

## **REVISED LOW IMPACT DEVELOPMENT AND GREEN INFRASTRUCTURE IMPLEMENTATION PROGRAM FOR BUTTE COUNTY SCHOOLS (SWRP PROJECT 77)**

### **General Project Information**

This project is a plan to implement Low Impact Development (LID) practices that reduce urban runoff from entering Chico Creeks and ultimately the Sacramento River. The plan will evaluate ways to include LID techniques into present and future landscape design and maintenance standards to assist the Chico Unified School District (CUSD) and Butte County Office of Education (BCOE) schools in meeting existing storm water management goals. In addition, the plan will include a cohesive storm water educational program, targeting after-school programs. Collaborations will be promoted with neighboring School Districts, community organizations, and municipal storm water programs seeking to align storm water protection efforts, share resources, identify cost-saving opportunities, and to develop consistent public messaging and understanding regarding storm water issues and solutions. This project builds on an existing Drought Response Outreach Program (DROPS) grant (Prop. 84).

- **Water Quality:** The water quality in Chico's creeks are declining as a result of urban development and increasing stormwater runoff. Use of LID techniques can reduce pollutants and urban runoff entering major waterways. Opportunities for implementing low impact development techniques at BCOE and CUSD schools will be identified and prioritized. LID techniques that will be evaluated include pervious pavement, infiltration trenches, vegetated buffer strips, bioretention, media filters, constructed wetlands, green streets, *etc.* The plan will also identify opportunities to collaborate with existing watershed protection groups, such as Butte Environmental Council, and The Stream Team to provide education and outreach and to evaluate the efficacy of the projects for improving water quality.
- **Water supply:** The bioswales will be designed to also provide infiltration.
- **Education and Outreach:** The plan will evaluate how project education will be integrated into CUSD/BCOE after-school program curriculum and how to include opportunities for students and their families to participate in projects. Examples of existing programs include the Clean Water Science Ambassadors, Clean Creeks in the Classroom, and the Citizen Monitoring Program. This plan will involve preparing an education and outreach plan and budget that includes: 1) opportunities to collaborate with existing watershed protection groups, such as Butte Environmental Council, Stream Team, Friends of Bidwell Park, *etc.* 2) evaluates and monitors the efficacy of the projects for reducing erosion and improving water quality, and 3) provides public education and outreach events. Some topics for education include residential landscaping to conserve water, dry weather runoff capture, and residential pesticides and fertilizer management.
- **Employment Opportunities:** The plan will evaluate employment opportunities by providing LID and green infrastructure job training and certification workshops utilizing LID demo projects as training tools. In addition, the plan will also evaluate ways to involve the California Conservation Corps to reduce project costs.
- **Watershed and Location:** The Project is located in the Big Chico Creek, Little Chico Creek watershed areas, and includes 25 schools.
- **Watershed Area:** The Big Chico Creek watershed is approximately 134,159 acres and Little Chico Creek watershed is approximately 42,091 acres.

## Benefits Resulting from this Project

- **Water Quality:** Water quality is expected to be improved because LID techniques will reduce stormwater and dry weather runoff and increase water quality. And by raising public awareness of stormwater BMPs
- **Water Supply:** Water supply is expected to be improved because implementing infiltration areas will allow some flows to recharge groundwater.
- **Flood Management:** Flood management is expected to be improved because solutions identified in this plan can help reduce localized flooding problems.
- **Environmental:** The environment is expected to be improved because implementing this plan will help manage sediment and erosion and will improve receiving waters.
- **Community:** The community is expected to be improved because this plan will incorporate outreach events and education signage within school districts and classrooms.

## Project Costs

- **Estimated Plan Preparation Cost:** The estimated cost of preparing this plan is to be determined (TBD). This cost does not include the costs of designing and constructing the improvements that will be identified in the plan. project

## Photographs



**Photograph 1: McManus Elementary .**



**Photograph 2: Chapman Elementary School.**

## Initial Projects Included

No other initial projects were included in this plan.