THE REGIONAL URBAN RECYCLED WATER PROJECT

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General: The Regional Urban Recycled Water Project Report will serve the Marina, Fort Ord, Seaside, Del Rey Oaks, and Monterey areas. The proposed project would be constructed in two Phases, with Phase I delivering approximately 1,700 acre-feet-per-year, and Phase II delivering a combined total of approximately 3,100 acre-feet-per-year. The estimated cost to construct Phase I is \$19.0 million. The estimated cost to construct Phase II ranges between \$10.2 million and \$12.3 million, depending on whether ASR or surface storage is used. It is estimated that Phase I could be complete in 2007, and Phase II in 2009. Amendment No. 3 to the MRWPCA-MCWRA Agreement governing the SVRP provides sufficient recycled water entitlements to MRWPCA to meet the Phase I and Phase II projected demands, plus an additional amount for other future projects.

Facilities: Operational Storage will be provided by an earthen reservoir at the Salinas Valley Reclamation Plant (SVRP) and a storage tank near the Blackhorse golf course. These will enable peak irrigation demands to be met with less peak pumping capacity than would be the case without such storage. Seasonal storage refers to the storage of recycled water produced during the low-demand winter months, so additional water can be made available during the high-demand summer months. No seasonal storage will be needed to serve the Phase I demands. However, seasonal storage will be a necessary component of the Phase II project. Options available for seasonal storage were identified as Aquifer Storage and Recovery and a surface storage reservoir at Armstrong Ranch.

There will be two pump stations within the distribution system to provide adequate operating pressure throughout the distribution system. One will be located at the SVRP and one near Lightfighter Road.

The distribution system was sized based on a conservation irrigation demand scenario. This was developed by taking into account adjustments to existing application and water management efficiencies that could reasonably be achieved by using improved management and water conservation practices.

Pipeline alignments were selected to maximize the use of existing public rights-of-way for pipeline construction and maintenance activities, minimize the need to acquire new rights-of-way in order to cross private and CSUMB lands, comply with State requirements for separation between potable water pipelines and recycled water pipelines, and to be consistent with FORA roadway and utility system development plans throughout the former Fort Ord.

<u>Construction</u>: It is proposed that the recycled water project be constructed in at least two phases, so that water demands will match the available supply, and also to keep the costs of recycled water in a competitive range compared with other water supplies. Phase I is projected to be complete in 2007, and would provide service to the largest existing customers, as well as other developments that are expected to be complete by 2007. Phase II could be complete by 2009. However, the construction schedule would be tied to the readiness of the Phase II users

The potential customers of Phases I and II are listed in the attached Table.

Financing: It is estimated that the unit cost of recycled water can be reduced by approximately \$30/AF for every million dollars of capital cost reduction achieved from capital cost contributions. Therefore, funding assistance from grants or other sources should be actively pursued. Other sources of capital contributions could include developer contributions, connection fees, and FORA development fees. The project should seek a construction loan from the State Revolving Fund (SRF) for the remaining capital costs.

RURWDP DEMAND ESTIMATES BY NODE

(PHASE I SITES)

Site	13 11 12 Location	Customer	H Tusta and Supply of Use	Area	Existing Demand	Conservation Irrigation
No.	1 ocauon 2 berra 1 ocauon			(acre)	(AFY)	(AFY)
1A	FO (Marina)	Marina Golf Course	golf course	100.0	250	250
1B	FO (Marina)	UC MBEST Center	landscape	26.3	84	50
4	FO (Marina)	Marina Heights / Abrams Park	landscape/park	30.0	96	57
5	FO (Marina)	Preston Park Housing Area	landscape	5.0	16	10
8	FO (Marina)	Preston Park	play field	5.0	30	13
42	FO (MoCo/Seaside)	Veterans Cemetery	cemetery	45.0	68	41
43	FO (MoCo)	MPC Training Center	landscape	10	32	19
50	FO (CSUMB)	CSUMB - East Campus	play field	40.0	236	100
75	FO (Seaside)	Bayonet/Blackhorse Golf Course	golf course	210.0	525	525
76	FO (MoCo/Seaside)	First Tee Golf Course	golf course	40.0	100	100
90	FO (DRO)	Del Rey Oaks Golf Course	golf course	105.0	263	263
91	FO (DRO)	Del Rey Oaks Convention Hotel	landscape	30.0	96	5.7
133	Monterey	Jack's Park	landscape	3.7	12	7 .
134	Monterey	San Carlos Catholic Cemetery	landscape	10.0	32	19
135	Monterey	Recreation Trail	landscape	4.0	13	8
136	Monterey	Monterey Bay Park	landscape	12.0	38	23
150	МоСо	Del Monte Golf Course	golf course	75.0	188	188
PHASE I TOTAL					2,077	1,727

TABLE 2: RURWDP DEMAND ESTIMATES BY NODE

(PHASE II SITES)

Site				Area	Existing Demand	Conservation Irrigation
No.	Location .	Customer	Use	(aere)	(AFY)	(AFY)
6	FO (Marina)	Future High School	play field	16.0	94	40
7	FO (Marina)	Future Elementary School	play field	5.0	30	13
9	FO (Marina)	Cypress Knolls	landscape	5.0	16	10
10	FO (Marina)	California Extension Median Landscape	landscape	1.0	3	2
11	FO (Marina)	12th Street Median Landscape	landscape	2.0	6	4
12	FO (Marina)	West & North University Village	landscape/park	25.0	80	48
13	FO (Marina)	Patton School	play field	4.0	24	- 10
20	Marina (Armstrong)	New Middle School	play field	7.0	41	18
21	Marina (Armstrong)	New Elementary School	play field	5.0	30	13
22	Marina	Crumpton School	play field	4.7	28	12
23	Marina	Marina Vista School	play field	4.0	24	10
24	Marina	Los Arboles Sports Fields	play field	5.1	30	13
25	Marina	Los Arboles School	play field	4.2	25	11
26	Marina	Del Mar School	play field	2.9	17	. 7
27	Marina	Locke Paddon Park/Pond	landscape	7.6	24	14
28	Marina	City Park	landscape	5.5	18	10
29	Marina	Marina Landing Shopping	landscape	2.5	8	5
30	Marina	Tate Park	play field/landscape	2.5	15	6
31	Marina	Del Monte Blvd. Medians	landscape	1.5	5	3
32	Marina	Reservation Road Medians	landscape	1.6	5	3
33	Marina	Olson School	play field	2.8	17	7
34	Marina	Monterey Bay Estates Park	landscape/playfield	1.7	10	4
35	Marina	Marina Dunes Development	landscape	21.0	67	40
40	FO (MoCo)	East Garrison Housing	landscape	40.0	128	76
41	FO (MoCo)	Monterey Horse Park	landscape	40	128	. 76
44	FO (MoCo)	UCMBEST East	landscape/playfield*	25	148	63
45	FO (MoCo)	Upgrade Youth Camp	play field	11	65	28
51	FO (CSUMB)	CSUMB - Main Campus	play field	10.0	59	25
52	FO (CSUMB)	CSUMB - Main Campus	play field	70.0	413	175
53	FO (CSUMB)	CSUMB - Other	landscape	20.0	64	38
PHASE II SITES (CONTINUED)						
Site No.		Customer 1	Use 1	V 071 S 0 2 4 7 10 10 10 10 10 10 10 10 10 10 10 10 10	Existing Demand	Conservation Trrigation

	7,000,000		127212		(AFY)	(AFY)
60	FO (State Parks)	Fort Ord State Park Wetlands	landscape	2.5	8	5
65	FO (Army)	Future Parks	landscape	20.0	64	38
70	FO (Seaside)	Parkway/Visitor/Retail Areas	landscape	28.0	90	53
71	FO (Seaside)	Shea's Gym Athletic Field	play field/landscape	3.0	18	8
72	FO (Seaside)	Stilwell Housing Area	landscape	25.0	80	48
73	FO (Seaside)	Stilwell School	play field	2.0	12	5
74	FO (Seaside)	Marshall School	play field	2.0	12	5
77	FO (Seaside)	Fitch School	play field	4.0	24	10
78	FO (Seaside)	Hayes School	play field	2.0	12	5
79	FO (Seaside)	Hayes Housing	landscape	30.0	96	57
80	Seaside	Seaside High School	play field	12.0	71	30
81	FO (Seaside)	Upgrade Soper Field	play field	3.0	18	8
82	FO (Seaside)	Chartwell School	play field	2.0	12	5
92	FO (DRO)	Proposed Hotel	landscape	2.0	6	4
100	Seaside	Mission Memorial Cemetery	cemetery	12.0	54	32
101	Seaside	Ord Terrace School	play field	2.0	12	5
102	Seaside	Havana Soliz Park	park area	0.5	2	1
103	Seaside	Cunningham Park	park area	1.0	4	2
104	Seaside	Manzanita School	play field	1.5	9	. 4
105	Seaside	Martin Luther King School	play field	1.5	9	4
106	Seaside	Portola Leslie Park	park area	1.0	4	2
107	Seaside	Mescal Neil Park	park area	0.5	2	1
108	Seaside	Housing Area & Misc. Parks	park area	3.0	12	7
109	Seaside	Highland School	play field	1.0	6	3
110	Seaside	Del Rey Woods School	play field	2.0	12	5
111	Seaside	Laguna Grande Park (Seaside Portion)	park area	3.0	12	7
120	Sand City	Granite Rock Concrete	industrial		7	7
130	Monterey	Laguna Grande Park (Monterey Portion)	park area	1.5	6	4
131	Monterey	Monterey County Fairgrounds	landscape	3.0	10	6
132	Monterey	MPC - Main Campus	landscape	15.0	48	29
137	Monterey	Ryan Ranch Park	landscape	60.0	192	114
PHASE II TOTAL					2675	1373
PHASE I &II TOTAL (AFY)					4752	3100