STATE WATER RESOURCES CONTROL BOARD
BOARD MEETING SESSION – DIVISION OF FINANCIAL ASSISTANCE
JANUARY 10, 2012

ITEM 5

SUBJECT

CONSIDERATION OF A RESOLUTION TO COMMIT $305,090 FROM PROPOSITION 50 COASTAL NONPOINT SOURCE POLLUTION CONTROL GRANT FUNDS FOR A PREDICTIVE BEACH WATER QUALITY MODELING PROJECT (PROJECT)

DISCUSSION

The Coastal Nonpoint Source Pollution (Coastal NPS) Control Grant Program *(Proposition 50, Chapter 5, Section 79543)* provides funding for projects that restore and protect the water quality and the environment of coastal waters, estuaries, bays, near shore waters, and groundwater. The State Water Resources Control Board (State Water Board) is authorized to administer these funds, and has remaining funds available.

Current fecal indicator bacteria measurement technologies require approximately one day of incubation before results can be obtained, seriously reducing the efficacy of beach advisories and closures. Two approaches for overcoming this problem are to use either rapid detection technologies or predictive models. The United States Environmental Protection Agency (U.S. EPA) has endorsed the use of predictive models for public health protection. The proposed Project will develop and test predictive models of water quality at California marine beaches. The Project will use data on fecal indicator bacteria concentrations, and oceanic and atmospheric conditions (i.e. tides, waves, water temperature, wind direction, etc.) to develop simple models for 25 different California beaches that predict when beaches are in and out of compliance with water quality standards. The beaches chosen will include those adjacent to storm drains and piers, those that are located on the open (unsheltered) ocean, and enclosed (sheltered) beaches. The models are expected to be transferrable to other beaches with similar oceanic and atmospheric conditions.

The models to be developed will build upon, expand, and customize existing models for use on California beaches. They will be created in partnership with beach managers and will be used to disseminate forecast information on health risks along the shoreline to the general public. Models can provide increased protection relative to methods currently used by providing real-time advisory information to swimmers and others engaging in contact recreation.

Heal the Bay, a non-profit organization, submitted an application for funding this Project through the Proposition 84 Clean Beaches Initiative (CBI) Grant Program in January 2009. The proposed project met the specific CBI program research priority listed in the Guidelines for that Solicitation, to design and test a predictive model for public notification of water quality conditions at California beaches. However, due to a freeze imposed on bond-funded grant projects in December 2008, the grant Solicitation was closed and the application was not reviewed or recommended for approval at that time.

Heal the Bay recently updated its proposed scope of work and budget for the Project in order to request funding the Project from an alternative source of funds. Staff from the State Water Board's Division of Water Quality, Division of Financial Assistance (Division), and the California Coastal Commission have reviewed the information and concurred that the Project has merit.

The total cost of the Project is estimated to be $305,090, and would be funded with Proposition 50 CNPS funds. The 2005-2006 Consolidated Grants Program Guidelines, which included the CNPS program, included a priority for projects to develop and test rapid indicators, with the intent that projects help meet the need for a fast, reliable, accurate, and inexpensive way to test beach water quality. The subsequent Proposition 84 CBI Guidelines included both predictive models, and development of rapid indicators as research priorities. The proposed Project meets the Proposition 84 CBI priorities and is consistent with the Consolidated Grants Program priorities, as it is an alternative that will provide real-time public information using model outputs rather than bacterial data.

POLICY ISSUE

Should the State Water Board:

1. Approve up to $305,090 in Proposition 50 CNPS grant funds for the proposed Predictive Beach Water Quality Modeling Project?
2. Authorize the Deputy Director of the Division to execute the Grant and any Amendments to implement the Project?
3. Authorize the Deputy Director of the Division to withdraw the Grant Award if the applicant is non-responsive?

FISCAL IMPACT

Approximately $2.3 million from Proposition 50 CNPS that is currently available to encumber.

REGIONAL WATER BOARD IMPACT

No. Division staff will manage the Project.

STAFF RECOMMENDATION

The State Water Board should:

1. Approve up to $305,090 in Proposition 50 CNPS grant funds for the proposed Predictive Beach Water Quality Modeling Project;
2. Authorize the Deputy Director of the Division to execute the Grant and any amendments to implement the Project; and
3. Authorize the Deputy Director of the Division to withdraw the Grant Award if the applicant is non-responsive.

State Water Board action on this item will assist the Water Boards in reaching Goal 1 of the Strategic Plan Update: 2008-2012 to implement strategies to fully support the beneficial uses for all 2006 listed water bodies by 2030. Approval of this item will: (1) provide increased health protection for swimmers using the beach, and (2) provide information for bacterial source abatement studies.

D R A F T

STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 2012-

TO COMMIT $305,090 FROM PROPOSITION 50 COASTAL NON-POINT SOURCE GRANT FUNDS FOR A PREDICTIVE BEACH WATER QUALITY MODELING PROJECT (PROJECT)

WHEREAS:

1. The Coastal Nonpoint Source (CNPS) Pollution Control Grant Program *(Proposition 50, Chapter 5)* provides funding for projects that restore and protect the water quality and the environment of coastal waters, estuaries, bays, near shore waters, and groundwater;

2. The State Water Resources Control Board (State Water Board) is authorized to administer the CNPS funds, and there are funds available;

3. A project to develop and test predictive models of water quality at California marine beaches is eligible to receive CNPS funding;

THEREFORE BE IT RESOLVED THAT:

The State Water Board:

1. Approves up to $305,090 in Proposition 50 CNPS grant funds for the proposed Predictive Beach Water Quality Modeling Project;

2. Authorizes the Deputy Director of the Division to execute the Grant and any amendments to implement the Project; and

3. Authorizes the Deputy Director of the Division to withdraw the Grant Award if the applicant is non-responsive.

CERTIFICATION

The undersigned, Clerk to the Board, does hereby certify that the forgoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Board held on January 10, 2012.

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Jeanine Townsend
Clerk to the Board