

# **Developing Local Water Resources Classroom Materials that Align with State Educational Science Standards**

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The Fresno Metropolitan Flood Control District offers 5th grade water resources educational tools that align with the State of California's Earth Sciences standards. The materials were developed in close coordination with 5<sup>th</sup> grade teachers through focus groups, creative development, material review and classroom visits. The objective of this approach is to increase the awareness of 5th grade students about local water resources, while keeping the subject matter within State mandated science standards. The materials cover water resources and water pollution prevention using local water resources and land features to help students make the connection to their own neighborhoods. Each teacher has the opportunity to choose any or all of the following activities or materials.

## **Stormwater DVD**

This engaging five-minute video delivers rapid-fire stormwater pollution prevention facts, and teaches the basics of the local urban drainage system. Students learn about stormwater, where it flows, how it becomes polluted, and how to prevent stormwater pollution.

## **Activity Book**

A 24-page multi-agency water resources activity book was developed with the help of local 5th grade teachers and local water agency partners (NPDES permit co-permittees) and also aligns with 5th grade Earth Sciences standards. Water topics covered include supply, conservation, pollution prevention, wastewater treatment, and wildlife habitat.

## **Water Cycle Poster**

The 36"x48" poster uses local water resources and topography to illustrate the water cycle and provides many water cycle-related definitions.

## **Stormwater Grants**

The District offers two types of Clean Stormwater competitive grants; project grants for up to \$2,000, and educational field trip grants to the San Joaquin River. The project grants help fund projects that protect or enhance water resources, or educate citizens about stormwater quality while the San Joaquin River field trips for 5<sup>th</sup> grade students connect classroom instruction to hands-on activities.

## **Presentations**

The District offers classroom or assembly presentations on water resources and stormwater pollution prevention. The fun and interactive presentations teach water resource topics and leaves the students with a greater knowledge of water resources in their community and the impact they and their families have on water quality.

During 2009/2010 school year over 3,500 students from 25 elementary schools received classroom material, 22 schools visited the river and \$20,000 in project grants was awarded. The District received positive teacher evaluations and is exploring obtaining standardized test scores for the specific science oriented test questions on the 5<sup>th</sup> grade standardized tests to measure the effectiveness of the classroom outreach.