

ITEM: CONSENT CALENDAR

6. CONSIDER EXPENDITURE FOR ASSISTANCE WITH COLLECTION OF STREAMFLOW MEASUREMENTS TO SUPPORT DEVELOPMENT OF AN INSTREAM FLOW MODEL FOR THE CARMEL RIVER

Meeting Date:	March 21, 2016	Budgeted:	Yes, partial
From:	David J. Stoldt General Manager	Program/ Line Item No.:	Augment Water Supply 1-8-1
		Account No.	35-03-7860.19
Prepared By:	Larry Hampson	Cost Estimate:	\$70,000

General Counsel Review: N/A

Committee Recommendation: The Administrative Committee reviewed this item on March 14, 2016 and recommended approval.

CEQA Compliance: N/A

SUMMARY: Staff proposes an amendment to an existing agreement for services with Normandeau Environmental Consultants (Normandeau) and to contract with Balance Hydrologics, Inc. (Balance) for assistance to measure streamflows in the Carmel River this winter and spring. The measurements are required in order to develop a hydraulic model for use with the Instream Flow Incremental Methodology (IFIM) study to address water rights issues and steelhead habitat management in the Carmel River. Normandeau and Balance would provide assistance to District crews to obtain more than 220 measurements at 74 different locations in about a two-week period.

RECOMMENDATION: Staff recommends approval of the expenditure of up to \$70,000 for additional assistance with developing an IFIM to revise instream flow requirements for the Carmel River. If this item is adopted with the Consent Calendar, the General Manager would be authorized to amend an agreement for services with Normandeau Environmental Services and increase that agreement from a not-to-exceed (NTE) amount of \$100,000 to a NTE of up to \$132,500. The General Manager would also be authorized to enter into an agreement for services with Balance Hydrologics, Inc. for a NTE of up to \$37,500.

IMPACTS TO STAFF/RESOURCES: \$100,000 in funds for this work are identified in the mid-year FY 2015-16 Budget, Program Line Item 1-8-1, Other Water Supply Projects – IFIM feasibility studies. However, approximately \$42,000 in project funds approved in FY 2014-15 for other field work were carried over in FY 2015-16, due to a lack of steelhead in the river in 2015. Therefore, a total of approximately \$112,000 would be needed to complete all authorized tasks in the current fiscal year.

BACKGROUND: The Board initially approved an expenditure of up to \$50,000 for IFIM assistance at their June 17, 2013 meeting. At their March 16, 2015 meeting, the Board authorized an additional \$50,000 to conduct tests to apply Habitat Suitability Index curves from the Big Sur

River to the Carmel River. This latter work was not possible to complete in 2015 due to a lack of spawning adults in the system in the past few years, which has resulted in low densities of young fish in the river¹.

The estimated costs for flow measurements by crews of two each from Normandeau and Balance include travel time, equipment rental, data acquisition, and quality control. There are three specific flow ranges required for the one-dimensional portion of the hydraulic model that includes high (up to about 120 cubic feet per second or cfs), medium (60-80 cfs) and low flow (10 cfs) measurements. The high flow range normally occurs for only short periods, necessitating several crews at once in order to gather the data. The medium and low flow measurements occur much more frequently and as staff time allows, MPWMD crews may obtain these flow measurements.

IFIM is an accepted scientific approach to quantifying the effects to aquatic habitat from water diversions at various levels of instream flows. Results from this work will provide the basis for evaluating water supply options from the Carmel River and revising existing instream flow requirements necessary to protect steelhead and their habitat in the Carmel River. The District, NMFS, CDFW, and California American Water (Cal-Am) are interested in updating these instream flow requirements in order to best manage steelhead populations in the Carmel River.

EXHIBIT

None

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¹ HSC are an important component of instream flow modeling and are a description of the relative quality of aquatic habitat components, such as water depth, water velocity, substrate type, and instream or overhead cover, on a scale of 0 (not-suitable) to 1 (optimal), to the species of interest (Carmel River steelhead). Developing HSC for a stream can be labor intensive. Thus, using HSC from another stream can save time and cost in the development of an instream flow model. However, sitings of young fish in the Carmel River are required to test HSC curves. Due to the lack of adult returns over the past three winter, the density of young fish in the river has not been high enough to collect field data.