

**STATE WATER RESOURCES CONTROL BOARD
BOARD MEETING SESSION – DIVISION OF WATER RIGHTS
MARCH 21, 2017**

ITEM 3

SUBJECT

CONSIDERATION OF A PROPOSED RESOLUTION AUTHORIZING THE EXECUTIVE DIRECTOR OR DESIGNEE TO ENTER INTO A CONTRACT WITH STOCKHOLM ENVIRONMENT INSTITUTE TO PROVIDE SERVICES TO THE STATE WATER RESOURCES CONTROL BOARD RELATED TO THE DEVELOPMENT OF WATER EVALUATION AND PLANNING SYSTEM MODELS TO EVALUATE INSTREAM FLOWS FOR STREAMS THROUGHOUT CALIFORNIA

DISCUSSION

The State Water Resources Control Board's (State Water Board) mission is to preserve, enhance and restore the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses, and to ensure proper water resource allocation and efficient use, for the benefit of present and future generations. In furtherance of this mission, the State Water Board exercises authority over all of California's waters, including both surface water and groundwater.

The State Water Board is working on multiple efforts to protect public trust resources, often focused on threatened and endangered fish species throughout California. Examples of such efforts include the following: adoption and implementation of the [Policy for Maintaining Instream Flows in Northern California Coastal Streams](#) (effective February 4, 2014); adoption and implementation of the [Russian River Frost Protection Regulations](#) (effective March 15, 2015); work to enhance flow in five streams statewide under Action 4 of the [California Water Action Plan](#) (January 22, 2014); [development of principles and guidelines for cannabis cultivation](#) to ensure effects of water diversion and discharge associated with cannabis cultivation do not affect natural flow variability and instream flows needed for fish; and updates to the 2006 [Bay-Delta Plan](#)¹. As part of these efforts, the State Water Board is considering how any additional instream flows necessary to protect public trust resources may impact other beneficial uses of water (e.g., domestic use and irrigation).

The State Water Board is developing models and associated tools to support its instream flow related work. For example, as part of the Bay-Delta Plan update, the State Water Board has developed the [Sacramento Water Allocation Model](#) (SacWAM). SacWAM is a hydrologic and system operations model developed by the Stockholm Environment Institute and State Water Board to assess potential revisions to instream flow and other requirements in the Bay-Delta Watershed. SacWAM was developed using the Water Evaluation and Planning (WEAP) software platform, and is intended to be user-friendly and useable for efficient comparison of multiple scenarios. Stream flows estimated by SacWAM may be used to inform various types of analyses as part of the State Water Board's assessment of potential alternative regulatory requirements. SacWAM is used in a comparative manner in which a model scenario is compared to a model base condition and the difference in model outputs is used to assess potential impacts of proposed regulatory actions.

¹ *Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary.*

The State Water Board plans to use the WEAP software platform for other instream flow related efforts, including working with the California Department of Fish and Wildlife under Action 4 (Protect and Restore Important Ecosystems) of the California Water Action Plan to [enhance flows in five streams systems statewide](#) (Mark West Creek, Mill Creek in Tehama County, Shasta River, South Fork Eel River, and Ventura River) that support critical habitat for anadromous fish. These WEAP models will assist the State Water Board in determining water availability and water demand in priority watersheds throughout the state, and evaluating potential water supply effects from alternative management and climate change scenarios. This will allow the State Water Board to make more informed water management decisions as it works to protect public trust resources, while also maximizing and reasonably protecting all designated beneficial uses of water.

Per [Resolution No. 2015-0022](#), the Executive Director is authorized to execute contracts and amendments with public and private entities that individually involve no more than \$750,000 or three years duration. This item will authorize the Executive Director or designee to enter into a contract for up to \$2 million and for up to five (5) years with the Stockholm Environment Institute to provide technical assistance to the State Water Board in the development and application of hydrologic, water allocation, and water right models for streams throughout California. This contract will support various State Water Board efforts related to instream flows and is integral to the California Water Action Plan.

POLICY ISSUE

Should the State Water Board authorize the Executive Director or designee to enter into a contract for up to \$2 million and for up to five (5) years with the Stockholm Environment Institute to provide technical assistance to the State Water Board in the development and application of hydrologic, water allocation, and water right models for streams throughout California.

FISCAL IMPACT

This activity is budgeted with existing resources, and no additional fiscal demands will occur as a result of approving this item.

REGIONAL BOARD IMPACT

This contract will support instream flow related efforts throughout California, including existing efforts in the area covered by the Central Valley, Los Angeles, and North Coast Regional Water Quality Control Boards.

STAFF RECOMMENDATION

Staff recommends the State Water Board adopt the proposed Resolution.

State Water Board action on this item will assist the Water Boards in reaching Goals 3 and 4 of the Strategic Plan Update: 2008-2012 to increase sustainable local water supplies for meeting existing and future beneficial uses and ensure adequate flows for fish and wildlife habitat (Goal 3); and comprehensively address water quality, and describe the connections between water quality, water quantity, and climate change, throughout California's water planning processes (Goal 4). In particular, approval of this item will assist in fulfilling Objective 3.3 to ensure that adequate stream flows are available for the protection of fish and wildlife habitat while maintaining the need for diversions of water for other uses.

DRAFT

STATE WATER RESOURCES CONTROL BOARD RESOLUTION NO. 2017-

AUTHORIZING THE EXECUTIVE DIRECTOR OR DESIGNEE TO ENTER INTO A CONTRACT WITH STOCKHOLM ENVIRONMENT INSTITUTE TO PROVIDE SERVICES TO THE STATE WATER RESOURCES CONTROL BOARD RELATED TO THE DEVELOPMENT OF WATER EVALUATION AND PLANNING SYSTEM MODELS TO EVALUATE INSTREAM FLOWS FOR STREAMS THROUGHOUT CALIFORNIA

WHEREAS:

1. The State Water Resources Control Board's (State Water Board) mission is to preserve, enhance and restore the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses, and to ensure proper water resource allocation and efficient use, for the benefit of present and future generations. In furtherance of this mission, the State Water Board exercises authority over all California's waters, including both surface water and groundwater. The State Water Board is also responsible for the protection of resources, such as fisheries, wildlife, aesthetics, and navigation, which are held in trust for the public;
2. The State Water Board is working on multiple efforts to protect public trust resources, often focused on threatened and endangered fish species throughout California. Examples of such efforts include the following: adoption and implementation of the [Policy for Maintaining Instream Flows in Northern California Coastal Streams](#) (effective February 4, 2014); adoption and implementation of the [Russian River Frost Protection Regulations](#) (effective March 15, 2015); work to enhance flow in five streams statewide under Action 4 of the [California Water Action Plan](#) (January 22, 2014); [development of principles and guidelines for cannabis cultivation](#) to ensure effects of water diversion and discharge associated with cannabis cultivation do not affect natural flow variability and instream flows needed for fish; and updates to the 2006 [Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary](#);
3. As part of these efforts, the State Water Board is considering how any additional instream flows necessary to protect public trust resources may impact other beneficial uses of water (e.g., domestic use and irrigation). The State Water Board intends to contract with Stockholm Environment Institute to use the Water Evaluation and Planning (WEAP) software platform for its instream flow related efforts, including work under Action 4 of the California Water Action Plan to [enhance flow in five streams statewide](#) that support critical habitat for anadromous fish. Stockholm Environment Institute is the non-profit organization that created the WEAP model. The contract will focus on the development of WEAP models for priority watersheds throughout the state; and
4. Delegation of this authority to the Executive Director or designee will allow the Executive Director or designee to enter into a contract with Stockholm Environment Institute for technical assistance to the State Water Board in the development and application of hydrologic, water allocation, and water right models for streams throughout California.

D R A F T

THEREFORE BE IT RESOLVED THAT:

The State Water Board authorizes the Executive Director or designee to execute a contract and authorize expenditures of up to \$2 million for contract services with the Stockholm Environment Institute, for a term of up to five (5) years for technical assistance in the development and application of hydrologic, water allocation, and water right models for streams throughout California.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on March 21, 2017.

Jeanine Townsend
Clerk to the Board