Monterey Water System

Fair Market Value Opinion

Prepared for:

Monterey Peninsula Water Management District, CA

REPORT DATE / MARCH 10, 2023

VALUE AS OF: DECEMBER 31, 2022

RAFTELIS

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RAFTELIS

March 10, 2023

David C. Laredo
General Counsel for the MPWMD
Delay & Laredo
606 Forest Avenue
Pacific Grove, CA 93950

Subject: Monterey Water System Appraisal Report

Dear Mr. Laredo:

At your request, Raftelis Financial Consultants, Inc. ("Raftelis") has prepared an appraisal of the operating assets of California-American Water Company's ("Cal-Am's") Monterey Water System as defined herein for the purposes of estimating the fair market value of the system. We understand that De Lay & Laredo is General Counsel to the Monterey Peninsula Water Management District ("MPWMD" or "District") and represents the MPWMD in this matter. This report was prepared for the MPWMD to support the District in preparing an offer to Cal-Am for purchase of the Monterey Water System through negotiated sale or condemnation action. This report is not intended for any other use.

The Monterey Water System is a retail water system serving approximately 40,000 customers located in Monterey County, California. As of the date of this report, most, but not all, of Cal-Am's property interests and assets comprising its Monterey Water System are located within the boundaries of the MPWMD and include what are known as the Main, Bishop, Hidden Hills, and Ryan Ranch water systems. The portions of the Monterey Water System located outside MPWMD's boundaries include portions of "Phase 2" of the Monterey Peninsula Water Supply Project ("MPWSP"), consisting of the Monterey Pipeline and appurtenant facilities utilized by Cal-Am to deliver reclaimed water from Monterey One Water's Advanced Water Treatment Facilities (located adjacent to its Regional Treatment Plant approximately two miles north of the City of Marina) to Cal-Am's retail service area (and MPWMD's northerly boundary).

For purposes of this report, the Monterey Water System specifically excludes the "MPWSP Phase 1 Property Interests," which include all of Cal-Am's property interests and assets, whether located within or outside MPWMD's boundaries which relate to Cal-Am's proposed 6.4 million gallon per day ("MGD") desalination plant and appurtenant and supporting facilities, including without limitation: (1) the proposed desalination plant and appurtenant facilities to be located on a 46-acre vacant parcel near Charles Benson Road, northwest of Monterey One Water's Regional Wastewater Treatment Plant and the Monterey regional Environmental Park; (2) a proposed source water intake system consisting of subsurface slant wells and appurtenant facilities placed on a 376-acre coastal property located north of the City of Marina and within the CEMEX retired mining area and extending offshore into the Monterey Bay; (3) proposed new pipelines to convey the source water from the slant wells to the MPWSP desalination plant; (4) proposed pipelines to convey the brine produced during the desalination process to the existing Monterey One Water ocean outfall for discharge to the Monterey Bay: and (5) proposed new and existing pipelines and appurtenant facilities that would transport desalinated water from the MPWSP desalination plant to the existing Cal-Am pipeline that delivers reclaimed water from the Monterey One

Water's Advanced Water Treatment Facilities to Cal-Am's retail service area (which is a portion of Phase 2 of the MPWSP described above).

The Monterey Water System addressed in this report also excludes the following: (1) the water systems owned and operated by Cal-Am in Monterey County known as Ambler, Ralph Lane, Chualar, Toro, and Garrapata (sometimes referred to as the 'Central Satellites'); and (2) the various wastewater systems owned and operated by Cal-Am in Monterey County (collectively, the 'Monterey Wastewater Systems').

This report is an appraisal report, which is intended to comply with a set of standards set forth by the Appraisal Foundation in its Uniform Standards of Professional Appraisal Practice ("USPAP") and the American Society of Appraisers Business Valuation Standards. Consistent with USPAP, this report presents a summary discussion of the data, reasoning, and analyses that were used in the appraisal process to develop the appraiser's opinion of value. Additional supporting documentation is retained in our project file. The depth of discussion and information provided in this report is specific to the needs of MPWMD and for the intended use stated above.

It has been a pleasure working with you, and we thank you and MPWMD staff for the support provided during the course of this work.

Sincerely,

John M. Mastracchio, ASA, CFA, P.E.
Executive Vice President

Steven McDonald, CVA
Chief Economist / Valuation Services
CVA® # 20639

William Stannard, P.E.
Executive Vice President
Chairman of the Board

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List of Acronyms

AFUDC	Allowance for Funds Used During Construction
AFY	Acre-Feet Per Year
ASR	Aquifer Storage and Recovery
AWWA	American Water Works Association
BIRP	Begonia Iron Removal Plant
CAGR	Compound Annual Growth Rate
CAPM	Capital Asset Pricing Model
Cal-Am	California American Water
CDFW	California Department of Fish and Wildlife
CIAC	Contributions in Aid of Construction
CILM	Capitalization of Income Loss Method
CPUC	California Public Utilities Commission
CWIP	Construction Work In Progress
DCF	Discounted Cash Flow
DLOM	Discount for Lack of Marketability
EBITDA	Earnings Before Interest Taxes Depreciation and Amortization
ERC	Equivalent Residential Connection
EV	Enterprise Value
FY	Fiscal Year
GAC	Granular Activated Carbon
GPM	Gallons Per Minute
GRC	General Rate Case
LCV	Lower Carmel Valley
MG	Million Gallons
MGD	Million Gallons per Day
MPWMD	Monterey Peninsula Water Management District
MPWSP	Monterey Peninsula Water Supply Project
NACWA	National Association of Clean Water Agencies
NPBV	Net Plant Book Value
O&M	Operations and Maintenance
OCLD	Original Cost Less Depreciation
PFAS	Per- and Polyfluoroalkyl Substances
PUC	Public Utility Commission

PWM	Pure Water Monterey
RCNLD	Reproduction Cost New Less Depreciation
RO	Reverse Osmosis
SDWA	Safe Drinking Water Act
S&P	Standard & Poor's
SUI	State Unemployment Insurance
SWRCB	State Water Resources Control Board
UCV	Upper Carmel Valley
UPAA	Utility Plant Acquisition Adjustment
US	United States
USEPA	United States Environmental Protection Agency
WACC	Weighted Average Cost of Capital
WHO	World Health Organization

Executive Summary

Description and Scope of the Assignment

The purpose of this assignment was to assess the fair market value of the Monterey Water System as of December 31, 2022 (the "valuation date"). This report was prepared for the Monterey Peninsula Water Management District ("MPWMD" or "District") in response to Ballot Measure J titled "The Monterey Peninsula Water System Local Ownership Feasibility Study Initiative" and to support the District in preparing an offer to the California-American Water Company ("Cal-Am") for purchase of the Monterey Water System through negotiated sale or condemnation action. This report is not intended for any other use.

The scope of the assignment included gathering, analyzing, and applying relevant information necessary to appropriate valuation approaches, methods, and procedures in order to complete and express an unambiguous opinion of the value of the Monterey Water System, expressed as a single dollar amount.

Business Interest Subject to this Appraisal

The business interest subject to this appraisal is the Monterey Water System owned by Cal-Am, a subsidiary of the American Water Works Company, Inc. The Monterey Water System is a retail water system serving approximately 40,000 customers located in Monterey County, California. As of the date of this report, most, but not all, of Cal-Am's property interests and assets comprising its Monterey Water System are located within the boundaries of the MPWMD and include what are known as the Main, Bishop, Hidden Hills, and Ryan Ranch water systems. The portions of the Monterey Water System located outside MPWMD's boundaries include portions of "Phase 2" of the Monterey Peninsula Water Supply Project ("MPWSP"), consisting of the Monterey Pipeline and appurtenant facilities that are utilized by Cal-Am to deliver reclaimed water from Monterey One Water's Advanced Water Treatment Facilities (located adjacent to its Regional Treatment Plant approximately two miles north of the City of Marina) to Cal-Am's retail service area (and MPWMD's northerly boundary).

For purposes of this report, the Monterey Water System specifically excludes the "MPWSP Phase 1 Property Interests," which include all of Cal-Am's property interests and assets, whether located within or outside MPWMD's boundaries, and which relate to Cal-Am's proposed 6.4 million gallon per day ("MGD") desalination plant and appurtenant and supporting facilities, including without limitation: (1) the proposed desalination plant and appurtenant facilities to be located on a 46-acre vacant parcel near Charles Benson Road, northwest of Monterey One Water's Regional Wastewater Treatment Plant and the Salinas River Wildlife Refuge; (2) a proposed source water intake system consisting of subsurface slant wells and appurtenant facilities placed on a 376-acre coastal property located north of the City of Marina and within the CEMEX retired mining area and extending offshore into the Monterey Bay; (3) proposed new pipelines to convey the source water from the slant wells to the MPWSP desalination plant; (4) proposed pipelines to convey the brine produced during the desalination process to the existing Monterey One Water ocean outfall for discharge to the Monterey Bay: and (5) proposed new and existing pipelines and appurtenant facilities that would transport desalinated water from the MPWSP desalination plant to the existing Cal-Am pipeline that delivers reclaimed water from the Monterey One Water's Advanced Water Treatment Facilities to Cal-Am's retail service area (which is a portion of Phase 2 of the MPWSP described above).

The Monterey Water System addressed in this report also excludes the following: (1) the water systems owned and operated by Cal-Am in Monterey County known as Ambler, Ralph Lane, Chualar, Toro, and Garrapata (sometimes referred to as the 'Central Satellites'); and (2) the various wastewater systems owned and operated by Cal-Am in Monterey County (collectively, the 'Monterey Wastewater Systems').

The business interest that is appraised is the complete controlling interest in, and ownership of, the Monterey Water System.

Standard and Premise of Value

The definition of value used in this appraisal is fair market value as set forth in the California Code of Civil Procedure Section 1263.320. Pursuant to this Section fair market value is defined as follows:

> *(a) The fair market value of the property taken is the highest price on the date of valuation that would be agreed to by a seller, being willing to sell but under no particular or urgent necessity for so doing, nor obliged to sell, and a buyer, being ready, willing, and able to buy but under no particular necessity for so doing, each dealing with the other with full knowledge of all of the uses and purposes for which the property is reasonably adaptable and available.*
>
> *(b) The fair market value of property taken for which there is no relevant, comparable market is its value on the date of valuation as determined by any method of valuation that is just and equitable.*

In addition, California Code of Civil Procedure Section 1263.330 provides as follows:

> *The fair market value of the property taken shall not include any increase or decrease in the value of the property that is attributable to any of the following:*
>
> *(a) The project for which the property is taken.*
>
> *(b) The eminent domain proceeding in which the property is taken.*
>
> *(c) Any preliminary actions of the plaintiff related to the taking of the property.*

The valuation of the Monterey Water System was analyzed based on the fair market value definition above and the premise that the highest and best use of the Monterey Water System is its continued use as a water system providing safe and reliable water service to its customers.

Hypothetical Willing Buyers

The likely population of hypothetical willing buyers was considered in order to estimate the fair market value of the Monterey Water System. Possible hypothetical buyers of the Monterey Water System were considered to include investor-owned water utility companies and not-for-profit government agencies or municipalities. However, the potential benefit that a particular buyer would derive from specific synergies with the subject entity that no other buyer would enjoy was excluded from consideration.

Water sector market data indicates that investor-owned water companies are much more active in the buying and selling of utility systems than not-for-profit government agencies. As of 2020, there were a total of 93 investor-owned water systems operating in California, including nine Class A Water Utilities

and four Class B Water Utilities.[1,2] Investor-owned utilities, those operating within and outside of California, may be interested in acquiring the System if they have the capabilities to operate the system, the financial capital to acquire the system, an opportunity to earn a reasonable return on their investment, and if the acquisition is aligned with their strategic goals.

Generally, municipalities do not have an interest in acquiring water systems outside their political jurisdiction and as such are not regularly in the business of doing so. A municipal buyer is typically regulated by its own governing body and does not have motivations of a typical investor-owned company buyer (e.g., no profit motive), but typically has motivations, such as controlling, managing and mitigating customer rates, improving levels of service, and establishing a more direct connection and communication with customers of the water system. In addition, public agencies in California cannot charge their customers a higher price for water than the actual cost of providing the service. Based on these motivations and considerations, a municipal buyer will not likely offer more than what a typical investor-owned utility may offer. Furthermore, we have been unable to locate a single instance in which multiple non-profit or government buyers bid for ownership of an investor-owned utility.

Based on these considerations, and the specific characteristics of the Monterey Water System, the most likely typical willing buyers of the Monterey Water System were identified as investor-owned water utility companies either operating within the State of California or in other states looking to expand into the California water market. However, even if the pool of hypothetical willing buyers of the System were to include a public agency, this would not likely change our opinion of the fair market value of the System due to the typical municipal buyer motivations and considerations discussed above.

Valuation Assessment

This valuation assessment was prepared in accordance with the Business Valuation Standards of the American Society of Appraisers and the Uniform Standards of Professional Appraisal Practice ("USPAP") which is promulgated by the Appraisal Foundation.

There are three generally recognized approaches to the determination of value of an asset, business, or business interest: the Income Approach, the Market Approach, and the Asset Approach. These approaches are widely accepted by financial institutions, courts, government agencies, businesses, and society in general, and they are comprised of theoretical concepts and systematic methods. These approaches were considered in developing our opinion of the fair market value of the Monterey Water System.

Income Approach

The Income Approach is based on the premise that the value of a property is the present value of the future economic benefits of owning the property. The underlying principle in this approach is that buyers invest in assets with the expectation of receiving the anticipated future net benefits. This approach is relevant when the property being valued generates or is anticipated to generate net income, profits, or free

[1] Regulated Water Utilities. California Public Utilities Commission. Report dated December 16, 2020.

[2] CPUC defines Class A Water Utilities as regulated water utilities with more than 10,000 service connections. Class B is defined as utilities with between 2,000 and 10,000 service connections, Class C has between 500 and 2,000 service connections, and Class D has less than 500 service connections. Source: California Public Utilities Commission 2018 Annual Report.

cash flows. In our Income Approach, we applied the discounted cash flow ("DCF") method. The DCF method measures value by projecting future expected (debt-free) net cash flows and discounting these cash flows to present value using a discount rate. The DCF method was selected because we had access to Cal-Am's revenue and expense projection for the Monterey Water System and Central Satellites from Cal-Am's 2022 GRC application to the California Public Utilities Commission ("CPUC").

The indicated fair market value of the "Base" Monterey Water System as of the valuation date using the Income Approach is $301,298,000. The "Base" Monterey Water System excludes construction work in progress ("CWIP"), real estate not used in the provision of utility service, potential compensation for Memorandum and Balancing Accounts, and customer accounts receivable and unbilled revenues.

Market Approach

The Market Approach is a general method of determining a value of an enterprise by using one or more methods that compare the subject to similar businesses that have been sold. There are two methods of estimating value of an asset, business, or business interest under the Market Approach. These are (1) the Guideline Public Company Method, and (2) the Guideline Transactions Method. The Guideline Public Company Method is a method whereby market multiples are derived from market prices of stocks of companies that are engaged in the same or similar lines of business and that are actively traded on a free and open market. The Guideline Transactions Method is a method whereby pricing multiples are derived from transactions involving companies engaged in the same or similar lines of business. If the sales comparisons are not exactly like the properties being valued, then the selling prices are adjusted to equate them to the characteristics of the subject properties being valued.

In our Market Approach, we considered both the Guideline Public Company Method and the Guideline Transactions Method but relied on the Guideline Transactions Method. Based on this method, the indicated fair market value of the Monterey Water System as of the date of valuation is $376,381,000. No weighting was placed on the Guideline Public Company Method because the value indication using this method over-states the value of the Monterey Water System because the acquisition of the Monterey Water System would not include acquisition of the corporate assets or functions of Cal-Am or American Water Works Company, the parent company of Cal-Am, nor is it geographically diversified as are some of the Guideline Public Companies.

Asset Approach

The Asset Approach is based on the principle of substitution. This principle states that a prudent buyer will not pay more for a property than the cost of acquiring a substitute property of equivalent value. Under the Asset Approach, the value of the assets is typically derived by subtracting the amount of depreciation from the replacement or reproduction cost of the assets. The value estimate under this approach is estimated by the sum of the parts of the system, i.e., physical asset components, land, water rights, etc., which is termed the asset accumulation method. Depreciation in this context represents the loss in value caused by physical deterioration, functional obsolescence, and economic obsolescence.

In our Asset Approach, we applied the asset accumulation method by adding together the current cost of tangible improvements, improvements pertaining to the realty,[3] personal property (e.g., vehicles, equipment, office furnishings, inventory, etc.), real estate, and intangible assets including water rights and franchise agreements. We relied on third-party appraisals for the value of water rights and the real estate.[4] We also applied various forms of depreciation to derive the value of the tangible personal property, including physical deterioration and economic obsolescence. We used two methods to measuring economic obsolescence, the Capitalization of Income Loss Method ("CILM") and a comparison of similar properties with and without external obsolescence.

Based on the Asset Approach and the methods described above, the indicated fair market value of the "Base" Monterey Water System is $337,453,000.

Valuation Synthesis

In our valuation synthesis, we assigned a 60% weighting to the Income Approach, a 30% weight to the Asset Approach, and a 10% weighting to the Market Approach. The fair market value of the Monterey Water System as indicated by the weightings of the three valuation approaches, is $319,653,000 as shown in Table ES-1. This "base" value excludes consideration of CWIP, real estate not used in the provision of utility service, Memorandum and Balancing Accounts, and customer accounts receivable and unbilled revenues.

A significant weighting was assigned to the Income Approach value indicator. This approach was selected as the primary indicator of value because it reflects the expected earnings associated with the hypothetical willing buyer, including constraints associated with the economic regulation of the Monterey Water System, and sufficient relevant data and information was available to rely on this approach.

We considered the Asset Approach as an indication of value and assigned a 30% weighting to this approach given that we consider the Monterey Water System to be a special purpose property. However, our analysis was limited to the consolidated asset information provided by Cal-Am in its 2022 General Rate Case application. Further, our analysis indicates that the reproduction cost new less depreciation ("RCNLD") estimate of the tangible personal property, without considering economic obsolescence, significantly overstates the value of the Monterey Water System. The conclusion on economic obsolescence is supported by Cal-Am's required use of rate base valued at original cost less depreciation ("OCLD") rather than RCNLD. Also, several recent water utility transactions involving a willing buyer and seller were reviewed to test the relationship between purchase price and RCNLD and OCLD estimates. This comparison shows that the purchase prices of many of these transactions were substantially lower than the reported RCNLD estimates of the acquired systems (excluding consideration

[3] "Improvements pertaining to the realty" include any machinery or equipment installed for use on property taken by eminent domain, or on the remainder if such property is part of a larger parcel, that cannot be removed without substantial economic loss or without substantial damage to the property on which it is installed, regardless of the method of installation, California Code of Civil Procedure § 1263.205.

[4] The reliance on a third-party appraisal for valuation of the real estate assets is an extraordinary assumption as defined by USPAP. Uniform Standards of Professional Appraisal Practice (USPAP) 2020-2021, The Appraisal Foundation. The 2020-2021 edition of USPAP was extended through December 31, 2023. USPAP defines an extraordinary assumption as an assignment-specific assumption as of the effective date regarding uncertain information used in an analysis, which, if found to be false, could alter the appraiser's opinion or conclusions.

of economic obsolescence). For these reasons, the Asset Approach was given a lower weighting than the Income Approach.

Significantly less weighting was assigned to the Market Approach than the Income Approach. A hypothetical willing buyer would likely scan the market for guideline companies and transactions in considering the value of the Monterey Water System. However, given the limited number of relevant guideline public companies and guideline transactions, their quality and limited comparability to the Monterey Water System, and the likelihood that potential asset additions, such as construction work in progress and memorandum and balancing accounts are factored into the purchase prices of the selected transactions, whereas we consider these potential asset additions separately, we relied on the Market Approach value indicator to a lesser extent than the other methods considered.

Table ES-1: Estimated Value of the Monterey Water System

Description	Value Indicator	x	Weighting	=	Weighted Value
Monterey Water System					
Income Approach					
Discounted Net Cash Flow Method	$ 301,298		60%		$ 180,779
Market Approach					
Guideline Public Company Method	391,079		0%		-
Guideline Transaction Method	376,381		10%		37,638
Asset Approach					
Asset Accumulation Method	337,453		30%		101,236
Opinion of Value of the Monterey System					**$ 319,653**
Potential Asset Additions:					
Customer Accounts Receivable and Unbilled Revenues					$ 13,785
Construction Work in Progress (CWIP), excluding MPWSP Phase 1					13,299
FMV of Real Estate Not Used for the Provision of Utility Service					4,425
Memorandum & Balancing Accounts and Other Adjustments:[1]					
San Clemente Dam					60,517
Other Memorandum and Balancing Account Items					15,973
Citizens Acquisition Premium					8,384
Tank Painting					2,861
Other Utility Plant Acquisition Adjustments[2]					9,911
Total of Potential Asset Additions					129,155
Opinion of Value with Potential Asset Additions (Rounded)					**$ 448,810**

Values shown in $1,000s

[1]Per Cal-Am 2022 GRC application.

[2]Includes Meadowbrook, Rio Plaza, Hillview, Warring, Bass Lake, Bellflower, and East Pasadena UPAA.

The values of CWIP, real estate not used for utility purposes, Memorandum and Balancing Accounts, and customer accounts receivable and unbilled revenues were then added the "Base" value indication for the Monterey Water System. CWIP includes the completed portion of ongoing capital projects that are

not yet used to provide utility service and excludes the MPWSP Phase 1 Property Interests which were not valued. CWIP was valued using the Cost Approach and is also included in Table ES-1.[5]

Cal-Am incurred other expenses that CPUC has approved for recovery through the Monterey Water System over time and recorded in Memorandum Accounts and Balancing Accounts. It is possible that MPWMD may be required to compensate Cal-Am for the unrecouped portions of these accounts as part of a potential taking of the Monterey Water System, and therefore, the balances in these accounts as of the valuation date were considered as asset additions as part of the valuation.

Valuation Summary and Conclusions

Based on the valuation analyses completed, the fair market value of the operating assets of the Monterey Water System is:

$448,810,000

This conclusion of value consists of compensation amounts for the operating assets of the Monterey Water System, including tangible improvements, improvements pertaining to the realty, personal property (e.g., vehicles, equipment, office furnishings, inventory, etc.), real estate, and intangible assets including water rights, CWIP, Memorandum and Balancing Accounts. This value estimate, including the "Base" Monterey Water System and asset additions as defined in this report, corresponds to a value of approximately $10,989 per customer account.

It was assumed that customer accounts receivable and unbilled revenues would be transferred in the sale of the Monterey Water System, and therefore was included as an asset addition in the valuation of the Monterey Water System. The amount of these items can vary overtime, from day-to-day and month-to-month. While we provide an estimate of these amounts as asset additions as of the valuation date, we assume that the actual amounts for compensation will be determined based upon a final accounting to be performed as of the date that ownership of the Monterey Water System is transferred by Cal-Am to MPWMD.

Further, we acknowledge that a potential amount of compensation may relate to unrecouped amounts associated with Monterey Water System Memorandum and Balancing Accounts that CPUC has authorized for recovery by Cal-Am. We have estimated and included the aggregate balances in the Memorandum and Balancing Accounts that CPUC may likely deem to be attributable to the ratepayers of the Monterey Water System as of the valuation date. However, we do not at this time accede that all such expenses will merit compensation.

These findings and conclusions are qualified and subject to change per the assumptions and limiting conditions identified and described throughout in this report. This report is qualified in its entirety by, and should be considered in light of, these assumptions and limitations.

[5] The amount of CWIP as of the valuation date was estimated from 2022 GRC filings submitted to CPUC by Cal-Am. Our estimate is based on this information and is considered an extraordinary assumption as defined by USPAP, and if found to be false, could alter the conclusion of value of the Monterey Water System.

1. Introduction

1.1. Description of the Assignment

The firm of De Lay & Laredo, General Counsel to the Monterey Peninsula Water Management District ("MPWMD" or "District") retained Raftelis Financial Consultants, Inc. ("Raftelis") to render an opinion of value of California-American Water Company's ("Cal-Am's") Monterey Water System as defined herein. The following information summarizes this appraisal assignment:

Parameter	Description
Subject Business Enterprise	California American Water Company's Monterey Water System
Purpose and Intended Use of the Appraisal	Determine the fair market value of the Monterey Water System for acquiring the System through negotiated sale or condemnation action.
Type of Engagement	Appraisal
Type of Entity	Class A Water Utility, Segment of a U.S. Corporation
Form of Ownership	Segment of a U.S. Corporation
State or Jurisdiction of Incorporation	California
Principal Business Location	Monterey County, California
Business Interest Under Consideration	The Monterey Water System portion of Cal-Am's Central Division
Level of Value and Control	Control, 100% interest and ownership of the Monterey Water System
Effective Date of the Appraisal	December 31, 2022

1.2. Background

The MPWMD was founded on June 6, 1978 under the enabling legislation of the California Water Code. Functions of MPWMD include managing and augmenting ground and surface water for sustainable use, promoting water conservation, and fostering positive environmental values in the Monterey Peninsula and Carmel River Basin. The MPWMD serves 112,000 people; membership of the District is comprised

of the municipal jurisdictions of Carmel-by-the-Sea, Del Rey Oaks, Monterey, Pacific Grove, Seaside, Sand City, and portions of unincorporated Monterey County and including Pebble Beach, Carmel Highlands and Carmel Valley. Revenue is raised through property taxes, user fees, water supply charges, water connection charges, investments, grants, permit fees, and project reimbursements.[6]

On November 6, 2018, the voters within the District passed Measure J, which directed that Rule 19.8 be added to the District's Rules and Regulations. Rule 19.8 establishes the District's policy of pursuing public ownership of the Monterey Peninsula Water System (the "Monterey Water System" or "System"), as follows:

A. It shall be the policy of the District, if and when feasible, to secure and maintain public ownership of all water production, storage and delivery system assets and infrastructure providing services within its territory.

B. The District shall acquire through negotiation, or through eminent domain if necessary, all assets of California American Water, or any successor in interest to California American Water, for the benefit of the District as a whole.

C. The General Manager shall, within nine (9) months of the effective date of this Rule 19.8, complete and submit to the Board of Directors a written plan as to the means to adopt and implement the policy set forth in paragraph A, above. The plan shall address acquisition, ownership, and management of all water facilities and services within and outside the District, including water purchase agreements, as appropriate. The plan may differentiate treatment of non-potable water services.

   This plan was prepared by the General Manager and provided to the Board of Directors on August 19, 2019.[7]

1.3. Summary Description of the Monterey Water System

The subject of this appraisal is the portion of Cal-Am's Central Division water system, herein referred to as the Monterey Water System. The Monterey Water System is a retail water system serving approximately 40,000 customers located in Monterey County, California. As of the date of this report, most, but not all, of Cal-Am's property interests and assets comprising its Monterey Water System are located within the boundaries of the MPWMD and include what are known as the Main, Bishop, Hidden Hills, and Ryan Ranch water systems. The portions of the Monterey Water System located outside MPWMD's boundaries include the portions of "Phase 2" of the Monterey Peninsula Water Supply Project ("MPWSP"), consisting of the Monterey Pipeline and appurtenant facilities that are utilized by Cal-Am to deliver reclaimed water from Monterey One Water's Advanced Water Treatment Facilities (located adjacent to its Regional Treatment Plant approximately two miles north of the City of Marina) to Cal-Am's retail service area (and MPWMD's northerly boundary).

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[6] MPWMD Website: https://www.mpwmd.net/who-we-are/about-mpwmd/

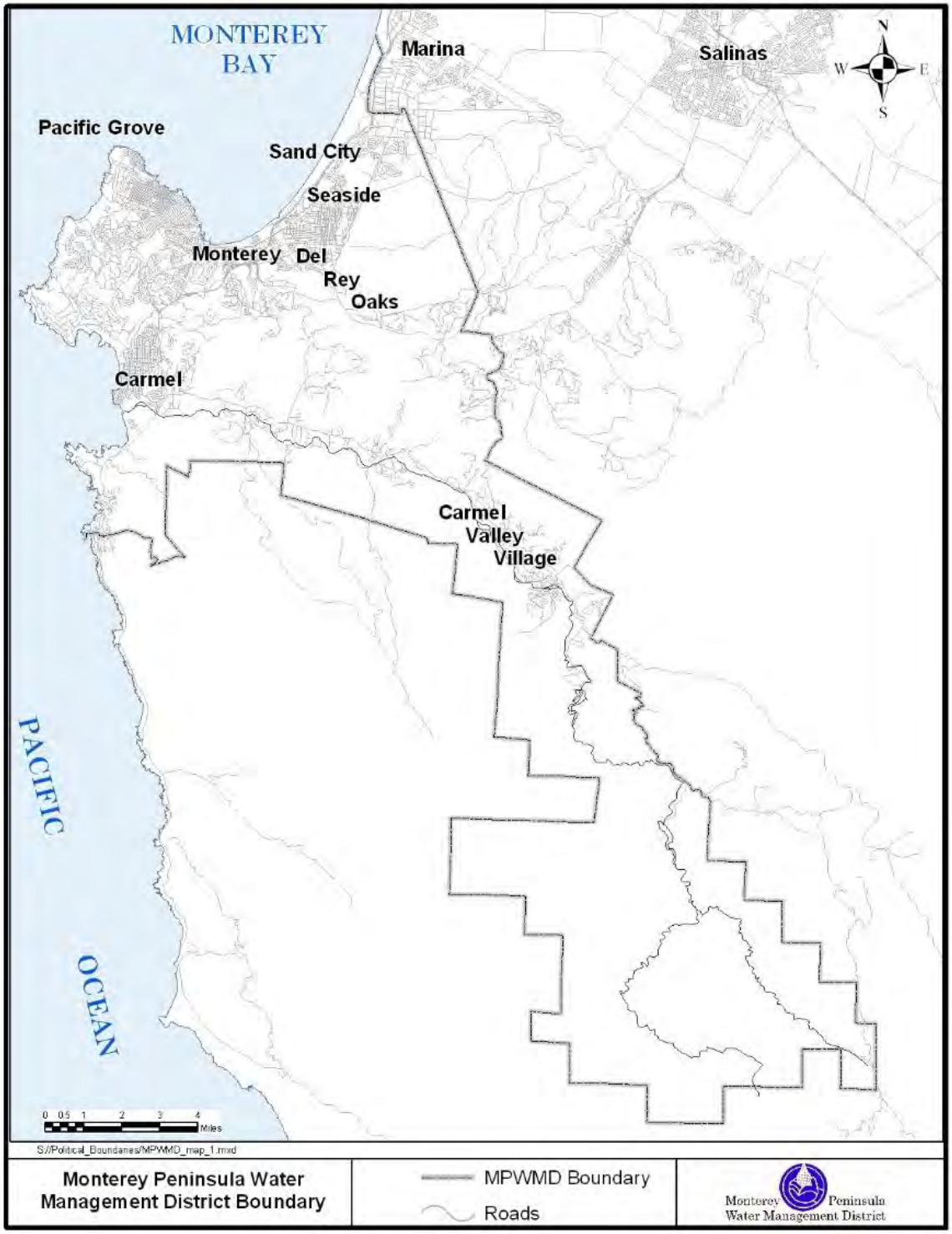
[7] A Plan to Adopt and Implement a Policy to Secure and Maintain Public Ownership of All Water Production, Storage and Delivery System Assets and Infrastructure Providing Services Within the Monterey Peninsula Water Management District Territory, prepared by the General Manager of the MPWMD, August 19, 2019.

For purposes of this report, the Monterey Water system explicitly excludes the "MPWSP Phase 1 Property Interests," i.e., the Cal-Am property interests and assets relating to Cal-Am's proposed 6.4 million gallon per day ("MGD") desalination plant and appurtenant and supporting facilities. At the time this report is being prepared, we understand that MPWMD maintains the position that the MPWSP Phase 1 Property Interests are not necessary and incidental to providing retail water service within MPWMD's boundaries. Accordingly, this report values the Monterey Water System assuming MPWMD elects to not acquire the MPWSP Phase 1 Property Interests.

The Monterey Water System addressed in this report also excludes the following: (1) the water systems owned and operated by Cal-Am in Monterey County known as Ambler, Ralph Lane, Chualar, Toro, and Garrapata (sometimes referred to as the 'Central Satellites'); and (2) the various wastewater systems owned and operated by Cal-Am in Monterey County (collectively, the 'Monterey Wastewater Systems').

Figure 1-1 provides a map of the MPWMD boundaries. A map depicting Cal-Am's Central Division water system is provided in Section 2 of this report.

Figure 1-1: MPWMD Boundaries



1.4. Purpose and Scope of the Assignment

The purpose of this assignment was to assess the fair market value of the Monterey Water System assets as of December 31, 2022 (the "valuation date") for acquiring the System through negotiated sale or condemnation action. The scope of the assignment included gathering, analyzing, and applying relevant information necessary to appropriate valuation approaches, methods, and procedures in order to complete and express an unambiguous opinion of the value of the Monterey Water System, expressed as a single dollar amount. Specifically, the scope of work associated with this assignment included:

- Completion of independent research and analysis concerning the industry and economic environment in which the Monterey Water System operates;
- Review and analysis of Cal-Am historical financial statements;
- Review and analysis of the historical financial performance of Cal-Am's Central Division;
- Facilitation of meetings and teleconferences with a former Cal-Am Central Division management employee regarding the operations of Cal-Am's Central Division;
- Completion of a visual inspection of the Monterey Water System service territory and above-ground assets on November 2 and 3, 2022. This was an outside-the-fence inspection of the above-ground water system assets because, as of the date of this report, Cal-Am has not granted access to the water system properties in order complete a more detailed inspection.
- Review of information from the California Public Utilities Commission ("CPUC") that was submitted to CPUC by Cal-Am as part of Cal-Am's 2019 and 2022 General Rate Cases;
- Completion of independent research and analysis of other private water companies operating in the water industry;
- Completion of independent research and analysis of other water system acquisitions;
- Review of Cal-Am's projected future financial performance of the Central Division, including the Monterey Water System based on review and analysis of relevant and available data and information;
- Review of information from the California Coastal Commission related to Phase 1 of the MPWSP;
- Review of the November 6, 2020 Rutan & Tucker, LLP., memo entitled "Monterey Peninsula Water Management District: Appraisal of Monterey Water System and MPWSP Property Interests; 'Larger Parcel' and Severance Damages Issues; and
- Application of appropriate valuation approaches, methods, and procedures to obtain an opinion of value of the Monterey Water System.

1.5. Standard and Premise of Value

The definition of value used in this appraisal was fair market value. According to California Code of Civil Procedure Section 1263.320, fair market value is defined as follows:

(a) The fair market value of the property taken is the highest price on the date of valuation that would be agreed to by a seller, being willing to sell but under no particular or urgent necessity for so doing, nor obliged to sell, and a buyer, being ready, willing, and able to buy but under no particular necessity for so doing, each dealing with the other with full knowledge of all of the uses and purposes for which the property is reasonably adaptable and available.

(b) The fair market value of property taken for which there is no relevant, comparable market is its value on the date of valuation as determined by any method of valuation that is just and equitable.

In addition, California Code of Civil Procedure Section 1263.330 provides as follows:

The fair market value of the property taken shall not include any increase or decrease in the value of the property that is attributable to any of the following:

(a) The project for which the property is taken.

(b) The eminent domain proceeding in which the property is taken.

(c) Any preliminary actions of the plaintiff related to the taking of the property.

The valuation of the Monterey Water System was analyzed based on the fair market value definition above and the following assumptions:

1. The highest and best use of the System is its continued use as a domestic water system;
2. Both the buyer and the seller were considered to be hypothetical parties;
3. Even though the willing buyer and willing seller are hypothetical, they are presumed to be dedicated to achieving their individual maximum economic advantage, but absent any compulsion to buy or sell;
4. The hypothetical buyer is prudent, implying a rational buyer, and is considered to be a "financial" and not a "strategic" buyer. A financial buyer is motivated by the profit opportunity implicit in the subject on a stand-alone basis whereas a strategic buyer would potentially derive benefits from specific synergies with the subject entity that no other buyer would enjoy;
5. Both parties are assumed to understand the industry and other economic conditions and their effects on the subject assets, as of the valuation date;
6. A hypothetical buyer is assumed to be an independent third party; and
7. A hypothetical sale will be for cash.

1.6. Sources of Information

The sources of information used to complete the appraisal of the Monterey Water System included the following:

1. California Code of Civil Procedure § 1263.
2. Regulated Water Utilities. California Public Utilities Commission. Report dated December 16, 2020.
3. Uniform Standards of Professional Appraisal Practice (USPAP) 2020-2021, The Appraisal Foundation.
4. "The Monterey Peninsula Water System Local Ownership Feasibility Study Initiative", Monterey Peninsula Water Management District Ballot Measure J, Adopted on November 6, 2018.
5. A Plan to Adopt and Implement a Policy to Secure and Maintain Public Ownership of All Water Production, Storage and Delivery System Assets and Infrastructure Providing Services Within the Monterey Peninsula Water Management District Territory, prepared by the General Manager of the MPWMD, August 19, 2019.
6. Letter from Mr. Douglas J. Dennington for Rutan & Tucker, LLP., to Mr. Richard Svindland, President of California American Water and Ms. Sarah Leeper, Vice President and General Counsel of California American Water, Re: Notice of Decision to Appraise California American Water Company's Monterey Water System and Other Property Interests Relating to MPWSP; Notice of Land Acquisition Procedures; Request for Documents, dated September 15, 2020.
7. Annual Reports of Cal-Am Monterey Water System and Central Satellites Operations submitted to the CPUC for fiscal years ("FY") 2011 through FY 2021 prepared by Cal-Am.
8. Application of Cal-Am to Increase Revenues in Each of Its Districts Statewide, submitted to the CPUC July 1, 2022, including supporting exhibits, testimony, and workpapers, Application A-22-07-001.
9. Updated Application of Cal-Am to Increase Revenues in Each of Its Districts Statewide, submitted to the CPUC January 27, 2023, including supporting exhibits, Application A-22-07-001.
10. Application of Cal-Am to Increase Revenues in Each of its Districts Statewide submitted to the CPUC on July 1, 2019, including supporting exhibits, testimony, and workpapers, Application A-19-07-004.
11. California-American Water Company's Update to General Rate Case Application to the 2019 General Rate Case, A-19-07-004, dated October 14, 2019.
12. Application of Cal-Am to Increase Revenues in Each of its Districts Statewide submitted to the CPUC on July 1, 2016, including supporting exhibits, testimony, and workpapers (Application 16-07-002).
13. CPUC Amended application A12-04-019, dated March 14, 2016.

14. Decision Adopting the 2018, 2019, and 2020 Revenue Requirement for Cal-Am dated December 13, 2018 (Decision 18-12-021).

15. National Marine Fisheries Service. 2013. South-Central California Coast Steelhead Recovery Plan. West Coast Region, California Coastal Area Office, Long Beach, California.

16. Comprehensive Planning Study for the Monterey System dated January 18, 2008.

17. Supply and Demand for Water on the Monterey Peninsula, David J. Stoldt, General Manager, MPWMD. May 18, 2020.

18. Fall 2017 Stage-Volume Relationship for Los Padres Reservoir, Carmel River, California: Prepared for the Monterey Peninsula Water Management District. The Watershed Institute, California State University Monterey Bay, Publication no. WI-2018-05.

19. MPWMD analysis of historical bathymetric survey data.

20. Los Padres Dam Sediment Removal Feasibility Study dated April 2013.

21. Los Padres Dam Fish Passage Study Technical Review Committee Meeting No. 3, Evaluate Alternatives, January 17, 2018.

22. Report titled Cal-Am Tank Capacities by Water System – 2011.xlsx, provided by MPWMD.

23. USEPA National Drinking Water Activity Dashboard. 2019.

24. Dun & Bradstreet, First Research Industry Profile, Water & Sewer Utilities, December 17, 2019.

25. The State of Public Water in the United States, published by Food & Water Watch, February 2016.

26. U.S. Private Water Utilities: Drivers, Competitive Landscape and Acquisition Trends, 2019, Bluefield research.

27. Principles of Public Utility Rates, J. Bonbright, A. Danielsen, and D. Kamerschen, 2nd Edition, 1988.

28. California Constitution, Article XIII D, 6(b) [Proposition 218].

29. Water Infrastructure Funding Parity Report, prepared by Raftelis and Tetra Tech for the National Association of Clean Water Agencies, dated July 21, 2022.

30. Buried No Longer: Confronting America's Water Infrastructure Challenge, American Water Works Association, 2012.

31. Infrastructure Report Card, Drinking Water, published by the American Society of Civil Engineers. 2017.

32. Residential End Uses of Water, Version 2, Executive Summary. Water Research Foundation, April 2016.

33. Water and Wastewater Maintenance Index, Bureau of Labor Statistics.

34. Standard & Poor's Water Sector Outlook 2020 and 2021.

35. State of the Water Industry, 2022. American Water Works Association.

36. Regulated water utility company information from the California Water Association.

37. Utility General Rate Case – A Manual for Regulatory Analysts, California Public Utilities Commission, Policy and Planning Division, November 13, 2017.

38. Decision Fixing Cost of Capital for Calendar Years 2018, 2019, 2020, for California Water Service Company, Cal-Am, Golden State Water Company, and San Jose Water Company (Decision 18-03-035).

39. Application of California-American Water Company for Authority to Establish its Authorized Cost of Capital for the Period from January 1, 2022 through December 31, 2024. Application No.21-05-001. May 3, 2021.

40. California Public Utilities Code, Division 1, Part 2, Chapter 2.5 Public Water System Investment and Consolidation Act of 1997, Sections 2718 to 2720.

41. A Revised Framework for Water Utility Acquisitions, Staff White Paper Recommending an Order Instituting Rulemaking, March 2022.

42. U.S. Census Bureau's American Community Survey, 5-Year estimates from 2011 to 2021.

43. U.S. Department of Interior precipitation information; USGS; https://nationalmap.gov/small_scale/printable/ climatemap.html.

44. Climate information from Western Regional Climate Center: https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca5115.

45. Department of Water Resources. Estimates of Natural and Unimpaired Flows for the Central Valley of California: Water Years 1922-2014. 2016.

46. Water Issues in California – Kleinman Center for Energy Policy (2018).

47. Department of Water Resources. Water Efficient Landscape Ordinance, 2017.

48. The California Law of Water Rights. State Engineer of California. Hutchins, Wells Aleck. 1956.

49. California Recycled Water Use in 2015, Algobin, David and Toni Pezzetti.

50. U.S. Department of Interior. "Updated and Extended Survey of U.S. Municipal Desalination Plants. (2018).

51. Urban Water Management Plan for the Central Division – Monterey District, prepared for Cal-Am by Water Systems Consulting, Inc., 2015.

52. Decision Approving a Modified Monterey Peninsula Water Supply Project, Adopting Settlement Agreements, Issuing Certificate of Public Convenience and Necessity and Certifying Combined Environmental Report, dated September 13, 2018 (Decision 18-09-017).

53. Judicial Council of California, Civil Jury Instructions, Series 100-2500, Approved December 2016.

54. American Society of Appraisers, Business Valuation Standards, 2009.

55. Advice Letter No. 1220 prepared by Kamilah Jones of Cal-Am ad submitted to the CPUC, dated December 31, 2018.

56. Proposed Resolution W-5200, dated August 15, 2019 and Final Resolution dated November 7, 2019.

57. Advice Letter 1238 submitted by Cal-Am to CPUC dated April 3, 2019, and associated workpapers, including Work Paper 100.

58. State Water Resources Control Board Order 95-10.

59. State Water Resources Control Board Cease-and-Desist Order WR 2009-060.

60. State Water Resources Control Board Order 2016-0016.

61. State Water Resources Control Board, License for Diversion and Use of Water, Cal-Am License 11866.

62. State Water Resources Control Board, Right to Divert and Use Water, Cal-Am Permit 21330.

63. 2020 Annual Report from the Seaside Basin Watermaster.

64. Los Padres Dam Sediment Removal Feasibility Study, dated April 2013.

65. Resolution No. W-4923 prepared by the Public Utilities Commission of the State of California, dated June 21, 2012.

66. Water Supply Project https://www.watersupplyproject.org/about

67. Staff Report: De Novo Appeal and Consolidated Coastal Development Permit, Application No.: 9-19-0198, August 25, 2020.

68. Letter from Ian Crooks of Cal-Am to Mr. Tom Luster of the California Coastal Commission, regarding Coastal Development Permit Application No. 9-19-0918, dated September 16, 2020.

69. California-American Water, Depreciation Rate Study prepared by Alliance Consulting Group, dated December 31, 2020.

70. Real Estate Appraisal Report prepared by Chris Carneghi, MAI (Appendix E).

71. Survey of Professional Forecasters, published by the Philadelphia Federal Reserve Bank of Philadelphia, November 14, 2022.

72. Livingston Survey, Federal Reserve Bank of Philadelphia, December 16, 2022.

73. California Public Utilities Code, Section 851-854; Evidence Code Section 810 to 824.

74. Section 1392 of the California Water Code.

75. South Bay Irrigation District v. California-American Water Co., 61 Cal.App.3d 944 (1976).

76. Duff & Phelps, Valuation Handbook – U.S. Guide to Cost of Capital, 2019.

77. Kroll Increases U.S. Normalized Risk-Free Rate from 3.0% to 3.5%, but Spot 20-Year U.S. Treasury Yield Preferred When Higher, June 16, 2022.

78. Impact of High Inflation and Market Volatility on Cost of Capital Assumptions, Kroll, October 2022.

79. Valuing a Business, The Analysis and Appraisal of Closely Held Companies, 6th Edition, Shannon P. Pratt.

80. Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets, American Society of Appraisers, Second Edition.

81. Principles of Public Utility Rates. Public Utilities Reports, Inc., Second Edition. 1988.

82. Handy-Whitman Index of Public Utility Construction Costs, published by Whitman, Requardt & Associates.

83. Engineering News Record, Construction Cost Indices.

84. Principles of Water Rates, Fees, and Charges, Manual of Water Supply Practices M1, Seventh Edition, American Water Works Association.

85. Resolution No. W-4923 prepared by the Public Utilities Commission of the State of California, dated June 21, 2012.

86. California Public Utilities Commission 2021 Annual Report.

87. Assessors' Handbook. Section 542 Assessment of Water Companies and Water Rights. California State Board of Equalization. December 2000 reprinted January 2015.

88. Standard Practice for Processing Rate Offsets and Establishing Amortizing Memorandum Accounts. Standard Practice U-27-W. California Public Utilities Commission. Division of Water and Audits. Revised April 16, 2014.

89. Guideline Public Water Companies 10-K Annual Reports as cited in this report.

90. California Coastal Commission Staff Reports Regarding Cal-Am's Consolidated Coastal Development Permit, August 25, 2020 and September 16, 2020.

91. Monterey Peninsula Water Supply Project Newsletter – Q3 2020, accessed at https://www.watersupplyproject.org/single-post/project-continues-to-move-forward.

92. Duff & Phelps Technical Update: Duff & Phelps Normalized Risk-Free Rate Lowered from 3.0% to 2.5% for the United States, United Kingdom and Canada, June 2020.

93. https://www.treasury.gov/resource-center/data-chart-center/interest-rates/pages/TextView.aspx?data=yieldYear&year=2017-2021.

94. Federal Reserve Economic Data, ICE BofA Single-A US Corporate Index Effective Yield, Percent, Daily, Not Seasonally Adjusted, accessed at https://fred.stlouisfed.org.

95. Memorandum from Jeffrey M. Oderman, Esq., and Doug Dennington, Esq., Rutan & Tucker, LLP. Monterey Peninsula Water Management District; Appraisal of Monterey Water System and MPWSP Property Interests; "Larger Parcel" and Severance Damages Issues. November 6, 2020.

96. Valuation of Discounts and Premiums. Fundamentals, Techniques & Theory. National Association of Certified Valuation Analysts. 1995-2012.

97. Discount for Lack of Marketability: Job Aid for Valuation Professionals. Internal Revenue Service. September 2009.

98. Certain other information and referenced sources pertaining to water utility sales transactions as cited in this report.

99. Certain other water industry and business valuation reference sources as cited in this report.

In addition, Rutan & Tucker, LLP., on behalf of the MPWMD and Raftelis, requested a list of documents and information from Cal-Am management, including management-prepared financial projections for the Monterey Water System.[8] However, as of the date of this report, none of the documents requested from Cal-Am were provided.

1.7. Assumptions and Limiting Conditions

The appraisal results presented in this report are subject to several extraordinary assumptions as defined by Uniform Standards of Professional Appraisal Practice ("USPAP").[9] The use of this Extraordinary Assumption might have affected the assignment results. These extraordinary assumptions include the following:

1. In preparation of this report and the conclusions contained herein, we have relied on certain assumptions and information provided by others with respect to conditions which may exist or events which may occur in the future. Data and information associated with the Monterey Water System and its property and assets were obtained from MPWMD, the CPUC, and other consultants and advisors to MPMWD, and were assumed to be complete, accurate, and reliable. These assumptions and sources of information are identified throughout the report. We believe such sources are reliable and the information obtained to be accurate and appropriate for the analysis undertaken and the conclusions reached herein. If any inaccuracies or incomplete information are subsequently discovered, then the value conclusions ascribed in this report are subject to change.
2. Raftelis was provided with a real estate appraisal report completed by Chris Carneghi, MAI. This report was relied upon to (1) determine the value of the real estate associated with tangible assets used for the provision of utility service, and (2) to determine the added value represented by Cal-Am's real estate assets that are not "used and useful." We take no responsibility for this third-party appraisal report, or its value conclusion, which we assume to be reliable.

[8] Letter from Mr. Douglas J. Dennington for Rutan & Tucker, LLP., to Mr. Richard Svindland, President of California American Water and Ms. Sarah Leeper, Vice President and General Counsel of California American Water, Re: Notice of Decision to Appraise California American Water Company's Monterey Water System and Other Property Interests Relating to MPWSP; Notice of Lan Acquisition Procedures; Request for Documents, dated September 15, 2020.

[9] Uniform Standards of Professional Appraisal Practice (USPAP) 2020-2021, The Appraisal Foundation. The 2020-2021 edition of USPAP was extended through December 31, 2023. USPAP defines an extraordinary assumption as an assignment-specific assumption as of the effective date regarding uncertain information used in an analysis, which, if found to be false, could alter the appraiser's opinion or conclusions.

3. Raftelis was provided with a water rights appraisal report completed by Steven Herzog, MAI, AI-GRS, RPF. This report was relied upon to determine the value of water rights associated with the Monterey Water System and owned by Cal-Am. We take no responsibility for this third-party appraisal report, or its value conclusion, which we assume to be reliable.
4. We assumed that the average depreciation rates by subaccount codes reported by Cal-Am in its 2022 GRC are applicable to each asset within each subaccount code. These depreciation rates were used to calculate the RCNLD amounts for the Monterey Water System assets by subaccount code.
5. We assumed that Cal-Am's management financial projections pertaining to the Central Division included in Cal-Am's 2022 GRC Application for the period of FY 2023 through FY 2026 are complete and accurate and will be realized. In addition, the normalized financial projections that were relied upon assume that Cal-Am will receive authorization from CPUC of a return on rate base for the System that is the same percentage as Cal-Am proposed in its pending cost of capital case before the CPUC, and that Cal-Am and a hypothetical buyer will be able to achieve this rate of return in each year of the projection period.
6. We assumed that the CPUC "ratepayer indifference test" and the "tangible ratepayer benefit" standard would result in the water utility rates, revenues, earnings, and net cash flows of the Monterey Water System and Central Satellites over the projection period to remain approximately the same before and after an acquisition of the system.
7. All existing liens and encumbrances, if any, were assumed to have been discharged and the subject assets were appraised as though free and clear.
8. It was assumed that the Monterey Water System is in full compliance with all applicable federal, state, and local environmental, safety, public health and drinking water laws and regulations unless otherwise stated or specified in this report. Similarly, it was assumed that all applicable zoning and land use regulations and restrictions have been complied with, unless non-conformity is otherwise stated or specified in this report.
9. It was assumed that all required licenses, certificates of occupancy, consents, and other legislative or administrative authority from any local, state, or national government, public entity or organization have been or can be obtained or renewed for any use on which the system value is based.
10. It was assumed that any and all permits and easements required to operate the Monterey Water System can be transferred in the event of an acquisition with reasonable time and effort.
11. It was assumed that there are no hidden or unapparent conditions of the system, property, soil, or structures, which would render the assets more or less valuable. Further, the existence of hazardous material or any other environmental problems or conditions is unknown. The opinion of value contained in this report is predicated on the assumption that there are no such material or condition on or in the property that would cause a loss in value. No responsibility is assumed for any such conditions, or for any expertise or knowledge required to discover them.
12. The valuation opinion contained in this report was based on the review and analysis of relevant available data and information and was, in part, based on the financial projections of the Monterey Water System that were prepared by Cal-Am as part of its 2022 General Rate Case

application and its Cost of Capital application submitted to the CPUC in 2021. The projection of revenues of the Monterey Water System over the projection period assumes that the CPUC accepts Cal-Am's rate case projections and its proposed cost of capital. For the purposes of this appraisal, we also assume that the rate base for rate setting purposes will be the same for the hypothetical buyer as for the current owner of the system.

The appraisal results presented in this report are subject to the following limiting conditions:

1. Cal-Am declined to provide the information requested by Rutan & Tucker, LLP., on behalf of the MPWMD and Raftelis, and this report is based on the limited information provided. This appraisal was prepared based on data and information obtained as of the date of this report. The conclusion of value contained in this report is qualified per the assumptions and limiting conditions identified and described throughout in this report and subject to change should new information become available. Any additional information that is provided or received subsequent to the date of this report could have a material effect on the findings and conclusions contained in this report. Any estimates or statements contained in this report are not predictions of the future and were created for the specific purpose of this appraisal.
2. The opinions and conclusions contained in this report are as of the stated effective valuation date, for a specific use and purpose, and made under specific assumptions and limiting conditions. The reader is cautioned and reminded that the conclusions presented in this appraisal apply only as to the effective date indicated. The appraiser makes no representation as to the effect on the subject property of any unforeseen events subsequent to the effective date of the appraisal. Raftelis makes no warranty, expressed or implied, with respect to the opinions and conclusions contained in this report. Any statement in this report involving estimates or matters of opinion, whether so specifically designated, are intended as such, and not as representation of fact.
3. No responsibility is assumed for legal matters, nor does this report provide any opinion on title related to the Monterey Water System. It was assumed that any title is good and marketable.
4. No responsibility is assumed for the absence or presence of any endangered species which would prevent, restrict, or adversely affect any transfer or improvement of the subject system.

2. Background and Description

2.1. Company Background

2.1.1. American Water Works Company, Inc.

The American Water Works Company, Inc. ("American Water") is a publicly traded U.S. Corporation that was founded in 1886 and is headquartered in Camden, New Jersey. American Water, through its subsidiaries, provides water and wastewater services in the United States and Canada. It serves approximately 14 million people with drinking water, wastewater, and other water-related services in 24 states in the United States and Ontario, Canada. It operates approximately 560 water treatment plants; 160 wastewater treatment plants; 52,000 miles of transmission, distribution, and collection mains and pipes; 1,100 groundwater wells; 1,700 water and wastewater pumping stations; 1,300 treated water storage facilities; and 76 dams.[10]

As of December 31, 2022, American Water's capital structure consisted of 41.4% common shareholder equity and 58.6% long-term debt and redeemable preferred stock.[11]

2.1.2. California-American Water Company

Cal-Am is a subsidiary of the publicly traded company, American Water. The service areas of Cal-Am are subdivided into the three following divisions: Northern, Central, and Southern. The Northern Division is comprised of the Sacramento District, which includes the Meadowbrook and Larkfield Districts, and other small service areas. The Central Division is comprised of the Monterey Water System and Central Satellites (otherwise known as the Monterey District), and the Monterey Wastewater District. The Southern Division is comprised of the Los Angeles, San Diego, and Ventura County Districts. A summary of the number of customers, rate base, and annual revenues by Division is provided in Table 2-1.

Table 2-1: Number of Customers, Rate Base, and Revenues by Division Year End 2021[12]

Division	Customers	% of Total	Rate Base (in $1,000s)	% of Total	Revenues (in $1,000s)	% of Total
Northern Division	71,285	37.7%	$225,337	33.4%	$68,952	28.3%
Central Division – Water[1]	40,763	21.6%	225,614	33.4%	69,298	28.5%
Central Division – Wastewater	2,390	1.3%	3,689	0.5%	3,336	1.4%
Southern Division	74,697	39.5%	220,803	32.7%	101,863.6	41.8%
Total	**189,135**		**$675,443**		**$243,450**	

[1]Includes the Monterey Water System and the Central Satellites since Cal-Am does not break these out separately in its 2022 GRC.

[10] https://research.valueline.com, and American Water Works Company website accessed at: https://www.amwater.com.

[11] Form 10K Annual Report for American Water Works Company, Inc. for the Period Ending December 31, 2022.

[12]Cal-Am 2022 GRC Application, Exhibit A - Chapter 3, Table 3.1 (customers), Table 9.2 (rate base) Table 2.3 (operating revenues).

In 2013, Cal-Am acquired the Garrapata Water Company and in 2007 Cal-Am acquired Toro Water Services, Inc., and both systems are now part of the Central Division and what is known as the Central Satellite systems. Descriptions of these transactions are provided in Appendix D.

2.2. Description of the Utility System

2.2.1. General

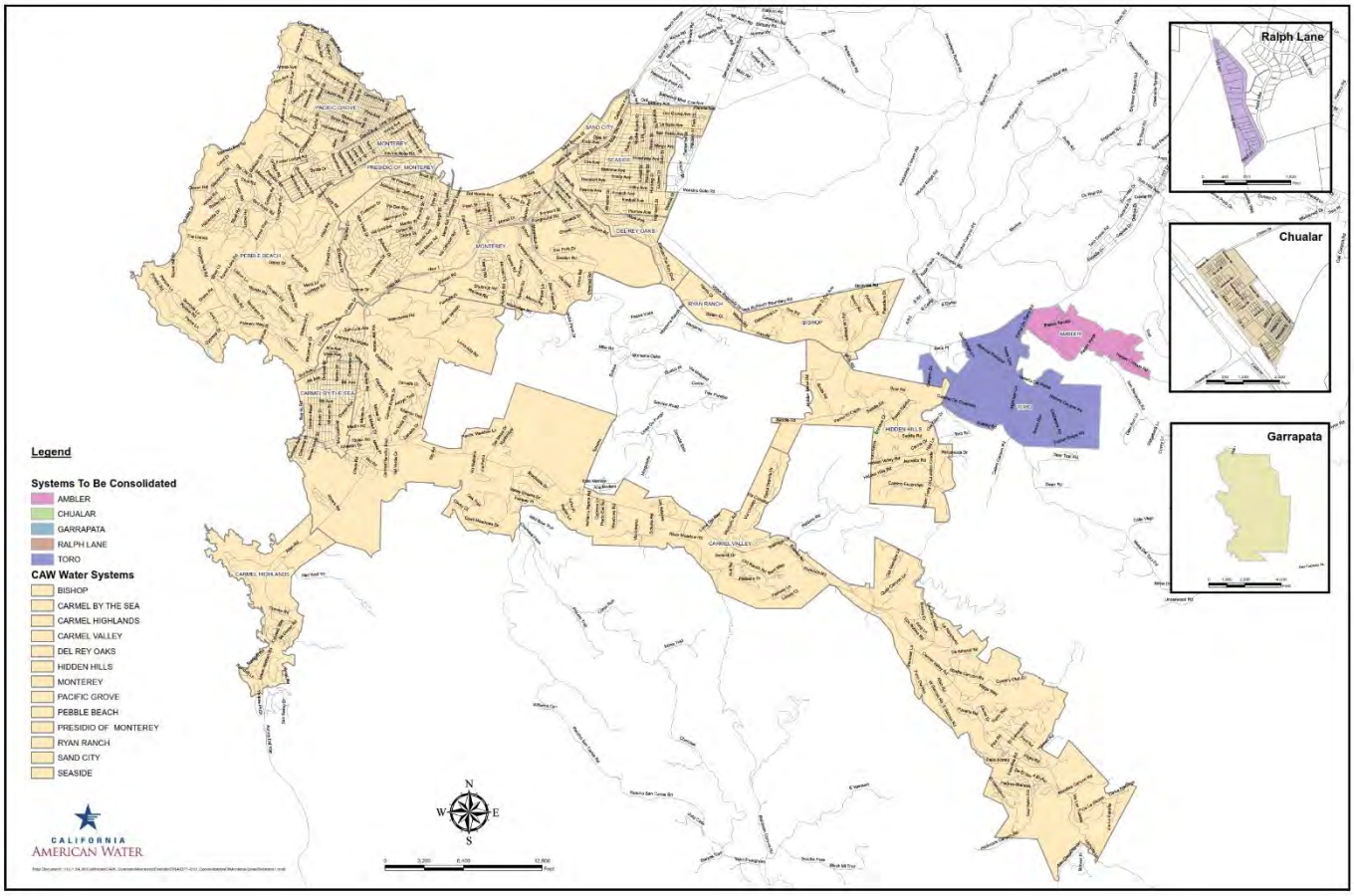
Cal-Am provides water and wastewater service to the Central Division. The Central Division is comprised of the Monterey District, which includes the Monterey Main, Bishop, Hidden Hills, Ryan Ranch systems; and the Central Satellites, which are comprised of the Ambler, Garrapata, Ralph Lane, Toro, and Chualar systems.[13]

The "Main" system within the Monterey District serves approximately 38,325 customers and includes customers within the incorporated cities of Carmel-by-the-Sea, Del Rey Oaks, Monterey, Pacific Grove, Sand City, and Seaside, and the unincorporated areas of Carmel Highlands, Carmel Valley and Pebble Beach.[14] The Main system is located entirely within the MPWMD boundaries. The Monterey District also includes the areas of Bishop, serving approximately 385 customers, Hidden Hills, serving approximately 454 customers, and Ryan Ranch, serving approximately 212 customers, which are areas that are also within the MPWMD boundaries. The Central Satellite areas include the areas of Ambler, Ralph Lane, Chualar, Toro, and Garrapata, which are located outside of MPWMD boundaries and serve a total of approximately 1,086 customers. A map depicting Cal-Am's water system areas within the Central Division is provided in Figure 2-1.

[13] Cal-Am 2022 GRC, Exhibit A – Results of Operations, Central Division, Chapter 1, Introduction, p.1 of 5.

[14] 2008 Comprehensive Planning Study for the Monterey System, dated January 18, 2008, p.E-i.

Figure 2-1: Cal-Am Central Division Water Systems[15]



2.2.2. Customers Served

A summary of Cal-Am customers by type within the Monterey system is provided in Table 2-2. As of December 31, 2021, the Monterey District and Central Satellite water systems served approximately 39,792 active metered service connections, 1,039 private fire connections, and 3,502 public fire hydrants, collectively serving a population of approximately 134,775.[16] Historical customer connections and water delivery statistics are provided in Exhibits 1 and 2 in Appendix C. As shown in Exhibit 1, between 2011 and 2021, the number of customers within Cal-Am's Monterey District was nearly flat while water consumption declined annually by a compound annual growth rate ("CAGR") of -1.8%.

[15] Cal-Am Service Area Map as of 2013, provided by the MPWMD.

[16] 2021 Annual Report of District Water System Operations for the Monterey District, prepared by Cal-Am for the CPUC, Schedule D-7.

Table 2-2: Number of Active Service Connections as of December 31, 2021[17]

Classification	Metered	Flat Rate
Residential	34,190	n/a
Commercial (including domestic)	5,029	n/a
Industrial	4	n/a
Public Authorities	511	n/a
Irrigation	n/a	n/a
Other (Golf Courses, Co. Acct.)	58	n/a
Agriculture	n/a	n/a
Subtotal	39,792	
Private Fire Connections	n/a	1,049
Public Fire Hydrants	n/a	3,344
Total	**39,792**	**4,393**

For Cal-Am's Monterey District Water System.

The following is a brief description of the water system, including details on the system's water sourcing, treatment plant, and transmission mains.

2.2.3. Sources of Supply

Currently, water supply for most customers comes from: (a) underflow in the Carmel River Alluvial Aquifer withdrawn from shallow wells in Carmel Valley, (b) mid-depth and deep wells in the Seaside Basin, and (c) deep wells along the Highway 68 corridor. Since 2003, Cal-Am has not pumped any of its supply directly from the Carmel River. Most of the Carmel River withdrawal comes from shallow wells located near the river in its lower reaches.[18] In addition, the Pure Water Monterey project commenced operations in March of 2020 and provides recycled water for recharge of the Seaside Basin. See Section 2.2.13 for more details. In addition, the Sand City Desalination Plant has legally committed 94 AFY to offset the Carmel River supply. See Section 2.2.4 for more details.

Carmel River and its Dams

The Carmel River is a 38-mile-long river that flows through Monterey County and into the Pacific Ocean. Historically, damming of the river and diverting its flow for municipal use spurred developments on the Monterey Peninsula, including the Del Monte Hotel (now part of the Naval Support Activity, Monterey), the Pebble Beach area, and Cannery Row in Monterey. The river was dammed at three locations upstream of the present-day Carmel Valley Village between 1883 and 1948; until the late 1950s, surface flow in the river supplied most of the municipal demand of the Monterey Peninsula.

Severe decline in the number of returning steelhead trout and significant degradation of the river's resources occurred over several decades beginning in the late 1970s. Municipal demand and sediment accumulation in the reservoirs accelerated in the 1970s along with the impacts of direct diversion of surface flow, which became unacceptable. The portion of municipal demand met by direct diversion of

[17] Ibid., Schedule D-4.

[18] Cal-Am 2022 GRC Proposed Application, Exhibits A-D, Chapter 1, pg 1.

surface flow at San Clemente Dam was initially ratcheted down in the early 1980s by agreement between Cal-Am, California Department of Fish and Wildlife ("CDFW"), and MPWMD.

As a result of four complaints filed against Cal-Am in the 1980s regarding impacts to Carmel River resources from its water diversions, the State Water Resources Control Board ("SWRCB") determined in 1995 that Cal-Am was diverting about 10,730 acre-feet per year ("AFY" or "AFA") from the Carmel River and its underflow without a valid basis of right. The SWRCB ordered the company to replace the unlawful diversions with lawful sources. SWRCB WR Order 95-10 described that Cal-Am's withdrawals from the Carmel River constituted the largest single adverse impact to instream beneficial uses of the river.

The SWRCB action reduced Cal-Am's rights to diversion to storage at Los Padres Reservoir to 2,179 AFY[19] and recognized other riparian and pre-1914 water rights associated with Cal-Am property along the river and San Clemente Dam. Surface diversions to the Carmel Valley Filter Plant at San Clemente Dam ceased in 2002. Since that time, surface flow impounded along the river has been used to augment dry season flows in the Carmel River to benefit threatened Carmel River steelhead and other species dependent on river flows.

In 2013, the National Marine Fisheries Service determined that all the dams on the river blocked passage for steelhead listed as threatened under the Endangered Species Act and needed to be removed or modified.[20] Two of the three dams were removed after they were determined to be obsolete and/or unsafe.[21]

Cal-Am is the current owner of the remaining Los Padres Dam and Reservoir, approximately 25 miles upstream of the ocean. The reservoir, built in 1948 by California Water & Telephone, had an original storage capacity estimated at 2,709 acre-feet.[22] By 2017, storage capacity had dropped to 1,679 acre-feet due to sediment accumulation over its nearly 70 years of operation.[23] Cal-Am currently relies on a portion of the water rights associated with the dam to provide about 20% of the Monterey Peninsula's existing demand.

The watershed contributing to Los Padres Reservoir is highly erosive and subject to periodic wildfires followed by intense rainfall that have resulted in about a 40% reduction in surface storage capacity over the 70-year life of the reservoir. In 2013, it was estimated that the reservoir has a useful life ranging

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[19] SWRCB Order 95-10 limited Cal-Am's diversion right due to siltation in the reservoir (see footnote 15, p. 25). San Clemente Dam is the only described point of re-diversion in License 11866 and this point of re-diversions has been removed; however, Order 95-10 requires Cal-Am to divert at the lower-most wells along the river.

[20] P. 7-12, National Marine Fisheries Service. 2013. South-Central California Coast Steelhead Recovery Plan. West Coast Region, California Coastal Area Office, Long Beach, California.

[21] San Clemente Dam and Reservoir, which was built in 1921 at RM 18.6 and originally stored up to 1,810 acre-feet with flashboards installed, stored 70 acre-feet of water as of 2008 after years of severe sediment accumulation. It was removed in 2015 in response to public safety concerns about the dam's resiliency to earthquakes and major floods, and environmental concerns about restoring habitat for threatened/endangered species. It was the largest dam removal in California history at the time. The Old Carmel River Dam, built in 1883 with Chinese laborers at RM 18.3, was removed in 2016.

[22] Prior to 2017, estimates of the original storage capacity of the reservoir cited in the record varied from 3,030 acre-feet to 3,200 acre-feet. The SWRCB licensed a storage right of 3,030 AFY in 1986. In 2017, it was determined that the original capacity was incorrectly estimated. See Los Padres Dam and Reservoir Alternatives and Sediment Management Study Final Sediment Characterization Technical Memorandum, Prepared by: AECOM, prepared for MPWMD in cooperation with California American Water, December 2017.

[23] Smith, D.P., Kvitek, R., Iampietro, P., and Consulo, P., 2018, Fall 2017 Stage-Volume Relationship for Los Padres Reservoir, Carmel River, California: Prepared for the Monterey Peninsula Water Management District. The Watershed Institute, California State University Monterey Bay, Publication no. WI-2018-05, 21 pp.

between 20 and 134 years. More recent analysis based on periodic bathymetric surveys indicates that at the present long-term sedimentation rate, reservoir capacity in the year 2100 may approach 1,000 acre-feet, or less than one-third of original capacity.[24]

Sediment removal alternatives were investigated to assess the costs to increase the reservoir's capacity to as high as 95% of its original storage capacity. These alternatives are costly, however, with plans ranging between $47-$90 million, or between $53,000-$112,000 per acre-foot of capacity recovered.[25] These costs exclude the costs for steelhead passage improvements that could range from under $10 million to over $100 million.[26] With a height differential of just over 120 feet from the dam spillway to its plunge pool, Los Padres Dam and Reservoir remains a challenge to provide adequate facilities to freely pass steelhead. MPWMD and Cal-Am continue to investigate alternatives to improve passage and manage sediment at the site.

Seaside Basin

The Seaside Basin underlies the cities of Seaside, Sand City, Del Rey Oaks, Monterey, and portions of unincorporated county areas, including the southern portions of Fort Ord, and the Laguna Seca Area. Generally, the Seaside Basin is bounded by the Pacific Ocean on the west, although it is recognized that the aquifer extends offshore under the seafloor, the Toro Park area on the east, Highways 68 and 218 on the south, and the northern boundary of the basin follows a groundwater flow divide separating groundwater flowing toward the Salinas Valley from groundwater flowing toward the coastal subareas of the Seaside Basin. Flow divides are hydraulic features that develop between two centers of concentrated pumping. The divide acts like a ridge in the regional water-level surface much like the way a topographic ridge separates two surface watersheds. The Seaside Basin consists of subareas, including the Coastal subarea and the Laguna Seca subarea in which geologic features form partial hydrogeologic barriers between the subareas. The Seaside groundwater basin has been pumped by Cal-Am to a degree that exceeds the basin's sustainable yield.[27]

Cal-Am filed an action which initiated adjudication of the Seaside Basin on August 14, 2003. The defendants were the City of Seaside, the City of Monterey, the City of Sand City, the City of Del Rey Oaks, Security National Guaranty, Inc., Granite Rock Company, D.B.O. Development Company No. 27, Muriel E. Calabrese 1987 Trust, Alderwoods Group (California), Inc., Pasadera Country Club, LLC, Laguna Seca Resort, Inc., Bishop, McIntosh *&* McIntosh, and The York School, Inc. A decision was entered March 2006 and was amended in February 2007 to allow Cal-Am to combine its production from the Coastal Subareas and Laguna Seca Subarea in determining its compliance with its assigned production allocation.

Based on estimates of then-recent basin extractions of approximately 5,600 AFY, the court concluded that the basin was in overdraft. That conclusion was confirmed in the adjudication decision which established a "Natural Safe Yield" for the Seaside Basin of 3,000 AFY. Accordingly, the current restrictions are needed to balance outflows and inflows within the basin, prevent further declines in water

[24] MPWMD analysis of historical bathymetric survey data.

[25] Los Padres Dam Sediment Removal Feasibility Study, dated April 2013, pg. 1 (2013) https://www.mpwmd.net/wp-content/uploads/MWH-Cal-Am-LPD-Study-Report-Final-20130425.pdf

[26]Los Padres Dam Fish Passage Study Technical Review Committee Meeting No. 3, Evaluate Alternatives, January 17, 2018.

[27]Todd Groundwater http://www.toddgroundwater.com/seaside-injection.html

levels, and reduce the risk of seawater intrusion. To achieve the Natural Safe Yield, pumpers were expected to reduce pumping in steps every three years through 2021. Cal-Am was required to reduce its withdrawals from the Seaside Basin from approximately 4,000 AFY to no more than 1,474 AFY beginning in 2021. Based on Cal-Am's over-withdrawals from the Seaside Groundwater Basin in prior years, the Watermaster created by the Court to administer and enforce its judgement ordered Cal-Am to replenish the basin at a rate of 700 AFY for 25 years, which effectively limits Cal-Am's allowable withdrawals to 744 AFY for a substantial period of time.

MPWMD developed an Aquifer Storage and Recovery ("ASR") program utilizing available storage in the Seaside Basin. The ASR program entails diversion of excess winter flows from the Carmel River for storage in injection/recovery wells in the Seaside Aquifer for withdrawal in the summer months to reduce pumping from the river. Winter flows are considered excess only when they surpass what is necessary to shelter the river's threatened steelhead trout population. Phase 1 of the ASR project was completed in 2008 and allows for a maximum annual diversion of about 2,400 AFY from the Carmel River, and an average yield of approximately 920 AFY. Phase 2 of the project, completed in 2013, involved constructing two ASR wells designed to store up to 2,900 AFY and provide an average yield of 1,050 acre-feet of additional water supply.[28] For water supply planning purposes, ASR is estimated to produce an average of 1,300 acre-feet annually.

Based on the water wells located in the Upper Carmel Valley, Lower Carmel Valley, and Seaside Basin, Cal-Am has the well infrastructure to be able to pump 3.27, 11.68, and 14.23 MGD, a total of 29.16 MGD, of groundwater within MPWMD district boundaries, respectively, as summarized in Table 2-3. There are also several satellite wells owned by Cal-Am, some of which are served by the Seaside Basin, Carmel River, and the Laguna-Seca Sub-Basin, as shown in Tables 2-4 to 2-6.

[28] https://www.mpwmd.net/water-supply/aquifer-storage-recovery/

Table 2-3: Seaside and Carmel Valley Well Summaries[29]

Region	Well Name / Number	Well Capacity (gpm)	Well Capacity (MGD)
Upper Carmel Valley	Los Laureles No. 5	250	0.36
	Los Laureles No. 6	450	0.65
	Garzas No. 3	220	0.32
	Garzas No. 4	220	0.32
	Panetta No. 1	250	0.36
	Panetta No. 2	300	0.43
	Robles Del Rio No. 3	580[30]	0.84
	Russell Well No. 2	Inactive	-
	Russell Well No. 4	Inactive	-
	Total Capacity	**2,270**	**3.27**
Lower Carmel Valley	Rancho Canada No. 1	1,150	1.66
	Cypress No. 1	1,500	2.16
	Pearce No. 1	1,500	2.16
	Schulte No. 2	1,250	1.80
	Manor No. 2[20]	125	0.18
	Begonia	1,600	2.30
	Berwick No. 8	985	1.42
	Scarlett No. 8	Inactive	-
	Total Capacity	**8,110**	**11.68**
Seaside	Plumas No. 4	192	0.28
	LaSalle No. 2	Monitoring	-
	Darwin No. 1	Monitoring	-
	Luzern No. 2	640	0.92
	Ord Grove No. 2	1,000	1.44
	Paralta No. 1	1,350	1.94
	Military No. 1	Inactive	-
	Playa No. 3	350	0.50
	Santa Margarita No. 1	1,700	2.45
	Santa Margarita No. 2[31]	1,700	2.45
	Seaside Middle School No. 3	1,250	1.80
	Seaside Middle School No. 4	1,700	2.45
	Total Capacity	**9,882**	**14.23**

[29] 2008 Comprehensive Planning Study, supra citation 14, pg. 197, updated by MPWMD.

[30] Was inactive in 2018 per MPWMD.

[31] ASR well couplets; Only one well operated in production at a time; Santa Margarita site owned by MPWMD.

On September 16, 2019 Cal-Am filed an application with the Monterey County health department to abandon and destroy the Manor No. 2, Scarlett No. 8, Begonia, and Russell No. 2 and No. 4 wells shown above.

Table 2-4: Ryan Ranch Service Area Well Summary[32]

Well Name / Number	Well Capacity (gpm)	Well Capacity (MGD)
Ryan Ranch No. 7	70	0.10
Ryan Ranch No.8 (Standby)	21	0.03
Ryan Ranch No.11	46	0.07
Total Capacity	101	0.15
Firm Capacity[33]	67	0.10

Table 2-5: Bishop Service Area Well Summary[34]

Well Name / Number	Well Capacity (gpm)	Well Capacity (MGD)
Bishop Well No. 1	410	0.59
Bishop Well No. 2	373	0.54
Total Capacity	783	1.13
Firm Capacity	373	0.54

Table 2-6: Hidden Hills Service Area Well Summary[35]

Well Name / Number	Well Capacity (gpm)	Well Capacity (MGD)
Bay Ridge Well	361	0.52
Standex Well	Inactive	-
Total Capacity	361	0.52
Firm Capacity	0	0

[32] 2008 Comprehensive Planning Study, supra citation 14, pg. 199, updated by MPWMD.

[33] For single well satellite systems, redundancy is achieved through emergency interties.

[34] 2008 Comprehensive Planning Study, supra citation 14, pg. 200, updated by MPWMD.

[35] Ibid pg. 200

2.2.4. Sand City Desalination Plant

The Sand City Coastal Desalination Plant is a brackish seawater desalination facility. It has a design capacity to produce 300 acre-ft of water (98 million gallons approximately) per year using a reverse osmosis (RO) process. However, the plant has failed to achieve more than 276 AFY due to source water quality issues and discharge permit requirements.[36] The plant became operational in April 2010. The facility includes four brackish water feed wells, a concentrate disposal well and associated pipelines and components. Of the four wells that are used to pump sea water to the plant, two are in use at any given time. These are over 59 feet deep and located 200 feet from the surf line and over 2,490 feet from the plant. Cal-Am operates the plant under a lease with the City of Sand City, the developer of the project. Only a total of 94 AFY of long-term production from the Sand City Desalination Plant is legally committed to offset Carmel River pumping.

2.2.5. Water Treatment Facilities

As of 2019, the Monterey Water System included six water treatment facilities of various types and sizes, as summarized in Table 2-7.

Table 2-7: Summary of Water Treatment Facilities[37]

Facility Name	Type	Age	Capacity (MGD)	2021 Production (MGD)
Begonia Iron Removal Plant	Iron & Manganese Filtration	Originally built in 1975, upgraded in 2001.	16.9	3.78
Ord Grove Treatment Plant	Chemical Disinfection	N/A	N/A	N/A
Luzern GAC Filtration System	Granular Activated Carbon Filtration, Hydrogen Sulfide Removal	N/A	N/A	N/A
Ryan Ranch Water Treatment Plant	Greensand Pressure Filtration Plant for Iron, Manganese, and Arsenic Removal	Originally built in 1981 with upgrades made in 2007.	0.22	N/A
Bishop Water Treatment Plant	Chemical Disinfection	N/A	N/A	N/A
Hidden Hills Water Treatment Plant	Chemical Disinfection	Built in 2001.	N/A	N/A

N/A = not available.

2.2.6. Water Distribution

The total water delivery from the various water supply sources described in this section in 2021 is summarized in Table 2-8.

[36] Supply and Demand for Water on the Monterey Peninsula, David J. Stoldt, General Manager, MPWMD. May 18, 2020. This source document did not include complete information.

[37] 2008 Comprehensive Planning Study, supra citation 14, (pg 5-7 to 5-15), updated by MPWMD, production figures from 2021 Annual Report.

Table 2-8. Monterey District Water Delivery in 2021[38]

System / Source	Subtotal (1,000 gal)	Total (1,000 gal)
Ambler System (From Ambler Wells)		53,479
Bishop System (From Bishop Wells)		-
Chualar System (From Chualar Wells)		29,427
Garrapata System (From Garrapata Wells)		6,405
Hidden Hills System		
From Bay Ridge Well	46762	
From Toro System	695	
Total for Hidden Hills System		47,457
Monterey Main System		
Wells to BIRP Plant to Distribution	1,380,031	
Purchased Water from Sand City	48,233	
Less ASR Injection	(41,629)	
Total for Monterey Main System		1,386,635
Ralph Lane System (From Ralph Lane Well)		2,229
Ryan Ranch System (from Ryan Ranch Wells)		-
Toro System		
From Toro Wells	54,997	
Transfer to Hidden Hills	(695)	
Total Delivery to Toro System		54,302
Pure Water Monterey		
PWM Injection (Monterey One Water)	1,174,794	
PWM Purchased Water	1,120,516	
PWM Recovery (Seaside Wells)	999,231	
Total Pure Water Monterey		3,294,541
Total		4,874,475

Source: 2021 Annual Report, Schedule D-1.

The Monterey Water System is divided into four district areas. Each area has different operational conditions and requirements.[39] The four areas are:

- Upper Carmel Valley;
- Lower Carmel Valley and Monterey Peninsula;
- Seaside;
- Upper Lift Zones.

[38] Monterey District Annual Report for 2021, supra citation 16, Schedule D-1.

[39] 2008 Comprehensive Planning Study, supra citation 14, (pg. 250), updated by MPWMD.

Upper Carmel Valley

Water from the Upper Carmel Valley ("UCV") aquifer is pumped direct to the system with wellhead treatment. Additionally, the Del Monte Booster Station can lift water from the Lower Carmel Valley district into the UCV. Many upper lift zones are in the UCV district.[40]

Lower Carmel Valley and Monterey Peninsula

Wells in the Lower Carmel Valley ("LCV") pump raw water to the Begonia Iron Removal Plant ("BIRP"). BIRP is a pressure filter plant. LCV has a 36-inch diameter transmission main that transports water from the BIRP to the west. At the intersection of Valley Greens Road and Carmel Valley Road, the 36-inch transmission main divides into a 30-inch pipe that goes to the Segunda Tank and pumping facility and another 30-inch main that continues to the Forest Lake Tanks in Pebble Beach. Water pumped to the Segunda Tank is then pumped to the Crest Reservoir, which has a capacity of 0.25 MG. The Crest Reservoir is a break tank that sends flow to Del Ray Oaks and Seaside through the Del Rey Regulator. From Seaside, the water moves to meet the demands in Monterey and Pacific Grove. Water pumped towards the Forest Lake Tanks is pumped via the Monterey Pipeline completed in 2018. The transmission mains at Valley Greens include 12-inch and 24-inch manually operated valves that can each partially control the flow split from BIRP.[41]

Seaside

Water is drawn from the Carmel Valley via the Segunda Booster Station and Crest Reservoir to serve the Seaside area. In the summer, water is extracted from the Seaside Basin to meet water demands. Water from Luzern well is filtered with Granular Activated Carbon ("GAC") filters. Water from Playa and Plumas wells is chlorinated on-site and is then distributed to the system. Water from the Ord Grove and Paralta wells is pumped to the Ord Grove Treatment Plant and then to the Ord Grove Tank via the Ord Grove Treatment Plant Booster Station. The Santa Margarita and Seaside Middle School Wells are treated at the Santa Margarita site then distributed to the system. The Hilby Tanks are also in Seaside; these tanks are only available when the Hilby Booster pumps are active to pump water into the distribution system as a result of their lower elevation. Pressures within the Seaside system are regulated by the Del Rey Regulating Station. Limited supplemental flow is provided by the Fairway Tanks for periods of high demand and fire flows, but a recirculation line has been added in the upper Seaside area to ameliorate that issue. Flows from these tanks are regulated by the Highway 68 Regulating Station.[42]

Upper Lift Zones

There are 43 upper lift zones in the Monterey system. The booster stations within the lift zones are utilized to pump the water to higher gradients. Flow can travel through up to four lifts to service customers at the outer boundaries of the system. Thirty-five of the upper lift zones have gravity storage while the remaining eight have hydropneumatic (closed loop) systems. Upper lift zones account for

[40] Ibid, pg. 263.

[41] Ibid, pg. 263-264.

[42]Ibid, pg. 264-265

around 34% of the average day demand in the Monterey system.[43] The main upper valley lift zones are served from the Segunda Tanks.

2.2.7. Water Distribution Piping

The water distribution system of the Central Division includes a distribution piping network consisting of approximately 640 miles of pipe, primarily cast iron, steel, cement asbestos, PVC, and ductile iron pipe with diameters ranging from 1-inch to 36-inch.[44] The average age of the distribution pipe network within the Monterey District is 50.3 years.[45] A summary of the size and type of pipe that comprise the distribution pipe network is summarized in Table 2-9. This is presented for the entire Central Division including the Central Satellites because the Cal-Am reporting does not break out the Central Satellites assets from the Monterey Water System assets.

Table 2-9: Distribution Pipe Network – Length (Ft) by Diameter

Material	1”	1 ½”	2”	2 ½”	3”	4”	5”	6”	8”
Cast Iron	187		12,725	176	6,098	130,857		100,828	55,056
Cast Iron (Cement Lined)	178		25,522		103	153,759		241,443	86,487
Concrete									
Copper	284		216						
Riveted Steel	267	102	1,217		143	9,976	23,183	46,526	63,240
Standard Screw									
Screw or Welded Casing									
Cement-Asbestos	173		1,988		619	124,804	2,137	380,659	131,995
Welded Steel									
Wood									
Other-Galvanized	517	2,144	25,911	1,666					3
Other-PVC	2,716	3,577	23,872	5,195	3,276	34,099		204,841	538,691
Other-Ductile Iron	124		2,026	29		1,845		10,083	16,246
Other-Brass	1		203	9				15	
Other-PE			1,144						
Other-Unknown	2,032	1,454	17,672		1,370	38,205		57,871	30,740
Total	**6,479**	**7,277**	**112,496**	**7,075**	**11,609**	**493,545**	**25,320**	**1,042,266**	**922,458**

[43] Ibid, pg. 265.

[44] Ibid, pg. 15., and 2022 GRC, MDR II.E.10.

[45] Cal-Am 2022 GRC, MDR II.E.10.

Table 2-9: Distribution Pipe Network – Length (Ft) by Diameter (Cont'd)

Material	10"	12"	14"	16"	17-18"	20-22"	24"	30-36"	Unknown	Total All Sizes
Cast Iron		42,360		9,657		993				358,937
Cast Iron (Cement Lined)		38,283		2,068	139		1,205			549,187
Concrete										-
Copper										500
Riveted Steel	20,505	58,952	2,936	11,467	16,527	15,845	8,535	53,975		333,396
Standard Screw										-
Screw or Welded Casing										-
Cement-Asbestos	4,109	70,137	5,483	5,686			505			728,295
Welded Steel										-
Wood										-
Other-Galvanized										30,241
Other-PVC	8,002	93,947	8	12,488		3,427	3,853			937,992
Other-Ductile Iron	160	9,609	281	46,563	2,932	33,429	45,780	88,225		257,332
Other-Brass										228
Other-PE										1,144
Other-Unknown	338	6,801	57	3,528	119	359	2,714	29	23,593	186,881
Total	**33,114**	**320,089**	**8,765**	**91,457**	**19,717**	**54,053**	**62,592**	**142,229**	**23,593**	**3,384,133**

Source: 2021 Annual Report, Schedule D-3.

2.2.8. Booster Pump Stations

As of 2008, the Monterey Water System included 58 booster pump stations (excluding production wells) in the "Main" Monterey system.[46] The Hilby Pump Station was added in support of the Monterey Pipeline in 2018 and a future Carmel Valley Pump Station is also planned.

2.2.9. Water Storage Facilities

There are 94 finished water storage facilities within the Monterey Water System with a total capacity of over 35 million gallons.[47] A summary of the distribution storage tanks by system and type is provided in Table 2-10.

[46] 2008 Comprehensive Planning Study, supra citation 14, p.6-11.

[47] 2021 Annual Report of District Water System Operations for the Monterey District, supra citation 16, Schedule D-2, p.14.

Table 2-10: Water Storage Facility Summary[48]

System	Type	Quantity	Total Capacity (MG)
Monterey Main System	Steel	72	30.953
	Concrete	8	2.165
Hidden Hills	Steel	6	0.440
Bishop	Steel	7	0.953
Ryan Ranch	Steel	1	0.500
Total		94	35.001

2.2.10. Other Distribution Appurtenances

The water distribution system also contains 3,496 fire hydrants, an estimated 12,000 distribution valves, and 41,398 retail water meters. A summary of the retail water meters and active service connections by size is provided in Table 2-10. In addition, there are four 18-inch meters at the ASR sites.

Table 2-11: Water Meters and Services[49]

Meter Size (inches)	No. of Meters	Service Line Diameter (inches)	Active Service Connections
5/8 x 3/4	32,775	Less than 3/4	-
3/4	165	3/4	1,039
1	6,495	1	34,599
1 1/2	1,063	1 1/2	364
2	742	2	3,482
3	84	3	56
4	36	4	446
6	20	6	98
8	-	8	-
12	-	12	-
Other (unknown)	18	Other (unknown)	47
Total	**41,398**		**40,131**

2.2.11. Monterey Pipeline and Pump Station

The Monterey Pipeline and Pump Station (Phase 2 of the MPWSP) was completed in 2018 and provides conveyance infrastructure for Cal-Am to move water north-to-south to Pacific Grove, Carmel, and Carmel Valley, as shown in Figure 2-2. It is comprised of approximately 6.5 miles of 36-inch pipe that conveys water from an existing pipeline at the intersection of Yosemite Street and Hilby Avenue (its

[48] Report titled Cal-Am Tank Capacities by Water System – 2011.xlsx, provided by MPWMD.

[49] 2021 Annual Report of District Water System Operations for the Monterey District, supra citation 16, Schedule D-5, p.16. Includes both the Monterey Water System assets and the Central Satellites because Cal-Am does not break them out separately.

eastern terminus) in Seaside, through Seaside and Monterey to the Eardley pump station within the City of Pacific Grove (the western terminus). The pipeline route improves the hydraulics of the existing system and allows for deliveries of Pure Water Monterey advance purified water, and for maximum use of ASR and Carmel River excess diversion rights. The Monterey Pipeline connects two pressure zones in the Cal-Am system (one in the area of the City of Pacific Grove and one in the area of the City of Seaside), by-passing the distribution system in Old and New Monterey. With implementation of this pipeline, water stored in Forest Lake Tanks in Pebble Beach can flow via gravity to the LCV or be pumped to the UCV, with construction of a new pump station.

The existing Cal-Am distribution system currently conveys Carmel River water through the Segunda-Crest pipeline network to the existing ASR facilities; however, the capacity of this pipeline can constrain the volume of water that can be delivered to the injection wells. The capacity of the Carmel Valley wells can also constrain amounts available for ASR injection. The Monterey Pipeline is expected to improve the capacity of Cal-Am's existing system to convey additional excess Carmel River winter flows to specially constructed injection/recovery wells in the Seaside Groundwater Basin. The pipeline is expected to better achieve the full yield authorized by previously approved water rights for later extraction and use by Cal-Am during dry periods. This "conjunctive use" more efficiently utilizes local water resources to improve the reliability of the community's water supply while reducing the environmental impacts to the Carmel River and Seaside Groundwater Basins. The Monterey Pipeline also enables Cal-Am to deliver Pure Water Monterey water to its customers.

2.2.12. Monterey Peninsula Water Supply Project

The MPWSP is a Cal-Am initiative to create a desalination plant with sub-surface intake wells, as well as related desalination facilities such as source pipelines, water product pipelines, and brine disposal systems (collectively, "Phase 1 of the MPWSP"). As discussed previously in this report, this project resulted from SWRCB Order 95-10, which mandated severe reductions in water sourcing from the Carmel River from the 2006 court adjudication of water rights in the Seaside Groundwater Basin and the subsequent implementing order(s) issued by the Seaside Basin Watermaster (which further reduced Cal-Am's extraction of water from that historical source), and as a safeguard against drought and basin overuse. This desalination plant is proposed to use reverse-osmosis technology and use slant wells to avoid the impacts to marine life that are posed by open ocean intakes. The seven-mile pipeline to deliver water from the desalination plant and Pure Water Monterey projects ("Phase 2 of the MPWSP") has been constructed. The desalination plant is proposed to be able to deliver 6.4 MGD or 6,252 acre-feet of water annually and to cost $322 million to complete.[50] The brine resulting from the desalination process is supposed to be discharged to the ocean through Monterey One Water's existing outfall. In June 2019, it was announced that The California Department of Water Resources will provide a $10 million grant to the utility to help fund this desalination project.[51]

[50] Water Supply Project https://www.watersupplyproject.org/about

[51] Water Supply Project Update (2019) https://www.watersupplyproject.org/single-post/2019/06/20/California-American -Water-Desalination-Project-Awarded-10-Million-State-Grant.

Figure 2-2: Monterey Pipeline[52]

In September 2018, CPUC issued a Certificate of Public Convenience and Necessity approval of the MPWSP.[53] A lawsuit was filed by the Marina Coast Water District in August of 2019 against Cal-Am and Monterey County, citing that the County had improperly granted Cal-Am a development permit for the desalination plant. In an August 25, 2020 California Coastal Commission staff report, staff recommended denial of the permit citing that the project is inconsistent with the relevant Coastal Act and Local Coastal Program policies and that the Pure Water Expansion is a feasible alternative to Cal-Am's desalination project, which would allow Cal-Am to cease its illegal water withdrawals from the Carmel River and meet the region's water needs, and is the preferable, least environmentally damaging alternative.[54] On September 16, 2020, the day before the California Coastal Commission Special Hearing, Cal-Am withdrew its consolidated coastal development permit application.[55] On November 6, 2020, Cal-Am refiled its application to the California Coastal Commission. On November 17, 2022, the California Coastal Commission approved Cal-Am's permit application for the approval of the MPWSP. As of the date of this report, Cal-Am must still obtain an array of local, state, and federal permits, and resolve litigation over groundwater rights before construction of the MPWSP can commence.[56]

[52] Map of Monterey Pipeline provided by MPWMD.

[53] https://www.cpuc.ca.gov/Environment/info/esa/mpwsp/index.html

[54] Staff Report: De Novo Appeal and Consolidated Coastal Development Permit, Application No.: 9-19-0198, August 25, 2020.

[55] Letter from Ian Crooks of Cal-Am to Mr. Tom Luster of the California Coastal Commission, regarding Coastal Development Permit Application No. 9-19-0918, dated September 16, 2020.

[56] Another California Desalination Plant Approved – The Most Contentious One Yet. Cal Matters, R. Becker, November 17, 2022. Accessed at: https://calmatters.org/environment/2022/11/desalination-plant-monterey-california/

2.2.13. Pure Water Monterey Project

The Pure Water Monterey ("PWM") project is a water supply project, jointly developed by MPWMD and Monterey One Water, that provides purified recycled water for recharge of the Seaside Basin that serves as a drinking water supply, and recycled water to augment the existing Castroville Seawater Intrusion Project's crop irrigation supply. By sourcing reclaimed wastewater, stormwater, food processing water, and impaired surface water, this initiative seeks to replenish groundwater, as well as provide water for domestic and irrigating uses.[57] This program began injecting water into the Seaside Groundwater Basin in March 2020. The Pure Water Monterey Expansion project is expected to yield 2,250 AFY.

2.2.14. Other

Other assets that comprise the Monterey Water System include (1) Cal-Am's leasehold interest in its local office; (2) Cal-Am's corporate yard and associated improvements, (3) various fixtures and equipment ("improvements pertaining to the realty")[58]; (4) personal property (e.g. vehicles used to service the Monterey Water System, office furnishings, computer equipment, supplies/inventory, SCADA equipment; (4) intangible property (e.g., customer/billing records, plans and specs for all of its improvements, maintenance and repair logs and reports, engineering reports and related documents for the Monterey Water System and the MPWSP), and (5) water rights as identified in this report.

2.3. Operations and Staffing

Mr. Kevin Tilden serves as the President of Cal-Am. He has served in the water industry for more than 20 years and has overseen community and government relations, public and customer outreach, customer communications, business development, conservation, and customer service for California and Hawaii American Water. Prior to joining American Water in 1998, Mr. Tilden managed a campaign for U.S. Congress, served as a public affairs manager for SBC/Pacific Bell (now AT&T), and worked for two leading California public affairs agencies. Mr. Tilden holds a Bachelor of Arts from the University of Washington and a Master of Business Administration from Pepperdine University.[59] We do not anticipate Mr. Tilden will be part of the staff acquired as part of the acquisition, but his experience and qualifications were provided here to provide an indication of the management capability of Cal-Am.

Cal-Am's Central Division operates the Monterey Water System under Tilden's leadership, including source of supply, pumping, water treatment, and transmission & distribution operation and maintenance activities. Cal-Am reported in its 2022 General Rate Case ("GRC") that it has 100 employees associated with its Central Division.[60] It is likely that a new owner would offer employment to at least some of the employees of Cal-Am's Central Division. In addition, Cal-Am's Central Division is supported by Cal-Am's General Office and American-Water Company's Service Company. The General Office is Cal-Am's state corporate office that provides specific services to its California operations. Examples of these services include the rates, finance, external affairs, and water quality teams that serve multiple districts across California, as well as leasing of the state corporate office located in San Diego County. The

[57] MPWMD Website https://www.mpwmd.net/water-supply/pure-water-monterey/

[58] "Improvements pertaining to the realty" include any machinery or equipment installed for use on property taken by eminent domain, or on the remainder if such property is part of a larger parcel, that cannot be removed without substantial economic loss or without substantial damage to the property on which it is installed, regardless of the method of installation, California Code of Civil Procedure § 1263.205.

[59] https://www.amwater.com/caaw/About-Us/Meet-the-President

[60] 2022 GRC, Exhibit A Ch 4, Table 4.2.

services provided by the Service Company include customer service, water quality testing, environmental compliance, human resources, communications, technology and innovation, finance, accounting, legal, engineering, supply chain, and risk management services. The tangible assets used by Cal-Am's General Office and its Service Company to provide services to the Central Division are excluded from the Monterey Water System appraisal.

2.4. Financial Statement Analysis

Exhibits 3 and 4 of Appendix C summarize the Cal-Am historical financial statements (income statements and balance sheets) for fiscal year FY 2014 through FY 2021. These statements were obtained from Annual Reports submitted by Cal-Am to the CPUC and provide historical financial results for Cal-Am's California operations. Statements of cash flow were not included in these reports. These financial statements were analyzed to assess Cal-Am's financial performance over time. The evaluation of Cal-Am's financial performance was used to assess the financial performance of Cal-Am's Monterey Water System and Central Satellites because more complete financial statement information was available for Cal-Am's California operations than for Cal-Am's Monterey Water System and Central Satellites. Historical financial statements were evaluated since they can provide some indication of future growth potential and financial performance.

Between 2014 and 2021, Cal-Am's assets increased by a CAGR of approximately 7.7%, its operating income increased by a CAGR of 5.1% and its net income CAGR over this period was 8.7%. Most of the increase in operating income occurred in 2019 and 2021. A portion of the asset and earnings growth was due to several acquisitions, including the acquisition of the Meadowbrook Water Company in 2016, which added approximately 1,695 connections to the Cal-Am's Northern Division, the acquisition of the Fruitridge Vista Water Company in 2020, which added approximately 4,800 service connections, and the acquisition of the Hillview Water Company in 2020, which added approximately 1,500 service connections. Over this historical timeframe, Cal-Am's net profit margin increased from 12.6% to 17.4%, its return on assets remained relatively stable between 2.7% and 3.3%, and its return on equity remained relatively consistent, but ranged from 7.5% to 8.7%, as shown in Exhibit 5.

Cal-Am's Annual Reports for the Monterey Water System and Central Satellites include income statement and utility plant in service information, however, balance sheets for the Monterey Water System and Central Satellites were not included in Cal-Am's Annual Reports or other report filings provided by Cal-Am to the CPUC that could be found. Historical utility plant in service and rate base information are presented on Exhibits 6 and 7. As shown in Exhibit 7, net utility plant increased from $171.1 million at the end of calendar year ("CY") 2012 to $273.8 million at the end of CY 2021 representing a CAGR of 5.4%. This increase was attributable to increases in pumping and transmission/distribution asset additions over the period.

Exhibit 8 presents historical operating results for the Monterey Water System and Central Satellites based on Annual Reports submitted by Cal-Am to the CPUC and Exhibit 9 presents historical statement of earnings presented by Cal-Am for the Monterey Water System and Central Satellites to the CPUC as part of its 2019 and 2022 Rate Case filings. These statements present similar, but not the same, information and financial results because they came from different sources. Based on Exhibit 8, operating revenues for the Monterey Water System and Central Satellites increased from approximately $56.2 million in 2013 to $77.7 million in 2021, a CAGR of 4.1%. Earnings before interest, taxes, depreciation, and amortization ("EBITDA") increased from $29.7 million in 2013 to $36.5 million in 2021, a CAGR of

2.6%. A higher rate of increase in operating expenses (5.7% CAGR) compared to operating revenues resulted in a relatively modest increase in EBITDA over this period.

The profitability of Cal-Am's Monterey Water System and Central Satellites has increased in terms of net profit margin and EBITDA/Sales since CY 2014. Net profit margin ranged from 16.1% to 20.8% from CY 2014 to CY 2021. EBITDA/Sales ranged from 15.0% to 39.9% over the same period, as shown in Exhibit 10. Return on rate base ranged from 1.7% to 6.9% over the period.

Based on the historical financial analysis, Cal-Am's Monterey Water System and Central Satellites has been able to increase its profitability in some years since 2014. However, in each year since 2014, the return on rate base has been lower than its current CPUC allowable rate of return of 7.61%. It is anticipated that the lower return on rate base than allowable return may be primarily caused by regulatory lag that prevents Cal-Am from immediately increasing utility prices as expenses increase and capital investments are made. Further, it is anticipated that growth in earnings may improve following settlement of Cal-Am's 2022 Rate Case with the CPUC.

The financial results of Cal-Am's Monterey Water System and Central Satellites provided in Exhibit 8 of Appendix C include General Office and Service Company Costs. General Office costs are associated with the state corporate office and reflect costs specific to California. Examples of these costs include the rates, finance, external affairs, and water quality teams that serve multiple districts across California, as well as lease costs for the state corporate office in San Diego County.[61] The services provided by the Service Company include customer service, water quality testing, environmental compliance, human resources, communications, technology and innovation, finance, accounting, legal, engineering, supply chain, and risk management services.[62] While these costs originate from the parent company, it is likely that a standalone company comprised of Monterey Water System would incur similar costs for the functions specified. Therefore, the historical financial results were not normalized to reflect changes to these General Office expenses. Several adjustments were made to expense items, including those associated with the Citizen's Acquisition Premium, San Clemente Dam expenses, and Utility Plant Acquisition Adjustments. These adjustments were made as described subsequently in Section 5 to value these items separately from the "Base" Monterey Water System. No other revenue or expense items were identified that required normalization adjustments.

[61] CAW 2019 GRC Application, Direct Testimony of Stephen Owens, dated July 1, 2019, p.13.

[62] CAW 2019 GRC Application, Direct Testimony of Nikole Bowen, dated July 1, 2019, p.2.

3. Water Industry Analysis and Outlook

3.1. Industry Overview

3.1.1. General

The water industry in the United States ("U.S.") is fragmented with approximately 148,031 public drinking water systems in the U.S. based on the latest comprehensive information on drinking water systems published by the U.S. Environmental Protection Agency ("USEPA").[63] Each of these systems regularly supplies drinking water to at least 25 people or 15 service connections. There is a total of approximately 50,022 non-transient community water systems that supply water to a population of customers year-round. Of these non-transient community water systems, the vast majority are relatively small or very small systems that serve less than 10,000 people. Table 3-1 provides a summary of community water systems in the U.S by size.

Table 3-1: Community Water Systems in the U.S. by Size[64]

Description	Very Small 500 or less	Small 501-3,300	Medium 3,301-10,000	Large 10,001-100,000	Very Large >100,000	Total
Number of Systems	27,273	13,387	5,014	3,907	441	50,022
Population Served	4,631,611	19,314,385	29,157,340	111,161,467	141,416,678	294,339,881
Percentage of Systems	55%	27%	10%	8%	1%	100%
% of Population	2%	6%	10%	36%	46%	100%

Government-owned water and wastewater utility services have annual revenue of about $116 billion. The number of private or investor-owned water utilities (approximately 4,800) is small compared to the number of government-owned utilities, and the combined annual revenue of private water and wastewater utilities is roughly $15 billion.[65] Public entities own and operate water systems that serve about 86 percent of this population, and privately-owned utilities serve 14 percent. Further, private water service is concentrated in several states, such as Massachusetts, Connecticut, and Idaho where private water utilities serve more than 35 percent of the population, and in Pennsylvania, Ohio, West Virginia, Kentucky, and Nebraska where private water utilities serve between 25 to 35 percent of the population. In California, private water utilities served between 15 and 25 percent of the population.[66] In aggregate, revenues for U.S. water, sewerage and other systems are forecasted to grow at an annual compounded rate of approximately 4% between 2019 and 2023.[67]

3.1.2. Competitive Landscape

Demand for utility services depends on commercial and residential water needs, which are related to population growth, the level of economic activity, and efficiency of water usage. The profitability of individual companies depends on efficiency of operations because prices are fixed by public utility

[63] USEPA National Drinking Water Activity Dashboard available at https://echo.epa.gov/trends/comparative-maps-dashboards/drinking-water-dashboard?state=National. 2019 data for number of systems, 2016 data for population served.

[64] Ibid.

[65] Dun & Bradstreet, First Research Industry Profile, Water & Sewer Utilities, December 17, 2019.

[66] The State of Public Water in the United States, published by Food & Water Watch, February 2016.

[67] Dun & Bradstreet, supra citation 65.

commissions ("PUCs"). Large companies have economies of scale in operations and the ability to raise capital for infrastructure improvements. Small companies can compete successfully through superior engineering or by serving desirable local markets. The U.S. industry is concentrated with the 50 largest companies accounting for about 75% of the revenue. High barriers to entry, such as capital investments, make the industry resistant to competition; many companies operate as de facto monopolies. The cost of constructing a new water and wastewater system in an existing market is high, and regulatory approval must be secured. Utilities may face competition from industrial customers supplying their own water.

Though there are many more public than private utilities, market activity (mergers and acquisitions) among private water companies is more prevalent than among government-owned utilities and takes place in major markets across the country. Between 2015 and 2020 there were approximately 716 acquisitions of community water and wastewater systems. Approximately 66% percent were transactions involving water systems, and the remaining 34% were for wastewater (18%) and combined water and wastewater systems (16%). Overall, the deal sizes were mostly smaller tuck-ins made by companies like American Water and Aqua America that average approximately 2,500 customers for water systems. In addition, the majority of transactions (approximately 60%) were comprised of private companies acquiring other private companies, approximately 24% involved private companies acquiring municipal systems, 11% involved municipal agencies acquiring private company systems, and approximately 5% involved municipal agencies acquiring systems from other municipal agencies.[68] Many of the transactions involving municipal agencies acquiring private company systems were eminent domain transactions or transactions consummated under the threat of condemnation. In 2021, there were approximately 210 utility transactions that occurred, which primarily involved acquisitions by private water and wastewater companies.[69]

3.1.3. Industry Regulation

Water and wastewater utilities are regulated by federal, state, and local authorities. PUCs provide economic regulation of private water and sewer companies and some government owned utilities. Regulation represents third-party intervention by a government agency as an arbitrator between the water company and the customers it serves. Ideally, regulation attempts to maximize the net benefits of efficiency, equity, and innovation by seeking fair profits and "just and reasonable" rates.[70] As such, utility rates charge by water and sewer companies typically require review and approval by state PUCs. State PUCs also set conditions and standards for services and often must approve long-term financing programs, capital expenditures, and reorganizations (including asset sales and acquisitions).

Accountability of utility rates charged by government-owned water and sewer utilities are typically assured through municipal governance and governing boards. Public agencies are non-profit service providers and in California, cannot charge their customers/ratepayers a higher price for water than the actual cost of providing the service.[71]

For private water companies, utility rates, revenues, and earnings are primarily based on a "utility basis" approach to establishing revenue requirements. Under this approach, PUCs allow water companies the

[68] U.S. Private Water Utilities: Drivers, Competitive Landscape, and Acquisition Trends, Bluefield Research, 2019.

[69] 34% Jump in M&A Emphasizes Banner Year for Water Industry, Bluefield Research, March 28, 2022. Accessed at: https://www.bluefieldresearch.com/ns/34-jump-in-ma-emphasizes-banner-2021-for-water-industry/

[70] Principles of Public Utility Rates, J. Bonbright, A. Danielsen, and D. Kamerschen, 2nd Edition, 1988, p.6.

[71] California Constitution, Article XIII D, 6(b) [Proposition 218].

opportunity to recover operation and maintenance ("O&M") expenses, including depreciation, and earn a fair rate of return on rate base. Rate base is typically comprised of the depreciated original cost value of the utility's property that is used and useful to serving the public and may include reasonable allowances for interest used during construction and for working capital. In this context, original cost is a term of art that means the cost of an asset when first devoted to public service rather than the cost to a transferee company.[72] The annual depreciation expense component of the revenue requirement allows the utility to recover its capital investment over the anticipated useful life of the depreciable assets. The return on rate base component is intended to compensate the utility for annual interest expenses on outstanding debt and provide a fair rate of return for the total equity capital employed to finance facilities used to provide water service.[73]

In addition to economic regulation, state and federal agencies regulate the operations of water utilities. The USEPA monitors state compliance with the Safe Drinking Water Act ("SDWA"), which sets regulations concerning contaminants in drinking water. The USEPA sets legal limits on over 90 contaminants in drinking water. All water system operators are required to post "consumer confidence reports" about the contaminants in their water. Under the Clean Water Act, the USEPA also regulates the types of contaminants that may be discharged into public waters from sewerage systems. Utilities are also subject to regulations regarding storage and disposal of hazardous substances, such as water treatment chemicals, and occupational safety laws.

3.2. Industry Risks and Challenges

The most significant issues and challenges facing water utilities include water source availability, aging infrastructure, access to funding for capital projects, and resiliency associated with extreme weather events. Utilities are also concerned about nonpoint pollution and contaminants in drinking water, such as per- and poly-fluoroalkyl substances ("PFAS").

Deteriorating infrastructure is a critical issue for water and wastewater utilities. Water utilities must invest in the coming decades to replace and update aging water treatment plants, storage tanks, and pipe, as well as other drinking water supply infrastructure. U.S. water and wastewater systems will need to spend an estimated $2.9 trillion in infrastructure investments over the next 20 years, according to a report published by the National Association of Clean Water Agencies ("NACWA").[74] Most of the buried water infrastructure in the U.S. is designed to last 60 to 80 years, and much of it is nearing or has passed that lifespan, according to the American Society of Civil Engineers.[75] Spending requirements to meet federal standards in the commercial portion of the industry are smaller but just as urgent.

Another critical issue in the water industry is that revenues and profitability for water companies are tied to unpredictable water consumption, except in circumstances where water demands are decoupled from revenues under certain regulatory decoupling mechanisms. The revenue of water utilities in part depends on the volume of water consumed, which in turn depends on weather conditions and customer consumption. Residential water use increases in hot, dry weather and decreases in cool, rainy periods.

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[72] Principles of Public Utility Rates, supra citation 70, p.211 and 237.

[73] Principles of Water Rates, Fees, and Charges, Manual of Water Supply Practices, M1. 7th Edition, American Water Works Association.

[74] Water Infrastructure Funding Parity Report, prepared by Raftelis and Tetra Tech for the National Association of Clean Water Agencies, dated July 21, 2022.

[75] 2017 Infrastructure Report Card, Drinking Water, published by the American Society of Civil Engineers.

During dry periods, municipalities and water companies may also restrict water use to conserve depleted supplies; consequently, revenues and profitability can vary highly through the year. Consumption is also impacted by shifting water use habits; indoor water use in the U.S. declined 22% between 1999 and 2016 due to more efficient appliances and other conservation efforts.[76] However, rate regulation in some states mitigates the risk of revenue losses from lower water demands through decoupling mechanisms. The CPUC has authorized Cal-Am and other water utilities in California to utilize such decoupling mechanisms. For example, Cal-Am tracks the difference between CPUC authorized fixed costs to be recovered in water rates and the total fixed revenues actual amount recovered based on actual water sales. Differences are tracked in an account for future recovery, known as the Water Revenue Adjustment Mechanism. This mitigates revenue risk for Cal-Am and other water utilities in California.

Other challenges facing the water industry include long-term water supply availability, aging workforce, improving public understanding of the value of clean and reliable water, addressing new and emerging contaminants and associated regulatory requirements, generating enough funds to pay for infrastructure improvements, and water affordability. The affordability of water has become a significant issue for low-income households and a higher priority for water and wastewater utilities that struggle to reconcile the need to adequately fund infrastructure while not overly burdening those who cannot afford rate increases. Water and wastewater rates in the U.S. have increased by an average of approximately 4% annually since 2016.[77] Water rates of the Monterey Water System have increased at an average annual rate greater than this average, and water rates for the Monterey Water System are among the highest in California.

3.3. Industry Outlook

According to Standard & Poor's ("S&P"), a U.S. credit rating agency, the general outlook for U.S. municipal water and wastewater utilities is stable, given that the majority of water and wastewater systems were remarkably resilient after the pandemic-related recession. However, S&P reported that headwinds are on the horizon, including challenges related to deferred maintenance, potential drought conditions, rate affordability, and regulatory changes which may pressure the sector.[78]

Key opportunities for water and sewer utilities are listed below:[79]

- Resiliency: In general, and not specifically pertaining to the Monterey Water System, water availability is becoming more resilient, and U.S. water utilities are reasonably well situated to withstand one year of poor precipitation or excessive heat. Communities are also becoming more environmentally focused, which means being more mindful about emerging risks and responsible use of water. Given the requirement that Cal-Am reduce reliance on the Carmel River as a water source, and the uncertainty associated with the supplemental water source for Monterey Water System customers, the resiliency of the water sources in Monterey is a challenge and risk that Cal-Am continues to face.
- Asset Management: Another opportunity for water and sewer utilities lies in improved asset management. Deemed "the low-hanging fruit" by the S&P Global Ratings, improved asset

[76] Residential End Uses of Water, Version 2, Executive Summary. Water Research Foundation, April 2016.
[77] Water and Wastewater Maintenance Index, Bureau of Labor Statistics.
[78] S&P Outlook for U.S. Water and Sewer Utilities: 2021
[79] Ibid.

identification and management has the potential to decrease costs to the utility over time by preparing for the replacement of failing systems, thereby, improving the resiliency of the utility.

- Infrastructure: Moderate interest rates and a stable economy should result in continued local investments, leading to increased water demand and infrastructure extensions and improvements. While this is a general U.S. outlook and not specifically applicable to the Monterey Water System, infrastructure reinvestment due to aging infrastructure continues to be need and challenge associated with the Monterey Water System.
- Financial Stability: The water utility financial profile has typically withstood credit cycle turns that have left other sectors vulnerable. The most common rating in the U.S. municipal water and sewer utilities sector remains steady at A+. Within the sector, ratings upgrades have outpaced downgrades at a rate of about 2:1 over the past six years.

Key risks for water and sewer utilities are listed below:[80]

- Regulatory Risks: PFAS, a family of manmade compounds, have been detected in water supplies across the U.S. These and other emerging unregulated contaminants will likely be recognized by Congress as substances requiring regulation by USEPA to help ensure public health, which means maximum contaminant levels will be set. Fortunately, existing technology is available to remove PFAS from drinking water but requires new treatment trains to be added to existing processes and treatment media to be changed on a frequent basis resulting in increased capital and O&M costs. Additionally, the USEPA estimates that there are between six million and ten million lead service lines in the U.S. A proposed update to the 1991 Lead and Copper Rule is expected to soon be finalized, which would require stricter maximum contaminant levels and more frequent testing of water. Communities testing above the maximum contaminant level would be required to replace 3% of their lead service lines per year until they are completely eliminated. This could also lead to higher utility operational and capital costs. PFAS is a group of compounds found in many water systems across the U.S., however, we are not aware of any significant PFAS contamination associated with the Monterey Water System.
- Recently a series of federal infrastructure packages have been passed that promise to help local water utilities pay for water infrastructure improvements. For example, the Infrastructure Investment and Jobs Act bill passed the U.S. Senate and will provide almost $55 billion in water infrastructure funding.[81] In addition, state revolving fund ("SRF") loans remain viable, well-capitalized, and a strongly managed option. SRF loans, public bonds, and private debt remain viable options for most water utilities, particularly considering the current elevated interest rate environment.
- Affordability: In the U.S. in general, and not specifically related to the Monterey Water System, rates and charges continue to increase approximately 4% per year. Approximately half of this is due to a combination of capital expenditures and debt service while the other half comes from rising operational costs. When accounts become delinquent, it is not without controversy, and the utility is typically put into a no-win situation. If the utility shuts off the delinquent account, the public may have a negative perception of the utility; if the utility chooses to allow the accounts receivable to grow, then the utility is viewed as a poor financial steward. This has led to

[80] Ibid.

[81] Updated Fact Sheet: Bipartisan Infrastructure Investment and Jobs Act, published by the White House Briefing Room, August 2, 2021.

the rise of customer assistance programs such as income-based bill subsidization, limits on shut-offs, and free in-home water audits to help customers realize consumption savings. Affordability risks become a concern as bad debts start to significantly affect cash flow. Affordability of water rates associated with the Monterey Water System continues to be a significant challenge as water rates are among the highest in California and the median income of Monterey Water System customers is only slightly higher than the U.S. median income.

- Aging Workforce: Even with automation leading to expected attrition, the number of available, essential utility sector jobs far outweigh the availability of qualified workers. Without the qualified workers needed to run a utility, the utility will start to acquire fines for regulatory compliance as well as put the entire utility under greater risk. This aging workforce problem is even greater in rural areas. S&P Global Ratings predicts that operational costs will grow for utilities as a result of this workforce shortage, as utilities try to attract and retain talent. The growth in operational costs will then lead to very small systems no longer being able to operate alone; as a result, there will be an increased consolidation of utilities through mergers and acquisitions.
- Cybersecurity and Emerging Risks: Cyber risk is viewed as an important emerging risk. Countermeasures have become almost reactionary to cyber-criminals because these malicious actors are increasing the sophistication their attacks at such a rapid pace. Because water and wastewater utilities serve as a vital source for life, they are also uniquely attractive to cyber-criminals. Therefore, utilities must have the functionality to provide critical services to customers in some way in the event of a cyberattack, and response planning is a crucial responsibility of the utility. In order to provide critical services after an incident, a utility is encouraged to maintain an emergency water supply, manual system operations, and properly store and manage backup data.
- Other Risks: Based on an annual utility survey, the AWWA reported that renewal and replacement of aging water and wastewater infrastructure, financing needed to make these upgrades, and water availability as paramount challenges for the sector, including for the Monterey Water System. In addition, the AWWA also identified extreme weather events, pollution, political instability, and climate change as risks that could have the most negative impacts on the water industry.[82]

3.4. Regional Overview

3.4.1. General

The CPUC is responsible for regulating California's investor-owned water utilities. Currently, CPUC regulates over 90 investor-owned utilities that serve 16% of California's residents and have annual water and wastewater revenues of $1.4 billion.[83] Approximately 95% of the population that is served by an investor-owned utility is served by one of nine Class A regulated utilities (utilities with more than 10,000 service connections).[84,85] These Class A utilities are listed below:

[82] AWWA State of the Water Industry 2022

[83] California Water Association http://www.calwaterassn.com/about-cwa/regulated-water-utilities-in-california/

[84] Ibid.

[85] California Public Utilities Commission https://www.cpuc.ca.gov/water/

- California-American Water Company
- California Water Service Company
- Golden State Water Company
- Great Oaks Water Company
- Liberty Utilities (Apple Valley Ranchos)
- Liberty Utilities (Downey)
- San Gabriel Valley Water Company
- San Jose Water Company
- Suburban Water Systems

There are seven investor-owned utilities operating within Monterey County, including California-American Water Company (Class A), California Water Service Company (Class A), Alco Water Service (Class B; 2,000-10,000 service connections), Little Bear Water Company (Class C; 500-2,000 service connections), Arroyo Center Water Co., Inc. (Class D), Canada Woods Water Company (Class D), and Spreckels Water Company (Class D).[86]

Nearby municipal-owned water utilities include Santa Cruz Water Department and City of Watsonville Water Department.

The competitive landscape in Monterey County and in California is similar to that described in Section 3.1.2. Competition among water utilities in Monterey County and in California is considered low to moderate as public utilities are natural monopolies and are often granted an exclusive franchise to deliver essential public service within a specified service area. In exchange, utilities are economically regulated and allowed an opportunity to earn a fair rate of return on their investment.

3.4.2. California Economic Regulation of Water Utilities

A knowledgeable, willing buyer and seller would consider the rate regulatory environment in the value of a public utility system. The CPUC establishes rates for utilities under its jurisdiction in a rate-setting proceeding called the GRC. Major investor-owned utilities operating in California are required to file a GRC application with the CPUC every three years. CPUC is mandated by the California Public Utilities Code to establish just and reasonable rates for utilities under its jurisdiction. The statutory authority to establish just and reasonable rates requires the CPUC to set rates sufficient to cover prudent costs of providing utility service. Included in the cost of providing service is a return on capital used to finance the purchase of assets and infrastructure to provide utility service. The CPUC is mandated by statute to ensure that utilities can attract capital by offering an adequate or fair rate of return to investors. Fairness in rate regulation entails that the CPUC strikes a balance between the interest of the ratepayers and the interest of regulated utilities.[87]

The economic regulation of utilities in California provides utilities the opportunity to earn an authorized rate of return on prudently incurred capital investments. However, utilities are not guaranteed to earn

[86] California Water Association http://www.calwaterassn.com/about-cwa/regulated-water-utilities-in-california/

[87] Utility GRC – A Manual for Regulatory Analysts, California Public Utilities Commission, Policy and Planning Division, November 13, 2017.

their authorized return. Rates are set prospectively and if a utility fails to manage its business efficiently and overspends, then it will likely fail to earn its authorized rate of return. This risk is symmetrical, however, and if the utility spends less than its authorized revenues, it may earn greater than its authorized return.

A utility's cost of service under CPUC regulation is comprised of operating expenses, including taxes and depreciation, and a reasonable return on rate base. Rate base is the gross plant in service less accumulated depreciation plus working capital. The CPUC uses the original cost for valuation of the facilities and other items included in rate base, where original cost is the cost of a facility to the owner first putting it into public service, rather than an acquisition cost.[88] The facilities included in rate base are required to be used and useful. According to the used and useful standard, a new asset must be required, prudent, and operate in an effective and efficient manner in order to be included in rate base.

Depreciation is the loss in value of facilities, not restored by current maintenance, which occurs because of wear and tear, decay inadequacy, and obsolescence. Annual depreciation expense allows the utility to recover its original capital investment over the useful life of the depreciable assets. Depreciation expense is typically recovered on an equal annual basis over the average service life of the asset. Rate base is further reduced by the accumulated deferred taxes.

The return component of the revenue requirement is intended to provide a return on capital employed to finance facilities used to provide service. The CPUC sets an authorized rate of return on capital (debt, preferred and common stock) and the authorized capital structure, which together determine the rate of return on rate base. The CPUC uses a weighted average cost of capital approach to establish the allowable rate of return. The CPUC accepts several models used to measure the return on common equity, including the Capital Asset Pricing Model ("CAPM"), Discounted Cash Flow ("DCF") and Risk Premium ("RP") models.[89] Cal-Am's latest approved rate of return on rate base by the CPUC is 7.61% to be applied statewide.[90] This rate of return is similar to the returns on rate base approved by the CPUC for the California Water Service Company (7.48%), Golden State Water Company (7.91%), and San Jose Water Company (7.64%), which are also applied statewide. Cal-Am has a pending application before the CPUC for establishing its authorized cost of capital for the period from January 1, 2022 through December 31, 2024.[91] Cal-Am's proposed cost of capital in its application is 8.0%.

These CPUC rate regulations significantly influence California investor-owned water utilities' revenues, net income, and debt free net cash flows. Furthermore, in California, no public utility may purchase or acquire another public utility without having first been authorized to do so by the CPUC.[92]

Rate regulation impacts the amount that a buyer would be willing to offer for the water system assets knowing that the ability to recoup and earn a rate of return on the acquisition premium may be limited. Court decisions in California have ruled consistently with this conclusion. For example, in a California Court of Appeals decision involving the South Bay Irrigation District and California-American Water,

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[88] Ibid. p.23.

[89] Ibid, p.29.

[90] Decision 18-03-035. Decision Fixing Cost of Capital for Calendar Years 2018, 2019, and 2020 for California Water Service Company, California-American Water Company, Golden State Water Company, and San Jose Water Company, dated March 22, 2018.

[91] Application of California-American Water Company for Authority to Establish its Authorized Cost of Capital for the Period from January 1, 2022 through December 31, 2024. Application No.21-05-001. May 3, 2021.

[92] California Public Utilities Code, Section 851-854.

the court stated in its decision that "*The mere fact that a structure of improvement may have cost a certain amount, or that it would cost that amount to reproduce it, is not conclusive proof of its value in the market, or that a purchaser would be willing to pay that sum… Generally speaking, reproduction cost is not considered the best evidence of fair market value if other evidence is available… and reproduction cost evidence almost invariably tends to inflate valuation because it sets an absolute ceiling on market price, which may not be, and most frequently is not, even approached in actual market negotiations.*[93]

Past enacted legislation in California, the Public Water System Investment and Consolidation Act of 1997 ("Consolidation Act of 1997"), has impacted the acquisition of certain water and wastewater utilities. This Act was enacted to achieve economies of scale in public water system given the increasing amounts of capital required to finance necessary investments. The Consolidation Act of 1997 established Section 2718 through 2720 of the Public Utilities Code. Under the Consolidation Act of 1997, the CPUC uses the standard of fair market value when establishing the rate base value for the distribution system of a public water system acquired by a water corporation.[94] This code incentivizes the consolidation of water systems by water corporations by setting the fair market value of the acquired system as the standard when establishing rate base. Section 2720 of the Code states:

> *(a) The commission shall use the standard of fair market value when establishing the rate base value for the distribution system of a public water system acquired by a water corporation. This standard shall be used for rate setting. (1) For purposes of this section, "public water system" shall have the same meaning as set forth in Section 116275 of the Health and Safety Code.*[95] *(2) For purposes of this section, "fair market value" shall have the same meaning as set forth in Section 1263.320 of the Code of Civil Procedure.*
>
> *(b) If the fair market value exceeds reproduction cost, as determined in accordance with Section 820 of the Evidence Code, the commission may include the difference in the rate base for rate setting purposes if it finds that additional amounts are fair and reasonable. In determining whether the additional amounts are fair and reasonable, the commission shall consider (1) whether the acquisition of the public water system will improve water system reliability; (2) whether the ability of the water system to comply with health and safety regulations is improved; (3) whether the water corporation by acquiring the public water system can achieve efficiencies and economies of scale that would not otherwise be available; and (4) whether the effect on existing customers of the water corporation and the acquired public water system is fair and reasonable.*[96]

The CPUC has traditionally applied two different standards to determine if an acquisition is in the public interest.[97] The first is the "ratepayer indifference test." Under the ratepayer indifference test, the sale of a public utility should not have net consequences that cause the ratepayer to prefer the seller to the buyer. Generally, this requires the buyer to demonstrate to the CPUC that the buyer's acquisition of the public

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[93] South Bay Irrigation. District. v. California-American Water Co., 61 Cal.App.3d 944, 976 (1976).

[94] California Public Utilities Code, Division 1, Part 2, Chapter 2.5 Public Water System Investment and Consolidation Act of 1997, Sections 2718 to 2720.

[95] According to the Health and Safety Code 116275, a "public water system" means a system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections, or regulatory serves at least 25 individuals daily at least 60 days out of the year.

[96] California Public Utilities Code Section 2720.

[97] A Revised Framework for Water Utility Acquisitions, Staff White Paper Recommending an Order Instituting Rulemaking, March 2022.

utility yields a tangible benefit to the ratepayer. Measures of service quality, continuity of service, and the impact of the purchase price on rate base are typically used to assess ratepayer indifference.[98]

The second standard is the "tangible ratepayer benefit," which requires that an acquisition must deliver a net benefit to the ratepayer. Historically, at the CPUC's discretion, any premium paid by a water company for assets in excess of their book value was borne by shareholders in the form of an acquisition adjustment to be recorded below the line for ratemaking purposes. Section 2720 of the Public Utilities Code changed that for California's regulated water utilities, in effect requiring the inclusion of this acquisition adjustment in rate setting rate base. However, the CPUC is required to review each proposed regulated water system transfer to ensure that each is in the public benefit before approving it.[99] CPUC has found that transactions subject to Section 2720 should offer ratepayers some equitable share of the benefits the transaction will generate, and Section 2720 is based on the premise that scale economies are achievable in the operation of public water systems and providing water corporations with an incentive to achieve these scale economies will provide benefits to ratepayers.[100]

The CPUC has not firmly established the degree to which the benefits of an acquisition must match or outweigh the costs, and as a result, the CPUC has used a mixture, applying both standards in different situations.[101]

3.5. Regional Outlook

California has a varied climate throughout the state, and with it, comes varied water challenges. Some northern areas of the state average 100 inches of precipitation each year while some southern portions average less than five inches per year.[102] This precipitation is also seasonal and occurs mostly in the winter months.[103] Furthermore, California experiences large year-to-year variations, making it difficult to predict water levels further than one year out.[104] Because of these variations throughout the state, California has historically stored water in wetter areas and moved it to the densely populated dry areas. This has come in the form of large water diversion projects taking water from remote regions to San Francisco and Los Angeles. Over 90% of California's rivers are dammed to meet the water demand for the state.[105]

Water is a very limited natural resource throughout many parts of California, including in Monterey. In order to encourage customers throughout the region to conserve water, many utilities have moved to increasing block structures in their pricing and/or have imposed stricter measures on how water is used such as only allowing two days per week for customers to water their lawns or giving incentives to replace turf with drought resistant landscaping.[106] To reduce indoor consumption, municipal and state

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[98] Resolution No. W-4923 prepared by the Public Utilities Commission of the State of California, dated June 21, 2012.

[99] CPUC Decision D01-09-057 dated September 20, 2001, p.24-25.

[100] Ibid. p.28.

[101] A Revised Framework for Water Utility Acquisitions, supra citation 96, p.20.

[102] U.S. Department of Interior; USGS; https://nationalmap.gov/small_scale/printable/ climatemap.html

[103] Western Regional Climate Center: https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca5115

[104] Department of Water Resources. Estimates of Natural and Unimpaired Flows for the Central Valley of California: Water Years 1922 2014. 2016.

[105] Water Issues in California – Kleinman Center for Energy Policy (2018) https://kleinmanenergy.upenn.edu/policy-digests/water-issues-california

[106] Ibid.

governments have raised the minimum water efficiency standards for most major appliances and fixtures in new homes.[107] With these conservation measures, many regions of California, including Monterey, have managed to decrease their water use while having increasing populations.[108]

Water right seniority in California is based on the time of the first beneficial use.[109] For this reason, for most regions, agriculture users tend to have senior water rights over towns and cities. This results in higher water prices and a higher likelihood of drought for towns and cities since agriculture users do not have to curtail their use to the extent that cities do during dry periods. This disparity in price has caused water trading between rural areas and cities to meet urban water demands.[110] However, physical limits to water transfer and regulatory barriers has caused water trading to stagnate.[111]

Because of the high-water demand in city centers, regions of California have also turned to alternative water sources, including in Monterey. One opportunity California is exploring is recycling wastewater and stormwater for non-potable uses such as groundwater recharge, agricultural and landscape irrigation, industrial use, and creating a barrier against saltwater intrusion.[112] Despite the abundance of possible uses, recycled water use barely increased between 2009 and 2015 and may benefit from better public education and awareness campaigns.[113] However, with the Pure Water Monterey Project, reclaimed water is a major source of additional supply for the Monterey Water System.

Another alternative water source opportunity is in desalination, which is the process of producing fresh water from saltwater. Over 400 municipal-owned desalination plants are operated within 35 states; California water utilities operate 58 municipal-owned plants, only second to Texas in total number operated.[114] The largest desalination plant in the western hemisphere, The Claude "Bud" Lewis Carlsbad Desalination Plant, is operated in Carlsbad, California and delivers nearly 50 million gallons (56,000 AFY) of fresh water to San Diego County.[115] As part of Phase 1 of the MPWSP, a desalination plant was planned by Cal-Am to be constructed to serve customers of Cal-Am's Monterey Water System in the next several years.[116] Even though there is optimism for desalination by some stakeholders, it is currently an energy and capital intensive process, making the cost of desalinated water almost seven times the cost of water from local reservoirs and twice as expensive as the cost to import water on a per unit basis.[117]

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[107] Department of Water Resources. Water Efficient Landscape Ordinance. http://www.water.ca.gov/wateruseefficiency/landscapeordinance/. 2017

[108] Water Issues in California (2018), supra citation 105.

[109] Hutchins, Wells Aleck. The California Law of Water Rights. State Engineer of California. 1956.

[110] Water Issues in California (2018), supra citation 105.

[111] Hanak, Ellen and Elizabeth Stryjewski. California's Water Market, by the Numbers: Update 2012. San Francisco, CA: Public Policy Institute of California. 2012.

[112] Water Issues in California (2018), supra citation 105.

[113] Algobin, David and Toni Pezzetti. California Recycled Water Use in 2015. http://www.water.ca.gov/recycling/docs/2015RecycledWaterSurveySummary_EnglishUnits.pdf. July 2017.

[114] U.S. Department of Interior. "Updated and Extended Survey of U.S. Municipal Desalination Plants. (2018). https://www.usbr.gov/research/dwpr/reportpdfs/report207.pdf

[115] https://www.carlsbaddesal.com/

[116] https://www.watersupplyproject.org/schedule

[117] Elias, Thomas. Desal Loses Urgency Following Wet Winter. http://www.sandiegouniontribune.com/pomerado-news/opinion/editorial/so-cal-focus/sd-elias-desal-loses-urgency-20170323-story.html. (2017).

For more information regarding water supply challenges within Cal-Am's Monterey Water System, and plans to address these challenges, please refer to Section 2 of this report.

3.6. Local Economy

Monterey County is located on the Central Coast of California, just south of the San Francisco Bay Area, about 45 miles from San Jose and 106 miles from San Francisco. The rich Salina Valley extends through the heart of the County, making Monterey the third largest agricultural county in California by acreage. The County also offers the longest coastline of any California county and attracts more than 3 million visitors annually. In addition, the wine industry produces approximately $238 million in production per year and attracts a substantial number of visitors to the wine trail.[118]

The largest occupations in Monterey County are farming, fishing, and forestry occupations, employing approximately 36,850 workers, followed by office and administration support occupations (21,076 workers), and food preparation and service-related occupations (16,290). Over the next 10 years, the fastest growing occupation group in Monterey County is expected to be healthcare support occupations.

The annual population in the City of Monterey and in Monterey County over the last ten years, from 2011 to 2021, is shown in Table 3-2. As of 2021, there were approximately 30,014 people living in the City of Monterey, and 438,953 living in Monterey County. Both areas have experienced low to moderate population growth over the period shown in the table, with the City of Monterey's population increasing about 0.7 percent per year, and Monterey County's population growing by about 0.7 percent per year over this period.

Table 3-2. Historical Population in City of Monterey and Monterey County

Year	City of Monterey	Monterey County
2011	27,861	411,385
2012	28,168	416,199
2013	27,939	420,569
2014	28,053	424,927
2015	28,283	428,441
2016	28,472	430,201
2017	28,671	433,168
2018	28,512	433,212
2019	28,352	433,410
2020	28,575	432,977
2021	30,014	438,953

Source: U.S. Census Bureau's American Community Survey, 5-Year estimates from 2011 to 2021.

The annual unemployment rate within the City of Monterey and in Monterey County over the last ten years, from 2011 to 2021, is shown in Table 3-3. As of 2021, the unemployment rate in the City of Monterey was 2.8 percent, while the unemployment rate for Monterey County was 3.3 percent. These unemployment rates represent significant declines from historical unemployment rates. For example, from 2011 to 2019, the City of Monterey's unemployment rate declined by about 54 percent, from 3.7 percent to 1.7 percent, before rising to 2.8 percent in 2021. During the same period, Monterey County's

[118] County of Monterey Economic Development Information accessed at: https://www.co.monterey.ca.us/government/departments-a-h/administrative-office/economic-development/at-a-glance-county-facts

unemployment rate declined by about 57 percent, from 6.8 percent to 2.9 percent, before rising slightly to 3.3 percent in 2021.

Table 3-3. Historical Unemployment Rates in City of Monterey and Monterey County

Year	City of Monterey	Monterey County
2011	3.7%	6.8%
2012	3.7%	6.9%
2013	4.6%	6.7%
2014	3.9%	5.8%
2015	2.8%	5.0%
2016	2.2%	4.1%
2017	2.1%	3.5%
2018	2.0%	3.2%
2019	1.7%	2.9%
2020	2.1%	3.0%
2021	2.8%	3.3%

Source: U.S. Census Bureau's American Community Survey, 5-Year Estimates from 2011 to 2021

3.7. Customer Growth Potential in Monterey

The population served by Cal-Am's Monterey Water System totaled 90,119 in 2010 growing to 93,528 in 2020. Cal-Am has projected that the population served will increase to 97,636 by 2035, as summarized in Table 3-4.[119,120] This increase represents a CAGR of approximately 0.4% over the period from 2020 to 2035 indicating a relatively low population growth potential for the service area.

The water demands within Cal-Am's Monterey Water System and Central Satellites totaled 9,756 AF in 2020, and this demand was projected by Cal-Am to increase to 12,927AF by 2035, as summarized in Table 3-5.[121] This increase in water demands represents a CAGR of approximately 1.9% over the period from 2020 to 2035 indicating a relatively low potential for increased water sales within the service area. In May 2020, David J. Stoldt, the General Manager of the MPWMD prepared a water supply and demand analysis for the Monterey Peninsula and concluded that the range potential future demand under low and high demand scenarios will be 10,844 to 12,287 acre-feet per year, considerably lower than the demands projected by Cal-Am.[122]

[119] 2015 Urban Water Management Plan for the Central Division – Monterey District, prepared for Cal-Am by Water Systems Consulting, Inc., p.237.

[120] 2020 Urban Water Management Plan for the Central Division – Monterey District, prepared for Cal-Am by Water Systems Consulting, Inc., p.4-8.

[121] Ibid, p.239.

[122] Supply and Demand for Water on the Monterey Peninsula, David J. Stoldt, MPWMD, May 18, 2020.

Table 3-4: Cal-Am Monterey Water System Service Area Population

Description	Actual 2010	Actual 2015	Actual 2020	Projected 2025	Projected 2030	Projected 2035
Monterey Main	88,299	90,073	91,717	93,577	95,437	97,297
Bishop	735	704	704	704	704	704
Hidden Hills	1,084	1,106	1,106	1,106	1,106	1,106
Ryan Ranch	1	1	1	1	1	1
Total	90,119	91,884	93,528	95,388	97,248	99,108
CAGR		**0.39%**	**0.36%**	**0.39%**	**0.39%**	**0.38%**

Monterey Main projections are from the 2020 Urban Water Management Plan. Projections for other systems are from the 2015 Urban Water Management Plan.

Table 3-5: Cal-Am Monterey Water System Water Demands (AFY)

Description	Actual 2010	Actual 2015	Actual 2020	Projected 2025	Projected 2030	Projected 2035
Monterey Main	10,466	8,973	9,303	10,443	11,883	12,474
Bishop	166	133	168	168	168	168
Hidden Hills	164	130	164	164	164	164
Ryan Ranch	116	96	121	121	121	121
Total	**10,912**	**9,332**	**9,756**	**10,896**	**12,336**	**12,927**

Monterey Main projections are from the 2020 Urban Water Management Plan. Projections for other systems are from the 2015 Urban Water Management Plan.

There has been a moratorium on new service connections for the Monterey Main System served by the Carmel River source water since 2009 due to two key limitations on Cal-Am's water production: (1) the SWRCB Order No. WR 95-10 (as revised and extended by SWRCB Order No. WR 2009-0060 and SWRCB Order 2016-0016), which found that Cal-Am did not have the legal right to about 10,730 acre-feet of water diversion from the Carmel River and (2) the Seaside Basin Adjudication, Monterey Superior Court Case No. M66343, and the subsequent order(s) issued by the Seaside Basin Watermaster, which limited rights to produce ground water from the Seaside Groundwater Basin. Cal-Am also intends to file an application requesting a moratorium for the Laguna Seca Subarea.[123] These Orders and moratoriums will likely impact new customer account growth and the growth in water demands until an additional water supply source is brought online.

[123] Cal-Am 2019 GRC, Final Application 100 Day Update, RO Report, Chapter 1, p.3.

4. Valuation Methods and Approaches

4.1. Valuation Approaches

There are three generally recognized approaches to the determination of value of an enterprise: the Income Approach, the Market Approach, and the Asset Approach (also sometimes referred to as the Cost Approach). These approaches are widely accepted by financial institutions, courts, government agencies, businesses, and society in general, and they are comprised of theoretical concepts and systematic methods. These approaches were considered in estimating the fair market value of the Monterey Water System. The remainder of this section provides a general description of the valuation approaches that were considered.

4.1.1. Income Approach

The Income Approach is based on the premise that the value of a property is the present value of the future economic benefits of owning the property. The underlying principle in this approach is that buyers invest in assets with the expectation of receiving the anticipated future net benefits. This approach is relevant when the property being valued generates or is anticipated to generate net income, profits, or free cash flows. There are generally two methods of estimating value under the Income Approach. These are (1) the direct capitalization method, or single-period model, and (2) the DCF method, a multi-period method.

The direct capitalization method measures value by capitalizing a projected net income or cash flow stream in perpetuity by a capitalization rate. It assumes there will be stable earnings, no variation in the capitalization rate, and no termination of the income stream. Reduced to its simplest terms, the concept of direct capitalization of income involves estimating value by determining the present value of money that will be received sometime in the future. The value under this approach can be determined by dividing the economic income by a capitalization rate, where the capitalization rate is used to convert anticipated economic benefits of a single period into a measure of value. This translates to more income means more value, and more risk and more time between the current date and future receipt of income means less value. [124] In the unique case where the economic income is a constant amount into the future, the capitalization rate equals the discount rate. In any other case where growth is expected from the base level of economic income being capitalized, then that expected growth is reflected in the capitalization rate, and the difference between the discount rate and the capitalization rate is the annual compound rate of growth in the economic income.[125] Furthermore, "*if the appraiser uses the rate of return allowed by the regulatory agency and capitalizes the regulatory agency's forecast income at that rate, the resulting value estimate will be exactly equal to the utility's rate base. [However,] the most defensible value estimate by the income approach will be reached using forecast income based upon current actual income and capitalizing that income at the current real rates of return sought by investors in that particular type of utility property.*"[126]

The DCF method measures value by projecting future expected (debt-free) net cash flows and discounting these cash flows to present value using a discount rate.[127] When either of these methods are used, it presumes that the cash flow stream is generated by employing all of the assets associated with the

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[124] Valuation of Railroad and Utility Property. Arlo Woolery, CAE, p.67-72

[125] Valuing a Business, The Analysis and Appraisal of Closely Held Companies, 6th Edition, Shannon P. Pratt., p.182-185.

[126] Arlo Woolery, supra citation 124, p 35-36.

[127] American Society of Appraisers, Business Valuation Standards, 2009, p.27.

water system that are used and useful. As such, there are no additions to the value estimate under this method for various asset components (e.g., land, water rights) that comprise the system and are used in the provision of service because those assets are part of the whole system and are used to generate the income stream. This theory was supported by the appeals court decision in the South Bay Irrigation District vs. California-American Water Company case, which stated that "*When the capitalization-of-Income Approach is used as a basis for an opinion of or considered in determining the market value of an operating enterprise, the result is a determination of the total value of all of the items of property which are part of that enterprise."*[128]

Under the direct capitalization or DCF methods, the debt-free net cash flows, or "free cash flows" represent the total after-tax cash flow generated by the enterprise and available to the providers of the subject's invested capital: stockholders (equity) and creditors (debt). Debt-free net cash flow is defined as follows:

> Debt free net cash flows = Net income + depreciation and amortization + interest expense - working capital additions - capital expenditures

Net cash flow is generally defined as cash that a business or project does not have to retain and invest in order to generate the projected cash flows in future years. Generally, net cash flow comes from operations, but may result from other sources, such as interest income where appropriate. Capital expenditures that are deducted from net cash flows are those amounts needed to match the revenue and expense projection. In other words, they represent the amounts needed for replacement of plant and/or equipment that are retired in the normal course of business, for increase in capacity consistent with projected revenues, and for the replacement of existing plant and/or equipment. Debt free net cash flow represents cash flow to the total invested capital and adds back interest expense and dividends on preferred stock, if any, since total invested capital includes debt, equity and preferred capital.[129]

These cash flows are discounted to present value at a discount rate that reflects the risks inherent in the investment and the returns reflective of current market conditions. If the cash flow stream is expected to continue beyond the projection period, a terminal or residual value is estimated. The sum of the discounted cash flows and the discounted terminal value provides an indication of the value of the enterprise.

The discount rate is the compounded rate (expressed as an annual rate) at which each increment of expected economic income is discounted back to its present value. The discount rate reflects both the time value of money and the risk associated with the expected income stream. The discount rate in totality represents the cost of capital. The cost of capital is the expected rate of return that market participants require in order to attract funds to a particular investment. The cost of capital reflects opportunity cost, that is, the cost of foregoing the next best alternative investment, and it is a function of the investment not the investor.[130]

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[128] South Bay Irrigation District. v. California-American Water Co., 61 Cal.App.3d 944,988 (1976).

[129] Cost of Capital Application and Examples, Shannon P. Pratt and Roger J. Grabowski, Fifth Edition, 2014, p.18-23.

[130] Ibid., p.3-6.

The discount rate may be derived using the Weighted Average Cost of Capital ("WACC"). The WACC represents the after-tax return on each element of invested capital, weighted by their relative percentage of the capital structure[131], and can be expressed with the following equation:

$$WACC = (k_e \times W_e) + (k_d [1\text{-}t] \times W_d)$$

Where:

k_e = cost of equity

W_e = weight equity capital in the capital structure

k_d = cost of debt capital (pre-tax)

t = income tax rate

W_d = weight of debt capital in the capital structure

The WACC used in the Income Approach is intended to represent the cost of capital of the population of the typical willing buyers of the enterprise.

The equity portion of WACC may be calculated using several methods, including the Build-Up Method, the DCF Method, and the Modified Capital Asset Pricing Model ("CAPM") Method. Under the Build-Up Method, the equity return is calculated by adding together the systematic risk and unsystematic risks associated with the subject company.[132] The basic formula for this method is as follows:

$$K_e = R_f + RP_m + RP_s + RP_i + RP_c$$

Where:

R_f = Risk-free rate

RP_m = Equity risk premium associated with the market

RP_s = Size premium

RP_i = Industry risk premium

RP_c = Company Specific Risk Premium

Under the DCF Method, the equity return is estimated using the Gordon Growth Model. This model is based on the theory that the value of a company's stock is the present value of the cash flows received from dividends including the dividend growth rate.

$$PV = NCF_1 / (k_e - g)$$

Where:

NCF_1 = Net cash flow in year 1

PV = Present value

k_e = cost of equity capital

[131] Duff & Phelps, Valuation Handbook – U.S. Guide to Cost of Capital, 2019.

[132] Financial Valuation, Applications and Models, 3rd Edition, James R. Hitchner, p.194.

g = Expected growth in net cash flows.

An implied cost of equity capital can be estimated using this model by applying the DCF model in reverse. The basic formula using the single-stage constant growth DCF Model is as follows:

$$k_e = (D_1 / P_o) + g$$

Where:

D_1 = Expected or announced stock dividend in year 1

P_o = Current stock market price

g = Expected growth in dividends per share.

The equity return determined using this method is a market-based model since publicly traded peer group companies are used to prepare an indication of the cost of equity. Under this method, indication of cost of equity for the subject company may include an adjustment for a company-specific risk premium.

The cost of equity (k_e) may also be derived using the Modified CAPM. In simple terms, the CAPM suggest that a rate of return on an asset is a function of a risk-free rate of return, plus a market risk premium. The CAPM formula is typically modified to reflect the additional risk associated with the size of the subject company and company-specific risk factors. The formula for the modified CAPM is as follows:

$$k_e = R_f + \beta \times (RP_m) + RP_i + RP_s + RP_c$$

Where:

R_f = Risk-free rate

β = Beta (measurement of systematic risk)

RP_m = Equity risk premium associated with the market

RP_i = Industry risk premium

RP_s = Size premium

RP_c = Company Specific Risk Premium

Beta (β) is a measure of the systematic risk of a stock, and the tendency of a stock's price to correlate with changes in the market. The equity risk premium (RP_m) is the extra return that investors demand to compensate them for investing in a diversified portfolio of large common stocks, rather than investing in risk-free securities. The size premium (RP_s) represents the difference between actual historical excess returns and the excess return predicted by beta. The "size effect" is based on the empirical observation that companies of smaller size are associated with greater risk, and therefore, have a greater cost of capital. The industry risk premium (RP_i) reflects the amount that investors expect the future return of the industry to exceed the return on the overall market. The company specific risk premium (RP_c) is additional risk premium that may be necessary to reflect lack of diversification, depth of management, lack of a public market, potential upward bias of the cash flow projection, or a variety of factors that may make the company more or less risky than comparable companies.

4.1.2. Market Approach

The Market Approach is a way of determining an indication of value of an enterprise by using one or more methods that compare the subject to similar businesses or similar businesses that have been sold. There are two methods of estimating value of a business under the Market Approach. These are (1) the Guideline Public Company Method, and (2) the Guideline Transactions Method. The Guideline Public Company Method is a method whereby market multiples are derived from market prices of stocks of companies that are engaged in the same or similar lines of business and that are actively traded on a free and open market.[133] The Guideline Transactions Method is a method whereby pricing multiples are derived from transactions involving companies engaged in the same or similar lines of business.[134] If the sales comparisons are not exactly like the properties being valued, then the selling prices are adjusted to equate them to the characteristics of the properties being valued. Certain factors, such as the location, date of sale, physical characteristics, and technical and economic factors relating to the transaction are analyzed for their comparability to the subject system. This approach is most reliable and applicable when there is an active market providing a sufficient number of sales of comparable properties that can be independently verified through reliable sources.

4.1.3. Asset Approach

The Asset Approach is defined as a way of determining a value indication of a business or business ownership interest using methods based on the value of assets, net of applicable liabilities. The Asset Approach can be applied using the asset accumulation method, which involves the valuation of each of the entity's assets. The Asset Approach is typically considered in situations where a system has a large quantity of tangible assets associated with it, when a grouping of assets is not frequently traded in the market or when other circumstances make this approach applicable to the situation at hand.

The Cost Approach is typically used in conjunction with the asset accumulation method to value tangible property assets. Under the Cost Approach, the value of the assets is typically derived by subtracting the amount of depreciation from the replacement or reproduction cost of the assets. The value estimate under this approach is estimated by the sum of the parts of the system, i.e., physical asset components, land, water rights, etc. Depreciation in this context represents the loss in value caused by physical deterioration, functional obsolescence, and economic obsolescence. Replacement cost is the current cost of a similar new property having the nearest equivalent utility as the property being valued. Reproduction cost is the current cost of reproducing a new replica of the property being valued using the same or closely similar materials.[135]

There are several methods that are used to estimate the current cost of a property. The Detail Method, also known as the Summation Method, involves assigning a current new cost to each individual component of an asset or property, itemizing and aggregating the cost of each of the assets so that the sum of the components reflects the cost of the whole. The Trending Method is a method of estimating reproduction cost by indexing or trending historical cost to an estimate of current cost.

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[133] Ibid, p.28.

[134] Ibid, p.30.

[135] Valuing Machinery and Equipment: The Fundamentals of Appraising Machinery and Technical Assets, American Society of Appraisers, Fourth Edition. 2020.

Economic obsolescence, sometimes referred to as external obsolescence, is a form of depreciation that reflects the loss in value caused by negative externalities, i.e., factors external to the property, such as economic regulation. These external factors can be temporary or permanent but are almost always incurable.[136] These factors include an increased cost of raw materials, labor or utilities (without an increase in product price), reduced demand for the product, increased competition, environmental or other regulations, or similar factors.[137]

Due to the regulated nature of the private water utility sector, the Asset Approach must consider the economic obsolescence of the general practice by state regulatory agencies to limit the rate of return on the unrecouped asset value or rate base that an investor-owned public utility may earn (which is also the general practice of the CPUC). This is because the ability of a public utility to set rates, generate revenues, and produce income is limited and governed by state regulatory agencies. In California, rate base typically reflects the original cost of assets, which means the cost of an asset when first devoted to public service, rather than a purchase cost or acquisition cost in a sale or asset transfer.[138] In general, in an acquisition, excess in acquisition cost over original cost less depreciation ("OCLD") may be excluded from rate base, eliminating the opportunity for the buying entity to directly recoup its investment of this excess, or a portion may be added as an acquisition premium depending upon the regulator's decision. Exceptions to this are certain transactions in California that are incentivized by the Consolidation Act of 1997.

Due to traditional economic regulation, the buying entity may have a limited opportunity to recover its excess in acquisition cost over rate base or a portion may be added as an acquisition premium depending upon the regulator's decision. Even under a scenario where a regulated investor-owned water utility may be acquired by a government entity that is not regulated by a public utility commission, economic obsolescence should still be considered.

There are several methods of estimating economic obsolescence within the Asset Approach. These include the following:

- The Inutility Method
- Comparison of Similar Properties With and Without External Obsolescence
- Capitalization of Income Loss Method

Inutility is a method that measures the impact of unneeded or overcapacity. For example, whenever the operating level of a plant or asset is significantly less than the rated or design capacity, and this condition is expected to persist, the asset may be less valuable than it otherwise would be. The Inutility Method measures the loss of value from this form of economic obsolescence by comparing the actual operating level to the rated capacity of the asset.[139] If a water or wastewater utility has excess capacity but the state regulatory agency allows the utility to include the entire cost of capacity in rate base, then there would not be any economic obsolescence due to inutility.

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[136] The Appraisal of Real Estate, Appraisal Institute, Fifteenth Edition, 2020 p.591.

[137] Valuing Machinery and Equipment, supra citation 135. p.69.

[138] Principles of Public Utility Rates. Public Utilities Reports, Inc., Second Edition. 1988, p.237.

[139] Valuing Machinery and Equipment, supra citation 135, p.68.

Comparison of similar properties with and without external obsolescence is another way to estimate economic obsolescence. In this method, economic obsolescence is estimated by comparing the value of the subject property with economic obsolescence with the value of property without economic obsolescence. This method can be the most persuasive measurement of the effect of negative externalities on value when enough data is available for the analysis to be completed.[140] However, this method can be difficult to apply to public utility assets because there is often a lack of sufficiently comparable transactions with and without external obsolescence that can be compared and analyzed using this method. One potential way of applying this method to water utility assets is to compare purchase prices of recent market transactions of water utilities where state regulatory commissions have applied rules that incentivize the consolidation of utility systems by allowing the purchase price of these utilities to be included in the rate base for rate setting purposes with purchase prices associated with utility transactions where regulatory rules require that the pre- and post-acquisition rate base remain the same at original cost less depreciation rate base. The difference in purchase prices associated with these transactions could be used to estimate economic obsolescence.

The Capitalization of Income Loss Method ("CILM") is an alternative to the direct comparison of properties with and without external obsolescence and measures the reduction in annual income due to the effect of the externality. The procedure for applying this method is comprised of two steps. First, the market is analyzed to quantify the income loss. Next, the loss or reduction in annual net operating income is capitalized to estimate the total amount of economic obsolescence.[141] Economic obsolescence is then subtracted from the RCNLD estimate to derive the estimate of value under the Asset Approach. Under this method, the profitability of the subject assets in the current period may be compared to prior periods when there was no identified economic obsolescence, compared to the profitability of guideline companies, or compared to the profitability based on projections that led to the investment decision.

Other methods for quantifying economic obsolescence within the cost approach include the following:[142]

- Analyses of industry returns – compare the returns on invested capital in the industry in which the subject property operates as compared to the returns in industries with similar risk characteristics.
- Analysis of the rate of return that the business, or industry as a whole, experienced historically as compared to the rate of return in the period just prior to the measurement date.
- Analysis of income projections for the subject property at the time of the acquisition, as compared to the actual income performance of the asset, measuring any income shortfall.
- Supply / demand relationships – determine if competition is increasing because of a surplus of supply or a decline in demand causing margins to decline and developing a relationship showing a supply / demand imbalance.
- Gross margin analysis – comparing historical or normal gross margin to current or expected gross margin showing how gross margins are declining.

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[140] The Appraisal of Real Estate, supra citation 136, p.594.

[141] Valuing a Business, Pratt, supra citation 125, p.1104.

[142] Valuing Machinery and Equipment, supra citation 135, p.72.

- Stock prices – compare the stock price of companies in the subject industry to a benchmark such as the company net book value, or a similar ratio in the general market to show a lower stock price / net book value ratio for stocks in the subject industry.
- Sales transactions – calculate the magnitude of economic obsolescence for a similar property acquired in the market by comparing the cost indicator of value prior to deducting economic obsolescence to the actual sales price. The difference is economic obsolescence.
- The relationship between replacement cost new and the expected cash flow that the hypothetical replacement facility is capable of generating. Compare the replacement cost new to the income indicator of value for the same property. The difference is economic obsolescence.

These and other methods utilize evidence that the value of the subject property has been reduced by external factors.

5. Valuation of the Monterey Water System

The valuation of the Monterey Water System was prepared considering the approaches and methods described in the previous section. The consideration and use of these approaches and methods for valuing the Monterey Water System is described below. For those methods deemed to be applicable, a summary of the estimation of system value under the method is also presented.

5.1. Hypothetical Willing Buyers

The likely population of hypothetical willing buyers was considered to estimate the fair market value of the Monterey Water System. Both the buyer and seller were considered to be hypothetical parties. The potential benefit that a particular buyer would derive from specific synergies with the subject entity that no other buyer would enjoy was excluded from consideration. This type of value is referred to as investment value.[143] This eliminates the element of a specific tangible benefit (i.e., unique synergies) to one buyer that no other buyers could realize from being considered in the appraisal. In addition, the buyer was assumed to be motivated by the profit opportunity implicit in the subject on a stand-alone basis. This is referred to as a financial buyer, rather than a strategic buyer, and such financial buyers would not consider unique synergistic benefits of a particular buyer arising from the combination of the subject with existing or future holdings.[144] In the water market, the likely population of willing buyers in the pool of market participants may include companies that own multiple water systems, and therefore, might derive value from synergistic benefits, but those synergies would not be described as those available only to one buyer.

The Monterey Water System is considered limited-market property and a special purpose property. A limited-market property is a property (or property right) that has relatively few potential buyers. A special-purpose property is a property with a unique physical design, special construction materials, or layout that particularly adapts its utility to the use for which it was built.[145] Based on the characteristics of the Monterey Water System and the utility providers that are likely to invest in the Monterey Water System, the most likely typical willing buyers of the Monterey Water System were identified as private or investor-owned water utility companies either operating within the State of California or in other states looking to expand into the California water market. Investor-owned utilities would likely be interested in acquiring the system if they have the capabilities to operate the system, the financial capital to acquire the system, an opportunity to earn a reasonable return on their investment, and the acquisition was aligned with their strategic goals.

Examples of investor-owned utility companies that may be considered as hypothetical buyers of the Monterey Water System:

- California Water Service Company
- American States Water Company / dba. Golden State Water Company
- SJW Group / San Jose Water Company

[143] Valuing a Business, Pratt, supra citation 125, p.388.

[144] Valuing a Business, Pratt, supra citation 125, p.327.

[145] Dictionary of Real Estate Appraisal, Sixth Edition, p. 114.

- Southwest Water Company / Suburban Water Systems
- Algonquin Power & Utilities Corporation / Liberty Utilities
- Essential Utilities
- NextEra Energy
- NW Natural Water Company
- Other water or energy companies operating in California and in the western region of the U.S.

Market data shows that private water and energy companies are much more active in buying and selling utility systems than municipalities or other governmental units. For example, according to a Bluefield Research industry report,[146] private to private water utility transactions dominate the market, representing 60% of the total number of deals between 2015-2018, municipal to private represented another 24% of the deals. Private to Municipal only comprised 11% of the deals, with most of those being eminent domain actions, rather than open market transactions. Furthermore, in 2019 to 2020, 199 water and wastewater transactions were identified. Of these, only 23 or approximately 12% were private to public transactions, and most of these were either small developer built and owned systems or eminent domain transactions.

We considered whether potential willing buyers might also include one or a few municipalities, such as such as MPWMD and Monterey One Water. Typically, it is only the municipality operating with jurisdiction within or within close proximity of the service area of the subject property that may have an interest in acquiring the subject property. In some cases, a municipality may need special enabling legislation or other legal authority to acquire and operate systems outside of their jurisdictional boundaries. We have been unable to locate a single instance in which multiple non-profit or government buyers bid for ownership of an investor-owned utility. Generally, municipalities do not have an interest in acquiring water systems outside their political jurisdiction and as such, are not regularly in the business of doing so.

A municipal utility is typically regulated by a municipal council, commission, or board and acts as a guardian or fiduciary of public funds. As a not-for-profit entity, it typically sets rates to recover costs without profit. Municipal utilities set rates based on cost-of-service, which means that rates are charged to customers reflective of the demands that they place on the system and the costs that they cause the utility to incur.[147] In addition, public agencies in California cannot charge their customers a higher price for water than the actual cost of providing the service.[148] Therefore, if a municipal utility does not pay taxes, for example, then tax recovery is not included in the revenue requirement or utility rates so as not to over-recover the utility's annual revenue requirements. This is reflected in market data that shows that utility rates charged by investor-owned utilities are generally significantly higher than utility rates charged by municipally owned utilities.[149]

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[146] U.S. Private Water Utilities: Drivers, Competitive Landscape and Acquisitions Trends, supra citation 68.

[147] AWWA Manual M1, supra citation 73, p.3-4.

[148] A local government in California may only extend, impose, or increase a fee or charge if the revenues do not exceed the funds required to provide the property-related services, and the revenues are not used for any purpose other than that for which the fee or charge was imposed. Cal. Const., art. XIII D, § 6(b).

[149] Water Pricing and Affordability in the US: Public vs. Private Ownership, X. Zhang, M. Gonzalez Rivas, M. Grant, and M.E. Warner, World Water Council, Water Policy Vol 24 No 3. 2022.

In assessing the return on investment required by municipal systems, one can look to the municipal systems that serve customers outside their jurisdictional boundaries and utilize the utility-basis approach for establishing their revenue requirements. Under the utility-basis approach, the utility recovers capital costs through depreciation and a rate of return on rate base, like an investor-owned utility. The rate of return component compensates the municipal utility for their interest expense and the amount of municipal funds used to fund capital infrastructure for the benefit of outside-jurisdictional customers, i.e., equity capital. A review of the equity returns included in these outside-jurisdictional pricing arrangements reveals that the returns required by municipal entities to serve outside-jurisdictional customers are within the range of investor-owned utility returns.[150] Furthermore, the risks of ownership of a utility system by a not-for-profit, public entity are similar to the risks of ownership of a utility system by an investor-owned utility.[151] Therefore, one would expect the required equity returns to be similar.

In assessing the capital structure of municipal utility systems, one can look to market data published by major U.S. credit rating agencies. According to a 2020 survey of 180 municipal water and wastewater systems, municipal utilities in the western U.S. and those with strong AAA and AA credit ratings, have debt to net plant asset ratios (i.e., capital structures) of between 27% and 41%, which is similar to the capital structure of investor-owned utilities.[152] Therefore, the most significant difference in a municipal utility's weighted average cost of capital as compared to an investor-owned water utility is the cost of debt, which is typically only slightly lower for municipal utilities than investor-owned utilities with the same credit rating because the interest earned by investors in municipal debt is often tax exempt. However, while a lower cost of debt may be an advantage of a specific potential strategic buyer, it is not considered representative of the pool of hypothetical buyers.

In assessing the motives of municipalities that seek to acquire utility systems, we relied on Raftelis experience working with over 1,200 municipal utilities nationwide. Typically, when a municipal entity is interested in acquiring a water or wastewater system within or adjacent to its municipal boundaries, it looks to the more active market of buying and selling of utilities by investor-owned utilities in assessing utility system value. Simply because a municipal utility may have a lower cost of capital than an investor-owned utility does not mean that the municipality would be willing to pay more for a utility system than the value in the marketplace. As discussed above, municipal entities report to councils, commissions, or boards and act as a guardian or fiduciary of public funds. Furthermore, most municipal entities looking to acquire a nearby utility system do not have motivations of a typical investor-owned company buyer (e.g., no profit motive), and likely may have different strategic objectives (e.g., direct control and oversight over the utility, controlling, reducing, or otherwise mitigating customer utility rates, improving service, more direct connection and communication with customers, and responsiveness, etc.). Based on these motivations, a municipal buyer may be considered a strategic buyer but would not likely offer more than what a typical investor-owned utility may offer.

These considerations suggest that the typical likely hypothetical buyers that would set the price of the Monterey Water System would be investor-owned water companies. For the reasons described above, a municipality may be a particular buyer or a strategic buyer of the subject property rather than considered a hypothetical, financial buyer. Therefore, in estimating the fair market value of the Monterey Water

[150] 2021 Water and Wastewater Rate Survey, published by American Water Works Association, April 2021.

[151] See Exhibit 11 in Appendix C for a comparison of risks between investor-owned and municipally owned systems.

[152] 2020 Water and Sewer Medians, Fitch Ratings, p.8 & 14.

System, we considered investor-owned utilities as the most likely and typical population of hypothetical willing buyers.

5.2. Income Approach

The valuation estimate under the Income Approach was prepared using the DCF method because the net earnings and cash flows were expected to vary in the near-term as a result of the CPUC's decision in Cal-Am's 2022 GRC, and we had access to Cal-Am management projections through FY 2026 from the 2022 GRC.

5.2.1. Discounted Cash Flow Method

We completed the Income Approach using the DCF method by utilizing Cal-Am's projection of future earnings for the Monterey Water System and Central Satellites and preparing a net cash flow projection for Cal-Am's Monterey Water System. Rutan & Tucker, LLP., on behalf of the MPWMD and Raftelis, requested Cal-Am management-prepared financial projections for the Monterey Water System.[153] However, no such financial projections were provided. Therefore, we relied upon Cal-Am's management projections through FY 2026 from the 2022 GRC.[154]

The development of the value estimate using the DCF method involved the following steps:

1. Relevant past and present financial and operating data available for the Cal-Am's Monterey Water System were reviewed, including sources of revenues, operating and capital expenses, depreciation, rate base, customer growth and usage patterns, and known or anticipated changes to future operations, customer base, or similar factors.
2. A projection of revenues and expenses from the FY 2023 through FY 2026 period was compiled from Cal-Am's 2022 GRC application filings to the CPUC.
3. The projected revenues for FY 2024 through FY 2026 were adjusted assuming that CPUC will accept Cal-Am's proposed cost of capital consistent with its 2021 cost of capital application to the CPUC (Application A2105001).
4. A terminal or residual value was estimated since the cash flow stream is expected to continue beyond the projection period.
5. A discount factor was selected for use in discounting net cash flows and the terminal value to the valuation date.

The "Base" revenue and expense projections for the Monterey Water System were normalized to exclude surcharge revenues and expenses, such as for the San Clemente Dam amortization, tank painting amortizations, and acquisition premiums, since they are reported and tracked separately by Cal-Am and

[153] Letter from Mr. Douglas J. Dennington for Rutan & Tucker, LLP., to Mr. Richard Svindland, President of California American Water and Ms. Sarah Leeper, Vice President and General Counsel of California American Water, Re: Notice of Decision to Appraise California American Water Company's Monterey Water System and Other Property Interests Relating to MPWSP; Notice of Land Acquisition Procedures; Request for Documents, dated September 15, 2020.

[154] Our use and reliance on these financial projections is, in our opinion, an extraordinary assumption. The USPAP, 2020-2021 edition, defines an extraordinary assumption as "an assignment-specific assumption as of the effective date regarding uncertain information used in an analysis, which, if found to be false, could alter the appraiser's opinion or conclusions."

CPUC in Memorandum and Balancing Accounts (See Section 5.5.2 for a detailed discussion and consideration of these accounts).[155]

In preparing the cash flow projection for the terminal period, annual capital investment in the system of approximately $18.9 million per year in FY 2022 dollars, escalated for capital construction cost inflation each year was assumed.[156] This annual expenditure amount was added to rate base, which increases depreciation expense recovery and the return on rate base amounts over the projection period.

The Cal-Am projection of revenues and expenses for the Monterey Water System and Central Satellites over the projection period is provided in Exhibit 12 of Appendix C. These projections are anticipated to result in profitability and growth metrics as shown in Exhibit 13 of Appendix C, which are similar to the historical trends as shown in Exhibit 10 of Appendix C and are consistent with the outlook and analysis presented in Section 3.

We assumed that the projection of revenues, earnings, and net cash flows of the Monterey Water System and Central Satellites over the projection period would be able to be realized by a hypothetical buyer. This is consistent with "ratepayer indifference test" described in Section 3.4.2. Further, since the current owner of the Monterey Water System already enjoys economies of scale associated with ownership several water systems in California, we have assumed that no additional economies of scale would be realized by the acquisition of the system by a hypothetical buyer. Therefore, we conclude that the "ratepayer indifference test" and the "tangible ratepayer benefit" standard (as described in Section 3.4.2) would result in the water utility rates, revenues, earnings, and net cash flows to be approximately the same for the system before and after an acquisition of the system.[157]

5.2.1.1. Discount Rate

An analysis of the fair market value of the Monterey Water System considered the cost of capital of the typical population of hypothetical willing buyers, the business and financial risks associated with the Monterey Water System, as well as the CPUC authorized rate of return on rate base for the Monterey Water System. According to Valuing a Business, by Shannon Pratt, 6th Edition, "*allowable rates of return for regulated companies can be viewed as a reasonable benchmark for a minimum boundary of the overall cost of capital.*"[158] This is because allowed rates of return generally are based on public utility commissions' perceptions of the cost of debt capital and the cost of equity capital based on studies by their staffs. In addition, the hypothetical willing buyer will have similar risks in owning and operating the Monterey Water System as the current owner, as described in Sections 2 and 3 of this report.

The CPUC authorizes cost of capital of investor-owned water utilities through cost of capital proceedings. The most recent cost of capital decision for Cal-Am and other Class A Water Utilities

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[155] The noted exclusion of these revenues from the base system valuation under the income approach is reasonable given how Cal-Am reports financial results of its Central Division to the CPUC, but in our opinion is a hypothetical condition. A hypothetical condition is a condition, directly related to a specific assignment, which is contrary to what is known by the appraiser to exist on the effective date of the assignment but is used for the purpose of analysis.

[156] This assumption is based on average historical capital spending by Cal-Am of approximately $18.3 million per year from 2011 to 2021 and the average projected capital spending of $22.2 million per year for 2022 to 2025. It is considered an extraordinary assumption as such uncertain information was used in an analysis, which, if found to be false, could alter our opinion and conclusion of value.

[157] This conclusion is considered an assignment-specific extraordinary assumption, which, if found to be false, could alter the appraiser's opinion or conclusions.

[158] Valuing a Business, Pratt, supra citation 125, p.248.

operating in California authorized a cost of capital of 7.61% for Cal-Am. [159] The authorized cost of capital for the water utilities included in the CPUC decision ranged from 7.48% to 7.91%, as shown in Table 5-1.

Table 5-1: CPUC Authorized Cost of Capital for Select Water Companies in California

Water Company	Debt %	Equity %	Cost of Debt	Return on Equity	WACC
California Water Service Company[1]	46.60%	53.40%	5.51%	9.20%	7.48%
California-American Water Company[1]	44.61%	55.39%	5.63%	9.20%	7.61%
Golden State Water Company[1]	43.00%	57.00%	6.60%	8.90%	7.91%
San Jose Water Company[1]	46.72%	53.28%	6.20%	8.90%	7.64%
Suburban Water Company[2]	37.34%	62.3%	5.85%	4.24/9.25%	7.86%
Liberty (Park Water & Apple Valley)[2]	43.0%	57.0%	4.71%	9.35%	7.35%

[1]CPUC Decision 18-03-035, p.27-28, effective for Calendar Years 2018, 2019, and 2020.
[2]CPUC Settlement A.18.05.001, p.7 for period from July 1, 2019 to June 30, 2022, equity % includes 2.26% preferred stock and 60% equity.

Also, in Cal-Am's 2021 Cost of Capital Application, Cal-Am applied for and justified its recommended cost of equity of 10.75%, cost of debt of 4.35%, and an overall rate of return on rate base of 8.0% based on a capital structure of approximately 57% common equity and 43% debt.[160]

The CPUC considers commonly used financial models in their equity return proceedings, including the capital asset pricing model, risk premium model, and discounted cash flow analysis. CPUC authorizations for cost of capital also considered the individual systems operated by these water companies in California, and the authorized cost of capital is applied to each of these individual water systems statewide.

An analysis of the fair market value of the Monterey Water System considered the cost of capital of the typical population of hypothetical willing buyers, the business and financial risks associated with the System, as well as the CPUC authorized rate of return on rate base for the System. In addition, the hypothetical willing buyer will have similar risks in owning and operating the Monterey Water System, as described in Sections 2 and 3 of this report. An analysis of the fair market value of the Monterey Water System should consider the cost of capital of the typical population of hypothetical willing buyers, as well as the risks associated with the System. Furthermore, as shown in Table 5-1, the CPUC authorized cost of capital for CPUC regulated water companies are closely aligned. Therefore, the CPUC authorized cost of capital of Class A Water Utilities in California is a reasonable proxy for the cost of capital of the typical population of hypothetical willing buyers as hypothetical willing buyers would likely be authorized a similar cost of capital as the CPUC authorized cost of capital for Cal-Am as of the date of this valuation report, and such authorized rate of return is a statewide rate of return that would not likely change due to acquisition.

[159] Decision 18-03-035. Decision Fixing Cost of Capital for Calendar Years 2018, 2019, and 2020 for California Water Service Company, California-American Water Company, Golden State Water Company, and San Jose Water Company, dated March 22, 2018.

[160] Application of California-American Water Company for Authority to Establish its Authorized Cost of Capital for the Period from January 1, 2022 through December 31, 2024, submitted to the Public Utilities Commission of the State of California, dated May 3, 2021. A2105001.

In addition, an independent analysis was completed to estimate the cost of capital of a proxy group of publicly traded, investor-owned utilities, which represent the typical hypothetical willing buyers. The proxy group was selected from the Global Industry Classification Standard (GICS) 551040 - Water Utilities.[161] Companies whose primary business comprised the delivery of public water and wastewater service were selected. The independent analysis involved preparing return of equity estimates using the Build-Up, DCF, and CAPM models, as well as an analysis of the cost of corporate debt. These equity cost of capital models were relied upon because they are often used by regulated utility companies to support their cost of capital estimates for rate setting and by investors looking to invest in utility companies.

Recent market conditions have changed since the CPUC authorized Cal-Am's cost of capital. This is due to recent economic market conditions in the U.S. economy. Changes in the market have resulted in an increase in risk-free interest rates and corporate bond rates in 2022 as compared to prior years, as well as much higher consumer price inflation. For example, in September 2022 Kroll issued a technical update to their Cost of Capital Navigator and increased its U.S. normalized risk-free rate from 3.0% to 3.5% due to sharp increases in estimates of real interest rates.[162] In addition, in October 2022, Kroll recommended an increase in the market risk premium from 5.5% to 6.0%.[163] We view the increase in market interest rates as a medium-term response to higher inflation and its impact on the economy.

The results of cost of capital analysis are presented in Exhibits 14 through 20 of Appendix C and indicate an after-tax cost of capital of 8.0% is supportable. This selected rate of return is similar to Cal-Am's rate case rate of return authorized as part of its 2018 cost of capital application before the CPUC and its proposed rate of return of 8.0% in its 2021 cost of capital application.

Considering the likely hypothetical willing buyers, the risks associated with the Monterey Water System, and the CPUC regulatory environment, and the current economic market conditions, we selected a cost of capital of 8.0% as the discount rate for the subject system. In preparing the normalized financial projections that we relied upon, we assumed that Cal-Am will receive authorization from CPUC of a return on rate base for the System that is the same percentage as Cal-Am proposed in its pending cost of capital case before the CPUC, and that Cal-Am will be able to achieve this rate of return in each year of the projection period.[164]

5.2.1.2. Long-Term Growth Rate

The long-term growth rate used as part of the income approach is intended to reflect the long-term average growth rate for the subject into perpetuity. For regulated public utilities, this growth rate is significantly dependent upon the long-term growth in utility rate base, which is influenced by its capital investment level, long-term inflation, and the growth in number of customers. As discussed in Section 2.2.2 and 3.7, the historical compound annual growth in customers from 2011 to 2021 for the Monterey Water System has been approximately flat, and Cal-Am's Urban Water Management Plan forecasts

[161] GICS was developed by S&P Dow Jones Indices, which is an independent international financial data and investment services company, and MSCI, an independent provider of global indices and benchmark-related products and services.

[162] Kroll Increases U.S. Normalized Risk-Free Rate from 3.0% to 3.5%, but Spot 20-Year U.S. Treasury Yield Preferred When Higher, June 16, 2022.

[163] Impact of High Inflation and Market Volatility on Cost of Capital Assumptions, Kroll, October 2022.

[164] This assumption is considered an extraordinary assumption as defined by USPAP, and if found to be false, it could alter our opinion and conclusion of value under the Income Approach.

growth in the range of 0.4% over the next 20 years. The selection of the long-term growth rate also considered forecasts in expected long-term inflation of approximately 2.5% to 2.8% per annum,[165,166] and the expected long-term growth in the overall economy as measured by the gross domestic product. The Livingston Survey forecasts a long-term GDP (nominal) growth rate of approximately 4.5%. A long-term growth rate for system cash flows of between the rate of customer growth plus inflation (estimated at approximately 2.9%) and the expected long-term GDP growth rate of approximately 4.5% was considered. However, it is anticipated that long-term system growth of the Monterey Water System will be less than the long-term GDP growth rate given the existing moratorium on development, the maturity of the utility sector and considering that the potential for long-term customer growth is limited and that earnings growth is tied to utility rate base. Therefore, a long-term growth rate of 3.8% was selected for the Monterey Water System. This growth rate assumes that as cost inflation and rate base associated with the system grows over time, the system will be able to achieve a consistent growth in earnings that correspond with the CPUC allowable rate of return.

5.2.2. Indication of Value Using the Income Approach

The indication of value of the "Base" Monterey Water System located within MPWMD boundaries using the Income Approach, as of the valuation date is:

$301,298,000

A summary of the valuation estimate using the DCF method is shown in Table 5-2. A larger version of this table is provided in Exhibit 21 of Appendix C.

[165] Survey of Professional Forecasters, published by the Philadelphia Federal Reserve Bank of Philadelphia, November 14, 2022.

[166] Livingston Survey, Federal Reserve Bank of Philadelphia, December 16, 2022.

Table 5-2: Valuation Estimate of the Monterey Water System Using the DCF Method

Line	Description	1 FY 2023	2 FY 2024	3 FY 2025	4 FY 2026	Terminal Value
	Interim Cash Flow Calculations[1]					
1	Net Income Before Interest Expense:[2]	$ 19,393.6	$ 22,313.9	$ 23,532.6	$ 24,751.2	
2	Plus: Depreciation and Amortization Expense	11,061.7	11,468.8	12,301.6	13,134.3	
3	Plus: San Clemente Dam Amortization Expense	6,245.4	6,245.4	6,245.4	6,245.4	
4	Less: Revenue Recovery of San Clemente Dam Expense	(6,245.4)	(6,245.4)	(6,245.4)	(6,245.4)	
5	Plus: Citizens Acquisition Premium Expense	873.0	873.0	877.8	883.5	
6	Less: Revenue Recovery for Citizens Amortization	(873.0)	(873.0)	(877.8)	(883.5)	
7	Plus: Return on and of UPAA	-	-	(1,491.1)	(3,014.5)	
8	Less: Revenue Recovery for UPAA	-	-	1,491.1	3,014.5	
9	Less: Working Capital Additions	(1,036.4)	(1,036.4)	(35.5)	(216.6)	
10	Less: Annual Capital Expenditures	(17,965.1)	(25,652.4)	(30,525.9)	(22,677.9)	
11	Net Cash Flow	$ 11,453.8	$ 7,093.9	$ 5,272.8	$ 14,991.0	$ 14,991.0
12	Period for PV Calculation[3]	0.500	1.500	2.500	3.500	
13	Discount Rate	8.00%	8.00%	8.00%	8.00%	
14	PV Factor	0.9623	0.8910	0.8250	0.7639	
15	PV of Net Cash Flows	$ 11,021.4	$ 6,320.5	$ 4,349.9	$ 11,451.1	
16	PV of Interim Cash Flows					$ 33,142.9
17	**Terminal Value Calculations**					
18	Terminal Year Net Cash Flow					$ 14,991.0
19	Long-Term Growth Rate					3.80%
20	Discount Rate					8.00%
21	Terminal Value					$ 370,491
22	PV of Terminal Value					$ 283,005
23	Estimated Value Under Income Approach[4]					$ 316,148
24	Adjustment for the Monterey Water System Only[5]					95.3%
25	Adjusted Value					$ 301,289

Amounts shown in $1,000s. Fiscal Year Ending December 31st

[1]Adjustments for both expenses and revenues associated with the San Clemente Dam, Citizens Acquisition Premium, and Utility Plant Acquisition Adjustments (UPAA) were made to address these revenues and expenses separately for purposes of estimating net cash flows. Consideration of these items were addressed separately as asset additions as part of the Monterey Water System valuation.

[2]Adjustment to net income to reflect an allowable return on rate base equivalent to the discount rate of 8%. Assumes CAPUC approves Cal-Am's proposed cost of capital in its Cost of Capital Case A2105001.

[3]Mid-year convention used for net income and net cash flows.

[4]Includes the Monterey Water System and the Central Satellites.

[5]Adjustment for the Monterey Water System Only based on a proportional allocation of water delivered to customers associated with the Monterey Water System as compared to the Monterey Water System customers plus the Central Satellites.

5.3. Market Approach

5.3.1. Guideline Company Method

A search was completed for publicly traded water companies listed in Global Industry Classification Standards (GICS) 551040 Water Utilities. A total of eight companies were identified in this GICS category plus one additional water company, Global Water Resources Group. Descriptions of these companies are provided in Table 5-3. Financial and operating information for the potential guideline companies were obtained from the latest Form 10-K Annual Reports and historical 10-K Annual Reports for the period from 2017 through 2021.

Table 5-3: Description of Water Supply Companies

Company	Description
American States Water Company	American States Water Company is the parent of Golden State Water Company, Bear Valley Electric Service, Inc. and American States Utility Services, Inc., serving over one million people in nine states. Through its water utility subsidiary, Golden State Water Company, the company provides water service to approximately 262,800 customer connections located within more than 80 communities in Northern, Coastal and Southern California. Through its electric utility subsidiary, Bear Valley Electric Service, Inc., the company distributes electricity to approximately 24,700 customer connections in the City of Big Bear Lake and surrounding areas in San Bernardino County, California. Through its contracted services subsidiary, American States Utility Services, Inc., the company provides operations, maintenance and construction management services for water distribution, wastewater collection, and treatment facilities located on eleven military bases throughout the country under 50-year privatization contracts with the U.S. government. In 2021 approximately 73% of the company's earnings came from water operations, 8% came from electric operations, and 19% came from contract services.
American Water Works Company, Inc.	American Water Works Company, Inc., is a holding company and through its subsidiaries, provides water and wastewater services in the United States and Canada. It offers drinking water, wastewater, and other related services to approximately 14 million people in 24 states. The company's primary business involves the ownership of utilities that provide water and wastewater services to residential, commercial, industrial, public authority, fire service and sale for resale. The company's utilities operate in 1,700 communities in 14 states, with 3.4 million active customers. It operates approximately 80 surface water treatment plants, 480 groundwater treatment plants, 160 wastewater treatment plants, 52,500 miles of transmission, distribution, and collection mains and pipes, 1,100 groundwater wells, 1,700 water and wastewater pumping stations, 1,300 treated water storage facilities, and 76 dams. Regulated businesses accounted for approximately 86% of the Company's total operating revenues in 2021.
Artesian Resources Corporation	Artesian Resources Corporation, through its subsidiaries, provides water, wastewater, and other services on the Delmarva Peninsula. The company distributes and sells water to residential, commercial, industrial, governmental, municipal, and utility customers, as well as for public and private fire protection in the states of Delaware, Maryland, and Pennsylvania; and offers wastewater services to customers in Delaware. It also provides contract water and wastewater services; water, sewer, and internal service line protection plans; and wastewater management services, as well as design, construction, and engineering services. In addition, the company offers services to other water utilities, including operations and billing functions; and owns real estate properties, including land for office buildings, a water treatment plant, and wastewater facility. As of December 31, 2021, it served approximately 94,300 customers in Delaware, Maryland, and Pennsylvania. Artesian Resources Corporation was founded in 1905 and is headquartered in Newark, Delaware. Its regulated business segment accounted for a large fraction (more than 86%) of the company's operating revenues in 2021.
California Water Services Group	California Water Service Group, through its subsidiaries, provides water utility and other related services in California, Washington, New Mexico, and Hawaii. It is involved in the production, purchase, storage, treatment, testing, distribution, and sale of water for domestic, industrial, public, and irrigation uses, as well as for fire protection. The company offers its services to approximately 494,500 customer connections in 100 California communities; approximately 6,200 water and wastewater customer connections on the islands of Maui and Hawaii; approximately 36,400 customer connections in the Tacoma and Olympia areas in Washington; and approximately 8,600 water and wastewater customer connections in the Belen, Los Lunas, Indian Hills, and Elephant Butte areas in New Mexico. It also engages in the provision of non-regulated water-related services, including operating municipally owned water systems, privately owned water, and recycled water distribution systems; providing water system operation, meter reading, and billing services to private companies and municipalities; leasing communication antenna sites on its properties to telecommunication companies; billing optional third-party insurance programs to its residential customers; and providing lab services. California Water Service Group was founded in 1926 and is headquartered in San Jose, California. Its regulated business segment accounted for a large fraction (approximately 97%) of the companies operating revenues in 2021.
Essential Utilities, Inc.	Essential Utilities, Inc., is a holding company for regulated utilities providing water, wastewater, and natural gas services to an estimated five million people in Pennsylvania, Ohio, Texas, Illinois, North Carolina, New Jersey, Indiana, Virginia, West Virginia, and Kentucky. Aqua Pennsylvania, Inc., one subsidiary of Essential accounted for approximately 55% of operating revenues and approximately 68% of income for its regulated water segment in 2021. In 2021, the company's regulated water segment comprised approximately 52% of its total operating revenues. The

Company	Description
	company's regulated natural gas segment comprised approximately 46% of its total operating revenues and other miscellaneous revenues comprised the remaining portion. The company was formerly known as Philadelphia Suburban Corporation and changed its name to Aqua America, Inc. in 2004. In 2020, Aqua America, Inc., changed its name to Essential Utilities.
Global Water Resources	Global Water Resources, LLC., is a water resource management company that owns, operates, and manages water, wastewater, and recycled water utilities in communities principally in metropolitan Phoenix, Arizona. The company owns and operates 25 water and wastewater systems that serve 54,182 service connections. Revenues from the company's regulated business accounted for approximately 98.3% of total revenues in 2021.
Middlesex Water Company	Middlesex Water Company, together with its subsidiaries, owns and operates regulated water utility and wastewater systems. It operates in two segments, Regulated and Non-Regulated. The Regulated segment engages in collecting, treating, and distributing water on a retail and wholesale basis to residential, commercial, industrial, and fire protection customers primarily in New Jersey and Delaware. This segment also includes regulated wastewater systems in New Jersey and Delaware. The company's New Jersey water utility system serves approximately 61,000 retail customers, and its Delaware utility systems serve approximately 59,500 customers. The Non-Regulated segment provides non-regulated contract services for the operation and maintenance of municipal and private water and wastewater systems in New Jersey and Delaware. Middlesex Water Company was founded in 1897 and is headquartered in Iselin, New Jersey. Its regulated business segment accounted for a large fraction (approximately 89%) of the company's operating revenues in 2021.
SJW Group	SJW Group, through its subsidiaries, provides water utility services in the United States. It engages in the production, purchase, storage, purification, distribution, wholesale, and retail sale of water. The company also provides non-tariffed services, including water system operations, maintenance agreements, and antenna site leases. Its San Jose Water Company subsidiary provides service to approximately 231,000 connections in the San Jose, California area. Its SJWNE, LLC subsidiary owns Connecticut Water Service that provides service to 140,000 connections in Connecticut and Maine. Its SJWTX subsidiary provides service to 24,000 service connections in Texas. Further, the company owns undeveloped land in California and Tennessee; and owns and operates commercial buildings in Tennessee. The company was formerly known as SJW Corp. and changed its name to SJW Group in November 2016. SJW Group was founded in 1866 and is headquartered in San Jose, California. Its regulated business segment accounted for a large fraction (approximately 98%) of the company's operating revenues in 2021.
York Water Company	The York Water Company impounds, purifies, and distributes drinking water. The Company also owns and operates three wastewater collection systems and five wastewater collection and treatment systems. The Company operates within its franchised water and wastewater territory, which covers portions of 51 municipalities within three counties in south-central Pennsylvania. The Company is regulated by the Pennsylvania Public Utility Commission for both water and wastewater in the areas of billing, payment procedures, dispute processing, terminations, service territory, debt and equity financing and rate setting. In 2021, the company served approximately 73,144 customers. The York Water Company was founded in 1816 and is headquartered in York, Pennsylvania. Its regulated business accounted for a large fraction (approximately 99%) of the company's operating revenues in 2021.

The criteria for establishing the relevance of the guideline companies to the Monterey Water System included company comparability and diversity of services and products offered, size, growth, location, and regulatory environment that the company operates under. Based on these criteria, two of these companies were excluded from consideration for use in the guideline company method because a significant portion of their business differed from the supply of retail potable drinking water, or a significant portion of their business was not economically regulated, and a third was eliminated due to size:

- American States Water Company – In 2021, approximately 19% of operating revenues from American States Utility Services, Inc., which provides operation, maintenance, and construction services to military bases. A total of 8% of revenues were generated by the Company's Electric

Utility business. The military and electric business are somewhat dissimilar to the Company's retail water business.

- Essential Utilities Inc (formerly Aqua America) – Essential Utilities is comprised of a water and wastewater division and a natural gas distribution division ("Peoples"). Operating revenues from its natural gas division comprised approximately 46% of the company's total operating revenues. This business is somewhat different from retail water service. Operating revenues in 2021 were $1,878 million, which is more than 27 times larger than Monterey Water System. For these reasons, this company was eliminated from consideration as a guideline company.
- American Water Company is the parent company of Cal-Am and the Monterey Water System segment, with $3,930 million in revenues in 2021, which is more than 50 times larger than the Monterey Water System. However, even though much larger than the subject of the appraisal, the parent company's financial performance was considered to a limited extent in the valuation of the system but excluded as a guideline company due to its size in relation to the Monterey Water System.

Fundamental financial results and customer data for the remaining companies as compared to the Monterey Water System are summarized in Table 5-4.

Table 5-4: Customer Statistics and 2022 Financial Results for Selected Companies

Guideline Company	Customer Connections	Net Utility Plant ($000s)	Sales ($000s)	EBITDA ($000s)	Net Income ($000s)
Artesian Resources Corp	94,300	655,960	96,355	42,852	18,733
California Water Services Group	547,600	2,987,612	818,820	237,881	79,374
Middlesex Water Company	226,367	899,857	157,635	68,217	42,496
SJW Group	399,600	2,592,881	589,061	214,215	58,348
York Water Company	73,144	417,827	58,684	33,993	18,665
Global Water Resources Group	53,882	280,608	43,937	17,594	5,028
Monterey Water System and Central Satellites	40,841	273,759	69,298	28,802	11,250

Financial results as of the end of quarter 3 of 2022 and for trailing twelve months ending in quarter 3 of 2022.
Monterey Water System and Central Satellites for the period ending or as of 12/31/2021 as documented in the 2022 GRC.

California Water Services Group and SJW Group are companies that are both significantly larger than the subject of the appraisal in terms of customer connections, net utility plant, sales and EBITDA. However, a significant portion of the water utility operations of these two companies are in California thus making PUC regulatory environment the same or similar to the Monterey Water System. Therefore, these companies were included in the selected guideline companies, however, their price multiples were adjusted for size and described below.

Finally, since the Monterey Water System is a segment of a larger corporation and the assets associated with the Monterey Water System, as defined in Section 2, do not include the corporate assets of Cal-Am, or the parent company, American Water, and the business risks are typically lower for water companies that are more diversified by operating in several geographies, the value indication using the Guideline

Company Method in this instance may over-state the value of the Monterey Water System. However, we have included the analysis below using the Guideline Company Method for comparison purposes with the Guideline Transaction Method.

A trend analysis of the financial results for the companies identified in Table 5-4 was completed from FY 2016 to FY 2021 and is provided in Table 5-5 in comparison to the Monterey Water System and Central Satellites. As shown in this table, the guideline companies have experienced growth in Net Utility Plant, sales, EBITDA, and EBIT that is generally similar to the Monterey Water System and Central Satellites.

Table 5-5: Historical Trends in Guideline Company Fundamentals

Financials / Company	2016 ($000s)	2021 ($000s)	Five-Year CAGR
Net Utility Plant			
Artesian Resources Corp	$425,502	$590,431	6.8%
California Water Services Group	1,859,277	2,846,862	8.9%
Middlesex Water Company	517,776	865,368	10.8%
SJW Group	1,146,363	2,497,499	16.9%
York Water Company	270,907	382,909	7.2%
Global Water Resources	200,489	255,866	5.0%
Monterey Water System & Satellites	182,084	273,759	8.5%
Sales			
Artesian Resources Corp	$79,089	$90,859	2.8%
California Water Services Group	609,370	790,909	5.4%
Middlesex Water Company	132,906	143,141	1.5%
SJW Group	339,706	573,686	11.0%
York Water Company	47,584	55,119	3.0%
Global Water Resources Group	29,799	41,914	7.1%
Monterey Water System & Satellites	59,669	77,662	5.4%
EBITDA			
Artesian Resources Corp	$37,117	$42,041	2.5%
California Water Services Group	167,579	255,713	8.8%
Middlesex Water Company	52,566	60,278	2.8%
SJW Group	152,844	217,586	7.3%
York Water Company	23,677	26,963	2.6%
Global Water Resources Group	13,804	19,450	7.1%
Monterey Water System & Satellites	28,554	36,490	5.0%
EBIT			
Artesian Resources Corp	27,929	30,156	1.5%
California Water Services Group	103,980	146,998	7.2%
Middlesex Water Company	39,770	39,169	-0.3%
SJW Group	108,219	123,186	2.6%
York Water Company	17,255	18,104	1.0%
Global Water Resources Group	7,525	9,960	5.8%
Monterey Water System & Satellites	21,405	27,343	5.0%

Values shown in $1,000s.

The enterprise values of the companies were compared to the Monterey Water System and Central Satellites based on the following metrics:

- Enterprise Value ("EV") to Revenues
- EV to Customer Connections
- EV to Original Cost Less Depreciation ("OCLD")
- EV to EBITDA
- EV to EBIT

The value multiples for the selected guideline public companies are summarized in Table 5-6. The enterprise values of the guideline public companies were calculated as shown in Exhibit 22 of Appendix C. The EV to sales, EV to EBITDA, and EV to EBIT multiples of the guideline companies were adjusted for size considering that several of the guideline public companies are significantly larger than the Monterey Water System, and larger companies tend to have higher value multiples than smaller companies due to a number of risk factors, such as geographic and customer diversification associated with larger companies. The size adjustment was computed based on industry size premium information provided by Kroll, as shown in Exhibits 17, 23, 24, and 25 of Appendix C.

The coefficient of variation for the potential value multiples were calculated and compared as shown in Table 5-6.[167] As shown, the coefficients of variation of each potential value vary considerably. Each of these value multiples were selected to calculate the indication of value using the Guideline Public Company Method. The EV / Revenues multiple reflects that the value of the system is related to the amount of revenues, which is supportable because larger revenues typically correspond to the potential for larger economic benefits. The EV/Connection multiple reflects that the value of a system is related to the number of customer connections, which is supportable because generally the size of the system and value of net plant increases with a larger customer base, and a larger customer base generally provides an opportunity for the owner of the system to have higher cash flows. Net Plant Book Value is a reasonable indicator of value given that utility fixed assets comprise the majority of the company's rate base from which the companies have opportunities to earn returns. EBITDA was selected as an indicator of value as it reflects earnings normalized for capital structure and taxation.

As described above, the indication of value using the Guideline Public Company Method likely over-states the value of the Monterey Water System because the value of guideline public companies includes corporate assets and risk mitigation through diversification, whereas the acquisition of the Monterey Water System does not include corporate assets, functions of Cal-Am or the parent company, American Water, nor is it geographically diversified. Furthermore, insufficient information was available for the guideline public companies to be able to make adjustments to remove from consideration the corporate assets. However, for comparison purposes with the Guideline Transaction Method, which includes sales transactions for utility segments, the Guideline Public Company indication of value for the Monterey Water System is presented in Table 5-7.

[167] Coefficient of variation was calculated as standard deviation / mean and is a measure of the predictive value of the value multiple. The lower the coefficient of variation, the tighter is the data around the mean and the higher the predictive value of the data.

Table 5-6: Potential Value Multiples (Adjusted) for Guideline Public Companies

Guideline Company	EV / Revenues (Adjusted)	EV/ Connection	EV / OCLD	EV / EBITDA (Adjusted)	EV / EBIT (Adjusted)
Artesian Resources Corp	4.78	7,408	1.06	12.32	14.94
California Water Services Group	2.75	8,077	1.48	12.36	17.59
Middlesex Water Company	5.77	8,432	2.12	15.33	17.54
SJW Group	3.93	9,781	1.51	13.34	19.55
York Water Company	7.48	10,364	1.81	14.78	18.49
Global Water Resources Group	8.98	7,312	1.40	22.39	36.95
Median	5.28	8,254	1.49	14.06	18.04
Mean	5.61	8,562	1.57	15.09	20.84
Standard Deviation	2.10	1,146	0.33	3.46	7.34
Coefficient of Variation	0.37	0.13	0.21	0.23	0.35

OCLD = Original Cost Less Depreciation or net plant book value.

Table 5-7: Indication of Value Using Guideline Public Company Method

Description	Monterey Water System Fundamentals[1]		Adjusted Median Valuation Multiple[2]		Indication of Value		Weight[3]		Weighted Indication of Value
EV / Sales	90,258	x	5.28	=	$ 476,562	x	0.10	=	47,656
EV / Connection	40,841	x	8,254	=	337,102	x	0.40	=	134,841
EV / OCLD	288,541	x	1.49	=	429,927	x	0.20	=	85,985
EV / EBITDA	34,930	x	14.06	=	491,116	x	0.20	=	98,223
EV / EBIT	24,202	x	18.04	=	363,604	x	0.10	=	43,660
Total weighted indication of value for Monterey Water System and the Central Satellites									$ 410,366
Pro-Rated for the Monterey Water System[4]									0.953
Pro-Rated for the Monterey Water System									$ 391,079

Value in $1,000s.

[1]Monterey Water System for normalized year based on 2022 GRC reported estimates for 2022 and 2023.

[2]From Guideline Public Companies.

[3]Based on coefficient of variation results and other considerations.

[4]Adjustment for the Monterey Water System only based on a proportional allocation of water delivered to the Monterey Water System customers as compared to the water delivered to the Monterey Water System customers plus the Central Satellites.

5.3.2. Guideline Transaction Method

A search was completed for utility transactions that were similar to the subject system. The criteria used in filtering the sales transaction information for comparability with the Monterey Water System included the following:

- System. Transactions involving water systems providing retail water service were considered. Transactions involving systems that solely provide wholesale water service (i.e., systems that did not include a water distribution system) or sales that involved multiple types of utility systems (water, wastewater, electric) were not considered unless the value of the water portion of the system comprised the most significant portion of the utility's operation or if the water portion could be separated from the remainder. In addition, transactions involving water systems that included their own raw water supplies and had their own treatment systems were considered potentially relevant. Water systems that purchased all or most of their potable water supply for resale were considered to be less relevant under some of the value measures employed.
- Location. Transactions that occurred in California were considered particularly relevant given their similar economic regulation to the Monterey Water System. Sales transactions in States outside of California were considered potentially relevant if they had similar economic regulation and ratepayer indifference considerations.
- Size. Transactions that involved water systems with similar order-of-magnitude of size as compared to the Monterey Water System, a Class A Water System, were considered potentially relevant. Sales transactions involving much smaller water systems (Class C and D) with less than 2,000 and 500 customer connections, respectively, were generally excluded from consideration or included for only limited purposes.[168]
- Voluntary negotiated transactions. MPWMD's legal Counsel, Rutan & Tucker, LLC., informed us that the normal rule in California eminent domain cases is that an appraiser's opinion of the value of the property may not be based upon an acquisition by a public agency with the power of eminent domain due to the inherent coercion in such a "forced sale" that undermines the basic concept underlying the principle that fair market value is supposed to be the "highest price on the date of valuation that would be agreed to by a seller, being willing to sell but under no particular or urgent necessity for so doing, nor obliged to sell, and a buyer, being ready, willing, and able to buy but under not particular necessity for so doing."[169] There is an exception if the acquisition relates to acquisition of a private water system. However, while it is unclear whether a California court would permit an appraiser from relying upon a transaction involving a water system acquired through eminent domain when the surrounding circumstances indicate the sale was involuntary, Raftelis believes it would be best to restrict our use of public agency acquisitions of private water systems to instances where the surrounding circumstances indicate that sale was a voluntary negotiated transaction.

  A few transactions were identified that appeared to have involved a willing buyer and seller where the parties negotiated a transaction price just prior to entering into an eminent domain settlement agreement. These transactions were considered to be negotiated willing buyer/willing

[168] See citation 2, supra.

[169] Cal. Evidence Code Section 821(a)(1) and Code of Civil Procedure Section 1263.320(a).

seller transactions and were identified as potentially relevant but were excluded from consideration for other reasons, as described in Appendix D.

- Transaction Date. The analysis under the Guideline Transaction Method focused on sales of water utility systems involving a willing buyer and willing seller that closed since 2015. This timeframe was considered reasonable since generally the economic regulation of utilities has remained relatively consistent over the time period and the public utility market is considered to be generally stable.
- Availability of Information. Transactions where very limited information was available regarding the system, customer base, and details regarding the transaction were excluded from consideration.
- Pending transactions. Transactions that were pending before the CPUC or another regulatory agency in another state were excluded from consideration.

Based on our research, we identified 53 potentially relevant transactions that were reported over this period. Descriptions of these transactions are provided in Appendix D. Information on the transaction details was obtained from PUC filings, PUC decisions, annual financial reports, bond official statements, and other similar reports. These transactions were filtered based on the considerations described above, resulting in three transactions that were considered potentially relevant, and 42 others that were considered for limited purposes as identified in Appendix D. The fundamental financial results and customer data for the acquired water systems associated with these potentially relevant transactions, as compared to the Monterey Water System, are provided in Table 5-8.

In valuing the Monterey Water System under the Guideline Transaction Method, the transaction prices were compared based on the following potential value multiples:

- Price to Sales
- Price to Customer Connection
- Price to OCLD
- Price to EBITDA
- Price to EBIT

A summary of these potential value multiples is provided in Table 5-8.

Table 5-8: Fundamental Statistics for Selected Guideline Transactions

Guideline Transaction	Transaction Date	Customer Connections	Net Utility Plant	Operating Revenues	EBITDA	EBIT
Park, Apple Valley & Mtn Water	Dec 17, 2015	71,027	235,725	70,897	49,552	41,794
Shorelands Water Co. Inc.	Apr 3, 2017	11,188	20,778	11,506	2,686	1,916
New York American Water Co	Dec 16, 2021	126,000	499,904	120,132	37,170	22,371
Monterey Water System & Central Satellites	n/a	40,841	288,541	87,063	31,108	20,364

Net Utility Plant, Sales, and EBITDA values in $1,000s.

Statistics for guideline transactions are for the selling company for latest fiscal year ending prior to the transaction date.

Monterey Water System based on 2022 GRC reported figures for 2021, 2022, and 2023 (normalized per Exhibit 34).

Table 5-9: Potential Value Multiples for Guideline Transactions

Guideline Transaction[1]	Price[2] ($1,000s)	Price / Sales	Price / Con[3]	Price / OCLD	Price / EBITDA	Price / EBIT
Park, Apple Valley & Mtn Water	329,500	4.65	6,142	1.40	6.65	7.88
Shorelands Water Co. Inc.	36,581	3.18	4,181	1.76	13.62	19.10
NY American Water, Co.	808,929	6.97	6,638	1.62	21.76	36.16
Mean	391,670	4.93	5,653	1.59	14.01	21.05
Median	329,500	4.65	6,142	1.62	13.62	19.10
Std Deviation		1.56	1,061	0.15	6.18	11.63
Coefficient of Variation[4]		0.32	0.19	0.09	0.44	0.55

[1]Statistics for guideline transactions are for the selling company's latest fiscal year ending prior to the transaction date.

[2]Price is measured based on the market value of invested capital (MVIC), excluding cash and cash equivalents. For those transactions that were capital stock transactions, adjustments to the purchase price were made to derive an asset sale equivalent price.

[3]For the Price/Connection, the enterprise value reported at the time of the transaction was adjusted from the transaction date to the valuation date of this report to reflect time value of money. A cost escalation factor was applied based on the average increase in the consumer price index and the Handy-Whitman Index for the Pacific Region.

[4]Coefficient of variation was calculated as the standard deviation / mean and is a measure of the predictive value of the value multiple. The lower the coefficient of variation, the tighter is the data around the mean and the higher the predictive value of the data.

Five value multiples were selected. The Price/Sales multiple reflects that the value of the system is related to the amount of revenues, which is supportable because larger revenues typically correspond to the potential for larger economic benefits. The Price/Connection multiple reflects that the value of a system is related to the number of connections, which is supportable because generally the size of the system and value of net plant increases with a larger customer base, and a larger customer base generally provides an opportunity for the owner of the system to have higher cash flows. Price/OCLD reflects the invested fixed asset value that is related to the amount of rate base that the system can earn a return on Price/EBITDA and Price/EBIT were selected because the future benefits of ownership relate to the earnings generated by the company.

The resulting indicated value of the Monterey Water System using the Guideline Transaction Method is summarized in Table 5-10. Details pertaining to the derivation of each value indicator are provided in Exhibits 26 through 30 of Appendix C.

Table 5-10: Indication of Value Using the Guideline Transaction Method (in $000s)

Description[1]	Monterey Water Fundamentals[2]		Valuation Multiple[3]		Indication of Value (in $000s)		Weight[4]		Weighted Indication of Value (in $000s)
Price / Sales	90,258	x	4.79	=	432,335	x	0.2	=	86,467
Price / Connection	40,841	x	5,898	=	240,880	x	0.3	=	72,264
Price / OCLD	288,541	x	1.61	=	464,552	x	0.3	=	139,366
Price / EBITDA	34,930	x	13.82	=	482,733	x	0.1	=	48,273
Price / EBIT	24,202	x	20.07	=	485,734	x	0.1	=	48,573
Total weighted indication of value									$394,943
Pro-Rated for System Inside MPWMD Boundaries									0.953
Pro-Rated for System Inside MPWMD Boundaries									$376,381

[1]Price is measured based on market value of invested capital (MVIC), excluding cash and cash equivalents.

[2]Estimated as of the valuation date. Shown in $000s for sales, OCLD, EBITDA, and EBIT.

[3]Average of calculated median and mean values.

[4]Weighted based on coeficient of variation results.

5.3.3. Indication of Value Using the Market Approach

The indication of value of the Monterey Water System using the Market Approach, as of the valuation date is:

$376,381,000

This indication of value under the Market Approach reflects consideration of the Guideline Transaction Method. While analyzed and considered, no weighting was placed on the Guideline Company Method because we believe the value indication using this method over-states the value of the Monterey Water System because the acquisition of the Monterey Water System is a business segment and does not include acquisition of the corporate assets or functions of a corporate organization.

5.4. Asset Approach

The Monterey Water System has a large quantity of tangible assets associated with it and the specific characteristics of raw water supply, water treatment, water transmission and distribution make the assets relatively unique in their combination. The assets are dedicated for a specific purpose of the delivery of retail water to the residences and businesses within the Monterey Water System. Therefore, the Asset Approach was deemed to be potentially applicable for consideration of the value of the Monterey Water System.

The steps that were completed to estimate the value of the Monterey Water System under the Asset Approach were as follows:

1. Relevant information regarding the tangible improvements, improvements pertaining to the realty, and personal property assets of the system and their use were gathered. This information was limited to publicly available information associated with Cal-Am's CPUC GRC.

2. Original asset cost and depreciation information were obtained and compiled from Cal-Am's 2022 GRC application to the CPUC. Specifically, plant asset balances, accumulated reserve balances, and depreciation rates were obtained from the Capital and Rate Base Workpapers from Cal-Am's 2022 GRC and were utilized.

3. OCLD amounts were calculated for each asset subaccount category.

4. The average ages of the assets and number of years of depreciation that was recorded for each asset category were calculated based on the accumulated depreciation and depreciation rates for each asset category that were obtained from the 2022 GRC information.

5. The original costs of assets for each asset category were trended to reproduction costs using the average age estimates and relevant historical construction cost indices.[170] Reproduction cost is the current cost of reproducing a new replica of the property using the same, or closely similar, materials.[171]

6. An estimate of the RCNLD amounts for each asset category were calculated by adjusting the reproduction costs for each asset category by the estimated remaining useful life of the assets based on the accumulated depreciation and depreciation rates utilized by Cal-Am.

7. The RCNLD amounts for each asset category were totaled.

8. Estimates of land value and water rights were added to the RCNLD asset amounts. The real estate value estimate for the Monterey Water System was prepared by Chris Carneghi, MAI and the appraisal report is provided in Appendix E.

9. The water rights value estimate that was prepared by Steve Herzog was added to the total (See Appendix F for the Herzog Appraisal Report).

10. An assessment of economic obsolescence was completed. The estimate of economic obsolescence was then subtracted from the asset amounts described above to derive the indication of value under an Asset Accumulation Method.

5.4.1. Improvements, Improvements Pertaining to the Realty, and Personal Property

The OCLD and RCNLD computations for Monterey Water System and Central Satellite improvements, improvements pertaining to the realty, and personal property assets installed prior to 2022 are provided in Exhibit 31 of Appendix C. These assets were obtained and compiled from Cal-Am's 2022 GRC application to the CPUC. Specifically, plant asset balances, accumulated reserve balances, and depreciation rates were obtained from the Capital and Rate Base Workpapers from Cal-Am's 2022 GRC and were utilized. Since the asset information reported by Cal-Am in its 2022 GRC were aggregated by subaccount codes, and not provided on an asset specific basis, and since Raftelis requested that Cal-Am

[170] The assets were trended utilizing the Handy-Whitman Index of Public Utility Construction Costs, published by Whitman, Requardt & Associates ("Handy-Whitman Index").

[171] Valuing Machinery and Equipment, supra citation 135.

provide asset-specific plant asset and accumulated reserve balances but were not provided with such information, we have assumed that the average depreciation rates by subaccount codes reported by Cal-Am are applicable to each asset within each subaccount code. These depreciation rates were used to calculate the RCNLD amounts for the Monterey Water System assets by subaccount code. While this RCNLD calculation approach is reasonable given the limited availability of asset data, this assumption is considered an extraordinary assumption as defined by USPAP, and if found to be false, it could alter our opinion and conclusion of value under the Asset Approach.

The 2022 capital expenditures that were reported by Cal-Am associated with the Monterey Water System in its 2022 GRC are provided in Exhibit 32 of Appendix C. We assumed that these capital expenditures would be fully implemented by Cal-Am as of the valuation date. However, if that is not the case, then the value of any assets not installed as of the valuation date should be removed the RCNLD computation. The RCNLD amount was then used to develop the indication of value of the tangible improvements, improvements pertaining to the realty, and personal property under the Asset Approach.

5.4.2. Real Estate

Cal-Am owns 109 separate real estate parcels of land that total approximately 3,606 acres within the Cal-Am Monterey District service area. The appraisal of this real estate and real property interests was completed by Chris Carneighi, MAI, and the real estate appraisal report is provided in Appendix E.[172] This appraisal report was relied upon in our valuation under the Asset Approach. Approximately 2,332 acres of the real estate parcels owned by Cal-Am are directly associated with the provision of utility service, and the remaining portion of parcels is not currently utilized for utility purposes. The values of these two types of land parcels are shown separately in Table 5-13. The real estate identified as not currently utilized for utility purposes consists of eight parcels, with a total of area of approximately 1,320 acres, that are associated with the land owned by Cal-Am in connection with the San Clemente Dam, and five parcels of buildable vacant land located in Seaside with a total area of approximately 0.5 acres. These parcels of land were assumed to be unrelated to the provision of utility service and not "used and useful." The remaining parcels and acreage of land owned by Cal-Am were deemed by the District to be related to, or in connection with, Cal-Am's utility infrastructure, and are included in the consideration of the "base" water system value. In addition, we assumed that the cost of acquiring the necessary easements associated with the installation of Cal-Am's pipe network is included in the original cost records provided by Cal-Am to the CPUC as part of its 2022 GRC.

5.4.3. Intangible Assets

Intangible assets include intangible plant and water rights. Intangible plant includes organization, franchises and consents, and other items as reported by Cal-Am in its Annual Report of Operations for the Monterey Water System and Central Satellites.

Cal-Am possesses water rights associated with the Monterey Water System that totals 6,338 AFY, as shown in Table 5-11. A portion of these water rights are pre-1914 rights and riparian rights. A riparian right refers to the right of a property owner to use water from a stream, river, or lake abutting the property and is created exclusively because the land is situated next to a natural water source and the

[172] The fair market value of the Monterey Water System is dependent on the market value of the real property owned by Cal-Am as provided to us by Chris Carneighi, MAI. We have not verified the validity of this asset value, which we assume to be reliable. The use of this assumption is considered an extraordinary assumption and might have affected our valuation conclusions.

right to the use of the surface water rest solely on the ownership of the land.[173] These rights are described in the SWRCB Order No. WR 95-10.[174] Cal-Am possesses the appropriative right to use a specific quantity of water related to its existing SWRCB License 11866[175] and Permit 21330.[176] In addition, Cal-Am possesses adjudicated water rights associated with the Seaside Groundwater source.[177] However, a portion of the Seaside Groundwater source water rights (700 AFY) are restricted by Cal-Am's replenishment obligations for 25 years, resulting in a net usable water right of 5,638 AFY.

The appraisal of these water rights was completed by Steven J. Herzog, MAI, AI-GRS, RPF, and the water rights appraisal report is provided in Appendix F.[178]

Table 5-11: Water Rights Owned by Cal-Am that are Part of the Monterey Water System

Description	Amount Acre-Feet
Pre-1914[1]	1,137
Riparian[1]	60
License 11866[2]	2,179
Permit 21330[3]	1,488
Seaside Groundwater[4]	774
Total	5,638

[1]State Water Resources Control Board, CA EPA, Order No. WR 95-10, dated July 6, 1995, p.25.

[2]State Water Resources Control Board, License for Diversion and Use of Water, CAW License 11866, dated April 12, 1985, p.1.

[3]State Water Resources Control Board, Right to Divert and Use Water, CAW Permit 21330, dated January 26, 1993, p.3.

[4]CPUC Amended application A12-04-019, dated March 14, 2016, Attachment H. Adjudicated right = 1,474 AFY less Cal-Am's water replenishment obligations.

Other intangible assets include maps and system schematics, engineering reports and drawings, customer lists, customer/billing records, supplier contracts, maintenance and repair logs and reports for the Monterey Water System. Engineering reports and records have likely been capitalized and are included in the fixed assets used to estimate the indication of value under the Asset Approach. We considered estimating the value of the other intangible assets identified in this paragraph. However, we concluded that the tangible property and improvements to the realty suffer from economic obsolescence (See Section

[173] Assessors' Handbook. Section 542 Assessment of Water Companies and Water Rights. California State Board of Equalization. December 2000 reprinted January 2015. Part II P.10.

[174] State Water Resources Control Board, CA EPA, Order No. WR 95-10, dated July 6, 1995.

[175] State Water Resources Control Board, License for Diversion and Use of Water, CAW License 11866, dated April 12, 1985.

[176] State Water Resources Control Board, Right to Divert and Use Water, CAW Permit 21330, dated January 26, 1993.

[177] CPUC Amended application A12-04-019, dated March 14, 2016, Attachment H. Adjudicated right = 1,474 AFY, Existing is adjudicated right less replenishment obligations.

[178] The fair market value of the Monterey Water System is dependent on the market value of the water rights owned by Cal-Am as provided to us by Steven J. Herzog, Mai, AI-GRS, RPF. We have not verified the validity of this asset value, which we assume to be reliable. The use of this assumption is considered an extraordinary assumption and might have affected our valuation conclusions.

5.4.8), and in our opinion, these intangible assets are not of material value after consideration of economic obsolescence.

5.4.4. Contributions in Aid of Construction

Contributions in Aid of Construction ("CIAC") represents property which was donated or given to a utility from individuals, governmental agencies, or others for construction or property additions.[179] Cal-Am reports CIAC for the Monterey Water System and Central Satellites totaling $19.287 million as of December 31, 2021.[180] CIAC is included in the valuation of the Monterey Water System under the Asset Approach per CPUC guidelines regarding the acquisition and mergers of water companies.[181]

5.4.5. Advances for Construction

Advances for Construction represent money expended by a developer or customer in order to receive service. For example, developers may give advances to utilities for the utility to connect to or provide service to their projects. Cal-Am reports Advances for Construction of $0.840 million for the Monterey Water System and Central Satellites as of December 31, 2021 as estimated by Cal-Am in its Annual Report to the CPUC. CPUC rules do not allow the utility to earn a return on the property advanced by developers or customers. Therefore, a prospective purchaser would not pay for advanced property.[182] Therefore, in valuing the Monterey Water System under the Asset Approach, no value was attributed to Advances for Construction.

5.4.6. Deferred Income Taxes

For asset acquired after 1981, the CPUC allows the use of normalized taxes in calculating the revenue required to provide the utility its allowed rate of return. This means that in the early years of an investment, utility rates will yield more revenue to the company to pay taxes than the actual tax expense. In later years, the actual tax expense will exceed the amounts provided for in the rates. The CPUC effectively passes the benefit of the deferral of income taxes through to the rate payers by requiring that the deferred income tax liability be deducted from the OCLD value in the calculation of rate base. If the CPUC presently requires the deduction of deferred taxes from the rate base for a particular property, prospective purchasers of that property are likely to assume that same treatment after the purchase. Therefore, the value under the Asset Approach should be adjusted to reflect the earnings limitation imposed by the rate making treatment of the deferred income taxes.[183] Cal-Am reports deferred income taxes of $24.742 million for the Monterey Water System and Central Satellites as of December 31, 2021 as reported by Cal-Am in its CPUC Annual Report for 2021. The deduction for deferred income taxes contributes to the amount of economic obsolescence considered under the Asset Approach and is addressed in the adjustment for economic obsolescence.

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[179] https://www.cpuc.ca.gov/glossary/

[180] 2021 Annual Report of District Water System Operations of the Monterey District of Cal-Am, supra citation 16.

[181] California Public Utilities Commission Decision 99-10-064, Appendix D. Section 2.07 of the Decision states "The Parties agree that any asset funded by contribution should be valued in the appraisal in accordance with Section 820 of the Evidence Code."

[182] Assessors' Handbook. Section 542 Assessment of Water Companies and Water Rights. California State Board of Equalization. December 2000 reprinted January 2015. P.32.

[183] Ibid. P.33.

5.4.7. Off-Balance Sheet Assets and Liabilities

Please see discussion of Memorandum and Balancing Account asset addition items in Section 5.5.2.3.

5.4.8. Economic Obsolescence

Economic obsolescence is an important consideration under the Asset Approach for public utilities that are economically regulated. *"Economic obsolescence is the loss in value resulting from causes outside of the property itself, such as regulation of rate base and rates or return and the consequent restriction in earnings of public utility property."*[184] Economic obsolescence may occur because the rate base value method required under economic regulation may differ from typical valuation methods, and earnings may not support a valuation based on RCNLD. In this case, the rate base value of the Monterey Water System for economic regulation is determined based on OCLD value, with adjustments for CIAC, customer deposits, deferred taxes, and working capital, whereas the typical methodology to value assets under the Asset Approach is to use RCNLD for improvements pertaining to the realty and personal property assets. The presence of economic obsolescence in the water market in California can be observed by comparing water utility transaction prices to reported OCLD and RCNLD estimates, as shown in Table 5-12. This table provides a summary of sales prices compared to OCLD and RCNLD for water utility transactions that occurred in California over the past decade. The median price per RCNLD was calculated to be approximately 30% of RCNLD. Since very few of the sales reported above transacted for a price equivalent to RCNLD (including physical depreciation but excluding economic obsolescence), we conclude that economic obsolescence in the California water utility market is a significant and should be considered under the Asset Approach.

Table 5-12 Indication of Economic Obsolescence in the California Water Utility Market

Sales Date	Seller	Buyer	State	Sales Price ($1,000s)	OCLD Value	RCNLD Value	Price to OCLD	Price to RCNLD
12/12/2012	Valencia Water Company	Castaic Lake Water Agency	CA	$82,794	$111,835	$290,514	0.7	0.3
6/25/2015	Rural Water Company - Santa Maria Area	Golden State Water Company	CA	$1,700	$2,656	$25,100	0.6	0.1
11/5/2015	Dunnigan Water Works, W&S	California American Water	CA	$2,000	$3,932	$6,525	0.5	0.3
12/1/2016	Meadowbrook Water Company	California American Water	CA	$4,000	$2,782	$22,091	1.4	0.2
11/10/2016	Geyserville Water Works	California American Water	CA	$1,415	$979	$7,171	1.4	0.2
4/15/2019	Mesa-Crest Water Company	Liberty Utilities (Park Water)	CA	$2,600	$324	$7,605	8.0	0.3
4/25/2019	Rio Plaza Water Company	California American Water	CA	$1,750	$439	$2,562	4.0	0.7
8/5/2019	Hillview Water Company	California American Water	CA	$7,470	$20,517	$39,617	0.4	0.2
12/19/2019	Fruitridge Vista Water Company	California American Water	CA	$22,750	$21,831	$33,280	1.0	0.7
8/5/2021	East Pasadena Water Co	California American Water	CA	$34,000	$5,803	$55,946	5.9	0.6
11/3/2022	Bellflower Municipal Water System	California American Water	CA	$17,000	$10,455	$21,231	1.6	0.8
12/1/2022	City of Montebello	San Gabriel Valley Water	CA	$15,857	$926	$15,857	17.1	1.0
Median Price Per OCLD and RCNLD (including physical depreciation, excluding economic obsolescence)							1.4	0.3

Values shown in $1,000s.

Economic obsolescence attributable to the Monterey Water System was calculated using two methods. Economic obsolescence under the first method was calculated by capitalizing the estimate of net income loss, sometimes termed the capitalized income loss method ("CILM"). The rationale for this approach is that buyers in the market would require an amount of net operating income for the subject assets that corresponds to achieving the market's expectation for return on investment. Any difference from the required market net operating income expectation is attributable to economic obsolescence. This

[184] Arlo Woolery, supra citation 124, p.58.

approach involved applying a market rate of return expectation of the pool of typical hypothetical willing buyers to the accumulation of asset costs and RCNLD estimates. A "required" investment return for the subject was derived by multiplying the market required rate of return by the accumulated cost under the Asset Approach. The market required investment return was then compared to the subject asset's debt free net cash flows for the "normalized" period, with any difference attributed to income loss. This difference was then capitalized to estimate the total amount of economic obsolescence. The procedure used for calculating economic obsolescence under this approach was as follows:

1. The required investment return was calculated as follows:
    a. The accumulated cost of the subject assets under the Asset Approach, including the estimated RCNLD cost of the subject assets, was complied.
    b. The required market return on total capital was calculated utilizing the discount rate derived based on the WACC. The capitalization rate with a 0% growth factor was used because the accumulated cost under the asset approach represents the cost of used and useful assets to serve existing customers, and additional assets would be needed to serve new customers and to increase utility system returns.
    c. The accumulated costs under the asset approach were multiplied by the required market return expectation to derive the required investment return.
2. The required investment return from Step 1 was compared with the subject's debt free net cash flows.
    a. The net cash flows for the subject systems were compiled for the "normalized" period.
    b. The required investment return (from Step 1) was subtracted from the subject's net cash flows for the normalized period to derive an estimate of income loss.
3. Economic obsolescence for the subject systems was calculated.
    a. The estimate of income loss (from Step 2) was divided by the capitalization rate (Step 1) to derive the estimate of economic obsolescence.
    b. The capitalized income loss was divided by the accumulated cost under the asset approach to derive the estimate of the percent of economic obsolescence.

We estimated an economic obsolescence factor of approximately 42% under this method. The calculations under this approach are shown on Exhibit 33 and 34 in Appendix C.

Economic obsolescence under the second method was calculated by comparing purchase prices of recent market transactions of water utilities where state regulatory commissions have applied rules that incentivize the consolidation of utility systems by allowing the purchase price of these utilities to be included in the rate base post-acquisition with purchase prices associated with utility transactions where regulatory rules require that the pre- and post-acquisition rate base remain the same at original cost less depreciation rate base. The post-acquisition rate base represents the base in which the buying entity can earn a return on and of its capital investment. The difference in purchase prices and price multiples associated with these transactions were used to estimate economic obsolescence.[185] Price multiples that were considered under this approach included Price/Sales, Price/Connection, Price/Net Book,

[185] As described in Section 5.2.1, we assumed that the Monterey Water System rate base will remain the same for the hypothetical buyer as the current owner of the system, which is consistent with the "ratepayer indifference test" described in Section 3.4.2. This assumption is considered an extraordinary assumption as defined by USPAP, and if found to be false, could the conclusion of value.

Price/RCNLD, and Price/EBITDA. We estimated an indication of economic obsolescence factor under this method of approximately 53%. The calculations under this approach are shown on Exhibits 35 through 37 in Appendix C.

5.4.9. Indication of Value Using the Asset Approach

The estimated value under the Asset Approach was obtained by adding the estimated values of (1) improvements and improvements to the realty, (2) real estate, and (3) intangible assets, and subtracting an estimated amount for economic obsolescence. The indication of value of the Monterey Water System, as of the valuation date, is summarized in Table 5-13:

Table 5-13: Value Indicator Using the Asset Approach

Asset Categories		Original Cost	OCLD	RCNLD	Value Estimate
Tangible Property and Improvements to the Realty					
Installed Prior to 2022					
Supply		$ 27,958	$ 14,679	$ 32,616	
Pumping		28,343	18,861	35,025	
Treatment		31,842	13,541	39,213	
Transmission / Distribution		206,074	143,524	321,179	
Storage		9,654	8,573	12,552	
Meters & Services		47,922	24,104	46,791	
Hydrants		11,124	6,489	13,799	
Admin & General		3,671	2,729	3,706	
Other Misc		7,122	4,806	6,899	
Subtotal		$ 373,711	$ 237,305	$ 511,779	
Pro-Rated (for Monterey Water System)[1]	0.953	$ 356,147	$ 226,152	$ 487,725	$ 487,725
Other					
Projected Other New Assets - 2022		20,353	20,099	20,099	20,099
Total Tangible Property and Improvements to the Realty		$ 376,500	$ 246,251	$ 507,824	$ 507,824
Fair Market Value of Real Estate Used for the Provision of Utility Service[2]					20,378
Intangible Assets					
Intangible Plant[3]					185
Water Rights[4]					120,560
Subtotal					**$ 648,948**
Less: Economic Obsolescence (From Exhibit 38)				48%	(311,495)
Value Indicator (Excluding Real Estate Not Used for the Provision of Utility Service)					**337,453**
Add: Fair Market Value of Real Estate Not Used for the Provision of Utility Service[5]					4,425
Value Indicator (Including Real Estate Not Used for the Provision of Utility Service)					**$ 341,878**

Values in $1,000s.

[1]Based on five-year average ratio of delivered water to Monterey Water System customers compared to water delivered to the total Monterey Water System and Central Satellites. This allocation is considered an extraordinary assumption as defined by USPAP.

[2]Reflects current market value of real estate, adjusted to include only the portion used for the provision of utility services. Real estate appraisal by Chris Carneghi, MAI dated December 15, 2022.

[3]Includes organization, franchises & consents, and other intangible plant per Schedule A-1a of the Annual Report of Operations of Cal-Am Monterey District, 2021.

[4]Water rights appraisal by Steven J. Herzog, MAI, AI-GRS dated December 26, 2022.

[5]Fair market value of real estate not directly used for utilty purposes. Appraisal by Chris Carneghi, MAI dated December 15, 2022.

5.5. Adjustments

5.5.1. Adjustment for Lack of Control

The subject interest that was valued in this report is the 100% interest, ownership, and control of the Monterey Water System. Therefore, no adjustment or discount for lack of control of the subject interest was applied.

5.5.2. Adjustment for Lack of Marketability

Ownership of an interest in a private company or for the assets in a special purpose market may not be readily marketable, and therefore, a discount for lack of marketability ("DLOM") may be appropriate for the determination of a conclusion of value of the subject assets. Theoretically, the use of a DLOM arises from the risks associated with a potential sale of the subject assets. These risks can generally be categorized as follows:[186]

- Uncertainty in operating condition and function of the assets
- Uncertainty in the time horizon to complete a sale
- Cost to prepare for and execute a sale
- Risk as to the eventual sale price and future expenses
- Non-cash and deferred transaction proceeds
- Inability to borrow against the estimated value of the assets

These categories can be viewed as the absence of a ready or existing market for the sale or purchase of the subject assets in contrast to the purchase of a publicly traded stock interest. Some of the common factors that have been identified as impacting marketability that are applicable to the subject assets are provided in Table 5-14.[187] This table also includes an assessment of these factors as they relate to the Monterey Water System.

Table 5-14: Marketability Factors and Analysis Summary

Marketability Factor	Assessment
Dividend Paying History	Not applicable
Dividend Yield	Not applicable
Attractiveness of the subject business	Good
Attractiveness of the industry	Good (stable)
Prosects of a sale or public offering	Fair (contingent on potential buyers)
Number of identifiable buyers	Fair (limited number of potential buyers)
Availability of access to reliable information	Fair to Good (access to subject system information is limited)
Management	Not applicable / Not assessed
Earnings	Variable (subject to CPUC approval of water rates)

[186] Valuation of Discounts and Premiums. Fundamentals, Techniques & Theory. National Association of Certified Valuation Analysts. 1995-2012, Chapter 7.

[187] Discount for Lack of Marketability: Job Aid for Valuation Professionals. Internal Revenue Service. September 2009. Page 6.

Marketability Factor	Assessment
Revenues	Good
Financial condition	Stable
% of Shares held by insiders	Not applicable
% of Independent directors	Not applicable
Business Risk	Fair

The application of a DLOM in an appraisal is relatively subjective and can range from zero (0%) to approximately 40% or more depending upon the marketability factors identified above and the circumstances associated with the subject assets. Based on my review of the marketability factors, the marketability of the Monterey Water System was deemed to be favorable and similar to the typical larger water utility system. Therefore, no DLOM adjustment was applied to the value conclusion.

5.6. Summary and Conclusions of Value

5.6.1. Base System Value

The "Base" Monterey Water System is defined as the Monterey Water System exclusive of CWIP, real estate not utilized for utility purposes, Memorandum and Balancing Accounts, and customer accounts receivable and unbilled revenues. The value of the Base Monterey Water System as of the valuation date (December 31, 2022) is $319,653,000, as summarized in Table 5-15. This value estimate corresponds to a value of approximately $7,827 per customer account.

Table 5-15: Estimated Value of the Monterey Water System

Description	Value Indicator	x	Weighting	=	Weighted Value
Monterey Water System					
Income Approach					
Discounted Net Cash Flow Method	$ 301,298		60%		$ 180,779
Market Approach					
Guideline Public Company Method	391,079		0%		-
Guideline Transaction Method	376,381		10%		37,638
Asset Approach					
Asset Accumulation Method	337,453		30%		101,236
Opinion of Value of the Monterey System					**$ 319,653**
Potential Asset Additions:					
Customer Accounts Receivable and Unbilled Revenues					$ 13,785
Construction Work in Progress (CWIP), excluding MPWSP Phase 1					13,299
FMV of Real Estate Not Used for the Provision of Utility Service					4,425
Memorandum & Balancing Accounts and Other Adjustments:[1]					
San Clemente Dam					60,517
Other Memorandum and Balancing Account Items					15,973
Citizens Acquisition Premium					8,384
Tank Painting					2,861
Other Utility Plant Acquisition Adjustments[2]					9,911
Total of Potential Asset Additions					129,155
Opinion of Value with Potential Asset Additions (Rounded)					**$ 448,810**

Values shown in $1,000s

[1]Per Cal-Am 2022 GRC application.

[2]Includes Meadowbrook, Rio Plaza, Hillview, Warring, Bass Lake, Bellflower, and East Pasadena UPAA.

The conclusion of value of the Base Monterey Water System is based on 60% weighting of the Income Approach, 30% weighting of the Asset Approach, and 10% weighting of the Market Approach. This weighting was based on (1) the relative appropriateness of the approaches applied; (2) the availability and anticipated accuracy of the data collected, and the calculations made under each approach; and the (3) the quantity and relevance of the data available for each approach.

The value estimate under the Income Approach reflects the expected discounted earnings of the hypothetical willing buyer. This approach was selected as the primary indicator of value because it reflects the expected earnings associated with the hypothetical willing buyer, including constraints associated with the economic regulation of the Monterey Water System, and sufficient relevant data and information was available to utilize this approach.

We considered the Asset Approach as an indication of value and assigned 30% to that value estimate for the following reasons. Our analysis was limited by the consolidated asset information provided by Cal-Am in its 2022 GRC application. Further, our analysis indicates that the RCNLD estimate of the tangible personal property, excluding the consideration of economic obsolescence, significantly overstates the value of the Monterey Water System. The conclusion on economic obsolescence is supported by Cal-Am's required use of rate base valued at OCLD rather than RCNLD. Also, several recent water utility transactions involving a willing buyer and seller were reviewed to test the relationship between purchase price and RCNLD and OCLD estimates. As shown in Table 5-12, the purchase prices of these transactions were substantially lower than the reported RCNLD estimates of the acquired systems (excluding consideration of economic obsolescence).

In selecting the weighting of the Asset Approach, we also considered that we used the capitalized income loss method as one of the methods to develop our estimate of economic obsolescence under the Asset Approach, and the results of this method indicated that the Monterey Water System suffers from significant economic obsolescence. However, utilization of the CILM to estimate economic obsolescence as part of the Asset Approach relies on the earnings of the Monterey Water System to estimate economic obsolescence. Such earnings were used to value the system under the Income Approach making the Asset Approach with economic obsolescence considerations inter-related with the Income Approach. Further, a significant weighting has been assigned to the Income Approach, which considers the current and potential future earnings of the system. Therefore, a lower weighting was placed on the indication of value using the Asset Approach than the Income Approach.

A hypothetical willing buyer will look to the market for guideline companies and transactions in considering the value of the Monterey Water System. However, a limited weighting of 10% for the Market Approach was selected given the limited number of relevant guideline public companies and guideline transactions that were identified, their quality and comparability to the Monterey Water System. In addition, we considered the likelihood that the indication of value using the Guideline Public Company Method over-states the value of the Monterey Water System because the value of guideline public companies includes corporate assets and some of the companies are geographically diversified, whereas the acquisition of the Monterey Water System does not include corporate assets, functions of Cal-Am or the parent company nor is the Monterey Water System geographically diversified. We also considered the possibility that the sales transactions used to estimate the value indicator under the Guideline Transaction Method may include compensation for construction work in progress, Memorandum and Balancing Accounts or other potential assets that we value separately from the "Base"

Monterey Water System, which could potentially overstate the value of the "Base" Monterey Water System using this method.

5.6.2. Asset Additions

The value of asset additions, specifically (1) CWIP, (2) real estate not used for utility purposes, (3) estimated recoverable balances in Balancing and Memorandum Accounts on the date of valuation, (4) accounts receivable and unbilled amounts for service provided prior to the date of valuation were considered in addition to the conclusion of value of the "Base" Monterey Water System. The values of these items are included in Table 5-15 and the value analyses for these items are described below.

5.6.2.1. Construction Work in Progress

Cal-Am reports net CWIP for the Monterey Water System and Central Satellites of $13.299 million as of December 31, 2022 in its 2022 GRC filings,[188] exclusive of MPWSP Phase 1. CWIP was not included in the base value of the Monterey Water System. New property is normally not included in the income stream under the Income Approach because the new CWIP has not had the opportunity to contribute to earnings. Further, the income and sales comparison approaches for valuing CWIP are of limited use because the property under construction is typically not producing any income, and it is difficult to find comparable sales of partially constructed projects. For this reason, the Cost Approach is nearly always used to value this type of property.

The value under the Cost Approach typically includes direct and indirect costs, such as planning and engineering costs. Ultimately, the value should be based on what the property in its partially constructed condition would bring in the marketplace involving a willing buyer and seller. The seller would attempt to recover all costs if the property under construction was sold in a partially constructed state. Potential purchasers may or may not be willing to pay the full cost of partially constructed projects, depending on their perceptions of the earnings potential of the projects.

For the purposes of valuing CWIP, it was assumed that the amount of CWIP estimated by Cal-Am at the end of 2022 for the Monterey Water System and Central Satellites has not been reflected in rate base by Cal-Am nor has Cal-Am been otherwise compensated for this expenditure as of the valuation date. By including CWIP in the value estimate, it is assumed that the MPWMD would acquire the assets associated with CWIP.[189]

Based on the information available, it was assumed that the entire CWIP amount identified as of the end of 2022 is associated with the Monterey Water System and not the Central Satellites. We reserve to modify this assumption if warranted, based on receipt of subsequent information.

5.6.2.2. Real Estate Not Used for the Provision of Utility Service

The fair market value of real estate parcels within the Monterey Water System boundaries that are owned by Cal-Am but not utilized for the provision of utility service was included in the value of the Monterey Water System as an asset addition. These parcels include eight parcels considered by the MPWMD staff as watershed surplus, and five vacant lots in Seaside, California. The remaining parcels and acreage of

[188] Table 7.1 of the 2022 GRC for the Monterey District, Updated as of January 27, 2023, Figure reflects 2022 ending CWIP amount.

[189] The estimate of the amount of CWIP as of the valuation date is considered an extraordinary assumption as defined by USPAP and if found to be false, could alter the conclusion of value of the Monterey Water System.

land owned by Cal-Am were deemed to be related to, or in connection with, Cal-Am's utility infrastructure, and are included in the consideration of the "base" water system value. See Appendix E for the real estate appraisal report.

5.6.2.3. Memorandum and Balancing Accounts

Cal-Am incurred other expenses that CPUC has approved for recovery through the Monterey Water System and Central Satellites over time and recorded in Memorandum Accounts and Balancing Accounts. A Memorandum Account is an accounting device that, after approval by the CPUC or upon statutory notice, may be used by a utility to record various expenses it incurs. The utility may later seek authorization from the CPUC to recover the recorded amounts by passing them on to consumers in rates. The establishment of a Memorandum Account does not guarantee that the utility will recoup the tracked amount, but a utility is precluded from recovering amounts not booked to a Memorandum Account.[190] A Memorandum Account is not recorded on the utility's accounting books, rather it represents an off-book accounting record. A Balancing Account is an account used to match the collection of actual revenues against actual costs after unanticipated changes in expenditures. Balancing accounts track monies that the CPUC has authorized for recovery or amortization. When a balance in a reserve account or Memorandum Account has been approved for recovery, that account balance is moved to a Balancing Account. A Balancing Account is a regulatory asset in the accounting records, and in the balance sheet.[191]

It is possible that MPWMD may be required to compensate Cal-Am for the unrecouped portions of these accounts as part of a potential taking of the Monterey Water System, and therefore, the balances in these accounts as of the valuation date should be considered as asset additions as part of the valuation. These expense items and their potential amounts are described below.

a. Tank Painting. Cal-Am defers the recovery of tank improvement project expenses over five years for study costs, and over 10 years for all other tank painting cost.[192] As of the valuation date, it is estimated that Cal-Am will have approximately the present value of $2.861 million of unrecovered, deferred tank painting expenses as detailed in Exhibit 39 of Appendix C.[193] It was assumed that the full amount of this expense is related to the Monterey Water System and none is related to the Central Satellites.

b. San Clemente Dam Balancing Account. The balance in the account reflecting the expenditures for the cost of the San Clemente Removal Project. The ending balance of the San Clemente Dam deferred expense amortization as of the valuation date is $60.517 million as detailed in Exhibit 40 of Appendix C.[194]

c. Citizens Acquisition Premium. In 2001, the CPUC approved Cal-Am's acquisition of Citizen Utilities Company of California at a purchase price that was above the net book value and authorized the acquisition premium to be amortized mortgage-style over 40 years beginning in

[190] Standard Practice for Processing Rate Offsets and Establishing Amortizing Memorandum Accounts. Standard Practice U-27-W. California Public Utilities Commission. Division of Water and Audits. Revised April 16, 2014.

[191] Ibid. p.8.

[192] GRC Decision D.18.12-021, p.67.

[193] Cal-Am's October 17, 2022 Response to MPWMD's data request. File: CAW Response to MPWMD 01 Q004 Attachment 1.xlsx.

[194] Direct Testimony of Jeffrey M. Dana dated July 1, 2019, Application 19-07-004, Attachment 2.

2002.[195] The present value of the Monterey Water System and Central Satellites' share of the unrecovered amount as of the valuation date was estimated to be $8.384 million as detailed in Exhibit 41 of Appendix C.[196] Considering that CPUC authorized the allocation of this acquisition premium state-wide, upon a sale or transfer of the Monterey Water System to another investor-owned utility, there is a possibility that the CPUC would authorize Cal-Am to be compensated for the Monterey Water System portion of the acquisition premium, and authorize the new owner to recover the compensation amount over-time. Therefore, we have included the Monterey Water System portion of the acquisition premium as an asset addition.

d. New UPAA. In Cal-Am's 2019 and 2022 GRC Applications, it requested a utility plant acquisition adjustment ("UPAA") for the Fruitridge, Bellflower, Rio Plaza, and Hillview acquisitions. Cal-Am seeks amortization of the Fruitridge UPAA over 27 years, Bellflower over 24 years, Rio Plaza over 40 years, and Hillview over 47 years.[197] A portion of these UPAAs were proposed and approved to be allocated to the Monterey Water System and Central Satellites. In addition, Cal-Am requested approval to allocate a portion of the UPAA associated with the Warring, Bass Lake, Bellflower, and East Pasadena acquisitions state-wide.[198] Based on the allocation of Cal-Am's return on and of UPAA to the Monterey Water System and Central Satellites, as reported in the 2019 GRC Application,[199] the total amount included as potential payment for UPAA is $9.911 million. As of the date of this report, the CPUC has yet to approve of the UPAA request contained in the 2022 GRC Application. However, based on past CPUC decisions, it is likely that UPAA recovery will be approved. Therefore, these amounts have been included as potential additions. Depending upon how the CPUC ultimately rules on this item in the current GRC, our opinion regarding including UPAA as an asset addition could change.

e. Other Memorandum and Balancing Account Items. Cal-Am identifies several other balancing account items associated with the Monterey Water System in its 2022 GRC Application.[200] The application also identifies the over- or under- collection balance of these items as of the date of the application. It is possible that MPWMD may be required to compensate Cal-Am for a portion of these balances as part of a potential taking of the Monterey Water System. As of the date of the 2022 GRC Application, the net balance of these balancing account items that we deemed potentially applicable to the Monterey Water System, excluding the specific items described in the bullets above, total approximately $15.973 million as detailed in Exhibit 41 of Appendix C.

The total potential amount of compensation from unrecouped Memorandum and Balancing Account balances for the Monterey Water System as of the valuation date is estimated to be $97,646,000, excluding the MPWSP Memorandum and Balancing Account. However, we do not at this time accede that all such expenses will merit compensation. The balances in these Memorandum and Balancing Accounts fluctuate from day-to-day and month-to-month. We assume that the actual amounts for

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[195] GRC Decision D.18.12-021, p.70., and CPUC Decision 01-09-057.

[196] Present value of the remaining amortization, assuming $898,800 per year per for 22 years. From 2019 GRC Final Application, Exhibit A, Ch4, Table 4.1, Last Authorized Test Year 2018.

[197] Direct Testimony of Stephen Owens dated July 1, 2019, Application 19-07-004, pg 53-67.

[198] Direct Testimony of Stephen Owens, 2022 GRC, p.45-47.

[199] 2019 GRC Application - Workpapers - Acquisitions, p.23.

[200] Direct Testimony of Michael S. Clarke, 2022 GRC. Attachment 1.

compensation will be determined based upon a final accounting to be performed as of the date that ownership of the Monterey Water System is transferred by Cal-Am to MPWMD.

5.6.2.4. Customer Accounts Receivable and Unbilled Revenues

Asset additions include compensation to Cal-Am for unbilled revenues and customer accounts receivable amounts associated with Monterey Water System that are outstanding as of the transaction date. However, these amounts would likely be net of any current liabilities assumed by MPWMD in acquiring the system. Working capital reported and projected in 2022 by Cal-Am as part of its 2022 GRC is $14.465 million, of which $13.785 million was estimated to be associated with the Monterey Water System. Current assets generally include cash and cash equivalents, accounts receivable, unbilled revenues, and other current assets. Current liabilities generally include accounts payable and other current liabilities. It was assumed that working capital, including customer accounts receivable and unbilled revenues would be transferred in the sale of the Monterey Water System and therefore was included as an asset addition in the valuation of the Monterey Water System. The amount of these items can vary overtime, from day-to-day and month-to-month. While we provide an estimate of these amounts as asset additions (included in Table 5-15), we assume that the actual amounts for compensation will be determined based upon a final accounting to be performed as of the date that ownership of the Monterey Water System is transferred by Cal-Am to MPWMD.

6. Valuation Conclusion

Based on the valuation analyses contained in this report, the fair market value of the operating assets of the Monterey Water System is:

$448,810,000

This conclusion of value consists of compensation amounts for the operating assets of the Monterey Water System, including tangible improvements, improvements pertaining to the realty, personal property (e.g., vehicles, equipment, office furnishings, inventory, etc.), real estate, and intangible assets including water rights, CWIP, Memorandum and Balancing Accounts, and customer accounts receivable and unbilled revenues. This value estimate, including the "Base" Monterey Water System and asset additions, corresponds to a value of approximately $10,989 per customer account.

It was assumed that customer accounts receivable and unbilled revenues would be transferred in the sale of the Monterey Water System, and therefore was included as an asset addition in the valuation of the Monterey Water System. The amount of these items can vary overtime, from day-to-day and month-to-month. While we provide an estimate of these amounts as asset additions, we assume that the actual amounts for compensation will be determined based upon a final accounting to be performed as of the date that ownership of the Monterey Water System is transferred by Cal-Am to MPWMD.

Further, we acknowledge that a potential amount of compensation may relate to unrecouped amounts associated with Monterey Water System Memorandum and Balancing Accounts that CPUC has authorized for recovery by Cal-Am. We have estimated and included the aggregate balances in the Memorandum and Balancing Accounts that CPUC would likely deem to be attributable to the ratepayers of the Monterey Water System as of the valuation date. However, we do not at this time accede that all such expenses will merit compensation.

These findings and conclusions are qualified and subject to change per the assumptions and limiting conditions identified and described throughout in this report. This report is qualified in its entirety by, and should be considered in light of, these assumptions and limitations.

APPENDIX A:

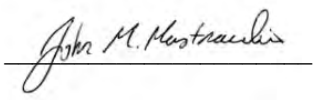
Valuation Representation

Valuation Representation

I certify that, to the best of my knowledge and belief:

1. The statements of fact contained in this report are true and correct.
2. The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions and are our personal, impartial, and unbiased professional analyses, opinions, and conclusions. Any statement in this report involving estimates or matters of opinion, whether or not so specifically designated, are intended as such, and not as representation of fact.
3. I have no present or prospective interest in the property that is subject of this report, and we have no personal interest with respect of the parties involved.
4. I have performed a prior valuation of the property that is the subject of this report in 2019, but have provided no other services, as an appraiser or in any other capacity, within the three-year period immediately preceding the agreement to perform this assignment.
5. I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
6. The engagement in this assignment was not contingent upon developing or reporting predetermined results.
7. My compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this valuation assessment.
8. My analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Uniform Standards of Professional Appraisal Practice.
9. Phil Sapone provided significant assistance in researching the subject, guideline companies, and compiling and reviewing information regarding the subject. Toby Fedder and Phil Sapone assisted in preparing the asset approach. Steven McDonald and William Stannard provided a technical review of the valuation analyses employed. No others provided significant assistance in the preparation of this report.
10. In preparation of this report and the conclusions contained herein, we have relied on certain assumptions and information with respect to conditions which may exist or events which may occur in the future. While we believe such assumptions are reasonable, sources are reliable, and the information obtained to be accurate and appropriate for the analysis undertaken and the conclusions reached herein, as is often the case, there may be differences between actual and projected results, some estimates used in this report may not be realized, and unanticipated events and circumstances may occur.
11. This report summarizes the work completed up to the date of the issuance of this report. Changed conditions occurring or becoming known after such date could affect the opinions and conclusions contained herein to the extent of such changes. I have no responsibility for updating this report for changes that occur after the date of this report.

Raftelis Financial Consultants, Inc.

By:  March 10, 2023

John M. Mastracchio, ASA, CFA, P.E.

APPENDIX B:

Professional Qualifications of the Principal Valuation Analysts

John Mastracchio ASA, CFA, PE

Executive Vice President

PROFILE

Mr. Mastracchio is an Executive Vice President with Raftelis Financial Consultants, Inc. serving in a national role and leading the Northeast practice. He has 27 years of experience as a financial and management consultant serving the utility, governmental, and private sectors. His extensive experience includes over 250 financial projects covering technical areas including utility valuation, investment decision-making, transactional consulting, capital financing, financial planning, cost of service and rate studies, alternative project delivery procurement support, and financial analysis. His experience spans several industries, including utilities (water, wastewater, electric, solid waste, stormwater), transportation, ports, and federal and municipal general government.

Mr. Mastracchio's business valuation experience includes appraisals for mergers and acquisitions, reorganizations (recapitalization and restructuring), eminent domain condemnation, real estate, tangible property valuation, cost to cure economic damages analyses, and litigation support. His valuation experience also includes providing acquisition and transactional advisory services to equity investors, business owners, and government officials on deals ranging in size from $2 million to $2.5 billion. He has provided other valuation-related services include due diligence investigations, development of financial projections, remaining useful life analyses, customer and supplier contracts, purchase price allocation, strategic investment decision-making, and deal structuring support, including the following representative appraisal experience:

- AZ Water & Wastewater Utilities (Multiple)
- CA Water & Wastewater Utilities (Multiple)
- CT Water & Wastewater Utilities (Multiple)
- MA Water Utility
- NY Wastewater Utility
- PA Water & Wastewater Utilities (Multiple)
- TX Water & Wastewater Utilities (Multiple)
- VA Water & Utilities (Multiple)

Mr. Mastracchio is an Accredited Senior Appraiser (ASA), has earned the Chartered Financial Analyst (CFA) designation, is a Series 50 Municipal Advisor Representative, and is also a Licensed Professional Engineer. He is a member of several industry associations, including the CFA Institute, and American Water Works Association, and is the past chairperson of the Finance, Accounting, and Management Controls Committee of AWWA.

He has authored manuals of practice and utility industry papers on valuation, infrastructure investment, capital financing, financial management practices, and rate-setting, including a technical paper titled "How much is it worth? An overview of valuing water utilities," an industry research report titled "New and Emerging Capital Providers for Infrastructure Funding – Addressing the Infrastructure Gap," and an industry manual of practice titled "Water Capital Financing, Manual of Practice M29."

Specialties

- Transactional due diligence support
- Valuation and appraisals
- Financial analysis & modeling
- Financial planning, cost of service, rate design
- Bond feasibility studies
- Government consolidation/regionalization
- Public-private partnerships
- Inter-municipal agreement support
- Expert witness & litigation support
- Benchmarking
- Capital financing & project planning
- Business process improvement
- Asset management/business case evaluations

Professional History

- Raftelis: Vice President (2017-present)
- Arcadis, U.S., Inc. (2003-2017)
- Arthur Andersen (2001-2002)
- Parsons Corporation (1994-2000)

Education

- Master of Business Administration, Finance - Cornell University (2001)
- Master of Science, Civil & Environmental Engineering - Clarkson University (1994)
- Bachelor of Arts - State University of New York, College at Geneseo (1993)

Certifications

- Accredited Senior Appraiser (ASA)
- Chartered Financial Analyst (CFA)
- Professional Engineer (PA)
- Lean Six Sigma
- Series 50 Municipal Advisor Representative

Professional Memberships

- American Society of Appraisers
- AWWA: Chair of Finance, Accounting, & Management Controls Committee
- CFA Institute
- Water Environment Federation

Steven McDonald CVA

Chief Economist / Valuation Services

Specialties

- Business Valuation and Appraisal
- Economic Impact Analysis
- Cost-Benefit Analysis

Professional History

- Raftelis: Chief Economist/Valuation Services (2021-present)
- GAI Consultants (2012-2021)
- The Disney Company (2008-2012)
- RERC (2004–2008)
- Burton & Associates (2002–2004)
- CHEP International (1999–2002)
- The Disney Company (1996–1999)
- Fishkind & Associates (1990–1996)

Education

- Bachelor of Arts in Public Policy – University of Central Florida (1988)
- Master of Arts in Applied Economics – University of Central Florida (1990)

Professional Affiliations

- National Association of Certified Valuators and Analysts (NACVA)
- Past Chairman and member of NACVA Ethics Oversight Board (EOB)
- President, NACVA Florida North Chapter
- American Society of Appraisers, Member
- Webster University, Adjunct Instructor

PROFILE

Steven is an Economist, Researcher, and Strategist with nearly 30 years of experience, almost equally divided between consulting assignments and corporate roles. He specializes in quantitative and qualitative research and analysis to include Business Valuation and Appraisal (CVA©#20639), economic analyses and econometrics, cost-benefit analyses, and short- and long-term financial analyses. Over this time, Steven has developed a high degree of technical expertise balanced with strategic management experience from high-profile, innovative projects, both domestically and internationally, focused on economic and financial issues across a broad range of industries. Altogether, corporate roles and consulting assignments, along with managing work efforts across no less than four business cycles, have provided Steven the opportunity to develop strong expertise in the field of economics and understanding enterprise business value.

Steven strives to maintain active participation as a member of the NACVA and is currently the President of the NACVA Florida North Chapter. In addition, he has served on the NACVA Ethics Oversight Board for three years, one of those years as Chairman. Steven is also an Adjunct Instructor with Webster University's Orlando Campus in Economic Concepts and Managerial Economics.

KEY PROJECT EXPERIENCE

Business Valuation and Appraisal

Business Valuation services have been provided for purposes of insurance, litigation, and purchase and sale transactions (M&A), generally resulting in a detailed, summary, or oral appraisal or value report. A Business Valuation, as defined by Uniform Standards of Professional Appraisal Practice (USPAP) Standard 9, provides a specific value based on purpose and use of the appraisal or calculation. All valuation services provided conform with the Professional Standards of the NACVA. Professional experience with providing Business Valuation services has included the following:

- Arizona Public Utility, 2021 (Water) – Asset Transaction
- Florida Public Utility, 2021 (Water and Wastewater) – Asset Transfer
- Florida IOU, 2021 (Irrigation) – Asset Transaction
- South Carolina Public Utility, 2021 (Water and Wastewater) – Asset Transaction
- Pennsylvania Public Utility, 2021 (Sewer) – Asset Transaction
- Florida Public Utility, 2021 (Water) – Asset Transaction
- Florida Public Utility, 2021 (Natural Gas) – Asset Transaction
- Pennsylvania Public Utility, 2021 (Sewer) – Asset Transaction
- Texas IOU (Water), 2021 – Asset Transaction
- Florida Public Utility, 2021 (Service Area) – Litigation
- Pennsylvania Public Utility, 2021 (Sewer) – IOU Acquisition
- California Water Market, 2021 (Credits) – Asset Transaction
- Pennsylvania Public Utility, 2021 (Sewer) – IOU Acquisition
- Florida Public Utility, 2020 (Water) – Asset Transaction
- Florida Public Utility, 2020 (Water) – Foreclosure
- Florida Public Utility, 2019 (Water and Wastewater) – Business Damages
- Florida Public Utility, 2019 (Water and Wastewater) – Acquisition
- Florida Public Utility, 2018 (Chilled Water) – Acquisition
- California Private Discharge Capacity, 2018 (Wastewater) – Acquisition
- Tennessee Public Utility, 2018 (Electric) – Acquisition
- Florida IOU, 2017 (Water-Sewer) – Acquisition
- Florida IOU, 2017 (Electric) – Tangible Property Tax
- Ohio IOU, 2017 (Water) – Financing
- Florida Public Utility, 2017 (Water Storage) – Acquisition
- South Carolina Public Utility, 2016 (Water) – Acquisition
- Ohio Public Utility, 2016 (Water-Sewer) – Acquisition
- Mississippi Certificate of Public Conveyance and Necessity, 2016 (Water) – Acquisition
- Florida IOU, 2016 (Electric) – Tangible Property Tax

YEARS OF EXPERIENCE

- 40 years

PROFESSIONAL HISTORY

- Raftelis: Chairman of the Board (2017-present); Chief Executive Officer (2012-2016); President (2008-2016); Vice President (2002-2008)
- Black & Veatch: Senior Vice President (1996-2002); Vice President (1992-1996); project manager (1984-1992); Assistant project manager (1980-1984); staff consultant (1975-1980)

EDUCATION

- Bachelor of Science in Business Administration - Kansas State University (1975)
- Bachelor of Science in Civil Engineering - Kansas State University (1975)

CERTIFICATIONS

- Series 50 Municipal Advisor Representative
- Registered Professional Engineer: MI (6201028796); OH (PE 57725); MA (38847); KS - 1979 (8636)

PROFESSIONAL MEMBERSHIPS

- American Society of Civil Engineers
- AWWA: Past-Chair of the Management & Leadership Division, Former Trustee of the Technical & Education Council, Past-Chair & Current member of the Finance, Accounting & Management Controls Committee, current member of the Rates & Charges Committee
- EPA Environmental Finance Advisory Board Member
- WEF: Past-Chair of Task Force on Wastewater Charges
- Listed in Best Lawyers in America: Directory of Expert Witnesses
- Listed in Who's Who in Science & Engineering
- Invited Instructor – University of Colorado Department of Civil Engineering
- National Association of Professional Engineers

Bill Stannard PE

Chairman of the Board
Raftelis Financial Consultants, Inc.

Bill has more than 40 years of experience providing consulting services to investor- and municipally-owned utilities covering management, operation, economic, and financial matters. His extensive experience encompasses: valuations, formulation of financial systems and ordinances for compliance with regulations regarding the Clean Water Act and the Safe Drinking Water Act; comprehensive revenue requirements and cost-of-service studies; rate setting; consulting engineers and financial feasibility reports related to the sale of revenue bonds; financial feasibility analyses; organizational and management reviews; and utility competitiveness studies.

He has served as an expert witness in financial litigation matters in federal and state courts and before arbitration panels and state public service commissions. Bill has also served as an arbitrator in resolving water and wastewater rate disputes.

Bill is an active member of the WEF and AWWA. He served as chair of the WEF's task force charged with the development of a *Manual of Practice, Financing and Charges for Wastewater Systems*. Bill also authored a chapter entitled, "Selecting the Optimal Capital Financing Plan and Pricing Structure," for the Fourth Edition of the industry guidebook, *Water and Wastewater Finance and Pricing: The Changing Landscape*. He is the Past Chair of AWWA's Management and Leadership Division, a former Trustee of AWWA's Technical and Education Council, and a past-Chair of AWWA's Finance, Accounting and Management Controls Committee. He is a current member of the United States Environmental Protection Agency's Environmental Finance Advisory Board.

APPENDIX C:

Supporting Schedules and Exhibits

Exhibit 1: Cal-Am Monterey Water System and Central Satellites Water Customers by Location

System	2011[1]	2012[1]	2013[1]	2014[1]	2015[1]	2016[1]	2017[1]	2018[2]	2019	2020	2021
Within MPWMD											
Main	38,637	38,265	38,141	38,225	38,325	38,325	38,325	38,740	n/a	n/a	n/a
Bishop	380	376	370	372	373	373	373	385	n/a	n/a	n/a
Hidden Hills	442	441	441	439	440	440	440	454	n/a	n/a	n/a
Ryan Ranch	157	156	164	167	167	167	167	212	n/a	n/a	n/a
Subtotal	39,616	39,238	39,116	39,203	39,305	39,305	39,305	39,791	n/a	n/a	n/a
Outside MPWMD											
Ambler	402	402	403	404	405	405	405	n/a	n/a	n/a	n/a
Ralph Lane	27	26	27	27	27	27	27	n/a	n/a	n/a	n/a
Chualar	184	184	194	192	192	192	192	n/a	n/a	n/a	n/a
Toro	409	412	412	416	415	415	415	n/a	n/a	n/a	n/a
Garrapata	-	-	48	47	47	47	47	n/a	n/a	n/a	n/a
Subtotal	1,022	1,024	1,084	1,086	1,086	1,086	1,086	n/a	n/a	n/a	n/a
Total from GRC WPs[1]	40,638	40,262	40,200	40,289	40,391	40,391	40,391	39,571	39,571	39,763	39,711
Total from Annual Reports[3]	40,779	41,007	40,388	40,544	40,493	40,648	40,644	40,744	40,768	40,842	40,841

[1]WPs SA Results of Ops (standalone).pdf from 2016 and 2022 GRC, excludes public fire connections.

[2]Consumptions Data - WY 2018.pdf (Oct 2017-Sept 2018)

[3]Annual Report of District Water System Operations of Cal-Am Monterey District.

Exhibit 2: Cal-Am Monterey Water System and Central Satellites Water Delivery to Metered Customers

System	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Within MPWMD											
Main	3,342,501	3,416,181	3,197,498	3,259,923	2,887,081	2,876,187	2,878,575	2,906,120	2,906,120	2,757,353	2,889,109
Bishop	50,979	54,394	52,569	43,087	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hidden Hills	58,670	65,010	59,365	55,499	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ryan Ranch	-	-	-	-	-	-	-	-	-	-	-
Subtotal	3,452,150	3,535,585	3,309,432	3,358,509	2,887,081	2,876,187	2,878,575	2,906,120	2,906,120	2,757,353	2,889,109
Outside MPWMD											
Ambler	53,283	57,866	57,083	53,760	29,791	38,636	45,710	47,060	46,003	48,686	49,838
Ralph Lane	2,574	2,997	2,848	2,146	2,060	2,155	2,016	2,075	2,159	2,267	2,176
Chualar	37,129	34,101	35,850	36,016	29,057	31,653	30,042	29,524	28,493	29,113	26,057
Toro	62,630	66,582	65,659	61,430	36,311	47,633	49,557	53,375	47,519	48,355	47,860
Garrapata	-	-	-	-	-	-	-	-	4,139	6,392	6,151
Subtotal	155,616	161,546	161,440	153,352	97,219	120,077	127,325	132,034	128,313	134,813	132,082
Other Usage	15,278	10,620	9,484	15,134	15,721	9,808	10,367	15,689	10,348	11,157	10,355
Total Monterey District	3,623,044	3,707,751	3,480,356	3,526,995	3,000,021	3,006,072	3,016,267	3,053,843	3,044,781	2,903,324	3,031,546
Within MPWMD as % of Total	95.3%	95.4%	95.1%	95.2%	96.2%	95.7%	95.4%	95.2%	95.4%	95.0%	95.3%

[1]Source: Annual Report of District Water System Operations of Cal-Am Monterey District, 2011 - 2021, Schedule D-7.

[2]Water delivered in units of 1,000 gallons per year.

[2]Consumptions Data - WY 2018.pdf (Oct 2017-Sept 2018)

Exhibit 3: Historical Balance Sheets for Cal-Am's California Operations

Description	Fiscal Year Ended December 31 2014 ($000)	2015 ($000)	2016 ($000)	2017 ($000)	2018 ($000)	2019 ($000)	2020 ($000)	2021 ($000)
ASSETS								
Total Utility Plant	$ 869,533	$ 930,475	$ 994,009	$ 1,094,733	$ 1,168,687	$ 1,255,764	$ 1,387,659	$ 1,544,764
Reserve for Depreciation of Utility Plant	275,451	291,020	308,545	328,003	343,009	363,572	383,859	421,830
Reserve for Amort. of Limited Term Utility Investmen	11	12	13	14	53	54	17	350
Reserve for Amortization of UPAA	1,869	1,976	2,082	2,134	2,276	2,406	2,516	3,596
Total Utility Plant Less Reserves	$ 592,202	$ 637,466	$ 683,368	$ 764,582	$ 823,348	$ 889,732	$ 1,001,267	$ 1,118,988
Investments and Fund Accounts	1,743	1,783	1,783	3,568	3,601	3,608	8,690	2,279
Cash and Cash Equivalents	226	205	304	214	862	2,006	685	1,655
Accounts Receivable	12,408	10,762	11,699	17,488	18,100	16,925	23,968	27,110
Other Current Assets	13,775	10,957	13,277	14,954	4,674	15,944	43,490	27,582
Deferred Debits	212,633	257,848	279,377	293,033	279,466	279,322	247,515	225,212
Total Assets	$ 832,986	$ 919,023	$ 989,810	$ 1,093,839	$ 1,130,051	$ 1,207,537	$ 1,325,615	$ 1,402,827
LIABILITIES								
Long-Term Debt	$ 269,014	$ 288,633	$ 295,154	$ 273,720	$ 358,697	$ 382,568	$ 283,591	$ 428,065
Current and Accrued Liabilities	80,524	105,459	123,303	206,582	87,349	75,482	259,216	132,576
Deferred Credits	108,606	137,616	163,327	98,645	106,348	110,384	107,177	82,618
Accumulated Deferred Taxes	-	-	-	82,898	93,315	107,633	99,269	121,596
Reserves	939	1,082	1,231	1,631	1,626	2,239	3,800	9,123
Contributions in Aid of Construction	59,672	60,808	60,807	65,820	67,448	69,437	83,777	98,241
Total Liabilities	$ 518,754	$ 593,598	$ 643,822	$ 729,296	$ 714,784	$ 747,744	$ 836,829	$ 872,220
EQUITY								
Corporate Capital and Surplus	$ 314,232	$ 325,425	$ 345,987	$ 364,543	$ 415,267	$ 459,794	$ 488,786	$ 530,607
Proprietary Capital	-	-	-	-	-	-	-	-
Total Equity	$ 314,232	$ 325,425	$ 345,987	$ 364,543	$ 415,267	$ 459,794	$ 488,786	$ 530,607
TOTAL LIABILITIES AND EQUITY	$ 832,986	$ 919,023	$ 989,810	$ 1,093,839	$ 1,130,051	$ 1,207,537	$ 1,325,615	$ 1,402,827

Source: Schedule A of 2014, 2015, 2016, 2017, 2018, 2019, 2020, and 2021 Annual Reports for California-American Water Company submitted to the CPUC.

Exhibit 4: Historical Income Statements for Cal-Am's California Operations

Description	Fiscal Year Ended December 31 2014 ($000)	2015 ($000)	2016 ($000)	2017 ($000)	2018 ($000)	2019 ($000)	2020 ($000)	2021 ($000)
Operating Revenues								
Metered Sales	$ 180,878	$ 158,649	$ 160,842	$ 189,779	$ 201,650	$ 206,989	$ 233,550	$ 247,003
Unmetered Sales	-	35	(0)	(0)	(0)	-	-	1,556
Other Water Service Revenues	3,948	3,840	3,700	4,011	3,747	3,330	3,124	3,119
Other Revenues	19,408	35,379	44,548	25,035	12,900	17,733	10,326	13,466
Total Operating Revenues	$ 204,235	$ 197,904	$ 209,089	$ 218,825	$ 218,296	$ 228,052	$ 246,999	$ 265,144
Operating Revenue Deductions								
Operating Expenses	$ 122,203	$ 112,631	$ 118,463	$ 128,314	$ 131,436	$ 131,747	$ 144,867	$ 154,643
Depreciation	17,878	19,764	21,598	22,704	23,587	25,888	28,606	29,234
Amortization of Limited-Term Utility Investments	(1,012)	(3,618)	(3,471)	790	2,849	2,583	3,324	3,184
Amortization of Utility Plant Acquisition Adjustment	110	107	106	51	142	130	110	1,080
Taxes	25,950	27,175	28,672	27,871	20,533	21,774	20,645	21,625
Total Operating Revenue Deductions	$ 165,129	$ 156,059	$ 165,369	$ 179,730	$ 178,547	$ 182,122	$ 197,551	$ 209,764
Operating Income	$ 39,106	$ 41,845	$ 43,720	$ 39,096	$ 39,750	$ 45,930	$ 49,448	$ 55,380
Other Income								
Income from Nonutility Operations (Net)	$ 321	$ 419	$ -	$ 107	$ (22)	$ 0	$ 545	$ 0
Revenue from Lease of Other Physical Property	242	165	251	140	103	88	128	67
Dividend Revenues	-	-	2	-	-	-	-	-
Interest Revenues	2,591	853	1,841	3,221	2,549	2,503	676	115
Miscellaneous Nonoperating Revenues	695	1,134	3,889	6,060	283	166	138	264
Nonoperating Revenue Deductions - Dr.	(128)	(1,061)	(509)	(610)	(370)	(246)	(250)	(428)
Total Other Income	$ 3,719	$ 1,511	$ 5,474	$ 8,919	$ 2,543	$ 2,511	$ 1,237	$ 17
Net Income Before Income Deductions	$ 42,825	$ 43,356	$ 49,195	$ 48,014	$ 42,293	$ 48,440	$ 50,684	$ 55,398
Income Deductions								
Interest on Long-Term Debt	$ 14,463	$ 15,151	$ 15,988	$ 16,505	$ 18,220	$ 18,367	$ 18,530	$ 16,491
Amortization of Debt Discount and Expense	191	209	232	235	557	537	629	554
Interest on Debt to Affiliated Companies	-	-	-	-	1,184	1,057	620	147
Other Interest Charges	98	171	462	755	2	217	(284)	(57)
Interest Charged to Construction - Cr.	-	-	-	-	(10,999)	(11,456)	(11,291)	(11,530)
Miscellaneous Income Deductions	2,308	1,177	2,704	548	2,186	311	786	3,583
Total Income Deductions	$ 17,060	$ 16,709	$ 19,386	$ 18,044	$ 11,149	$ 9,034	$ 8,990	$ 9,188
Net Income	$ 25,765	$ 26,647	$ 29,809	$ 29,970	$ 31,144	$ 39,406	$ 41,694	$ 46,210

Source: Schedule B of 2014 - 2021 Annual Reports for California-American Water Company submitted to the CPUC.

Exhibit 5: Financial Ratio Analysis for Cal-Am's California Operations

Description	2014	2015	2016	2017	2018	2019	2020	2021	5-Year CAGR
Profitability									
Net Profit Margin	12.6%	13.5%	14.3%	13.7%	14.3%	17.3%	16.9%	17.4%	n/a
Asset Turnover	0.25	0.22	0.21	0.20	0.19	0.19	0.19	0.19	n/a
Return on Assets	3.1%	2.9%	3.0%	2.7%	2.8%	3.3%	3.1%	3.3%	n/a
Financial Leverage	1.88	1.96	1.98	2.10	1.98	1.94	2.05	2.11	n/a
Return on Equity	8.2%	8.2%	8.6%	8.2%	7.5%	8.6%	8.5%	8.7%	n/a
EBITDA / Sales	40.2%	43.1%	43.3%	41.4%	39.8%	42.2%	41.3%	41.7%	n/a
EBITDA / Net Utility Plar	13.9%	13.4%	13.3%	11.8%	10.5%	10.8%	10.2%	9.9%	n/a
Leverage									
Debt to Equity	1.11	1.21	1.21	1.32	1.07	1.00	1.11	1.06	n/a
Debt to Capital	0.53	0.55	0.55	0.57	0.52	0.50	0.53	0.51	n/a
Growth - YOY									
Total Assets	n/a	10.3%	7.7%	10.5%	3.3%	6.9%	9.8%	5.8%	6.4%
Sales Growth	n/a	-3.1%	5.7%	4.7%	-0.2%	4.5%	8.3%	7.3%	4.9%
Net Income Growth	n/a	3.4%	11.9%	0.5%	3.9%	26.5%	5.8%	10.8%	11.4%

Calcuated based on historical balance sheets and income statements for Cal-Am.

Exhibit 6: Utility Plant in Service for Cal-Am's Monterey Water System and Central Satellites (in $000s)

	Description	As of December 31st 2014	2015	2016	2017	2018	2019	2020	2021
1	I. Intangible Plant								
2	Organization	$ 102.4	$ 102.4	$ 102.4	$ 102.4	$ 102.4	$ 102.4	$ 102.4	$ 102.4
3	Franchises and Consents	27.7	27.7	27.7	27.7	27.7	27.7	27.7	27.7
4	Other intangible plant	5.6	55.2	55.2	55.2	55.2	55.2	55.2	55.2
5	Total intangible plant	$ 135.7	$ 185.3	$ 185.3	$ 185.3	$ 185.3	$ 185.3	$ 185.3	$ 185.3
6	II Landed Capital								
7	Land and land rights	$ 2,185.3	$ 2,174.9	$ 2,172.0	$ 2,285.7	$ 2,262.0	$ 2,262.0	$ 2,262.0	$ 2,262.0
8	III. Source of Supply Plant								
9	Structures and improvements	$ 1,117.1	$ 4,783.3	$ 5,365.9	$ 5,471.7	$ 5,012.6	$ 4,600.0	$ 4,755.1	$ 6,784.9
10	Collecting and impounding reservoirs	2,352.0	2,379.8	2,379.8	2,356.8	2,377.8	2,377.8	1,815.5	1,815.5
11	Lake, river and other intakes	12.4	66.1	70.3	70.3	(318.6)	57.9	57.9	64.4
12	Springs and tunnels	-		-	-	-	-	-	-
13	Wells	14,815.2	14,718.3	14,805.6	15,234.6	14,764.2	15,024.1	14,618.5	15,012.5
14	Supply mains	4,961.1	4,974.7	4,974.7	4,974.7	4,968.7	4,968.7	4,968.7	5,098.5
15	Other source of supply plant	124.3	124.3	124.3	124.3	124.3	124.3	124.3	124.3
16	Total source of supply plant	$ 23,382.1	$ 27,046.6	$ 27,720.6	$ 28,232.5	$ 26,929.0	$ 27,152.7	$ 26,339.9	$ 28,900.1
17	IV. Pumping Plant								
18	Structures and improvements	$ 4,009.6	$ 4,020.8	$ 4,264.0	$ 4,741.6	$ 4,748.4	$ 6,308.8	$ 6,303.4	$ 6,521.5
19	Boiler plant equipment			-	-	-	-	-	-
20	Other power production equipment	1,627.8	1,727.6	1,715.5	1,744.5	1,890.4	1,889.7	1,889.7	2,687.2
21	Pumping equipment	14,614.5	14,874.4	16,140.8	17,653.8	17,804.8	20,965.4	22,670.2	23,360.5
22	Other pumping plant	-	-	-	-	-	-	-	-
23	Total pumping plant	$ 20,251.9	$ 20,622.8	$ 22,120.3	$ 24,139.8	$ 24,443.6	$ 29,163.8	$ 30,863.3	$ 32,569.3
24	V. Water Treatment Plant								
25	Structures and improvements	$ 9,930.4	$ 10,019.0	$ 10,099.4	$ 10,101.9	$ 10,102.4	$ 10,094.8	$ 10,095.5	$ 10,089.8
26	Water treatment equipment	20,532.9	22,192.0	21,937.0	22,248.8	21,880.8	21,968.9	21,357.8	21,577.1
27	Total water treatment plant	$ 30,463.3	$ 32,211.0	$ 32,036.4	$ 32,350.8	$ 31,983.2	$ 32,063.7	$ 31,453.3	$ 31,666.9
28	VI. Transmission and Distribution Plant								
29	Structures and improvements	$ 443.2	$ 525.6	$ 576.2	$ 913.2	$ 998.8	$ 944.4	$ 944.4	$ 944.4
30	Reservoirs and tanks	22,021.8	22,028.7	23,937.8	25,306.0	25,437.4	25,628.8	26,697.3	27,601.5
31	Transmission and distribution mains	105,889.5	107,839.4	109,931.8	115,311.9	115,656.3	171,718.2	178,163.3	184,953.7
32	Fire mains	-	-	-	-	-	-	-	-
33	Services	26,091.1	26,813.8	27,209.3	28,362.2	29,030.8	31,024.2	32,558.6	33,671.9
34	Meters	6,864.7	7,545.9	8,308.4	8,846.4	9,907.5	11,747.3	12,848.7	14,261.7
35	Meter Installations	-	-	-	-	-	-	-	-
36	Hydrants	7,909.1	8,022.8	8,301.7	8,622.2	8,830.2	9,669.4	10,137.0	11,123.7
37	Other transmission and distribution plant	1,964.3	1,964.3	1,964.3	1,964.3	1,964.3	1,964.3	1,964.3	1,964.3
38	Total transmission and distribution plant	$ 171,183.7	$ 174,740.5	$ 180,229.6	$ 189,326.1	$ 191,825.3	$ 252,696.5	$ 263,313.6	$ 274,521.3
39	VII. General Plant								
40	Structures and improvements	$ 1,954.4	$ 2,111.0	$ 1,970.0	$ 2,165.4	$ 2,170.0	$ 2,197.9	$ 2,295.9	$ 2,703.1
41	Office furniture and equipment	745.8	824.6	1,166.4	1,143.9	1,235.2	1,246.3	1,337	1,122
42	Transportation equipment	124.4	124.4	124.4	130.0	139.4	139.4	317	400
43	Stores equipment	-	-	-	-	-	-	-	-
44	Laboratory equipment	270.5	270.7	270.7	273.6	273.6	273.6	178	177
45	Communication equipment	6,989.2	7,396.5	7,423.6	6,538.6	7,136.9	7,591.2	7,195	3,197
46	Power operated equipment	180.7	180.7	244.5	244.8	277.8	286.6	156	243
47	Tools, shop and garage equipement	371.2	398.4	399.5	482.8	497.0	500.8	496	548
48	Other general plant	92.7	111.3	113.7	147.1	196.4	196.2	156	140
49	Total general plant	$ 10,728.7	$ 11,417.5	$ 11,712.7	$ 11,126.3	$ 11,926.3	$ 12,432.0	$ 12,131.6	$ 8,531.0
50	Total Utility Plant in Service	$ 258,330.8	$ 268,398.6	$ 276,176.9	$ 287,646.6	$ 289,554.7	$ 355,956.1	$ 366,549.0	$ 378,635.8

[1]Schedule A-1a of Annual Report of District Water System Operations of Cal-Am Monterey District, 2014 - 2021.

Exhibit 7: Rate Base Summary for Cal-Am's Monterey Water System and Central Satellites (in $000s)

	Description	From Annual Reports 2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
1	Utility Plant										
2	Plant in Service	$ 239,949.0	$ 254,860.1	$ 258,330.8	$ 268,398.6	$ 276,176.9	$ 287,646.6	$ 289,554.7	$ 355,956.1	$ 366,549.0	$ 378,635.8
3	Construction Work in Progress	16,982.3	20,207.4	6,052.1	1,299.2	66,499.9	113,201.5	149,424.0	128,682.7	157,725.9	184,242.6
4	General Office Prorate (CA-Am Advice Letter CWIP and MPWSP Projects)	3,829.2	4,616.8	-	-	(64,015.1)	(112,245.1)	(93,065.2)	(117,801.0)	(140,502.3)	(171,510.9)
5	Total Gross Plant	260,760.5	279,684.3	264,382.9	269,697.9	278,661.7	288,603.0	345,913.5	366,837.8	383,772.6	391,367.6
6	Less Accumulated Depreciation										
7	Plant in Service	87,988.9	94,315.9	86,596.1	91,614.4	96,578.2	101,157.7	105,501.8	110,476.5	114,664.8	117,609.1
8	General Office Prorate	1,709.2	761.0	-	-	-	-	-	-	-	-
9	Total Accumulated Depreciation	89,698.1	95,076.9	86,596.1	91,614.4	96,578.2	101,157.7	105,501.8	110,476.5	114,664.8	117,609.1
10	Net Utility Plant	$ 171,062.4	$ 184,607.4	$ 177,786.8	$ 178,083.5	$ 182,083.5	$ 187,445.3	$ 240,411.6	$ 256,361.3	$ 269,107.8	$ 273,758.5
11	Less Other Reserves										
12	Deferred Income Taxes	13,706.6	17,891.4	20,629.9	22,342.0	34,053.7	23,979.9	14,358.6	18,373.1	17,284.6	24,742.2
13	Deferred Investment Tax Credit	440.7	377.3	332.6	287.9	243.2	198.6	153.9	117.3	85.2	53.8
14	Other Reserves	122.1	90.8	139.3	141.6	109.3	23,707.3	7,574.3	6,896.2	6,623.2	7,962.6
15	Total Other Reserves	14,269.3	18,359.6	21,101.8	22,771.5	34,406.2	47,885.8	22,086.8	25,386.6	23,993.0	32,758.5
16	Less Adjustments										
17	Contributions in Aid of Construction	19,193.7	19,711.7	20,947.0	20,829.0	20,181.5	19,578.6	19,253.9	18,764.1	19,256.2	19,286.5
18	Advances for Construction	1,211.1	1,171.6	1,132.2	1,092.7	1,053.3	1,013.8	974.4	950.6	879.7	840.3
19	Other		-	-	-	-	-	-	-	-	-
20	Total Adjustments	20,404.8	20,883.3	22,079.2	21,921.7	21,234.7	20,592.4	20,228.3	19,714.8	20,135.9	20,126.7
21	Add Materials & Supplies	227.2	197.7	220.4	191.9	293.8	264.4	305.7	256.4	350.7	327.5
22	Add Working Capital	4,492.5	4,750.7	7,181.3	6,972.9	7,168.2	5,563.6	5,872.2	6,197.1	6,214.4	7,575.2
23	Total District Rate Base	$ 141,108.0	$ 150,312.9	$ 142,007.6	$ 140,555.0	$ 133,904.5	$ 124,795.2	$ 204,274.4	$ 217,713.4	$ 231,543.9	$ 228,775.9

[1]Annual Report of District Water System Operations of Cal-Am Monterey District, Schedule A-4, 2014-2021.

Exhibit 8: Schedule of Historical Operating Results for Cal-Am's Monterey Water System and Central Satellites (in $000s)

Line	Description	Recorded 2012	Recorded 2013	Recorded 2014	Recorded 2015	Recorded 2016	Recorded 2017	Recorded 2018	Recorded 2019	Recorded 2020	Recorded 2021
1	Water Service Revenues										
2	Metered Revenues	$ 39,765.6	$ 37,208.1	$ 40,090.6	$ 36,199.6	$ 35,923.0	$ 48,801.9	$ 51,887.4	$ 58,406.6	$ 68,157.5	$ 75,772.0
3	Fire Protection	441.7	746.8	752.3	738.0	745.2	731.9	742.0	669.4	682.1	684.2
4	Other Sales & Services	103.3	244.9	169.7	131.7	162.1	364.7	56.3	169.0	246.2	253.0
5	Other Water Revenues										
6	Misc Service Revenues	1,076.8	1,129.8	1,797.1	524.6	733.7	733.3	73.7	1,500.9	2,123.4	1,881.3
7	Rent from Water Property	166.7	83.5	102.4	70.6	82.7	64.1	43.0	36.5	41.1	79.3
8	Other Water Revenues	9,231.5	16,782.7	13,839.2	15,922.1	22,022.3	5,934.3	6,886.9	3,093.7	(1,876.2)	(1,008.1)
9	Total Operating Revenues	$ 50,785.7	$ 56,195.8	$ 56,751.3	$ 53,586.6	$ 59,669.2	$ 56,630.3	$ 59,689.4	$ 63,876.1	$ 69,374.0	$ 77,661.7
10	Operation & Maintenance Expenses										
11	Source of Supply	$ 1,942.4	$ 175.8	$ 1,586.5	$ 1,191.5	$ 1,828.2	$ 854.6	$ 1,272.3	$ 2,105.6	$ 3,223.9	$ 10,062.7
12	Pumping	3,291.1	2,705.4	3,067.1	2,943.7	2,735.6	3,321.1	3,381.5	3,760.8	3,599.5	3,706.5
13	Water Treatment	1,732.2	2,017.1	2,121.8	1,833.6	2,171.0	2,384.0	2,458.2	2,192.8	2,311.6	2,590.4
14	Tranmission and Distribution	3,096.6	3,642.5	4,148.5	3,571.6	4,033.2	4,210.8	5,219.8	4,734.2	4,837.3	5,540.0
15	Customer Account Expense										
16	Uncollectible Accounts	-	-	-	3,637.1	-	-	-	-	-	305.1
17	All Other Expenses	431.2	473.0	456.6	485.8	571.8	576.0	512.2	537.8	483.7	558.8
18	Administrative and General										
19	Admin & General Salaries	1,578.7	1,700.3	1,837.2	1,848.6	1,949.3	1,978.3	2,322.4	2,233.1	2,199.2	2,150.4
20	Office Supplies and Other	21.2	30.9	33.3	22.3	21.3	27.8	20.5	21.1	17.6	19.6
21	Property Insurance	-	-	-	0.3	10.1	0.5		0.5	-	1.1
22	Injuries and Damages	35.4	69.4	261.1	88.2	1,665.8	(680.4)	(153.1)	148.1	161.2	139.1
23	Employee Pensions and Benefits	1,742.3	2,004.7	1,583.5	1,617.5	1,690.2	1,715.2	1,366.6	1,415.0	1,310.9	1,869.0
24	Regulatory Commission Expenses	807.8	814.9	-	14.5	260.3	235.2	49.5	0.2	-	-
25	Outside Services Employed	468.2	618.2	868.6	(188.0)	1,022.1	275.4	2,052.9	2,386.3	(70.8)	(94.4)
26	Miscellaneous General Expenses	(868.0)	1,850.1	3,120.9	3,061.5	2,669.4	4,900.1	3,309.3	3,706.7	4,980.2	3,252.0
27	Maintenance of General Plant	22.4	-	9.1	2.3	19.6	66.3	13.7	19.6	12.2	12.2
28	Rents	427.8	440.2	571.0	505.6	555.6	542.0	568.5	540.4	439.4	726.3
29	Administrative Expenses Transferred	8,091.3	7,657.3	7,872.9	6,749.3	6,939.6	6,988.2	6,681.5	6,510.2	7,095.1	6,258.7
30	Duplicate Charges - Credit Ca_Am ROF	-	-	547.6	658.3	638.7	739.2	438.7	671.0	535.9	680.5
31	Total Operations & Maintenance Expense	$ 22,820.7	$ 24,199.8	$ 28,085.6	$ 28,043.8	$ 28,781.8	$ 28,134.4	$ 29,514.5	$ 30,983.3	$ 31,137.0	$ 37,778.2
32	General Taxes										
33	Taxes on Real and Personal Property	$ 1,345.5	$ 1,465.8	$ 1,591.9	$ 1,595.1	$ 1,547.4	$ 1,543.0	$ 1,521.1	$ 1,682.2	$ 2,635.7	$ 2,474.1
34	State Corporation Franchise Tax	-	-	0.1	11.7	17.9	-	-	-	-	-
35	State Unemployment Insurance Tax	47.8	63.9	53.0	41.1	35.7	35.8	33.4	25.0	25.6	25.3
36	Other State and Local Taxes	91.2	102.2	106.0	64.9	74.8	47.5	81.7	100.2	123.0	108.0
37	Other Federal Taxes	613.5	670.8	593.6	511.3	657.7	743.3	727.5	769.0	804.2	785.8
38	Total General Taxes	$ 2,098.0	$ 2,302.7	$ 2,344.6	$ 2,224.1	$ 2,333.4	$ 2,369.7	$ 2,363.7	$ 2,576.4	$ 3,588.4	$ 3,393.1
39	EBITDA	$ 25,867.1	$ 29,693.4	$ 26,321.1	$ 23,318.8	$ 28,554.0	$ 26,126.3	$ 27,811.2	$ 30,316.4	$ 34,648.6	$ 36,490.4
40	Depreciation & Amortization	6,553.9	7,469.5	5,957.5	6,740.8	7,149.0	7,410.4	7,555.5	9,213.0	9,542.0	9,147.4
41	Earnings Before Interest and Taxes (EBIT)	$ 19,313.2	$ 22,223.8	$ 20,363.5	$ 16,577.9	$ 21,405.0	$ 18,715.9	$ 20,255.8	$ 21,103.4	$ 25,106.6	$ 27,343.0
42	Income Taxes and Credits	3,963.9	3,832.2	4,673.8	4,917.2	5,192.9	4,988.6	3,085.9	3,134.0	2,561.5	2,667.9
43	After-Tax EBIT	$ 15,349.3	$ 18,391.6	$ 15,689.7	$ 11,660.7	$ 16,212.1	$ 13,727.3	$ 17,169.8	$ 17,969.4	$ 22,545.1	$ 24,675.1

Source: Annual Reports of the Monterey District of California-American Water Company, 2013-2021, Sch A-5, B-1.

Exhibit 9: Summary of Historical Earnings for Cal-Am's Monterey Water System and Central Satellites (in $000s)

Line	Description	Recorded from 2016 GRC			Recorded Years from 2019 GRC			Recorded Years from 2022 GRC				
		Recorded 2011	Recorded 2012	Recorded 2013	Recorded 2014	Recorded 2015	Recorded 2016	Recorded 2017	Recorded 2018	Recorded 2019	Recorded 2020	Recorded 2021
1	Operating Revenues											
2	Metered Revenues	$ 34,656.9	$ 41,745.7	$ 39,027.1	$ 43,194.7	$ 38,528.3	$ 50,045.7	$ 54,539.5	$ 57,880.6	$ 57,855.8	$ 69,285.9	$ 68,478.7
3	Private/Public Fire	521.2	442.8	442.8	442.8	442.8	734.3	721.9	739.3	646.4	684.4	700.8
4	Other Revenues											
5	Method 5 Revenues	3.4	2.3	-	-	-	-	0.0	0.0	-	-	-
6	Contract Revenues	-	-	-	-	-	-	-	-	-	-	-
7	Antenna Leases	68.8	71.3	83.5	85.8	53.8	102.2	91.9	111.0	104.3	116.4	106.9
8	Additional NTPS Rev	22.4	20.6	-	-	-	-	-	-	-	-	-
9	Misc Service Revenues	10.7	17.2	43.9	36.8	153.2	327.2	349.0	354.0	349.4	78.3	11.3
10	Late Payment Penalty	-	-	-	-	-	-	-	-	-	-	-
11	Reconnect Fees After Hours	8.6	12.0	-	-	-	-	-	-	-	-	-
12	Metered Construction	-	-	56.8	-	-	-	-	-	-	-	-
13	Subtotal Other Revenues	$ 114.0	$ 123.3	$ 184.2	$ 122.5	$ 207.0	$ 429.4	$ 441.0	$ 465.0	$ 453.7	$ 194.7	$ 118.2
14	Total Operating Revenues	$ 35,292.1	$ 42,311.8	$ 39,654.0	$ 43,760.0	$ 39,178.0	$ 51,209.3	$ 55,702.4	$ 59,084.8	$ 58,956.0	$ 70,165.0	$ 69,297.7
15	Operation & Maintenance Expenses											
16	Labor	$ 7,148.7	$ 6,869.5	$ 6,878.2	$ 7,662.4	$ 7,740.1	$ 8,171.4	$ 9,349.7	$ 9,028.3	$ 9,131.8	$ 9,527.7	$ 8,409.7
17	Purchased Water	1,393.3	975.0	939.8	926.4	1,192.5	1,177.1	1,261.9	1,453.5	1,032.8	2,714.4	9,528.5
18	Purchased Power	2,413.4	2,273.6	2,255.2	2,431.0	2,154.8	2,196.9	2,854.9	2,455.4	2,894.7	2,829.5	2,775.2
19	Chemicals	314.5	357.3	416.9	397.0	331.8	324.2	449.3	429.7	645.6	530.4	340.5
20	Operation Expense	711.2	675.4	1,293.5	1,490.2	1,229.8	1,294.6	2,041.0	2,346.8	1,450.0	1,158.9	1,667.5
21	Maintenance (Excl Amort Tank Painting)	2,343.3	1,441.5	1,265.0	1,533.6	1,655.7	2,198.5	1,533.1	2,385.4	2,806.4	2,466.6	2,956.4
22	Amortization of Tank Painting	361.6	367.6	369.2	486.8	413.6	500.0	848.2	706.8	662.7	725.0	569.6
23	Customer Accounting	355.4	389.2	461.5	359.6	367.3	372.3	424.6	437.5	441.8	375.3	364.5
24	Uncollectible Expense	174.1	232.5	225.1	269.2	4,059.6	243.3	4,586.2	3,032.3	3,409.7	3,196.9	2,518.6
25	Insurance	489.5	539.1	620.7	579.8	790.7	600.5	479.1	606.6	609.3	545.7	551.8
26	Pensions and Benefits	2,024.7	2,984.6	2,720.4	2,055.3	1,680.3	2,314.7	2,657.9	1,970.6	2,049.5	1,876.4	1,837.0
27	Regulatory Expenses	(153.1)	312.0	488.0	363.3	123.8	461.2	676.7	136.5	240.5	137.4	82.3
28	Rents	527.2	553.4	565.9	694.0	720.8	718.2	825.8	836.4	748.0	639.2	848.3
29	Other Administrative & General	2,530.0	2,184.2	3,290.1	3,179.8	2,928.0	3,594.8	4,620.4	4,153.3	4,372.7	4,236.7	3,239.0
30	Service Company Costs	2,807.6	2,743.0	2,892.5	3,002.2	3,032.5	3,055.7	2,980.9	2,952.2	2,924.1	2,946.9	2,739.5
31	Citizens Acquisition Premium	902.0	873.1	844.0	803.5	775.9	748.2	710.5	854.0	857.1	860.6	864.2
32	General Office Return on Rate Base	175.6	288.6	350.1	369.3	434.0	456.1	547.1	512.0	525.9	965.0	1,179.8
33	Return on and of Utility Plant Acq Adjustment	-	-	-	-	-	-	-	-	-	-	-
34	San Clemente Dam	-	-	-	-	-	-	7,921.0	7,921.0	6,245.4	6,245.4	6,245.4
35	Total Operations & Maintenance Expenses	$ 24,519.0	$ 24,059.6	$ 25,876.1	$ 26,603.4	$ 29,631.2	$ 28,427.7	$ 44,768.3	$ 42,218.3	$ 41,048.0	$ 41,978.0	$ 46,717.8
36	General Taxes	$ 1,822.5	$ 1,922.9	$ 1,982.1	$ 2,291.2	$ 2,302.3	$ 2,339.8	$ 2,573.9	$ 2,479.5	$ 2,473.8	$ 2,441.7	$ 2,138.8
37	EBITDA	$ 8,950.6	$ 16,329.3	$ 11,795.8	$ 14,865.4	$ 7,244.5	$ 20,441.8	$ 8,360.2	$ 14,387.0	$ 15,434.2	$ 25,745.3	$ 20,441.1
38	Depreciation Expense	5,985.4	4,951.1	6,339.4	6,289.5	6,230.1	6,723.6	6,992.3	7,266.1	8,627.1	9,435.9	9,848.2
39	EBIT	$ 2,965.2	$ 11,378.2	$ 5,456.4	$ 8,575.9	$ 1,014.4	$ 13,718.2	$ 1,367.9	$ 7,120.9	$ 6,807.1	$ 16,309.4	$ 10,592.9
40	Income Taxes	5,770.8	9,382.2	6,545.1	1,545.2	(1,591.1)	3,487.3	(1,446.1)	871.7	51.5	1,715.5	(294.1)
41	Utility Operating Income	$ (2,805.6)	$ 1,996.0	$ (1,088.7)	$ 7,030.7	$ 2,605.5	$ 10,230.9	$ 2,814.0	$ 6,249.2	$ 6,755.6	$ 14,593.9	$ 10,887.0
42	Interest (rate making)	3,358.7	3,888.9	3,809.2	4,704.9	4,842.4	5,083.5	4,873.9	3,868.0	4,816.6	5,282.6	5,648.4
43	Net Income	$ (6,164.3)	$ (1,892.9)	$ (4,897.9)	$ 2,325.8	$ (2,236.9)	$ 5,147.4	$ (2,059.9)	$ 2,381.2	$ 1,939.0	$ 9,311.3	$ 5,238.6

[1]Results of Operations from 2019 GRC Application - 100 Day Update dated October 14, 2019, and the 2022 GRC Application, updated January 27, 2023. Table CH2, Tbl 2.3, and Ch3 Tables 3.17-3.18.

Exhibit 10: Historical Financial Ratio Analysis – Cal-Am Monterey Water System and Central Satellites

Description	2014	2015	2016	2017	2018	2019	2020	2021	5-Year CAGR	8-Year CAGR
Profitability[1]										
Net Margin[2]	16.1%	6.7%	20.0%	5.1%	10.6%	11.5%	20.8%	15.7%	n/a	n/a
EBITDA / Op Revenues	34.0%	18.5%	39.9%	15.0%	24.3%	26.2%	36.7%	29.5%	n/a	n/a
EBITDA / Net Plant Assets	8.4%	4.1%	11.2%	4.5%	6.0%	6.0%	9.6%	7.5%	n/a	n/a
Return on Rate Base	4.7%	1.7%	6.3%	1.8%	4.0%	3.5%	6.9%	4.8%	n/a	n/a
Growth - YOY[1]										
Rate Base	-5.5%	-1.0%	-4.7%	-6.8%	63.7%	6.6%	6.4%	-1.2%	16.4%	7.0%
Sales	10.4%	-10.5%	30.7%	8.8%	6.1%	-0.2%	19.0%	-1.2%	5.6%	6.8%
EBITDA	26.0%	-51.3%	182.2%	-59.1%	72.1%	7.3%	66.8%	-20.6%	25.0%	4.7%

[1]Calculated based on Cal-Am Monterey District financial results reported as part of the 2016, 2019, and 2022 GRC.

[2]After Tax EBIT / Operating Revenues

Exhibit 11: Typical Risks of Investor-Owned and Municipally Owned Water Utilities

Risk	Investor Owned	Risk Description	Municipality Owned	Risk Description
Business Risk				
a. Industry Risk				
Level of Competition	Low	IOUs are shielded from competition by regulation. IOUs have monopoly service rights, reducing competitive risks.	Low to Moderate	May have higher risk of competition if owner serves outside jursidicational customers without a contract or without a strong contract with long-term sole provider provisions.
Cyclical Nature	Similar	Relatively Low. Water needed in periods of economic expansion as well as recession.	Similar	Relatively Low. Water needed in periods of economic expansion as well as recession.
Threat of Substitution	Similar	Low. Few, if any subsitutes for potable water.	Similar	Low. Few, if any subsitutes for potable water.
b. Regulatory Risk				
PUC Rate Regulation	Low to Moderate	The election or appointment of commissoners may impact regulatory predictability and consistency over-time (political risk). Some risk exist regarding efficiency of rate setting process.	N/A	N/A
Board / Council	N/A	N/A	Low to Moderate	The election or appointment of boards and councils may impact the abiltiy to get rate adjustments passed. Financial sustainability tied to elected official decision-making and rate approvals.
c. Utility scale and diversity	Similar	Larger utilities likely have greater customer diversity and thus lower concentration risk.	Similar	Larger utilities likely have greater customer diversity and thus lower concentration risk.
d. Operating Risk	Similar	Utilities required to perform in accordance with EPA regulations and PUC requirements. Failure to perform, could result in fines and lower returns.	Similar	Utilities required to perform in accordance with service contracts and EPA regulations. If utility fails to perform, potential for fines, liquidated damages, or payment withholdings.
e. Stranded Cost Risk	Low to Moderate	Typically, IOUs have monopoly service rights, reducing the potential for stranded assets.	Low to Moderate	Service rights generally do not extend beyond jurisdictional boundaries. Risk depends on the service agreement and if the agreement mitigates this risk to the owner.
Financial Risk				
Equity Capital Attraction Risk	Moderate	Risk that attracting equity capital could be compromised by poor financial performance.	Low	System equity typically generated over time by utility management decisions regarding capital financing and rate setting. Utility needs to demonstrate that the use of social equity is invested prudently.
Debt Financing Risk	Similar	Financial performance drives ability to borrow at low interest rates.	Similar	Financial performance drives ability to borrow at low interest rates.
Interest Rate Risk	Similar	If rates rise, the cost of debt is adjusted in the WACC calculation, resulting in an adjustment to the utility's total ROR.	Similar	For a service contract with a rate multiplier, if interest rates rise, the utility's ROE for serving outside customers could erode.
Collection Risk	Similar	Risk of uncollectable billed amounts	Similar	Risk of uncollectable billed amounts
Liquidity Risk	Similar	Utility funds permanently committed to invested assets, imposing liquidity risk. Also, an IOUs stock may be easily traded or thinly traded affecting an investor's liquidity risk.	Similar	Utility funds permanently committed to invested assets, imposing liquidity risk.

Exhibit 12: Cal-Am Projection of Revenues and Expenses for Cal-Am's Monterey Water System and Central Satellites (in $000s)

Line	Description	Estimated FY 2022	1 FY 2023	2 FY 2024	3 FY 2025	4 FY 2026
1	Operating Revenues					
2	Metered Revenues	$ 90,023.1	$ 90,023.1	$100,022.8	$102,535.9	$106,013.9
3	Other Revenues	234.1	235.3	236.0	236.8	236.8
4	Total Operating Revenues	$ 90,257.2	$ 90,258.4	$100,258.8	$102,772.7	$106,250.7
5	Operation & Maintenance Expenses					
6	Labor	$ 9,756.2	$ 10,056.5	$ 10,369.1	$ 10,691.6	$ 11,014.5
7	Purchased Water	13,399.6	13,429.2	13,453.7	13,478.3	13,478.3
8	Purchased Power	2,870.7	2,870.7	2,870.7	2,870.8	2,870.8
9	Chemicals	543.3	639.9	668.9	699.3	699.3
10	Operation Expense	1,643.1	1,707.1	2,778.3	2,831.5	2,886.2
11	Maintenance (Excl Amort Tank Painting)	2,616.2	2,718.2	2,802.5	2,887.1	2,970.4
12	Amortization of Tank Painting	602.6	725.2	987.6	1,083.4	1,116.2
13	Customer Accounting	426.9	443.6	457.3	471.1	485.4
14	Uncollectible Expense	469.9	469.9	4,113.9	4,235.3	4,240.3
15	Insurance	614.1	646.1	665.4	685.3	705.9
16	Pensions and Benefits	2,492.3	2,281.0	2,379.7	2,451.1	2,525.2
17	Regulatory Expenses	-	-	157.7	630.7	630.7
18	Rents	739.0	767.8	789.7	804.0	805.0
19	Other Administrative & General	3,582.9	3,803.1	4,454.0	4,546.2	4,660.4
20	Service Company Costs	2,933.0	3,128.3	3,220.3	3,313.4	3,415.6
21	Citizens Acquisition Premium	868.5	873.0	877.8	883.5	889.4
22	General Office Return on Rate Base	1,270.1	1,489.3	1,500.4	1,505.6	1,510.8
23	Return on and of Utility Plant Acq Adjustment	-	-	(1,491.1)	(3,014.5)	(3,014.5)
24	San Clemente Dam	6,245.4	6,245.4	6,245.4	6,245.4	6,245.4
25	Total Operations & Maintenance Expenses	$ 51,073.8	$ 52,294.3	$ 57,301.3	$ 57,299.1	$ 58,135.3
26	General Taxes	$ 3,492.4	$ 3,795.7	$ 3,996.1	$ 4,176.5	$ 4,428.7
27	EBITDA	$ 35,691.0	$ 34,168.4	$ 38,961.4	$ 41,297.1	$ 43,686.7
28	Depreciation Expense	10,393.2	11,061.7	11,468.8	12,301.6	13,134.3
29	EBIT	$ 25,297.8	$ 23,106.7	$ 27,492.6	$ 28,995.5	$ 30,552.4
30	Taxes	4,327.7	3,713.1	5,178.7	5,462.9	5,801.2
31	Net Income Before Interest Expense	$ 20,970.1	$ 19,393.6	$ 22,313.9	$ 23,532.6	$ 24,751.2

Source: Based on Cal-Am projected 2022 GRC Results of Operations for 2022 through 2026.

Exhibit 13: Projected Financial Ratio Analysis – Cal-Am Monterey Water System and Central Satellites

Description	1 2023	2 2024	3 2025	4 2026
Profitability				
Projected Net Margin	21.5%	21.4%	22.0%	22.4%
Projected EBITDA / Op Revenues	37.9%	38.2%	39.5%	40.4%
Projected EBITDA / Net Plant Assets	11.7%	12.4%	12.4%	12.7%
Projected Return on Rate Base	7.5%	7.7%	7.5%	7.5%
Growth - YOY				
Rate Base	4.0%	7.4%	8.0%	4.6%
Sales	0.0%	9.9%	2.5%	3.4%
EBITDA	-4.3%	10.8%	6.0%	5.8%

Exhibit 14: Cost of Capital

Weighted Average Cost of Capital

WACC = (k_e x W_e) + (k_d [1-t] x W_d)

k_e = cost of equity

W_e = weight equity capital in the capital structure

k_d = cost of debt capital (pre-tax)

t = income tax rate

W_d = weight of debt capital in the capital structure

WACC calculation used with the Income Approach:

k_e =	11.54%	From Cost of Equity supporting tables. See Exhibit 15.
k_d =	5.3%	Cost of debt based on US Corporate A Effective Yield. https://fred.stlouisfed.org/series/BAMLC0A3CAEY.
D/E =	0.82	Estimate based on the typical capital structure of a stand-alone, investor-owned water utility system.
W_e =	55.0%	
W_d =	45.0%	
t =	21.0%	Corporate federal tax rate.
st=	8.84%	State Corporation Franchise Tax from Table 2.4 of the 2022 GRC Exhibits.
Eff t =	28.0%	Effective Tax Rate

Source of Capital	Capital Structure	Cost of Capital	Tax Rate	After Tax Cost	Contribution to Weighted Average
Debt	45.0%	5.25%	27.98%	3.78%	1.70%
Equity	55.0%	11.54%			6.35%
WACC (Rounded)					8.00%

Exhibit 15: Summary of Cost of Equity Methods and Results

No.	Method	Amount	Reference / Description
1	Build-Up Method:		
	Risk Free Rate of Return	3.50%	Kroll Normalized risk-free rate applies expected inflation forecasts to long-term real interest rates.
	Long-Term Equity Risk Premium	6.00%	Kroll estimated ERP using various historical, supply-side, and implied estimates of ERP. See Exhibit 16.
	Industry Risk Premium	-3.06%	GICS 551040 Median Vasicek-Adjusted Beta. From Kroll Cost of Capital Navigator.
	Equity Risk Size Premium	4.80%	Decile 10 (Market Cap of $10.6M - $289M). Kroll Cost of Capital Navigator. See Exhibit 17.
	Company Specific Risk Adjustment	0.00%	See report text for description and rationale.
	Cost of Equity Indication	11.24%	
2	Build-Up Method:		
	Risk Free Rate of Return	4.09%	Spot 20-Year Treasury Yield. From Kroll Cost of Capital Navigator, 2022.
	Long-Term Equity Risk Premium	6.22%	Supply-side long-term ERP. From Kroll Cost of Capital Navigator, 2022.
	Industry Risk Premium	-3.06%	GICS 551040 Median Vasicek-Adjusted Beta. From Kroll Cost of Capital Navigator.
	Equity Risk Size Premium	4.80%	Decile 10 (Market Cap of $10.6M - $289M). Kroll Cost of Capital Navigator. See Exhibit 17.
	Company Specific Risk Adjustment	0.00%	See report text for description and rationale.
	Cost of Equity Indication	12.05%	
3	Discounted Cash Flow (DCF) Model:		
	Peer Group Cost of Equity Indication	8.33%	See Exhibit 16.
	Equity Risk Size Premium	3.46%	Size Premium Spread Decile 10 vs. Decile 7. See Exhibit 17.
	Company Specific Risk Adjustment	0.00%	See report text for description and rationale.
	Cost of Equity Indication	11.79%	
4	Modified Capital Asset Pricing Model (MCAPM):		
	Peer Group Cost of Equity Indication	7.63%	See Exhibit 17.
	Equity Risk Size Premium	3.46%	Size Premium Spread Decile 10 vs. Decile 7. See Exhibit 17.
	Company Specific Risk Adjustment	0.00%	See report text for description and rationale.
	Cost of Equity Indication	11.09%	
	Selected Cost of Equity Indication	11.54%	

Exhibit 16: Summary of Cost of Equity Methods and Results

ERP Estimate	Arithmetic Average (%)
Historical Estimates	
Historical Long-Term ERP (1926 - 2021)	7.36%
Historical Long-Term ERP adjusted for WWII Interest Rate Bias	6.50%
Supply-side Long-Term ERP (1926 - 2021)	6.22%
Supply-side Long-Term ERP (1926 - 2021) adjusted for WWII Rate Bias	5.26%
Implied	
Damodaran Implied ERP (trailing 12-month, measured against a normilzed RFR of 3.0%)	4.69%
Default Spred Model Implied ERP	4.74%
Kroll ERP Recommended[1]	6.00%

[1]Developed by Kroll in conjunction with a normalized 20-year yield on U.S. government bonds as a proxy for the risk-free rate. Reported as of October 2022.

Source: Kroll Cost of Capital Navigator, 2022.

Exhibit 17: Center for Research Security Prices (CRSP) Size Premiums by Deciles

Description	Market Capitalization Range Smallest Company	Largest Company	Decile	Size Premium (Return in Excess of CAPM)
	(in $1,000s)	(in $1,000s)		
1	$ 36,160,584	$ 2,324,390,219	1	-0.22%
2	1,675,939	36,099,221	2	0.43%
3	8,216,356	16,738,364	3	0.55%
4	5,019,883	8,212,638	4	0.54%
5	3,281,009	5,003,747	5	0.89%
6	2,170,315	3,276,553	6	1.18%
7	1,306,402	2,164,524	7	1.34%
8	629,118	1,306,038	8	1.21%
9	290,002	627,803	9	2.10%
10	10,588	289,007	10	4.80%
Breakdown of the 10th Decile:				
10A	190,487	289,007	10A	3.31%
	251,715	289,007	10w	2.34%
	190,487	251,505	10x	4.54%
10B	10,588	190,440	10B	7.89%
	127,920	190,440	10y	6.34%
	10,588	127,729	10z	11.17%
Proxy Group	298,676	28,252,514	2 - 9	0.43% - 2.10%
Proxy Group Median		1,105,860	7	1.34%
Monterey		<289,007	10	4.80%
Size Premium Spread				3.46%

Source: Kroll Cost of Capital Navigator, Accessed 12/30/22.

Exhibit 18: Estimated Cost of Equity for Peer Group Using the DCF Model

Proxy Group	Annual Dividend Per Share[1]	60-Day Avg Stock Price as of 12/30/22	Dividend Yield[1]	Projected Growth in EPS[1]	Adjusted Dividend Yield[2]	Estimated Cost of Equity[3]
	(1)	(2)	(3)	(4)	(5)	(6)
Artesian Resources Corporation	$1.07	$54.29	1.97%	6.50%	2.03%	8.53%
California Water Service Group	$0.98	$62.25	1.57%	6.50%	1.63%	8.13%
Middlesex Water Company	$1.16	$89.23	1.30%	4.50%	1.33%	5.83%
SJW Group	$1.42	$75.57	1.88%	14.00%	2.01%	16.01%
York Water Company	$0.78	$44.93	1.74%	6.00%	1.79%	7.79%
Global Water Resources Group	$0.30	$13.02	2.27%	10.00%	2.38%	12.38%
Mean						9.78%
Median						8.33%

[1]Value Line Research, accessed at https://research.valueline.com.

[2]Adjusted latest reported dividend yield for growth reflecting a mid-year convention D1 = Do x 1/2*(1+g).

[3]Based on formula Ke = $D_1 / P_o + g$. Column 4 + Column 5.

Exhibit 19: Estimated Cost of Equity for Peer Group Using the CAPM Model

Proxy Group	Value Line Adjusted Levered Beta[1]	Value Line Unadjusted Levered Beta[2]	Risk-Free Rate[3]	Market Risk Premium[4]	CAPM w/ Adj Beta	CAPM w/ unAdj Beta	Estimated Cost of Equity[5]
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Artesian Resources Corporation	0.70	0.55	3.50%	6.00%	7.70%	6.80%	7.25%
California Water Service Group	0.70	0.55	3.50%	6.00%	7.70%	6.80%	7.25%
Middlesex Water Company	0.70	0.55	3.50%	6.00%	7.70%	6.80%	7.25%
SJW Group	0.80	0.70	3.50%	6.00%	8.30%	7.70%	8.00%
York Water Company	0.80	0.70	3.50%	6.00%	8.30%	7.70%	8.00%
Global Water Resources Group	0.80	0.70	3.50%	6.00%	8.30%	7.70%	8.00%
Mean							7.63%
Median							7.63%

[1]Value Line Research, accessed at https://research.valueline.com.

[2]Adjusted beta = 0.67 x Unadjusted Raw beta +0.33 x 1.0. Value Line Research, accessed at https://research.valueline.com.

[3]From Kroll Cost of Capital Navigator. Spot 20-Year Treasury Yield as of 12/30/22.

[4]Supply-side market ERP as of 12/30/22 from Kroll Cost of Capital Navigator.

[5]Cost of Equity indication using the average of CAPM with adjusted Beta and unadjusted Beta.

Exhibit 20: Beta Adjustments for the Selected Peer Group

Proxy Group	60-Day Avg Stock Price as of 12/30/22 ($/Sh)	Shares[1] (M)	Equity Market Cap[2] ($M)	Total Debt[1] (M)	Debt to Equity Ratio[3]	Value Line Adjusted Levered Beta[4]	Value Line Unadjusted Levered Beta[5]	Income Tax Rate[4] (%)	Value Line Unadjusted Unlevered Beta[6]
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Artesian Resources Corporation	$54.29	9.459	513.529	185.173	0.36	0.70	0.55	21.0%	0.43
California Water Service Group	$62.25	54.356	3,383.661	1,129.953	0.33	0.70	0.55	21.0%	0.44
Middlesex Water Company	$89.23	17.604	1,570.805	340.725	0.22	0.70	0.55	21.0%	0.47
SJW Group	$75.57	30.248	2,285.817	1,636.011	0.72	0.80	0.70	21.5%	0.45
York Water Company	$44.93	14.265	640.916	117.137	0.18	0.80	0.70	6.2%	0.60
Global Water Resources Group	$13.02	22.940	298.676	110.943	0.37	0.80	0.70	24.2%	0.55
Mean			$1,448.901			0.75	0.63		0.49
Median			1,105.860			0.75	0.63		0.46

[1]Information gathered from SEC 10Q and 10k Reports.

[2]Column 1 x Column 2

[3]Column 4 / Column 3

[4]Value Line Research, accessed at https://research.valueline.com.

[5]Adjusted beta = 0.67 x Unadjusted Raw beta +0.33 x 1.0. Value Line Research, accessed at https://research.valueline.com.

[6]Hamada Equation. B_u = Equity Beta (B_e) / [(1+(1 - t) x D/E]

Exhibit 21: Discounted Cash Flow Estimates for Cal-Am's Monterey Water System and Central Satellites

Line	Description	1 FY 2023	2 FY 2024	3 FY 2025	4 FY 2026	Terminal Value
	Interim Cash Flow Calculations[1]					
1	Net Income Before Interest Expense:[2]	$ 19,393.6	$ 22,313.9	$ 23,532.6	$ 24,751.2	
2	Plus: Depreciation and Amortization Expense	11,061.7	11,468.8	12,301.6	13,134.3	
3	Plus: San Clemente Dam Amortization Expense	6,245.4	6,245.4	6,245.4	6,245.4	
4	Less: Revenue Recovery of San Clemente Dam Expense	(6,245.4)	(6,245.4)	(6,245.4)	(6,245.4)	
5	Plus: Citizens Acquisition Premium Expense	873.0	873.0	877.8	883.5	
6	Less: Revenue Recovery for Citizens Amortization	(873.0)	(873.0)	(877.8)	(883.5)	
7	Plus: Return on and of UPAA	-	-	(1,491.1)	(3,014.5)	
8	Less: Revenue Recovery for UPAA	-	-	1,491.1	3,014.5	
9	Less: Working Capital Additions	(1,036.4)	(1,036.4)	(35.5)	(216.6)	
10	Less: Annual Capital Expenditures	(17,965.1)	(25,652.4)	(30,525.9)	(22,677.9)	
11	Net Cash Flow	$ 11,453.8	$ 7,093.9	$ 5,272.8	$ 14,991.0	$ 14,991.0
12	Period for PV Calculation[3]	0.500	1.500	2.500	3.500	
13	Discount Rate	8.00%	8.00%	8.00%	8.00%	
14	PV Factor	0.9623	0.8910	0.8250	0.7639	
15	PV of Net Cash Flows	$ 11,021.4	$ 6,320.5	$ 4,349.9	$ 11,451.1	
16	PV of Interim Cash Flows					$ 33,142.9
17	**Terminal Value Calculations**					
18	Terminal Year Net Cash Flow					$ 14,991.0
19	Long-Term Growth Rate					3.80%
20	Discount Rate					8.00%
21	Terminal Value					$ 370,491
22	PV of Terminal Value					$ 283,005
23	Estimated Value Under Income Approach[4]					$ 316,148
24	Adjustment for the Monterey Water System Only[5]					95.3%
25	Adjusted Value					$ 301,289

Amounts shown in $1,000s. Fiscal Year Ending December 31st

[1]Adjustments for both expenses and revenues associated with the San Clemente Dam, Citizens Acquisition Premium, and Utility Plant Acquisition Adjustments (UPAA) were made to address these revenues and expenses separately for purposes of estimating net cash flows. Consideration of these items were addressed separately as asset additions as part of the Monterey Water System valuation.

[2]Adjustment to net income to reflect an allowable return on rate base equivalent to the discount rate of 8%. Assumes CAPUC approves Cal-Am's proposed cost of capital in its Cost of Capital Case A2105001.

[3]Mid-year convention used for net income and net cash flows.

[4]Includes the Monterey Water System and the Central Satellites.

[5]Adjustment for the Monterey Water System Only based on a proportional allocation of water delivered to customers associated with the Monterey Water System as compared to the Monterey Water System customers plus the Central Satellites.

Exhibit 22: Enterprise Values of Guideline Public Companies as of December 31, 2022

Guideline Company	Stock Price[1]	Common Shares (in 000s)	Market Value of Equity (in 000s)	Interest Bearing Debt (000s)	Market Value of Invested Capital (in 000s)	Less: Cash and Cash Equivalents (in 000s)	Enterprise Value (in 000s)
Artesian Resources Group	$54.29	9,459	513,529	185,173	698,702	108	698,594
California Water Services Group	$62.25	54,356	3,383,661	1,129,953	4,513,614	90,458	4,423,156
Middlesex Water Company	$89.23	17,604	1,570,805	340,725	1,911,530	2,908	1,908,622
SJW Group	$75.57	30,248	2,285,817	1,636,011	3,921,828	13,190	3,908,638
York Water Company	$44.93	14,265	640,916	117,137	758,053	1	758,052
Global Water Resources Group	$13.02	22,940	298,676	110,943	409,619	15,613	394,006

[1]Stock Price is the averge daily price over the past 60-days as of 12/30/22. Data from Morningstar.com

Exhibit 23: Adjustment to Guideline Company EV / EBITDA Multiples for Size

Guideline Public Company	EV / EBITDA	Market Value of Equity[1] ($ Millions)	Size Decile[2]	Industry Equity Return[3]	Size Premium[2]	Decile Equity Return[4]	Subject Decile Equity Return[5]	Decile Equity Return Difference[6]	Equity Weighting[1]	Adjustment to WACC for Size[7]	Size - Adjusted EV/ EBITDA[8]
Artesian Resources Corporation	16.3	$ 514	9	6.44%	2.10%	8.54%	11.24%	2.70%	73.50%	1.98%	12.3
California Water Service Group	18.6	$ 3,384	6	6.44%	1.18%	7.62%	11.24%	3.62%	74.97%	2.71%	12.4
Middlesex Water Company	28.0	$ 1,571	8	6.44%	1.21%	7.65%	11.24%	3.59%	82.18%	2.95%	15.3
SJW Group	18.2	$ 2,286	7	6.44%	1.34%	7.78%	11.24%	3.46%	58.28%	2.02%	13.3
York Water Company	22.3	$ 641	9	6.44%	2.10%	8.54%	11.24%	2.70%	84.55%	2.28%	14.8
Global Water Resources Group	22.4	$ 299	10	6.44%	4.80%	11.24%	11.24%	0.00%	72.92%	0.00%	22.4
Median	20.4										14.1
Average	21.0										15.1

[1]Company 10k Reports for trailing twelve months ending quarter 3 of 2022 from 10Q and 10k reports.

[2]Size Decile from Kroll Cost of Capital Navigator.

[3]From Kroll based on a risk free rate (Rf) of 3.5%, an equity risk premium of 6.0%, and an industry risk premium adjustment of -3.06%. Rm = Rf + Rp + (Ri) = 3.5% + 6.0% - 3.06%.

[4]Industry Equity Return + Size Premium

[5]Industry Equity Return + 10th Decile Equity Return of 5.59% from Duff and Phelps Valuation Handbook.

[6]Subject Equity Return - GPC Decile Equity Return

[7]Decile Equity Return Difference x Equity Weighting

[8]Adjusted multiple = 1/[(1/multiple)+Adj to WACC for size]

Exhibit 24: Adjustment to Guideline Company EV / EBIT Multiples for Size

Guideline Public Company	EV / EBIT	Market Value of Equity[1] ($ Millions)	Size Decile[2]	Industry Equity Return[3]	Size Premium[2]	Decile Equity Return[4]	Subject Decile Equity Return[5]	Decile Equity Return Difference[6]	Equity Weighting[1]	Adjustment to WACC for Size[7]	Size - Adjusted EV/ EBITDA[8]
Artesian Resources Corporation	21.2	$ 514	9	6.44%	2.10%	8.54%	11.24%	2.70%	73.50%	1.98%	14.9
California Water Service Group	33.7	$ 3,384	6	6.44%	1.18%	7.62%	11.24%	3.62%	74.97%	2.71%	17.6
Middlesex Water Company	36.3	$ 1,571	8	6.44%	1.21%	7.65%	11.24%	3.59%	82.18%	2.95%	17.5
SJW Group	32.3	$ 2,286	7	6.44%	1.34%	7.78%	11.24%	3.46%	58.28%	2.02%	19.6
York Water Company	32.0	$ 641	9	6.44%	2.10%	8.54%	11.24%	2.70%	84.55%	2.28%	18.5
Global Water Resources Group	37.0	$ 299	10	6.44%	4.80%	11.24%	11.24%	0.00%	72.92%	0.00%	37.0
Median	33.0										18.0
Average	32.1										20.8

[1]Company 10k Reports for trailing twelve months ending quarter 3 of 2022 from 10Q and 10k reports.

[2]Size Decile from Kroll Cost of Capital Navigator.

[3]From Kroll based on a risk free rate (Rf) of 3.5%, an equity risk premium of 6.0%, and an industry risk premium adjustment of -3.06%. Rm = Rf + Rp + (Ri) = 3.5% + 6.0% - 3.06%.

[4]Industry Equity Return + Size Premium

[5]Industry Equity Return + 10th Decile Equity Return of 5.59% from Duff and Phelps Valuation Handbook.

[6]Subject Equity Return - GPC Decile Equity Return

[7]Decile Equity Return Difference x Equity Weighting

[8]Adjusted multiple = 1/[(1/multiple)+Adj to WACC for size]

Exhibit 25: Adjustment to Guideline Company EV / Sales Multiples for Size

Guideline Public Company	EV/ Sales[1]	Sales / After Tax EBIT[1]	Decile Equity Return Difference[2]	Equity Weighting[1]	Adjustment to WACC for Size[3]	Size - Adjusted EV/ Sales[4]
Artesian Resources Corporation	7.3	3.6	2.70%	73.50%	1.98%	4.8
California Water Service Group	5.4	6.6	3.62%	74.97%	2.71%	2.7
Middlesex Water Company	12.1	3.1	3.59%	82.18%	2.95%	5.8
SJW Group	6.6	5.2	3.46%	58.28%	2.02%	3.9
York Water Company	12.9	2.5	2.70%	84.55%	2.28%	7.5
Global Water Resources Group	9.0	4.6	0.00%	72.92%	0.00%	9.0
Median	8.1					5.3
Average	8.9					5.6

[1]Company 10k and 10Q Reports for trailing 12 months ending quarter 3 of 2022 from 10Q and 10k reports.

[2]From MVIC / EBITDA Adjustment Table.

[3]Decile Equity Return Difference x Equity Weighting

[4]Adjusted multiple = 1/[(1/multiple)+ (Sales/After Tax EBIT x Adj to WACC for size)]

Exhibit 26: Price / Sales Value Indicator Details

Sales Date	Seller	Buyer	State	Purchase Price ($1,000s)	Sales ($1,000s)	Price to Sales
12/17/2015	Park, Apple Valley & Mtn Water	Liberty Utilities	CA, MT	$329,500	$70,897	4.65
4/3/2017	Shorelands Water Co. Inc.	NJ American Water Works Co.	NJ	$36,581	$11,506	3.18
12/16/2021	NY American Water Company	Liberty Utilities	NY	$808,929	$116,134	6.97
Median						4.65
Mean						4.93
Average of Median and Mean						4.79
Monterey Water System Normalized Sales (in $000s)					$90,258	
Estimated Market Value (in $1,000s)						$432,335
Pro-Rated (Inside MPWSP District)					**0.953**	**$412,015**
Pro-Rated (Outside MPWSP District)					0.047	$20,320

See Exhibit 34 for normalization.

Exhibit 27: Price / Customer Connection Value Indicator Details

Sales Date	Seller	Buyer	State	Adjusted Price ($1,000s)	Number of Connections	Adjusted Price to Connection
12/17/2015	Park, Apple Valley & Mtn Water	Liberty Utilities	CA, MT	$436,238	71,027	6,142
4/3/2017	Shorelands Water Co. Inc.	NJ American Water Works Co.	NJ	$46,773	11,188	4,181
12/16/2021	NY American Water Company	Liberty Utilities	NY	$836,361	126,000	6,638
Median						6,142
Mean						5,653
Average of the Median and Mean						5,898
Monterey Water System Connections					40,841	
Estimated Market Value (in $1,000s)						$240,880
Pro-Rated (Inside MPWSP District)					**0.953**	**$229,559**
Pro-Rated (Outside MPWSP District)					0.047	$11,321

Exhibit 28: Price / Original Cost Less Depreciation Indicator Details

Sales Date	Seller	Buyer	State	Purchase Price ($1,000s)	OCLD Value ($1,000s)	Price to OCLD
12/17/2015	Park, Apple Valley & Mtn Water	Liberty Utilities	CA, MT	$329,500	$235,725	1.40
4/3/2017	Shorelands Water Co. Inc.	NJ American Water Works Co.	NJ	$36,581	$20,778	1.76
12/16/2021	NY American Water Company	Liberty Utilities	NY	$808,929	$499,904	1.62
Median						1.62
Mean						1.59
Average of the Median and Mean						1.61
Monterey Water System Net Book Value					$288,541	
Estimated Market Value (in $1,000s)						$464,552
Pro-Rated (Inside MPWSP District)					**0.953**	**$442,718**
Pro-Rated (Outside MPWSP District)					0.047	$21,834

Exhibit 29: Price / Earnings (EBITDA) Indicator Details

Sales Date	Seller	Buyer	State	Purchase Price ($1,000s)	EBITDA ($1,000s)	Price to EBITDA
12/17/2015	Park, Apple Valley & Mtn Water	Liberty Utilities	CA, MT	$329,500	$49,552	6.65
4/3/2017	Shorelands Water Co. Inc.	NJ American Water Works Co.	NJ	$36,581	$2,686	13.62
12/16/2021	NY American Water Company	Liberty Utilities	NY	$808,929	$37,170	21.76
Median						13.62
Mean						14.01
Average of the Median and Mean						13.82
Monterey Water System Normalized EBITDA					$34,930	
Estimated Market Value (in $1,000s)						$482,733
Pro-Rated (Inside MPWSP District)					**0.953**	**$460,044**
Pro-Rated (Outside MPWSP District)					0.047	$22,688

See Exhibit 34 for normalization.

Exhibit 30: Price / Earnings (EBIT) Indicator Details

Sales Date	Seller	Buyer	State	Purchase Price ($1,000s)	EBIT ($1,000s)	Price to EBIT
12/17/2015	Park, Apple Valley & Mtn Water	Liberty Utilities	CA, MT	$329,500	$41,794	7.88
4/3/2017	Shorelands Water Co. Inc.	NJ American Water Works Co.	NJ	$36,581	$1,916	19.10
12/16/2021	NY American Water Company	Liberty Utilities	NY	$808,929	$22,371	36.16
Median						19.10
Mean						21.05
Average of the Median and Mean						20.07
Monterey Water System Normalized EBIT					$24,202	
Estimated Market Value (in $1,000s)						$485,734
Pro-Rated (Inside MPWSP District)					**0.953**	**$462,905**
Pro-Rated (Outside MPWSP District)					0.047	$22,830

See Exhibit 34 for normalization.

Exhibit 31: Monterey Water System and Central Satellites Asset OCLD and RCNLD Computations for Assets Installed Prior to 2022

Subaccount	Subaccount Description	District #	Original Cost[1]	2022 Accum Depr[2]	OCLD	Depr Rate[3]	Depreciable Life (yrs)	Annual Depr	Years Depreciated	Avg Yr Acquired	% Depr	RC Index[4]	OC Index[4]	Esc Factor	RCN	RCNLD
301000	Organization	1540	$ 102,407	$ 104	$ 102,303	0.00%	0.0	$ -	n/a	n/a	n/a	1	1	1.00	$ 102,407	$ 102,303
302000	Franchises	1540	27,696	-	27,696	0.00%	0.0	-	n/a	n/a	n/a	1	1	1.00	27,696	27,696
302100	CA Seaside Franchise	1540	-	15,333	(15,333)	0.00%	0.0	-	n/a	n/a	n/a	1	1	1.00	-	(15,333)
303200	Land & Land Rights-Supply	1540	1,263,238	152	1,263,086	0.00%	0.0	-	n/a	n/a	n/a	1	1	1.00	1,263,238	1,263,086
303300	Land & Land Rights-Pumping	1540	47,675	-	47,675	0.00%	0.0	-	n/a	n/a	n/a	1	1	1.00	47,675	47,675
303400	Land & Land Rights-Treatmen	1540	490,966	-	490,966	0.00%	0.0	-	n/a	n/a	n/a	1	1	1.00	490,966	490,966
303500	Land & Land Rights-T&D	1540	282,403	13,123	269,280	0.00%	0.0	-	n/a	n/a	n/a	1	1	1.00	282,403	269,280
303600	Land & Land Rights-General	1540	143,729	44,237	99,492	0.00%	0.0	-	n/a	n/a	n/a	1	1	1.00	143,729	99,492
304100	Struct & Imp-Supply	1540	6,784,855	1,440,438	5,344,417	2.33%	42.9	173,896	9.1	2013	21.2%	916	605	1.51	10,272,607	8,091,712
304200	Struct & Imp-Pumping	1540	6,503,446	1,660,176	4,843,270	3.28%	30.5	234,644	7.8	2014	25.5%	916	607	1.51	9,814,096	7,308,789
304300	Struct & Imp-Treatment	1540	10,089,805	5,776,825	4,312,980	1.68%	59.5	186,460	34.1	1988	57.3%	916	266	3.44	34,745,344	14,852,218
304400	Struct & Imp-T&D	1540	944,359	359,789	584,570	4.32%	23.1	44,876	8.8	2013	38.1%	916	605	1.51	1,429,806	885,068
304500	Struct & Imp-General	1540	2,190,992	326,777	1,864,215	2.81%	35.6	64,645	5.3	2017	14.9%	916	668	1.37	3,004,414	2,556,319
304600	Struct & Imp-Offices	1540	229,864	48,389	181,475	5.51%	18.1	13,299	3.8	2018	21.1%	916	684	1.34	307,830	243,028
304700	Struct & Imp-Store,Shop,Gar	1540	166,314	52,846	113,468	4.65%	21.5	8,120	6.8	2015	31.8%	916	630	1.45	241,815	164,979
304800	Struct & Imp-Misc	1540	115,948	37,488	78,460	6.45%	15.5	7,479	5.0	2017	32.3%	916	668	1.37	158,995	107,589
305000	Collect & Impound Reservoirs	1540	1,815,478	1,861,188	(45,710)	7.35%	13.6	133,438	13.9	2008	102.5%	731	431	1.70	3,079,152	(77,526)
306000	Lake, River & Other Intakes	1540	64,403	16,424	47,979	2.31%	43.3	1,488	11.0	2011	25.5%	731	458	1.60	102,792	76,578
307000	Wells & Springs	1540	14,070,817	7,513,370	6,557,447	2.28%	43.9	384,978	23.4	1999	53.4%	731	323	2.26	31,844,481	14,840,539
309000	Supply Mains	1540	5,098,511	2,389,573	2,708,938	1.36%	73.5	86,675	34.5	1988	46.9%	1,000	283	3.53	18,015,940	9,572,220
310000	Power Generation Equip	1540	2,687,233	1,018,248	1,668,985	5.57%	18.0	164,647	6.8	2015	37.9%	1,593	928	1.72	4,612,890	2,864,971
311200	Pump Eqp Electric	1540	21,218,338	7,621,136	13,597,202	4.19%	23.9	977,953	8.6	2013	35.9%	1,593	800	1.99	42,251,016	27,075,429
311300	Pump Eqp Diesel	1540	62,926	25,818	37,108	4.28%	23.4	2,963	9.6	2012	41.0%	1,593	780	2.04	128,514	75,787
311400	Pump Eqp Hydraulic	1540	195,421	58,255	137,166	4.12%	24.3	8,856	7.2	2015	29.8%	916	630	1.45	284,136	199,435
311500	Pump Eqp Other	1540	341,657	107,686	233,971	4.10%	24.4	15,409	7.7	2014	31.5%	916	607	1.51	515,581	353,076
311540	Pumping Equipment TD	1540	-	-	-	0.00%	0.0	-	0.0	2022	0.0%	916	916	1.00	-	-
320100	WT Equip Non-Media	1540	21,011,832	12,082,272	8,929,560	2.37%	42.2	547,778	24.3	1998	57.5%	1,057	396	2.67	56,084,612	23,834,709
320200	WT Equip Filter Media	1540	563,670	374,339	189,331	4.63%	21.6	28,708	14.3	2008	66.4%	1,057	556	1.90	1,071,581	359,932
330000	Dist Reservoirs & Standpipes	1540	17,947,514	6,254,490	11,693,024	1.64%	61.0	367,924	21.2	2001	34.8%	1,113	270	4.12	73,983,641	48,201,244
330200	Ground Level Tanks	1540	9,654,002	1,081,466	8,572,536	1.66%	60.2	200,321	6.7	2015	11.2%	1,656	1131	1.46	14,135,303	12,551,829
331001	T&D Mains	1540	113,991	38,890	75,101	1.98%	50.5	3,611	17.2	2005	34.1%	1,000	429	2.33	265,713	175,061
331100	TD Mains 4in & Less	1540	10,732,830	3,135,940	7,596,890	1.98%	50.5	340,016	14.8	2007	29.2%	1,000	488	2.05	21,993,504	15,567,397
331200	TD Mains 6in to 8in	1540	70,947,332	25,111,374	45,835,958	1.97%	50.8	2,236,260	18.0	2004	35.4%	1,000	383	2.61	185,241,076	119,676,130
331300	TD Mains 10in to 16in	1540	34,164,014	17,486,320	16,677,694	1.96%	51.0	1,071,383	26.1	1996	51.2%	1,000	323	3.10	105,770,941	51,633,728
331400	TD Mains 18in & Grtr	1540	68,987,166	9,278,506	59,708,660	2.00%	50.0	2,207,589	6.7	2015	13.4%	1,000	716	1.40	96,350,791	83,391,983
333000	Services	1540	33,671,929	16,811,274	16,860,655	2.87%	34.8	1,691,173	17.4	2005	49.9%	766	408	1.88	63,217,396	31,655,053
334100	Meters	1540	13,494,953	6,900,008	6,594,945	5.92%	16.9	958,681	8.6	2013	51.1%	803	380	2.11	28,516,966	13,936,160
334200	Meter Installations	1540	-	-	-	0.00%	0.0	-	0.0	2022	0.0%	803	803	1.00	-	-
334300	Meter Vaults	1540	755,333	106,912	648,421	3.65%	27.4	30,327	3.9	2018	14.2%	803	434	1.85	1,397,540	1,199,729
335000	Hydrants	1540	11,123,737	4,634,315	6,489,422	2.63%	38.0	453,459	15.8	2006	41.7%	1,312	617	2.13	23,653,716	13,799,224
339100	Other P/E-Intangible	1540	33,897	(33,897)	67,794	0.00%	0.0	-	0.0	2022	-100.0%	1	1	1.00	33,897	67,794
339200	Other P/E-Supply	1540	124,290	58,154	66,136	3.33%	30.0	4,139	14.1	2008	46.8%	731	431	1.70	210,803	112,171
339500	Other P/E-TD	1540	1,964,332	803,097	1,161,235	14.29%	7.0	280,703	2.9	2019	40.9%	1,000	810	1.23	2,425,101	1,433,623
339600	Other P/E-CPS	1540	21,329	9,143	12,186	6.67%	15.0	1,423	6.4	2016	42.9%	1	1	1.00	21,329	12,186
340100	Office Furniture & Equip	1540	340,761	119,327	221,434	4.76%	21.0	16,220	7.4	2015	35.0%	1,241	843	1.47	501,642	325,978
340200	Comp & Periph Equip	1540	773,461	423,999	349,462	12.50%	8.0	96,683	4.4	2018	54.8%	1,241	930	1.33	1,032,113	466,325
340300	Computer Software	1540	7,107	948	6,159	6.67%	15.0	474	2.0	2020	13.3%	1,241	1067	1.16	8,266	7,163
340310	Main Frame Computer Softwa	1540	-	1,212	(1,212)	6.67%	15.0	-	0.0	2022	0.0%	1,241	1241	1.00	-	(1,212)
340500	Other Office Equipment	1540	2,019	1,213	806	5.00%	20.0	101	12.0	2010	60.1%	1,241	683	1.82	3,668	1,465
341100	Trans Equip Lt Duty Trks	1540	127,094	20,659	106,435	8.37%	11.9	9,574	1.9	2020	16.3%	1	1	1.00	127,094	106,435
341200	Trans Equip Hvy Duty Trks	1540	141,145	23,703	117,442	8.37%	11.9	10,632	2.0	2020	16.8%	1	1	1.00	141,145	117,442
341300	Trans Equip Autos	1540	2,625	-	2,625	0.00%	0.0	-	0.0	2022	0.0%	1	1	1.00	2,625	2,625
341400	Trans Equip Other	1540	128,920	58,294	70,626	12.08%	8.3	14,016	3.7	2018	45.2%	1,241	930	1.33	172,032	94,244
343000	Tools,Shop,Garage Equip	1540	548,474	153,475	394,999	5.00%	20.0	27,424	5.6	2016	28.0%	1,241	877	1.42	776,119	558,943
344000	Laboratory Equipment	1540	177,138	68,180	108,958	5.00%	20.0	8,857	7.7	2014	38.5%	1,241	812	1.53	270,724	166,524
345000	Power Operated Equipment	1540	243,193	25,970	217,223	3.84%	26.0	7,938	2.8	2019	10.7%	1,241	985	1.26	306,398	273,679
346100	Comm Equip Non-Telephone	1540	404,335	125,822	278,513	10.00%	10.0	40,434	3.1	2019	31.1%	1,241	985	1.26	509,421	350,898
346190	Remote Control & Instrument	1540	2,732,720	886,852	1,845,868	10.00%	10.0	273,272	3.2	2019	32.5%	1,241	985	1.26	3,442,950	2,325,606
346200	Comm Equip Telephone	1540	49,304	14,458	34,846	10.00%	10.0	4,930	2.9	2019	29.3%	1,241	985	1.26	62,118	43,903
347000	Misc Equipment	1540	140,427	35,021	105,406	5.88%	17.0	8,257	4.2	2018	24.9%	1,241	930	1.33	187,387	140,654
	Totals		$ 376,069,355	$ 136,479,111	$ 239,590,244			$ 13,452,131							$ 845,085,136	$ 514,064,000
	Total (Excluding Land)		$ 373,711,241	$ 136,406,162	$ 237,305,079										$ 842,727,022	$ 511,778,835

[1]Source: FILE: CAW Response MPWMD 01 Q001-Q003 Attachment 1.xlsx, Plant in Service Beg. Of Year tab.

[2]Source: 2020 Depreciation Rate Study for California American Water, Appendix A, p. 4 of 7.

[3]Source: 2020 Depreciation Rate Study for California American Water, Appendix B, p. 5 of 8 and 2020 Depreciation Rate Study for California American Water, Appendix A, p. 4 of 7.

[4]Source: Handy-Whitman Index - Cost Trends of Water Utilities in the Pacific Region.

Exhibit 32: Capital Expenditures for the Monterey Water System and Central Satellites (2022)

California American Water
Summary SCEP Report - Pivot Table On WS9 CH07_RO_Forecast_101
All Districts - 2022 General Rate Case

District #	1540
District Name	Monterey County District

Row Labels	Project Description	Sum of Prior	Sum of 2022	Sum of 2023	Sum of 2024	Sum of 2025	Sum of All
CAPRPC	Mains - Unscheduled	101,998	498,822	546,449	571,078	643,505	2,361,853
CAPRPE	Hydrants/Valves/Manholes - New	-	-	-	-	-	-
CAPRPF	Hydrants/Valves/Manholes - Replaced	83,221	462,056	460,324	448,566	453,379	1,907,546
CAPRPG	Services and Laterals - New	113,020	-	-	-	-	113,020
CAPRPH	Services and Laterals - Replaced	193,878	1,448,770	1,443,339	1,475,927	1,523,937	6,085,852
CAPRPJ	Meters - Replaced	195,347	1,324,562	1,319,596	2,049,899	2,123,080	7,012,483
CAPRPL	SCADA Equipment and Systems	6,856	32,791	34,648	35,692	38,025	148,012
CAPRPM	Security Equipment and Systems	31,893	99,367	98,994	99,360	103,351	432,965
CAPRPN	Offices and Operations Center	1,630	4,968	9,899	9,936	10,335	36,769
CAPRPO	Vehicles	-	234,925	653,637	308,198	97,501	1,294,261
CAPRPP	Tools and Equipment	-	83,468	85,135	84,890	87,751	341,244
CAPRPQ	Plant Facilities and Equipment	133,170	378,588	386,078	385,863	401,703	1,685,403
D154001	Projects Funded by Others	128,337	453,150	453,150	453,150	453,150	1,940,937
I15400097	MRY-Interconnect RR, HH, Bishop	580,592	681,494	426,762	472,570	1,432,919	3,594,337
I15400104	MRY-Advanced Metering Infrastructure	293,191	148,103	-	-	-	441,294
I15400108	MRY-Standby Power/Emergency Generators (PSPS) Phase 2 Gen. Plugs	260,717	364,049	-	-	-	624,766
I15400109	MRY-Los Padres Dam Facilities Improvements	226,918	55,578	-	216,628	-	499,124
I15400110	MRY-Begonia Iron Removal Plant Improvements	2,698,983	97,356	-	-	-	2,796,339
I15400117	MRY-Los Padres Dam DSOD Improvements	472,383	50,978	101,591	-	-	624,953
I15400120	MRY-Booster Station Rehab Program (2018-2020)	-	29,207	-	-	-	29,207
I15400122	MRY-Los Padres Dam NMFS MOA Requirements	799,907	764,200	1,551,079	541,570	546,640	4,203,395
I15400124	MRY-Huckleberry Hydropneumatic Tank Repic	731,894	194,713	-	-	-	926,606
I15400125	MRY-Main Replacement Program (2021-2023)	783,497	3,058,690	3,047,741	-	-	6,889,928
I15400126	MRY-Fire Protection Program (2021-2023)	35,076	367,043	365,729	-	-	767,847
I15400127	MRY-Pump Station Rehabilitation Program (2021-2023)	200,589	937,998	934,641	-	-	2,073,228
I15400128	MRY-SCADA Maintenance and Improvements Program (2021-2023)	833,202	389,425	387,965	-	-	1,610,593
I15400129	MRY-Tank Rehabilitation Program (2021-2023)	63,716	458,804	558,753	-	-	1,081,272
I15400130	MRY-Carmel Woods #1 and #2 Tank Replacement	-	-	221,583	216,628	1,311,935	1,750,146
I15400131	MRY-Well Rehabilitation Program (2021-2023)	128,838	999,172	833,049	-	-	1,961,059
I15400133	MRY-Phase 2 BIRP Improvements	-	555,782	1,551,079	866,511	-	2,973,372
I15400135	MRY-Arc Flash Mitigation	67,912	214,184	96,991	-	-	379,087
I15400136	MRY-Ambler Water Treatment Solids Residual Handling	-	389,047	465,324	595,727	-	1,450,097
I15400137	MRY-Del Rey Regulating Station	-	166,735	354,532	1,083,139	546,640	2,151,046
I15400138	MRY-Rancho Fiesta Tanks and Pump Station	-	166,735	686,906	541,570	1,093,279	2,488,490
I15400140	MRY-Standby Generator Improvement Program (2021-2023)	-	203,913	457,161	-	-	661,074
I15400141	MRY-New Carmel Valley Well	312,183	555,782	553,957	1,083,139	1,093,279	3,598,340
I15400142	MRY-Ralph Lane Interconnect	-	-	-	-	350,448	350,448
I15400143	MRY-Forest Lake Pump Station	1,061,758	1,849,771	-	-	-	2,911,529
I15490001	GAR-Garrapata Slide Recovery	1,745,377	292,069	-	-	-	2,037,446
I15400144	MRY-CRRDR Pipe Removal	-	-	-	-	-	-
I15400152	MRY-Los Padres Dam Outlet Modifications	272,582	500,204	664,748	1,083,139	-	2,520,673
I15400153	MRY-Eardley-Forest Lake Transmission Main Replacement	-	-	-	108,314	109,328	217,642
I15400154	MRY-BIRP Soundwall	-	-	-	108,314	218,656	326,970
I15400155	MRY-Carmel Valley Transmission Main Improvement	-	-	-	270,785	273,320	544,105
I15400156	MRY-Los Padres Dam Facilities Improvements	-	-	-	108,314	109,328	217,642
I15400157	MRY-Main Replacement Program (2024-2026)	-	-	-	4,432,205	5,083,748	9,515,954
I15400158	MRY-Fire Protection Program (2024-2026)	-	-	-	389,930	393,581	783,511
I15400159	MRY-Pump Station Rehabilitation Program (2024-2026)	-	-	-	996,488	1,005,817	2,002,305
I15400160	MRY-SCADA Maintenance and Improvements Program (2024-2026)	-	-	-	567,083	573,168	1,140,251
I15400161	MRY-Tank Rehabilitation Program (2024-2026)	-	-	-	1,624,709	1,639,919	3,264,628
I15400162	MRY-Well Rahabilitation Program (2024-2026)	-	-	-	2,166,278	1,639,919	3,806,197
I15400163	MRY-Standby Generator Improvement Program (2024-2026)	-	-	-	406,177	409,980	816,157
I15400164	MRY-Well Installation and Replacement Program (2024-2026)	-	-	-	1,516,395	1,530,591	3,046,986
I15400165	MRY-Tank Installation and Replacement Program (2024-2026)	-	-	-	1,516,395	1,530,591	3,046,986
I15480014	TOR-New Well #4	1,122,541	883,996	-	-	-	2,006,536
Grand Total		**13,681,204**	**19,396,494**	**18,750,844**	**26,834,566**	**26,828,800**	**105,491,908**

Exhibit 33: Indication of Economic Obsolescence Based on Capitalized Income Loss Method

Line No.	Description	Asset Approach Amounts[1]	Required Return[2]	Amount	Reference
1	Tangible Property and Improvements to the Realty (Pre 2022)	$ 487,725			Table 5-13.
2	Tangible Property and Improvements to the Realty (2022)	20,099			Table 5-13.
3	Real Estate	20,378			Table 5-13.
4	Intangible Assets	120,745			
5	Subtotal Tangible and Intangible Plant (in $000s)	$ 648,948	8.0%	$ 51,916	Calculation
6	Required Annual Return on Total Operating Assets			51,916	Line 5
7	Normalized Debt Free Net Cash Flows[3]			29,873	Exhibit 34
8	Annual Economic Obsolescence			(22,043)	Line 7 - Line 6
9	Capitalization Rate[2]			8.0%	
10	Capitalized Income Loss			$ (275,536)	Line 8 / Line 9
11	Estimated Economic Obsolescence % (rounded)			42.0%	Line 10 / Line 5

[1]Amounts shown in $000s.

[2]Discount rate less 0% long-term growth rate. This growth rate was used since additional assets would be requred to increase rate base and net cash flows.

[3]Debt free net cash flow excludes annual capital expenses. This adjustment allows for comparison with the required return on tangible assets.

Exhibit 34: Normalized Year for Economic Obsolescence Calculation

Line	Description	Cal-Am Estimated FY 2022	Cal-Am Projected FY 2023	Normalized Year	Description
1	**Historical an Projected Earnings of Target Company**				
2	Operating Revenues				
3	Metered Revenues	$ 90,023.1	$ 90,023.1	$ 90,023.1	Average of 2022 Estimated and 2023 Projected Results.
4	Other Revenues	234.1	235.3	234.7	Average of 2022 Estimated and 2023 Projected Results.
5	Total Operating Revenues	$ 90,257.2	$ 90,258.4	$ 90,257.8	Calculation
6	Operation & Maintenance Expenses				
7	Labor	$ 9,756.2	$ 10,056.5	$ 9,906.4	Average of 2022 Estimated and 2023 Projected Results.
8	Purchased Water	13,399.6	13,429.2	13,414.4	Average of 2022 Estimated and 2023 Projected Results.
9	Purchased Power	2,870.7	2,870.7	2,870.7	Average of 2022 Estimated and 2023 Projected Results.
10	Chemicals	543.3	639.9	591.6	Average of 2022 Estimated and 2023 Projected Results.
11	Operation Expense	1,643.1	1,707.1	1,675.1	Average of 2022 Estimated and 2023 Projected Results.
12	Maintenance (Excl Amort Tank Painting)	2,616.2	2,718.2	2,667.2	Average of 2022 Estimated and 2023 Projected Results.
13	Amortization of Tank Painting	602.6	725.2	663.9	Average of 2022 Estimated and 2023 Projected Results.
14	Customer Accounting	426.9	443.6	435.3	Average of 2022 Estimated and 2023 Projected Results.
15	Uncollectible Expense	469.9	469.9	469.9	Average of 2022 Estimated and 2023 Projected Results.
16	Insurance	614.1	646.1	630.1	Average of 2022 Estimated and 2023 Projected Results.
17	Pensions and Benefits	2,492.3	2,281.0	2,386.7	Average of 2022 Estimated and 2023 Projected Results.
18	Regulatory Expenses	-	-	-	Average of 2022 Estimated and 2023 Projected Results.
19	Rents	739.0	767.8	753.4	Average of 2022 Estimated and 2023 Projected Results.
20	Other Administrative & General	3,582.9	3,803.1	3,693.0	Average of 2022 Estimated and 2023 Projected Results.
21	Service Company Costs	2,933.0	3,128.3	3,030.7	Average of 2022 Estimated and 2023 Projected Results.
22	Citizens Acquisition Premium	868.5	873.0	870.8	Average of 2022 Estimated and 2023 Projected Results.
23	General Office Return on Rate Base	1,270.1	1,489.3	1,379.7	Average of 2022 Estimated and 2023 Projected Results.
24	Return on and of Utility Plant Acq Adjustment	-	-	-	Average of 2022 Estimated and 2023 Projected Results.
25	San Clemente Dam	6,245.4	6,245.4	6,245.4	Average of 2022 Estimated and 2023 Projected Results.
26	Total Operations & Maintenance Expenses	$ 51,073.8	$ 52,294.3	$ 51,684.1	Calculation
27	General Taxes	$ 3,492.4	$ 3,795.7	$ 3,644.1	Average of 2022 Estimated and 2023 Projected Results.
28	EBITDA	$ 35,691.0	$ 34,168.4	$ 34,929.7	Calculation
29	Depreciation Expense	10,393.2	11,061.7	10,727.5	Average of 2022 Estimated and 2023 Projected Results.
30	EBIT	$ 25,297.8	$ 23,106.7	$ 24,202.2	Calculation
31	Taxes	4,327.7	3,713.1	4,020.4	Average Tax Rate
32	Net Income Before Interest Expense	$ 20,970.1	$ 19,393.6	$ 20,181.8	Calculation
33	Interest Expense (Rate Making)	6,236.0	6,548.1	6,392.1	Average of 2022 Estimated and 2023 Projected Results.
34	Net Income	$ 14,734.1	$ 12,845.5	$ 13,789.8	Calculation

Estimation of Net Cash Flow for the Normalized Year

Line	Description	Cal-Am Estimated FY 2022	Cal-Am Projected FY 2023	Normalized Year	Description
1	**Cash Flow Calculations**[1]				
2	Net Income Before Interest Expense:	$ 20,970.1	$ 19,393.6	$ 20,181.8	From table above.
3	Plus: Depreciation and Amortization Expense	10,393.2	11,061.7	10,727.5	From table above.
4	Plus: San Clemente Dam Amortization Expense	6,245.4	6,245.4	6,245.4	From table above.
5	Less: Revenue Recovery of San Clemente Dam Expense	(6,245.4)	(6,245.4)	(6,245.4)	From table above.
6	Plus: Citizens Acquisition Premium Expense	868.5	873.0	870.8	From table above.
7	Less: Revenue Recovery for Citizens Amortization	(868.5)	(873.0)	(870.8)	From table above.
8	Plus: Return on and of UPAA	-	-	-	From table above.
9	Less: Revenue Recovery for UPAA	-	-	-	From table above.
10	Less: Working Capital Additions	(1,439.6)	(1,036.4)	(1,036.4)	From table above.
11	Net Cash Flow Before Capital Expenditures	29,923.7	29,418.9	29,872.9	Calculation
12	Less: Annual Capital Expenditures	(20,353.4)	(17,965.1)	(20,046.5)	Based on historical CAPEX as % of Depreciation
13	Net Cash Flow	$ 9,570.3	$ 11,453.8	$ 9,826.4	Calculation

Amounts shown in $1,000s. Fiscal Year Ending December 31st

[1]Adjustments for both expenses and revenues associated with the San Clemente Dam, Citizens Acquisition Premium, and Utility Plant Acquisition Adjustments (UPAA) were made to address these revenues and expenses separately for purposes of estimating net cash flows. Consideration of these items were addressed separately as asset additions as part of the Monterey Water System valuation.

Exhibit 35: Market Transactions Involving Regulatory Incentives

Sales Date	Seller	Buyer	State	Price ($000s)	Adj Price / Connection	Price / NBV	Price / RCNLD	Price / Sales	Price / EBITDA
4/1/2015	North Maine Utility - Village of Glenvi	Aqua Illinois	IL	$ 18,590	$ 5,282	1.47	2.59	2.30	21.66
11/10/2016	Geyserville Water Works	California American Water	CA	1,415	5,726	1.44	0.20	5.61	12.79
12/1/2016	Meadowbrook Water Company	California American Water	CA	4,000	3,030	1.44	0.18	4.88	22.45
12/29/2016	City of Scranton	Pennsylvania-American Water	PA	195,000	8,033	2.39		8.66	19.67
10/26/2017	City of Mckeesport	Pennsylvania-American Water	PA	159,000	15,626	2.16	1.02	12.31	25.22
5/1/2018	Sundale W & WW Systems	American Water	IL	2,000	1,270	2.63	0.69	3.84	34.68
2/6/2018	Village of Manteno	Aqua Illinois	IL	25,000	7,940	2.97	0.92	7.71	11.92
7/12/2018	Limerick Township	Aqua Pennsylvania	PA	75,100	16,764	2.08	0.85	19.26	35.32
8/15/2018	Lake Station Water Department	Indiana American Water	IN	20,680	7,282		1.02	10.60	30.12
4/15/2019	Mesa-Crest Water Company	Liberty Utilities (Park Water) Corp.	CA	2,600	4,417	8.02	0.34	1.52	16.12
4/25/2019	Rio Plaza Water Company	California American Water	CA	1,750	4,054	3.99	0.68	3.98	14.37
8/5/2019	Hillview Water Company	California American Water	CA	7,470	5,969	0.36	0.19	3.04	11.53
10/24/2019	Cheltenham Township	Aqua Pennsylvania	PA	50,250	5,778	3.26	1.07	5.49	11.50
12/19/2019	Fruitridge Vista Water Company	California American Water	CA	22,750	5,619	1.04	0.68	6.48	19.54
5/21/2020	East Norriton Township	Aqua Pennsylvania	PA	21,000	4,978	14.63	0.76	6.55	28.71
9/23/2020	City of Jerseyville	Illinois-American Water	IL	43,250	5,620	1.69	0.71	9.89	19.23
8/5/2021	East Pasadena Water Co	California American Water	CA	34,000	11,833	5.86	0.61	10.73	10.24
1/31/2022	City of Bolivar	Liberty Utilities	MO	23,500	2,553	1.69	1.12	4.74	8.39
4/14/2022	City of York	Pennsylvania-American Water	PA	235,000	6,915	2.29	1.18	12.84	9.67
7/29/2022	East Whiteland Township	Aqua Pennsylvania	PA	54,930	14,137	1.64	0.92	13.10	44.95
8/30/2022	Bellflower Municipal	California American Water	CA	17,000	9,329	2.11	0.81	9.19	14.98
12/1/2022	City of Montebello	San Gabriel Valley Water Company	CA	15,857	9,610	17.12	1.00	6.12	51.83
	Mean			46,825	7,353	3.82	0.84	7.67	21.59
	Median			21,875	**5,874**	**2.16**	**0.81**	**6.51**	**19.39**

Exhibit 36: Market Transactions Without Regulatory Incentives

Sales Date	Seller	Buyer	State	Price ($000s)	Adj Price / Connection	Price / OCLD	Price / RCNLD	Price / Sales	Price / EBITDA
2/14/2012	Ohio American Water Company	Aqua Ohio, Inc.	OH	$ 120,244	$ 3,026	0.95		3.17	12.99
4/20/2012	Aqua Utilities, Inc.	NY American Water Works Co.	NY	71,040	2,029	1.17		2.27	6.98
12/12/2012	Valencia Water Company	Castaic Lake Water Agency	CA	82,794	4,048	0.74	0.28	3.70	9.05
3/31/2013	Crystal River Utilities, Inc	Florida Governmental Utility Authority	FL	29,726	2,814	1.30		2.93	9.39
8/4/2015	Captain's Cove Utility Company	Aqua Utilities	VA	2,643	2,837	0.78		2.74	6.02
12/17/2015	Park, Apple Valley & Mtn Water	Liberty Utilities Company	CA, MT	329,500	6,142	1.40		4.65	6.65
4/3/2017	Shorelands Water Co. Inc.	NJ American Water	NJ	51,469	5,882	2.48		4.47	19.16
4/12/2017	The Avon Water Company	Connecticut Water Service Inc	CT	39,100	10,289	1.48		9.11	18.13
4/14/2019	Aqua Virginia Inc. - Indian River	City of Chesapeake	VA	1,932	4,607	1.53		7.19	
6/13/2019	Pennsylvania Utilities	Utilities, Inc.	PA	3,141	3,173	1.00		5.16	13.90
8/15/2019	River Road Public Service District	Morgantown Utility Board	WV	2,616	3,893	0.69		5.21	12.59
9/24/2019	Heritage Hills Water System	SUEZ	NY	5,200	2,266	1.09		3.57	15.93
11/6/2019	H2O Systems, Inc.	Magnolia Water	LA	16,047	1,984	2.00		3.93	15.44
1/24/2020	City of Campbell	Aqua Ohio, Inc.	OH	7,500	2,751	1.49		3.03	8.93
3/13/2020	Mo-Dad Utilities, LLC	Magnolia Water	LA	10,910	1,479	1.44		1.91	7.58
3/26/2020	Rainier View Water Company	Washington Water Service Company (CWSG)	WA	37,600	2,431	1.10		5.22	27.27
1/14/2021	The Commons Water Supply, Inc	Aqua Texas, Inc.	TX	4,000	4,311	0.59	0.34	5.91	23.95
12/16/2021	NY American Water Company	Liberty Utilities	NY	808,929	6,638	1.58		6.73	23.80
2/4/2022	Michigan-American Water	Triton Utilities, Inc (Ullico)	MI	6,000	1,230				
8/11/2022	Borough of Bound Brook	NJ American Water	NJ	5,000	1,729			2.67	8.68
	Mean			81,769	3,678	1.27	0.31	4.40	13.69
	Median			13,478	**2,932**	**1.23**	**0.31**	**3.93**	**12.79**

Exhibit 37: Market Transactions Involving Regulatory Incentives

Description	Price / Conn	Price / NBV	Price / Sales	Price / EBITDA	Amount
Price Multiples for Transactions Incentivized by PUCs (Median)[1]	5,874	2.16	6.51	19.39	
Price Multiples for Transactions Not Incentivized by PUCs (Median)[2]	2,932	1.23	3.93	12.79	Avg
Discount for Non-Incentivized Transactions	50.1%	42.8%	39.6%	34.0%	41.6%
Price to RCNLD (Median) for Incentivized Transactions					0.81
Average Discount For Non-Incentivized Transactions Compared to Incentivized Transactions					41.6%
Price to RCNLD Indication for Non-Incentivized Transactions					0.47
Economic Obsolescence Indication					53%

[1]See Exhibit 35 for details.

[2]See Exhibit 36 for details.

Exhibit 38: Economic Obsolescence Summary

Analysis Approach	Economic Obsolescence Indication (%)	Exhibit Reference
Capitalization of Income Loss	42.0%	Exhibit 33
Transactions with No PUC Incentives	53.0%	Exhibit 37
Economic Obsolescence Conclusion (Rounded)	**48.0%**	

Exhibit 39: Calculation Details for Present Value of Tank Painting Balancing Account

Description	Year End Balance 2022
40 - Monterey	
Aguajito 1 Tank Painting Interior and Exterior	$ 1,493
Aguajito 1 Comprehensive Tank Inspection	$ 1,912
Aguajito 2 Comprehensive Tank Inspection	$ 2,790
Aguajito 2 Tank Painting Interior and Exterior	$ -
Aguajito 2 Anniversary Inspect	$ -
Airways, Lower Comprehensive Tank Inspection	$ 1,912
Airways, Lower Comprehensive Tank Inspection	$ -
Airways, Upper Tank Painting Interior and Exterior	$ -
Airways, Upper Anniversary Inspect	$ -
Airways, Upper Comprehensive Tank Inspection	$ 1,021
Airways, Upper Comprehensive Tank Inspection	$ -
Boots Tank Painting Interior and Exterior	$ 57,959
Boots Tank Painting Interior and Exterior	$ 17,239
Boots Comprehensive Tank Inspection	$ -
Boyd Comprehensive Tank Inspection	$ 900
Boyd Comprehensive Tank Inspection	$ -
C.V. Clearwell A Comprehensive Tank Inspection	$ 2,343
C.V. Clearwell A Comprehensive Tank Inspection	$ -
C.V. Clearwell B Comprehensive Tank Inspection	$ 2,343
C.V. Clearwell B Comprehensive Tank Inspection	$ -
Carmel Valley Ranch Comprehensive Tank Inspection	$ 2,158
Carmel Valley Ranch Comprehensive Tank Inspection	$ -
Carmel Views Tank Painting Interior and Exterior	$ 855
Carmel Views Comprehensive Tank Inspection	$ 2,790
Carmel Woods 1 Comprehensive Tank Inspection	$ 900
Carmel Woods 1 Comprehensive Tank Inspection	$ -
Carmel Woods 2 Comprehensive Tank Inspection	$ 900
Carmel Woods 2 Comprehensive Tank Inspection	$ -
Carmel Woods 3 Comprehensive Tank Inspection	$ 2,790
Carola 1 Tank Painting Interior and Exterior	$ 115,808
Carola 1 Anniversary Inspect	$ 2,015
Carola 2 Tank Painting Interior and Exterior	$ 14,307
Carola 2 Comprehensive Tank Inspection	$ -
Chualar 1 Comprehensive Tank Inspection	$ -
Corral (Middle Tank) Comprehensive Tank Inspection	$ -
Corte Cordillera 1 Comprehensive Tank Inspection	$ -
Corte Cordillera 2 Comprehensive Tank Inspection	$ -
Country Club Heights Comprehensive Tank Inspection	$ 900
Country Club Heights Comprehensive Tank Inspection	$ -
Country Club Heights Tank Painting Interior and Exterior	$ -
Country Club Heights Comprehensive Tank Inspection	$ -
Crest Canyon Comprehensive Tank Inspection	$ 900
Crest Canyon Comprehensive Tank Inspection	$ -
Cypress 2 Comprehensive Tank Inspection	$ -
Cypress 2 Touch up Tank Painting Interior and Exterior	$ -
Del Mesa Comprehensive Tank Inspection	$ 900
Del Mesa Comprehensive Tank Inspection	$ -
Eddy Rd (Vista Hermosa) Comprehensive Tank Inspection	$ 1,912
Eddy Rd (Vista Hermosa) Comprehensive Tank Inspection	$ -
Estrella D'Oro 1, Upper Tank Painting Interior and Exterior	$ 12,987
Estrella D'Oro 1, Upper Tank Painting Interior and Exterior	$ 56,425
Estrella D'Oro 1, Upper Comprehensive Tank Inspection	$ -
Estrella D'Oro 2, Upper Tank Painting Interior and Exterior	$ 58,745
Estrella D'Oro 2, Upper Anniversary Inspect	$ 365
Estrella D'Oro 2, Upper Comprehensive Tank Inspection	$ -
Estrella D'Oro, Lower Tank Painting Interior and Exterior	$ 59,380
Estrella D'Oro, Lower Tank Painting Interior and Exterior	$ 20,451
Estrella D'Oro, Lower Comprehensive Tank Inspection	$ -
Fairways 1 Tank Painting Interior and Exterior	$ -
Fairways 1 Anniversary Inspect	$ -
Fairways 2 Comprehensive Tank Inspection	$ 1,068
Fairways 2 Tank Painting Interior and Exterior	$ -
Fairways 2 Anniversary Inspect	$ -
Fairways 3 Comprehensive Tank Inspection	$ 1,021
Fairways 3 Tank Painting Interior and Exterior	$ -
Fairways 3 Anniversary Inspect	$ -
Forest Lake 1 Comprehensive Tank Inspection	$ 900
Forest Lake 1 Tank Painting Interior and Exterior	$ -
Forest Lake 1 Anniversary Inspect	$ -
Forest Lake 2 Tank Painting Interior and Exterior	$ 208,446
Forest Lake 2 Comprehensive Tank Inspection	$ -
Forest Lake 3 Comprehensive Tank Inspection	$ 3,870
Hidden Hills Clearwell 1 Comprehensive Tank Inspection	$ 2,790
Hidden Hills Clearwell 2 Comprehensive Tank Inspection	$ 2,790
High Meadows 1 Tank Painting Interior and Exterior	$ 87,133
High Meadows 1 Tank Painting Interior and Exterior	$ 38,422
High Meadows 1 Comprehensive Tank Inspection	$ -
Hilby 2 Comprehensive Tank Inspection	$ 520
Hilby 2 Tank Painting Interior and Exterior	$ 435,067
Hilby 2 Annivesary Inspect	$ 4,500
Hilby 1 Comprehensive Tank Inspection	$ 520
Hilby 1 Tank Painting Interior and Exterior	$ 608,402
Hilby 1 Annivesary Inspect	$ 4,500
Huckleberry 2 Tank Painting Interior and Exterior	$ 16,707
Huckleberry 2 Tank Painting Interior and Exterior	$ 146,348
Huckleberry 2 Comprehensive Tank Inspection	$ -
Huckleberry 3 Comprehensive Tank Inspection	$ -
Los Tulares, Lower Tank Painting Interior and Exterior	$ 10,712
Los Tulares, Lower Comprehensive Tank Inspection	$ 2,790
Los Tulares, Upper Comprehensive Tank Inspection	$ 1,912
Los Tulares, Upper Comprehensive Tank Inspection	$ -

Description	Year End Balance 2022
Markham, Lower Comprehensive Tank Inspection	$ 1,912
Markham, Lower Comprehensive Tank Inspection	$ -
Markham, Upper Comprehensive Tank Inspection	$ 1,912
Markham, Upper Comprehensive Tank Inspection	$ -
Mercurio Comprehensive Tank Inspection	$ 900
Mercurio Comprehensive Tank Inspection	$ -
Middle Canyon 2 Comprehensive Tank Inspection	$ 900
Middle Canyon 2, Lower Comprehensive Tank Inspection	$ -
Middle Canyon, Upper Comprehensive Tank Inspection	$ 1,912
Middle Canyon, Upper Comprehensive Tank Inspection	$ -
Middle Canyon, Upper Tank Painting Interior and Exterior	$ -
Middle Canyon, Upper Anniversary Inspect	$ -
Mt Devon Touch up Tank Painting Interior and Exterior	$ -
Mt Devon Comprehensive Tank Inspection	$ -
Ord Grove Comprehensive Tank Inspection	$ 900
Ord Grove Comprehensive Tank Inspection	$ -
Ord Grove Tank Painting Interior and Exterior	$ -
Ord Grove Anniversary Inspect	$ -
Pacific Meadows Comprehensive Tank Inspection	$ 3,150
Paseo Privado 1, Lower Comprehensive Tank Inspection	$ 3,150
Paseo Privado 2, Lower Comprehensive Tank Inspection	$ 3,150
Paseo Privado, Upper Comprehensive Tank Inspection	$ 1,912
Paseo Privado, Upper Comprehensive Tank Inspection	$ -
Pebble Beach 1 Comprehensive Tank Inspection	$ 900
Pebble Beach 1 Comprehensive Tank Inspection	$ -
Pebble Beach 2 Tank Painting Interior and Exterior	$ 182,500
Pebble Beach 2 Anniversary Inspect	$ 2,200
Pebble Beach 3 Tank Painting Interior and Exterior	$ 10,335
Pebble Beach 3 Comprehensive Tank Inspection	$ -
Presidio 1 Tank Painting Interior and Exterior	$ 182,500
Presidio 1 Anniversary Inspect	$ 2,200
Presidio 1 Comprehensive Tank Inspection	$ -
Presidio 2 Tank Painting Interior and Exterior	$ -
Presidio 2 Tank Painting Interior and Exterior	$ 4,963
Presidio 2 Comprehensive Tank Inspection	$ -
Quail Meadows Comprehensive Tank Inspection	$ 900
Quail Meadows Comprehensive Tank Inspection	$ -
Ralph Lane Comprehensive Tank Inspection	$ 2,790
Ranchitos 2 Tank Painting Interior and Exterior	$ 288,192
Ranchitos 2 Anniversary Inspect	$ 2,880
Rancho Fiesta, Lower Comprehensive Tank Inspection	$ 900
Rancho Fiesta, Lower Comprehensive Tank Inspection	$ -
Rancho Fiesta, Upper Comprehensive Tank Inspection	$ 2,790
Rimrock 3, Upper Comprehensive Tank Inspection	$ 2,790
Rio Vista 1 Comprehensive Tank Inspection	$ 2,158
Rio Vista 1 Tank Painting Interior and Exterior	$ -
Rio Vista 1 Anniversary Inspect	$ -
Rio Vista 2 Comprehensive Tank Inspection	$ 2,790
Rio Vista 2 Tank Painting Interior and Exterior	$ -
Rio Vista 2 Anniversary Inspect	$ -
Rio Vista 3 Comprehensive Tank Inspection	$ 900
Rio Vista 3 Comprehensive Tank Inspection	$ -
Rio Vista 3 Tank Painting Interior and Exterior	$ -
Rio Vista 3 Anniversary Inspect	$ -
Robles, Upper Comprehensive Tank Inspection	$ 1,912
Robles, Upper Comprehensive Tank Inspection	$ -
Robles, Lower Comprehensive Tank Inspection	$ 1,912
Robles, Lower Comprehensive Tank Inspection	$ -
Ryan Ranch Comprehensive Tank Inspection	$ 3,420
Segunda 1 Comprehensive Tank Inspection	$ -
Segunda 2 Comprehensive Tank Inspection	$ -
Spectacular Bid 1 Comprehensive Tank Inspection	$ -
Spectacular Bid 2 Comprehensive Tank Inspection	$ 1,912
Spectacular Bid 2 Comprehensive Tank Inspection	$ -
Stirrup Tank Painting Interior and Exterior	$ 91,924
Stirrup Comprehensive Tank Inspection	$ -
Tierra Grande, Lower Comprehensive Tank Inspection	$ 1,912
Tierra Grande, Lower Comprehensive Tank Inspection	$ -
Tierra Grande, Middle Comprehensive Tank Inspection	$ 1,912
Tierra Grande, Middle Comprehensive Tank Inspection	$ -
Tierra Grande, Upper Comprehensive Tank Inspection	$ 1,912
Tierra Grande, Upper Comprehensive Tank Inspection	$ -
Toyon 1, Lower Comprehensive Tank Inspection	$ 900
Toyon 1, Lower Comprehensive Tank Inspection	$ 1,912
Toyon 1, Lower Comprehensive Tank Inspection	$ -
Toyon 1, Upper Comprehensive Tank Inspection	$ -
Viejo Tank Painting Interior and Exterior	$ 2,491
Viejo Comprehensive Tank Inspection	$ 3,420
Vista Dorado Comprehensive Tank Inspection	$ 2,790
Walden, Lower Comprehensive Tank Inspection	$ 2,790
Walden, Lower Touch up Tank Painting Interior and Exterior	$ -
Withers 3 Comprehensive Tank Inspection	$ 900
Withers 3 Comprehensive Tank Inspection	$ -
Withers 4 Comprehensive Tank Inspection	$ 900
Withers 4 Comprehensive Tank Inspection	$ -
York Road Comprehensive Tank Inspection	$ 1,912
York Road Comprehensive Tank Inspection	$ -
MYER HYDRO Comprehensive Tank Inspection	$ -
UP ESTREALLA D'ORO HYDRO Comprehensive Tank Inspection	$ -
CHUALAR HDYRO Comprehensive Tank Inspection	$ -
CAROLA HYDRO Comprehensive Tank Inspection	$ -
HILBY HYDRO 1 Comprehensive Tank Inspection	$ -
HILBY HYDRO 2 Comprehensive Tank Inspection	$ -
RANCHO MAR MONTE HYDRO Comprehensive Tank Inspection	$ -
UP TIERRA GRANDE HYDRO Comprehensive Tank Inspection	$ -
UP LOS TULARES HYDRO Comprehensive Tank Inspection	$ -
RALPH LANE HYDRO Comprehensive Tank Inspection	$ -
CORTE CORDILLERA HYDRO Comprehensive Tank Inspection	$ -
UP MARKHAM HYDRO Comprehensive Tank Inspection	$ -
	2,861,133.00

Source: Cal-Am October 17, 2022 Response to PPWMD Data Request.

Exhibit 40: Calculation Details for Value of San Clemente Dam Balancing Account

Period	Beginning Balance for SCD, for AFUDC calc	Deferred tax liability	SCD, net of DTL	AFUDC Debt	AFUDC Equity	AFUDC Equity Tax Gross Up	Equals COC	Recovery billed during the month	Less Uncollectible Accounts	Equals Recovery Collected	Collected to recover COC	Amount to recognize as amortization	Net Increase to Reg Asset, Surcharges less than AFUDC calc	Deferred AFUDC Debt	Deferred AFUDC Equity	Deferred AFUDC Equity Tax Gross Up	Deferred Cumulative AFUDC Equity Tax Gross Up	Additional Expenditures during the month	Ending Balance W/O tax gross up	Ending Balance w/ tax gross up for SCD
Aug-17	83,626,773	27,583,783	56,042,990	146,380	246,493	170,080	561,953	891,528	5,015	886,513	561,953	324,560	-	-	-	-	3,535,173	(255,464)	83,046,740	86,581,922
Sep-17	83,046,749	27,583,783	55,462,966	144,214	244,516	168,716	557,446	999,334	5,621	993,712	557,446	436,266	-	-	-	-	3,535,173	7,580	82,618,062	86,153,236
Oct-17	82,618,062	27,583,783	55,034,280	143,086	242,604	167,397	553,087	780,272	4,389	775,883	553,087	222,796	-	-	-	-	3,535,173	(2,158)	82,393,109	85,928,282
Nov-17	82,393,109	27,583,783	54,809,326	146,480	248,359	171,368	566,207	398,298	2,240	396,058	396,058	-	170,149	44,018	74,834	51,497	3,586,670	3,058,402	85,570,163	89,156,834
Dec-17	85,570,163	27,583,783	57,986,381	149,582	253,618	174,996	578,196	653,058	3,673	649,384	578,196	71,188	-	-	-	-	3,586,670	(909,631)	84,589,244	88,176,014
Jan-18	84,589,344	23,604,098	60,921,245	127,314	258,318	100,744	486,376	660,084		660,084	486,376	173,708	-	-	-	-	3,586,670	(182,570)	84,233,066	87,819,736
Feb-18	84,233,066	23,588,412	60,664,654	127,600	258,899	100,971	487,470	660,084		660,084	487,470	172,614	-	-	-	-	3,586,670	604,111	84,864,563	88,251,233
Mar-18	84,864,563	23,686,145	60,975,418	127,620	258,938	100,986	487,544	660,084		660,084	487,544	172,540	-	-	-	-	3,586,670	379	84,493,002	88,079,673
Apr-18	84,493,002	23,641,142	60,851,860	127,256	258,199	100,698	486,152	660,084		660,084	486,152	173,932	-	-	-	-	3,586,670	(100,000)	84,219,071	87,805,741
May-18	84,219,071	23,564,496	60,654,575	126,948	257,577	100,455	484,980	660,084		660,084	484,980	175,104	-	-	-	-	3,586,670	1,280	84,045,247	87,631,917
Jun-18	84,045,247	23,515,860	60,529,387	125,759	255,163	99,514	480,436	660,084		660,084	480,436	179,648	-	-	-	-	3,586,670	(885,112)	82,980,488	86,567,158
Jul-18	82,980,488	23,217,340	59,762,547	125,060	253,786	98,977	477,843	660,084		660,084	477,843	182,241	-	-	-	-	3,586,670	-	82,798,247	86,384,917
Aug-18	82,798,247	23,166,950	59,631,298	124,805	253,226	98,759	476,792	660,084		660,084	476,792	183,292	-	-	-	-	3,586,670	-	82,614,955	86,201,626
Sep-18	82,614,955	23,115,665	59,499,291	124,529	252,668	98,541	475,738	660,084		660,084	475,738	184,346	-	-	-	-	3,586,670	-	82,430,610	86,017,280
Oct-18	82,430,610	23,064,085	59,366,525	124,251	252,104	98,321	474,676	660,084		660,084	474,676	185,408	-	-	-	-	3,586,670	-	82,245,202	85,831,872
Nov-18	82,245,202	23,012,208	59,232,995	123,972	251,537	98,099	473,608	660,084		660,084	473,608	186,476	-	-	-	-	3,586,670	-	82,058,726	85,645,397
Dec-18	82,058,726	22,960,032	59,098,695	123,715	251,017	97,897	472,629	660,084		660,084	472,629	187,455	-	-	-	-	3,586,670	23,407	81,894,678	85,481,349
Jan-19	81,894,679	22,914,131	58,980,548	123,443	250,465	97,681	471,589	660,084		660,084	471,589	188,495	-	-	-	-	3,586,670		81,706,184	85,292,855
Feb-19	81,706,184	22,861,390	58,844,794	123,159	249,888	97,456	470,503	660,084		660,084	470,503	189,581	-	-	-	-	3,586,670		81,516,604	85,103,274
Mar-19	81,516,604	22,808,346	58,708,258	122,874	249,309	97,231	469,414	660,084		660,084	469,414	190,670	-	-	-	-	3,586,670		81,325,934	84,912,605
Apr-19	81,325,934	22,754,996	58,570,938	122,586	248,725	97,003	468,314	660,084		660,084	468,314	191,770	-	-	-	-	3,586,670		81,134,165	84,720,835
May-19	81,134,165	22,701,339	58,432,825	122,297	248,139	96,774	467,210	660,084		660,084	467,210	192,874	-	-	-	-	3,586,670		80,941,291	84,527,961
Jun-19	80,941,291	22,647,373	58,293,918	122,006	247,549	96,544	466,099	660,084		660,084	466,099	193,985	-	-	-	-	3,586,670		80,747,306	84,333,977
Jul-19	80,747,306	22,593,096	58,154,210	121,714	246,956	96,313	464,983	660,084		660,084	464,983	195,101	-	-	-	-	3,586,670		80,552,206	84,138,876
Aug-19	80,552,206	22,538,507	58,013,698	121,420	246,359	96,080	463,859	660,084		660,084	463,859	196,225	-	-	-	-	3,586,670		80,355,981	83,942,651
Sep-19	80,355,981	22,483,603	57,872,377	121,124	245,759	95,846	462,729	660,084		660,084	462,729	197,355	-	-	-	-	3,586,670		80,158,626	83,745,297
Oct-19	80,158,626	22,428,384	57,730,243	120,827	245,155	95,610	461,592	660,084		660,084	461,592	198,492	-	-	-	-	3,586,670		79,960,135	83,546,805
Nov-19	79,960,135	22,372,846	57,587,289	120,527	244,548	95,374	460,449	660,084		660,084	460,449	199,635	-	-	-	-	3,586,670		79,760,500	83,347,170
Dec-19	79,760,500	22,316,988	57,443,512	120,227	243,938	95,136	459,301	660,084		660,084	459,301	200,783	-	-	-	-	3,586,670		79,559,717	83,146,388
Jan-20	79,559,717	22,260,809	57,298,908	119,924	243,324	94,896	458,144	660,084		660,084	458,144	201,940	-	-	-	-	3,586,670		79,357,778	82,944,448
Feb-20	79,357,778	22,204,306	57,153,471	119,620	242,706	94,655	456,981	660,084		660,084	456,981	203,103	-	-	-	-	3,586,670		79,154,675	82,741,345
Mar-20	79,154,675	22,147,478	57,007,197	119,313	242,085	94,413	455,811	660,084		660,084	455,811	204,273	-	-	-	-	3,586,670		78,950,402	82,537,073
Apr-20	78,950,402	22,090,323	56,860,080	119,005	241,460	94,169	454,634	660,084		660,084	454,634	205,450	-	-	-	-	3,586,670		78,744,953	82,331,623
May-20	78,744,953	22,032,838	56,712,115	118,696	240,832	93,924	453,452	660,084		660,084	453,452	206,632	-	-	-	-	3,586,670		78,538,321	82,124,991
Jun-20	78,538,321	21,975,022	56,563,299	118,384	240,200	93,678	452,262	660,084		660,084	452,262	207,822	-	-	-	-	3,586,670		78,330,499	81,917,170
Jul-20	78,330,499	21,916,874	56,413,626	118,071	239,564	93,430	451,065	660,084		660,084	451,065	209,019	-	-	-	-	3,586,670		78,121,480	81,708,151
Aug-20	78,121,481	21,858,390	56,263,090	117,756	238,925	93,181	449,862	660,084		660,084	449,862	210,222	-	-	-	-	3,586,670		77,911,259	81,497,929
Sep-20	77,911,259	21,799,570	56,111,689	117,439	238,282	92,930	448,651	660,084		660,084	448,651	211,433	-	-	-	-	3,586,670		77,699,826	81,286,497
Oct-20	77,699,826	21,740,411	55,959,415	117,120	237,635	92,678	447,433	660,084		660,084	447,433	212,651	-	-	-	-	3,586,670		77,487,176	81,073,846
Nov-20	77,487,176	21,680,912	55,806,264	116,800	236,985	92,424	446,209	660,084		660,084	446,209	213,875	-	-	-	-	3,586,670		77,273,301	80,859,972
Dec-20	77,273,301	21,621,070	55,652,231	116,477	236,331	92,169	444,977	660,084		660,084	444,977	215,107	-	-	-	-	3,586,670		77,058,195	80,644,865
Jan-21	77,058,195	21,560,883	55,497,312	99,567	202,021	78,788	380,376	520,454		520,454	380,376	140,078	-	-	-	-	3,586,670	115,842,264	61,068,848	64,655,519
Feb-21	61,068,848	17,087,064	43,981,785	92,052	186,772	72,841	351,665	520,454		520,454	351,665	168,789	-	-	-	-	3,586,670		60,900,059	64,486,730
Mar-21	60,900,059	17,039,837	43,860,223	91,797	186,255	72,639	350,891	520,454		520,454	350,891	169,563	-	-	-	-	3,586,670		60,730,297	64,316,967
Apr-21	60,730,297	16,992,337	43,737,960	91,541	185,736	72,437	349,714	520,454		520,454	349,714	170,740	-	-	-	-	3,586,670		60,559,557	64,146,227
May-21	60,559,557	16,944,564	43,614,993	91,284	185,214	72,233	348,731	520,454		520,454	348,731	171,723	-	-	-	-	3,586,670		60,387,834	63,974,504
Jun-21	60,387,834	16,896,516	43,491,318	91,025	184,689	72,029	347,743	520,454		520,454	347,743	172,711	-	-	-	-	3,586,670		60,215,123	63,801,793
Jul-21	60,215,123	16,848,191	43,366,931	90,765	184,161	71,823	346,749	520,454		520,454	346,749	173,705	-	-	-	-	3,586,670		60,041,418	63,628,088
Aug-21	60,041,418	16,799,589	43,241,829	90,503	183,629	71,615	345,747	520,454		520,454	345,747	174,707	-	-	-	-	3,586,670		59,866,711	63,453,381
Sep-21	59,866,711	16,750,706	43,116,005	90,240	183,095	71,407	344,742	520,454		520,454	344,742	175,712	-	-	-	-	3,586,670		59,690,999	63,277,669
Oct-21	59,690,999	16,701,542	42,989,458	89,975	182,558	71,198	343,731	520,454		520,454	343,731	176,723	-	-	-	-	3,586,670		59,514,276	63,100,947
Nov-21	59,514,276	16,652,094	42,862,182	89,709	182,017	70,987	342,713	520,454		520,454	342,713	177,741	-	-	-	-	3,586,670		59,336,535	62,923,206
Dec-21	59,336,535	16,602,363	42,734,173	89,441	181,474	70,775	341,690	520,454		520,454	341,690	178,764	-	-	-	-	3,586,670		59,157,771	62,744,442
Jan-22	59,157,771	16,552,344	42,605,427	89,171	180,927	70,562	340,660	520,454		520,454	340,660	179,794	-	-	-	-	3,586,670		58,977,977	62,564,648
Feb-22	58,977,977	16,502,036	42,475,939	88,900	180,377	70,347	339,624	520,454		520,454	339,624	180,830	-	-	-	-	3,586,670		58,797,148	62,383,818
Mar-22	58,797,148	16,451,442	42,345,706	88,628	179,824	70,131	338,583	520,454		520,454	338,583	181,871	-	-	-	-	3,586,670		58,615,277	62,201,947
Apr-22	58,615,277	16,400,554	42,214,722	88,353	179,268	69,915	337,536	520,454		520,454	337,536	182,918	-	-	-	-	3,586,670		58,432,359	62,019,029
May-22	58,432,359	16,349,374	42,082,985	88,076	178,708	69,696	336,482	520,454		520,454	336,482	183,972	-	-	-	-	3,586,670		58,248,387	61,835,057
Jun-22	58,248,387	16,297,899	41,950,488	87,800	178,146	69,477	335,423	520,454		520,454	335,423	185,031	-	-	-	-	3,586,670		58,063,356	61,650,026
Jul-22	58,063,356	16,246,127	41,817,229	87,521	177,580	69,256	334,357	520,454		520,454	334,357	186,097	-	-	-	-	3,586,670		57,877,259	61,463,929
Aug-22	57,877,259	16,194,057	41,683,202	87,241	177,010	69,034	333,285	520,454		520,454	333,285	187,169	-	-	-	-	3,586,670		57,690,090	61,276,760
Sep-22	57,690,090	16,141,687	41,548,403	86,959	176,438	68,811	332,208	520,454		520,454	332,208	188,246	-	-	-	-	3,586,670		57,501,844	61,088,515
Oct-22	57,501,844	16,089,016	41,412,828	86,675	175,862	68,586	331,123	520,454		520,454	331,123	189,331	-	-	-	-	3,586,670		57,312,513	60,899,184
Nov-22	57,312,513	16,036,041	41,276,472	86,390	175,283	68,360	330,033	520,454		520,454	330,033	190,421	-	-	-	-	3,586,670		57,122,092	60,708,763
Dec-22	57,122,092	15,982,761	41,139,331	86,103	174,701	68,133	328,937	520,454		520,454	328,937	191,517	-	-	-	-	3,586,670		56,930,576	60,517,246
Jan-23	56,930,576	15,929,175	41,001,400	85,814	174,115	67,905	327,834	520,454		520,454	327,834	192,620	-	-	-	-	3,586,670		56,737,956	60,324,626
Feb-23	56,737,956	15,875,280	40,862,676	85,524	173,526	67,675	326,725	520,454		520,454	326,725	193,729	-	-	-	-	3,586,670		56,544,227	60,130,897
Mar-23	56,544,227	15,821,075	40,723,152	85,232	172,934	67,444	325,610	520,454		520,454	325,610	194,844	-	-	-	-	3,586,670		56,349,383	59,936,053
Apr-23	56,349,383	15,766,557	40,582,825	84,938	172,338	67,212	324,488	520,454		520,454	324,488	195,966	-	-	-	-	3,586,670		56,153,417	59,740,087
May-23	56,153,417	15,711,726	40,441,691	84,643	171,738	66,978	323,359	520,454		520,454	323,359	197,095	-	-	-	-	3,586,670		55,956,322	59,542,992
Jun-23	55,956,322	15,656,579	40,299,743	84,345	171,136	66,743	322,224	520,454		520,454	322,224	198,230	-	-	-	-	3,586,670		55,758,092	59,344,762
Jul-23	55,758,092	15,601,114	40,156,978	84,047	170,529	66,506	321,082	520,454		520,454	321,082	199,372	-	-	-	-	3,586,670		55,558,720	59,145,391
Aug-23	55,558,720	15,545,330	40,013,390	83,746	169,920	66,269	319,935	520,454		520,454	319,935	200,519	-	-	-	-	3,586,670		55,358,201	58,944,872
Sep-23	55,358,201	15,489,225	39,868,977	83,444	169,306	66,029	318,779	520,454		520,454	318,779	201,675	-	-	-	-	3,586,670		55,156,526	58,743,197

Source: 2019 GRC, Direct Testimony of Jeffrey M. Dana dated July 1, 2019, Application 19-07-004, Attachment 2.

Exhibit 41: Other Balancing and Memorandum Account Details

Item	Account Name	Description	District	Over/(Under) Collection	Memo or Bal Acct?	Monterey Portion
A-1	Consolidated Expense Balancing Account	Consolidates PUC approved balances and memorandum accounts for amortization as deemed appropriate.	Monterey	(10,066,740)	Balancing	(10,066,740)
A-2	Water Revenue Adjustment Mechanism (WRAM) & Modified Cost Balancing Accounts (MCBA)	The WRAM tracks variances in quantity charge revenue. The MCBA tracks variances in purchased water, purchased power & pump taxes.	Monterey	(12,703,825)	Balancing	(12,703,825)
A-4	Two-Way Tax Memorandum Account	Tracks changes in permanent tax items and rate effects, differences between tax expenses authorized and incurred, protected EADIT, and bonus depreciation.		35,622,161	Memorandum	7,499,916
A-5	Customer Assistance Program (CAP) Balancing Account	Tracks discounts provided, surcharges collected, and adjusts annual surcharges.	Monterey	800,411	Balancing	800,411
A-6	California American Water Conservation Surcharge Balancing Account	One-way account to track conservation related expenses & surcharges.	Monterey	713,149	Balancing	713,149
A-7	Credit Card Memorandum Account	Tracks waived credit card fees paid for customers offset by cost savings that may result.	All CA	(1,142,344)	Memorandum	(240,510)
A-9	Catastrophic Event Memorandum Account	Recovers costs associated with the restoration of service & facilities affected by a catastrophic event.	All CA - Opex	35,856	Memorandum	7,549
			All CA - Capex	7,209,114	Memorandum	1,517,812
			Pandemic	(1,261,263)	Memorandum	(265,547)
A-10	Group Insurance Balancing Account	Tracks the difference between authorized recovery and actual costs.	Monterey	(379,531)	Balancing	(379,531)
A-11	Pension Balancing Account	Tracks the difference between Commission authorized pension and actual required pension payments.	Monterey	(47,669)	Balancing	(47,669)
A-12	Other Post-Employment Benefits (OPEB) Balancing Account	Tracks the difference between Commission authorized OPEB costs and actual required OPEB payment	Monterey	919,922	Balancing	919,922
A-15	Affiliate Transaction Memorandum Account	Established per D.10-10-019 to track fees paid to CAW for the transfer, assignment, or employment of an employee by an affiliate.	All CA	12,357	Memorandum	2,602
A-16	GRC Interim Rate True-Up Memorandum Account	Tracks the difference between what was billed in 2021 and the first two months of 2022 and what should have been billed under the authorized rates for 2021 and approved step rates for 2022.	All CA	(12,242,876)	Memorandum	(2,577,624)
A-19	Sustainable Groundwater Management Act Memorandum Account	Tracks costs of complying with the new SGMA regulations.	All CA	(863,321)	Memorandum	(181,764)
A-20	Garrapata Safe Drinking Water State Revolving Fund (SDWSRF) Loan Repayment Balancing Account	Tracks recovery of the SDWSRF loan provided under the American Recovery and Reinvestment Act.	Monterey	(19,945)	Balancing	(19,945)
A-21	Water-Energy Nexus Program Memorandum Account	Tracks expenses for water-energy nexus projects.	All CA	(4,204)	Memorandum	(885)
A-22	Public Safety Power Shut-off (PSPS) Memorandum Account	Tracks incremental operation and maintenance (O&M) expense and carrying costs for new facilities costs, related to a PSPS event.	All CA	(375,493)	Memorandum	(79,057)
A-25	Drought Memorandum Account	Tracks all costs and penalties associated with the adoption of drought procedures under Resolution W-	Monterey	(2,447)	Memorandum	(2,447)
A-27	TCP Litigation Proceeds Memorandum Account	Tracks litigation awards and settlement proceeds and investments in replacement and treatment property.	All CA	3,657,555	Memorandum	770,064
B-1	National Oceanic & Atmospheric Endangered Species Act (NOAA/ESA) Memorandum Account	Tracks compliance payments paid to NOAA or designated payee for ESA mitigation.	Monterey	(1,112,400)	Memorandum	(1,112,400)
B-3	Endangered Species Act (ESA) Memorandum Account	Tracks costs incurred for compliance with ESA, except for ESA associated with San Clemente Dam.	Monterey	(510,117)	Memorandum	(510,117)
B-6	Seaside Groundwater Basin Balancing Account	Tracks costs associated with annual administrative and other payments made to the Seaside Basin Water Master, and recovery of such payments from customers.	Monterey	203,091	Memorandum	203,091
B-8	Monterey Cease and Desist Order Memorandum Account	Track costs to address the State Water Resources Control Board (SWRCB) Cease and Desist Order (CDO) for unauthorized diversion of water from the Carmel River and any such other costs.	Monterey	(219,005)	Memorandum	(219,005)
	Subtotal Other Balancing and Memorandum Accounts					**$ (15,972,550)**
	Citizens Acquisition Premium	Amortized mortgage style beginning in 2002 over 40 years per 2016 GRC Decision, p.77 of 340. See D.12-06-016, Exhibit CAW-33 at 64; Exh. ORA-9 at 16.				(8,383,942)

APPENDIX D:

Descriptions of Recent Water Utility Sales Transactions

Sales Transactions Involving Systems Considered Similar to the Monterey Water System

1. System: Park Water, Apple Valley Ranchos Water, Mountain Water Companies
   Buyer: Liberty Utilities Company of Liberty WWH, Inc.
   Seller: Western Water Holdings of Carlyle Infrastructure Partners
   Date: December 17, 2015

   This transaction involved the merger of two holding companies where Liberty WWH, Inc. merged with and into Western Water Holdings. As a result, Liberty Utilities Company (Liberty Utilities), a Class A utility, acquired ownership and control of Park Water Company (Park Water), a Class A water utility operating in the southeast portion of Los Angeles, and its associated companies, Apple Valley Ranchos Water Company (Apple Valley Water), a Class A water utility operating in San Bernardino County, California, and Mountain Water Company (Mountain Water), a utility of similar size as Apple Valley Water located in Montana, from Carlyle Infrastructure Partners. Liberty Utilities is a Subsidiary of Algonquin Power & Utilities Corp. (Algonquin). Park Water, Apple Valley Water, and Mountain Water were owned by Western Water Holdings, which is a wholly owned investment of Carlyle Infrastructure Partners. As a result of this transaction, Western Water Holdings became a direct, wholly-owned subsidiary of Liberty Utilities. The decision by the CPUC to adopt the settlement agreement was dated December 17,2015.[201]

   The purchased water systems served a combined 71,027 service connections, or 109,843 equivalent residential connections prior to the transaction.

   - The Park Water system is comprised of a network of 26 water supply wells, approximately 253 miles of distribution piping, water treatment facilities, 11 storage facilities with a combined capacity of 11.697 million gallons, 29,110 metered connections, and various other system appurtenances.
   - The Apple Valley system is comprised of a network of 13 water supply wells, water treatment facilities, approximately 469 miles of distribution piping, three storage facilities with a combined capacity of 2.735 million gallons, 22,431 metered connections, and various other system appurtenances.
   - The Mountain Water system is comprised of a network of 38 water supply wells, purification treatment facilities, approximately 322 miles of distribution piping, 25 storage facilities with a combined capacity of 10.3 million gallons, 23,504 metered connections, and various other system appurtenances.

   The transaction is characterized by a merger in which purchase price was $327 million, which included the assumption of $77 million of debt. In this purchase, Liberty Utilities reportingly sought out this merger because it is consistent with Algonquin's business strategy to invest in, own and operate a national portfolio of utilities that support a strong customer-focused approach and regional management strategies.

[201] CPUC Decision 15-12-029.

In total, the three purchased utilities earned revenues of approximately $70.897 million in the year prior to the transaction, had EBITDA of $45.538 million, a pre-acquisition rate base of approximately $161.1 million, and net plant book value of approximately $235.7 million.

Liberty Utilities is a regulated water, wastewater, natural gas, electric, and propane/air utility company that provides local utility management, service and support to small and medium communities across the United States including California, Texas, and Arizona among others. At the time of the merger, Liberty Utilities served an aggregate of approximately 485,000 customers with a little under 180,000 customers being water customers. Liberty Utilities has $1.8 billion in regulated assets and is headquartered in Londonderry, New Hampshire. Algonquin owns a diverse portfolio of 59 power generating facilities and 27 regulated utilities. The purchase of Park Water and Apple Valley was within Algonquin's corporate strategy of acquiring high-quality assets in consistent regulatory climates such as California.

Consideration was given to the potential differences in this merger transaction vs. the fair market value of an asset sale on a cash or cash equivalent basis. Since the transaction was structured as a merger, the purchase price was adjusted to an asset sale equivalent purchase price by reflecting the assumption of debt in the purchase price to derive an estimate of the enterprise value. In addition, the Plan and Agreement of Merger was reviewed to identify any additional specific liabilities that were identified that were assumed by the purchaser under the merger that would not be assumed under an asset sale, which could impact the purchase price difference between the merger and the asset sale. Based on the review of the representations and warranties, covenants, and indemnifications contained in the Agreement of Merger, an amount of $2.5 million was added to the transaction price to reflect potential losses and liabilities associated with the merger and to adjust the transaction price to an asset sale equivalent purchase price.

Consideration was also given to whether the asset sale equivalent purchase price should reflect the difference between the tax treatment associated with an asset purchase vs. a stock purchase. In an asset purchase, the tax basis can be written up to the purchase price for income tax purposes, whereas this tax treatment is not available under a stock transaction. However, most PUC rate regulations, including CPUC, only allow utilities to recover actual tax expenses in the rate revenue requirement. For example, the CPUC effectively passes the benefit of the deferral of income taxes through to rate payers by requiring that the deferred income tax liability be deducted from the OCLD value in the calculation of rate base. Therefore, while differences in tax treatment was considered in the asset sale equivalent purchase price, no additional adjustment was made to derive the asset sale equivalent purchase price.

This transaction was considered comparable to the Monterey Water System because the purchased systems were investor-owned, and two of the three purchased utilities had retail water systems located in California, Mountain Water operated in a similar regulatory climate as California, the transaction involved a willing buyer and willing seller, and the combined size of the systems acquired was similar to the Monterey Water System in terms of number of connections, EBITDA, and net plant book value, and the systems have similar components to the Monterey Water System.

Sources:

Joint Application of Liberty Utilities, Col, Liberty WWH, Inc., Western Water Holdings, LLC, Park Water Company, and Apple Valley Ranchos Water Company for Authority for Liberty Utilities Co to Acquire and Control Park Water Company and Apple Valley Ranchos Water Company, November 24, 2014.

Plan and Agreement of Merger by and among Liberty Utilities Co, Liberty WWH, Inc, and Western Water Holdings, LLC, dated September 19, 2014.

Annual Report of Park Water Company and Apple Valley Ranchos Water Company Submitted to the Public Utilities Commission of the State of California, For the Year Ended December 31, 2014.

Annual Report of the Mountain Water Company Submitted to the Public Service Commission of Montana, For the Year Ended December 31, 2014.

Decision Adopting the Settlement Agreement and Conditionally Approving the Application. Public Utilities Commission of the State of California. Application 14-11-013, Decision 15-12-029. December 28, 2015.

2. System: Shorelands Water Company, Inc.
   Buyer: New Jersey-American Water Works Company
   Seller: Shorelands Water Company, Inc.
   State: New Jersey
   Date: April 13, 2017

   New Jersey-American Water Works Company, an investor-owned utility, purchased 100% of the capital stock Shorelands Water Company Inc., an investor-owned retail water utility provider located in New Jersey. The transaction occurred on April 3, 2017 and involved the Shorelands Water Company transferring all of its capital stock to American Water Works for total consideration of $33 million.[202] The enterprise value of this transaction was estimated at $36.58 million by adding the long-term outstanding debt ($5.81 million), less cash and cash equivalents ($2.23 million) of the Shorelands Water Company for the fiscal year ending just prior to the date of the transaction.[203]

   The acquired water system included water treatment purification equipment, two pumping stations, seven water supply wells, four storage facilities with a combined capacity of 5.6 million gallons, approximately 172 miles of distribution piping, services, hydrants, valves, and other appurtenances.

   At the time of the transaction, the Shorelands Water Company served 11,188 customer connections, or approximately 16,636 equivalent residential connections, in Hazlet Township and a portion of Holmdel Township in New Jersey. Additionally, the utility had a net plant book value of approximately $20.778 million, operating revenues of $11.51 million, and EBITDA of $2.69 million in the year prior to the transaction. While the acquisition price for Shorelands exceeded the original cost less depreciation or net plant book value of Shorelands, the parties argued that the synergy savings which were expected to be derived from the transaction will exceed the value of this premium.

   New Jersey-American Water is owned by American Water, which is a public utility company operating in the United States and Canada. American Water has yearly revenues approximately $3.44 billion and is headquartered in Camden New Jersey.

[202] 10Q-3 filing of American Water Works Company to SEC, for quarter ending September 30, 2017, p.24.

[203] Shoreland's Water Company 2016 Annual Report to New Jersey Board of Public Utilities, p.11-12.

Consideration was given to the potential differences of this capital stock transaction vs. the fair market value of an asset sale on a cash or cash equivalent basis. Since the transaction was structured as a capital stock deal, the purchase price was adjusted to an asset sale equivalent purchase price by reflecting the assumption of debt in the purchase price to derive an estimate of the enterprise value.

The Purchase Agreement associated with this transaction was confidential and was redacted from the public record. Therefore, this document was not available for review to identify any additional specific liabilities, in addition to the outstanding debt, that were assumed by the purchaser under the stock sale that would not be assumed under an asset sale, which could impact the purchase price difference between the merger and the asset sale. However, based on the review of the Joint Application, and other available public records regarding this transaction, no additional liabilities assumed by the acquirer were identified that would not be liabilities under an asset sale. Therefore, no adjustment was made for liability considerations to derive an asset sale equivalent purchase price.

Consideration was also given to whether the asset sale equivalent purchase price should reflect the difference between the tax treatment associated with an asset purchase vs. a stock purchase. In an asset purchase, the tax basis can be written up to the purchase price for income tax purposes, whereas this tax treatment is not available under a stock transaction. However, most PUC rate regulations, including CPUC, only allow utilities to recover actual tax expenses in the rate revenue requirement. For example, the CPUC effectively passes the benefit of the deferral of income taxes through to rate payers by requiring that the deferred income tax liability be deducted from the OCLD value in the calculation of rate base. Therefore, while differences in tax treatment was considered in the asset sale equivalent purchase price, no additional adjustment was made to derive the asset sale equivalent purchase price.

This transaction was considered similar to the Monterey Water System because the purchased system was an investor-owned, retail water system that operated in a similar regulatory climate as California, the transaction involved a willing buyer and willing seller, the system has similar components to the Monterey Water System, and the size of the system was equivalent to a Class A or Class B utility in California, which is indicative of a complete water system with source of supply, treatment, storage, distribution, and support facilities, and similar economic/rate regulation to the Monterey Water System.

Sources:

Joint Petition of American Water Works Company, Inc., New Jersey-American Water Company, Inc., and Shorelands Water Company, Inc., for American Water Works Company, Inc., and Shorelands Water Company, Inc., to Acquire Control of Shorelands Water Company, Inc. and for Shorelands Water Company, Inc. to Transfer Upon its Books All of its Capital Stock to American Water Works Company, Inc., Shortly Thereafter for Shorelands Water Company Inc., to be Merged into New Jersey-American Water Company, Inc. and for Such Other Approvals as May Be Necessary to Complete the Proposed Transaction, submitted to the New Jersey Board of Public Utilities, October 28, 2016. BPU Docket No. WM16101036.

Order of Approval Published by the New Jersey Board of Public Utilities, dated March 27, 2017. BPU Docket No. WM16101036.

10Q-3 filing of American Water Works Company to SEC, for quarter ending September 30, 2017, p.24.

Shoreland's Water Company 2016 Annual Report to New Jersey Board of Public Utilities, p.11-12.

In the Matter of the Petition of the New Jersey-American Water Company, Inc. for Approval of Increased Tariff Rates and Charges for Water and Wastewater Service, Changes in Depreciation Rates, and Other Tariff Modifications submitted by the State of New Jersey, Division of Rate Counsel, May 31, 2019 BPU Docket No. WR17090985.

3. System: New York American Water Systems
Buyer: Liberty Utilities
Seller: New York American Water Company
State: New York
Date: December 16, 2021

Liberty Utilities Company, an investor-owned utility, purchased a 100% capital stock ownership interest in New York American Water Company, Inc. ("NYAC"). The transaction occurred on December 16, 2021 and involved the NYAC transferring all of its capital stock to Liberty Utilities for $608 million or a total enterprise value of approximately $803.9 million. The transaction occurred following American Water Works facilitating a competitive bidding process for entities interested in acquiring NYAC.

NYAC is a wholly-owned subsidiary of American Water Works, and has a principal office in the hamlet of Merrick in the Town of Hempstead, Nassau County, New York. NYAC's system included nearly 1,300 miles of water main and other infrastructure, including treatment plants, tanks, pump stations, fire hydrants, and metering equipment. The system includes 14 permanent and three seasonal iron removal treatment plants, 43 groundwater production facilities with an average system delivery of 38 million gallons per day, over 14,000 valves and 8,800 fire hydrants, and 25 water storage tanks with a capacity of 22 million gallons. At the time of the sale, NYAC provided residential and non-residential metered and other water services, as well as public and private fire protection services, to approximately 126,000 customers in parts of Nassau, Orange, Putnam, Sullivan, Ulster, Washington, and Westchester Counties. In addition to its regulated water business in New York, NYAC owned and operated the Mt. Ebo Sewer Works, Inc., and unregulated sewer company that it acquired in 2014.[204]

Liberty Utilities owns and operates 25 regulated utilities in the U.S., and is a subsidiary of Liberty Utilities Canada, which is a subsidiary of Algonquin Power & Utilities Corp, a publicly-traded company on the Toronto and New York stock exchanges.

The enterprise value of this transaction was estimated at $803.9 million by adding outstanding debt in the amount of ($196 million), less cash and cash equivalents ($0 million) of the of the NYAC for the fiscal year ending just prior to the date of the transaction.

Consideration was given to the potential differences in this capital stock transaction vs. the fair market value of an asset sale on a cash or cash equivalent basis. Since the transaction was structured as a capital stock transaction, the purchase price was adjusted to an asset sale equivalent purchase price by reflecting the assumption of debt in the purchase price to derive an estimate of the enterprise

[204] Joint Petition of American Water Works Company, New York American Water Company, and Liberty Utilities for Approval of the Acquisition by Liberty Utilities of 100% of New York American Water Company's Issued and Outstanding Capital Stock. February 28, 2020.

value. In addition, the Stock Purchase Agreement was reviewed to identify any additional specific liabilities that were identified that were assumed by the purchaser under the merger that would not be assumed under an asset sale, which could impact the purchase price difference between the merger and the asset sale. Based on the review of the representations and warranties, covenants, and indemnifications contained in the Stock Purchase Agreement, an amount of $5 million was added to the transaction price to reflect potential losses and liabilities assumed by the acquirer that would not likely be transferred under an asset sale, and to adjust the transaction price to an asset sale equivalent purchase price.

Consideration was also given to whether the asset sale equivalent purchase price should reflect the difference between the tax treatment associated with an asset purchase vs. a stock purchase. In an asset purchase, the tax basis can be written up to the purchase price for income tax purposes, whereas this tax treatment is not available under a stock transaction. However, most PUC rate regulations, including the NYSPSC, only allow utilities to recover actual tax expenses in the rate revenue requirement. Therefore, while differences in tax treatment was considered in the asset sale equivalent purchase price, no additional adjustment was made to derive the asset sale equivalent purchase price.

This transaction was considered comparable to the Monterey Water System because the purchased system was operating segment of the American Water Works Company, similar to Cal-Am, of which the Monterey Water System is a part of. In addition, the transaction occurred within the recent past, involved a willing buyer and willing seller, and the combined size of the systems acquired was similar to the Monterey Water System in terms of number of connections, and the systems have similar components to the Monterey Water System.

Sources:

Joint Petition of American Water Works Company, New York American Water Company, and Liberty Utilities for Approval of the Acquisition by Liberty Utilities of 100% of New York American Water Company's Issued and Outstanding Capital Stock. February 28, 2020.

Staff Statement in Support of the Joint Proposal, State of New York, Department of Public Service. Case 20-W-0102.

Order Adopting Terms of Joint Proposal, Approving Stock Purchase Agreement and Long-Term Indebtedness. Case 20-W-0102.

Sales Transactions Considered for Limited Use

4. System: Citizens Water System
   Buyer: California-American Water Company
   Seller: Citizens Water Company
   State: California
   Date: September 24, 2001

   In this asset sale transaction, California American Water, an investor-owned utility, purchased Citizens Water Company, an investor-owned water utility in California. This transaction was in the amount of approximately $161.320 million and was settled on September 24, 2001. The net book value of this system was estimated to be approximately $96.767 million and served 66,000 customer connections.

   At the time of the transaction, Citizens Water Company owned and operated four water districts involved in this transaction; Larkfield District in Sonoma County, Felton District in Santa Cruz County, Montara District in San Mateo County, and other small systems in Sacramento and Placer County.

   This transaction served as limited use because of the age of the transaction; however, it involved Cal-Am's acquisition of some of the water systems that it currently owns and operates in California, so it has some limited relevance to the Monterey Water System. Due to the age of the transaction, it was not used in any of the price multiples considered under the Market Approach.

5. System: Toro Water Service, Inc.
   Buyer: California-American Water Company
   Seller: Receiver for the Toro Water Systems, Inc. wholly owned by Aisal Water Corporation
   Date: November 16, 2007

   This asset sale transaction involved the purchase of the Toro Water Services, Inc. by California-American Water Company (Cal-Am). The California Public Utilities Commission approved the purchase on November 16, 2007. The sales price was $408,000, and Cal-Am did not assume any liabilities, debts, or obligations that existed prior to closing.[205]

   Toro was a Class D public water utility wholly owned by Alisal Water Corporation. In 2002 the U.S. District Court for the Northern District of California found that Alisal had continuously failed to provide its customers with healthful drinking water in compliance with the Safe Drinking Water Act, and the system was put into receivership.

   The Toro system served approximately 408 customers, and the transaction included 2.58 acres of land, along with all easements and other real property rights, and water system assets. On January 1, 2008, the Toro system had a net plant book value of $1.15 million, and in 2008 it had revenues of $304,000 and EBITDA (EBITDA) of approximately $62,000.

[205] Opinion Approving Sale and Conveyance of Toro Water system, Inc. to California American Water Company, Decision 07-11-034, November 16, 2007.

Within 90-days following the transaction, Cal-Am was required to construct and operate an arsenic treatment facility at a cost of $685,000. Cal-Am was also required to proceed with wellhead improvements estimated at $40,000.

Although the transaction involved part of the current Cal-Am Monterey Water System, the system was in receivership at the time of the transaction, the system is very small compared to the total Monterey Water System, and the transaction is more than 10 years old. However, the transaction has some limited relevance because it involved Cal-Am's acquisition of a portion the Monterey Water System.

6. System: Public Utility Assets of the Garrapata Water Company
   Buyer: California-American Water Company
   Seller: Garrapata Water Company
   Date: January 24, 2013

   This asset sale transaction involved the purchase of the Garrapata Water Company by California-American Water Company (Cal-Am). The California Public Utilities Commission approved the purchase on January 24, 2013, and the sales price was $50,000. In addition, as part of the transaction, Cal-Am assumed a state revolving fund loan held by Garrapata in the amount of $114,000.[206] Therefore, the total enterprise value of this transaction was estimated to be $164,000.

   At the time of the transaction, the Garrapata Water Company was a Class D utility with a service territory in Monterey County, generally along Highway 1, south of Carmel Highlands that served 49 non-metered residential service connections. The water system included two groundwater wells (only one active), a water treatment system consisting of filtration and chlorination, four storage tanks, a new transmission line, and other system appurtenances.

   Prior to the transaction, the Garrapata Water Company had a rate base of $57,407, net plant book value of $524,000, and in 2011 revenues of $89,000 and EBITDA (EBITDA) of $17,000.

   This transaction is relevant because it involved Cal-Am's acquisition of a portion of the Monterey Water System. However, due to its very small size in comparison to the total Monterey Water System, and its age, it was not directly used as part of the Market Approach.

7. System: Ohio-American Water Company
   Buyer: Aqua Ohio Inc.
   Seller: Ohio-American Water Company
   State: Ohio
   Date: February 14, 2012

   This capital stock sales transaction involved the acquisition of the Ohio-American Water Company by Aqua Ohio, Inc. The transaction was approved by the Public Utilities Commission of Ohio on February 14, 2012 and involved Ohio-American Water Company transferring all of its capital stock

[206] Decision Approving California-American Water Company's Acquisition of Garrapata Water Company's Assets, Decision 13-01-033, January 24, 2013.

to Aqua Ohio, Inc. for $88.55 million in cash.[207] The enterprise value of this transaction was estimated at $120.24 million, computed by adding the long-term outstanding debt and assumed liabilities ($31.69 million) of the company as of December 31, 2010.[208]

At the time of the transaction, Ohio American was a public utility authorized to furnish water service to seven districts located in the counties of Ashtabula, Franklin, Lawrence, Marion, Morrow, Pike, Portage, Preble, Richland and Seneca in Ohio, and sewer service to portions of Franklin County. At the time of the transaction, Ohio-American Water Company provided water service to approximately 50,903 customers, and sewer service to a much smaller customer base of approximately 6,554 customers in the State of Ohio.

- The Ashtabula district water system sources water from Lake Erie and includes a water treatment plant including coagulant, filtration, disinfection, and fluoridation, four water storage facilities, distribution piping and other appurtenances serving approximately 12,369 customers.
- The Lawrence County District water system obtains water from West Virginia American Water Company and includes two storage facilities with a combined capacity of 0.8 million gallons, distribution piping and other appurtenances serving approximately 3,359 customers.
- The Marion District water system obtains its source of supply from groundwater wells and surface water, and includes water treatment consisting of lime softening, coagulation, sedimentation, fluoridation, filtration, and chlorination, 2.2 million gallons of storage capacity, distribution piping and other appurtenances serving approximately 16,579 customers.
- The Lake White District water system obtains water from groundwater wells, includes water treatment with chlorination, one elevated storage tank, and distribution piping and other appurtenances serving approximately 404 customers.
- The Mansfield District water system obtains source water from groundwater wells, includes a water treatment plant with chlorination, distribution piping and other appurtenances serving approximately 1,492 customers.
- The Tiffin District water system obtains source water from the Sandusky River and five groundwater wells, includes water treatment by coagulation, sedimentation, filtration, chlorination, fluoridation, and potassium permanganate, contains two elevated storage facilities with a combined capacity of 1.3 million gallons, distribution piping and other appurtenances serving approximately 6,301 customers.
- The Portage District water system is supplied from groundwater purchased from Portage County Water Resources and includes two water storage facilities with a combined capacity of 0.13 million gallons, distribution piping and other appurtenances serving approximately 883 customers.

[207] Findings and Order issued by the Public Utilities Commission of Ohio, Case No. 11-5103-WS-ATR, dated February 14, 2012, and Joint Application for Approval of the Purchase of Common Stock of Ohio American Water Company by Aqua Ohio, Inc., p.25.

[208] Ibid, Exhibit A.

- The Franklin County District water system obtains source water from groundwater wells, includes five water treatment facilities with aeration and filtration, softening, chlorination, and fluoridation, six storage facilities with a combined capacity of approximately 2.0 million gallons, distribution piping and other appurtenances, and serves approximately 7,851 customers.

This transaction was considered for limited use due to the age of the transaction. The transaction was similar to the Monterey Water System because the purchased system was an investor-owned, retail water system, the transaction involved a willing buyer and willing seller, the system has similar components to the Monterey Water System, and the size of the system in terms of the total number of connections was comparable to the Monterey Water System.

8. System: Aqua New York including New York Water Services Corporation and Aqua NY Seacliff
Buyer: New York - American Water Works Company
Seller: Aqua Utilities, Inc. of Aqua America Inc.
State: New York
Date: April 20, 2012

The capital stock sales transaction included the sale of Aqua New York and its water systems associated with its subsidiaries, including the New York Water Services Corporation and Aqua NY Seacliff to New York – American Water Works Company. The transaction was approved by the New York State Public Service Commission on April 20, 2012 and involved Aqua Utilities, Inc. transferring all of its capital stock of Aqua NY to American Water Works for total consideration of $42.17 million.[209] The enterprise value of this transaction was estimated at $71.04 million by adding the long-term outstanding debt and assumed liabilities ($28.87 million) of the Aqua NY for the fiscal year ending just prior to the date of the transaction to the amount of the stock compensation.

Aqua NY was a New York corporation, a subsidiary of Aqua Utilities that owns two public utility subsidiaries: New York Water Service Corporation (NYWS) and Aqua NY Sea Cliff. At the time of the transaction, NYWS provided retail water service to approximately 45,000 customers in the Towns of Hempstead and Oyster Bay in Nassau County, NY. Aqua NY Sea Cliff provided general water service to approximately 4,300 customers in the Town of Oyster Bay in Nassau County, NY.

The NYWS system included 18 water supply wells, 12 pumping stations, eight water treatment facilities with iron removal, softening, and chlorination, five storage facilities with a combined capacity of 5.75 million gallons, 233 miles of distribution mains, 2,814 fire hydrants, and other appurtenances.

The Aqua NY Sea Cliff system included two water supply wells, a water treatment facility with chlorination disinfection, two water storage facilities with a combined capacity of 1.15 million gallons, 52.6 miles of distribution piping, and other appurtenances.

Aqua NY also served several other areas through separate rate districts, including:

[209] Order Approving Stock Transaction, Case 11-W-0472, April 20, 2012, p.2., and Joint Petition, Exhibit A.

- Cambridge – Water service provided to 473 customers in the Village of Cambridge, portions of the Towns of Jackson and White Creek, in Washington County, NY. The Cambridge water system included two groundwater wells and a water storage facility with a capacity of approximately 76,300 gallons. The system also included two treatment systems, two pumping and booster stations, a network of approximately 55,000 feet of distribution mains, and 57 fire hydrants, services, and associated appurtenances.
- Dykeer – Water service provided to approximately 120 customers in the Hamlet of Lincolndale, Town of Somers in Westchester County, NY.
- Kingsvale – Water service provided to approximately 219 customers in the Town of Ulster in Ulster County, NY.
- Waccabuc – Water service provided to approximately 80 customers in the Town of Lewisboro in Westchester County, NY.
- Wild Oaks – Water service provided to approximately 192 customers in Westchester County, NY. The Wild Oaks water system included three groundwater supply wells with a total capacity of 80,000 gallons per day and a 50,000 gallons storage tank. The system also includes 23 fire hydrants, services, and associated appurtenances.

The purchased water system served a total of 50,384 customer connections, which equates to approximately 61,742 equivalent residential connections. In 2010, Aqua NY had a net plant book value of approximately $60.64 million, operating revenues of $31.34 million, and EBITDA (EBITDA) of $10.17 million.[210]

This transaction was considered for limited use due to the age of the transaction. The system was considered similar to the Monterey Water System because the purchased system was an investor-owned, retail water system, the transaction involved a willing buyer and willing seller, the system has similar components to the Monterey Water System, and the size of the system in terms of the total number of connections was comparable to the Monterey Water System.

9. System: Valencia Water Company
Buyer: Castaic Lake Water Agency
Seller: Valencia Water Company and the Newhall Land and Farming Company
State: California
Date: December 12, 2012

This capital stock sales transaction involved the purchase of the Valencia Water Company, a Class A Water Company, owned by the Newhall Land and Farm Company and based in Valencia, California by Castaic Lake Water Agency (CLWA), a public agency, now a subsidiary of Santa Clarita Valley Water Agency. This sales transaction involved an eminent domain action filed by the CLWA. The eminent domain action was approved by CLWA's board on December 12, 2012[211],

[210] Exhibit E of Joint Petition.

[211] Resolution No. 2890 included as an attachment to the Settlement Agreement.

which was the same day that the parties entered into an Eminent Domain Settlement Agreement[212], indicating that the sale was likely negotiated prior to the eminent domain action.

The purchased water system is in Santa Clarita, California, a suburban area north of the City of Los Angeles, and at the time of the transaction, the company was a retail provider of water that served 28,776 service connections, or 65,587 equivalent residential connections. The purchased system included a water filtration plant, 21 water supply wells, 25 storage facilities with a combined capacity of 54.9 million gallons, over 357 miles of distribution piping, and other system appurtenances.

The transaction was a stock purchase where Castaic Lake Water Agency acquired all shares and physical assets of Valencia Water Company, consisting of a base price of $73.8 million, less adjustments applied on the date of closing of approximately $15.0 million. These adjustments consisted of additions for cash and cash equivalents, accounts receivable and reductions for accounts payable and notes payable. The enterprise value of the transaction ($82.8 million) was computed by summing the base price and adjustments ($73.8 million - $15 million), and then adding the debt assumed as part of the stock transaction ($24.0 million).

In 2010, the Valencia Water Company earned revenues of approximately $22.4 million, had EBITDA of approximately $9.1 million, a pre-acquisition rate base of $44.9 million, and in 2011, a net plant book value of $111.8 million. Net plant book value included $57.7 million of CIAC.

This transaction was considered comparable to the Monterey Water System because the purchased water system was an investor-owned, retail water system located in California, the transaction likely involved a willing buyer and willing seller, the size of the system acquired was similar to the Monterey Water System in terms of number of equivalent residential connections and net plant book value. While not a very recent transaction, this transaction was also deemed relevant because it involved a purchase of an investor-owned water system by a municipality, which is similar to the anticipated Monterey Water System transaction. To address the age of the transaction, the purchase price was adjusted and escalated for inflation for some of the price multiples that were considered.

10. System: Crystal River Utilities, Inc.
    Buyer: Florida Government Utility Authority
    Seller: Crystal River Utilities, Inc. of Aqua Utilities Florida, Inc.
    State: Florida
    Date: March 31, 2013

    This asset sale transaction involved the purchase of water and wastewater systems owned and operated by Crystal River Utilities, Inc., an investor-owned utility located in Alachua, Hardee, Lake, Lee Marion, Orange, Pasco, Polk, Putnam, Seminole, and Volusia counties, Florida by the Florida Government Utility Authority, a municipal utility. There were three operating systems involved in this transaction, the Pasco, Lake, and Unified systems. The transaction price and total number of

[212] Eminent Domain Settlement Agreement Among Castaic Lake Water Agency, the Newhall Land and Farming Company, and Valencia Water Company.

water and wastewater accounts attributable to each system associated with this transaction is summarized below.[213]

	Purchase Price	Water Accounts	Water ERCs	WW Accounts	WW ERCs
Pasco System	$16,408,267	2,886	3,257	2,742	2,966
Lake System	$14,720,418	4,778	5,037	1,164	1,201
Unified System	$18,834,764	7,106	8,003	1,824	2,339
Total	$49,963,449	14,770	16,297	5,730	6,506

The sales transaction occurred in March 2013 and the total transaction amount was estimated to be approximately $49.96 million. The total acquisition price was allocated to the water and wastewater portions of the system based on pre-acquisition rate base. The pre-acquisition rate base for the water system was approximately 59.5% of the total combined water and wastewater system rate base.[214] Therefore, the water system acquisition price was estimated to be approximately $29.7 million.

The assets associated with these systems included water and wastewater treatment plants, including water wells, water supplies, collection, transmission, and distribution system piping, and pumping systems, lift stations, pumps, generators, controls, tanks, distribution, valves, meters, meter reading devices, and associated appurtenances.

- The Pasco water system included three sub water systems serving mainly residential customers. Two of the systems owned their own water treatment plants, one of the systems purchased water from Pasco County Utilities. The system included six water supply wells, four storage tanks, 31.4 miles of distribution piping, and other system appurtenances.
- The Lake water system included 24 sub water systems, a network of 24 water supply wells, 26 water treatment plants, water storage facilities, distribution piping, and other system appurtenances.
- The Unified water system includes 41 sub water systems, 40 water treatment plants, approximately 66 water supply wells, water storage facilities, distribution piping, and other system appurtenances.

This transaction was considered similar to the Monterey Water System because the purchased system was an investor-owned, retail water system that operated in a similar regulatory climate as California, the transaction involved a willing buyer and willing seller, the system has similar components to the Monterey Water System, and the size of the system was equivalent to a Class A or Class B utility in California, which is indicative of a complete water system with source of supply, treatment, storage, distribution, and support facilities, and similar economic/rate regulation to the Monterey Water System.

[213] Purchase price by system and number of connections based on the 2013 Bond Official Statement for FGUA for the Pasco, Lake, and Unified systems.

[214] Rate Case Order No. PSC-11-0256-PAA-WS, p.59.

11. System: North Main Utility Water and Wastewater Systems (IL)
    Buyer: Aqua Illinois
    Seller: Village of Glenview, IL
    State: Illinois
    Date: April 1, 2015

    In this asset sale transaction, Aqua Illinois purchased the water system and wastewater assets of the North Maine Utility owned by the Village of Glenview, a municipal-owned utility in Illinois. The service area of the system has a mixed customer base with a significant number of residential customers, with numerous multifamily/condominium/apartment buildings, and a number of commercial customers. The water supply for the system is purchased from the City of Chicago. The acquisition of the water system was in the amount of approximately $18.59 million and was settled on April 1, 2015. The water system had a net book value of approximately $12.611 million and served approximately 4,724 customer connections. The wastewater system was acquired for approximately $3.41 million. The wastewater system had a net book value of approximately $1.783 million and served approximately 2,494 customer connections.

    The water utility transaction was considered for limited use because the transaction involved an incentive to consolidate by the Illinois Commerce Commission, the water system was a retail water system with the number of customers within an order of magnitude of the Monterey Water System, the buyer operated under Illinois Commerce Commission regulation, which is similar to the regulatory climate as California, however the system purchased its water from a wholesale supplier, which is dissimilar to the Monterey Water System.

12. System: Captain's Cove Utility Company, Inc.
    Buyer: Aqua Utilities Captain's Cove, Inc.
    Seller: Captain's Cove Utility Company, Inc.
    State: Virginia
    Date: 08/04/2015

    Aqua Utilities Captain's Cove, Inc., a wholly owned subsidiary, of Aqua Virginia, purchased in an asset sale transaction the assets of Captain's Cove Utility Company, Inc, a publicly owned water and wastewater provider located in Accomack County, Virginia. The transaction occurred on August 4, 2015 and involved Captain's Cove Utility Company, Inc. transferring all water and sewer assets for $2,432,735 in a cash transaction plus $30,000 per year for 10 years for a total compensation of $2.64 million.[215]

    The acquired water utility system included water utility assets including two operating wells, drilled wells, future well lots, well horse pump stations, hydro tanks, storage tank, chlorination feed equipment, distribution system, service lines, shut off valves, permits, hydrants, flush offs, valves, land, and easements pertaining to the water assets, or other tools, trucks, equipment, and any other appurtenances of the water system. The acquired sewer utility system included sewer utility assets including single lined lagoons, air compressors, pump stations. Included in this transaction was all

[215] Commonwealth of Virginia State Corporation Commission Joint Petition of Aqua Utilities Captain's Cove, Inc., and Captain's Cove Utility Company, Inc. for Approval of a Transfer of Utility Assets; Case No.:PUE-2015-000014

other tangible and intangible assets owned of held by the seller and used or useful in providing water/sewer service to the Seller's customers.

At the time of the transaction, Captain's Cove Utility Company, Inc. served 957 water customer connections and 272 sewer customer connections, had a net utility plant value of $3,367,000, operating revenues of $966,000, and EBITDA of $439,000 in 2016.

Aqua Utilities Captain's Cove, Inc., a wholly-owned subsidiary of Aqua Virginia, which in turn is wholly-owned by Aqua America, Inc. Aqua America is one of the largest U.S based publicly traded water and sewer holding companies. Aqua Virginia, Inc. currently owns and operates 170 water systems and 7 sewer systems, serving over 30,000 premises or about 75,000 individuals in and throughout the commonwealth.

This transaction was considered for limited use because of its age. However, the purchased system operated under a regulatory environment without consolidation incentives, the transaction involved a willing buyer and willing seller, the system has similar water components to the Monterey Water System, and the size of the system was within an order of magnitude of the Monterey Water System.

Sources:

Joint Petition of Aqua Utilities Captain's Cove, Inc. and Captain's Cove Utility Company, Inc. for Approval of a Transfer of Utility Assets, Case No. PUE-2015-000014.

Order Granting Approval of the Joint Petition of Aqua Utilities Captain's Cove, Inc. and Captain's Cove Utility Company, Inc. for approval of a transfer of utility assets, August 4, 2015.

Compliance Filing for Aqua Utilities Captain's Cove, Inc., November 30, 2016.

13. Buyer: Golden State Water Company
Seller: Rural Water Company – Santa Maria Area
State: California
Date: June 25, 2015

In this asset sale transaction, Golden State Water Company, a Class D investor-owned utility, purchased the water system previously owned by Rural Water Company in the Santa Maria area of California. Rural Water Company was an investor-owned water utility. This transaction was in the amount of approximately $1.7 million and was settled on June 25, 2015. The RCNLD of this system was estimated to be approximately $25.1 million and served 950 customer connections.

This transaction was considered for limited use because it is much smaller than the Monterey Water System and was only considered in the Market Approach as an example of where the transaction involved an incentive to consolidate and the purchase price associated with the system was significantly lower than the RCNLD of the system.

14. Buyer: California-American Water Company
Seller: Dunnigan Water Works
State: California
Date: November 5, 2015

In this asset sale transaction, California-American Water Company, an investor-owned utility, purchased Dunnigan Water Works, a Class D investor-owned water utility in California. This transaction was in the amount of approximately $2.0 million and was settled on November 5, 2015.

The RCNLD of this system was estimated to be approximately $6.525 million and served 486 customer connections.

This transaction was considered for limited use since it is much smaller than the Monterey Water System and was only considered in the Market Approach as an example of where the transaction involved an incentive to consolidate and the purchase price associated with the system was significantly lower than the RCNLD of the system.

15. Buyer: California American Water
Seller: Geyserville Water Works
State: California
Date: November 10, 2016

In this asset sale transaction, California-American Water Company, a Class D investor-owned utility, purchased Geyserville Water Works, an investor-owned water utility in California. This transaction was in the amount of approximately $1.415 million and was settled on November 10, 2016. The reproduction cost new less depreciation (RCNLD) of this system was estimated to be approximately $7.171 million and served 318 customer connections.

This transaction was considered for limited use because the system is much smaller than the Monterey Water System and was only considered in the Market Approach as an example of a transaction involving an incentive to consolidate and where the purchase price associated with the system was significantly lower than the RCNLD of the system.

16. System: Meadowbrook Water System
Buyer: California-American Water Company
Seller: Meadowbrook Water Company of Merced, Inc.
State: California
Date: December 1, 2016

This capital stock sale transaction was a negotiated sale between California-American Water Company (Cal-Am), a subsidiary of American Water Works Company, who purchased Meadowbrook Water Company, a Class C water utility owned by Merced, Inc. The purchased water system is located in Merced County, California and served 1,698 service connections, or 2,196 equivalent residential connections, including two schools and a meat processing facility, approximately the time of the transaction. The purchased system included three wells that use seven pneumatic tanks to regulate pressure, and a distribution system consisting of over 20.2 miles of water mains, and other system appurtenances.

The purchase price was $4.0 million, and the transaction was approved by the CPUC on December 1, 2016. The portion of the purchase price allowable to be included in rate base was $3.425 million. The remaining portion of the purchase price ($575,000) represents contributions in aid of construction that Cal-Am will be able to recover as an expense through a surcharge. Cal-Am acquired all shares and assets of Meadowbrook Water Company, as well as certain real property not owned by Meadowbrook Water Company but by the Walker Family. This other real property consisted of office facilities and associated land, and a majority of the well sites. The system was

reportedly sold because operating the system was becoming more complicated as administrative and regulatory burdens increased.

The Meadowbrook Water Company earned revenues of approximately $820,000 in 2016, had EBITDA of $178,000, a pre-acquisition rate base of approximately $1.96 million, and net plant book value[216] of approximately $2.78 million.

This transaction served as limited use because of small size of the acquired system (Class C Utility) as compared to the Monterey Water System (Class A Utility); however, it involved Cal-Am's acquisition of a water systems that it currently owns and operates in California, so it has some limited relevance to the Monterey Water System. Due to the relatively small size of the acquired system, it was only considered in the Market Approach as an example of a transaction involved an incentive to consolidate and where the purchase price associated with the system was significantly lower than the RCNLD of the system.

17. System: Scranton Wastewater System
    Buyer: Pennsylvania-American Water
    Seller: City of Scranton
    State: Pennsylvania
    Date: December 29, 2016

    In this asset sale transaction, Pennsylvania-American Water Company purchased the wastewater system previously owned by the City of Scranton. This transaction was in the amount of approximately $195 million and was approved on December 29, 2016. The system served 31,229 customer connections.

    This transaction was considered for limited use because this was a wastewater system, not a water system, and was only considered in the Market Approach as an example of a transaction involving a regulatory incentive to consolidate.

18. System: Mckeesport Wastewater System
    Buyer: Pennsylvania-American Water
    Seller: City of Scranton
    State: Pennsylvania
    Date: October 26, 2017

    In this asset sale transaction, Pennsylvania-American Water Company purchased the wastewater system previously owned by the City of Mckeesport. This transaction was in the amount of approximately $159 million and was approved on October 26, 2017. The RCNLD of this system was estimated to be approximately $156.5 million and served 12,780 customer connections.

[216] Net plant book value includes land & land rights, depreciable plant (less accumulated depreciation), construction work in progress, and CIAC.

This transaction was considered for limited use because this was a wastewater system, not a water system, and was only considered in the Market Approach as an example of a transaction involving a regulatory incentive to consolidate.

19. System: The Avon Water Company
Buyer: Connecticut Water Service Inc.
Seller: The Avon Water Company
State: Connecticut
Date: April 12, 2017

This capital stock and cash merger transaction involved transferring of ownership and control of the Avon Water Company (AWC), a Class B water utility, to Connecticut Water Service, Inc. (CWS). The AWC was located in Avon, Connecticut serving 4,859 service connections, or 5,759 equivalent residential connections consisting of residential, commercial, and industrial customers in the communities of Avon, Farmington, and Simsbury, Connecticut. The transaction was approved by the Connecticut Public Utilities Regulatory Authority (CPURA) on April 12, 2017.[217]

The purchased system included a chlorination purification system,11 groundwater wells, five water storage facilities with a combined capacity of approximately 2.8 million gallons, 19 pumping and booster stations, a network of approximately 95.6 miles of distribution piping, 648 fire hydrants, services, and associated appurtenances. In 2015, AWC had EBITDA of $2.2 million and net plant book value of approximately $26.3 million.

The transaction was an 80% stock-for-stock and 20% cash purchase where CWS acquired 100% of the issued and outstanding stock of AWC. The acquisition was reported in the CPUC Decision to reflects a total enterprise value of $36.58 million, consisting of $32.94 million in cash payments to Avon Water Company shareholders, plus the assumption by CWS of approximately $3.74 million in AWC long-term debt. However, following the completion of the transaction, CWS reported that the completed transaction reflected a total enterprise value of $39.1 million, with $33.0 million paid to shareholders and the assumption by CWS of approximately $6.1 million of debt held by AWC at the time of the acquisition.[218] This higher enterprise value was used for this transaction.

Connecticut Water Service Inc. currently serves 95,000 customers or a population of approximately 325,000 people in 56 towns in Connecticut.

The Avon Water Company transaction was considered for limited use because the acquisition involved an entire company, not just a water system or segment of a company, and the rationale for the transaction included taking advantage of significant economies of scale, which is not the case for the Monterey Water System. However, this transaction has similarities to the Monterey Water System because the purchased system was an investor-owned, retail water system, the transaction occurred within the recent past (2017), involved a willing buyer and willing seller, the system has similar components to the Monterey Water System, and the size of the system was equivalent to a

[217] Docket No. 16-11-31.

[218] Annual Report (Form 10-K) of the Connecticut Water Service, Inc. for the period ending 12/31/2017.

Class A or Class B utility in California, which is indicative of a complete water system with source of supply, treatment, storage, distribution, and support facilities.

20. System: Sundale Water and Wastewater
Buyer: Illinois-American Water Company
Seller: Sundale Utilities
State: Illinois
Date: May 1, 2018

Illinois-American Water Company ("IAWC"), a subsidiary of American Water, and the largest investor-owned water utility in Illinois purchased Sundale Utilities, a privately owned water and wastewater utility provider located in Illinois providing water and wastewater service to customers located in three separate areas in Tazewell County. The asset sale transaction occurred on May 1, 2018 and involved Sundale Utilities transferring all water assets for $1,500,000 and all wastewater assets for $500,000 in a cash transaction.[219]

Sundale was a public utility company providing potable water service to approximately 550 customers in Washington Estates and wastewater treatment and collection services to 550 customers in Washington Estates and 860 customers in Sundale, Tazewell County, Illinois. The utility system included eleven miles of water mains, 34 fire hydrants, 15 miles of sewer force mains, an office building, sewage treatment parcels, lagoons, lift stations, and a water treatment facility. The water system's primary assets include two wells, a water treatment plant, a 75,000-gallon elevated water tower, a liquid chlorine injection system, and a 150-kw generator. The acquired utility system included 10 parcels of land owned in fee by Sundale Utilities. At the time of the transaction, Sundale Utilities had a net utility plant value of approximately $760,000, operating revenues of $521,000, and EBITDA of $58,000 in 2017.

IAWC is owned by American Water, which is a public utility company operating in the United States and Canada. American Water has yearly revenues approximately $3.44 billion and is headquartered in Camden New Jersey.

This transaction was considered for limited use because of its small size and because the purchased system was consummated under PUC incentives that were not deemed to be relevant to the Monterey Water System, which impacted the purchase price. The system acquired was an investor-owned retail water and wastewater system, the transaction involved a willing buyer and willing seller, the system has similar water components to the Monterey Water System.

Sources:

Joint Application for Approval of Asset Purchase Agreement and Exhibits, Docket No. 18-0241.

Annual Report of Sundale Utilities, Inc. to the Illinois Commerce Commission, December 31, 2016 and 2017.

Illinois Commerce Commission Order 18-0241, May 2, 2018.

[219] State of Illinois Commerce Commission Approval of the Purchase of Assets, docket no. 18-0241, p.3.

21. System: Manteno Wastewater System
    Buyer: Aqua Illinois
    Seller: City of Manteno
    State: Illinois
    Date: February 6, 2018

    In this asset sale transaction, Aqua Illinois purchased the wastewater system previously owned by the City of Manteno. This transaction was in the amount of approximately $25.0 million and was approved on February 6, 2018. The RCNLD of this system was estimated to be approximately $27.2 million and served 3,937 customer connections.

    This transaction was considered for limited use because this was a wastewater system, not a water system, and was only considered in the Market Approach as an example of a transaction involving a regulatory incentive to consolidate.

22. System: Limerick Wastewater System
    Buyer: Aqua Pennsylvania
    Seller: Limerick Township
    State: Pennsylvania
    Date: July 12, 2018

    In this asset sale transaction, Aqua Pennsylvania purchased the wastewater system previously owned by the Limerick Township. This transaction was in the amount of approximately $75.1 million and was approved on July 12, 2018. The RCNLD of this system was estimated to be approximately $88.1 million and served 5,433 customer connections.

    This transaction was considered for limited use because this was a wastewater system, not a water system, and was only considered in the Market Approach as an example of a transaction involving a regulatory incentive to consolidate and where the purchase price associated with the system was lower than the RCNLD of the system.

23. System: Lake Station Water System, IN
    Buyer: Indiana-American Water Company
    Seller: Lake Station Water Department, IN
    State: Indiana
    Date: August 15, 2018

    In this asset sale transaction, Indiana-American Water Company, an investor-owned utility, purchased a Class C water system previously owned by Lake Station Water Department in Indiana. This transaction was in the amount of approximately $20.68 million and was settled on August 15, 2018. The system served approximately 3,443 customer connections. This transaction was considered for limited use due to the relatively small size of the acquired system (a Class C Utility) as compared to the Monterey Water System (a Class A Utility), and the different regulatory environment.

    This transaction was considered for limited use because the Lake Station Water System was considered a "distressed water system" and the Indiana Utility Regulatory Commission allowed

special consideration to the Company including allowing a "cost differential" in its rate base post acquisition without consideration of rate payer indifference.

24. System: Indian River Water System
Buyer: City of Chesapeake
Seller: Aqua Virginia, Inc.
State: Virginia
Date: April 14, 2019

Aqua Virginia is an investor-owned water and wastewater public service company operating under the laws of the Commonwealth of Virginia. The City of Chesapeake is a municipal corporation and political subdivision of the Commonwealth of Virginia. The Indian River Water System was owned by Aqua Virginia and the System's service area is located within the political boundaries of the City.

The buyer and seller agreed that the City would acquire the Indian River Water System in an asset sale for a purchase price of $1,931,600 paid in full at the time of closing the transaction.

The acquired water utility system included wells, well lots, well houses, well treatment, storage tankage, booster pumps, distribution system piping and valves, flush offs, service lines to each connection, and other appurtenances.

At the time of the transaction, The Indian River Water System served 505 water customer connections, had a net utility plant value of $1,259,000, and annual operating revenues of approximately $269,000 in 2018.

This transaction was considered for limited use due to the small size of the system and was only considered in the Market Approach as an example of a transaction of a system that operated in a state without consolidation incentives. The transaction has similarities with the Monterey System in that the transaction involved a willing buyer and willing seller, the system has similar water components to the Monterey Water System, but the size of the system was much smaller than the Monterey Water System.

Sources:

Joint Petition of Aqua Virginia, Inc. and the City of Chesapeake, Virginia, Case No. PUR-2018-00184.

Order Granting Approval of the Joint Petition of the City of Chesapeake and Aqua Virginia for approval of a transfer of utility assets, March 14, 2019.

25. Buyer: Liberty Utilities (Park Water) Corporation
Seller: Mesa-Crest Water Company
State: California
Date: April 15, 2019

In this asset sale transaction, Liberty Utilities (Park Water) Corporation, an investor-owned utility, purchased Mesa-Crest Water Company, a Class D investor-owned utility located in California. This transaction was in the amount of approximately $2.6 million and was settled on April 15, 2019.

The purchased water system served 709 customer connections in total. Additionally, the utility had annual revenues of approximately $1.71 million and a rate base of approximately $2.925 million.

This transaction was considered for limited use due to its small size and was only considered in the Market Approach as an example of a transaction of a system that involved a regulatory incentive to consolidate.

26. Buyer: California-American Water Company
Seller: Rio Plaza Water Company – Ventura County Service Area
State: California
Date: April 25, 2019

In this asset sale transaction, California-American Water Company, an investor-owned utility, purchased the water system previously owned by Rio Plaza Water Company, a Class D investor-owned water utility in California. This transaction only included the system in the Ventura County Service Area. This transaction was in the amount of approximately $1.75 million and was settled on April 25, 2019. The RCNLD of this system was estimated to be approximately $2.562 million and served 520 customer connections.

This transaction is much smaller than the Monterey Water System and was only considered for limited use in the Market Approach as an example of a transaction involving an incentive to consolidate and where the purchase price associated with the system was significantly lower than the RCNLD of the system.

27. System: River Road Public Service District
Buyer: City of Morgantown (Morgantown Utility Board)
Seller: River Road Public Service District
State: West Virginia
Date: April 30, 2019

Morgantown Utility Board, a public utility board, purchased River Road Public Service District, a publicly owned water utility provider located in West Virginia providing water service to customers located in Monongalia County. The asset sale transaction occurred on April 30, 2019 and involved River Road Public Service District transferring all water assets for $3,614,000 in a cash purchase.[220]

The acquired utility system included water utility assets including pump houses, water transmission and distribution lines, water storage tanks, booster stations, mains, extensions, laterals, valves, connections, services, meter, and all other equipment and personal property used and useful in providing water service to the customers. Along with all other tangible and intangible assets owned of held by the seller and used or useful in providing water service to the Seller's customers.

[220] West Virginia State Public Utility Commission Final Order of the River Road Public Service District and Morgantown Utility Board, Case no. 19-0454-PWD-W-PC

At the time of the transaction, River Road Public Service District served 791 water customer connections, had a net utility plant value of $3,785,000, operating revenues of $502,000, and EBITDA of $208,000 in 2019.

Morgantown Utility Board is a public utility board operating in Monongalia County, West Virginia. Morgantown Utility Board serves 26,364 customers in the county and provides resale water service to seven customers.

This transaction was considered for limited use because the transaction involved a willing buyer and willing seller, the transaction did not involve an incentive to consolidate, but the size of the system was much smaller than the Monterey Water System.

Sources:

Petition for consent and approval for Morgantown Utility Board to acquire the waterworks system assets of River Road Public Service District, Case No. 19-0454-PWD-W-PC, April 30, 2019.

Public Service Commission of West Virginia Order granting approval for Morgantown Utility Board to acquire the waterworks system assets of River Road Public Service District, Case No. 19-0454-PWD-W-PC, August 15, 2019.

Annual Report for the River Road Public Service District submitted to the Public Service Commission of West Virginia, for the year ended 2019.

28. System: Pennsylvania Utility Company
Buyer: Community Utilities of Pennsylvania, Inc.
Seller: Pennsylvania Utility Company
State: Pennsylvania
Date: June 13, 2019

Community Utilities of Pennsylvania, Inc. ("CUPA"), a subsidiary of Utilities, Inc., a privately owned water and wastewater utility operating across 18 states purchased Pennsylvania Utility Company, a privately owned water and wastewater utility in Pennsylvania providing water and wastewater service to customers located in Tamiment, Lehman Township, Pike County, Pennsylvania. The asset sale transaction occurred on June 13, 2019 and involved the Pennsylvania Utility Company transferring all water and wastewater assets for $3,141,702 in a cash transaction.[221]

The acquired utility system is located in the resort community of Tamiment in the Poconos of Pennsylvania. This community was a resort community with a ski resort, golf course, and a playhouse. In 2005, the resort was liquidated to make room for a residential condominium development.

The System included two separate, but physically connected water systems. The first system contains two deep wells with a combined yield of approximately 300,000 gpd; one steel, elevated water storage tank with a capacity of 125,000 gallons; one submersible pump; one electric motor; one chemical feed with a 30-gallon solution tank; and approximately 12,000 feet of six-inch and eight-inch diameter plastic distribution main and related appurtenances. The second system contains one deep well with a yield of approximately 432,000 gpd; one submersible pump; one steel standpipe with a capacity of 350,000 gallons; chemical feed pumps, chemical solution tanks and

[221] Pennsylvania Public Utility Commission Joint Application, docket no. A-2018-3005432, p.9.

mixers; approximately 55,010 feet of six-inch and eight-inch diameter plastic distribution main and related appurtenances. The acquired sewer system includes 5 pump stations, a sewage treatment plant, and 58,000 feet of one-and-a-half-inch through eight-inch diameter plastic collection mains.

At the time of the transaction, Pennsylvania Utility Company served 506 residential customers, four commercial water customer connections, and 506 residential and four wastewater connections. In addition, the utility charges 273 unoccupied lots an availability charge. Pennsylvania Utility Company had operating revenues of $609,000, and EBITDA of $226,000 in 2017.

CUPA is owned by Utilities, Inc., which is a private utility company operating in the United States. Utilities, Inc. has yearly revenues approximately $441 million and is headquartered in Chicago, IL.

This transaction was considered for limited use due to its relatively small size and was considered as an example of a transaction that did not involve an incentive to consolidate. The transaction was similar to the Monterey System because the transaction involved a willing buyer and willing seller, the system has similar water components to the Monterey Water System, but the size of the system was much smaller than the Monterey Water System.

Sources:
Pennsylvania Public Utility Commission Joint Application, docket no. A-2018-3005432.
Response to questions from the Public Utility Commission, dated January 7, 2019.

29. System: Hillview Water Company
Buyer: California American Water
Seller: Hillview Water Company
State: California
Date: August 5, 2019

This capital stock transaction involved the purchase of the Hillview Water Company, a Class C Utility, by California-American Water, an investor-owned utility. Hillview Water Company was an investor-owned utility located in California whose service territory was located in Madera County in and around Oakhurst, California. The transaction was approved on August 5, 2019 and involved a stock purchase of the Hillview Water Company in the amount of $6.5 million, plus assumption of the Company's debt by California-American Water. The total enterprise value of this transaction was estimated at $7.47 million.[222]

The acquired water system included 50 water supply wells, water treatment purification systems, pumping equipment, 48 storage tanks with a combined capacity of 3.3 million gallons, approximately 64.5 miles of piping (not including service piping) and services, hydrants, valves, and other appurtenances. The Company's operations included four separate operating systems. In addition, Hillview had struggled with compliance related to naturally occurring uranium in its water source in two of the four systems it operates and received notices of non-compliance from the Division of Drinking water. Further, Department of Health Services considered Hillview Water as an "inadequately operated and maintained small water utility."

[222] Cal-Am Reply Comments on Proposed Decision Approving the Purchase of Water System, Application 18-04-025, p.2.

At the time of the transaction, the Hillview Water Company served 1,473 customer connections, or approximately 2,766 equivalent residential connections, had a net plant book value of approximately $20.52 million, annual operating revenues of $2.45 million, and EBITDA of $643,000.

California-American Water is owned by American Water, which is a public utility company operating in the United States and Canada. American Water has yearly revenues approximately $3.44 billion and is headquartered in Camden New Jersey.

This transaction served as limited use because of small size of the acquired system (Class C Utility) as compared to the Monterey Water System (Class A Utility); however, it involved Cal-Am's acquisition of a water systems that it currently owns and operates in California, so it has some limited relevance to the Monterey Water System. Due to the relatively small size of the acquired system, it was only considered in the Market Approach as an example of a transaction involving an incentive to consolidate and where the purchase price associated with the system was significantly lower than the RCNLD of the system.

30. System: Heritage Hills Water and Sewer
Buyer: SUEZ Water New York, Inc.
Seller: Heritage Hills Water Works Corporation and Heritage Hills Sewer Works Corporation
State: New York
Date: September 24, 2019

SUEZ Water New York, Inc. ("SUEZ"), a wholly owned subsidiary of SUEZ Water Resources LLC, a large water and wastewater utility, purchased Heritage Hills Water Works Corporation and Heritage Hills Sewer Works Corporation, a privately owned water and wastewater utility provider located in New York providing water and wastewater service to customers located in Westchester County. The asset sale transaction occurred on September 24, 2019 and involved Heritage Hills transferring all water and wastewater assets for $5,200,000 and $3,700,000, respectively, in a cash transaction.[223]

The acquired water utility system included five gravel packed wells with a production capacity of 864,000 gpd, one treatment plant, and two storage tanks with a total volume of 1.1 million gallons. The acquired sewer utility system included one treatment plant and two lift stations.

At the time of the transaction, Heritage Hills served 2,700 water customer connections, and 2,900 wastewater connections. Heritage Hills water system had a net utility plant value of $4,774,000, operating revenues of $1,458,000, and EBITDA of $326,000 in 2018.

SUEZ provides drinking water, wastewater and waste collection service to 6.7 million people on a daily basis; treats 560 million gallons of water and 460 million gallons of wastewater each day; delivers water treatment and advanced network solutions to 16,000 industrial and municipal sites; processes 160,000 tons of waste for recycling; rehabilitates and maintains water assets for more than

[223] SUEZ Press Release, December 30, 2020.

6,000 municipal and industrial customers; and manages $4.1 billion in total assets. The company posted revenues of $1.1 billion in 2019 and is a subsidiary of Paris-based SUEZ.

The water utility portion of the transaction was considered for limited use as an example of a transaction that did not involve a regulatory incentive to consolidate. The transaction was similar to the Monterey Water System because it involved a willing buyer and willing seller, the system has similar water components to the Monterey Water System, and the size of the system was within an order of magnitude of the Monterey Water System. The water system was a complete water system with source of supply, treatment, storage, distribution, and support facilities.

Sources:

Joint Petition of Suez Water NY, Inc and Heritage Hills water works Corporation for Acquisition Approval. 19-W-0726.

New York Public Service Commission Order Authorizing the Transfer of Assets, December 18, 2020.

SUEZ Press Release, December 30, 2020.

31. System: Cheltenham Wastewater System
Buyer: Aqua Pennsylvania
Seller: Cheltenham Township
State: Pennsylvania
Date: October 24, 2019

In this asset sale transaction, Aqua Pennsylvania purchased the wastewater system previously owned by the Cheltenham Township. This transaction was in the amount of approximately $50.3 million and was approved on October 24, 2019. The RCNLD of this system was estimated to be approximately $47.1 million and served 10,219 customer connections.

This transaction was considered for limited use because this was a wastewater system, not a water system, and was only considered in the Market Approach as an example of a transaction involving a regulatory incentive to consolidate.

32. System: H2O Systems, Inc.
Buyer: Magnolia Water
Seller: H2O Systems, Inc.
State: Louisiana
Date: 11/6/2019

Magnolia Water, a Louisiana limited liability company, of Central States Water Resources, Inc., purchased H2O Systems, Inc., a Louisiana water utility corporation located in Mandeville, Louisiana. The asset sale transaction occurred on November 6, 2019 and involved H2O Systems, Inc. transferring all water and sewer assets to Magnolia Water for $16,047,000 in a cash transaction.[224]

[224] Louisiana Public Service Commission response to Application for a Letter of Non Opposition to the Acquisition of the Water and/or Wastewater Systems operated by H2O Systems, Inc. Louisiana Public Service Commission, Docket No. S-35297, November 6, 2019.

The acquired water utility system included water utility assets including 12 water subsystems comprised of drilled water wells, pumps, storage tanks, and pressure tanks, distribution system, service lines, valves, land, and easements pertaining to the water assets. The acquired sewer utility system includes 11 wastewater subsystems mechanical plants sewer utility assets including collection piping, treatment, and pumping assets.

At the time of the transaction, H2O Systems, Inc. served approximately 4,921 water customers and approximately 4,568 wastewater customers located in St. Tammany Parish, had a net utility plant value of $8,006,000, operating revenues of $4,082,000, and EBITDA of $1,039,000 in 2018.

Magnolia Water is owned by Central States Water Resources, Inc., a company that owns and operates utility companies in 10 states with its parent headquarters in St. Louis, Missouri.

This transaction was considered for limited use as an example of a transaction that did not involve a regulatory incentive to consolidate. The transaction was somewhat similar to the Monterey Water System because it involved a willing buyer and willing seller, the system has similar water components to the Monterey Water System, and the size of the system was within an order of magnitude of the Monterey Water System. However, the system was located in a low cost of living area and there are regulatory differences as compared to CPUC regulation.

Sources:

Application for a Letter of Non-Opposition to the Acquisition of the Water and/or Wastewater Systems operated by H2O Systems, Inc. Louisiana Public Service Commission, Docket No. S-35297, June 25, 2019.

Louisiana Public Service Commission response to Application for a Letter of Non-Opposition to the Acquisition of the Water and/or Wastewater Systems operated by H2O Systems, Inc. Louisiana Public Service Commission, Docket No. S-35297, November 6, 2019.

Annual Report Filing for the Year Ended December 31, 2018, H2O Systems, Inc. submitted to the Louisiana Public Service Commission, dated July, 23, 2019.

33. System: Fruitridge Vista Water Company
Buyer: California-American Water Company
Seller: Cook Endeavors d/b/a Fruitridge Vista Water Company
State: California
Date: December 19, 2019

This asset sale transaction involved the purchase of the Fruitridge Vista Water Company, a subsidiary of Cook Endeavors, Inc. by California-American Water, an investor-owned utility. Fruitridge Vista Water Company was a Class B investor-owned utility located in California. The transaction was approved on December 19, 2019 and involved Fruitridge Vista Water Company transferring all of its assets to California-American Water for $20.75 million in cash along with the assumption of State Revolving Fund loan debt in the amount of $2.0 million.[225] The total enterprise value of this transaction was estimated to be $22.75 million.

[225] Joint Acquisition Application of California-American Water Company and Cook Endeavors, p. 5.

The acquired water system included 20 water supply wells, water treatment purification system, pumping equipment, 17 storage tanks with a combined capacity of 17,982 AF, approximately 72.7 miles of piping (not including service piping) and services, hydrants, valves, and other appurtenances.

At the time of the transaction, the Fruitridge Vista Water Company served 4,760 customer connections, or approximately 9,134 equivalent residential connections, in a four-square mile area of Sacramento County in California. Additionally, in 2018 the utility had a net plant book value of approximately $21.83 million, operating revenues of $3.51 million, and EBITDA of $1.06 million.

The Fruitridge's owner testified that he seeks to sell the utility assets because administrative, regulatory, and legal burdens have become increasingly complex, making it difficult to continue to operation the utility as a family-owned business. The Joint Applicants contended that the purchase by Cal-Am will ensure compliance with California's requirements to upgrade water infrastructure under the "Public Water system Investment and Consolidation Act of 1997. The CPUC approved of the transaction in part based on the policy of consolidating smaller utilities into larger ones because of efficiencies of scale, better management/competence/expertise, greater resources, and financial capabilities of the purchaser, and the need for the utility to upgrade its infrastructure.

California-American Water is owned by American Water, which is a public utility company operating in the United States and Canada. American Water has yearly revenues approximately $3.44 billion and is headquartered in Camden New Jersey.

This transaction was considered for limited use because it involved an incentive to consolidate under CPUC policies that would not likely apply to the Monterey Water System, which is already a larger system and would not likely achieve the same level of benefit from an acquisition by a larger utility provider, the water system was a Class B retail water system operating in California. The acquired system was a Class B utility in California but was smaller in size than the Monterey Water System. For these reasons, it was only considered in the Market Approach as an example of where the purchase price associated with the system was significantly lower than the RCNLD of the system.

34. System: Campbell Water System
Buyer: Aqua Ohio
Seller: City of Campbell
State: Ohio
Date: January 24, 2020

Aqua Ohio, a waterworks company purchased a water system owned by the City of Campbell, Ohio for $7.5 million. The system included a water treatment plant, distribution mains and lines, related appurtenances, including fittings, hydrants, valves, booster/pump stations, storage facilities, manholes and other related distribution equipment. The transaction also included all real estate, whether in fee or by easement.

At the time of the asset sale transaction, the City's water system had 3,200 water service connections, a net book value of $5.0 million, revenues of $2.5 million, and EBITDA of approximately $840,000.

This transaction was considered for limited use as an example of a transaction that did not involve a regulatory incentive to consolidate. This transaction was somewhat similar to the Monterey Water

System because it involved a willing buyer and willing seller without a PUC consolidation incentive, but the size of the system was smaller than the Monterey Water System in terms of number of water customers.

Sources:

Application of Aqua Ohio, Inc. to Purchase the Assets and Property of the City of Campbell, submitted to the Public Utilities Commission of Ohio, Case No. 19-1610-WS-UNC. August 21, 2019.

Finding and Order of the Public Utilities Commission of Ohio related to Case No. 19-1610-WS-UNC. December 18, 2019.

35. System: Mo-Dad Utilities, LLC.
Buyer: Magnolia Water
Seller: Mo-Dad Utilities, LLC.
State: Louisiana
Date: March 13, 2020

Magnolia Water, a Louisiana limited liability company, of Central States Water Resources, Inc., purchased Mo-Dad Utilities, LLC., a Louisiana limited liability company located in Denham Springs, Louisiana. The transaction occurred on March 13, 2020 and involved Mo-Dad Utilities, LLC., transferring all water and sewer assets to Magnolia Water for $10,910,000 in a cash transaction.[226]

At the time of the transaction, Mo-Dad Utilities, LLC. Served approximately several wastewater systems and one water system serving approximately 8,600 wastewater and approximately 55 water customers in Ascension, Livingston, Tangipahoa, East Baton Rouge, West Baton Rouge, and St. Helena Parishes. The company had a net utility plant value of $7,589,000, operating revenues of $5,716,000, and EBITDA of $1,440,000 in 2018.

Magnolia Water is owned by Central States Water Resources, Inc., a company that owns and operates utility companies in 10 states with its parent headquarters in St. Louis, Missouri.

This transaction was considered for limited use as an example of a transaction that did not involve a regulatory incentive to consolidate. This transaction was somewhat similar to the Monterey Water System because it involved a willing buyer and willing seller without a PUC consolidation incentive, but the size of the system was much smaller than the Monterey Water System in terms of number of water customers.

Sources:

Application for a Letter of Non-Opposition to the Acquisition of the Water and/or Wastewater Systems operated by Mo-Dad Utilities, LLC., Docket No. S-35296, June 25, 2019.

Louisiana Public Service Commission response to Application for a Letter of Non-Opposition to the Acquisition of the Water and/or Wastewater Systems operated by Mo-Dad Utilities, LLC., Louisiana Public Service Commission, Docket No. S-35296, November 6, 2019.

[226] Louisiana Public Service Commission response to Application for a Letter of Non Opposition to the Acquisition of the Water and/or Wastewater Systems operated by Mo-Dad Utilities, LLC., Louisiana Public Service Commission, Docket No. S-35296, November 6, 2019.

Annual Report Filing for the Year Ended December 31, 2018, Mo-Dad Utilities, LLC., submitted to the Louisiana Public Service Commission, dated April, 30, 2019.

36. System: Rainier View Water System
Buyer: Washington Water Service Company
Seller: Rainier View Water Company
State: Washington
Date: March 26, 2020

Washington Water Service Company, a wholly-owned subsidiary of California Water Service Group purchased a water system owned by the Rainier View Water Company, located in Pierce County, Washington for $37.6 million. The transaction included all water supply and treatment equipment and facilities, included but not limited to wells, pumping equipment, connections, tanks, reservoirs, mains, pipes, meters, and hydrants. The transaction also included all real property and easements, water rights, inventory, accounts receivable, and books and records of the owner.

At the time of the transaction, the water system had 18,151 water service connections, a net plant book value of 34.2 million, revenues of $7.1 million, and EBITDA of $2.2 million.

This transaction was considered for limited use as an example of a transaction that did not involve a regulatory incentive to consolidate. This transaction was somewhat similar to the Monterey Water System because it involved a willing buyer and willing seller without a PUC consolidation incentive.

Sources:

Application of Washington Water Service Company and Rainier View Water Company, Inc. for the Sale and Transfer of Assets, submitted to the Washington Utilities and Transportation Commission, Docket UW-200091, February 6, 2020.

Order of the Washington Water Service Company Granting Application for the Sale and Transfer of Assets, Docket UW-200091. March 26, 2020.

37. System: Jerseyville Water and Wastewater System
Buyer: Illinois-American Water
Seller: City of Jerseyville
State: Illinois
Date: September 23, 2020

Illinois-American Water, a wholly-owned subsidiary of the American Water Works Company purchased a water and wastewater system owned by the City of Jerseyville, a Illinois municipal corporation, located in Jersey County, Illinois for $43.2 million. The transaction included a water system that included three parcels of land owned in fee, one water treatment plant, three active wells, one water tower, one storage tank, meters, hydrants, and approximately 649,000 linear feet of water mains. The wastewater system included 10 wastewater lift stations, two wastewater treatment plants, and approximately 438,000 linear feet of mains.

At the time of the asset sale transaction, the water system had 4,200 water service connections and 4,000 wastewater service connections, a net plant book value of $25.6 million, revenues of $4.4 million, EBITDA of $2.2 million, and an RCNLD cost of $61.2 million.

This transaction was considered for limited use as an example of a transaction involving an incentive to consolidate and where the purchase price associated with the system was significantly lower than the RCNLD of the system.

Sources:

Application of Illinois-American Water Company for the Issuance of a Certificate of Public Convenience and Necessity to Provide Water and Wastewater Service to Areas in Jersey County, Illinois, and for the Approval of the Purchase of Certain Assets of the City of Jerseyville, Illinois. Illinois Commerce Commission Case No. 19-1139. December 20, 2019.

Water and Wastewater System Appraisal Report for the Jerseyville Water & Wastewater System, prepared by Goodman Appraisal Consultants, LLC. May 1, 2020.

Order of the Illinois Commerce Commission. Application 19-1139. September 23, 2020.

38. System: The Commons Water Supply, Inc.
Buyer: Aqua Texas, Inc.
Seller: The Commons Water Supply, Inc.
State: Texas
Date: January 14, 2021

Aqua Texas, Inc. purchased a water system owned by The Commons Water Supply, Inc., a regulated water utility located in Harris County, Texas for $4.0 million. The transaction included a water system that included two active wells, 156,000 linear feet of water pipe, 83 to 106 gate valves, 38 fire hydrants, 38 isolation valves, 14 blow off valves, a water treatment system comprised of chlorination, and a pressure tank.

At the time of the asset sale transaction, the water system had approximately 992 water service connections, a net plant book value of $6.8 million, revenues of $677,000, EBITDA of $167,000, and an RCNLD cost of $11.8 million.

This transaction was considered for limited use as an example of a transaction not involving an incentive to consolidate and where the purchase price associated with the system was significantly lower than the RCNLD of the system.

Sources:

Application for the Sale, Transfer, or Merger of a Retail Public Utility, Submitted to the Public Utility Commission of Texas by Aqua Texas, Inc. March 17, 2021, Control Number 51911.

Notice of Approval of the Application of the Commons Water Supply, Inc. and Aqua Texas, Inc. for Sale, Transfer, or Merger of Facilities and Certificate Rights in Harris County. Docket 51911. January 14, 2021.

39. System: East Pasadena Water System
Buyer: California-American Water
Seller: City of East Pasadena
State: California
Date: August 5, 2021

Cal-Am acquired the East Pasadena Water System on August 5, 2021 for $34 million. East Pasadena Water is a Class B public water utility that owns and operates a water system consisting of wells,

reservoirs, meters, mains, distribution lines, water rights, and other facilities necessary for the utility operations. The system serves approximately 3,000 customer connections in the cities of Temple City, Arcadia, and San Gabriel and an unincorporated portion of Los Angeles County located southeast of the City of Pasadena.

This asset sale transaction was considered for limited use because it involved an incentive to consolidate under CPUC policies that would not likely apply to the Monterey Water System, which is already a larger system and would not likely achieve the same level of benefit from an acquisition by a larger utility provider. The transaction was similar to the Monterey Water System because it involved a willing buyer and willing seller, the system has similar water components to the Monterey Water System, and the size of the system was within an order of magnitude of the Monterey Water System.

Sources:

Joint Application of California-American Water Company for an Order Authorizing East Pasadena Water Company to Sell and California-American Water to Purchase the Water Utility Assets of East Pasadena Water Company, Application A2004003.

Decision Approving the Sale of East Pasadena Water Company Utility Assets to California-American Water Company, Inc. California Public Utilities Commission, Proposed Decision. August 5, 2021.

40. System: Triton Utilities, Inc.
Buyer: Triton Utilities, Inc (Ullico)
Seller: Michigan-American Water Company
State: Michigan
Date: February 4, 2022

Triton Utilities, Inc. (Ullico) purchased a water system owned by Michigan-American Water Company, a wholly owned subsidiary of the American Water Works Company, Inc., a regulated water utility located in Michigan for $6.0 million.

At the time of the asset sale transaction, the water system had approximately 5,000 water service connections that served a population of approximately 12,000 people across five townships in Northern Houghton County, Michigan.

This transaction was considered for limited use as an example of a transaction not involving an incentive to consolidate.

Sources:

American Water Announces Completion of Sale of its Utility Operations in Michigan to Ullico, BusinessWire, February 4, 2022.

American Water Works Company, Annual 10k Report filing to the Securities & Exchange Commission for the fiscal year ending December 31, 2021.

41. System: York Wastewater System
Buyer: Pennsylvania-American Water Company
Seller: City of York
State: Pennsylvania
Date: April 14, 2022

In this asset sale transaction, Pennsylvania-American Water Company purchased the wastewater system previously owned by the City of York. This transaction was in the amount of approximately $235 million and was approved on July 12, 2018. The RCNLD of this system was estimated to be approximately $199.0 million and served 34,490 customer connections.

This transaction was considered for limited use because this was a wastewater system, not a water system, and was only considered in the Market Approach as an example of a transaction involving a regulatory incentive to consolidate.

42. System: East Whiteland Wastewater System
Buyer: Aqua Pennsylvania
Seller: East Whiteland Township
State: Pennsylvania
Date: July 29, 2022

In this asset sale transaction, Aqua Pennsylvania purchased the wastewater system previously owned by the East Whiteland Township. This transaction was in the amount of approximately $54.9 million and was approved on July 29, 2022. The RCNLD of this system was estimated to be approximately $59.5 million and served 3,895 customer connections.

This transaction was considered for limited use because this was a wastewater system, not a water system, and was only considered in the Market Approach as an example of a transaction involving a regulatory incentive to consolidate.

43. System: Bound Brook Wastewater System
Buyer: New Jersey-American Water Company
Seller: Borough of Bound Brook
State: New Jersey
Date: August 11, 2022

In this asset sale transaction, New Jersey American Water Company purchased the wastewater system previously owned by the Borough of Bound Brook. This transaction was in the amount of approximately $5.0 million and was approved on August 11, 2022. The system served approximately 2,900 customer connections.

This transaction was considered for limited use because this was a wastewater system, not a water system, and was only considered in the Market Approach as an example of a transaction that did not involve a regulatory incentive to consolidate.

44. System: Bellflower Water System
Buyer: California-American Water Company
Seller: Bellflower Municipal
State: California
Date: August 30, 2022

The Bellflower Municipal Water System is located in Bellflower, California in southeast Los Angeles County and provides water service to about 1,826 customers in seven non-contiguous service areas.

The system consists of a water supply source and water delivery system that interconnects with a neighboring water system, and includes one active well, three standby wells, three storage tanks, water pipelines, fire hydrants, isolation valves, blow-off valves, and six interconnections.

In this asset sale transaction, the purchase price of the system by California-American Water was reported to be $17 million, which was lower than the total RCNLD value of the system estimated by Cal-Am to be $18.6 million.

This transaction was considered for limited use because it involved an incentive to consolidate under CPUC policies that would not likely apply to the Monterey Water System, which is already a larger system and would not likely achieve the same level of benefit from an acquisition by a larger utility provider. The transaction was similar to the Monterey Water System because it involved a willing buyer and willing seller, the system has similar water components to the Monterey Water System, and the size of the system was within an order of magnitude of the Monterey Water System.

45. System: Montebello Water System
Buyer: San Gabriel Valley Water Company
Seller: City of Montebello
State: California
Date: December 1, 2022

The City of Montebello is located in the southwestern San Gabriel Valley, eight miles east of downtown Los Angeles, has 64,000 residents served by five different public water systems. The City's municipal water system is located almost entirely within the City's boundaries, with small portions serving 125 non-residential customers in the Cities of Commerce and Rosemead. The City's water system provides service to approximately 1,650 customers.

The San Gabriel Valley Water Company, is a California corporation and is a Class A public utility water company with approximately 97,300 customers in two operating divisions in portions of Los Angeles County and San Bernadino County.

In this asset sale transaction, San Gabriel purchased the City's water system for $15.857 million and a ten-year lease of the City's 386.5 AF of Central Basin groundwater pumping rights at an initial rate of $450 per AF, with annual increases tied to changes in MWD's rates for untreated water. The transaction was completed under the 1997 California Consolidation Act.

This transaction was considered for limited use because it involved an incentive to consolidate under CPUC policies that would not likely apply to the Monterey Water System, which is already a larger system and would not likely achieve the same level of benefit from an acquisition by a larger utility provider. The transaction was similar to the Monterey Water System because it involved a willing buyer and willing seller, the system has similar water components to the Monterey Water System, and the size of the system was within an order of magnitude of the Monterey Water System.

Sources:

Application of San Gabriel Valley Water Company Authorizing the Purchase of the City of Montebello's Water System Assets. Application 2010004, October 2, 2020.

Sales Transactions Eliminated from Consideration

46. System: Jornada Water System
Buyer: City of Las Cruces
Seller: Jornada Water Company
Date: November 1, 2016

In this sales transaction, the City of Las Cruces, a municipality in New Mexico, acquired the water system previously owned by Jornada Water Company, an investor-owned utility in New Mexico. Compensation for the assets was in the amount of approximately $16.4 million and the transaction was settled on 11/1/2016. The system served 3,465 customer connections and had a net book value of $6.731 million. This transaction was eliminated from consideration because it involved a forced taking by eminent domain, rather than an open market transaction between a willing buyer and willing seller.

47. System: Larkspur Meadows Water System, CA
Buyer: Del Oro Water Company, Inc.
Seller: Larkspur Meadows Water Company
Date: March 23, 2017

In this sales transaction, Del Oro Water Company, Inc. purchased Larkspur Meadows Water Company, a Class D investor-owned water utility in California. This asset sale transaction was in the amount of approximately $83,000 and was settled on March 23, 2017. The net book value of this system was estimated to be approximately $82,000 and served 37 customer connections. This transaction was eliminated from consideration because of the very small size of the Larkspur Meadows Water Company as compared to the Monterey Water System.

48. System: Benbow Water System, CA
Buyer: Del Oro Water Company, Inc.
Seller: Benbow Water Company
Date: May 11, 2017

In this sales transaction, Del Oro Water Company, Inc. purchased Benbow Water Company, a Class D investor-owned water utility in California. This asset sale transaction was in the amount of approximately $591,000 and was settled on May 11, 2017. The net book value of this system was estimated to be approximately $788,000 and served 134 customer connections. This transaction was eliminated from consideration because of the very small size of the Benbow Water Company as compared to the Monterey Water System.

49. System: Ojai Water District Water System, CA
Buyer: Casitas Municipal Water District, CA
Seller: Golden State Water Company
Date: June 8, 2017

In this sales transaction, Casitas Municipal Water District, a municipal water district, acquired the Ojai Water District assets from the Golden State Water Company, an investor-owned water utility in California, through eminent domain. Compensation for the assets was in the amount of

approximately $30 million and was settled on June 8, 2017. The net book value of this system was estimated to be approximately $22.462 million, and the system served 2,899 customer connections. This transaction was eliminated from consideration because it was a forced taking by eminent domain, rather than an open market transaction between a willing buyer and willing seller.

50. Buyer: Guadalupe-Blanco River Authority
Seller: SJW Group / Texas Water Alliance Ltd. LLC
Date: November 16, 2017

In this sales transaction, Guadalupe-Blanco River Authority purchased the water system previously owned by SJW Group / Texas Water Alliance Ltd. LLC., an investor-owned utility in Texas. This asset sale transaction was in the amount of approximately $31 million and was settled on 11/16/2017. This transaction was not included due to the lack of available relevant information and details approximately the transaction.

51. System: Aquarion Water Company
Buyer: Eversource Energy
Seller: Macquarie Utilities, Inc.
Date: December 4, 2017

This sales transaction consisted of Eversource Energy acquiring control of Macquarie Utilities, Inc. (MUI) and it direct and indirect subsidiaries of the Aquarion Water Company (AWC). Eversource transmits and delivers electricity and natural gas for approximately 3.7 million electric and natural gas customers in Connecticut, Massachusetts and New Hampshire. The transaction was approved by the Connecticut Public Utilities Regulatory Authority on December 4, 2017 and involved Eversource acquiring all of the issued and outstanding common stock of MUI for total consideration of $1.675 billion, comprised of $880 million in cash and an estimated $795 million of assumed debt at the closing of the transaction.[227] However, some of the details regarding the purchase and sale agreement were redacted.[228]

AWC of Connecticut, Inc. (AWC-CT) was MUI's largest operating subsidiary serving 625,000 people and 197,000 customers in 51 cities and towns throughout Connecticut. AWC-CT's system included approximately eight reservoir system, 292 wells, nine surface water treatment plants (with a combined capacity of 165 MGD, 68 groundwater treatment facilities that treated water from wells, approximately 3,100 miles of water mains, 67 water storage tanks, and 103 pump stations.

AWC of Massachusetts served 19,772 customers. The water systems included 21 water supply wells, three reservoirs, 44 pumping stations, water treatment facilities, five storage facilities with a combined capacity of 4.46 million gallons, 284.7 miles of distribution mains, 1,548 fire hydrants, and other appurtenances.

AWC of New Hampshire served approximately 9,089 customers. The water systems included 16 water supply wells, 16 pumping stations, chlorination disinfection water treatment facilities, four

[227] Joint Application of Eversource Energy and Macquarie Utilities, Inc. for Approval of a Change of Control, p.6.

[228] Purchase and Sale Agreement by and among Macquarie Utilities Holdings, GP and Eversource Energy, dated June 1, 2017.

storage facilities with a combined capacity of 2.75 million gallons, 136.1 miles of distribution mains, 494 fire hydrants, and other appurtenances.

At the time of the transaction, AWC served a total of 226,470 customer connections, or approximately 335,731 equivalent residential connections, had a total combined net plant book value of approximately $1,015.8 million, annual operating revenues of $206.5 million, and EBITDA of $104.6 million in 2017.

The AWC transaction involved acquiring a large water company, including several divisions and operating companies and its corporate operations, whereas the Monterey Water System is only a segment of American Water Company's California operations. Therefore, this transaction is somewhat dissimilar than the acquisition of the Monterey Water System. In addition, some of the details regarding the purchase and sale of the company have been redacted, so only limited information is available about this transaction. For these reasons, this transaction was eliminated from consideration.

52. System: Tahoe Cedars Water Company and Madden Creek Water Company
Buyer: Tahoe City Public Utility District
Seller: Mid Sierra Water Utility
Date: December 21, 2017

This sales transaction consisted of Tahoe City Public Utility District (District), a public utility district in California acquiring Tahoe Cedars Water Company, a Class C water utility, and Madden Creek Water Company, a Class D water utility, from the Mid-Sierra Water Utility, a California corporation. This sales transaction was an asset sale and involved an eminent domain action filed by the District on December 7, 2017[229], but the filing occurred only six days before the parties entered into an Eminent Domain Settlement Agreement,[230] indicating that the sale was likely negotiated prior to the eminent domain action. The date of final judgement in the condemnation was dated December 21, 2017.

At the time of the transaction, the Tahoe Cedars system served 30 metered and 1,141 flat rate customers, or 1,795 equivalent residential connections. The water system includes a water supply well, a 0.44-million-gallon storage facility, 13 miles of distribution piping, fire hydrants, services, and associated appurtenances. At the time of the transaction, the Madden Creek Water system served 169 metered and flat rate customers or 288 equivalent residential connections. This water system includes a water supply well, a 0.125-million-gallon storage facility, 5.8 miles of distribution piping, fire hydrants, services, and associated appurtenances. Appurtenances included pumps, valves, meters, and meter boxes.

[229]Complaint in Eminent Domain filed by the Tahoe City Public Utility District in the Superior Court of the State of California, December 7, 2017.

[230]Agreement of Purchase and Sale of Certain Assets – Mid-Sierra Water Utility and Tahoe City Public Utility District, December 13, 2017.

The combined purchase price of these water systems was $4.7 million. But, of this purchase price, $150,000 was paid to three company shareholders for as-needed consulting services during the first year following the system acquisition. As such, this portion was not considered part of the compensation for the water system. In 2017, the systems combined had reported EBITDA of $68,000, a rate base of approximately $977,000 and a net plant book value of approximately $1.43 million.

This transaction served as limited use because of the relatively small size of the acquired systems (Class C and D Utilities) as compared to the Monterey Water System (Class A Utility). It involved the acquisition of an investor-owned water utility by a California municipality, so it has some limited relevance to the Monterey Water System. Due to the small size of the acquired utility, it was not used in any of the price multiples considered under the Market Approach.

53. Buyer: Town of Hingham
Seller: Aquarion Water Company
Date: April 1, 2019

In this sales transaction, the Town of Hingham, Massachusetts purchased the water system previously owned by Aquarion Water Company, an investor-owned utility in Massachusetts. This transaction was an asset sale in the amount of approximately $114.0 million and was settled on April 1, 2019. The system served approximately 12,710 customer connections. This transaction was excluded from consideration because it involved a forced taking by eminent domain, rather than an open market transaction between a willing buyer and willing seller, and the transaction price was calculated formulaically.

APPENDIX E:

Real Estate Appraisal Report prepared by Chris Carneghi, MAI

APPRAISAL VALUATION STATEMENT

Appraisal of Fee Simple Full Take Real Estate Acquisition

California American Water Monterey District

Various Parcels, Monterey County, CA

Date of Value: December 15, 2022

Appraiser: **Chris Carneghi, MAI**
Address: **1602 The Alameda, Suite 103, San Jose, CA 95126**
Phone: **408-535-0900**
File No. **22-78**

This summary of the basis of my appraisal is prepared for Mr. Mr. David C. Laredo, General Counsel for Monterey Peninsula Water Management District **(MPWMD)** and the law firm of Rutan & Tucker. This appraisal is a valuation statement in compliance with the California Code of Civil Procedure and is intended to be an Appraisal Report as defined in the Uniform Standards of Professional Appraisal Practice. If called, I will testify to the matters and opinions set forth herein.

I. Description of subject property taken: See Exhibit A

Larger Parcel

The subject property appraised consists of 109 separate real estate parcels. These parcels are in various locations within the California American Water **(Cal-Am)** Monterey District service area. Broadly, the individual parcels are located in the incorporated cities of Monterey, Carmel, Pacific Grove, Seaside and Del Rey Oaks as well as in unincorporated Monterey County including the communities of Pebble Beach and Carmel Valley. The individual parcel sizes range from 474 square feet to 640 acres. The Larger Parcel is defined as the total combined size of 3,605.83 acres.

The individual parcels are identified on **Table 1** in Exhibit A titled ***"SUBJECT PARCELS IDENTIFICATION TABLE".*** An overview map titled ***"Parcels Owned by Cal-Am Water"*** is also included.

This appraisal addresses the fair market value of the land/real estate only, at its highest and best use, consistent with the rules of real estate valuation applicable to eminent domain proceedings in California. This report does not value equipment or improvements such as tanks, pumps, pipes, treatment plants and other improvements associated with the water system, business or goodwill.

II. Conclusions

A.	**Fair Market Value of the Subject Property Taken:**	**$24,803,000**
B.	**Amount of Severance Damages:**	**NA**
C.	**Amount of Benefits:**	**NA**
D.	**Total Real Estate Compensation:**	**$24,803,000**
E.	**Amount of Other Compensation:**	**NA**
F.	**My conclusion is based, in part, on the opinion of:**	**NA**
G.	**Basic Data and Opinions:**	

1. Estate or interest valued: **Fee Simple**

2. Date of Valuation: **December 15, 2022**

3. Highest and Best Use of the Property:

The highest and best use of the various subject parcels is shown on **Table 3** in Exhibit A and discussed in the valuation section of this report. Each individual parcel falls into one of the following categories:

Speculative Residential
City Park/Open Space
Private Open Space
Conservation/Open Space
Industrial Yard

4. Applicable zoning and probability of zoning change:

The individual subject parcel zoning and General Plan designations are shown on **Table 2** in Exhibit A and discussed in the valuation section of this report.

There is little probability of a change in the zoning.

5.	**Market Data:**	**See Exhibit B**
6.	**Replacement cost less Depreciation:**	**NA**
7.	**Income Approach:**	**NA**
8.	**Sales Comparison Approach:**	**See Exhibit C**
9.	**Description and value of Larger Parcel:**	
	Land Area:	***3,605.83 Acres***
	Assessor's Parcel Numbers:	***See Table 1 Exhibit A***
	Fair Market Value of the Larger Parcel:	**$24,803,000**

III. Certification

We, the undersigned, hereby certify that, to the best of our knowledge and belief: the statements of fact contained in this report are true and correct; the reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are our personal, impartial, and unbiased professional analyses, opinions, and conclusions; we have no present or prospective interest in the property that is the subject of this report, and we have no personal interest with respect to the parties involved; we have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment; our engagement in this assignment was not contingent upon developing or reporting predetermined results, our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal; the appraisal assignment was not based on a requested minimum valuation, a specific valuation, or the approval of a loan; our analyses, opinions and conclusions were developed, and this report has been prepared in conformity with the Uniform Standards of Professional Appraisal Practice, Code of Professional Ethics and the Standards of Professional Appraisal Practice of the Appraisal Institute, we have made a personal inspection of the property that is the subject of this report; Bradley Carneghi, MAI provided significant real property appraisal assistance to the persons signing this certification. The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.

As of the date of this report Chris Carneghi has completed the requirements under the continuing education program of the Appraisal Institute. In accordance with the Competency Provision in the USPAP, we certify that our education, experience and knowledge are sufficient to appraise the type of property being valued in this report.

We have previously appraised the property that is the subject of this report in the 36 months prior to accepting this assignment.

Chris Carneghi, MAI
Certified General Real Estate Appraiser
State of California No. AG001685

EXHIBIT "A"

DESCRIPTION OF PROPERTY TAKEN

Table 1 - Subject Parcels Identification

Map of Parcels Owned by Cal-Am Water

Table 2 - Zoning and General Plan

Table 3 - Highest and Best Use

Table 1

SUBJECT PARCELS IDENTIFICATION TABLE

Appraisal of Proposed Fee Acquisitions
From - California American Water Monterey District (Cal-Am Water System)
By - Monterey Peninsula Water Management District
Date of Value: December 15, 2022

No.	Assessors Parcel Number (APN)	Parcel Size Sq. Ft.	Parcel Size Acres *(1)*	Street or Location	City / Mailing Address	In City?	Current Use
1	001181002000	55,490	1.27	1650 David Ave	Monterey	Yes	Corporate Yard
2	001213021000	23,514	0.54	620 Devisadero St	Monterey	Yes	Withers Tanks
3	001423031000	13,754	0.32	6 Shady Ln	Monterey	Yes	Lower Toyon Tank
4	001761036000	71,436	1.64	599 Viejo Rd	Monterey	Yes	Viejo Tank
5	001931024000	2,500	0.06	52 Linda Vista Dr	Monterey	Yes	Lower Monte Vista Tank
6	006528001000	2,861	0.07	Sinex Ave	Pacific Grove	Yes	Eardley Roundabout
7	006694005000	9,877	0.23	2nd St	Pacific Grove	Yes	Corporate Yard
8	006694006000	390,000	8.95	Hillcrest Ave	Pacific Grove	Yes	Corporate Yard
9	007491015000	664,725	15.26	2949 Bird Rock Rd	Pebble Beach	No	3 Tanks
10	008111016000	12,521	0.29	4041 Sunset Ln	Pebble Beach	No	Huckleberry Hill Tanks
11	008111017000	9,817	0.23	4039 Sunset Ln	Pebble Beach	No	Huckleberry Hill Tanks
12	008111022000	32,234	0.74	4045 Sunset Lane #4059	Pebble Beach	No	Huckleberry Hill Tanks
13	008161003000	22,106	0.51	17 Mile Dr	Pebble Beach	No	Unknown
14	008171011000	8,966	0.21	Ronda Rd	Pebble Beach	No	Pebble Beach Tanks
15	008293008000	5,328	0.12	Portola Rd	Pebble Beach	No	Unknown
16	009142010000	8,896	0.20	24739 Upper Trail	Carmel	No	Carmel Woods Tank
17	010233004000	3,150	0.07	2nd Ave	Carmel	Yes	Unknown
18	011051018000	814	0.02	1635 Military Ave	Seaside	Yes	Well
19	011061004000	44,870	1.03	1987 Park Ct	Seaside	Yes	Well, Tank, Treatment
20	011071018000	9,106	0.21	Luzern St	Seaside	Yes	Luzern #2 Well & PS
21	011091017000	39,627	0.91	1237 Playa Ave	Seaside	Yes	Playa #3 Well
22	011355004000	7,906	0.18	598 Harcourt Ave	Seaside	Yes	Vacant Lot
23	011493028000	7,622	0.17	2104 Paralta Ave	Seaside	Yes	Paralta #1 Well
24	012193016000	6,172	0.14	1257 Palm Ave	Seaside	Yes	Vacant Lot
25	012324032000	49,231	1.13	1561 Hilby Ave	Seaside	Yes	Hilby Tank & Pump Station
26	012432004000	21,757	0.50	1453 Plumas Lane	Seaside	Yes	Plumas #4 Well
27	012532013000	3,019	0.07	Via Verde	Del Rey Oaks	Yes	Land Locked
28	012681005000	10,802	0.25	1245 Yosemite	Seaside	Yes	Upper Hilby Tank
29	012681006000	10,306	0.24	1235 Yosemite St	Seaside	Yes	Upper Hilby Tank
30	012681007000	9,246	0.21	1225 Yosemite St	Seaside	Yes	Upper Hilby Tank
31	012831013000	2,865	0.07	1833 Luxton St	Seaside	Yes	Vacant Lot
32	012834001000	8,930	0.21	1898 Waring St	Seaside	Yes	LaSalle #2 Well
33	012843005000	3,690	0.08	1860 Harding St	Seaside	Yes	Vacant Lot
34	012843013000	7,381	0.17	1849 Darwin St	Seaside	Yes	Darwin #1 Well
35	012843016000	1,843	0.04	1865 Darwin St	Seaside	Yes	Vacant Lot
36	014111010000	9,931	0.23	Skyline Dr	Monterey	Yes	Upper Toyon Tank
37	015031013000	13,539	0.31	25231 Pine Hills Dr	Carmel	No	Rio Vista Tank
38	015031087000	21,470	0.49	24735 Outlook Dr	Carmel	No	Carmel Views Tank
39	015162038000	9,147	0.21	5258 Carmel Valley Rd	Carmel	No	Rancho Canada #1 Well
40	015251030000	174,240	4.00	26530 Rancho Sn Carlos Rd	Carmel	No	San Carlos #2 Well
41	015441001000	22,867	0.52	498 Del Mesa Dr	Carmel	No	Del Mesa Tank
42	015441005000	13,832	0.32	100 Del Mesa Dr	Carmel	No	Pump Station
43	015481001000	29,240	0.67	24750 High Meadow Dr	Carmel	No	High Meadows Tank
44	101031004000	778	0.02	1199 Aguajito Rd	Monterey	No	Castro Plant 7A
45	103011011000	9,866	0.23	500 Aguajito Rd	Carmel	No	Aguajito Tank
46	103071005000	12,434	0.29	625 Monhollan Rd	Carmel	No	Fairways Tanks

Table 1

SUBJECT PARCELS IDENTIFICATION TABLE
Appraisal of Proposed Fee Acquisitions
From - California American Water Monterey District (Cal-Am Water System)
By - Monterey Peninsula Water Management District
Date of Value: December 15, 2022

No.	Assessors Parcel Number (APN)	Parcel Size Sq. Ft.	Parcel Size Acres *(1)*	Street or Location	City / Mailing Address	In City?	Current Use
47	103102008000	9,299	0.21	Loma Alta Rd/Aguajito Rd	Carmel	No	Unknown
48	103121014000	3,048	0.07	3741 Raymond Way	Carmel	No	Mar Monte Tank
49	103181002000	12,411	0.28	Landlocked by Jacks Park	Monterey	No	Unknown
50	169111008000	164,823	3.78	4 Scarlett Rd #A	Carmel Valley	No	Scarlett #8 Well
51	169131023000	327,108	7.51	28005 Dorris Dr	Carmel	No	Berwick #7 Well
52	169141016000	117,536	2.70	9210 Carmel Valley Rd	Carmel	No	Iron Removal Plant
53	169141023000	42,207	0.97	S. of Carmel Valley Road	Carmel	No	Iron Removal Plant
54	169181021000	18,358	0.42	27539 Via Sereno	Carmel	No	Schulte #2 Well
55	169221012000	2,400	0.06	7240 Carmel Valley Rd	Carmel	No	Cypress #1 Well
56	169262002000	2,595	0.06	25863 Tierra Grande Dr	Carmel	No	Pump Station
57	169271007000	22,964	0.53	25723 Tierra Grande Dr	Carmel	No	Lower Tierra Grande Tank
58	169342011000	15,231	0.35	25451 Tierra Grande Dr	Carmel	No	Middle Tierra Grande Tank
59	169381007000	28,648	0.66	25329 Tierra Grande Dr	Carmel	No	Upper Tierra Grande Tank
60	173071047000	7,102	0.16	Laguna Seca Golf Ranch	Monterey	No	Bishop WTP
61	173071051000	1,859	0.04	Laguna Seca Golf Ranch	Monterey	No	Bishop Well
62	173071052000	931	0.02	Near Pasadero Sub.	Monterey	No	Unknown
63	173071054000	7,001	0.16	9385 York Rd	Monterey	No	York Rd Tank
64	173101053000	25,608	0.59	23729 Spectacular Bid Ln	Monterey	No	Spectacular Bid Tank
65	187021024000	9,583	0.22	13471 Middle Canyon Rd ***(2)***	Carmel Valley	No	Upper Middle Canyon Tank
66	187111017000	28,897	0.66	71 Oak View	Carmel Valley	No	Ranchitos Tank
67	187221001000	39,695	0.91	64 Middle Canyon Rd	Carmel Valley	No	Middle Canyon Tank
68	187221011000	7,885	0.18	50 Middle Canyon Rd	Carmel Valley	No	Middle Canyon Tank & PS
69	187231005000	2,271	0.05	11 Rancho Rd	Carmel Valley	No	Pump Station
70	187301002000	4,125	0.09	308 Country Clb Heights Ln	Carmel Valley	No	Country Club Heights Tank
71	187331004000	3,814	0.09	6 Loma Ln	Carmel Valley	No	Tank Lot
72	187351004000	474	0.01	358 Ridge Way	Carmel Valley	No	RidgeWay Plant No. 65 (well)
73	187442013000	2,550	0.06	5 Via Contenta	Carmel Valley	No	Pump Station
74	187601009000	10,500	0.24	396 El Caminito Rd	Carmel Valley	No	Upper Airway Tank
75	187611014000	8,736	0.20	191 Chaparral Rd	Carmel Valley	No	Lower Airway Tank
76	187611015000	11,479	0.26	58 Chaparral Rd	Carmel Valley	No	Lower Airway Tank
77	189091015000	5,530	0.13	35 W Garzas Rd	Carmel Valley	No	Garzas #3 Well
78	189141001000	629	0.01	94 Boronda Rd	Carmel Valley	No	Well
79	189191007000	4,934	0.11	96 Panetta Rd	Carmel Valley	No	Well
80	189191010000	664	0.02	90 Panetta Rd	Carmel Valley	No	Panetta Well No. 2
81	189211005000	3,337	0.08	46 W Carmel Valley Rd	Carmel Valley	No	Vacant Lot
82	189311033000	10,782	0.25	5 De Los Helechos	Carmel Valley	No	Robles Del Rio #3 Well
83	189352006000	10,490	0.24	57 Piedras Blancas	Carmel Valley	No	Lower Robles Tank
84	189401004000	5,929	0.14	46 Camino De Travesia	Carmel Valley	No	Upper Robles Tank
85	189401005000	6,223	0.14	48 Camino De Travesia	Carmel Valley	No	Upper Robles Tank
86	189561029000	18,805	0.43	94 W Garzas Rd	Carmel Valley	No	Garzas #4 Well
87	197081032000	1,149,984	26.40	W. of E. Carmel Valley Rd	Carmel Valley	No	Carmel River/Open Space
88	197081033000	4,153,445	95.35	W. of E. Carmel Valley Rd	Carmel Valley	No	Tularcitos Creek/Open Space
89	241112003000	930	0.02	179 Fern Canyon Rd	Carmel	No	Unknown
90	241261012000	43,782	1.01	247 Lower Walden Rd	Carmel	No	Lower Walden Tank & PS
91	259031011000	13,321	0.31	15 Upper Ragsdale Dr	Monterey	Yes	Ryan Ranch #2 Well (NA)
92	259031012000	8,069	0.19	15 Upper Ragsdale Dr #1/2	Monterey	Yes	Ryan Ranch #11 Well (NA)

Table 1

SUBJECT PARCELS IDENTIFICATION TABLE
Appraisal of Proposed Fee Acquisitions
From - California American Water Monterey District (Cal-Am Water System)
By - Monterey Peninsula Water Management District
Date of Value: December 15, 2022

No.	Assessors Parcel Number (APN)	Parcel Size Sq. Ft.	Parcel Size Acres *(1)*	Street or Location	City / Mailing Address	In City?	Current Use
93	259041013000	23,817	0.55	5 Upper Ragsdale Dr	Monterey	Yes	Ryan Ranch #9 (NA)
94	259091012000	37,141	0.85	Enlace Road	Monterey	No	Segunda Tanks
95	259093014000	32,234	0.74	Enlace Road	Monterey	No	Segunda Tanks
96	416111002000	15,428	0.35	25219 Casiano Dr	Salinas	No	Hidden Hills WTP/Bay Ridge Well
97	417051003000	3,380,242	77.60	San Clemente Drive	Carmel Valley	No	Carmel River / Open Space
98	417051004000	17,829,277	409.30	45 Sleepy Hollow	Carmel Valley	No	Watershed Open Space
99	417051005000	12,665,506	290.76	San Clemente Road	Carmel Valley	No	Carmel River / Open Space
100	417051010000	1,932,849	44.37	S. of Carmel River	Carmel Valley	No	Watershed Open Space
101	417051011000	7,814,279	179.39	W. of Carmel River	Carmel Valley	No	Watershed Open Space
102	417091005000	8,771,677	201.37	W. of Cachagua Road	Carmel Valley	No	Camel River/Watershed Open Space
103	418191003000	15,645,010	359.16	S. of Carmel River	Carmel Valley	No	Watershed Open Space
104	418191005000	13,939,200	320.00	W. of Carmel River	Carmel Valley	No	Camel River/Watershed Open Space
105	418191034000	7,509,744	172.40	S. of Nason Road	Carmel Valley	No	Camel River/Watershed Open Space
106	418191035000	27,878,400	640.00	S. of Nason Road	Carmel Valley	No	Danish Creek, Camel River/Watershed
107	418191043000	20,908,800	480.00	S. of Nason Road	Carmel Valley	No	Camel River / Watershed Open Space
108	418191053000	3,484,800	80.00	S. of Nason Road	Carmel Valley	No	Watershed Open Space
109	418191080000	6,926,040	159.00	Nason Road	Carmel Valley	No	Watershed Open Space
Totals		**157,070,141**	**3,605.83**				

(1) Parcel Size based on Assessor Records

(2) Possessary Interest

Sources: MPWMD, Monterey County Assessor Records, Data Tree, County of Monterey Resource Management Agency

22-78 Chris Carneghi, MAI December 2022

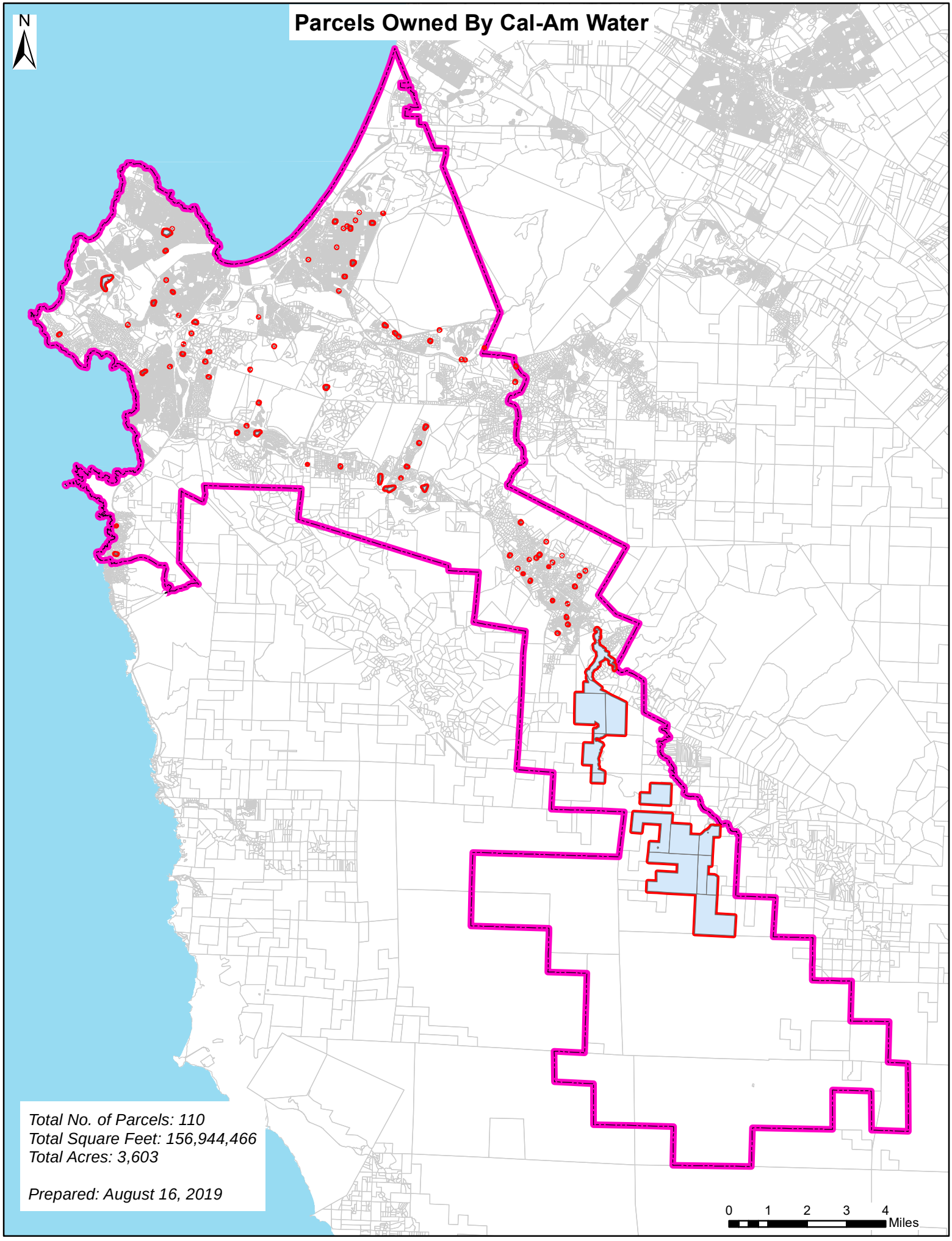

Parcels Owned By Cal-Am Water
N
Total No. of Parcels: 110
Total Square Feet: 156,944,466
Total Acres: 3,603
Prepared: August 16, 2019
0 1 2 3 4
Miles

Table 2

SUBJECT PARCELS ZONING AND GENERAL PLAN / LAND USE DESIGNATION

Appraisal of Proposed Fee Acquisitions
From - California American Water Monterey District (Cal-Am Water System)
By - Monterey Peninsula Water Management District
Date of Value: December 15, 2022

No.	Assessors Parcel Number (APN)	Parcel Size Sq. Ft.	Parcel Size Acres (1)	Street or Location	City / Mailing Address	In City	Zoning	General Plan / Land Use Designation
1	001181002000	55,490	1.27	1650 David Ave	Monterey	Yes	Residential-3	Residential - Medium Density
2	001213021000	23,514	0.54	620 Devisadero St	Monterey	Yes	R-1-5	Low Density Residential
3	001423031000	13,754	0.32	6 Shady Ln	Monterey	Yes	R-1-8	Low Density Residential
4	001761036000	71,436	1.64	599 Viejo Rd	Monterey	Yes	PC - Planned Community	Public/Semi-Public
5	001931024000	2,500	0.06	52 Linda Vista Dr	Monterey	Yes	R-1-12	Residential - Low Density
6	006528001000	2,861	0.07	Sinex Ave	Pacific Grove	Yes	U - Unclassified District	NA
7	006694005000	9,877	0.23	2nd St	Pacific Grove	Yes	R-1 - Single Familly Residential District	OSI - Open Space-Institutional
8	006694006000	390,000	8.95	Hillcrest Ave	Pacific Grove	Yes	U - Unclassified District	OSI - Open Space-Institutional
9	007491015000	664,725	15.26	2949 Bird Rock Rd	Pebble Beach	No	O-D-S-RES, MDR/B-6-D-RES	Open Space Forest
10	008111016000	12,521	0.29	Sunset Ln	Pebble Beach	No	MDR/4-D(CZ)	Residential – Medium Density
11	008111017000	9,817	0.23	Sunset Ln	Pebble Beach	No	MDR/4-D(CZ)	Residential – Medium Density
12	008111022000	32,234	0.74	4045 Sunset Lane #4059	Pebble Beach	No	MDR/4-D(CZ)	Residential – Medium Density
13	008161003000	22,106	0.51	17 Mile Dr	Pebble Beach	No	MDR/2-D(CZ), RC-D(CZ)	Open Space – Forest
14	008171011000	8,966	0.21	Ronda Rd	Pebble Beach	No	LDR/1-D(CZ), RC-D(CZ)	Open Space – Forest
15	008293008000	5,328	0.12	Portola Rd	Pebble Beach	No	LDR/1.5-D(CZ)	Residential – Low Density
16	009142010000	8,896	0.20	24739 Upper Trail	Carmel	No	MDR/2-D(CZ)	Residential – Medium Density
17	010233004000	3,150	0.07	2nd Ave	Carmel	Yes	R-1, P - SFR w/ Park Overlay	Single Family Residential
18	011051018000	814	0.02	1635 Military Ave	Seaside	Yes	RS-8 - Single Family Residential	RLS - Low Density SFR
19	011061004000	44,870	1.03	1987 Park Ct	Seaside	Yes	OSR - Open Space - Recreation	POS - Park and Open Space
20	011071018000	9,106	0.21	Luzern St	Seaside	Yes	RS-8 Single-family Residential	RLS - Low Density SFR
21	011091017000	39,627	0.91	1237 Playa Ave	Seaside	Yes	RH - High Density Residential	RH - High Density Residential
22	011355004000	7,906	0.18	598 Harcourt Ave	Seaside	Yes	OSR - Open Space - Recreation	POS - Park and Open Space
23	011493028000	7,622	0.17	2104 Paralta Ave	Seaside	Yes	RS-8 Single-family Residential	RLS - Low Density SFR
24	012193016000	6,172	0.14	1257 Palm Ave	Seaside	Yes	RS-12 - Single-family Residential	RMS - Medium Density SFR
25	012324032000	49,231	1.13	1561 Hilby Ave	Seaside	Yes	RS-8 - Single-family Residential	RIS - Low Density SFR
26	012432004000	21,757	0.50	1453 Plumas Lane	Seaside	Yes	RS-8 - Single family Residential	RIS - Low Density SFR
27	012532013000	3,019	0.07	Via Verde	Del Rey Oaks	Yes	R-1 - Single Family Residential	LDR(R) Low Density Residential
28	012681005000	10,802	0.25	1245 Yosemite	Seaside	Yes	RS-8 Single-family Residential	RLS - Low Density SFR
29	012681006000	10,306	0.24	1235 Yosemite St	Seaside	Yes	RS-8 Single-family Residential	RLS - Low Density SFR
30	012681007000	9,246	0.21	1225 Yosemite St	Seaside	Yes	RS-8 Single-family Residential	RLS - Low Density SFR
31	012831013000	2,865	0.07	1833 Luxton St	Seaside	Yes	RS-12 - Single-family Residential	RMS - Medium Density SFR
32	012834001000	8,930	0.21	1898 Waring St	Seaside	Yes	RS-12 - Single-family Residential	RMS - Medium Density SFR
33	012843005000	3,690	0.08	1860 Harding St	Seaside	Yes	RS-12 - Single-family Residential	RMS - Medium Density SFR

Table 2

SUBJECT PARCELS ZONING AND GENERAL PLAN / LAND USE DESIGNATION

Appraisal of Proposed Fee Acquisitions
From - California American Water Monterey District (Cal-Am Water System)
By - Monterey Peninsula Water Management District
Date of Value: December 15, 2022

No.	Assessors Parcel Number (APN)	Parcel Size Sq. Ft.	Parcel Size Acres (1)	Street or Location	City / Mailing Address	In City	Zoning	General Plan / Land Use Designation
34	012843013000	7,381	0.17	1849 Darwin St	Seaside	Yes	RS-12 - Single-family Residential	RMS - Medium Density SFR
35	012843016000	1,843	0.04	1865 Darwin St	Seaside	Yes	RS-12 - Single-family Residential	RMS - Medium Density SFR
36	014111010000	9,931	0.23	Skyline Dr	Monterey	Yes	PC - Planned Community	Low Density Residential
37	015031013000	13,539	0.31	25231 Pine Hills Dr	Carmel	No	LDR/B-6-D-S-RAZ	Residential - Low Density 5 - 1 Ac/Unit
38	015031087000	21,470	0.49	24735 Outlook Dr	Carmel	No	LDR/1-D-S-RAZ, RDR/5.1-UR-D-S	Residential - Rural Density 5 Ac +/Unit, Resource Conservation
39	015162038000	9,147	0.21	5258 Carmel Valley Rd	Carmel	No	LDR/2.5-D-S-RAZ, PQP-D-S-RAZ, 100' setback	Residential - Low Density 5 - 1 Ac/Unit, Rivers&Water Bodies
40	015251030000	174,200	4.00	26530 Rancho Sn Carlos Rd	Carmel	No	LDR/2.5-D-S-RAZ, 100' setback	Residential - Low Density 5 - 1 Acres/Unit, Rivers&Water Bodies
41	015441001000	22,867	0.52	498 Del Mesa Dr	Carmel	No	RDR/10-D-S-RAZ	Residential - Rural Density 5 Acres+/Unit
42	015441005000	13,832	0.32	100 Del Mesa Dr	Carmel	No	LDR/2.5-D-S-RAZ, 100' setback	Residential - Low Density 5 - 1 Acres/Unit
43	015481001000	29,240	0.67	24750 High Meadow Dr	Carmel	No	MDR/1-D-S	Residential - Medium Density 1 - 5 Units/Acre
44	101031004000	778	0.02	1199 Aguajito Rd	Monterey	No	MDR/1-UR-D	Residential - Medium Density 1 - 5 Units/Acre
45	103011011000	9,866	0.23	500 Aguajito Rd	Carmel	No	RDR/5.1-UR-D-S	Residential - Rural Density 5 Acres+/Unit
46	103071005000	12,434	0.29	625 Monhollan Rd	Carmel	No	RDR/10-UR-D	Residential - Rural Density 5 Acres+/Unit
47	103102008000	9,299	0.21	Loma Alta Rd/Aguajito Rd	Carmel	No	RDR/5.1-UR-D-S	Residential - Rural Density 5 Acres+/Unit
48	103121014000	3,048	0.07	3741 Raymond Way	Carmel	No	LDR/1-UR-D-S	Residential - Low Density 5 - 1 Acres/Unit
49	103181002000	12,411	0.28	Landlocked by Jacks Park	Monterey	No	PQP-D	Public/Quasi-Public
50	169111008000	164,823	3.78	4 Scarlett Rd #A	Carmel Valley	No	LDR/2.5-D-S-RAZ, O-D-S-RAZ, 100' setback	Residential - Low Density 5 - 1 Acres/Unit, Rivers&Water Bodies
51	169131023000	327,108	7.51	28005 Dorris Dr	Carmel	No	LDR/B-6-D-S-RAZ, LDR/1-D-S-RAZ	Residential - Low Density 5 - 1 Acres/Unit, Rivers&Water Bodies
52	169141016000	117,536	2.70	9210 Carmel Valley Rd	Carmel	No	LDR/1-D-S-RAZ, 100' setback	Residential - Low Density 5 - 1 Acres/Unit
53	169141023000	42,207	0.97	S. of Carmel Valley Road	Carmel	No	LDR/1-D-S-RAZ, 100' setback	Residential - Low Density 5 -1 Acres/Unit
54	169181021000	18,358	0.42	27539 Via Sereno	Carmel	No	LDR/2.5-D-S-RAZ, 100' setback	Residential - Low Density 5 - 1 Acres/Unit
55	169221012000	2,400	0.06	7240 Carmel Valley Rd	Carmel	No	LDR/2.5-D-S-RAZ	Residential - Low Density 5 - 1 Acres/Unit
56	169262002000	2,595	0.06	25863 Tierra Grande Dr	Carmel	No	LDR/B-6-D-S-RAZ, 100' setback	Residential - Low Density 5 - 1 Acres/Unit
57	169271007000	22,964	0.53	25723 Tierra Grande Dr	Carmel	No	LDR/B-6-D-S-RAZ	Residential - Low Density 5 -1 Acres/Unit
58	169342011000	15,231	0.35	25451 Tierra Grande Dr	Carmel	No	LDR/B-6-D-S-RAZ	Residential - Low Density 5 - 1 Acres/Unit
59	169381007000	28,648	0.66	25329 Tierra Grande Dr	Carmel	No	LDR/B-6-D-S-RAZ	Residential - Low Density 5 - 1 Acres/Unit
60	173071047000	7,102	0.16	Laguna Seca Golf Ranch	Monterey	No	PQP-UR-D-S, 100' setback	Public/Quasi Public
61	173071051000	1,859	0.04	Laguna Seca Golf Ranch	Monterey	No	RC/B-6-D, 100' setback	Public/Quasi Public
62	173071052000	931	0.02	Near Pasadero Sub.	Monterey	No	RC/B-6-D, 100' setback	Resource Conservation
63	173071054000	7,001	0.16	9385 York Rd	Monterey	No	LDR/2.5-UR-D-S	Residential - Low Density 5 - 1 Acres/Unit
64	173101053000	25,608	0.59	23729 Spectacular Bid Ln	Monterey	No	LDR/B-6-UR-D(20')	Residential - Low Density 5 - 1 Acres/Unit
65	187021024000	9,583	0.22	13471 Middle Canyon Rd ***(2)***	Carmel Valley	No	RDR/10-D-S-RAZ	Residential - Rural Density 5 Acres+/Unit
66	187111017000	28,897	0.66	71 Oak View	Carmel Valley	No	LDR/1-D-S-RAZ	Residential - Low Density 5 - 1 Acres/Unit
67	187221001000	39,695	0.91	64 Middle Canyon Rd	Carmel Valley	No	LDR/1-D-S-RAZ	Residential - Low Density 5 - 1 Acres/Unit

Table 2

SUBJECT PARCELS ZONING AND GENERAL PLAN / LAND USE DESIGNATION

Appraisal of Proposed Fee Acquisitions
From - California American Water Monterey District (Cal-Am Water System)
By - Monterey Peninsula Water Management District
Date of Value: December 15, 2022

No.	Assessors Parcel Number (APN)	Parcel Size Sq. Ft.	Parcel Size Acres (1)	Street or Location	City / Mailing Address	In City	Zoning	General Plan / Land Use Designation
68	187221011000	7,885	0.18	50 Middle Canyon Rd	Carmel Valley	No	LDR/1-D-S-RAZ	Residential - Low Density 5 - 1 Acres/Unit
69	187231005000	2,271	0.05	11 Rancho Rd	Carmel Valley	No	VO-HR-D-S-RAZ, 100' setback	Visitor Accomodations/Professional Offices
70	187301002000	4,125	0.09	308 Country Clb Heights Ln	Carmel Valley	No	LDR/1-D-S-RAZ	Residential - Low Density 5 - 1 Acres/Unit
71	187331004000	3,814	0.09	6 Loma Ln	Carmel Valley	No	LDR/1-D-S-RAZ	Residential - Low Density 5 - 1 Acres/Unit
72	187351004000	474	0.01	358 Ridge Way	Carmel Valley	No	LDR/1-D-S-RAZ, 100' setback	Residential - Low Density 5 - 1 Acres/Unit
73	187442013000	2,550	0.06	5 Via Contenta	Carmel Valley	No	VO-D-S-RAZ, 30' setback	Visitor Accomodations/Professional Offices
74	187601009000	10,500	0.24	396 El Caminito Rd	Carmel Valley	No	LDR/1-D-S-RAZ	Residential - Low Density 5 - 1 Acres/Unit
75	187611014000	8,736	0.20	191 Chaparral Rd	Carmel Valley	No	LDR/1-D-S-RAZ	Residential - Low Density 5 - 1 Acres/Unit
76	187611015000	11,479	0.26	58 Chaparral Rd	Carmel Valley	No	LDR/1-D-S-RAZ	Residential - Low Density 5 - 1 Acres/Unit
77	189091015000	5,530	0.13	35 W Garzas Rd	Carmel Valley	No	LDR/1-D-S-RAZ, 100' setback	Residential - Low Density 5 - 1 Acres/Unit
78	189141001000	629	0.01	94 Boronda Rd	Carmel Valley	No	LDR/1-D-S-RAZ, 100' setback	Residential - Low Density 5 - 1 Acres/Unit
79	189191007000	4,934	0.11	96 Panetta Rd	Carmel Valley	No	LDR/1-D-S-RAZ, 100' setback	Residential - Low Density 5 - 1 Acres/Unit
80	189191010000	664	0.02	90 Panetta Rd	Carmel Valley	No	LDR/1-D-S-RAZ, 100' setback	Residential - Low Density 5 - 1 Acres/Unit
81	189211005000	3,337	0.08	46 W Carmel Valley Rd	Carmel Valley	No	LDR/1-D-S-RAZ, 30' setback	Residential - Low Density 5 - 1 Acres/Unit
82	189311033000	10,782	0.25	5 De Los Helechos	Carmel Valley	No	LDR/2.5-D-S-RAZ	Residential - Low Density 5 - 1 Acres/Unit
83	189352006000	10,490	0.24	57 Piedras Blancas	Carmel Valley	No	LDR/2.5-D-S-RAZ	Residential - Low Density 5 - 1 Acres/Unit
84	189401004000	5,929	0.14	46 Camino De Travesia	Carmel Valley	No	LDR/2.5-D-S-RAZ	Residential - Low Density 5 - 1 Acres/Unit
85	189401005000	6,223	0.14	48 Camino De Travesia	Carmel Valley	No	LDR/2.5-D-S-RAZ	Residential - Low Density 5 - 1 Acres/Unit
86	189561029000	18,805	0.43	94 W Garzas Rd	Carmel Valley	No	LDR/1-D-S-RAZ	Residential - Low Density 5 - 1 Acres/Unit
87	197081032000	1,149,984	26.40	W. of E. Carmel Valley Rd	Carmel Valley	No	LDR/2.5-D-S, MDR/2, PQP/B-6	Rivers and Water Bodies, Resource Conservation
88	197081033000	4,153,445	95.35	W. of E. Carmel Valley Rd	Carmel Valley	No	RC/1000	Rivers and Water Bodies, Resource Conservation
89	241112003000	930	0.02	179 Fern Canyon Rd	Carmel	No	LDR/1-D(CZ)	Residential - Low Density
90	241261012000	43,782	1.01	247 Lower Walden Rd	Carmel	No	LDR/1-D(CZ)	Residential - Low Density
91	259031011000	13,321	0.31	15 Upper Ragsdale Dr	Monterey	Yes	I-R-40-D2-ES	Industrial
92	259031012000	8,069	0.19	15 Upper Ragsdale Dr #1/2	Monterey	Yes	I-R-150-D2-ES	Industrial
93	259041013000	23,817	0.55	5 Upper Ragsdale Dr	Monterey	Yes	I-R-40-D2-ES	Industrial
94	259091012000	37,141	0.85	Enlace Road	Monterey	No	RDR/10-UR-D	Residential - Rural Density 5 Acres+/Unit
95	259093014000	32,234	0.74	Enlace Road	Monterey	No	RDR/10-UR-D	Residential - Rural Density 5 Acres+/Unit
96	416111002000	15,428	0.35	25219 Casiano Dr	Salinas	No	RDR/7.5-VS(20')	Residential - Rural Density 5 Acres+/Unit
97	417051003000	3,380,242	77.60	San Clemente Drive	Carmel Valley	No	PG/160, RC/1000, RDR/20	Rivers and Water Bodies, Permanent Grazing 10-160 Ac
98	417051004000	17,829,277	409.30	45 Sleepy Hollow	Carmel Valley	No	RG/160, RC/1000	Rivers and Water Bodies, Resource Conservation
99	417051005000	12,665,506	290.76	San Clemente Road	Carmel Valley	No	PG/160, RC/1000	Rivers and Water Bodies, Permanent Grazing 10-160 Ac
100	417051010000	1,932,849	44.37	S. of Carmel River	Carmel Valley	No	RC/160, PG/160, RC/1000	Rivers and Water Bodies, Resource Conservation
101	417051011000	7,814,279	179.39	W. of Carmel River	Carmel Valley	No	PG/160, RC/1000	Rivers and Water Bodies, Resource Conservation

Table 2

SUBJECT PARCELS ZONING AND GENERAL PLAN / LAND USE DESIGNATION

Appraisal of Proposed Fee Acquisitions
From - California American Water Monterey District (Cal-Am Water System)
By - Monterey Peninsula Water Management District
Date of Value: December 15, 2022

No.	Assessors Parcel Number (APN)	Parcel Size Sq. Ft.	Parcel Size Acres (1)	Street or Location	City / Mailing Address	In City	Zoning	General Plan / Land Use Designation
102	417091005000	8,771,677	201.37	W. of Cachagua Road	Carmel Valley	No	RC/160, RC/200	Rivers and Water Bodies, Resource Conservation
103	418191003000	15,645,010	359.16	S. of Carmel River	Carmel Valley	No	RC/2300	Resource Conservation
104	418191005000	13,939,200	320.00	W. of Carmel River	Carmel Valley	No	RC/2300	Rivers and Water Bodies, Resource Conservation
105	418191034000	7,509,744	172.40	S. of Nason Road	Carmel Valley	No	RC/2300	Rivers and Water Bodies, Resource Conservation
106	418191035000	27,878,400	640.00	S. of Nason Road	Carmel Valley	No	RC/2300	Rivers and Water Bodies, Resource Conservation
107	418191043000	20,908,800	480.00	S. of Nason Road	Carmel Valley	No	RC/2300	Rivers and Water Bodies, Resource Conservation
108	418191053000	3,484,800	80.00	S. of Nason Road	Carmel Valley	No	RC/40	Resource Conservation
109	418191080000	6,926,040	159.00	Nason Road	Carmel Valley	No	RC/20, PQP, RC/2300	Rivers and Water Bodies, Resource Conservation
Totals		**157,070,101**	**3,605.83**					

(1) Parcel Size based on Assessor Records
(2) Possessary Interest
Sources: MPWMD, Monterey County Assessor Records, Data Tree, County of Monterey Resource Management Agency
22-78 Chris Carneghi, MAI December 2022

Table 3

SUBJECT PARCELS HIGHEST AND BEST USE
Appraisal of Proposed Fee Acquisitions
From - California American Water Monterey District (Cal-Am Water System)
By - Monterey Peninsula Water Management District
Date of Value: December 15, 2022

No.	Assessors Parcel Number (APN)	Parcel Size Sq. Ft.	Parcel Size Acres *(1)*	Street or Location	City / Mailing Address	In City?	Current Use	Appraisal Highest and Best Use	Comments
1	001181002000	55,490	1.27	1650 David Ave	Monterey	Yes	Corporate Yard	Speculative Residential	Zoning, Size, No meter
2	001213021000	23,514	0.54	620 Devisadero St	Monterey	Yes	Withers Tanks	Speculative Residential	Zoning, Size, No meter
3	001423031000	13,754	0.32	6 Shady Ln	Monterey	Yes	Lower Toyon Tank	Speculative Residential	Zoning, Size, No meter
4	001761036000	71,436	1.64	599 Viejo Rd	Monterey	Yes	Viejo Tank	City Park/Open Space	Zoning, Slope
5	001931024000	2,500	0.06	52 Linda Vista Dr	Monterey	Yes	Lower Monte Vista Tank	Private Open Space	Substandard lot size
6	006528001000	2,861	0.07	Sinex Ave	Pacific Grove	Yes	Eardley Roundabout	City Park	Current Use, Location
7	006694005000	9,877	0.23	2nd St	Pacific Grove	Yes	Corporate Yard	Speculative Residential	Zoning, Size, No meter
8	006694006000	390,000	8.95	Hillcrest Ave	Pacific Grove	Yes	Corporate Yard	Speculative Residential	Zoning, Topo, No meter
9	007491015000	664,725	15.26	2949 Bird Rock Rd	Pebble Beach	No	3 Tanks	Conservation/Open Space	Zoning, Configuration
10	008111016000	12,521	0.29	4041 Sunset Ln	Pebble Beach	No	Huckleberry Hill Tanks	Speculative Residential	Zoning, Size, No meter
11	008111017000	9,817	0.23	4039 Sunset Ln	Pebble Beach	No	Huckleberry Hill Tanks	Private Open Space	Size, Configuration
12	008111022000	32,234	0.74	4045 Sunset Lane #4059	Pebble Beach	No	Huckleberry Hill Tanks	Speculative Residential	Zoning, Size, No meter
13	008161003000	22,106	0.51	17 Mile Dr	Pebble Beach	No	Unknown	Private Open Space	Zoning, Configuration
14	008171011000	8,966	0.21	Ronda Rd	Pebble Beach	No	Pebble Beach Tanks	Private Open Space	Zoning, Size, Access
15	008293008000	5,328	0.12	Portola Rd	Pebble Beach	No	Unknown	Private Open Space	Size, Configuration
16	009142010000	8,896	0.20	24739 Upper Trail	Carmel	No	Carmel Woods Tank	Speculative Residential	No meter
17	010233004000	3,150	0.07	2nd Ave	Carmel	Yes	Unknown	Private Open Space	Size, Slope
18	011051018000	814	0.02	1635 Military Ave	Seaside	Yes	Well	Private Open Space	Size
19	011061004000	44,870	1.03	1987 Park Ct	Seaside	Yes	Well, Tank, Treatment	Speculative Residential	No meter
20	011071018000	9,106	0.21	Luzern St	Seaside	Yes	Luzern #2 Well & PS	Speculative Residential	No meter
21	011091017000	39,627	0.91	1237 Playa Ave	Seaside	Yes	Playa #3 Well	Speculative Residential	No meter
22	011355004000	7,906	0.18	598 Harcourt Ave	Seaside	Yes	Vacant Lot	City Park	No meter
23	011493028000	7,622	0.17	2104 Paralta Ave	Seaside	Yes	Paralta #1 Well	Speculative Residential	No meter
24	012193016000	6,172	0.14	1257 Palm Ave	Seaside	Yes	Vacant Lot	Speculative Residential	No meter
25	012324032000	49,231	1.13	1561 Hilby Ave	Seaside	Yes	Hilby Tank & Pump Station	Speculative Residential	No meter
26	012432004000	21,757	0.50	1453 Plumas Lane	Seaside	Yes	Plumas #4 Well	Speculative Residential	No meter
27	012532013000	3,019	0.07	Via Verde	Del Rey Oaks	Yes	Unknown	Private Open Space	Size, Slope, Access
28	012681005000	10,802	0.25	1245 Yosemite	Seaside	Yes	Upper Hilby Tank	Speculative Residential	No meter
29	012681006000	10,306	0.24	1235 Yosemite St	Seaside	Yes	Upper Hilby Tank	Speculative Residential	No meter
30	012681007000	9,246	0.21	1225 Yosemite St	Seaside	Yes	Upper Hilby Tank	Speculative Residential	No meter

Table 3

SUBJECT PARCELS HIGHEST AND BEST USE
Appraisal of Proposed Fee Acquisitions
From - California American Water Monterey District (Cal-Am Water System)
By - Monterey Peninsula Water Management District
Date of Value: December 15, 2022

No.	Assessors Parcel Number (APN)	Parcel Size Sq. Ft.	Parcel Size Acres *(1)*	Street or Location	City / Mailing Address	In City?	Current Use	Appraisal Highest and Best Use	Comments
31	012831013000	2,865	0.07	1833 Luxton St	Seaside	Yes	Vacant Lot	Speculative Residential	No meter
32	012834001000	8,930	0.21	1898 Waring St	Seaside	Yes	LaSalle #2 Well	Speculative Residential	No meter
33	012843005000	3,690	0.08	1860 Harding St	Seaside	Yes	Vacant Lot	Speculative Residential	No meter
34	012843013000	7,381	0.17	1849 Darwin St	Seaside	Yes	Darwin #1 Well	Speculative Residential	No Meter
35	012843016000	1,843	0.04	1865 Darwin St	Seaside	Yes	Vacant Lot	Speculative Residential	No meter
36	014111010000	9,931	0.23	Skyline Dr	Monterey	Yes	Upper Toyon Tank	Private Open Space	Zoning, Access
37	015031013000	13,539	0.31	25231 Pine Hills Dr	Carmel	No	Rio Vista Tank	Private Open Space	Substandard lot size
38	015031087000	21,470	0.49	24735 Outlook Dr	Carmel	No	Carmel Views Tank	Private Open Space	Size, Location
39	015162038000	9,147	0.21	5258 Carmel Valley Rd	Carmel	No	Rancho Canada #1 Well	Private Open Space	Size, Riparian corridor
40	015251030000	174,240	4.00	26530 Rancho Sn Carlos Rd	Carmel	No	San Carlos #2 Well	Private Open Space	Riparian corridor
41	015441001000	22,867	0.52	498 Del Mesa Dr	Carmel	No	Del Mesa Tank	Private Open Space	Substandard lot size
42	015441005000	13,832	0.32	100 Del Mesa Dr	Carmel	No	Pump Station	Private Open Space	100 ft. setback from Rd
43	015481001000	29,240	0.67	24750 High Meadow Dr	Carmel	No	High Meadows Tank	Private Open Space	Access,Topography
44	101031004000	778	0.02	1199 Aguajito Rd	Monterey	No	Castro Plant 7A	Private Open Space	Substandard lot size
45	103011011000	9,866	0.23	500 Aguajito Rd	Carmel	No	Aguajito Tank	Private Open Space	Substandard lot size
46	103071005000	12,434	0.29	625 Monhollan Rd	Carmel	No	Fairways Tanks	Open Space	Substandard lot size
47	103102008000	9,299	0.21	Loma Alta Rd/Aguajito Rd	Carmel	No	Unknown	Private Open Space	Substandard lot size
48	103121014000	3,048	0.07	3741 Raymond Way	Carmel	No	Mar Monte Tank	Private Open Space	Substandard lot size
49	103181002000	12,411	0.28	Landlocked by Jacks Park	Monterey	No	Unknown	Open Space	Access, Location
50	169111008000	164,823	3.78	4 Scarlett Rd #A	Carmel Valley	No	Scarlett #8 Well	Private Open Space	Riparian corridor, shape
51	169131023000	327,108	7.51	28005 Dorris Dr	Carmel	No	Berwick #7 Well	Private Open Space	Riparian corridor, shape
52	169141016000	117,536	2.70	9210 Carmel Valley Rd	Carmel	No	Iron Removal Plant	Speculative Residential	Zoning
53	169141023000	42,207	0.97	S. of Carmel Valley Road	Carmel	No	Iron Removal Plant	Private Open Space	Substandard lot size
54	169181021000	18,358	0.42	27539 Via Sereno	Carmel	No	Schulte #2 Well	Private Open Space	Size, Riparian corridor
55	169221012000	2,400	0.06	7240 Carmel Valley Rd	Carmel	No	Cypress #1 Well	Private Open Space	Substandard lot size
56	169262002000	2,595	0.06	25863 Tierra Grande Dr	Carmel	No	Pump Station	Private Open Space	Substandard lot size
57	169271007000	22,964	0.53	25723 Tierra Grande Dr	Carmel	No	Lower Tierra Grande Tank	Private Open Space	Size, topogaphy
58	169342011000	15,231	0.35	25451 Tierra Grande Dr	Carmel	No	Middle Tierra Grande Tank	Private Open Space	Size, topogaphy
59	169381007000	28,648	0.66	25329 Tierra Grande Dr	Carmel	No	Upper Tierra Grande Tank	Private Open Space	Configuration, access
60	173071047000	7,102	0.16	Laguna Seca Golf Ranch	Monterey	No	Bishop WTP	Private Open Space	Golf Course
61	173071051000	1,859	0.04	Laguna Seca Golf Ranch	Monterey	No	Bishop Well	Private Open Space	Golf Course

Table 3

SUBJECT PARCELS HIGHEST AND BEST USE
Appraisal of Proposed Fee Acquisitions
From - California American Water Monterey District (Cal-Am Water System)
By - Monterey Peninsula Water Management District
Date of Value: December 15, 2022

No.	Assessors Parcel Number (APN)	Parcel Size Sq. Ft.	Parcel Size Acres *(1)*	Street or Location	City / Mailing Address	In City?	Current Use	Appraisal Highest and Best Use	Comments
62	173071052000	931	0.02	Near Pasadero Sub.	Monterey	No	Unknown	Private Open Space	Access, Size
63	173071054000	7,001	0.16	9385 York Rd	Monterey	No	York Rd Tank	Private Open Space	Access, Size
64	173101053000	25,608	0.59	23729 Spectacular Bid Ln	Monterey	No	Spectacular Bid Tank	Private Open Space	Access, Size
65	187021024000	9,583	0.22	13471 Middle Canyon Rd ***(2)***	Carmel Valley	No	Upper Middle Canyon Tank	Private Open Space	Substandard lot size
66	187111017000	28,897	0.66	71 Oak View	Carmel Valley	No	Ranchitos Tank	Private Open Space	Substandard lot size
67	187221001000	39,695	0.91	64 Middle Canyon Rd	Carmel Valley	No	Middle Canyon Tank	Private Open Space	Substandard lot size
68	187221011000	7,885	0.18	50 Middle Canyon Rd	Carmel Valley	No	Middle Canyon Tank & PS	Private Open Space	Substandard lot size
69	187231005000	2,271	0.05	11 Rancho Rd	Carmel Valley	No	Pump Station	Private Open Space	Size, Setback
70	187301002000	4,125	0.09	308 Country Clb Heights Ln	Carmel Valley	No	Country Club Heights Tank	Private Open Space	Substandard lot size
71	187331004000	3,814	0.09	6 Loma Ln	Carmel Valley	No	Tank Lot	Private Open Space	Substandard lot size
72	187351004000	474	0.01	358 Ridge Way	Carmel Valley	No	RidgeWay Plant No. 65 (well)	Private Open Space	Substandard lot size
73	187442013000	2,550	0.06	5 Via Contenta	Carmel Valley	No	Pump Station	Private Open Space	Size, Setback
74	187601009000	10,500	0.24	396 El Caminito Rd	Carmel Valley	No	Upper Airway Tank	Private Open Space	Substandard lot size
75	187611014000	8,736	0.20	191 Chaparral Rd	Carmel Valley	No	Lower Airway Tank	Private Open Space	Substandard lot size
76	187611015000	11,479	0.26	58 Chaparral Rd	Carmel Valley	No	Lower Airway Tank	Private Open Space	Substandard lot size
77	189091015000	5,530	0.13	35 W Garzas Rd	Carmel Valley	No	Garzas #3 Well	Private Open Space	Substandard lot size
78	189141001000	629	0.01	94 Boronda Rd	Carmel Valley	No	Well	Private Open Space	Substandard lot size
79	189191007000	4,934	0.11	96 Panetta Rd	Carmel Valley	No	Well	Private Open Space	Substandard lot size
80	189191010000	664	0.02	90 Panetta Rd	Carmel Valley	No	Panetta Well No. 2	Private Open Space	Substandard lot size
81	189211005000	3,337	0.08	46 W Carmel Valley Rd	Carmel Valley	No	Vacant Lot	Private Open Space	Substandard lot size
82	189311033000	10,782	0.25	5 De Los Helechos	Carmel Valley	No	Robles Del Rio #3 Well	Private Open Space	Substandard lot size
83	189352006000	10,490	0.24	57 Piedras Blancas	Carmel Valley	No	Lower Robles Tank	Private Open Space	Substandard lot size
84	189401004000	5,929	0.14	46 Camino De Travesia	Carmel Valley	No	Upper Robles Tank	Private Open Space	Substandard lot size
85	189401005000	6,223	0.14	48 Camino De Travesia	Carmel Valley	No	Upper Robles Tank	Private Open Space	Substandard lot size
86	189561029000	18,805	0.43	94 W Garzas Rd	Carmel Valley	No	Garzas #4 Well	Private Open Space	Substandard lot size
87	197081032000	1,149,984	26.40	W. of E. Carmel Valley Rd	Carmel Valley	No	Carmel River/Open Space	Conservation/Open Space	Riparian Corridor, zoning
88	197081033000	4,153,445	95.35	W. of E. Carmel Valley Rd	Carmel Valley	No	Tularcitos Creek/Open Space	Conservation/Open Space	Zoning, Riparian Corridor
89	241112003000	930	0.02	179 Fern Canyon Rd	Carmel	No	Unknown	Private Open Space	Substandard lot size
90	241261012000	43,782	1.01	247 Lower Walden Rd	Carmel	No	Lower Walden Tank & PS	Speculative Residential	Size, Zoning
91	259031011000	13,321	0.31	15 Upper Ragsdale Dr	Monterey	Yes	Ryan Ranch #2 Well (NA)	Industrial Yard	Narrow triangular Lot
92	259031012000	8,069	0.19	15 Upper Ragsdale Dr #1/2	Monterey	Yes	Ryan Ranch #11 Well (NA)	Industrial Yard	Rear Lot

Table 3

SUBJECT PARCELS HIGHEST AND BEST USE
Appraisal of Proposed Fee Acquisitions
From - California American Water Monterey District (Cal-Am Water System)
By - Monterey Peninsula Water Management District
Date of Value: December 15, 2022

No.	Assessors Parcel Number (APN)	Parcel Size Sq. Ft.	Parcel Size Acres *(1)*	Street or Location	City / Mailing Address	In City?	Current Use	Appraisal Highest and Best Use	Comments
93	259041013000	23,817	0.55	5 Upper Ragsdale Dr	Monterey	Yes	Ryan Ranch #9 (NA)	Industrial Yard	Configuration, access
94	259091012000	37,141	0.85	Enlace Road	Monterey	No	Segunda Tanks	Private Open Space	Substandard lot size
95	259093014000	32,234	0.74	Enlace Road	Monterey	No	Segunda Tanks	Private Open Space	Substandard lot size
96	416111002000	15,428	0.35	25219 Casiano Dr	Salinas	No	Hidden Hills WTP/Bay Ridge Well	Private Open Space	Substandard lot size
97	417051003000	3,380,242	77.60	San Clemente Drive	Carmel Valley	No	Carmel River / Open Space	Conservation/Open Space	Zoning
98	417051004000	17,829,277	409.30	45 Sleepy Hollow	Carmel Valley	No	Watershed Open Space	Conservation/Open Space	Zoning
99	417051005000	12,665,506	290.76	San Clemente Road	Carmel Valley	No	Carmel River / Open Space	Conservation/Open Space	Zoning
100	417051010000	1,932,849	44.37	S. of Carmel River	Carmel Valley	No	Watershed Open Space	Conservation/Open Space	Zoning
101	417051011000	7,814,279	179.39	W. of Carmel River	Carmel Valley	No	Watershed Open Space	Conservation/Open Space	Zoning
102	417091005000	8,771,677	201.37	W. of Cachagua Road	Carmel Valley	No	Camel Rv/Watershed Open Space	Conservation/Open Space	Zoning
103	418191003000	15,645,010	359.16	S. of Carmel River	Carmel Valley	No	Watershed Open Space	Conservation/Open Space	Zoning
104	418191005000	13,939,200	320.00	W. of Carmel River	Carmel Valley	No	Camel Rv/Watershed Open Space	Conservation/Open Space	Zoning
105	418191034000	7,509,744	172.40	S. of Nason Road	Carmel Valley	No	Camel Rv/Watershed Open Space	Conservation/Open Space	Zoning
106	418191035000	27,878,400	640.00	S. of Nason Road	Carmel Valley	No	Danish Cr, Camel Rv/Watershed	Conservation/Open Space	Zoning
107	418191043000	20,908,800	480.00	S. of Nason Road	Carmel Valley	No	Camel Rv/Watershed Open Space	Conservation/Open Space	Zoning
108	418191053000	3,484,800	80.00	S. of Nason Road	Carmel Valley	No	Watershed Open Space	Conservation/Open Space	Zoning
109	418191080000	6,926,040	159.00	Nason Road	Carmel Valley	No	Watershed Open Space	Conservation/Open Space	Zoning
Totals		**157,070,141**	**3,605.83**						

(1) Parcel Size based on Assessor Records

(2) Possessary Interest

22-78 Chris Carneghi, MAI December 2022

EXHIBIT B

COMPARABLE DATA

Table 4 - Residential Subdivision Land Sales

Table 5 - Residential Lot Sales

Table 6 - Private Open Space Land Sales

Table 7 - Conservation/Open Space Land Sales

Table 8 - Industrial Land Sales

Table 4

Comparable Residential Subdivision Land Sales

Appraisal of Proposed Fee Acquisitions
From - California American Water Monterey District (Cal-Am Water System)
By - Monterey Peninsula Water Management District
Date of Value December 15, 2022

No.	Location	COE Date	Sale Price	Land Area (Ac/SF)	Price/SF Price/Unit	Land Use/ Zoning	Allowed/Proposed Development Density		Grantor/Grantee Document #	Comments
1	Enclave Phase II Seaside APN: 031-051-044 & -045	3/22	$10,980,000	13.82 601,901	**$18.24** **$366,000**	Recreation Commercial V-FO	30 2.17	Units DU/Ac.	Cornerstone Capitol Management Shea Homes #12914	Phase II Enclave gated community/resort development at Bayonet & Black Horse golf course. 80-acre development planned in 2009 for 275-room hotel, 175 timeshares, 125 residential lots fronting golf course. Water available.
2	118 Ortalon Circle Santa Cruz APN: 001-161-22	3/21	$2,750,000	4.01 174,458	**$15.76** **$458,333**	Low Density Residential R1-10 - Single Family Res.	6 1.50	Units DU/Ac.	Lezin Family Rachel Lewis #0013106	Located in upper westside Santa Cruz. Property improved with 2,480 SF SFR in poor condition. Buyer to subdivide property into 4-8 lots. Water available.
3	1137 Broadway Ave. Seaside APN: 012-191-multiple	7/20	$1,000,000	2.57 111,949	**$8.93** **$71,429**	MX - Mixed Use CMX - Commercial Mixed Use	14 5.45	Units DU/Ac.	City of Seaside The Orosco Group #2020.34167	Former RDA owned 14 parcels. Include about 8K SF older building improvements. Purchased for future mixed-use development. Does not include water which must be negotiated with different 3rd party.
4	1260 7th Avenue Santa Cruz APN: 026-221-15	12/19	$1,580,000	0.95 41,338	**$38.22** **$158,000**	R-UM - Res. Urban Medium RM-4 - Res. Multifamily	10 10.54	Units DU/Ac.	George Brownridge Buddha Back Forty LLC #0039655	Property marketed for development with 11 SFR or up to 17 unit multi-family project. Would require application for density bonus. Max units based on zoning and GP is 10.
5	271 Carmel Avenue Marina APN: 032-201-003 & -031	7/18	$850,000	1.20 52,272	**$16.26** **$20,238**	C-R - Comm/Multi Fam Res.	42 35.00	Units DU/Ac.	Hope Presbyterian Aladdin Properties #0029420	Property improved with 900 SF church, 1,500 SF community bldg. and 675 SF modular house. Zoning allows up to 35 DU/Ac.
6	1405 La Salle Ave Seaside APN: 011-081-021 & -022	10/16	$1,040,000	1.20 52,271	**$19.90** **$109,474**	RIS - Low Density SFR RS-8 Single-Family Res.	10 8.00	Units DU/Ac.	First Baptist Church Seaside Early Dev Services Inc. #2016.64535	Property improved with 9K SF religious facility. Purchased by owner user for use as day care. Parcels updated to -025 and -026 after sale. Sufficent water for existing bldg. use.
7	SWC Soquel Dr. @ Monterey Soquel APN: 037-191-29	6/16	$1,200,000	1.82 79,279	**$15.14** **$240,000**	R-1-6	5 2.75	Units DU/Ac.	Filice Family Trust Hacienda Homes LLC #2016.22650	Property located at SWC Soquel Drive and Monterey Avenue in Soquel. Buyer subdivided property for development with 5 SFR.
8	1010 Rodriquez Street Santa Cruz APN: 026-111-01	11/15	$1,600,000	1.60 69,696	**$22.96** **$142,857**	R-1-6	11 7.06	Units DU/Ac.	Cal-Cruz Hatcheries Inc City Ventures #0047151	Property purchased for subdivision and development with single family residences. Buyer also owned parcel to the south. Larger development is 20 units on 2.83 acres. Overall Density is 7.06 DU/Ac.

Source: 22-78 Chris Carneghi, MAI December 2022

Comparable Subdivision Land Sales Map

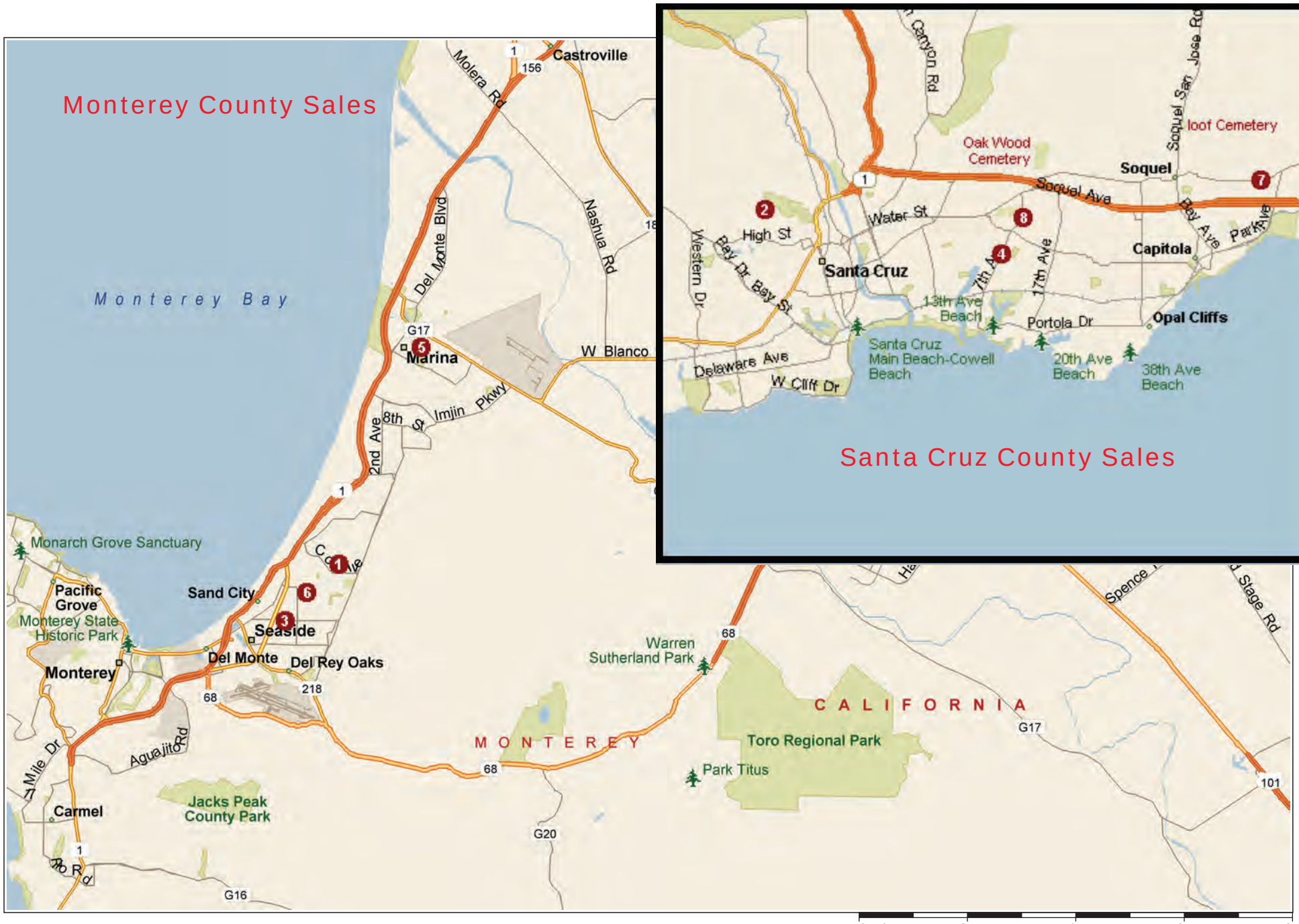


Table 5

Comparable Residential Lot Sales

Appraisal of Proposed Fee Acquisitions
From - California American Water Monterey District (Cal-Am Water System)
By - Monterey Peninsula Water Management District
Date of Value December 15, 2022

No.	Location	COE Date	Lot Size (SF/Ac)	Zoning	Sale Price/ Price/SF Land	Grantor/Grantee Document #	Comments
1	1784 Laguna Street Seaside APN: 012-811-016	5/22	1,900 0.04	RS-12	**$128,000** **$67.37/SF**	David Jhow Mark A. Ramirez #2022.23738	Vacant rectangular lot with water credits for 6.8 fixture units, but no water meter. Formerly improved with SFR that was destroyed in 2013.
2	930-940 Madison St Monterey APNs: 001-333-014 & -017	2/21	8,000 0.18	R-1-6	**$150,000** **$18.75/SF**	Rollo Lee Harris Trust Max Marc #2021.13009 & 10	Two adjacent, steeply sloped, residential development sites vacant of building improvements. Old Town Monterey. No water credits or meter.
3	Oak Way Carmel Highlands APN: 241-131-018	9/20	10,170 0.23	LDR/1-D (CZ)	**$200,000** **$19.67/SF**	Harry W Kelso Abbas Kashani #2020.51688	Vacant, gently sloped site above the Carmel Highlands Inn. No water credits or meter.
4	Hamilton Avenue Seaside APN: 012-274-019	1/20	2,500 0.06	RM	**$20,000** **$8.00/SF**	Century Land LLC Dmitry Kisselev #20201733	Vacant rectangular lot advertised for sale at $30K. Medium Density residential legal classification. No water meter/credits.
5	Hamilton Avenue Seaside APN: 012-264-019	9/19	2,493 0.06	RS-12	**$42,000** **$16.85/SF**	Bruce Marta Family Trust Patricio and Victoria Padilla #201941236	Vacant rectangular lot. Medium density single family residential legal classification. List price was $60K. No water meter/credits.
6	Noche Buena Street Seaside APN: 012-262-013	8/19	3,552 0.08	RS-12	**$50,000** **$14.08/SF**	Bruce Marta Family Trust Jose M Pacheco-Perez #2019.35644	Property located at NWC Amador Avenue. Vacant rectangular shaped site. No water meter/credits.
7	1327 Lawton Avenue Pacific Grove APN: 007-561-044	4/18	4,500 0.10	R-1	**$170,000** **$37.78/SF**	Del Olmo Family Living Trust Nicolette Munson #2018.18135	Located in Del Monte Park neighborhood of Pacific Grove. Property improved with 2-car garage. No water meter/credits. Previous sale was June 2005 at $265K.
8	229 Peter Pan Road Carmel APN: 241-201-023	11/17	30,928 0.71	LDR/1-D (CZ)	**$65,000** **$2.10/SF**	Santa Cruz County Bank Alan Harlan #2017.15901	Bank owned property near point Lobos. No water meter/credits. Buyer to hold until water available for residential development.
9	67A Southbank Road Carmel Valley APN: 189-511-005	5/17	27,238 0.63	LDR/2.5-D S-RAZ	**$180,000** **$6.61/SF**	Partch P Y Living Trust Vicky Valverde-Salas #2017.27232	Located in Robles Del Rio Carmelo area of Carmel Valley. No water meter/credits on site. Heavily wooded topography.
10	Judson Street Seaside APN: 012-832-021	10/16	5,000 0.11	RS-12	**$49,000** **$9.80/SF**	Tina Satow Ron Yasny #2016.61725	Vacant rectangular site just south of intersection at La Salle Avenue. No water meter/credits. Original listing price was $99K.
11	747 Filmore Street Monterey APN: 001-174-031	7/16	5,001 0.11	R-1-5	**$175,000** **$34.99/SF**	Mary Hallisey Edward Chiorazzi #2016.40466	Vacant residential lot. No water meter/credits. Low density residential legal designation.
12	3800 Genista Way Carmel APN: 103-131-006	4/16	47,045 1.08	LDR/B-6 UR-D-S	**$160,000** **$3.40/SF**	James Castle Shoemaker Living Trust #2016.20718	Vacant site with sloping topography. Located within High Meadows subdivision. No water meter/credits. Property listed for sale since 2009. Asking Price was $500K in 2010.
13	751 Hawthorne Street Monterey APN: 001-078-004	4/16	6,000 0.14	R-3-5	**$165,000** **$27.50/SF**	Blackwell B C Trust Joe & Nelda Cardoso #2016.20055	Vacant site located proximate to Cannery Row/downtown Monterey. No water meter/credits. Legal designation is for medium density residential.
14	801 Lyndon Street Monterey APN: 001-186-017	2/16	5,024 0.12	R-3-5	**$120,000** **$23.89/SF**	Saba Siavoush Trust MacHado Family Trust #2016.7936	Vacant site located at NWC Lyndon Street and Irving Avenue. No water meter/credits. General Plan is for Medium Density Residential. Advertised for development with approved tri-plex.

Source: 22-78 Chris Carneghi, MAI December 2022

Comparable Residential Lot Sales Map

Table 6

Comparable Private Open Space Land Sales

Appraisal of Proposed Fee Acquisitions
From - California American Water Monterey District (Cal-Am Water System)
By - Monterey Peninsula Water Management District
Date of Value December 15, 2022

No.	Location	COE Date	Sale Price	Lot Size (Ac/SF)	Price/SF Land Area	Land Use/ Zoning	Grantor/Grantee Document #	Comments
1	39271 Kincannon Road Carmel Valley APN: 418-271-014	8/22	$150,000	5.15 224,334	**$0.67/SF**	Resource Conservation RC/40	Benjamin Domanico-Huh Donna Braden #2022.32757	Remote site located between Laurel Spring Road and Tassajara Road. Sloping, heavily wooded site accessed via private road which bisects property. Well is installed and there is electricity at the lot line. Natural spring feeds creek on property.
2	Dougherty Place Lot #2 Carmel APN: 015-291-026	12/21	$55,000	0.72 31,334	**$1.76/SF**	Res - Low Density 5-1 Du/Ac. LDR/B6--D-S-RAZ	James and Mary Fromm Trust J. De La Rosa #2022.761	Land slopes steeply down from street grade. Site bisected by drainage easement and includes scenic easement at rear of property.
3	3000 Lake Court Marina APN: 033-171-021	11/21	$110,000	0.32 13,939	**$7.89/SF**	Public Facilities PF-O	Lopez Family Trust Stephen & Melinda Sherry #2021.75762	Vacant site zoned for public facilities. No water, electricity or sewer. Property purchased by owner of an adjacent SFR.
4	Southbank Road Carmel Valley APN: 189-501-015 & 189-491-006	6/21	$130,000	1.24 54,038	**$2.41/SF**	Res - Low Density 5-1 Du/Ac. LDR/B6--D-S-RAZ	Arosso-Streitz Trust Santa Rosa Motel Co LP #2021.41492	Vacant, T-shaped site includes water entitlements of 0.3 acre feet per year. Access is only through a private, gated entrance with shared driveway to neighboring properties.
5	Crestview Circle Carmel APN: 009-591-019	12/19	$50,000	0.24 10,380	**$4.82/SF**	MDR/2-D(CZ)	Carol Ernst S Kubica LLC #2019.62151	Vacant steeply sloped lot. Buyer purchased adjacent SFR in same transaction for $1.25M. Site originally listed for sale at $250K.
6	Garapatos Redwoods Lot 153 Carmel Highlands APN: 418-071-031	7/19 7/16	$11,500 $5,000	0.11 4,760	**$2.42/SF** **$1.05/SF**	RDR/40-D(CZ)	Benjamin Saputelli Morgan Quackenbush #2017.32292	Located in Garapatos Redwoods Subdivision. Steeply sloped & heavily wooded. Below minimum 1 acre for septic and 5 acre lot minimum for building. No public right-of-way access, water or wastewater. Sold in July 2016 for $5K.
7	35068 Sky Ranch Road Carmel Valley APN: 417-081-058	6/19	$135,000	10.00 435,600	**$0.31/SF**	Perm. Grazing/Rural Res. PG/40 RDR/B-6	James Healey Samirf Messiah #2019.23750	Probate sale of long and narrow strip of vacant land proximate to Cachagua Road.
8	40 Asoleado Drive Carmel Valley APN: 417-112-007	8/18	$145,000	10.05 437,778	**$0.33/SF**	Resource Conservation RC/20 PG/B-6	Mary McCary Trust Brian Snyder #2018.33955	Vacant lot relatively clear of trees. Sloping downward from street grade. Purchased by adjacent property owner.
9	Garapatos Redwoods Lot 34 Carmel Highlands APN: 418-071-082	6/17 1/17	$6,500 $10,000	0.87 37,838	**$0.17/SF** **$0.26/SF**	RDR/40-D(CZ)	Nicola Anthony Matthew Banhagel #2017.32292	Located in Garapatos Redwoods Subdivision. Steeply sloped and heavily wooded. Below minimum 1 acre for septic and 5 acre lot minimum for building. No public right-of-way access, water or wastewater. Sold in 5 months previous for $10K.
10	38302 Laurel Springs Road Carmel Valley APN: 418-281-019	6/16	$77,600	10.02 436,471	**$0.18/SF**	Resource Conservation RC/20	Bank of America Lauryn Nichols #2016.33973	Sloping topography and heavily wooded. Laurel Springs Road traverses property. Buyer reportedly purchased adjacent 16.59 acre property for $215K in 3/17.
11	Madison Street Monterey APN: 001-334-015	1/16	$30,000	0.18 8,000	**$3.75/SF**	Low Density Residential R-1-6	Banathy Trust Mark A Tovar #2015.73861	Property is accessed via paper street, Madison Street physically dead-ends just east of property. Advertised as landlocked and no utilities.

Source: 22-78 Chris Carneghi, MAI December 2022

Comparable Private Open Space Land Sales Map

Table 7

Comparable Conservation/Open Space Land Sales

Appraisal of Proposed Fee Acquisitions
From - California American Water Monterey District (Cal-Am Water System)
By - Monterey Peninsula Water Management District
Date of Value December 15, 2022

No.	Location	COE Date	Sale Price	Lot Size (Ac/SF)	Price/Acre Land Area	Land Use/ Zoning	Grantor/Grantee Document #	Comments
1	38771 Palo Colorado Carmel APN: 418-011-070	12/21	$725,000	120.00 5,227,200	**$6,042**	WSC/40-D(CZ)	Sula Nichols Igino and Rebecca Cafiero #2021.85441	Whale rock at twin peaks located 3,000 up in Santa Lucia mountains above northern Big Sur coast. Four-wheel drive access road from Palo Colorado along Rocky Creek to Twin Peaks.
2	36402 Tassajara Road Carmel Valley APN: 418-293-001	2/21	$890,000	136.55 5,948,118	**$6,518**	Permanent Grazing 10-160 Ac PG/160	Paul Rauber Lisa and David Battaglia #2021.14780	Off-market sale of rolling hillside land off Tassajara Road near intersection of E Carmel Valley Road. Property improved with SFR and outbuildings.
3	10190 Calle De Robles Carmel Valley APN: 185-051-001	1/21	$2,950,000	343.20 14,949,792	**$8,596**	Res. - Low Density 5-1 Ac/Du LDR/1-D-S-RAZ	Asolo LLC Rancho Quintana Carmel LLC #2021.7140	Located in gated community of Quintana, 8 miles from downtown Carmel. Vacant rolling hillside land. Sold previously in 2006 for $2.850M
4	8-10 Rancho San Carlos Road Carmel APNs: 157-131-010, 157-121-025, 239-102-014	8/20	$3,850,000	466.22 20,308,543	**$8,258**	Residential - Low Density WSC/40-D(CZ), RG/10-D-S-RAZ LDR/5-D-S-RAZ	Denise S Malcom Slpa LLC #2020.38163	Located at the Santa Lucia Preserve. Includes golf club access. Includes rights to maintain livestock, establish cultivated crops, private water wells for livestock. Deeded right to maintain, store and land helicopters.
5	Rancho Aguila Big Sur APNs: 418-021-006 and 418-011-029	7/20	$4,300,000	1,199.00 52,228,440	**$3,586**	WSC/40-D(CZ)	Adler Land Trust Esselen Tribe of Monterey #2020.36622	Property size of 1,199 acres from assessor's map. Five miles inland from ocean with scenic ridgeline. Overlooks Los Padres National Forest. Culturally significant site for buyer.
6	Washburn Property Monterey County APN: 417-021-051	4/20	$210,000	83.51 3,637,696	**$2,515**	Perm. Grazing 10-160 Ac. Min PG/160	Washburn Family Trust Big Sur Land Trust #202016846	Adjacent to southern boundary of the Mitteldorf Preserve. No deeded easement rights for access. Buyer owns adjacent lands.
7	39720 Laurel Springs Road Carmel Valley APNs: 418-201-006	3/20	$490,000	160.00 6,969,600	**$3,063**	Resource Conservation RC/40	Vals Plumbing & Heating Gordon D Kinder #202011887	Located in Jamesburg area. Purchased by adjacent property owner. No recorded access to one of the parcels.
8	Lambert Flats Road Carmel Valley APN: 418-301-007	11/19	$500,000	300.00 13,068,000	**$1,667**	Resource Conservation RC/40	Monterey Bay Chinese Assn Range of The Condor #201955654	Located in Jamesburg area. Property was donated to seller to raise funds. List price was $500K. Adjacent to Los Padres Nationa Forest. Buyer is Land Trust conservation group.

Source: 22-78 Chris Carneghi, MAI December 2022

Conservation/Open Space Land Sales Map

Table 8

Comparable Industrial Land Sales

Appraisal of Proposed Fee Acquisitions
From - California American Water Monterey District (Cal-Am Water System)
By - Monterey Peninsula Water Management District
Date of Value December 15, 2022

No.	Location	COE Date	Sale Price	Lot Size (SF/Ac)	Price/SF Land Area	Land Use/ Zoning	Grantor/Grantee Document #	Comments
1	200 Barnet Segal Lane Monterey APN: 001-761-045 & -046	5/21	$4,750,000	738,778 16.96	**$6.43/SF**	Very Low Density Residential PC - Planned Community	Bruno Concettina Family Trust Montage Health Properties LLC #2021.33911	Vacant land at intersection of Iris Canyon road near Highway 1. Buyer owns/operates 28-bed Westland House Community Hospital of Monterey Peninsula (CHOMP) facility located just east.
2	2969 Monterey Salinas Hwy Monterey APNs: 259-031-055 & -056	8/18	$1,850,000	259,182 5.95	**$7.14/SF**	Industrial IR-150-D2-ES	Perry D & Barbara Miller Borelli Investment Company #2018.35443	Site purchased for development with Monterey Motorsport park, 90K SF, 4-building, 86-unit, automobile garage condominium complex. Escrow was 1-year while buyer secured entitlements.
3	6-8 Lower Ragsdale Drive Monterey APNs: 259-031-055 & -056	3/18	$2,200,000	613,325 14.08	**$3.59/SF**	Industrial IR-150-D2-ES	Sierra Instruments, Inc. Montage Health #2018.11092	Located in Ryan Ranch Bus. Pk. btwn HWY 68 & Lower Ragsdale Dr. 4-5 flat acres. Buyer is constructing medical related offices.

Comparable Industrial Land Sales Map

EXHIBIT C

VALUATION ANALYSIS

Table 9 – Subject Parcels Valuation

IV. VALUATION NARRATIVE

The subject property consists of 109 separate land parcels located within the Monterey Peninsula Water Management District. The general location of these parcels is shown on the map in Exhibit A.

A. Highest and Best Use

As noted, each subject parcel falls into one of five highest and best use categories:

Speculative Residential are parcels where the zoning and general plan allow for residential development. However, at the current time there is a moratorium on new water meters. The practical effect of this moratorium is that residential development cannot occur on parcels without a water meter. Although the subject properties are part of a water distribution system, an alternative use of the property for housing can only occur when the moratorium is lifted.

City Park/Open Space category applies to land that is zoned, general planned or currently used for public park purposes or surrounded by existing public owned open space land.

Private Open Space refers to land which is either substandard in size or difficult to access making residential development speculative. These parcels are too small to appeal to a conservation group but would appeal to an adjacent land owner to expand an existing lot for amenity purposes.

Conservation/Open Space refers to larger land parcels which are located beyond the existing urban development pattern and would appeal to conservation groups. Many of these parcels have riparian portions and steep elevations.

Industrial Yard refers to land adjacent to existing industrial uses.

In arriving at the highest and best use of each parcel, as shown on **Table 3**, the factors considered are size, location, parcel configuration, topography, access, zoning, general plan and surrounding uses.

B. Sales Comparison Approach – Comparable Sales

The appropriate methodology for valuing the subject land parcels is by the Sales Comparison approach whereby the subject land value is based on an analysis of other similar land sales. The Comparable Land Sales used in this appraisal were previously presented on **Tables 4, 5, 6, 7, and 8**.

1. Comparable Residential Subdivision Land Sales

Table 4 shows the comparable residential subdivision land sales. These land comparables are larger parcels planned to be either subdivided or developed with multiple units. Comparables 3 and 6 are in Seaside. Comparable 3 sold without sufficient water for redevelopment and the buyer planned to negotiate with a separate third party for water. Comparable 6 included sufficient water for the buyers intended use of the existing religious facility. Comparable 1 is also in Seaside but not within the MPWMD and has water available for development.

The other sales are outside the MPWMD in locations with similar market characteristics, specifically Marina, Santa Cruz and Soquel. These comparables do have water availability. A downward adjustment is necessary for comparables that have water service in comparison to the subject parcels that do not.

The unit prices range from $8.93 to $38.22 per square foot of land area and $20,238 to $458,333 per allowed/proposed dwelling unit. Greater weight is given to the price per square foot of land indicator since the number of units that could be developed on the subject properties is unclear and it is uncertain when future development could occur. There is the standard inverse relationship between size and unit price with the smaller parcels selling at higher unit prices than larger parcels, all else being equal.

2. Comparable Residential Lot Sales

Table 5 shows comparable single family residential lot sales, all of which are located in the MPWMD. None of these lots had water meters at the time of sale and were therefore not buildable. The unit prices range from $2.10 to $67.37 per square foot of land area and $20,000 to $200,000 per lot. Location and size are the two major influences on the prices paid. Smaller lots in higher density urban locations are higher, while larger parcels in outlying areas are much lower.

3. Comparable Private Open Space Land Sales

Table 6 shows comparable private open space land sales. In this category the lack of a water meter does not generally influence the value since the land does not have building development potential. These comparables are all within the MPWMD. The prices range from $0.17 to $7.89 per square foot of land area. Again, the standard inverse relationship between size and unit price can be seen with the smaller parcels selling at higher unit prices than larger parcels for properties with similar locations.

4. Comparable Conservation Open/Space Land Sales

Table 7 lists comparable conservation open space land sales. These are large tracts of land in undeveloped locations which have appeal to open space or conservation groups for habitat preservation. Some are also purchased by private parties. The sales show a consistent range of prices from a low of $1,667 per acre, to a high of $8,596 per acre. The high end of the range comparables are the least relevant as they include a parcel in the Quintana development, an exclusive gated community. Another high end comparable sold with rights to access a golf course, rights to land helicopters and rights to maintain livestock among other things. Comparable 2 includes a small single-family home and out buildings. Absent these data points, the range narrows to a high of $6,042 per acre.

5. Comparable Industrial Land Sales

Table 8 lists comparable industrial land sales. Two of these sales are located in the Ryan Ranch Business Park in Monterey where the only subject properties with an industrial highest and best use are found. The other sale is near and existing medical hospital facility and was purchased by a health care organization. The sales range from $3.59 to $7.14 per square foot of land area.

C. Valuation

Valuation of each individual parcel is shown on **Table 9**. The Table shows both the current use of the parcel and the highest and best use. The highest and best use determines which comparable data set is appropriate for the valuation. Based on an analysis of the subject parcel factors including zoning, location, size, topography and access, an appropriate unit value is estimated. The unit value is either per square foot of land area or per acre of land area as stated on the table. The unit value applied to the parcel size provides the fair market value indication for each of the 109 subject parcels.

V. Fair Market Value Conclusion

Based on the analysis explained above, the fair market value of the fee simple interest as of December 15, 2022 for the total 109 subject parcels is concluded at:

Total Subject Fair Market Value $24,803,000

Table 9

SUBJECT PARCELS VALUATION
Appraisal of Proposed Fee Acquisitions
From - California American Water Monterey District (Cal-Am Water System)
By - Monterey Peninsula Water Management District
Date of Value: December 15, 2022

No.	Assessors Parcel Number (APN)	Parcel Size Sq. Ft. (1)	Acres	Street or Location	City / Mailing Address	Current Use	Appraisal Highest and Best Use	Comparable Data	Unit Value	Unit	Value Conclusion
1	001181002000	55,490	1.27	1650 David Ave	Monterey	Corporate Yard	Speculative Residential	Subdivision Land	$25.00	SF	**$1,387,000**
2	001213021000	23,514	0.54	620 Devisadero St	Monterey	Withers Tanks	Speculative Residential	Subdivision Land	$15.00	SF	**$353,000**
3	001423031000	13,754	0.32	6 Shady Ln	Monterey	Lower Toyon Tank	Speculative Residential	Residential Lots	$15.00	SF	**$206,000**
4	001761036000	71,436	1.64	599 Viejo Rd	Monterey	Viejo Tank	City Park/Open Space	Private Open Space	$1.00	SF	**$71,000**
5	001931024000	2,500	0.06	52 Linda Vista Dr	Monterey	Lower Monte Vista Tank	Private Open Space	Private Open Space	$5.00	SF	**$13,000**
6	006528001000	2,861	0.07	Sinex Ave	Pacific Grove	Eardley Roundabout	City Park	Private Open Space	$10.00	SF	**$29,000**
7	006694005000	9,877	0.23	2nd St	Pacific Grove	Corporate Yard	Speculative Residential	Subdivision Land	$25.00	SF	**$247,000**
8	006694006000	390,000	8.95	Hillcrest Ave	Pacific Grove	Corporate Yard	Speculative Residential	Subdivision Land	$12.00	SF	**$4,680,000**
9	007491015000	664,725	15.26	2949 Bird Rock Rd	Pebble Beach	3 Tanks	Conservation/Open Space	Conservation/Open Sp	$25,000	acre	**$381,000**
10	008111016000	12,521	0.29	4041 Sunset Ln	Pebble Beach	Huckleberry Hill Tanks	Speculative Residential	Residential Lots	$20.00	SF	**$250,000**
11	008111017000	9,817	0.23	4039 Sunset Ln	Pebble Beach	Huckleberry Hill Tanks	Private Open Space	Private Open Space	$10.00	SF	**$98,000**
12	008111022000	32,234	0.74	4045 Sunset Lane #4059	Pebble Beach	Huckleberry Hill Tanks	Speculative Residential	Residential Lots	$15.00	SF	**$484,000**
13	008161003000	22,106	0.51	17 Mile Dr	Pebble Beach	Unknown	Private Open Space	Private Open Space	$2.00	SF	**$44,000**
14	008171011000	8,966	0.21	Ronda Rd	Pebble Beach	Pebble Beach Tanks	Private Open Space	Private Open Space	$5.00	SF	**$45,000**
15	008293008000	5,328	0.12	Portola Rd	Pebble Beach	Unknown	Private Open Space	Private Open Space	$10.00	SF	**$53,000**
16	009142010000	8,896	0.20	24739 Upper Trail	Carmel	Carmel Woods Tank	Speculative Residential	Residential Lots	$20.00	SF	**$178,000**
17	010233004000	3,150	0.07	2nd Ave	Carmel	Unknown	Private Open Space	Private Open Space	$4.00	SF	**$13,000**
18	011051018000	814	0.02	1635 Military Ave	Seaside	Well	Private Open Space	Private Open Space	$5.00	SF	**$4,000**
19	011061004000	44,870	1.03	1987 Park Ct	Seaside	Well, Tank, Treatment	Speculative Residential	Subdivision Land	$8.00	SF	**$359,000**
20	011071018000	9,106	0.21	Luzern St	Seaside	Luzern #2 Well & PS	Speculative Residential	Residential Lots	$15.00	SF	**$137,000**
21	011091017000	39,627	0.91	1237 Playa Ave	Seaside	Playa #3 Well	Speculative Residential	Subdivision Land	$8.00	SF	**$317,000**
22	011355004000	7,906	0.18	598 Harcourt Ave	Seaside	Vacant Lot	City Park	Residential Lots	$15.00	SF	**$119,000**
23	011493028000	7,622	0.17	2104 Paralta Ave	Seaside	Paralta #1 Well	Speculative Residential	Residential Lots	$15.00	SF	**$114,000**
24	012193016000	6,172	0.14	1257 Palm Ave	Seaside	Vacant Lot	Speculative Residential	Residential Lots	$15.00	SF	**$93,000**
25	012324032000	49,231	1.13	1561 Hilby Ave	Seaside	Hilby Tank & Pump Station	Speculative Residential	Subdivision Land	$8.00	SF	**$394,000**
26	012432004000	21,757	0.50	1453 Plumas Lane	Seaside	Plumas #4 Well	Speculative Residential	Subdivision Land	$8.00	SF	**$174,000**
27	012532013000	3,019	0.07	Via Verde	Del Rey Oaks	Unknown	Private Open Space	Private Open Space	$5.00	SF	**$15,000**
28	012681005000	10,802	0.25	1245 Yosemite	Seaside	Upper Hilby Tank	Speculative Residential	Residential Lots	$15.00	SF	**$162,000**
29	012681006000	10,306	0.24	1235 Yosemite St	Seaside	Upper Hilby Tank	Speculative Residential	Residential Lots	$15.00	SF	**$155,000**
30	012681007000	9,246	0.21	1225 Yosemite St	Seaside	Upper Hilby Tank	Speculative Residential	Residential Lots	$15.00	SF	**$139,000**
31	012831013000	2,865	0.07	1833 Luxton St	Seaside	Vacant Lot	Speculative Residential	Residential Lots	$15.00	SF	**$43,000**
32	012834001000	8,930	0.21	1898 Waring St	Seaside	LaSalle #2 Well	Speculative Residential	Residential Lots	$15.00	SF	**$134,000**
33	012843005000	3,690	0.08	1860 Harding St	Seaside	Vacant Lot	Speculative Residential	Residential Lots	$15.00	SF	**$55,000**

Table 9

SUBJECT PARCELS VALUATION
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From - California American Water Monterey District (Cal-Am Water System)
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No.	Assessors Parcel Number (APN)	Parcel Size Sq. Ft. (1)	Acres	Street or Location	City / Mailing Address	Current Use	Appraisal Highest and Best Use	Comparable Data	Unit Value	Unit	Value Conclusion
34	012843013000	7,381	0.17	1849 Darwin St	Seaside	Darwin #1 Well	Speculative Residential	Residential Lots	$15.00	SF	**$111,000**
35	012843016000	1,843	0.04	1865 Darwin St	Seaside	Vacant Lot	Speculative Residential	Residential Lots	$15.00	SF	**$28,000**
36	014111010000	9,931	0.23	Skyline Dr	Monterey	Upper Toyon Tank	Private Open Space	Private Open Space	$5.00	SF	**$50,000**
37	015031013000	13,539	0.31	25231 Pine Hills Dr	Carmel	Rio Vista Tank	Private Open Space	Private Open Space	$2.00	SF	**$27,000**
38	015031087000	21,470	0.49	24735 Outlook Dr	Carmel	Carmel Views Tank	Private Open Space	Private Open Space	$2.00	SF	**$43,000**
39	015162038000	9,147	0.21	5258 Carmel Valley Rd	Carmel	Rancho Canada #1 Well	Private Open Space	Private Open Space	$2.00	SF	**$18,000**
40	015251030000	174,240	4.00	26530 Rancho Sn Carlos Rd	Carmel	San Carlos #2 Well	Private Open Space	Private Open Space	$1.00	SF	**$174,000**
41	015441001000	22,867	0.52	498 Del Mesa Dr	Carmel	Del Mesa Tank	Private Open Space	Private Open Space	$2.00	SF	**$46,000**
42	015441005000	13,832	0.32	100 Del Mesa Dr	Carmel	Pump Station	Private Open Space	Private Open Space	$4.00	SF	**$55,000**
43	015481001000	29,240	0.67	24750 High Meadow Dr	Carmel	High Meadows Tank	Private Open Space	Private Open Space	$4.00	SF	**$117,000**
44	101031004000	778	0.02	1199 Aguajito Rd	Monterey	Castro Plant 7A	Private Open Space	Private Open Space	$4.00	SF	**$3,000**
45	103011011000	9,866	0.23	500 Aguajito Rd	Carmel	Aguajito Tank	Private Open Space	Private Open Space	$4.00	SF	**$39,000**
46	103071005000	12,434	0.29	625 Monhollan Rd	Carmel	Fairways Tanks	Open Space	Conservation/Open Sp	$8,000	acre	**$2,000**
47	103102008000	9,299	0.21	Loma Alta Rd/Aguajito Rd	Carmel	Unknown	Private Open Space	Private Open Space	$2.00	SF	**$19,000**
48	103121014000	3,048	0.07	3741 Raymond Way	Carmel	Mar Monte Tank	Private Open Space	Private Open Space	$4.00	SF	**$12,000**
49	103181002000	12,411	0.28	Landlocked by Jacks Park	Monterey	Unknown	Open Space	Conservation/Open Sp	$8,000	acre	**$2,000**
50	169111008000	164,823	3.78	4 Scarlett Rd #A	Carmel Valley	Scarlett #8 Well	Private Open Space	Private Open Space	$1.00	SF	**$165,000**
51	169131023000	327,108	7.51	28005 Dorris Dr	Carmel	Berwick #7 Well	Private Open Space	Private Open Space	$1.00	SF	**$327,000**
52	169141016000	117,536	2.70	9210 Carmel Valley Rd	Carmel	Iron Removal Plant	Speculative Residential	Residential Lots	$2.00	SF	**$235,000**
53	169141023000	42,207	0.97	S. of Carmel Valley Road	Carmel	Iron Removal Plant	Private Open Space	Private Open Space	$2.00	SF	**$84,000**
54	169181021000	18,358	0.42	27539 Via Sereno	Carmel	Schulte #2 Well	Private Open Space	Private Open Space	$4.00	SF	**$73,000**
55	169221012000	2,400	0.06	7240 Carmel Valley Rd	Carmel	Cypress #1 Well	Private Open Space	Private Open Space	$6.00	SF	**$14,000**
56	169262002000	2,595	0.06	25863 Tierra Grande Dr	Carmel	Pump Station	Private Open Space	Private Open Space	$5.00	SF	**$13,000**
57	169271007000	22,964	0.53	25723 Tierra Grande Dr	Carmel	Lower Tierra Grande Tank	Speculative Residential	Private Open Space	$4.00	SF	**$92,000**
58	169342011000	15,231	0.35	25451 Tierra Grande Dr	Carmel	Middle Tierra Grande Tank	Private Open Space	Private Open Space	$4.00	SF	**$61,000**
59	169381007000	28,648	0.66	25329 Tierra Grande Dr	Carmel	Upper Tierra Grande Tank	Private Open Space	Private Open Space	$3.00	SF	**$86,000**
60	173071047000	7,102	0.16	Laguna Seca Golf Ranch	Monterey	Bishop WTP	Private Open Space	Private Open Space	$3.00	SF	**$21,000**
61	173071051000	1,859	0.04	Laguna Seca Golf Ranch	Monterey	Bishop Well	Private Open Space	Private Open Space	$3.00	SF	**$6,000**
62	173071052000	931	0.02	Near Pasadero Sub.	Monterey	Unknown	Private Open Space	Private Open Space	$3.00	SF	**$3,000**
63	173071054000	7,001	0.16	9385 York Rd	Monterey	York Rd Tank	Private Open Space	Private Open Space	$2.00	SF	**$14,000**
64	173101053000	25,608	0.59	23729 Spectacular Bid Ln	Monterey	Spectacular Bid Tank	Private Open Space	Private Open Space	$2.00	SF	**$51,000**
65	187021024000	9,583	0.22	13471 Middle Canyon Rd ***(2)***	Carmel Valley	Upper Middle Canyon Tank	Private Open Space	Private Open Space	$1.00	SF	**$10,000**
66	187111017000	28,897	0.66	71 Oak View	Carmel Valley	Ranchitos Tank	Private Open Space	Private Open Space	$2.00	SF	**$58,000**

Table 9

SUBJECT PARCELS VALUATION
Appraisal of Proposed Fee Acquisitions
From - California American Water Monterey District (Cal-Am Water System)
By - Monterey Peninsula Water Management District
Date of Value: December 15, 2022

No.	Assessors Parcel Number (APN)	Parcel Size Sq. Ft. (1)	Acres	Street or Location	City / Mailing Address	Current Use	Appraisal Highest and Best Use	Comparable Data	Unit Value	Unit	Value Conclusion
67	187221001000	39,695	0.91	64 Middle Canyon Rd	Carmel Valley	Middle Canyon Tank	Private Open Space	Private Open Space	$2.00	SF	**$79,000**
68	187221011000	7,885	0.18	50 Middle Canyon Rd	Carmel Valley	Middle Canyon Tank & PS	Private Open Space	Private Open Space	$3.00	SF	**$24,000**
69	187231005000	2,271	0.05	11 Rancho Rd	Carmel Valley	Pump Station	Private Open Space	Private Open Space	$3.00	SF	**$7,000**
70	187301002000	4,125	0.09	308 Country Clb Heights Ln	Carmel Valley	Country Club Heights Tank	Private Open Space	Private Open Space	$3.00	SF	**$12,000**
71	187331004000	3,814	0.09	6 Loma Ln	Carmel Valley	Tank Lot	Private Open Space	Private Open Space	$3.00	SF	**$11,000**
72	187351004000	474	0.01	358 Ridge Way	Carmel Valley	RidgeWay Plant No. 65 (well)	Private Open Space	Private Open Space	$3.00	SF	**$1,000**
73	187442013000	2,550	0.06	5 Via Contenta	Carmel Valley	Pump Station	Private Open Space	Private Open Space	$3.00	SF	**$8,000**
74	187601009000	10,500	0.24	396 El Caminito Rd	Carmel Valley	Upper Airway Tank	Private Open Space	Private Open Space	$3.00	SF	**$32,000**
75	187611014000	8,736	0.20	191 Chaparral Rd	Carmel Valley	Lower Airway Tank	Private Open Space	Private Open Space	$2.00	SF	**$17,000**
76	187611015000	11,479	0.26	58 Chaparral Rd	Carmel Valley	Lower Airway Tank	Private Open Space	Private Open Space	$2.00	SF	**$23,000**
77	189091015000	5,530	0.13	35 W Garzas Rd	Carmel Valley	Garzas #3 Well	Private Open Space	Private Open Space	$3.00	SF	**$17,000**
78	189141001000	629	0.01	94 Boronda Rd	Carmel Valley	Well	Private Open Space	Private Open Space	$5.00	SF	**$3,000**
79	189191007000	4,934	0.11	96 Panetta Rd	Carmel Valley	Well	Private Open Space	Private Open Space	$5.00	SF	**$25,000**
80	189191010000	664	0.02	90 Panetta Rd	Carmel Valley	Panetta Well No. 2	Private Open Space	Private Open Space	$5.00	SF	**$3,000**
81	189211005000	3,337	0.08	46 W Carmel Valley Rd	Carmel Valley	Vacant Lot	Private Open Space	Private Open Space	$4.00	SF	**$13,000**
82	189311033000	10,782	0.25	5 De Los Helechos	Carmel Valley	Robles Del Rio #3 Well	Private Open Space	Private Open Space	$3.00	SF	**$32,000**
83	189352006000	10,490	0.24	57 Piedras Blancas	Carmel Valley	Lower Robles Tank	Private Open Space	Private Open Space	$3.00	SF	**$31,000**
84	189401004000	5,929	0.14	46 Camino De Travesia	Carmel Valley	Upper Robles Tank	Private Open Space	Private Open Space	$3.00	SF	**$18,000**
85	189401005000	6,223	0.14	48 Camino De Travesia	Carmel Valley	Upper Robles Tank	Private Open Space	Private Open Space	$3.00	SF	**$19,000**
86	189561029000	18,805	0.43	94 W Garzas Rd	Carmel Valley	Garzas #4 Well	Private Open Space	Private Open Space	$2.00	SF	**$38,000**
87	197081032000	1,149,984	26.40	W. of E. Carmel Valley Rd	Carmel Valley	Carmel River/Open Space	Conservation/Open Space	Conservation/Open Sp	$4,000	acre	**$106,000**
88	197081033000	4,153,445	95.35	W. of E. Carmel Valley Rd	Carmel Valley	Tularcitos Creek/Open Space	Conservation/Open Space	Conservation/Open Sp	$3,500	acre	**$334,000**
89	241112003000	930	0.02	179 Fern Canyon Rd	Carmel	Unknown	Private Open Space	Private Open Space	$3.00	SF	**$3,000**
90	241261012000	43,782	1.01	247 Lower Walden Rd	Carmel	Lower Walden Tank & PS	Speculative Residential	Residential Lots	$5.00	SF	**$219,000**
91	259031011000	13,321	0.31	15 Upper Ragsdale Dr	Monterey	Ryan Ranch #2 Well (NA)	Industrial Yard	Industrial Land Sales	$4.00	SF	**$53,000**
92	259031012000	8,069	0.19	15 Upper Ragsdale Dr 1/2	Monterey	Ryan Ranch #11 Well (NA)	Industrial Yard	Industrial Land Sales	$7.00	SF	**$56,000**
93	259041013000	23,817	0.55	5 Upper Ragsdale Dr	Monterey	Ryan Ranch #9 (NA)	Industrial Yard	Industrial Land Sales	$7.00	SF	**$167,000**
94	259091012000	37,141	0.85	Enlace Road	Monterey	Segunda Tanks	Private Open Space	Private Open Space	$2.00	SF	**$74,000**
95	259093014000	32,234	0.74	Enlace Road	Monterey	Segunda Tanks	Private Open Space	Private Open Space	$2.00	SF	**$64,000**
96	416111002000	15,428	0.35	25219 Casiano Dr	Salinas	Hidden Hills WTP/Bay Ridge Well	Private Open Space	Private Open Space	$2.00	SF	**$31,000**
97	417051003000	3,380,242	77.60	San Clemente Drive	Carmel Valley	Carmel River / Open Space	Conservation/Open Space	Conservation/Open Sp	$3,500	acre	**$272,000**
98	417051004000	17,829,277	409.30	45 Sleepy Hollow	Carmel Valley	Watershed Open Space	Conservation/Open Space	Conservation/Open Sp	$3,000	acre	**$1,228,000**
99	417051005000	12,665,506	290.76	San Clemente Road	Carmel Valley	Carmel River / Open Space	Conservation/Open Space	Conservation/Open Sp	$3,000	acre	**$872,000**

Table 9

SUBJECT PARCELS VALUATION
Appraisal of Proposed Fee Acquisitions
From - California American Water Monterey District (Cal-Am Water System)
By - Monterey Peninsula Water Management District
Date of Value: December 15, 2022

No.	Assessors Parcel Number (APN)	Parcel Size Sq. Ft. (1)	Acres	Street or Location	City / Mailing Address	Current Use	Appraisal Highest and Best Use	Comparable Data	Unit Value	Unit	Value Conclusion
100	417051010000	1,932,849	44.37	S. of Carmel River	Carmel Valley	Watershed Open Space	Conservation/Open Space	Conservation/Open Sp	$3,000	acre	**$133,000**
101	417051011000	7,814,279	179.39	W. of Carmel River	Carmel Valley	Watershed Open Space	Conservation/Open Space	Conservation/Open Sp	$3,000	acre	**$538,000**
102	417091005000	8,771,677	201.37	W. of Cachagua Road	Carmel Valley	Camel Rv/Watershed Open Space	Conservation/Open Space	Conservation/Open Sp	$3,000	acre	**$604,000**
103	418191003000	15,645,010	359.16	S. of Carmel River	Carmel Valley	Watershed Open Space	Conservation/Open Space	Conservation/Open Sp	$3,000	acre	**$1,077,000**
104	418191005000	13,939,200	320.00	W. of Carmel River	Carmel Valley	Camel Rv/Watershed Open Space	Conservation/Open Space	Conservation/Open Sp	$3,000	acre	**$960,000**
105	418191034000	7,509,744	172.40	S. of Nason Road	Carmel Valley	Camel Rv/Watershed Open Space	Conservation/Open Space	Conservation/Open Sp	$3,000	acre	**$517,000**
106	418191035000	27,878,400	640.00	S. of Nason Road	Carmel Valley	Danish Cr, Camel Rv/Watershed	Conservation/Open Space	Conservation/Open Sp	$3,000	acre	**$1,920,000**
107	418191043000	20,908,800	480.00	S. of Nason Road	Carmel Valley	Camel Rv/Watershed Open Space	Conservation/Open Space	Conservation/Open Sp	$3,000	acre	**$1,440,000**
108	418191053000	3,484,800	80.00	S. of Nason Road	Carmel Valley	Watershed Open Space	Conservation/Open Space	Conservation/Open Sp	$3,000	acre	**$240,000**
109	418191080000	6,926,040	159.00	Nason Road	Carmel Valley	Watershed Open Space	Conservation/Open Space	Conservation/Open Sp	$3,000	acre	**$477,000**
	Totals		**3,605.83**				**Cumulative Total Fair Market Value**				**$24,803,000**

(1) Parcel Size based on Assessor Records

(2) Possessary Interest

22-78 Chris Carneghi, MAI December 2022

EXHIBIT D

SCOPE OF WORK

LIMITING CONDITIONS AND ASSUMPTIONS

DEFINITION OF FAIR MARKET VALUE

APPRAISER'S QUALIFICATIONS

SCOPE OF WORK

The scope of work for this appraisal is to utilize the appropriate approaches to value in accordance with Uniform Standards of Professional Appraisal Practice (USPAP) to arrive at a market value conclusion. Specific steps include the inspection of the subject property and the research, analysis and verification of comparable data to arrive at a value indication as put forth in this report. The Sales Comparison Approach is the best indicator for the subject property as vacant land. The Cost and Income Approaches were not used, due to the fact that the market for this type of property does not rely on these approaches.

ASSUMPTIONS AND LIMITING CONDITIONS

1. Extraordinary Assumptions and Hypothetical Conditions

There are no extraordinary assumptions nor hypothetical conditions used in the appraisal.

The use of any hypothetical conditions or extraordinary assumptions in this report might have affected the assignment results.

2. General Limiting Conditions

a) It is the client's responsibility to read this report and to inform the appraiser of any errors or omissions of which he/she is aware prior to utilizing this report or making it available to any third party.

b) No responsibility is assumed for legal matters. It is assumed that title of the property is marketable and it is free and clear of liens, encumbrances and special assessments other than as stated in this report.

c) The subject property is valued assuming it is clean of any toxic contamination. The appraiser assumes that there are no hidden or unapparent conditions of the property, subsoil, or structures, which would render it more or less valuable. The appraiser assumes no responsibility for such conditions, or for engineering which might be required to discover such factors. It is assumed that no soil contamination exists as a result of chemical drainage or leakage in connection with any production operations on or near the property.

d) Plot plans and maps are included to assist the reader in visualizing the property. Information, estimates, and opinions furnished to the appraiser, and contained in the report, were obtained from sources considered reliable and believed to be true and correct. However, no responsibility for accuracy of such items furnished the appraiser is assumed by the appraiser.

e) All information has been checked where possible and is believed to be correct, but is not guaranteed as such.

DEFINITION OF FAIR MARKET VALUE

The measure of "just compensation" is "market value". Section 1263.320 of the Code of Civil Procedure defines market value as:

a) The fair-market value of the property taken is the highest price on the date of valuation that would be agreed to by a seller, being willing to sell but under no particular or urgent necessity for so doing, nor obliged to sell, and a buyer, being ready, willing and able to buy but under no particular necessity for so doing, each dealing with the other with full knowledge of all the uses and purposes for which the property is reasonably adaptable and available.

b) The fair-market value of property taken for which there is no relevant comparable market is its value on the date of valuation as determined by any method of valuation that is just and equitable.

SALE HISTORY

To the best of the appraisers knowledge and research, the subject property is not currently listed for sale nor have any of the subject parcels sold within the last three years.

DATE OF INSPECTION

The appraiser had previously inspected the individual subject properties in 2020. A second inspection was conducted on various dates in October and November 2022. The property owner was provided with a Notice of Decision to Appraise (letter dated October 3, 2022) offering the opportunity to accompany the appraiser on the inspections. However, the owner did not accompany the appraiser on the inspections.

Chris Carneghi is a commercial real estate appraiser with more than 30-years' experience in the San Francisco Bay Area and Silicon Valley. He is a Member of the Appraisal Institute (MAI), is licensed as a California Certified General Real Estate appraiser and sits on the County of Santa Clara Assessment Appeals Board I.

His areas of expertise include:

- Ground leases
- Assessment appeals
- Condemnations
- Arbitrations
- Expert witness valuation testimony

Mr. Carneghi frequently provides litigation support and has provided testimony as an expert witness in court and in private arbitration proceedings. He has often acted as either a neutral or party arbitrator in resolving matters of real estate values, rents and related issues. He has been qualified as a real estate appraisal expert and provided testimony in all Bay Area California Superior Courts and in Federal United States Bankruptcy Court. He has been qualified as a real estate expert and testified in Federal Tax Court, in California Public Utilities Commission (PUC) hearings and in hearings conducted at the American Arbitration Association (AAA) and Judicial Arbitration and Mediation Service (JAMS) in various locations. He has also testified in Hawaii concerning ground lease issues.

EXPERIENCE

Mr. Carneghi is an expert commercial real estate appraiser, arbitrator and consultant in the fields of real estate and urban economics. He has conducted numerous real estate appraisals of commercial properties including office buildings, research and development (R&D) buildings, industrial facilities, retail stores and shopping centers, hotels, apartments, condominiums and vacant land. Mr. Carneghi' s real estate appraisal expertise is focused on urban/suburban buildings, development projects and land. He has extensive experience in appraising real estate for condemnations, rental and other appraisal arbitration matters, property tax assessment appeals, real estate loans, assessment districts, community facilities districts and similar public finance bond financing. Analysis and valuation of leasehold, leased fee and other real estate interests are standard areas of practice. Mr. Carneghi holds the MAI designation from the Appraisal Institute and is licensed as a California Certified General Real Estate appraiser.

After graduating with academic distinction from the University of California at Berkeley, he worked for several years with Paul Fullerton, MAI, on real estate market research with emphasis on downtown rejuvenation studies. He then spent two years with Kaiser-Aetna, a national real estate development partnership, managing market research and financial analysis for their special projects office. Following that he was the project economist for the City of San Jose Economic Development and Redevelopment Program. In 1977, Mr. Carneghi established the firm of Urban Economics Corporation, a real estate consulting firm. In 1979, he merged Urban Economics with the firm of Fullerton-Mills, a real estate appraisal firm established in 1972. The merger resulted in Mills-Carneghi, Inc., later renamed Carneghi and Partners, Inc.

Other related experience includes teaching, speaking and publications on various facets of real estate appraisal, arbitration and market research which are listed below.

PROFESSIONAL AFFILIATIONS & STATE CERTIFICATION

MAI Designation: (No. 6566) Appraisal Institute
Chairman Admissions Committee: AIREA Chapter 11, 1987
State of California Certified General Real Estate Appraiser No. AG001685

EDUCATION

Bachelor's Degree: Urban Studies, University of California at Berkeley
Master's Degree: Business Administration, San Jose State University

SPEAKING

Topic: Different Rules for Different Courts: Appraisers in a Legal Setting
Location: 2018 Annual Fall Conference No. CA Chapter Appraisal Institute

Topic: Legal Pitfalls in Arbitration; Lambert v. Carneghi
Location: No. CA Chapter Appraisal Institute, Spring Litigation Conference, Woodside, 2011

Topic: Real Estate Appraisal Principals and Concepts
Location: City of San Jose, Office of Economic Development, 2011

Topic: Real Estate Appraisal Principals and Concepts
Location: City of San Jose, Real Estate Services and Asset Management Division, 2010

Topic: The Bankruptcy Process: Appraiser / Attorney Interaction
Location: No. CA Chapter Appraisal Institute, Spring Litigation Conference, Woodside, 2010

Topic: Property Tax Assessment Appeal & Procedures
Location: No. CA Chapter Appraisal Institute, Spring Litigation Conference, Woodside, 2009

Topic: Appraisal Arbitration Workshop
Location: No. CA Chapter Appraisal Institute, CE Workshop, Pleasanton, 2005

Topic: Qualifying Appraisal Clients, Engaging Assignments, and Product Pricing
Location: No. CA Chapter Appraisal Institute, Fall Conference, San Francisco, 2004

Topic: Exchange and Deposition - Litigation Process Involving a RE Appraiser Expert
Location: No. CA Chapter Appraisal Institute, Fall Conference, San Francisco, 2003

Topic: Issue of Specific Defendant Compensation for an Unrecorded Public Interest in a Condemned Parcel of Land

Location: Case Studies in Eminent Domain Seminar; Northern California Chapter of Appraisal Institute, Oakland, 2003

Topic: Rent Arbitration in Volatile Market Conditions
Location: San Francisco Real Estate Roundtable, 2002

Topic: Demolition and Toxic Contamination Problems in Real Estate Appraising
Location: Santa Clara County Assessor's Training Conference, 2002

Topic: Appraisal Crossfire: Controversies in the Profession
Location: Appraisal Institute San Francisco Bay Area Fall Conference, 1997

Topic: Reviewing the Reviewer in Real Estate Appraisal
Location: Appraisal Institute San Francisco Bay Area Fall Conference, 1993

Topic: Property Acquisition Workshop - Nonprofit Housing
Location: San Francisco Redevelopment Agency, 1993

Topic: Americans with Disabilities Act (ADA) & Unreinforced Masonry Buildings (UMB)
Location: Appraisal Institute San Francisco Bay Area Fall Conference, 1992

Topic: Private Real Estate and Public Planning
Location: San Jose State University, Urban Planning 143 & 275F, 1992

Topic: Real Estate Appraising in a Changing Market
Location: Peat Marwick Real Estate Study Group, April 1989, 1984 and 1985

Topic: Capitalization of 1st Yr. Income in a Market Involving Rent Concessions
Location: AIREA Chapter 11 Meeting, 1989

Topic: Appraised Values - Downtown Area
Location: City of San Jose Real Estate/Relocation/Appraisal Division, 1988

Topic: Rent Concessions in the Appraisal Process
Location: AIREA Chapter 11 Meeting, 1987

Topic: Appraising: Where Are We?
Location: AIREA Chapter 11 Meeting, 1985

Topic: Development Approach to Industrial Land Valuation in an Inflationary Period
Location: Society of Industrial Realtors Appraisal Committee, San Francisco, 1982

Topic: Market-Feasibility Studies for Mortgage Revenue Bond Programs
Location: Dean Witter Reynolds Seminar, St. Francis Hotel, San Francisco, 1981

Topic: Feasibility Studies in Real Estate Valuation

Location: Valley Seminar sponsored by Sierra Chapter SREA, Modesto Jr College, 1981

Topic: Economic Feasibility of Downtown Office Buildings
Location: Building Owners and Managers Association Northwest Regional Conference, Spokane, Washington, 1979

TEACHING

Course: Real Estate Appraisal (RE 302), Instructor
Location: Golden Gate University, San Francisco, Spring 1989

Course: Topics in Real Estate (BA 296), Guest Lecturer
Location: University of California at Berkeley, Spring 1988

Course: Real Estate and Urban Planning (URB P 196H), Instructor
Location: San Jose State University, Spring 1981

Course: Real Estate Appraisal Problems (BUS 104), Instructor
Location: San Jose State University, Fall 1980, Spring 1981

PUBLICATIONS

Article: Appraisal Arbitration: The Role of the Real Estate Appraiser in Resolving Value Disputes
Publication: The Appraisal Journal, April 1999

Article: Determining Ground-Lease Rental Rates
Publication: The Appraisal Journal, April 1994

Article: Real Estate Appraising Under R41c
Publication: San Jose Business Journal, March 1987

Article: Specialty Shopping Centers: Factors of Success and Failure
Publication: The Appraisal Journal, October 1981

Article: San Jose Office Market
Publication: Western Real Estate News, 1976

APPENDIX F:

Water Rights Appraisal Report prepared by Steven Herzog, MAI, AI-GRS

Appraisal of

Water Rights in the Monterey Water System currently owned by California American Water Company (aka Cal-Am)

For

Monterey Peninsula Water Management District
David C. Laredo, District Counsel

Effective Date

December 26, 2022

By

Steven J. Herzog, MAI, AI-GRS

December 26, 2022

Monterey Peninsula Water Management District
David C. Laredo, District Counsel
Telephone: (831) 646-1502
Email: dave@laredolaw.net

Regarding: Appraisal of Water rights held by California American Water Company (Cal-Am) in its Monterey Water System

Mr. Laredo:

According to your request and authorization, I have made an analysis of the property identified below.

Subject Property: The water rights held by California American Water Company (Cal-Am) as part of its Monterey Water System.

Purpose: The purpose of the appraisal is to estimate the fair market value of the subject property as of the specified effective date.

Rights Appraised: Fee simple

Effective date: December 26, 2022.

Appraisal Instructions: Perform all research and analysis necessary to arrive at a fair market value conclusion for the subject property and produce an appraisal report presenting my conclusions with supporting documentation.

Client: Monterey Peninsula Water Management District (MPWMD), represented by David C. Laredo, District Counsel

Intended Users: CLIENT and its counsel.

Intended Uses: The anticipated intended uses are for CLIENT information and decision making, and for potential use in a condemnation of Cal-Am's Monterey Water System by CLIENT.

Standards: Value estimates in this report are prepared to conform to the Professional Ethics and Standards outlined by the Appraisal Institute, as well as the current version of USPAP (Uniform Standards of Professional Appraisal Practice) promulgated by The Appraisal Foundation.

Type of Report: By USPAP definition, this is an "Appraisal Report."

Value estimate: **$120,560,000**

(One Hundred Twenty Million Five Hundred Sixty Thousand Dollars)

An Extraordinary Assumption utilized in this appraisal is that the water rights being valued are available for sale or lease on a stand-alone basis, even though they are one, critical, component of a water utility. This assumption may or may not be true. The use of this Extraordinary Assumption, if found to be false, may impact the value conclusion.

Thank you for the opportunity to be of service in this assignment.

Sincerely,

Steven J Herzog

Steven J. Herzog, MAI, AI-GRS
California Certified General Real Estate Appraiser AG002359
California Registered Professional Forester RPF 2433

INTRODUCTION

TABLE OF CONTENTS

DATA ANALYSIS & CONCLUSIONS

ADDENDA

SALIENT FACTS & CONCLUSIONS

Subject	Water rights currently owned by Californian American Water Company (Cal-Am) that are part of its Monterey Water System
Location	Monterey County, CA (near the City of Monterey)
Value Conclusions	Fair Market Value of subject water rights $120,560,000
Improvements	There is a water capture, treatment, and delivery system/infrastructure in place. However, this appraisal does not included any such related improvements, and is of only the water rights.
Date Of Inspection	I have been to the vicinity of the subject property on several occasions in the past, but the inspection date for this assignment was November 2, 2022.
Client	Monterey Peninsula Water Management District (MPWMD), represented by David C. Laredo, District Counsel
Effective Date Of Appraisal	December 26, 2022
Rights Appraised	fee simple
Purpose	Estimate the fair market value of the subject property as of the specified effective date.
Intended Use Of Appraisal	The anticipated intended uses are for CLIENT information and decision making, and for potential use in a condemnation of Cal-Am's Monterey Water System by CLIENT.
Intended Users Of Appraisal	CLIENT and its counsel
Hypothetical Condition	None
Extraordinary Limiting Conditions and Assumptions	It is assumed that the water rights are available for sale or lease on a stand-alone basis.

CERTIFICATION OF THE APPRAISAL

I hereby certify that upon request for an appraisal by:

David C. Laredo, representing
Monterey Peninsula Water Management District

I have made an investigation and analysis of the following described property:

The water rights held by California American Water Company
as part of its Monterey Water System.
(Identified in detail later in the report)

I am of the opinion that the fair market value of the fee simple interest in the subject property as of the valuation date of **December 26, 2022**, is:

$120,560,000
(One Hundred Twenty Million Five Hundred Sixty Thousand Dollars)

1. The statements of fact contained in the report are true and correct.
2. The reported analyses, opinions, and conclusions are limited only by the reported assumptions, limiting conditions, and legal instructions, and are my personal, impartial, and unbiased professional analysis, opinions, and conclusions.
3. I have no present or prospective interest in the property appraised and no personal interest or bias with respect to the parties involved.
4. I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
5. My engagement in this assignment was not contingent upon developing or reporting predetermined results.
6. My compensation received for the appraisal is not contingent on the analyses, opinions, or conclusions reached or reported.
7. My compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended us of this appraisal.
8. I have physically viewed the vicinity in which the subject property exists, including viewing various water related infrastructure features in the area.

9. No one provided significant real property appraisal assistance to the person signing this certification.

10. My analyses, opinions, and conclusions were developed, and this report has been prepared in conformity with the Appraisal Foundation's *Uniform Standards for Professional Appraisal Practice.*

11. The reported analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute.

12. The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.

13. As of the date of this report, I have completed the continuing education program for Designated Members of the Appraisal Institute.

14. I have not performed previous services, either as an appraiser or in any other capacity, related to the property being appraised. Neither have I been previously engaged by this Client for any work of any description.

15. An Extraordinary Assumption utilized in this appraisal is that the water rights being valued are available for sale or lease on a stand-alone basis. This may or may not be true. The use of this Extraordinary Assumption, if found to be false, may impact the value conclusion.

Steven J Herzog

STEVEN J. HERZOG, MAI, AI-GRS, RPF Date: December 26, 2022
California Certified General Real Estate Appraiser AG002359
California Registered Professional Forester 2433

STATEMENT OF ASSUMPTIONS AND LIMITING CONDITIONS

The following **general assumptions and conditions** are limitations to the appraiser's opinions:

1) Maps and exhibits included are for illustration only, and are to be used as an aid in visualizing matters discussed within the report. They should not be considered as surveys, or relied upon for any other purpose.

2) No opinion is intended to be expressed for legal or other matters that would require specialized investigation or knowledge beyond that ordinarily employed by real estate appraisers.

3) The date of value set forth in the letter of transmittal and the certification apply to the opinions expressed in this report. The appraiser assumes no responsibility for economic or physical factors occurring at some later date that may affect the opinions herein stated.

4) Information, estimates, and opinions provided by others and contained in the report, were obtained from sources considered reliable. However, I assume no responsibility for the accuracy of such items.

5) The appraiser has made no engineering survey. Except as specifically stated, data relative to physical characteristics were taken from sources considered to be reliable.

6) No opinion as to title is rendered. Data on ownership and legal descriptions were obtained from sources generally thought to be reliable. Title is assumed to be marketable and free and clear of all liens, encumbrances, easements and restrictions.

7) The property is appraised assuming it is under reasonable ownership, competent management and available for its most economical use.

8) The appraiser has no knowledge of the existence of hazardous materials that may or may not be present on or in the property. The appraiser however, is not qualified to detect such substances. The presence of potentially hazardous materials may affect the value of the property. The value opinion is predicated on the assumption there is no such material on or in the property that would cause a loss in value. No responsibility is assumed for any such condition, or for any expertise or engineering knowledge required to discover them. The client is urged to retain an expert in this field if desired.

SCOPE OF THE APPRAISAL

STANDARDS AND VALUATION APPROACHES

Value estimates in this report are prepared to conform to the Professional Ethics and Standards outlined by the Appraisal Institute, as well as the Uniform Standards of Professional Appraisal Practice of the Appraisal Foundation (USPAP).

All approaches to value were considered.

It was necessary to utilize an Extraordinary Assumption in order to complete the assignment. That assumption is that the water rights are available for sale or lease on a stand-alone basis. The legality of that is uncertain since the current use of the water rights is to provide thousands of retail customers with potable water. Government regulatory agencies may not allow the water rights to be separated from the entire package of the interests that comprise the water utility. The use of this Extraordinary Assumption may impact value conclusions if found to be false.

REFERENCES AND DATA SOURCES

Relevant information was sought from many sources. The following were contacted or researched, but the list is not all inclusive.

California Department of Water Resources	California State Water Resources Control Board
County of Monterey	Various cities in Monterey County
California State Water Project	Multiple Precipitation Related Sites
Google Earth images	Client supplied information
Various water district websites and UWMPs (Urban Water Management Plans)	ASFMRA (American Society of Farm Managers and Rural Appraisers) publication “Trends” in ag land values

DEFINITION OF FAIR MARKET VALUE

The definition of value used in this appraisal is fair market value as set forth in the California Code of Civil Procedure Section 1263.320. Pursuant to this Section fair market value is defined as follows:

> *(a) The fair market value of the property taken is the highest price on the date of valuation that would be agreed to by a seller, being willing to sell but under no particular or urgent necessity for so doing, nor obliged to sell, and a buyer, being ready, willing, and able to buy but under no particular necessity for so doing, each dealing with the other with full knowledge of all of the uses and purposes for which the property is reasonably adaptable and available.*
>
> *(b) The fair market value of property taken for which there is no relevant, comparable market is its value on the date of valuation as determined by any method of valuation that is just and equitable.*

In addition, California Code of Civil Procedure Section 1263.330 provides as follows:

> *The fair market value of the property taken shall not include any increase or decrease in the value of the property that is attributable to any of the following:*
>
> *(a) The project for which the property is taken.*
>
> *(b) The eminent domain proceeding in which the property is taken.*
>
> *(c) Any preliminary actions of the plaintiff related to the taking of the property.*

REGIONAL AND AREA DATA

DEMOGRAPHIC INFORMATION

Population projections for California and several of its counties are displayed below for comparison purposes. The subject is located in Monterey County. The projected growth rate for California as a whole is much less than the rapid rates in the past. It is obvious that most of the projected growth is expected to occur in the Sacramento, San Francisco and Santa Clara areas. The projected growth rates for the smaller counties that are more removed from the financial, IT and political centers is much more of a mixed picture with some experiencing population loss.

The population of Monterey County is estimated to be rather stable with a total increase of less than seven percent over the next 38 years.

From this information, development pressure, along with its demand for new water hookups should be rather modest.

	Recent Past, Current and Projected Population Estimates						% Increae
Geography	2010	2022	2030	2040	2050	2060	from 2022
California	37,366,938	40,146,003	41,860,549	43,353,414	44,049,015	44,228,057	10.17%
Marin County	252,655	257,795	257,024	253,549	243,838	231,338	-10.26%
Monterey County	416,005	447,300	464,124	477,265	481,305	476,734	6.58%
Napa County	136,587	139,518	143,223	146,602	146,050	144,261	3.40%
Orange County	3,016,796	3,218,111	3,291,863	3,315,726	3,268,048	3,166,309	-1.61%
Sacramento County	1,422,960	1,571,846	1,687,220	1,808,307	1,901,507	1,979,204	25.92%
San Diego County	3,104,732	3,356,185	3,461,883	3,543,663	3,583,006	3,583,085	6.76%
San Francisco County	810,504	897,416	936,862	972,787	1,004,943	1,039,403	15.82%
San Luis Obispo County	269,450	279,268	284,729	284,346	274,677	263,650	-5.59%
Santa Barbara County	424,109	455,127	469,717	479,622	479,532	473,067	3.94%
Santa Clara County	1,791,215	1,987,898	2,105,066	2,241,634	2,343,610	2,408,169	21.14%
Santa Cruz County	262,813	276,024	284,670	289,843	289,138	287,606	4.20%
Ventura County	824,935	851,620	872,856	885,628	873,594	849,091	-0.30%

Projections Prepared by Demographic Research Unit, California Department of Finance, July 2021

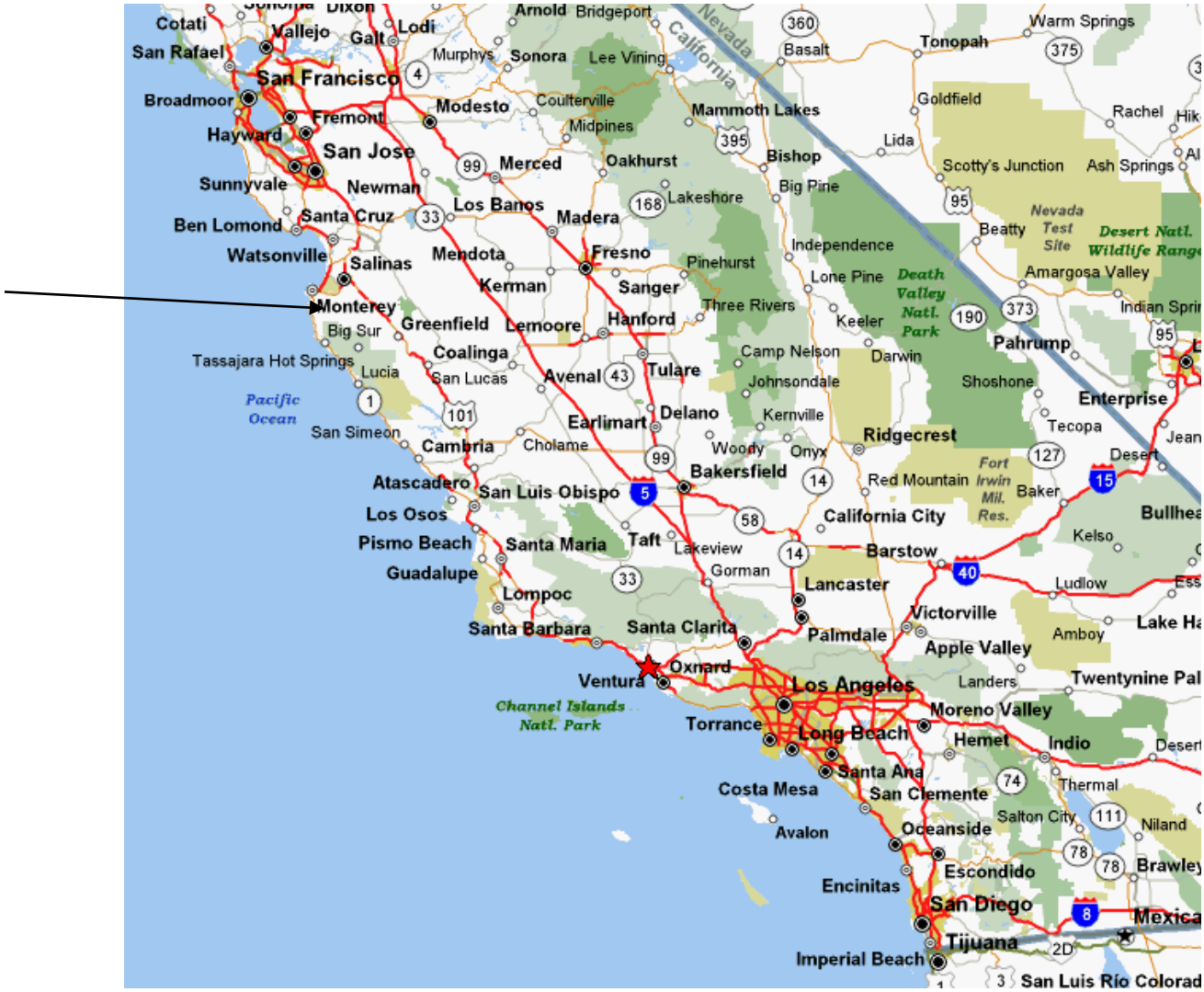
The 2020 and 2021 population estimates for Monterey County and its cities are displayed below. Regional and area maps are displayed on following pages.

E-1: City/County Population Estimates with Annual Percent Change			
January 1, 2021 and 2022			
	Total Population		Percent
State/County/City	1/1/2021	1/1/2022	Change
California	39,303,157	39,185,605	-0.3
Monterey	435,721	433,716	-0.5
Carmel-by-the-Sea	3,095	3,041	-1.7
Del Rey Oaks	1,558	1,539	-1.2
Gonzales	8,492	8,340	-1.8
Greenfield	18,705	19,634	5.0
King City	13,476	13,331	-1.1
Marina	21,271	21,457	0.9
Monterey	28,347	28,082	-0.9
Pacific Grove	14,942	14,761	-1.2
Salinas	161,777	159,932	-1.1
Sand City	378	372	-1.6
Seaside	31,113	32,068	3.1
Soledad	26,316	26,308	0.0
Balance of County	106,251	104,851	-1.3

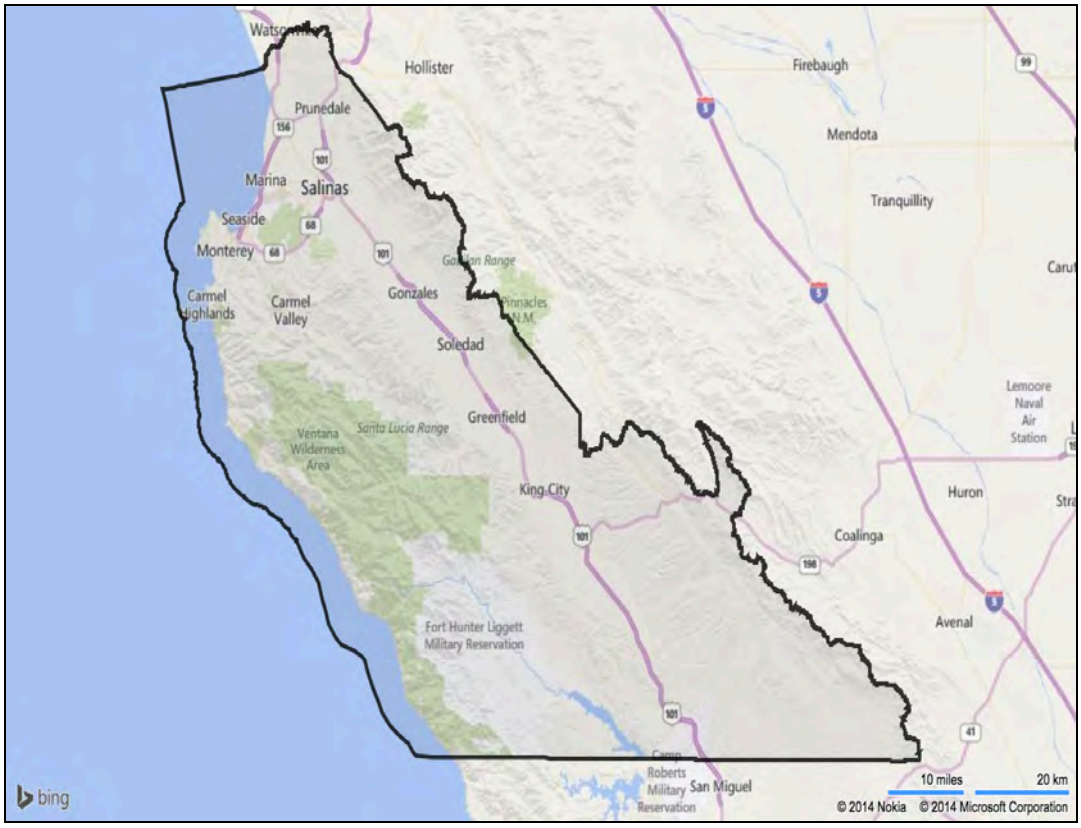
The information for the county in the table above is somewhat lower than in the previous table. Also, most of the cities in the county appear to have experienced small population declines.

CALIFORNIA COUNTIES

REGIONAL MAP



MONTEREY COUNTY MAP



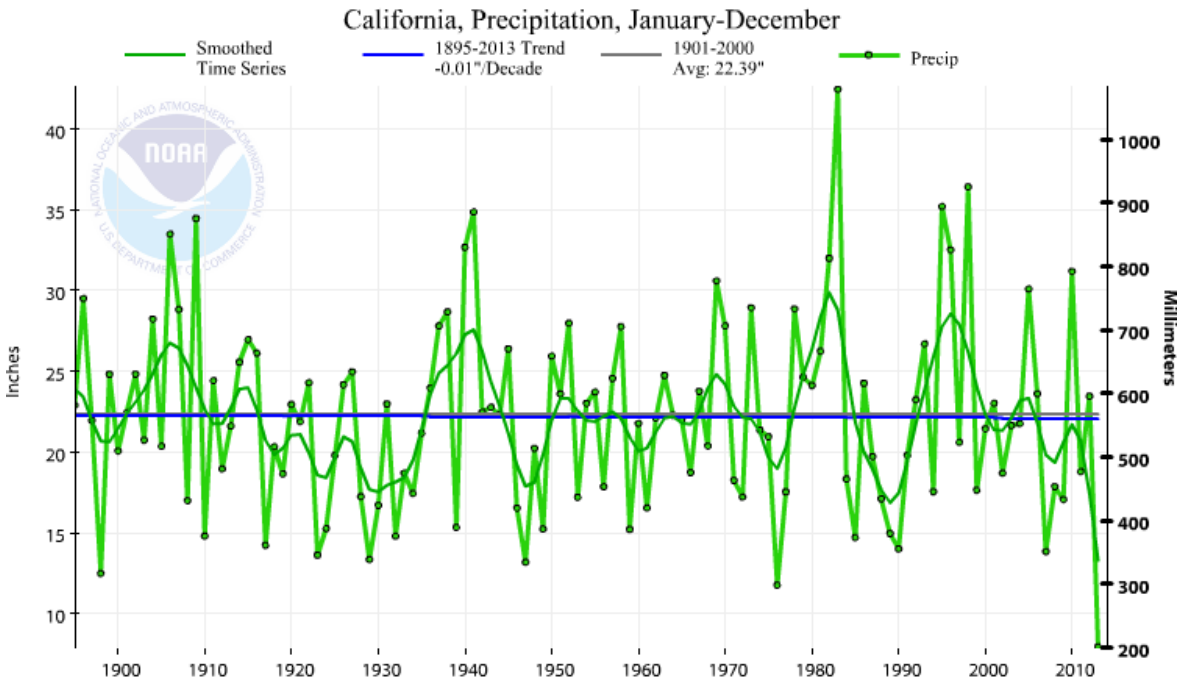
MONTEREY AREA MAP

WATER RELATED INFORMATION

PRECIPITATION AND DROUGHT

The recent multi-year drought that has gripped California and other portions of the Western U.S. for several years has garnered national attention. The 2016-17 water year (October 1 – September 30) broke the drought. But, the 2017-18 water year was much drier than the previous year, and the below normal precipitation has continued through to the present. However, December 2022 precipitation in California has been substantial, including significant snowfall on Mt. Shasta and the Sierras, with over 200 percent of normal snowpack being common.

As the graph below shows, California is no stranger to variability in the amount of precipitation it receives, though the most recent drought has been particularly severe.



The California Water Watch website (https://cww.water.ca.gov) states:

"We ended Water Year 2022 on Sept.30 following a year featuring continued extreme drought with historically dry months and a record-shattering heatwave.

The 2022 Water Year ended with total annual average statewide precipitation at 17.9 inches and 76% of historical average. Statewide reservoir storage ended the water year at 14.70 Million Acre Feet and 69% of historical average.

A growing body of evidence is starting to show that our current drought is an extension of the 2012-2016 drought, interrupted by just a few wet years."

HYDROLOGIC REGION

The California Department of Water Resources divides the state into nine hydrologic regions. The subject is located in the Central Coastal Region, a map of which is displayed on the following page.

This description is extracted from the 2013 California Water Plan:

> **Central Coast Hydrologic Region Summary**
> The Central Coast Hydrologic Region is the most groundwater-dependent hydrologic region in California, with approximately 80 percent of agricultural, municipal, and domestic water demands met by the extraction of groundwater. Imported surface water allocations from the State Water Project (SWP) and the Central Valley Project total up to 106,000 acre-feet (af) per year; however, actual volumes of imported water received vary annually. The economy of the Central Coast relies heavily on agriculture and viticulture, which thrives in the temperate climate, rich soils, and moderate rainfall. Major water-related challenges for the region include groundwater and surface water quality degradation, groundwater basin overdraft, flood risk, seawater intrusion, and aging infrastructure. Urban, environmental, and disadvantaged community (DAC) interests in the Central Coast are currently well-represented in the region's integrated regional water management efforts, which include new and updated integrated regional water management (IRWM) plans and numerous implementation projects. *(continued after the next page)*

Figure 1-1 Central Coast Region 3

Setting

The Central Coast Hydrologic Region extends from southern San Mateo County in the north to Santa Barbara County in the south. The region includes all of Santa Cruz, Monterey, San Luis Obispo, and Santa Barbara counties, most of San Benito, and parts of San Mateo, Santa Clara, Ventura, and Kern counties. Geographically, the vegetation and topography of the Central Coast is highly variable and includes redwood forests, foggy coastal terraces, chaparral-covered hills, green cultivated valley floors, stands of oak, warm and cool vineyards, and semi-arid grasslands. The climate and microclimates of the region are unique and foster both ecological and agricultural diversity.

Among all of California's hydrologic regions, the Central Coast is the most reliant on groundwater for its water supply.

Groundwater supplies are locally supplemented by stream diversions, timed releases from regional reservoirs, and some imported surface water. Factors that affect water availability in the region include precipitation, groundwater recharge capacity, groundwater quality degradation, groundwater pumping management styles or practices, surface water and reservoir storage capacity, as well as the annually variable SWP and CVP water deliveries.

The Central Coast Hydrologic Region receives very little snow, and floodwaters originate primarily from rainstorms in winter and spring. Streams draining the mountains of the Central Coast are subject to short, flashy, intense floods that cause frequent flood damage in agricultural and urban areas; however, the larger streams, like the Salinas and Pajaro rivers, produce slow-rise floods of a longer duration. Extended precipitation may produce debris flows, particularly after a season of hillside fire damage and the steepness of the streams can increase the sediment size to boulder proportions. ….

(end of extraction)

Note: Even though reference is made in the previous quoted text of water being imported into the hydrologic region, that is not the case for the subject area. At the south end of the region, the Coastal Branch of the SWP delivers some water to that area in the vicinity of San Luis Obispo.

MAJOR WATER INFRASTRUCTURE IN CALIFORNIA

There are a combination of federal, state, city and private water capturing and transportation projects in the state. The following exhibit helps with understanding the surface water delivery infrastructure. The subject area is not benefited by or connected to any of the major water projects in the state.

GROUNDWATER

Chapter 7 of the California DWR's Bulletin 118, 2020 Update addresses the Central Coast groundwater situation.

- Land Use: The region has approximately 454,000 acres used for agricultural production. This consists of 128,000 acres used for miscellaneous truck crops, 127,000 acres for grapes, 55,000 acres for miscellaneous grain and hay, and 48,000 acres used for lettuce and other leafy greens. *(However, there is no major agriculture in the subject area.)*

- The Monterey Bay is highlighted as an area that has experienced seawater intrusion, with local ordinances passed to restrict new wells and manage existing wells.

- "In the two areas most impacted by seawater intrusion, Pajaro Valley and Castroville, local water managers have been working to provide alternative water sources to agricultural users for decades. These water managers face the challenge that the region lacks the infrastructure to tap into external water supply sources. Instead, local water managers have turned to reuse and water recycling. In both Pajaro Valey and Castroville, projects have been constructed to provide recycled water to local growers as an alternative water source. Since the inception of these projects, local seawater intrusion rates have declined."

The **Sustainable Groundwater Management Act of 2014** is the most significant water related legislation that has been put in place in many years. The Association of California Water Agencies had the following summary of it:

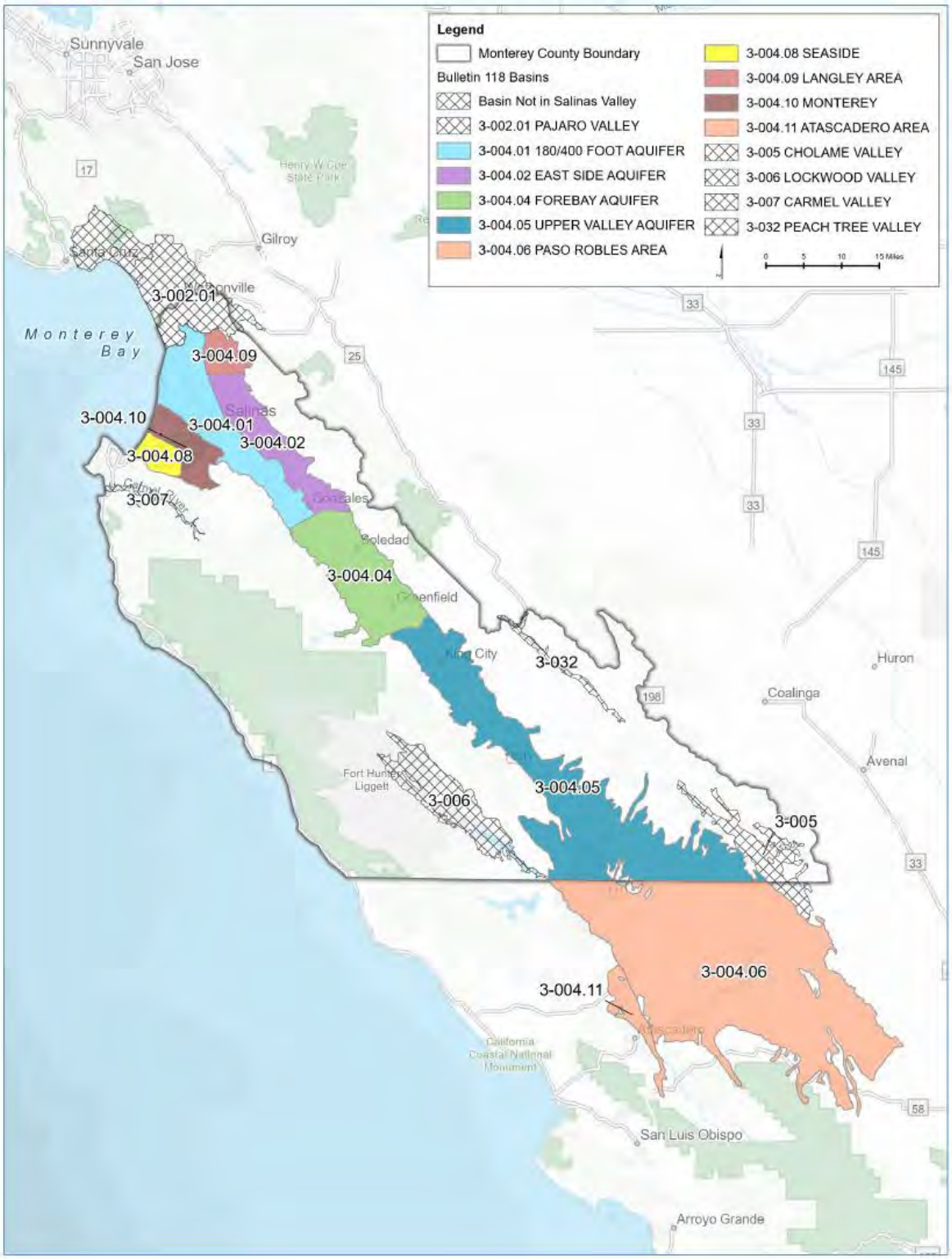
"California enacted landmark legislation in 2014 known as the Sustainable Groundwater Management Act (SGMA). The legislation provides a framework for sustainable management of groundwater supplies by local authorities, with a limited role for state intervention only if necessary to protect the resource.

The act requires the formation of local groundwater sustainability agencies (GSAs) that must assess conditions in their local water basins and adopt locally-based management plans. The act provides substantial time – 20 years – for GSAs to implement plans and achieve long-term groundwater sustainability. It protects existing surface water and groundwater rights and does not impact current drought response measures."

Critical overdraft basins are the initial focus.

The exhibit on the following page comes from the Marina Coast Water District Urban Water Management Plan, dated June 2021.

Monterey County Groundwater Basins and Sub-Basins



California DWR's Bulletin 118, 2020 Update:

The Central Coast region is heavily dependent on groundwater to meet its water demand. Of the 1,343,000 af of demand, 1,203,000 is met by groundwater, i.e. 90%.

The Seaside Basin (3-004.08) is listed as an adjudicated basin with an adjudication year of 2006.

Figure 4-4 of the document indicates that there are three basins in the subject area that are "Subject to Critical Conditions of Overdraft." They are listed below along with their Groundwater Sustainability Plan (GSP) status:

- 3-001, Santa Cruz Mid-County (Approved GSP)
- 3-002.01, Pajaro Valley (Approved Alternative to GSP)
- 3-004.1, 180/400 Foot Aquifer (Approved GSP)

Of the three basins only the 180/400 Foot Aquifer is relevant to this assignment, since the other two play no role in providing water to the subject area. Cal-Am is not authorized to draw from the 180/400 Foot Aquifer so it is of limited interest also.

Two other basins are signficiant to this assignment, they are the Seaside and Carmel River basins. They are discussed below but do not require a GSP.

Carmel Basin

The Monterey Peninsula Water Management District is the GSA (Groundwater Sustainability Agency) for the Carmel River Basin. However, the State Water Resources Control Board has determined that the Basin contains surface water flowing underground in a known and definite channel and is, therefore, not groundwater and not subject to a GSP.

Seaside Basin

The Seaside Groundwater Basin is adjudicated and therefore not subject to a GSP. The Seaside Basin is further described in the Bulletin 118 2004 update:

Seaside Area Subbasin, (3-4.08)

The Salinas Valley –Seaside Area Subbasin includes the coastal communities of Seaside and Marina as well as the western portion of the former Fort Ord. The western boundary is the extent of Quaternary sand dunes which form the shoreline of Monterey Bay. The northeast boundary is the 180/400 foot aquifer subbasin which is in the Salinas Valley proper. The southeastern boundary is the Corral de Tierra subbasin which is roughly the extent of Quaternary sand (Jennings and Strand 1956). Surface drainage within the subbasin is primarily internal to small depressions between the sand dunes. Very few streams exit the area.

Groundwater Storage Capacity. The storage capacity of the subbasin was estimated to be 1,000,000 af based on the storage of 630,000 af of groundwater in the southern half of the subbasin.

IRRIGATED AGRICULTURE

There is no significant irrigation agriculture in the subject area of interest. The information presented in this section is the foundation for one of the indicators of value that will be presented later in the report.

The California Chapter of the American Society of Farm Managers and Rural Appraisers (ASFMRA) publishes an annual magazine called "TRENDS in Agricultural Land & Lease Values" which presents information regarding rural land values throughout the State. TRENDS classifies Monterey County as being in Region 6 of the State, i.e. Central Coast.

The following is extracted from the 2022 issue of TRENDS.

Monterey & Santa Cruz Counties

Row Crops

"Row crop land values in Monterey County continued a steadily increasing trend in 2021. Sale activity was typical, with a handful of transactions occurring, most of which were in the southern part of the county. Sales indicate values ranging from $30,000 to $75,000 per acre. The general trend over the past few years is that increasing values in the southern part of Monterey County are reducing the value gap between the primary farming areas closer to Salinas. There was a nearly equal mix between sale properties formally listed for sale on the open market and transactions negotiated directly between the parties involved. The properties listed for sale generally indicate strong demand, with multiple interested parties and sales prices at or near the asking prices.

Such increasing values, and corresponding decreasing capitalization rates, have somewhat priced investors out of the market in the interim, until rents catch up. Buyers are primarily local growers looking to secure land with a long-term approach and less emphasis placed on the income earning capability of a property."

The exhibit on the below summaries the land sale and rental values in the Monterey area.

Land Use	Value/Acre	Demand	Activity	Value Trend	Rent Range
Row Crops	$30,000-75,000	Strong	Moderate	Increasing	$1,000-$3,800
Plantable (Wine Grapes)	$20,000-50,000	Moderate	Moderate	Stable	N/A
Wine Grapes	$25,000-75,000	Moderate	Moderate	Stable	N/A
Rangeland	$700-2,000	Limited	Very Limited	Stable	$6-$30

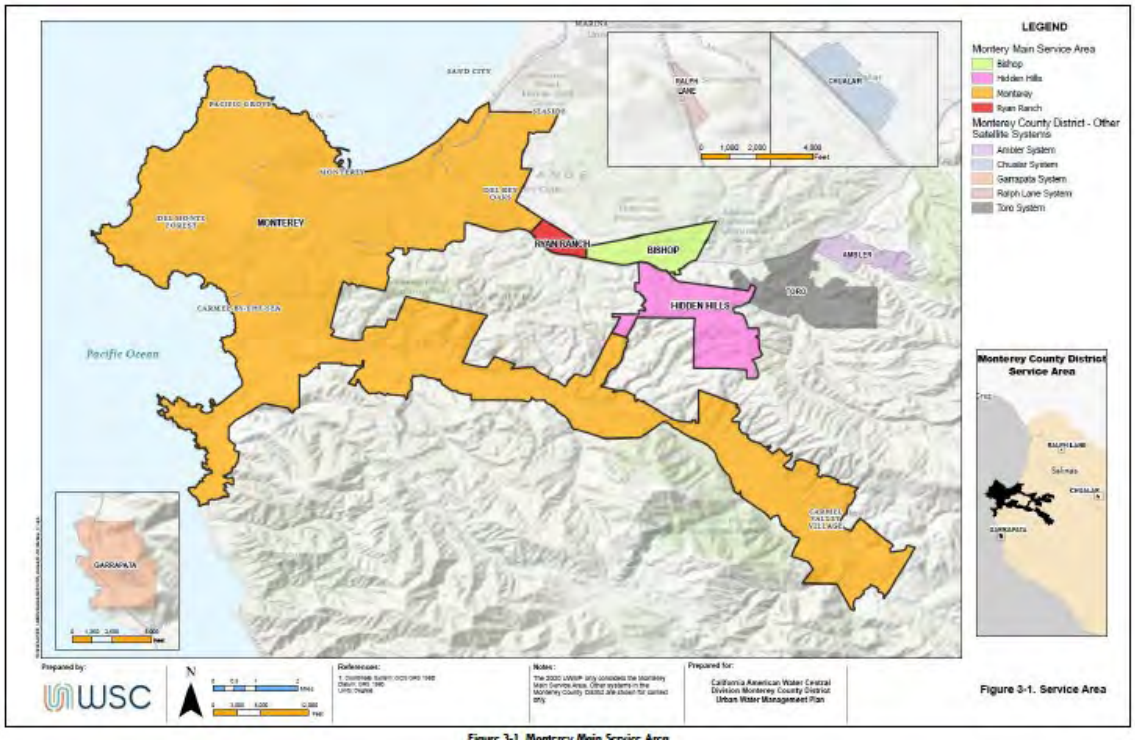
End of Quotes and Extractions from Trends

LOCAL UWMPs

This section contains summaries of the UWMPs (Urban Water Management Plans) in the area. There are three UWMPs available for review. The focus will be on the existing and potential water sources for each entity.

CALIFORNIA AMERICAN WATER, the owner of the water rights being addressed in this report is the first to be summarized. The most recent UWMP available is the June 2021 one for the **Monterey County District**.:

Service Area Boundaries:



4.2.2 Past and Current Water Use

The historic water demand for Monterey Main since 2006 is shown in **Figure 4-1**. The water demand is equal to the production, or total amount of water that is pumped into the distribution system. Most of this water is delivered to customers and will appear as metered consumption, however, some production will be lost to leaks and authorized non-metered use. The difference between production and metered consumption is characterized as non-revenue water (NRW). The term "demand" is used to quantify water consumption plus an appropriate allowance for NRW. In this way total demand for all customer types will equal total production.

As shown in **Figure 4-1**, the demand in the Monterey Main peaked at about 14,600 acre-feet per year (AFY) in 2007 and has steadily declined since then. The decline in water use since 2007 is attributed to highly effective conservation programs and a drought rate structure which has resulted in a substantial drop in water use. The five-year average demand between 2016 – 2020 was about 9,300 AFY. In 2020 demands dropped to 9,138 AFY, but the drop from 2019 to 2020 was influenced by reduced tourism and commercial activity during the COVID-19 pandemic, and those restrictions are expected to ease in future years.

Figure 4-1. Monterey Main Historic Annual Demand

Table 4-4. Projected Demands, 2025 through 2045

	BASELINE (2016-2020)	2025	2030	2035	2040	2045
Demographics						
Service Area Population	91,717	93,577	95,437	97,297	99,157	101,017
Annual Population Growth Rate		0.41%	0.40%	0.39%	0.38%	0.38%
Service Area Employment	64,307	67,020	69,732	72,445	75,157	77,870
Residential Demand						
Residential Demand (GPCD)	48	48	52.8	52.8	52.8	52.8
Residential Demand (AF)	4,931	5,031	5,644	5,754	5,865	5,975
Non-Residential Demand						
Non-Residential Demand (AF)	4,372	4,556	4,741	4,925	5,110	5,294
Fire Service Demand (AF)		400	400	400	400	400
Other Future Demand						
Pebble Beach Entitlements (AF)		0	65	130	195	260
Tourism Rebound (AF)		250	500	500	500	500
Legal Lots of Record (AF)		0	300	520	740	960
Losses		205	233	245	256	268
Average Annual Demand (AFY)		**10,443**	**11,883**	**12,474**	**13,065**	**13,656**

Water Supply

Table 6-1 DWR 6-1R Groundwater Volume Pumped

GROUNDWATER TYPE	LOCATION OR BASIN NAME	2016	2017	2018	2019	2020
Alluvial Basin	Carmel Valley Aquifer[1]	6,181	5,619	5,954	6,249	5,317
Alluvial Basin	Seaside Groundwater Basin	2,471	3,532	2,296	2,378	2,802
Total:		8,652	9,152	8,249	8,627	8,119

Notes:

1. The Carmel River Aquifer volume excludes water that was injected into the Seaside Basin for ASR. This volume is counted as ASR storage and supply.

Table 6-2. Projected Groundwater Volume

GROUNDWATER TYPE	LOCATION OR BASIN NAME	2025	2030	2035	2040	2045
Alluvial Basin	Carmel Valley Aquifer[1]	3,376	3,376	3,376	3,376	3,376
Alluvial Basin	Seaside Groundwater Basin[2]	1,474	774	774	774	774
Total:		4,850	4,150	4,150	4,150	4,150

Notes:

1. The CAW Monterey Main System has a total entitled right of 3,376 AFY from the Carmel River Aquifer. This volume does not include water for ASR injection to the Seaside Basin, which is reliant on seasonal diversions from the Carmel River.
2. The CAW Monterey Main System has a total entitled right of 1,474 AFY from the Seaside Groundwater Basin, however CAW has an agreement in place to not pump 700 AFY of this right for 25-years once a new supply source is operational. This Plan assumes the reduced pumping will beginning in 2030 and continue through 2055. The reduced pumping repayment volume or duration of payment is subject to increase in the future.

6.3 Aquifer Storage and Recovery (ASR)

The Aquifer Storage and Recovery (ASR) program allows for the storage of excess Carmel River flows in the Seaside Groundwater Basin Coastal Subbasin for later extraction during summer months. The ASR program is a joint program between CAW and the MPWMD.

In 1996, MPWMD began investigating the feasibility of ASR in the local setting. MPWMD constructed a "proof-of-concept" demonstration project in 1997, followed by a pilot test well in 1998 in the shallower aquifer of the Seaside Basin, the Paso Robles aquifer. After several years of successful pilot-well testing, MPWMD acquired property and approvals to construct a full-scale, 700-foot deep test well in 2001 in the deeper aquifer, the Santa Margarita Sandstone aquifer. The subsequent results of extensive water quality and quantity testing led to planning for a permanent ASR project.

In 2006, MPWMD and CAW developed an ASR Management and Operations Agreement to construct, operate and maintain ASR and ASR-related support facilities for the recharge, storage, and recovery of water. The ASR program was developed in two phases. CAW began utilization of ASR recovery in 2008. The wells inject excess river flows from December to May and extract water as needed (mainly between July and November).

Table 6-3. Historic and Projected Normal Year Supply from ASR (AFY)

	HISTORIC SUPPLY					PROJECTED SUPPLY				
	2016	2017	2018	2019	2020	2025	2030	2035	2040	2045
ASR Extraction	914	1,196	1,210	744	806	920	920	920	920	920

6.4 Surface Water

The Monterey Main System does not supply any surface water. Wells pumped from the Carmel River Aquifer are influenced by flows in the Carmel River.

6.6 Wastewater and Recycled Water

Wastewater is treated by multiple agencies within the Monterey Main System, including:

• **Monterey One Water (M1W)** treats wastewater collected in Pacific Grove, Monterey, Del-Rey-Oaks, Seaside, Sand City, and Ryan Ranch.

• **Carmel Area Wastewater District (CAWD) and Pebble Beach Community Services District (PBCSD)** collect and treat wastewater in Pebble Beach, Carmel-by-the-Sea, and parts of Carmel Valley.

• **California American Water (CAW)** collects wastewater from the remainder of sewer served locations within the service area and provides treatment at four wastewater facilities.

6.6.1 Monterey One Water

M1W, formerly Monterey Regional Water Pollution Control Agency, serves Del Rey Oaks, Monterey, Pacific Grove, Sand City, Ryan Ranch, and Seaside, which are within the CAW service area, as well as Salinas, Boronda, Castroville, Moss Landing, Fort Ord, Marina, and parts of Monterey County that are not serviced by CAW.

M1W operates a treatment plant that produces varying levels of recycled water. The M1W Regional Treatment Plant treats all collected wastewater through secondary treatment. Some secondary treated wastewater is treated to higher levels including Title 22 tertiary disinfected level for raw food crop irrigation or purified using advanced treatment as part of the PWM Project (About Monterey One Water, 2021). The tertiary treated recycled water is currently used to irrigate edible food crops in the northern Salinas Valley, outside of the Monterey Main service area. The remainder of the water that is not recycled or purified is discharged to the ocean.

6.6.1.1 Pure Water Monterey

The MPWMD and M1W recently completed the construction and startup of the PWM Project. The PWM Project provides purified recycled water for injection into the Seaside Groundwater Basin and ultimate potable use in Monterey Main. The PWM Project also provides purified recycled water for landscape irrigation for the Marina Coast Water District (MCWD) and recycled water to augment the existing Castroville Seawater Intrusion Project's agricultural irrigation supply.

CAW has a water purchase agreement to secure water from the project, which would deliver 3,500 AFY of advanced-treated recycled water for injection to the Seaside Groundwater Basin. The advanced treated recycled water will mix with the existing groundwater and will be pumped as a potable supply source. The PWM Project is a key component of CAW's MPWSP to reduce diversions from the Carmel River and will serve as a key component of the future water supply for the Monterey Peninsula.

Phase 1 of the project began operation near the end of 2019 and is intended to provide 3,500 AFY of water to Monterey Main once it is fully operational. MPWMD and M1W updated and certified the Supplemental EIR for the expansion of the PWM Project in April 2021. The PWM Expansion is envisioned to deliver an additional 2,250 AFY of water to the Seaside Basin that would be available to CAW. However, the PWM Expansion project has not been proven to have an adequate volume of source water to provide the full 2,250 AFY, especially during dry years.

The preceding text is quoted directly from the indicated sections of the UWMP. For brevity, I will summarize the balance of Section 6.6.1.1.

The UWMP's author(s) make the case that there is insufficient wastewater available to allow full production from PWM and the PWM Expansion, without the construction of CAW's proposed ocean desalination plant. The following table is intended to reflect that conclusion.

Table 6-4. PWM and PWM Expansion Projected Supply Reliability

	2020	2025	2030	2035	2040	2045
PWM Phase 1 Contractual Supply, AFY	**3,500**	**3,500**	**3,500**	**3,500**	**3,500**	**3,500**
Normal Year Reliability	3,500	3,500	3,500	3,500	3,500	3,500
Worst-Case Scenario Multi-Dry Year Reliability	0	0	3,500	3,500	3,500	3,500
PWM Expansion Design Supply, AFY[1]		**2,250**	**2,250**	**2,250**	**2,250**	**2,250**
Normal Year Reliability		528	2,250	2,250	2,250	2,250
Worst-Case Scenario Dry Year Reliability		0	503	1,388	2,250	2,250

Notes:

1. PWM Expansion is not anticipated to be operational until 2025

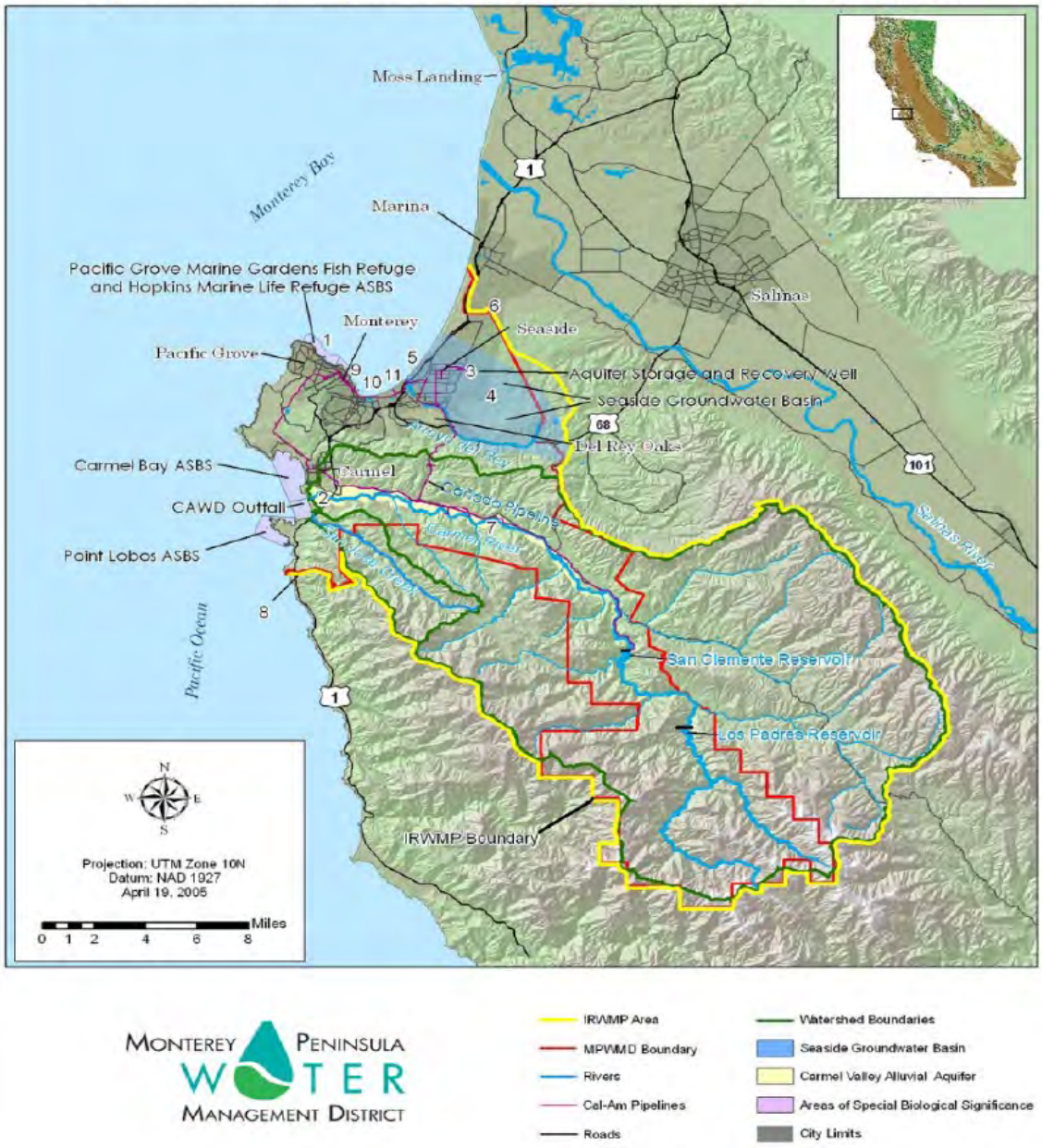
In Section 6.6.3 information is presented on CAW's wastewater treatment in its service area. Primarily the treated water is used to irrigate golf courses. Table 6-5 indicates that the wastewater collection and treatment operations of the various entities in the area collect approximately 9,300 acre feet of wastewater, with about 860 acre feet being discharged into the ocean without further land use.

Section 6.7 Sand City Desalination, indicates that this 300 AFY facility has operated at around two-thirds capacity in recent years, with CAW receiving 94 AFY of the production. This facility receives brackish groundwater for input.

In Section 6.9 Future Water Projects, the PWM Expansion is summarized, with emphasis again on the necessity of the proposed CAW Ocean Desalination Plant being necessary to make the Expansion feasible.

Nowhere in the UWMP could I find any discussion as to the potential of importing water from outside of the area, or any consideration of purchasing groundwater rights from current holders that are using them for agricultural irrigation.

Figure ES-1: Map of Monterey Peninsula Integrated Regional Water Management Planning Region



2.1.1 Regional Watersheds

Except for the Laguna Seca, a sub-basin in the Seaside Groundwater Basin which has no surface outlet, all the watersheds within the region flow directly into the Pacific Ocean. Thus, the main stem streams in these watersheds are considered waters of the United States (33 Code of Federal Regulations (CFR) Part 328).

The largest watershed in the region is the 255-square mile Carmel River Basin watershed. For the purposes of this Plan, the Carmel River Basin is defined as the Carmel River Alluvial Aquifer, described below, the surface waters of the Carmel River and its tributaries, and the Los Padres reservoir. The headwaters of the Carmel River Basin originate in the Santa Lucia Mountains at 4,500 to 5,000-foot elevations, descend and merge with seven major stream tributaries along a 36-mile river course, and discharge into Carmel Bay about five miles south of the City of Monterey. About 70 percent to 80 percent of the surface runoff in the Carmel River watershed is generated from rainfall within the Los Padres National Forest and Ventana Wilderness. The average annual runoff on the Carmel River at U.S.G.S gage Near Carmel (3.56 River Miles upstream of the Pacific Ocean) was 73,080 acre-feet (AF) for the period of record WY 1962-2018.

The Carmel River Basin currently supplies about 75% of the annual municipal demand within the planning region (Cal-Am and non-Cal-Am). But, appropriative diversions in the basin are required by the State Water Resources Control Board to be reduced by 2022 such that the basin will supply about a third of annual municipal demand in the future.

The region also contains twelve other stream basins including Wildcat Canyon, Gibson Creek, San Jose Creek, Pescadero Creek, Stillwater Creek, Fan Shell Creek, Seal Rock Creek, Sawmill Gulch Creek, Josselyn Canyon Creek, Aguajito Canyon, Iris Canyon, and Arroyo del Rey.

2.1.2 Groundwater Basins

The two major groundwater resources within the region are the Carmel Valley Alluvial Aquifer (also described by the Department of Water Resources, or DWR, as the Carmel Valley Groundwater Basin) and the Seaside Groundwater Basin.

Carmel Valley Alluvial Aquifer

The Carmel Valley Alluvial Aquifer (CVAA, also described in Bulletin 118 by the Department of Water Resources as the Carmel Valley Groundwater Basin, Basin Number 3-7) has been defined by the MPWMD and the State Water Resources Control Board (SWRCB) as the water-bearing strata directly associated with the Carmel River. It was originally mapped by the U.S. Geological Survey (USGS) in 1984. The map of the alluvial aquifer is subject to refinement over time based on updated hydrologic information.

The CVAA is about six square-miles and is approximately 16 miles long. It varies in width from 300 to 4,500 feet and in thickness from about fifty feet near Carmel Valley Village to greater than 150 feet near Highway 1. The thickness of the alluvium averages 75 feet and is adequately defined by well logs (U.S.G.S., 1984).

Groundwater levels within the aquifer are influenced by pumping or production at supply wells, evapotranspiration by riparian vegetation, seasonal river flow infiltration and subsurface inflow, outflow from the basin, and reservoir releases to augment summer low flows. During the dry season, pumping of wells causes significant declines in the groundwater levels and leads to decreased surface flows in the Lower Carmel River along as much as nine river miles. Complete recharge of this aquifer generally occurs quite rapidly after winter rains commence and the Carmel River begins flowing into the dry reaches.

Seaside Groundwater Basin

The Seaside Groundwater Basin underlies a hilly coastal plain that slopes northward toward the Salinas Valley and westward toward Monterey Bay. The water-bearing aquifers used for potable water supply extend offshore under the Monterey Bay, but the extent of the aquifers under the bay has not been fully explored. The basin area includes a 19 square-mile area of Sand City, and much of the cities of Seaside and Del Rey Oaks, as well as unincorporated parts of Monterey County, including a portion of the Ord Community in the former Fort Ord. The physiography is characterized by young, active dunes near the coast and mature dunes to the east on the former Fort Ord. Land surface elevations range from sea level at the beach to approximately 900 feet near the eastern boundary of the basin. Until recently, recharge to the groundwater system was primarily from infiltration of precipitation, with minor additional amounts contributed by deep percolation of irrigation water, leaky pipes, septic systems, and possibly stream flow. With the introduction of the Aquifer Storage and Recovery project, excess winter flows from the Carmel River are periodically injected into the basin and subsequently recovered during dry periods.

Until the basin was adjudicated in 2006, basin-wide groundwater withdrawals were up to 5,600 AFY. The Final Decision of the adjudication set a ramp down schedule aimed at reducing annual extractions to 3,000 AFY, which is termed the "natural safe yield," by 2021.

Salinas Valley Groundwater Basin

The southern portion of the Ord Community is within the planning region and is supplied from the Salinas Valley Groundwater Basin under a 1993 agreement between the United States and MCWRA. In 1997 MCWD took over the responsibility of operating the Ord Community water and wastewater systems.

Special Districts and Agencies in the Region

Numerous are listed, but the one most relevant to this valuation is:

Monterey One Water – a joint powers agency formed in 1972 to provide wastewater collection and treatment to the Monterey Peninsula cities (except Carmel-by-the-Sea). M1W also serves areas within its boundaries that are outside of the Monterey Peninsula region (e.g. Salinas, Moss Landing, and Castroville).

2.2.3 State Water Resources Control Board Cease and Desist Order

In 1995, when the SWRCB issued Order No. WR 95-10, CalAm was initially limited to 11,285 acre-feet of diversions from the Carmel River Basin and ordered CalAm to maximize diversions (to the extent feasible) from the Seaside Groundwater Basin. In 2009, SWRCB issued Order No. 2009-0060, which ordered CalAm to cease and desist its unauthorized diversions in the Carmel River Basin by 2017 and reduce authorized diversions to 3,376 AFY. In July 2016 the SWRCB adopted Order 2016-0016, which amends Orders 95-10 and 2009-0060. Order 2016-0016 extends the date by which CalAm must terminate all unlawful diversions from the Carmel River from December 31, 2016 to December 31, 2021. The revised Cease and Desist Order set an initial diversion limit of 8,310 AFY for Water Year 2015-2016 (October 1, 2015 - September 30, 2016) and establishes annual milestones toward replacement supplies that CalAm must meet in order to maintain the 8,310 AFY diversion limit through 2021.

2.2.4 Seaside Groundwater Basin Adjudication

Adjudication of the Seaside Groundwater Basin occurred in 2006 with a Final Statement of Decision filed on March 27, 2006. The Decision was amended on February 9, 2007. The court ordered the formation of a Watermaster and mandated a "physical solution" to the overdraft problem. The operating yield for three (3) years beginning in March 2007 for the Seaside Basin as a whole was defined as 5,600-acre feet (Coastal Sub area is 4,611-acre feet and 989-acre feet for the Laguna Seca Sub area). The judgment required that the operating yield for coastal subareas be decreased by 10 percent every three years starting in year four, e.g. 10 percent decrease at the start of the fourth year for years four, five, and six, and an additional 10 percent decrease at the start of the seventh year for years seven, eight and nine, etc. These decreases will continue until production reaches the "natural safe yield", which was initially set at 3,000 AFY, unless the Watermaster (1) has secured an equivalent amount of "non-native" replacement water and added it to the basin, or (2) the Watermaster has secured an equivalent amount of recycled water and contracted with one or more of the producers in the basin to use this quantity of recycled water in lieu of their production allocation with the producers agreeing to forego their right to claim a storage credit for their forbearance, or (3) any combination of replacement or recycled water results in the required decrease in production of "native water" in the basin, or (4) water levels in the aquifers are sufficient to ensure a positive offshore gradient to prevent seawater intrusion.

In the event the Watermaster cannot procure replacement water to offset operating yield over-production in an administrative year, production in the following administrative year must be curtailed to the targeted operating yield or a replenishment assessment may be levied on the producers. In recent years, the Watermaster has allowed CalAm to combine production from sub-areas into a single basin report and has allowed CalAm to overproduce from the basin (relative to the natural safe yield and operating safe yield amounts) without incurring a monetary penalty. However, CalAm must replenish the overproduced water in the future and has agreed to forego production of 700 AFA from the basin for 25 years, once replacement water supplies are available. This is referred to as "in-lieu recharge."

In compliance with the judgment entered in the Seaside Groundwater Basin adjudication, the final "Seaside Monitoring and Management Program" (Program) was adopted by the Seaside Basin Watermaster in September 2006 to ensure that the Seaside Groundwater Basin is protected and managed as a perpetual source of water for beneficial uses. The Program was approved by the court with the Amended Decision on February 9, 2007. The Program sets forth actions that will be taken to: (a) monitor current overdraft conditions and the present threat of potential seawater intrusion into the Coastal Subarea of the Basin; (b) develop and import supplemental water supplies for the purpose of eliminating Basin overdraft and the associated threat of seawater intrusion, and (c) establish procedures that will be implemented to address seawater intrusion should seawater intrude into the onshore portions of the Basin. Key elements of the Basin Management Program include: a) a monitoring component that builds on MPWMD's efforts to collect and organize data regarding groundwater production, water levels, water use, land use, rainfall, and other pertinent information; b) development of an enhanced Seaside Basin groundwater model; c) development of recommendations regarding implementation of strategies to import supplemental water supplies into the basin; and d) development of strategies for redistribution of pumping to avoid various adverse impacts within the basin.

2.3.3 Water Supply Projects

Carmel Area Wastewater District Reclamation Project

The CAWD treatment plant supplies recycled water (approximately 650 AFY) to irrigate turf at several Monterey Peninsula golf courses and at one local school. Use of this reclaimed water has resulted in a one-for-one decrease in CalAm system demand. The reclamation project was completed in 1994, the Forest Lake Reservoir facility was rehabilitated for storing the reclaimed water in 2004-2005, and an advanced tertiary treatment process was added to the plant in 2009 to reduce the sodium concentrations in the reclaimed water (due in part to residential water softeners). The advance treatment included a Microfiltration/Reverse Osmosis (MF/RO) system, located at the CAWD plant site to reduce the sodium content of the tertiary reclaimed water from 150 mg/L to less than 55 mg/L to reduce the stress on the golf greens and eliminate the need for flushing the courses with potable water. The retrofit eliminated the existing use of 300 AFY of potable water on Pebble Beach area golf courses and athletic fields.

Castroville Seawater Intrusion Project and the Salinas Valley Reclamation Plant

M1W treats up to 25,000 AFY of municipal wastewater, with nearly 9,000 AFY coming from within the Monterey Peninsula region. A portion of this treated water is used to slow seawater intrusion in the Salinas Valley Groundwater Basin and to irrigate agricultural land in the northern Salinas Valley.
In 1992, M1W and the MCWRA formed a partnership to build two projects: a water recycling facility at the Regional Treatment Plant (currently known as the Salinas Valley Reclamation Plant or SVRP) and a distribution system including 45 miles of pipeline and 22 supplemental wells. The distribution system is called the Castroville Seawater Intrusion Project (CSIP). Its objective was to slow the advancement of seawater intrusion by supplying recycled water for irrigation to nearly 12,000 acres of farmland in the northern Salinas Valley in lieu of groundwater that was currently in use. This would significantly reduce the draw of water from the underground aquifers. The $75 million projects were completed in 1997 after three years of construction, and highly treated wastewater (meeting Title 22 requirements for unrestricted reuse) is currently used for irrigation.

Monterey Peninsula Water Supply Project Desalination Plant

In 2018, the California Public Utilities Commission (CPUC) certified an Environmental Impact Report (EIR) for the Monterey Peninsula Water Supply Project (MPWSP) proposed by CalAm. The MPWSP would include:

- A source water intake system consisting of subsurface slant wells extending offshore into the Monterey Bay, and appurtenant facilities. The preferred site for the subsurface slant wells is a 376-acre coastal property located north of the city of Marina and within the CEMEX retired mining area. New pipelines would convey the source water from the slant wells to the MPWSP desalination plant.

- A 6.4 million gallon per day desalination plant and appurtenant facilities on a 46-acre vacant parcel near Charles Benson Road, northwest of the Monterey Regional Water Pollution Control Agency's (MRWPCA) Regional Wastewater Treatment Plant and the Monterey Regional Environmental Park. Facilities proposed at the MPWSP desalination plant include pretreatment, reverse osmosis, and post-treatment systems; chemical feed and storage facilities; a brine storage basin; and an administrative building. Brine produced during the desalination process would be conveyed to the existing MRWPCA ocean outfall and discharged to the Monterey Bay. Approximately 6,250 afy of potable water supplies would be produced by the desalination facilities and 3,500 acre-feet per year would be purchased from the Pure Water Monterey (PWM) Groundwater Replenishment (GWR) Project.

- Up to 21 miles of desalinated water conveyance pipeline and mains, and associated facilities including a pump station, and clearwells.

- Improvements to the existing Seaside Groundwater Basin ASR system, including two additional injection/extraction wells, and associated pipelines.

Aquifer Storage and Recovery

MPWMD and CalAm own and operate two injection/extraction sites in the coastal area of the Seaside Groundwater Basin that are used to inject excess winter flows from the Carmel River via the CalAm distribution system, called the Aquifer Storage and Recovery (ASR) project. The average annual yield of this system is anticipated to be 2,000 AFY; however, yield is highly dependent upon rainfall and river flows due to permit requirements for the river to achieve minimum flow conditions in order to divert water for the ASR system. A third injection/extraction site (ASR 5 and 6) is currently proposed as part of the MPWSP, which is described in more detail above. The third site would inject desalinated water into the groundwater basin.

Pure Water Monterey Groundwater Replenishment Project

In 2015, M1W in partnership with MPWMD prepared an EIR for the PWM Project. This project includes diversions from source waters throughout the region to the M1W Regional Treatment Plant, an advanced water purification facility at the Regional Treatment Plant, product water conveyance facilities, and injection wells in the Seaside Groundwater Basin. The PWM Project will generate 3,500 AFY of water to offset an equal amount of water currently being diverted from the Carmel River. The project is currently under construction and is expected to be operational by the end of 2019. M1W is proposing an PWM Expansion Backup Project, which would generate 2,250 AFY of water and would move forward in the event that the Desalination Plant component of the MPWSP, which is described above, cannot be constructed.

Pacific Grove Local Water Project

In 2017, the City of Pacific Grove completed construction of the Local Water Project. The Local Water Project produces and distributes high quality recycled water to replace potable water used for non-potable water demands. The project recycles and reuses a portion of the wastewater generated within the City. Wastewater is diverted from a gravity sewer in Asilomar Avenue that collects wastewater from the City's western-most sewershed4. Wastewater is collected from existing sewer trunks and pipelines through a new diversion structure located in Asilomar Avenue. Diverted wastewater is conveyed from this structure to the Satellite Recycled Water Treatment Plant (SRWTP) through a 1,300-foot-long pipeline. The SRWTP produces disinfected tertiary treated water, the highest grade of recycled water suitable for landscape irrigation described by the State of California in Title 22 Water Recycling Criteria (California Department of Health Services, 2009). Following treatment at the proposed SRWTP, recycled water is distributed through a new 2,800-foot long transmission pipelines to the Pacific Grove Golf Links and El Carmelo Cemetery.

Regional Urban Water Augmentation Project

The purpose of the Regional Urban Water Augmentation Project (RUWAP) is to supply the water demands of the redevelopment of the former Fort Ord. The RUWAP project was originally a component of Phase 1 of the Regional Water Project proposed by MCWD. While the water produced by the RUWAP Project will primarily be delivered to MCWD customers outside of the Monterey Peninsula IRWM Region, some of the project facilities are within the Region.

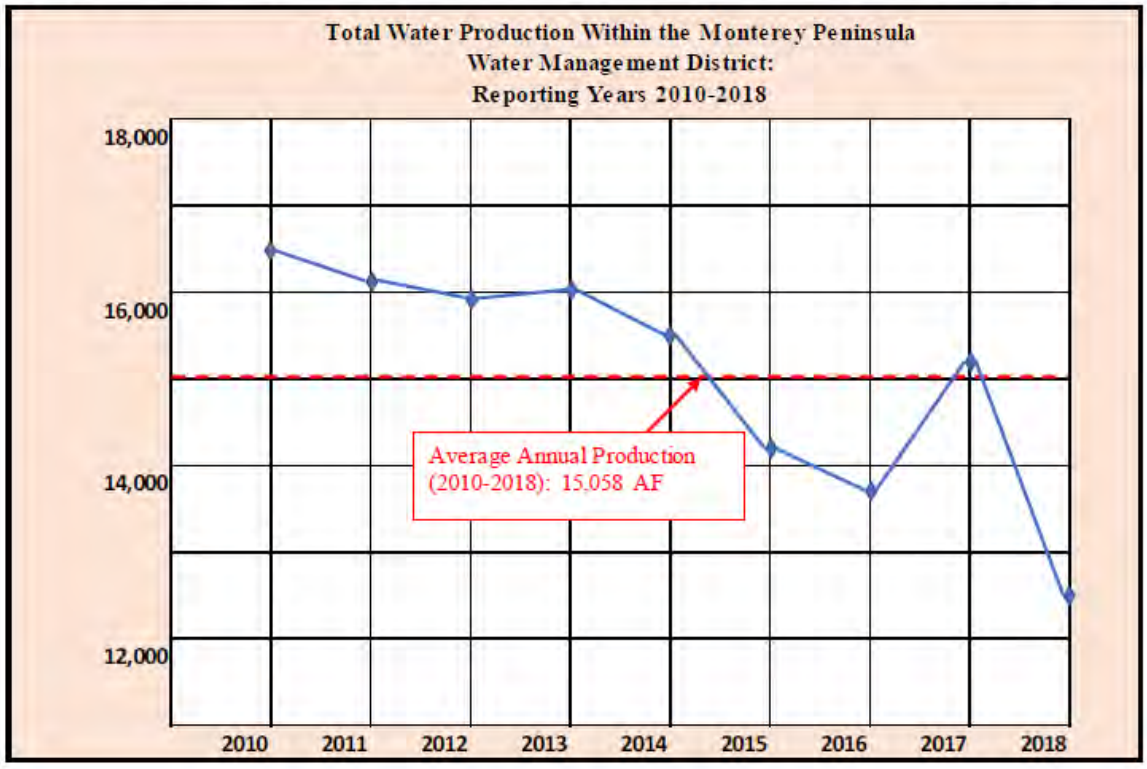
2.4 Water Supply and Demand within the IRWM Region

2.4.1 Water Supply

The population of the region, is estimated to be about 114,400, is entirely dependent on local rainfall and runoff for its potable water supply, with no connections to California state or federal water supply sources outside of the region.

The average annual runoff of the Carmel River, was 73,080 acre-feet (AF) for the period of record 1962-2018 (U.S. Geological Survey, measured at U.S.G.S Near Carmel gage, 3.56 River Miles upstream of the Pacific Ocean). No flow reached this station for a 16-month period during the drought of 1976-77 – a condition that was a factor in the destabilization of streamside areas along the Carmel River during subsequent high flows in the years following this drought. The greatest amount of runoff recorded was estimated by the U.S.G.S. at nearly 368,000 AF during the 1982-83 el Niño event. As shown in **Figure 2-2**, total water production from all sources within the MPWMD boundary in Water Year 2018 was 12,859 AF.5 The average from during Water Years 2010 through 2018 (October 1 to September 30) was 15,058 AFY.

Figure 2-2: Total Water Production within Monterey Peninsula Water Management District Boundary



Yates et al. (2005), hydrology consultants for MPWMD, completed a detailed analysis of water level trends and groundwater budgets and estimated the natural safe yield of the Seaside Groundwater Basin at 2,880 AFY.

Direct diversions from surface storage in Carmel Valley are no longer relied on to meet municipal demand. Instead, stored water is released during dry periods from the Los Padres Reservoir to meet instream flow requirements and partially offset environmental damage from groundwater extractions. Winter season diversions along the Carmel River for injection into the Seaside Basin and which are recovered in the summer season (see description of the Aquifer Storage and Recovery Project, in **Section 2.3.3**) could provide an average of about 2,000 AFY. Thus, the region is mostly dependent on a system of wells to extract groundwater and meet municipal demand for potable water.

Monterey Peninsula Water Resources System (MPWRS)

The Monterey Peninsula Water Resources System (MPWRS) includes: surface water in the Carmel River and in Los Padres Reservoir and groundwater in the Carmel Valley Alluvial Aquifer, which are in the Carmel River Basin; and groundwater in the coastal subareas of the Seaside Groundwater Basin. The MPWRS contains the majority of water resources within the planning region.

During WY 2018, Cal-Am produced 9,956 acre-feet (AF) of water for customer service from all sources in its Carmel River, Seaside Coastal and Laguna Seca Subarea systems. This production consisted of 6,111 AF from Carmel River source wells, 2,229 AF of native water from Seaside Coastal wells, 303 AF from Laguna Seca Subarea wells, 190 AF from the Sand City desalination plant, 153 AF from Table 13, 1,210 AF from ASR Recovery, and 64 AF produced from the Malpaso well and delivered to the Cal-Am system.

2.4.2 CalAm Water Supply Infrastructure

There is one main stem reservoir in Carmel Valley; the Los Padres Dam and Reservoir (located at RM 24, measured from the ocean) is currently estimated to have approximately 1,667 AF of usable storage, based on 2017 survey data, which is less than 2 percent of the annual runoff in the watershed. Usable storage is projected to reach zero within 100 years at historic rates of sedimentation. Flows released from this facility are used to augment instream flows during the dry season.

About 80 percent of produced water within the MPWMD boundaries is collected, stored, and distributed by CalAm, which serves 95 percent of the residents and businesses in the Peninsula. CalAm owns and operates a series of production wells along the Carmel River and in the Seaside Groundwater Basin, and a network of pipelines extending through Carmel Valley to the Monterey Peninsula and Seaside communities.

CalAm also owns and operates the Ryan Ranch, Hidden Hills, and Bishop systems in the Laguna Seca Subarea. CalAm acquired these systems in 1990, 1993, and 1997, respectively.

2.4.3 Surface and Groundwater Sources of Supply

The Carmel River Basin, which has an average annual runoff of 73,080 AFY, currently supplies about 75 percent of the MPWMD area domestic water supply. The water supply reservoir on the main stem of the Carmel River is owned by CalAm, but generally water from this source flows through the Carmel River and is pumped by CalAm to the Monterey Peninsula through a well field in the alluvial aquifer. During the rainy season, river flow is often unregulated by the Los Padres Reservoir, described in more detail above in **Section 2.4.2**. To reduce impacts to streamside areas from water extraction, flow diversions for municipal supply generally occur at the farthest downstream production wells and progress upstream in response to demand.

To meet municipal demand greater than what can be supplied from the Carmel River Basin, water is pumped from a well field in the Seaside Groundwater Basin. To the extent feasible, production from the Seaside Basin is maximized to reduce pumping from Carmel Valley. Although the Seaside Groundwater Basin has significant storage, groundwater production in the Seaside Groundwater Basin is limited due to depressed water levels in the basin and the adjudication described in **Section 2.2.4.**

Groundwater production in Carmel Valley outside of the MPWMD boundary is not as well quantified as within the MPWMD area. However, within the MPWMD boundary, groundwater production records for Water Year 2013 (October 1, 2012 to September 30, 2013) for the Carmel Valley upland area show that production is about seven percent of the volume produced in the alluvial aquifer.

2.4.4 Stormwater as Water Supply

Several water supply projects within the IRWM Region propose to use stormwater as a source of water supply, see **Section 2.3.3** above for more details.

In 2018, the Monterey Regional Stormwater Management Program (MRSWMP) worked with partners and stakeholders to develop the Stormwater Resource Plan (SWRP) for the IRWM Region. This effort was funded by a Prop 1 Planning Grant from the SWRCB, the City of Monterey's Neighborhood Improvement Program, and MPWMD.

The Stormwater Resource Plan is a planning document that identifies public lands (i.e., streets, parks, and municipal properties) where stormwater capture projects could potentially be located to provide the most benefit. Stormwater capture projects collect, store, and treat stormwater runoff as well as dry weather flows such as excess irrigation runoff. Potential environmental and community benefits include:

- Providing water for other uses, such as irrigation,
- Recharging groundwater,
- Reducing local flooding, and
- Improving water quality in local creeks.

Increase Water Supply, Section 4.2.3

Listed items include: conjunctive use, desalination, precipitation enhancement, recycled municipal water, and surface storage. Each of these are discussed. The desalination section states, "Desalination has been used in the Region and surrounding area at a small scale, with plants located in the Monterey Bay Aquarium, Sand City, and City of Marina. While a large-scale plant has yet to be built and operated, this strategy is being actively pursued by California American Water."

The Pure Water Monterey Expansion project is referenced in the recycled municipal water section with the potential to produce 2,250 AFY.

In the surface storage section Los Padres Reservoir is the only existing facility that exists, and it could either have its storage enhanced somewhat, or be torn out for environmental reasons.

In summary, other than the large desalination project proposed by CAW and the Pure Water Monterey Expansion, the options for increasing water supply significantly appear to be quite limited. Importing water from outside of the region was not an option addressed.

MARINA COAST 2020 URBAN WATER MANAGEMENT PLAN, dated June 2021

1.2 System Description

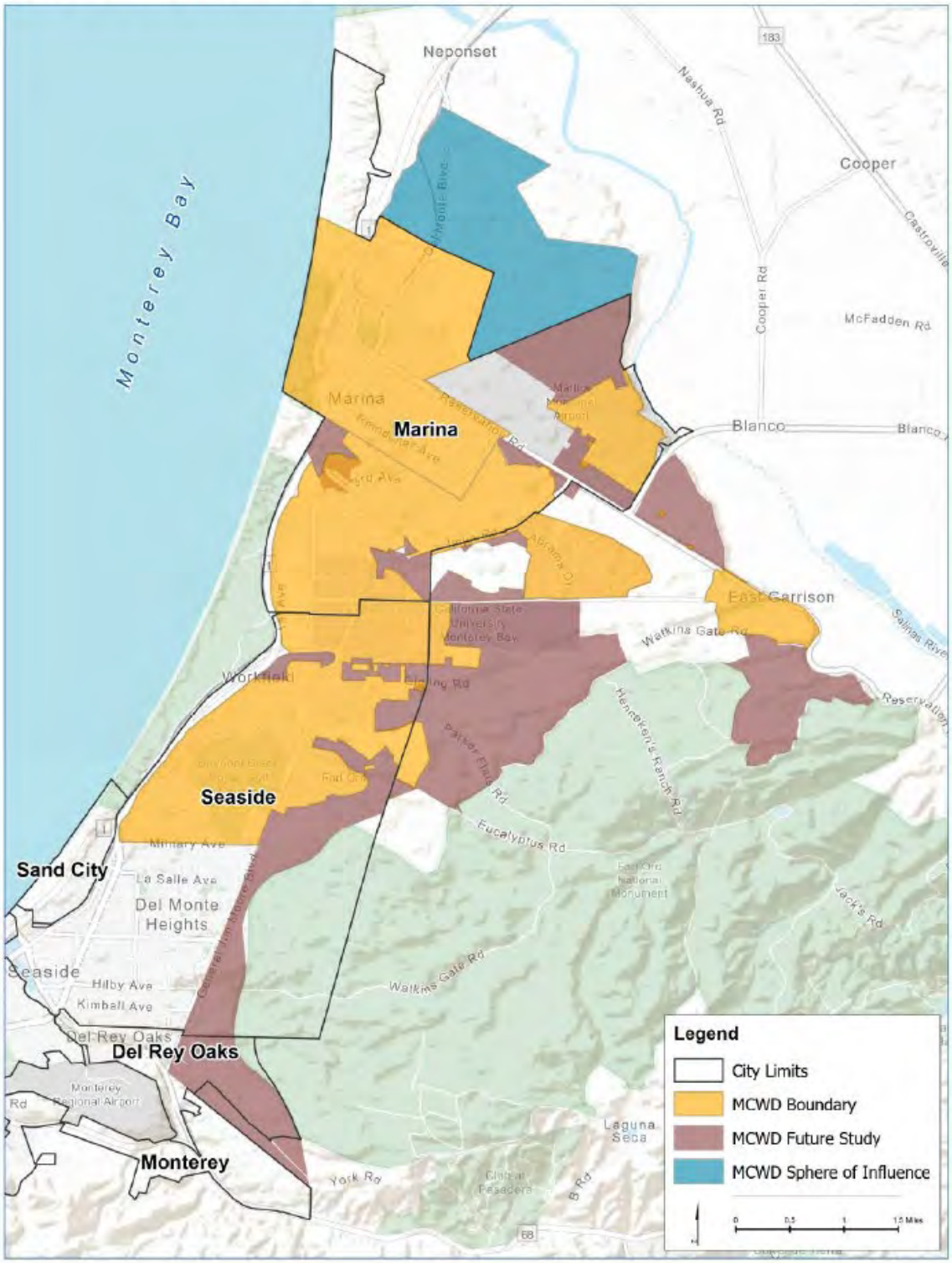
The Marina Coast Water District is located in Monterey County, on the coast of Monterey Bay at the northwest end of the Salinas Valley. The District's jurisdictional service area is 10.3 square miles, encompassing the City of Marina and portions of the former Fort Ord. The District has a 2.2 square mile sphere of influence immediately north of its service area. The remaining redevelopment parcels within the former Fort Ord are considered a future study area (see Figure 1.1). The District has two service areas, Central Marina which is the portion of the City outside the former Fort Ord, and the Ord Community within the former Army base. The Ord Community includes portions of the Cities of Marina, Seaside, Del Rey Oaks and Monterey, as well as unincorporated portions of Monterey County. California State University and the University of California each have lands and facilities within the Ord Community.

The District served only the City of Marina until 1994, when Fort Ord closed and the District was selected to take over the water and wastewater systems within the base. The population served by MCWD is projected to more than double once the former Fort Ord is fully redeveloped, as shown in Table 1.1.

Table 1.1 Historic and Projected Population

Year	1990	2000	2010	2020	2030	2040
Population	26,436	33,813	30,480	36,646	58,012	73,183

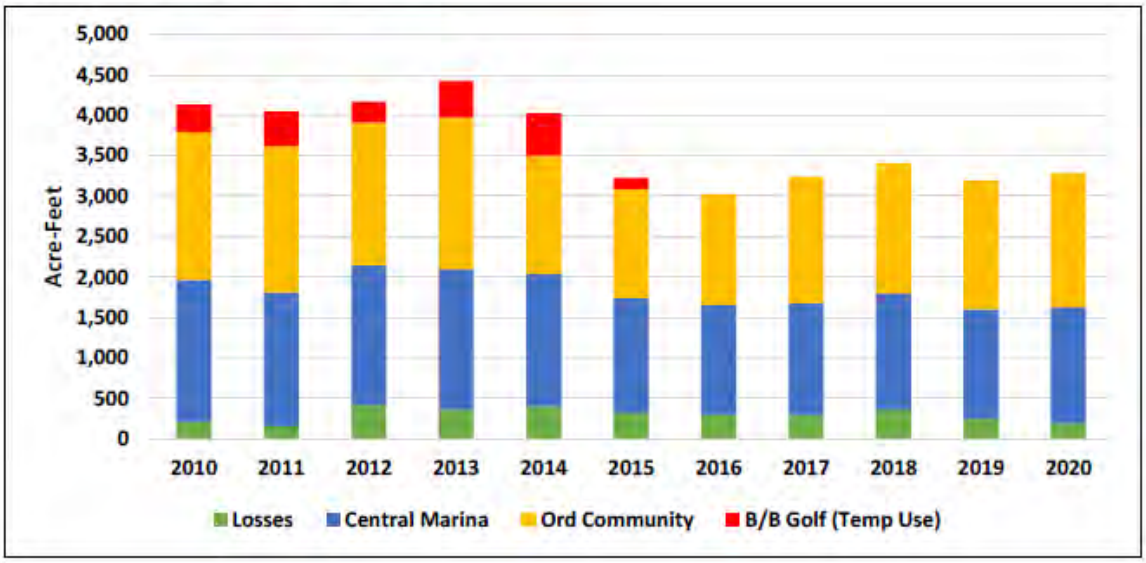
Figure 1.1 MCWD Service Areas



1.3 Water Demands

The District currently supplies approximately 3,300 acre-feet/year (afy), or an average 3 million gallons per day. The demands for the last decade are shown in Figure 1.2. California's drought of record was the period 2012-2017, and the year 2013 was the driest on record for the Salinas Valley. As expected, water demand increased in 2013, mainly for landscape irrigation. In 2014 mandatory water use restrictions were imposed, and they remained in place until 2016. A significant amount of "hard" water conservation improvements were made during the drought (fixture replacements, turf and landscape replacements), such that the post-drought water use has not rebounded to pre-drought levels, even though the population was steadily increasing during this period (see Figure 1.3). The District-wide average water demand is currently 80 gallons per capita per day (gpcd), which is significantly under the State goal of 100 gpcd and the District's 2020 conservation target of 117 gpcd.

Figure 1.2 Water Use, 2010 - 2020[1]



Future water demands are estimated based on in-fill and redevelopment projections provided by the jurisdictions served by MCWD. The projection methodology is discussed in Section 4 of this report, and the results are in Table 1.2, below. Due to the COVID-19 shelter-in-place orders in 2020, CSU Monterey Bay switched to remote learning and the campus was without students and faculty. For that reason, the projection uses the year 2018 demands as the baseline for CSUMB. Monterey Peninsula Unified School District also switched to remote learning, but those students continued to live within the District, so no adjustment was needed for those demands. Total water use is projected to more than double over the next 20-years.

1.4 Water Supplies

The District provides groundwater from the Monterey Subbasin of the Salinas Valley Groundwater Basin (SVGB). The SVGB covers approximately 620 square miles within Monterey County, and consists of several interconnected subbasins as listed in Table 1.3. Basin boundaries in the vicinity of MCWD are shown in Figure 1.4. The southern portion of the Ord Community overlies the Seaside Subbasin, which is an adjudicated aquifer, but none of the District's wells draw water from that source.

Table 1.3 Subbasins within the Salinas Valley Groundwater Basin

Basin Number	Designation	Area (acres)
3-4	Salinas Valley Groundwater Basin	
3-004.01	180/400 Foot Aquifer	88,700
3-004.02	East Side Aquifer	57,500
3-004.04	Forebay Aquifer	94,100
3-004.05	Upper Valley Aquifer	237,670
3-004.06	Paso Robles (SLO County)	436,240
3-004.08	Seaside	14,500
3-004.09	Langley	17,600
3-004.10	Monterey	30,900
3-004.11	Atascadero (SLO County)	19,700

Marina Coast Water District and the former Fort Ord were separately annexed into Monterey County Zones 2/2A in 1996 and 1993, respectively. Under those agreements, MCWD agreed to limit their groundwater use to 3,020 afy, and Fort Ord agreed to a limit of 6,600 afy. Those limits are considered to be reliable yields. The 6,600 afy within the Ord Community was allocated to the various land use jurisdictions by the Fort Ord Reuse Authority so that they may plan for and entitle redevelopment projects. The land use jurisdictions sub-allocate the supply to projects and specific plans.

Under the Sustainable Groundwater Management Act of 2014, several groundwater sustainability agencies have been formed. The Salinas Valley Basin GSA covers all of the SVGB within Monterey County except the adjudicated Seaside Subbasin and except for the lands within MCWD's GSA. The Seaside Subbasin is adjudicated and managed by the Seaside Basin Watermaster. The Marina Coast Water District GSA covers the portion of the Monterey and 180/400-Foot Aquifer Subbasins within their service area. The City of Marina GSA covers the portion of the 180/400-ft Aquifer within the City Limits but outside MCWD's service area; however, the City's right to be the exclusive GSA for this area is in dispute (as discussed in Section 5.2.2). The Groundwater Sustainability Plan for the 180/400-Foot Aquifer Subbasin was published in January 2020, and the plan for the Monterey Subbasin is due for submission in 2022.

The District is currently constructing a recycled water distribution network and will begin delivering recycled water for urban landscape irrigation within the next few years. The producer of the recycled water is Monterey One Water (M1W), the regional wastewater treatment agency. M1W has two water recycling systems. The Salinas Valley Reclamation Plant, constructed in 1989, produces tertiary treated and disinfected recycled water used for crop irrigation within the Castroville Seawater Intrusion Project. The Advanced Water Purification Plant produces advanced treated water for Indirect Potable Reuse as part of the Pure Water Monterey Project. The advanced treated water is injected into the Seaside Groundwater Basin within the Ord Community. MCWD has metered turnouts along the transmission main for supplying advanced treated water to recycled water customers. The MCWD Phase 1 project is 600 afy, with a planned Phase 2 expansion to 1,427 afy.

The District constructed a pilot seawater desalination plant in 1996 to explore the feasibility of using shallow wells along the beach as a source of brackish water. The plant had a capacity of 300 afy, but is no longer in operation.

The District has sufficient groundwater plus contracted recycled water to meet the projected water demands of the next 20 years. As future water demands increase, the District will develop additional sources of water supply. The desalination of brackish groundwater has been studied in detail and remains a viable option. The District is currently studying the feasibility of Indirect Potable Reuse of advanced treated water from the Pure Water Monterey project.

4.2.4 Summary of Demand Projections

Table 4.5 summarizes the projected demands from all currently expected development and population growth through 2040. Included for comparison are the existing allocations of groundwater supply by jurisdiction, which are explained in Section 4. The projected 20-year water demands in this Urban Water Management Plan are lower than the 20-year projection in the 2015 UWMP (approximately 10,000 afy in this UWMP vs. 11,000 afy in the 2015 UWMP). This reduction is due to several factors, discussed below.

As mentioned earlier in this section, the proposed golf course in Del Rey Oaks was removed, which reduced the City's projected demand by 200 afy. The proposed Monterey Downs development was removed from the City of Seaside, which had a projected demand of 850 afy. Within the Army housing projection, the demand factor for the proposed child development center was revised to be consistent with the existing child development center, which reduced the projected demand for that facility by 160 afy. Also within the Army housing projection, all of the units are metered as of 2019, so the 2020 water use is accurate, compared to previous years where a portion was based on a flat rate estimate. The District assumed a usage of 0.33 afy/dwelling unit under the flat rate, while actual use is closer to 0.24 afy/dwelling unit.

Table 4.5 Water Demand by Jurisdiction (afy)

	Jurisdiction	2020	2025	2030	2035	2040	Notes	Allocation
Ord	U.S. Army	409	461	471	471	471		1,577
	CSUMB	318	421	616	821	977	1	1,035
	Del Rey Oaks	0	31	224	238	238		243
	City of Monterey	0	0	130	130	130		65
	County of Monterey	227	436	436	522	522		720
	UCMBEST	1	116	335	377	408		230
	City of Seaside	339	839	1,032	1,435	1,698		1,012
	State Parks and Rec.	0	7	9	9	9		45
	Marina Ord Comm.	446	1,125	1,638	1,757	1,809		1,325
	Assumed Line Loss	190	348	348	348	348		348
Marina	Armstrong Ranch	0	550	680	680	680		920
	CEMEX	0	10	10	10	10		500
	Marina Central	1,438	1,656	1,874	2,081	2,284		3,020
	Subtotal - Ord	1,929	3,784	5,239	6,108	6,610		6,600
	Subtotal - Marina	1,438	2,217	2,563	2,781	2,974		4,440
	Total	3,367	6,001	7,802	8,879	9,584		11,040

1. CSUMB Campus closed for most of 2020 due to COVID-19 restrictions, so the 2018 campus usage is assumed as the baseline demand.

Table 4.5 shows that the current groundwater allocation for Central Marina is sufficient to meet projected demands through 2040. The City of Marina's Downtown Vitalization Specific Plan is projected for build-out by the year 2050, and is not projected to increase the Central Marina water demand above the available groundwater supply. The Ord Community is projected to fully use its Salinas Valley groundwater allocation, but individual jurisdictions may exceed their allocations as early as 2030.

Section 5 - Water Supplies

5.1 Water Sources and Water Rights

The sole source of potable water supply for the Marina Coast Water District is the Salinas Valley Groundwater Basin, described in detail in Section 5.2. Both Central Marina and the Ord Community Service areas have relied upon this source of supply since the areas were initially developed. The District owns and operates its production wells, and does not purchase wholesale potable water supply. The District is currently constructing a recycled water distribution system, and will begin delivering recycled water in the near future.

The three water production wells in the Central Marina service area and one in the Ord Community are in the Deep Aquifer, as described in Section 5.2.1. The other four wells in the Ord Community service area are in the 400-foot Aquifer. Until recently, MCWD was the only significant user of the Deep Aquifer in the immediate area. Over the last decade, at least six new Deep Aquifer agricultural wells have been added and reported extractions from the Deep Aquifer have more than doubled.

5.4 Future Water Supply

Looking at the projected demands in Table 5.3, the total Ord Community groundwater supply of 6,600 afy is sufficient to meet the projected year 2040 water demand of 6,610 afy. However, certain jurisdictions have projected shortfalls and others have projected surpluses. The jurisdictions shortfalls sum to 1,398 afy in 2040. A portion of that shortfall will be met by using recycled water for landscape irrigation. Also, land use jurisdictions may bi-laterally exchange water allocations (several project-specific exchanges have occurred over the last 5 years). The Central Marina service area is not projected to exceed its current SVGB groundwater allocation within the planning period.

5.4.2 Surface Water Supplies

The District is located along the Salinas River, and MCWD Board of Directors had considered purchasing surface water rights in the Salinas River Basin as a means of meeting long-term (beyond 2030) demands. MCWD has also studied the possibility of constructing a surface water treatment plant, which would utilize surplus Salinas River water. In a 1985 filing with the SWRCB for an extension of time to put Salinas River water under permit 11043 to beneficial use, the MCWRA recommended locating a surface water treatment plant on that portion of the Armstrong Ranch property that was later purchased by MCWD. That treatment plant option is still available to meet additional demands beyond the 20-year planning horizon. Also, Phase II of the Salinas Valley Water Project, examined at a programmatic level in the SVWP EIR, calls for surface water to be made available to coastal urban water agencies in the future. MCWRA holds an undeveloped water right permit 11043 with a priority date of July 11, 1949, for diversion of up to 135,000 afy from the Salinas River, at a peak rate of 400 cfs (peak winter flows). The SVBGSA has identified the possibility of diverting winter flows under Permit 11043 and percolating it into the East Side Aquifer Subbasin, which would benefit the 180/400-Foot Aquifer Subbasin as well. However, the State Water Resources Control Board amended the permit in 2013, setting a deadline of July 1, 2026, for completing the planning, permitting and construction of the intake and initiating diversions under the permit.

MCWRA's existing water rights Licenses 7543 and 12624 and water right Permit 21089 for the Nacimiento and San Antonio Reservoirs were amended in 2008 to add the Salinas River Diversion Facility adjacent to MCWD's Armstrong Ranch parcel as a point of rediversion and all lands within MCWRA Zone 2C as an authorized place of use for such diverted water under all three rights. All three rights already had municipal uses as authorized purposes of use. Under the 1993 Annexation Agreement, Fort Ord was annexed into Zones 2 and 2A. Under the 1996 Annexation Agreement, Marina was annexed into Zones 2 and 2A. Zone 2C was established in 2003, encompassing all of Zones 2 and 2A, as well as other portions of the county. Consequently, there is an opportunity for MCWD to collaborate with the 180/400-Foot Aquifer Sub-basin pumpers and with MCWRA to develop a joint surface water supply project that would benefit both north and south of the Salinas River within the North County area.

The plan goes on to discuss stormwater capture, recycled water, Pure Water Monterey and desalination.

Marina Coast WD examined building a much larger plant than the 300 afy one that is no longer operational, and then temporarily was jointly planning with CAW to build a larger desal plant. That joint effort is no longer the case, and CAW is proceeding on its own.

The following from Marina Coast Water District's website appears to communicate an adversarial position to the proposed desalination plant:

CAL-AM'S DESAL THREATENS TO DIMINISH AND CONTAMINATE MARINA'S WATER SUPPLY WITH SALTWATER INTRUSION.

Cal-Am's desal proposed wells are mostly underground (not under the ocean) and would pump 17,000 acre-feet of brackish (salty) groundwater from under Marina. This is five times more water than Marina Coast Water District's own wells pump.

Pumping out the brackish water will allow seawater to flow into the Salinas Valley Groundwater Basin. The seawater contamination could force MCWD to spend tens of millions to move three large wells further inland, potentially pumping more from the deep aquifer also used by Salinas, and stressing Salinas area water supplies as well.

Cal-Am has no water rights to take groundwater from the overdrafted basin that serves MCWD's 35,000 customers in Marina, the Ord Community, Seaside, East Garrison, and other communities. We believe Cal-Am will never obtain this right and are in litigation now to prove it.

Cal-Am claims they won't harm Marina Coast's wells, but they can't prove it. We can't live with that.

CAL-AM'S DESAL PROJECT IS NOT NEEDED BECAUSE THE EXPANSION OF THE ALREADY-FUNCTIONING RECYCLED WATER PROJECT (PURE WATER MONTEREY) CAN MEET THE NEEDS OF THE PENINSULA.

The California Public Utilities Commission is expected to approve the Pure Water Monterey project this month to deliver an additional 2,250 acre-feet of water annually by early 2025 at less than half the cost of desal.

Cal-Am is already meeting its water needs while complying with its Carmel River Cease and Desist Order.

Three independent studies, including one by the California Public Utilities Commission Public Advocates, agree that the Pure Water Monterey recycled water expansion will meet Cal-Am's water needs until 2040 or 2050.

Of course, Cal-Am cannot charge customers a profit for the cost of purchasing recycled water. It can, however, charge a 9% profit on capital investments like this unnecessary plant, generating large returns for private investors.

In summary, this Marina Coast's UWMP communicates that it is well prepared to supply its customers with reliable water for the projection period. Marina Coast also appears to be a very active player in examining all possibilities for developing future water supplies, and it does appear to have some options.

PROPERTY DATA

DESCRIPTION OF SUBJECT

Water rights currently owned by Californian American Water Company (Cal-Am) that are part of its Monterey Water System.

Carmel River – Cal-Am Only:

- License 11866, Permit 7130A (Application 11674A)

Originally 3,030 AFA but reduced as part of Order 95-10 in 1995 to 2,179 AFA

- Pre-1914 rights = 1,137 AFA

- Riparian rights = 60 AFA

2,179 + 1,137 + 60 = 3,376 AFA

- Permit 21330 (Application 30215A) "Table 13" rights

1,488 AFA; limit of 4.1 cfs; Season of diversion 12/1 thru 5/31

Carmel River – Shared with MPWMD:

- Permit 20808A (Application 27614A)

2,426 AFA; limit of 6.7 cfs; Season of diversion 12/1 thru 5/31

- Permit 20808C (Application 27614C)

2,900 AFA; limit of 8.0 cfs; Season of diversion 12/1 thru 5/31

Seaside Groundwater Basin Rights:

- 1,474 AFA with commitment to conduct in-lieu recharge of 700 AFA for 25 years. Hence, only 774 AFA available

ASSESSED VALUE AND ANNUAL TAX LOAD

Not applicable. Water rights are not assessed separately.

ZONING AND OTHER USE REGULATIONS

Zoning does not apply to the water rights.

USE HISTORY

The subject water rights have been used for many years to provide potable water to the customers of California American Water Company in Monterey County, California.

SALES AND RENTAL HISTORY

Sales History

From:

California American Water Company (CalAm) - CCoWS Wiki (csumb.edu)

In 1965 CalAm purchased the Monterey Peninsula's water system and water rights from the California Water and Telephone Company. This purchase included both the San Clemente Dam and Los Padres Dam within The Carmel River Watershed.

Other sources indicate that American Water Works Company, Inc. was the buyer, and subsequently renamed itself to California American Water Company.

Rental History

I am not aware of any rental history for the subject.

DATA ANALYSIS AND CONCLUSIONS

HIGHEST AND BEST USE ANALYSIS

The highest and best use analysis is critical to the appraisal of any property. The conclusion assists in the selection of comparable properties and valuation methods. The concept of *highest and best use* as applied here is an economic view, not one of social or public interest values.

The analysis follows a four-step process:

1) Determine what uses are **legally permissible**.

2) Of the legally permissible uses, which ones are **physically possible**?

3) Of the physically possible and legally permissible uses, which ones are **financially feasible**?

4) Finally, of the uses that meet all of the restrictions examined in the preceding steps, which single use is **maximally productive**? That use is the highest and best use.

As can be seen from reading the steps above, the highest and best use analysis begins by considering a broad range of uses. The number of uses considered is systematically reduced as the analysis proceeds. Finally, a single use, or combination of uses, is selected as the highest and best use.

LEGALLY PERMISSIBLE

The legal uses of the water rights being valued are to:

1. Continue to use them in the manner that they have historically been used; or
2. Sell it to another party for the same, or an alternate use.

The current use is to provide potable water to thousands of customers in the Cal-Am service area. The water rights are one component of a private utility. The other components are:

- The physical infrastructure in place that takes the water from its naturally occurring location and condition, purifies it, and delivers it to the retail customer.

- The real estate underlying the physical infrastructure; and

- The human expertise required to make it all work.

If the water rights were withdrawn from their current use and converted to another, there are not sufficient alternate water rights available to fill the vacuum that would be created. Consequently, thousands of customers would find themselves without potable water. It is extremely unlikely that this would be a legally permissible option.

Consequently, the most probable scenario would be for the water rights to be sold as part of a complete package that included all of the other items needed to make them useful to their current end users, i.e. the retail customers. This means that even if the ownership were to change, the use of the water rights will remain the same.

In addition, there do not appear to be any "excess" water rights that could be disposed of without impacting the amount available to the customers. On the contrary, the current owner is considering building a new large desalination project to increase the water supply.

The valuation of the entire utility, and allocation of that total value to the various parts, is beyond the scope of this appraisal. Consequently, this appraisal will value the water rights as a stand-alone real property interest utilizing whatever water related market data is available. Therefore, for purposes of this appraisal, it must be assumed that the water rights are available for sale or lease on a stand-alone basis. **This is an Extraordinary Assumption of the appraisal.**

PHYSICALLY POSSIBLE

The historical use is clearly physically possible. Sale or lease of the water rights would also be physically possible. The most probable physical use for a new owner would be to lease or sell the water right to the owner of the rest of the currently existing utility. Irrigation use could conceivably be physically possible, as would be the use of combating seawater intrusion through injecting water into groundwater basins. It would also be physically possible to leave the water in its naturally occurring location for environmental purposes.

FINANCIALLY FEASIBLE

From the Dictionary of Real Estate Appraisal, 7th Edition, something is financially feasible when:

> "The capability of a physically possible and legal use of property to produce a positive return to the land after considering risk and all costs to create and maintain the use."

If one substitutes "water rights" for "land" in the definition, the concept still holds true.

All of the legally permissible and physically possible uses could produce a positive financial return, though clearly not the same level of return.

MAXIMALLY PRODUCTIVE

By definition, the maximally productive use is the one, from all the legally permissible, physically possible and financially feasible ones, that will yield the highest value. There is no doubt that the highest value would be obtained if the use continued to be its current one. No other use would have the ongoing benefit of an income stream based on the critical needs of thousands of customers, and the potential of steadily increasing what those customers pay for the product they receive.

HIGHEST AND BEST USE

Regardless of ownership change, the highest and best use is to continue the historical and current use of being part of the package of properties and expertise that takes the water available from the water rights being valued and delivers potable water to existing and future customers.

VALUATION METHODOLOGY

The Fair Market Value definition presented earlier in the report, and is replicated here for reference:

> *(a) The fair market value of the property taken is the highest price on the date of valuation that would be agreed to by a seller, being willing to sell but under no particular or urgent necessity for so doing, nor obliged to sell, and a buyer, being ready, willing, and able to buy but under no particular necessity for so doing, each dealing with the other with full knowledge of all of the uses and purposes for which the property is reasonably adaptable and available.*
>
> *(b) The fair market value of property taken for which there is no relevant, comparable market is its value on the date of valuation as determined by any method of valuation that is just and equitable.*

In addition, California Code of Civil Procedure Section 1263.330 provides as follows:

> *The fair market value of the property taken shall not include any increase or decrease in the value of the property that is attributable to any of the following:*
>
> *(a) The project for which the property is taken.*
>
> *(b) The eminent domain proceeding in which the property is taken.*
>
> *(c) Any preliminary actions of the plaintiff related to the taking of the property.*

Some of the principles in the preceding definition, and most other definitions of market value, are: (1) knowledgeable parties, (2) neither buyer nor seller under duress, and (3) both parties are willing and acting in their own financial best interest.

REAL PROPERTY RIGHTS DEFINITION

From the Dictionary of Real Estate Appraisal, 7th edition – Appraisal Institute

> **Fee Simple Estate.** Absolute ownership unencumbered by any other interest or estate, subject only to the limitations imposed by the governmental powers of taxation, eminent domain, police power, and escheat.

METHODOLOGY APPLICABILITY TO THE SUBJECT

There are three generally accepted valuation approaches:

- ***The Income Capitalization Approach***
- ***The Sales Comparison Approach***
- ***The Cost Approach***

These approaches have varying degrees of applicability, depending on the type of property being appraised. In the following paragraphs, these techniques are defined and the appropriateness of their being used to value the subject is discussed.

The Income Capitalization Approach

The following definition pertains to the income capitalization approach:

> "Specific appraisal techniques applied to develop a value indication for a property based on its earning capability and calculated by the capitalization of property income."[1]

The Income Approach is appropriate for valuing properties that are typically purchased for investment purposes with the value based on their income generating potential. Office buildings, retail stores, apartment buildings and some agricultural production lands are examples of the types of properties where the Income Approach should be one of the valuation methods applied.

To my knowledge, the subject has never been leased to another party. In the California water market, it is common to have "short term sales" that are really one-year leases of water rights. There are also situations where the buyer and seller negotiate "dry-year options" which allow the buyer, at their discretion, to exercise the option of using the water rights in a particular year. An example would be 15 year option agreement with the buyer having the right to exercise its option in any 7 of the years. The seller (lessor) receives agreed upon option payments in all years, and more when the option is exercised. Of course it would be possible for a buyer of water rights to intend to lease them out every year on long-term basis, though I am not aware of any such situations.

[1] The Dictionary of Real Estate Appraisal, 7th Edition. (The Appraisal Institute, Chicago, 2015), p 115

The recent entry of Monterey One Water (M1W) into the Monterey Peninsula was a dramatic shift in the water market. The M1W project takes waste water and converts it into usable water. The first water available was suitable for irrigation only. However, subsequently, Pure Water Monterey (PWM) treated some of the M1W water to the potable level. Both of those types of water have found ready buyers (lessees). PWM Expansion is planned to come online in the near future.

Also, Cal-Am has been planning to build a large desalination facility. It is possible they could make some of that water available to other municipal water utilities in the area at an annual cost. Sand City's desalination plant also has a financial arrangement with Cal-Am that allows Cal-Am use of most of the production.

Finally, for many years there has been a "replenishment fee" put in place by the Seaside Groundwater Watermaster. Any entity that exceeds its allotted extraction volume must pay a predetermined fee for every acre foot of excess extraction. This could be considered a rental rate for water as well.

Therefore, there are annual income streams that could be considered to be rental rates for water in the area, which can be incorporated into an Income Capitalization Approach.

Sales Comparison Approach

> "In the sales comparison approach, an opinion of market value is developed by comparing properties similar to the subject property that have recently sold, are listed for sale, or are under contract (i.e., for which purchase offers and a deposit have been recently submitted). A major premise of the sales comparison approach is that an opinion of the market value of a property can be supported by studying the market's reaction to comparable and competitive properties.
>
> Comparative analysis of properties and transactions focuses on similarities and differences that affect value, called *elements of comparison*, which may include variations in property rights, financing terms, conditions of sale, market conditions, locational influences, and physical characteristics, among others."[2]

As has been previously documented in this report, the Monterey Peninsula is isolated from other regions that could possibly provide water to it. From a water perspective, "you can't get there from here," seems to apply. Therefore, any transaction data from other regions in the state are rather irrelevant.

[2] The Appraisal of Real Estate, 15th Edition, (The Appraisal Institute, Chicago, 2013), p 351

In addition, as noted in the previous section, the entry of M1W and PWM into the market changed the market dramatically. Which means that any local sale data that occurred prior the M1W would not be reflective of the market as of the effective date, and would contribute little, if anything, to the analysis. Since I have not discovered any recent water rights sales in the local area, the Sales Comparison Approach will not be utilized in the typical sense.

There is an opportunity to utilize market values of irrigated agricultural land in the Monterey area along with how much applied water is needed for irrigation to estimate the contributing value of water to those lands. Even though this is not the classic direct sale approach, since water sales are not involved, it is still one indicator of water value. In valuing the subject, all available avenues for estimating value should be considered. This analysis will be presented as part of the Sales Comparison Approach later in the report.

The Cost Approach

> A set of procedures through which a value indication is derived for the fee simple estate by estimating the cost new as of the effective date of the appraisal to construct a reproduction of (or replacement for) the existing structure, including an entrepreneurial incentive; deducting depreciation from the total cost; and adding the estimated land value. The contributory value of any site improvements that have not already been considered in the total cost can be added on a depreciated-cost basis. Adjustments may then be made to the indicated value of the fee simple estate in the subject property to reflect the value of the property interest being appraised.[3]

The Cost Approach can sometimes be appropriate to utilize in a water rights valuation. If there is unappropriated surface or groundwater available, then the cost of obtaining the right to that water and physically capturing and transporting it to the place of use could be considered as replacement cost.

Another cost item that could reflect value is if a utility were to be providing financial incentives to customers to reduce consumption. The total cost of the incentive program and the amount of water saved could be indicative of water value. This is different than the typical tiered pricing, i.e. the more you use, the more you pay per unit used, which is more of "stick" approach to conservation than the "carrot" approach of an incentivized program.

Building a desalination plant is certainly a cost item that produces new water. However, the annual sale price (lease rate) of that water will reflect cost recovery along with some level of profit. The projected annual water cost from the proposed desalination plan will be considered in the Income Approach.

[3] The Dictionary of Real Estate Appraisal, 7th ed., (Appraisal Institute, Chicago, 2015), p. 54.

To my knowledge there is no unappropriated surface or groundwater available. Also, after a long and challenging drought, most of the conservation "slack" has been taken out of the system. It appears that the Cost Approach has very limited utility in this situation and will not be pursued.

RELEVANT WATER QUANTITY UNITS USED IN THIS REPORT

CFS: cubic feet per second.
Acre Foot: 43,560 cubic feet
One cubic foot = 7.481 gallons
Number of seconds in a year = (60 sec/min) x (60 min/hr) x (24 hr/day) x (365 days/year) = 31,536,000 seconds per year
1.0 cfs = 31,536,000 cubic feet per year
1.0 cfs for a year = 31,536,000 cf/43,560 cf/acre foot = 723.967 = approximately 724 acre feet.
1 acre foot = 325,851 gallons
Note: it is common practice for cities to refer to a "unit" of water to be 100 cubic feet and to consider that to be equivalent to 750 gallons.

INCOME CAPITALIZATION APPROACH

The following definition and overviews pertain to the income capitalization approach:

> "Income-producing real estate is typically purchased as an investment, and from an investor's point of view earning power is the critical element affecting property value. A basic investment premise holds that the higher the earnings, the higher the value, provided the risk remains constant. An investor purchasing income-producing real estate is essentially trading present dollars for the expectation of receiving future dollars. The income capitalization approach to value consists of methods, techniques, and mathematical procedures that an appraiser uses to analyze a property's capacity to generate benefits (i.e., usually the monetary benefits of periodic income and reversion from a future sale) and convert these benefits into an indication of present value."[4]

Several water related income streams will be presented in this section, with a conclusion reached as to the appropriate annual income that could be expected from the subject water rights. After that, a capitalization rate will be developed. Finally, the estimated income will be capitalized to estimate the market value under this approach to value.

Water Lease Data

The **Seaside Groundwater Replenishment Assessment** will be the first income stream examined. The Draft Seaside Basin Watermaster Annual Report – 2022, intended to be published January 5, 2023, is available online at: **SBW - Home Page (seasidebasinwatermaster.org)**

Item H from that document is quoted as follows: At its meeting of October 5, 2022 the Watermaster Board determined that beginning with WY 2023 the Natural Safe Yield Replenishment Assessment unit cost should be updated to $3,461 per acre-foot, and the Operating Yield Replenishment Assessment unit cost should be updated to $865 per acre-foot. The combined total replenishment assessment for 2023 will be $4,326 per acre foot.

The Agenda transmittal which explains the basis of calculation for these new unit costs is contained in Attachment 4.

Attachment 5 of that document shows the replenishment assessment for WY 2022. The Natural Safe Yield Replenishment Assessment unit cost are $3,260 per acre-foot, and the Operating Yield Replenishment Assessment unit cost are $815 per acre-foot. The combined total replenishment assessment for 2022 is then $4,075 per acre foot.

Given that 2022 is almost over, it is reasonable to utilize the replenishment costs for WY 2023.

[4] The Appraisal of Real Estate, 15th Edition, The Appraisal Institute, Chicago, 2001, p 413.

Attachment 4 of the document (Updated Replenishment Assessment Unit Costs) has the following table and explanation of derivation of the replenishment cost.

WATER YEAR 2023 (October 1, 2022-September 30, 2023)

ANTICIPATED UNIT COSTS OF WATER THAT COULD POTENTIALLY BE USED FOR REPLENISHMENT OF THE SEASIDE BASIN

POTENTIAL SOURCE OF REPLENISHMENT WATER	POTENTIAL DATE REPLENISHMENT WATER COULD BECOME AVAILABLE	POTENTIAL VOLUME OF WATER THAT COULD BE SUPPLIED BY THE PROJECT (AFY) (1)	BASE UNIT COST ($/AF)	BASE UNIT COST YEAR
Regional Desalination (2)	2024	6,250	$6,147	2021
Pure Water Monterey & PWMX (6)	2020	5,750	3,486	2021
Monterey Peninsula Water Supply Project (Combined Regional Desalination with Groundwater Replenishment Project)	PWM in 2020; Regional Desalination in 2024	12,000	**$4,872 (3)**	2022
Seaside Basin ASR Expansion (4)	2021	1,000	**$2,025**	2016
Regional Urban Water Augmentation Project (5)	2021	1,400-1,700	**$3,486**	2021

($4,872 + $2,025 + $3,486) / 3 =

$3,461 – 2023 Replenishment Assessment Unit Cost for NSY Overproduction

$3,461/4 – $865 Replenishment Assessment Unit Cost for OY Overproduction

FOOTNOTES:

(1) For the Regional Desalination Project this is the total amount of water from this source which could potentially come to the Cal Am distribution system, based on the sesalination plant having a 6.4 MGD capacity equivalent to 7,169 AFY. Only a portion of this amount might be available as initially unused capacity that could be used to help replenish the Seaside Basin For the RUWAP this is the total amount of non-potable water from this source. Only a portion of this amount might be used for in-lieu replenishment of the Seaside Basin. For the ASR Expansion Project this is the additional amount of water that could potentially be provided by this project (see footnote 4). For the PWM & PWMX this is the quantity of water that is being planned at this time by CAW for inclusion in its Monterey Peninsula Water Supply Project.

(2) Base unit cost data based on PUC filing documents and provided by Dave Stoldt of MPWMD. This unit cost was confirmed in August 2021 by Ian Crooks of Cal Am as being the latest unit cost available for this project.

(3) Flow-weighted average unit cost of the combined desalination and groundwater replenishment projects, calculated as:
(6,250x$6,147 + 5,750x$3,486)/12,000 = $4,872

(4) Base unit cost data provided by MPWMD in 2016. No updated unit cost was provided for this project. The 1,000 AFY of potential water that this project could supply would be in addition to the 1,300 AFY included as part of the Monterey Peninsula Water Supply Project, and would be an annual average taking into account river flow and hydrologic conditions that change from year to year.

(5) Project data updated in 2022. Patrick Breen of MCWD noted that to determine total cost per acre-foot, use the $3,486-acre foot cost from Pure Water Monterey (which would be RUWAP cost as well) and add MCWD O&M and Financing costs to be determined.

(6) Base unit cost effective September 19, 2022 based on information provided by Ian Crook of Cal Am.

The development of the replenishment assessment by the Watermaster incorporates both actual and estimated future water costs. Some of the projects whose water costs are incorporated do not yet exist, e.g. the Regional Desalination Plant and the Pure Water Monterey Expansion. Those entities that exceed their allotted production (extraction) must pay the calculated amount, but the actual replenishment of the groundwater basin may not happen until some future date. Those that over-extract are essentially buying/renting the water at the indicated rate.

Monterey One Water takes wastewater from a variety of sources and treats it to the extent that it is suitable for use in irrigation. That water is then available to irrigators in the area that are positioned to receive it from the extensive network of pipes that have been installed. This irrigation use also has the added benefit of reducing groundwater extraction by the growers and the associated sea water intrusion into the groundwater basins.

The price charged to the irrigators is $432 per acre foot delivered to their properties.

Pure Water Monterey takes some of the water that is produced by Monterey One Water and further treats it so that it is suitable for injection into the Seaside Groundwater Basin and it is eventually withdrawn by CAW and, with some additional treatment, becomes potable water delivered to the customers. The success of Pure Water Monterey has resulted in a planned Expansion.

The existing production is 3,500 AFY and the Expansion yield is projected to be a maximum of 2,250 AFY. The combined yield depends on there being sufficient wastewater available as input. Some potential appears to exist for more stormwater capture to assist with the volume of input.

CAW has made the argument that there will not be sufficient wastewater available unless its proposed desalination plant is constructed.

The price for Pure Water Monterey water is $3,486 per acre foot.

Desalinated potable water is projected to cost $6,147 per acre foot, but is not expected to be available until 2025, or later.

The Seaside Basin Aquifer Storage Recovery project, that diverts some winter flows from the Carmel River and injects it into the Seaside Groundwater Basin for future extraction by CAW, is projected to cost $2,025 per acre foot.

I contacted Sand City to inquire as to what the financial arrangement was with CAW regarding the Sand City desalination plant. The City Planner indicated that he was not at liberty to disclose that information. Reportedly, CAW runs the plant with Sand City having the ability to provide water allocations for new development. That new development would then become CAW customers. CAW's UWMP projected that 200 AFY (out of a capacity of 300 AFY) would be available from this facility for CAW's use.

The City Planner stated that the plant cost around $12 million to build with around $3 million of that coming from a grant.

Annual Water Value Conclusion
The most reliable indicator of value for the subject water is the price being charged for the Pure Water Monterey Water which is $3,486 per AFY.

Subject Water Volume
Cal-Am appears to have rights to 3,376 AFY from the Carmel River aquifer, and another 774 AFY from the Seaside Groundwater Basin. This is a total of 4,150 AFY.

Total Annual Income
Annual project lease income for the subject property is then 4,150 AFY times $3,486 per AF which equals $14,467,000 (rounded).

The information below is from the Appraisal Institute resources available to its members.

ECONOMIC INDICATORS – September 2022

Market Rates and Bond Yields

	Sept22	Mar22	Sept21	Mar21	Sept20	Sept19
Reserve Bank Discount Rate	2.50	0.2	0.25	0.25	0.25	2.50
Prime Rate (monthly average)	5.50	3.37	3.25	3.25	3.25	5.00
Federal Funds Rate	2.33	0.2	0.09	0.07	0.09	1.90
3-Month Treasury Bills	2.88	0.44	0.09	0.01	0.09	1.84
6-Month Treasury Bills	3.25	0.83	0.11	0.04	0.11	1.78
U.S. 5-Year Bond	3.27	2.11	0.24	1.63	0.24	1.55
U.S. 10-Year Bond	3.11	2.13	0.66	2.34	0.66	1.68
U.S. 30-Year Bond	3.23	2.41	1.41	1.27	1.41	2.12
Municipal Tax Exempts (Aaa)†	--	--	--	--	1.81	2.37
Municipal Tax Exempts (A)†	--	--	--	--	2.24	2.73
Corporate Bonds (Aaa)†	--	--	--	--	2.31	3.03
Corporate Bonds (A)†	--	--	--	--	2.79	3.37
Corporate Bonds (Baa)†	--	--	--	--	3.36	3.91

According to the U.S. Treasury website, the 30-year Bond rate was 3.82 on December 23, 2022.

PwC Real Estate Investor Survey, Q2 2022

	Regional Mall		CBD Office		Warehouse		Apartment	
	Q2 2022	Q1 2022	Q2 2022	Q1 2022	Q2 2022	Q1 2022	Q2 2022	Q1 2022
Discount Rate (IRR)[a]								
Range (%)	5.75 – 13.00	6.00 – 13.00	6.00 – 9.00	6.00 – 9.00	4.75 – 8.00	5.00 – 7.00	4.75 – 10.00	5.00 – 10.00
Average (%)	7.78	7.83	6.93	6.93	5.96	5.88	6.72	6.62
Change (bps)		–5		0		+8		+10
Overall Cap Rate (OAR)[a]								
Range (%)	4.50 – 12.50	4.50 – 12.50	4.25 – 8.00	4.25 – 8.50	3.00 – 6.50	2.60 – 6.50	3.00 – 7.00	3.00 – 7.00
Average (%)	7.23	7.23	5.70	5.64	4.37	4.22	4.45	4.40
Change (bps)		0		+6		+15		+5
Residual Cap Rate								
Range (%)	4.50 – 13.00	4.50 – 13.00	4.75 – 8.50	4.75 – 8.50	3.75 – 6.00	3.50 – 6.00	3.50 – 7.00	3.50 – 7.00
Average (%)	7.28	7.30	6.13	6.13	4.92	4.79	4.76	4.81
Change (bps)		–2		0		+13		–5

[a]Rate on unleveraged, all-cash transactions. *Definitions:* bps — basis points. Discount Rate (IRR) — internal rate of return in an all-cash transaction, based on annual year-end compounding. Overall Cap Rate (OAR) — initial rate of return in an all-cash transaction. Residual Cap Rate — overall capitalization rate used in calculation of residual price; typically applied to the NOI in the year following the forecast. Survey involves institutional-grade properties. *Source:* PwC Real Estate Investor Survey; personal survey conducted by PwC during April 2022. For subscription information, please email us-pwcsurvey@pwc.com.

Inflation and the Economy

The information below comes from:

Current US Inflation Rates: 2000-2022 | US Inflation Calculator

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ave
2022	7.5	7.9	8.5	8.3	8.6	9.1	8.5	8.3	8.2	7.7	7.1	*Avail. Jan. 12*	
2021	1.4	1.7	2.6	4.2	5.0	5.4	5.4	5.3	5.4	6.2	6.8	7.0	4.7
2020	2.5	2.3	1.5	0.3	0.1	0.6	1.0	1.3	1.4	1.2	1.2	1.4	1.2
2019	1.6	1.5	1.9	2.0	1.8	1.6	1.8	1.7	1.7	1.8	2.1	2.3	1.8
2018	2.1	2.2	2.4	2.5	2.8	2.9	2.9	2.7	2.3	2.5	2.2	1.9	2.4

The high rate of inflation that has been happening over the last year and a half is well known. Combating inflation is the motivation for the Federal Reserve to dramatically increase the Prime Rate. In spite of the Feds actions, inflation has remained stubbornly high. On November 30, the Chairman of the Federal Reserve, Jerome Powell, stated that the Fed would be backing off from the multiple 0.75 percent rate increases with a lower increase expected the next time. However, he also said that the battle against inflation was a long-term struggle, and left open the issue of further rate increases. The general expectation is that the Fed will increase rates as high as is necessary to bring inflation down significantly.

Many prognosticators are forecasting a recession beginning in 2023. This is happening after many years of relative stability, low inflation, and low interest rates prior to COVID. There is a lot of uncertainty in the world, including but not limited to:

- Unknown duration of current inflationary period,
- General economic uncertainty,
- The ongoing war in Ukraine,
- Food and petroleum products being politically weaponized,
- Instability within China due to resistance to ongoing COVID lockdowns,
- Saber rattling by China regarding Taiwan,
- Concerns across the globe about the next variants of COVID and their severity, and
- Intense and prolonged weather events.

Uncertainty and risk to investments go hand in hand, which must be considered in selecting a capitalization rate to apply to the expected annual income stream for the subject.

Capitalization Rate

From the Dictionary of Real Estate Appraisal, 7th Edition:

> **capitalization rate (*R*).** A ratio of one year's net operating income provided by an asset to the value of the asset; used to convert income into value in the application of the income capitalization approach.
>
> **overall capitalization rate (*RO*).** The relationship between a single year's net operating income expectancy and the total property price or value ($R_O = I_O / V_O$).
>
> **safe rate**. The minimum required rate of return on invested capital. Theoretically, the difference between the total rate of return and the safe rate is considered a premium to compensate the investor for risk, the burden of management, and the illiquidity of the capital invested; also called *riskless rate* or *relatively riskless rate*.
>
> **risk.** The probability that foreseen events will not occur. Risk may be incurred as a result of the impact of general economic and market conditions upon the performance of the specific property, the interaction of a group of investments in a portfolio, or the operation of the real estate enterprise as an independent venture.
>
> **built-up rate.** An overall capitalization rate or discount rate that represents the combination of a safe, or risk-free, rate and rates that reflect risks inherent in nonliquidity, management, inflation, duration, and other considerations.

From "The Appraisal of Real Estate, 15th Edition," selected extractions begin from page 429:

> **Estimating Rates**
> Whether an income rate or a yield rate is applied, the conversion of income into property value should reflect the annual rate of return the market indicates is necessary to attract investment capital. This rate is influenced by many factors:
>
> - The degree of perceived risk
> - Market expectations regarding future inflation
> - The prospective rates of return for alternative investments (i.e., opportunity costs)
> - The rates of return earned by comparable properties in the past
> - The availability of debt financing
> - The prevailing tax law
>
> Because the rates of return used in the income capitalization approach represent prospective rates, not historical rates, the market's perception of risk and changes in purchasing power are particularly important.

The suitability of a particular rate of return cannot be proven with market evidence, but the rate estimated should be consistent with the data available. Estimating rates requires appraisal judgment and knowledge of prevailing market attitudes and economic indicators.

Typically, investors expect to receive a return on capital that represents the time value of money with an appropriate adjustment for perceived risk. The minimum rate of return for invested capital is sometimes referred to as the safe, *riskless, or relatively riskless rate* – e.g., the prevailing rate on insured savings accounts or guaranteed government securities. Theoretically, the difference between the total rate of return on capital and the safe rate may be considered a premium to compensate the investor for risk, the illiquidity of invested capital, and other investment considerations.

Risk

The anticipation of receiving future economic benefits creates value, but the possibility of not receiving or losing future benefits reduces value and creates risk. Higher rewards are required in return for accepting higher risk. To a real estate investor, risk is the uncertainty of realizing projected future economic benefits and the chance of incurring a financial loss. Most investors try to avoid excessive risk. They prefer certainty to uncertainty and expect a reward for taking risk.

Inflation and Value

Appraisers should be aware of the difference between inflation and appreciation in real value. Inflation is an increase in the volume of money and credit, a rise in the general level of prices, and the erosion of purchasing power. Appreciation in real value results from an excess of demand over supply, which increases property values beyond the level of inflation.

The amount of inflation expected affects the forecast of future benefits and the estimation of an appropriate income or yield rate. If inflation is anticipated, the desired nominal rate of return on invested capital will likely increase to compensate for lost purchasing power. The required nominal rate, then, will increase to offset the expected inflation. Most investors try to protect the real rate of return over time.

Development of Capitalization Rate

It is well accepted that the “safe rate” is the U.S. Treasury 30 year bond rate. As of this writing, that rate is 3.82%.

The inflation rate has been elevated for an extended period of time, and most recently was at 7.1%. Given the Fed may be slowing down on its rate increases, its decision makers may be expecting some decrease in the inflation rate in coming months. For this analysis a rate range of 6 - 7.1% is considered appropriate.

Risk is another item that must be considered. Even though a water right in a confined market could be considered to be relatively safe, as recent drought years of clearly shown, the future may have unpleasant weather surprises that lessen the volume of water available to water right holders, and the income that may be received from those water rights. Illiquidity is another significant factor since the water rights being valued could not be quickly converted into cash. A risk allowance of 2-3% is considered appropriate.

The result of adding the safe rate, the inflation rate and the risk rate together is shown below.

$$3.8 + (6.0 – 7.1) + (2.0 – 3.0) = \text{a range from } 11.8 \text{ to } 13.9$$

The Price Waterhouse Cooper survey of investment grade large properties had capitalization rates ranging from 5.75 to 13 percent. Of the four different property types covered in that survey:

- Regional Shopping Malls
- Central Business District Offices
- Warehouses
- Apartment Buildings

Regional malls are considered to be the riskiest, and their capitalization rates confirm that. COVID and massive online shopping have made retail stores a riskier investment proposition.

All things considered, I conclude that a capitalization rate of 12.0 percent is appropriate. Other rates will also be examined subsequently.

Independent from my analysis, the Client provided an alternate approach to determining a capitalization rate as of October 18, 2022. The Client's approach and conclusion are displayed below for reference. This did not play any role in my determination of the appropriate capitalization rate.

Determining a Capitalization Rate

			Revenue Required	
Amount Added to Rate Base	$	1,000,000		
Rate of Return Authorized		7.610%		2022 GRC Direct Testimony of Owens, Attachment 7
Return Required (Pre-Tax)	$	76,100		
Gross-Up Factor		1.389		1/(1-Effective Tax Rate) where CA=8.84% and Fed=21%, minus FBOS
Gross-Up for Taxes	$	105,703	$ 105,703	
Depreciable Life (years)		100,000,000		
Depreciation Expense	$	0	$ 0	
Ad Valorem & Other Tax Rate		1.179%		Joint Supplemental Testimony in A.12-04-019, p. 188 of PDF, May 2016
Ad Valorem & Other Taxes	$	11,790	$ 11,790	
Sub-Total Revenue Requirement			$ 117,493	
Uncollectible Rate		0.521%		2022 GRC Direct Testimony of Owens, p. 16, line 6
Uncollectible Expense	$	612	$ 612	
TOTAL Revenue Requirement			$ 118,105	
Capitalization Rate			**11.810%**	

Income Approach Conclusion

A yield of 4,150 AFY times $3,486 per AF = $14,466,900 annual income

$14,466,900 annual income divided by a capitalization rate of 12.0% = $120,557,500

It is appropriate to round the result of the calculations to $120,560,000, which is the fair market value conclusion from the income approach

Alternate Scenarios Table

					Capitalization Rate					
		120.5575	**9.0%**	**10.0%**	**11.0%**	**12.0%**	**13.0%**	**14.0%**	**15.0%**	
		$3,000	138	125	113	104	96	89	83	
Annual		$3,100	143	129	117	107	99	92	86	
Water Value		$3,200	148	133	121	111	102	95	89	
(Lease Rate)		$3,300	152	137	125	114	105	98	91	
		$3,400	157	141	128	118	109	101	94	
		$3,500	161	145	132	121	112	104	97	
		$3,600	166	149	136	125	115	107	100	
		$3,700	171	154	140	128	118	110	102	
		$3,800	175	158	143	131	121	113	105	
		$3,900	180	162	147	135	125	116	108	
		$4,000	184	166	151	138	128	119	111	
				Table Values are in Millions of Dollars						
	Vaue per acre foot		$3,486							
	Capitalization Rate		12.0%		Specific Calculation is $120,557,500					
	Water Volume (AF)_		4,150							

Not surprisingly, the results of the capitalization are somewhat more sensitive to changes in the capitalization rate than to changes in the per acre value of the water.

Nothing in the table above causes me to reconsider the previous value conclusion.

SALES COMPARISON APPROACH

CONTRIBUTING VALUE OF WATER TO AGRICULTURAL LAND

The value of agricultural land can provide another market indicator of the value of water. By comparing prices of irrigated lands to non-irrigated lands prices, an indication of the contributing value of water can be developed. This analysis is particularly useful as (1) a check on the reasonableness of other value indicators, and (2) when other market data is quite sparse as in this case.

Agriculture in the region has been previously discussed in this report beginning on page 23.

Regarding land values, the American Society of Farm Managers and Rural Appraisers publication cited previously (TRENDS) indicates the following:

	Monterey County $/acre	**Mid-point of Range**
Row Crops	$30,000 - $75,000	$52,500
Plantable (Wine Grapes)	$20,000 - $50,000	$35,000
Wine Grapes	$25,000 - $75,000	$50,000
Rangeland	$700 – $2,000	$1,350
Row Crop value minus Rangeland value		$51,150
Plantable grape land value minus Rangeland value		$33,650

The value of row crop land throughout the Central Coastal region sets the upper end of agricultural land values, with prices in the other counties very similar or even higher than for Monterey County.

California Department of Water Resources Bulletin 113-4, April 1986, Crop Water Use in California, is the source of the following:

County Average Unit Applied Water (acre-feet per acre)

County	Other Field	Grapes
Monterey	2.2	1.8

The following information comes from CIMIS (California Irrigation Management Information System) which has hundreds of weather stations positioned throughout the state. The Monterey area is in Zone 3.

Monthly Average Reference Evapotranspiration by ETo Zone (inches/month)

Zone	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1	0.93	1.40	2.48	3.30	4.03	4.50	4.65	4.03	3.30	2.48	1.20	0.62	33.0
2	1.24	1.68	3.10	3.90	4.65	5.10	4.96	4.65	3.90	2.79	1.80	1.24	38.0
3	1.86	2.24	3.72	4.80	5.27	5.70	5.58	5.27	4.20	3.41	2.40	1.86	46.3
4	1.86	2.24	3.41	4.50	5.27	5.70	5.89	5.58	4.50	3.41	2.40	1.86	46.6
5	0.93	1.68	2.79	4.20	5.58	6.30	6.51	5.89	4.50	3.10	1.50	0.93	43.9
6	1.86	2.24	3.41	4.80	5.58	6.30	6.51	6.20	4.80	3.72	2.40	1.86	49.7
7	0.62	1.40	2.48	3.90	5.27	6.30	7.44	6.51	4.80	2.79	1.20	0.62	43.4
8	1.24	1.68	3.41	4.80	6.20	6.90	7.44	6.51	5.10	3.41	1.80	0.93	49.4
9	2.17	2.80	4.03	5.10	5.89	6.60	7.44	6.82	5.70	4.03	2.70	1.86	55.1
10	0.93	1.68	3.10	4.50	5.89	7.20	8.06	7.13	5.10	3.10	1.50	0.93	49.1
11	1.55	2.24	3.10	4.50	5.89	7.20	8.06	7.44	5.70	3.72	2.10	1.55	53.0
12	1.24	1.96	3.41	5.10	6.82	7.80	8.06	7.13	5.40	3.72	1.80	0.93	53.3
13	1.24	1.96	3.10	4.80	6.51	7.80	8.99	7.75	5.70	3.72	1.80	0.93	54.3
14	1.55	2.24	3.72	5.10	6.82	7.80	8.68	7.75	5.70	4.03	2.10	1.55	57.0
15	1.24	2.24	3.72	5.70	7.44	8.10	8.68	7.75	5.70	4.03	2.10	1.24	57.6
16	1.55	2.52	4.03	5.70	7.75	8.70	9.30	8.37	6.30	4.34	2.40	1.53	62.5
17	1.86	2.80	4.65	6.00	8.06	9.00	9.92	8.68	6.60	4.34	2.70	1.86	68.5
18	2.48	3.36	5.27	6.90	8.68	9.60	9.61	8.68	6.90	4.96	3.00	2.17	71.6

Variability between stations within single zones is as high as 0.02 inches per day for zone 1 and during winter months in zone 13. The average standard deviation of the ETo between estimation sites within a zone for all months is about 0.01 inches per day for all 200 sites.

The average total annual evapotranspiration is 46.3 inches, while the precipitation averages around 18 inches. This indicates that the irrigation need for row crops was about 28 inches, or about 2.33 acre feet per acre. This supports the previous data source regarding “applied water.”

Combining the information above allows the development of an estimate of the contributing value of water to agricultural land in the area. For instance, to gain the increased value that row crop land has over rangeland of approximately $51,150 per acre, one would have to apply 2.2 acre feet of water per acre. This means that $51,150/2.2 = $23,250 is the indicated value added for each acre foot of water applied.

For grape land the calculations are: $33,650/1.8 acre feet = $18,694.

The greater the differential between the land values attributable to water availability (dry v. irrigated), the larger will be the value indicator for the water.

Contributing value to Agricultural Land Conclusions

The climate, combined with the fertile agricultural lands that are suitable for growing field crops such as strawberries, results in row crop land being quite valuable provided it has sufficient irrigation water. Most, if not all, of the irrigation water utilized in this area has been groundwater. The over drafting of the groundwater basins has resulted in long-term seawater intrusion. The efforts of Monterey One Water and other water recycling efforts in the area are intended to combat that problem by providing alternate source irrigation water.

The preceding analysis indicates that irrigation water may contribute between $19,000 and $23,000 per acre foot. The mid-point of that range is $21,000. Since there is a yield of 4,150 AFY from the subject water rights, an indication of value can be derived by multiplying those two figures together.

4,150 AFY x $21,000 per AF = **$87,150,000**

Since the value per acre of irrigated agricultural lands varied quite dramatically, with the midpoint being utilized, the range for the contributing value of water rights could have an equally wide range, i.e. much higher and much lower than the calculated figure based on the midpoint.

However, the conclusion of the Sales Comparison Approach is $87,150,000 for the fair market value of the subject water rights. The less-than-ideal supporting information for this conclusion is recognized. Also, recall that there are no significant commercial agricultural operations in the area of interest, and I found no evidence of any plans to acquire agricultural properties to solve the water challenges of the subject area.

COST APPROACH

Considered to be not relevant, and was not performed.

FINAL RECONCILIATION

Income Approach

The conclusion was $120,560,000. This approach, by far, had the most market data, and information about the water market in general, available and merits exclusive consideration in the final reconciliation.

Sales Comparison Approach

The conclusion was $87,150,000. Far less than ideal data was available for input into this approach, with the results being more of a “ball park” estimate, not meriting any consideration in the final reconciliation.

Cost Approach

Not relevant.

Final Value Conclusion

I reconcile to the Fair Market Value of the subject water rights that can yield up to 4,150 acre feet of water per year, as of December 26, 2022, to be:

$120,560,000
(One Hundred Twenty Million Five Hundred Sixty Thousand Dollars)

There is an Extraordinary Assumption employed in this appraisal that, if found to be false, could impact the value conclusion. The subject water rights are currently part of a complete package of property rights, infrastructure and expertise that comprise a water utility. The assumption is that the water rights are available for sale or lease on a stand-alone basis.

ADDENDA

APPRAISER'S QUALIFICATIONS and LICENSE

Business, Consumer Services & Housing Agency

BUREAU OF REAL ESTATE APPRAISERS

REAL ESTATE APPRAISER LICENSE

Steven J. Herzog

has successfully met the requirements for a license as a residential and commercial real estate appraiser in the State of California and is, therefore, entitled to use the title:

"Certified General Real Estate Appraiser"

This license has been issued in accordance with the provisions of the Real Estate Appraisers' Licensing and Certification Law.

BREA APPRAISER IDENTIFICATION NUMBER: AG 002359

Effective Date: December 22, 2021
Date Expires: December 21, 2023

Loretta Dillon

Loretta Dillon, Deputy Bureau Chief, BREA

3060327

Steven J. Herzog, MAI, AI-GRS, RPF - Qualifications

College Education:

OREGON STATE UNIVERSITY, Master of Science Degree-Forestry, Minor in Statistics (1984)
NORTHERN ARIZONA UNIVERSITY, Bachelor of Science Degree-Forestry (1974)

Designations and Licenses:

- Appraisal Institute (MAI designation -1994, and AI-GRS designation - 2014)
- Certified General Real Estate Appraiser in California
- California Registered Professional Forester (RPF - 1991)

Professional Development Programs:

- Valuation of Conservation Easements – Program's curriculum completed and examination passed
- Litigation - Program's curriculum completed and examinations passed

Publications:

- "The Appraisal of Water Rights," *Appraisal Institute*, August 2012
- "The Lake Tahoe Basin: Appraising in a Heavily Regulated Market," *Appraisal Journal,* Summer 2008
- "The Appraisal of Water Rights: Valuation Methodology," *Appraisal Journal,* Spring 2008
- "The Appraisal of Water Rights: Their Nature and Transferability," *Appraisal Journal*, Winter 2008
- "Guidelines for the Appraisal of Water Rights in California," USFWS, CH2M Hill, September 2006
- "Wind Energy: Power and Policy," *Appraisal Journal*, January 1999
- "California Water: The New Gold," *Appraisal Journal*, April 1996

Instructor: Have instructed on water rights and timberland valuation techniques at federal agency workshops, assessors seminars, appraiser seminars, and DOI Appraisal All Hands Meeting. Valuation panelist at the U.S. Court of Federal Claims, 18th Judicial Conference. Panelist at Water Rights Symposium sponsored by The Centre for Advanced Property Economics. Water rights instructor at annual conferences of the Northern California Chapter and the Sacramento-Sierra Chapter of the Appraisal Institute, and at two National Business Institute seminars on Agricultural water law offered for CLE credit.

Appraisals: Timberland, water rights, conservation easements, riparian lands, wind energy sites, landfills, ranches, office buildings, industrial properties, apartments, retail properties, vacant land (commercial, residential, agricultural, and transitional), food processing plants, and residential properties. Testified as an expert witness in Federal and Superior Courts, as well as in binding arbitration. As a private appraiser, I performed appraisal assignments for the National Park Service, Bureau of Land Management, Forest Service, Fish & Wildlife Service, Reclamation, and the Army Corps of Engineers. I have also completed assignments for the U.S. Department of Justice.

Awards:

- DOI - NBC Director's Choice Award (Crystal Buffalo) – October 2008
- NBC Star Award for Excellence, February 2009, Nominated for Employee of the Year in NBC, technical category
- Annual performance awards (financial) each year at DOI
- Annual performance awards (financial or time off) each year at USACE
- USACE NWD Commander's Award for Civilian Service – June 2015

Experience:

6/2015 to Present: **SOLE PROPRIETOR** of appraisal firm operating under my name, specializing in natural resource and complex valuations. Wide service region.

12/2010 to 6/2015: **REVIEW APPRAISER, NORTHWESTERN DIVISION - U.S. ARMY CORPS OF ENGINEERS – PORTLAND, OR,** Support and advise District Appraisers, Realty Specialists and Planners on appraisal and other real estate matters. Service region included Pacific NW, Midwest, Alaska, Hawaii and other Pacific Ocean locations.

7/2007 to 12/2010: **REVIEW APPRAISER, OFFICE OF VALUATION SERVICES – DOI, PORTLAND, OR,** Contracting for appraisal services and review of appraisal reports, Pacific NW and Alaska region.

1/1998 to 7/2007: **THE HERZOG GROUP, INC., MODESTO, CA,** President and Natural Resource Valuation Specialist. Service region was primarily Western US

2/1990 to 12/1997: **ROBERT FORD & ASSOC., INC., MODESTO, CA,** Senior Appraiser – Natural Resource Valuation Specialist

3/1987 to 2/1990: **SMITH-DENTON, STAFF FEE APPRAISER** of Commercial and Residential Properties throughout the East Bay Area, CA

1986 to 1987: **OREGON STATE UNIVERSITY RESEARCH FOREST, CORVALLIS, OR** School Forest Database Manager

Prior to 1986: **VARIOUS JOBS, MILITARY AND EDUCATION** Forest Service - primarily forest inventory and fire suppression. Construction industry jobs. U.S. Army (1970-1971) Honorable discharge, Vietnam veteran. Student pursuing Bachelors and Masters Degrees.

Appraisal Classes and Seminars

Unless indicated otherwise, all of the following were taken from the Appraisal Institute or its predecessor, the American Institute of Real Estate Appraisers. List is not comprehensive.

• Review Theory - General • Appraising the Appraisal: Appraisal Review-General • Appraisal Review - General	• The Appraiser as an Expert Witness: Preparation and Testimony • Condemnation Appraising: Principles & Applications • Litigation Appraising: Specialized Topics and Applications
• Oregon Water Law (2 days) (The Seminar Group)	
• Uniform Appraisal Standards for Federal Land Acquisitions (2016) (taken in May 2017) • Federal Land Exchanges	• Valuation of Conservation Easements • Problems in the Valuation of Partial Acquisitions (IRWA)
• Forest Appraisal (Duke University extension)	• 15 Hour USPAP Course
• Valuation of Detrimental Conditions in Real Estate	• USPAP 7 Hour Update (numerous)
• Analyzing Distressed Real Estate	• Business Practices and Ethics
• Appraisal Consulting: A Solutions Approach for Professionals	• Art/Science of Real Estate Feasibility Analysis
• Rates and Ratios: Making Sense of GIMs, OARs, and DCF	• Appraisal Curriculum Overview (2-day General)
• Public Interest Value vs. Market Value	• Subdivision Valuation
• Report Writing & Valuation Analysis	• Case Studies in Real Estate Valuation
• Real Estate Appraisal Principles	• Federal & State Laws and Regulations
• Basic Valuation Procedures	• Standards of Professional Practice, A & B
• Residential Valuation	• Capitalization Theory & Techniques, A & B