

TEICHERT PONDS IMPROVEMENT PROJECT (SWRP PROJECT Q)

General Project Information:

This project is a plan to improve Teichert Ponds (Photograph 1). The Teichert Ponds (Ponds) currently function as detention basins for a watershed that includes high density residential, commercial, and some open space. In addition to providing storm drainage detention, the Ponds provide habitat for local water fowl and other aquatic species, and provide recreational uses such as fishing and nature viewing. A restoration project for the Ponds was developed in 2008, and the habitat restoration plan set is linked [here](#). The restoration sheet from the plan set is provided at the end of this project description. Project elements from this restoration plan could be updated and incorporated into this project. A mitigated Negative Declaration and Initial Study was prepared for the Restoration Plan in 2009. Improving the Ponds will involve many aspects, all of which will need to be evaluated further in a revised restoration plan before construction can occur. The goal of the revised plan will be to improve water quality, ecosystem health, and maintenance activities. The revised plan will evaluate the following:



Photograph 1. Teichert Ponds

- **Operations and Maintenance:** The plan will evaluate improvements to the operations and maintenance of the Ponds to help improve both the pond hydraulics and water quality. A study of the Ponds' existing operations and maintenance issues will be evaluated, factors that affect water quality will be identified, and solutions recommended.
 - The plan will evaluate various efforts to improve water quality, including a study to assess water quality entering and leaving the ponds to identify potential issues, sources, and solutions for water quality impairments; installing a settling basin (possibly by modifying the existing concrete inlet channel) and/or a constructed wetlands that help reduce sedimentation, trash, and other pollutants in the ponds; re-routing smaller storm drains so they don't discharge directly into Pond 1, identifying pollutants in silt and removing silt buildup in the ponds; separating Pond 1 from Ponds 2 and 3; modifying Ponds 2 and 3 so that Pond 2 and 3 can be periodically drained and cleaned; and developing a plan in conjunction with Butte County Mosquito and Vector Control District to reduce the need for pesticide mosquito control.
 - The plan will evaluate maintenance improvement options, including reconstruction of the existing outlet to provide greater hydraulic control and reduce the desirability for beavers to build dams that block pond outflow, installation of new outlets, reduction of flooding on the access road to facilitate maintenance, removal of chain link fencing around Pond 1 to improve access for vegetation control and trash removal, and preparation of an operations and maintenance plan.
 - The plan will evaluate the effectiveness and feasibility of source reduction for trash and pollutants, including locations in the Teichert Ponds watershed where low impact development (LID) could be installed to help improve water quality and reduce runoff.
 - The plan will include an ecological and biological assessment to evaluate ecosystem health.
- **Trash:** The plan will identify ways to reduce trash (both floating and sinking trash) entering and leaving the Ponds, such as trash racks on the pond inlets or outlet. A trash reduction campaign will also be evaluated for reducing trash entering the ponds, such as an increase in trash receptacles, increase in street sweeping, installation of trash capture devices in upstream drain inlets, and ways to

limit illegal camping in the pond areas. This program will include education/outreach to citizens. It will include coordination with Caltrans, the upstream commercial areas, and organizations that already perform trash cleanups (such as Butte Environmental Council).

- **Habitat:** The plan will identify ways to improve the existing wildlife and riparian habitat at the Ponds. The Pond and habitat health could be monitored by citizen organizations, including water quality testing. Habitat will also be considered in the development of solutions that are needed to improve water quality and maintenance.
- **Vegetation Management:** The plan will identify invasive aquatic and terrestrial plants and various solutions for treating invasive species; including use of herbicides where necessary, professional removal services, and a program to coordinate City efforts with interested community organizations to remove invasive plants and plant native species.
- **Public Access, Education, and Recreation:** The Ponds will provide education opportunities, including school field trips and walking paths with educational signage. The plan will evaluate how to limit illegal camping and illegal dumping in the area, identify where walking paths, education, signage, and picnic areas could be constructed and incorporated into the Chico Bike Path. It will identify community groups to lead volunteer educational/outreach efforts. 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. Green jobs training could be evaluated for implementation of construction projects and vegetation management.
- **Project Effectiveness Monitoring:** The plan will also evaluate methods to monitor program effectiveness. Ideas for collaboration with existing monitoring programs and ways to provide public storm water education and outreach will be included.
- **Watershed and Location:** This project includes the entire Teichert Ponds Watershed (approximately 400 acres).



Benefits Resulting from this Project

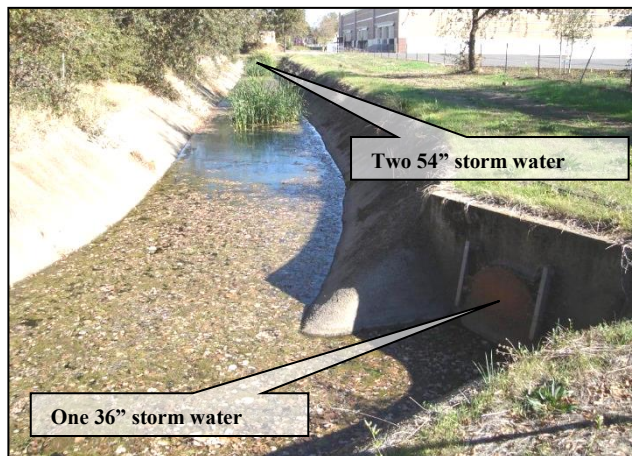
This project includes the preparation of the Teichert Ponds Improvement Plan. When the Teichert Ponds Improvement Plan is fully implemented, the following benefits are expected to occur:

- **Water Quality:** Water Quality is expected to be improved because solutions will be implemented that reduce the amount of trash and pollutants entering and leaving the ponds.
- **Water Supply:** Water Supply is not expected to change.
- **Flood Management:** Flood Management is expected to be improved because the operations of the pond will be improved.
- **Environmental:** The Environment is expected to be improved because habitat and vegetation management will be improved.
- **Community:** The Community is expected to be improved because education and outreach opportunities will be provided to schools and recreational opportunities will be enhanced.

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.

Photos



The concrete-lined storm water ditch located on the south side of Pond 2 conveys storm water from the surrounding community into Pond 2.



Parrot's feather, a highly problematic weed that can prohibit the free movement of water, is shown here covering a large area of Pond 2.

Initial Projects Included

This project includes the following initial projects in whole or in part:

- SWRP 2 - Teichert Ponds Improvement Project
- SWRP 13 - Teichert Ponds Retention Basins
- SWRP 14 - Teichert Ponds Vegetation, Trash, and Public Access
- SWRP 42 - Teichert Ponds Improvement
- SWRP 61 - Teichert Ponds Project
- SWRP 67 - Teichert Ponds Cleansing Wetland
- SWRP 83 - Teichert Pond Water Quality Improvement Project
- SWRP C - Teichert Ponds
- SWRP E - Homeless Camping Reduction Program

