STATE WATER RESOURCES CONTROL BOARD
BOARD MEETING SESSION - DIVISION OF FINANCIAL ASSISTANCE
MARCH 15, 2011

SUBJECT

THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (U.S. EPA) 2010 PISCES PRESENTATION TO THE CITY OF HERMOSA BEACH FOR THE CONSTRUCTION OF THE HERMOSA STRAND STORM WATER INFILTRATION TRENCH.

BACKGROUND

The Performance and Innovation in the State Revolving Fund Creating Environmental Success (PISCES) Award was created in 2005 to recognize the extraordinary successes of each States' Clean Water State Revolving Fund (CWSRF). Projects financed under the CWSRF support the Clean Water Act by protecting environmental health and water quality. The PISCES Award highlights successfully designed projects that further the goal of clean and safe water with exceptional planning, management, and financing.

U.S. EPA has selected the City of Hermosa Beach's Hermosa Strand Stormwater Infiltration Trench as the 2010 PISCES award winner recognizing the project's potential to protect environmental health and water quality.

DISCUSSION

Most of Santa Monica Bay beaches, including the beaches adjacent to the City of Hermosa Beach, are listed as impaired for human body contact recreation and are included on California's 303(d) list due to excessive amounts of coliform bacteria which are used as indicators for the presence of pathogens. Discharge of dry weather and wet weather flows from storm drains has been associated with increased frequency of exceedances of indicator bacteria standards.

The Hermosa Strand Stormwater Infiltration Trench (Project) is a full-scale pilot Project to evaluate the effectiveness of underground infiltration in an urban beach environment. The Project is sited in a small but intensely developed coastal subdrainage area within the City of Hermosa Beach. The Project includes a structural low-flow diversion to direct dry weather flows from the Pier Avenue storm drain into a pump well, through a large particle filtering unit, then into the underground 1,000 foot-long trench constructed on the beach next to the strand. Three to four feet of native sand below the trench provides filtration and treatment of the urban runoff as it percolates down into the water table below. Additional filtration is provided as the groundwater flows toward the ocean across 300 feet of beach before reaching the beach/ocean interface.

Construction of the Project began in January 2010, and was completed in April 2010. Monitoring will be conducted for a full year. Project effectiveness monitoring includes: influent flow and water quality to the trench, water quality between the trench and shoreline relative to baseline conditions, and groundwater elevation.

Planning and pre-construction phases were funded under the California Proposition 50 Clean Beaches Initiative Program, however, state bond funding was halted following the design phase of the Project. Construction has been completed and monitoring is conducted utilizing $950,850 in Federal American Recovery and Reinvestment Act (ARRA) funding from U.S. EPA through the Clean Water State Revolving Fund.

POLICY ISSUE

None at this time

FISCAL IMPACT

None at this time

ENVIRONMENTAL IMPACT

None at this time

REGIONAL WATER BOARD IMPACT

None at this time

STAFF RECOMMENDATION

None at this time