
Laguna Creek Watershed Council Work Plan May 2009 – May 2011

The Laguna Creek Watershed Council (LCWC) completed its Management Action Plan (LC WMAP) in May, 2009. This Work Plan reflects a review of all potential projects and activities contained within the WMAP. The projects were divided into 4 major categories: *Policies and Practices* (27 projects), *Stewardship Efforts* (5 projects), *Restoration or Implementation Projects* (8 projects), and *Visioning Efforts* (6 projects). The Board of Directors spent 6 months reviewing the projects with the over-arching goal of implementing the mission of the watershed council: to protect and restore the many benefits Laguna Creek and neighboring waterways provide, including flood attenuation, fish and wildlife habitat, recreational opportunities, and open space. We seek to accomplish this mission by working cooperatively with all stakeholders in the watershed. Criteria were identified through a discussion with members in a series of meetings and were meant to help focus the efforts of the watershed council. While we plan to focus our energies on those projects which ranked highest, the Work Plan is a living document and is meant as a guide for our activities, not a rigid list set in stone. If opportunities arise to implement other activities due to the availability of funding or willing partners, we will evaluate the specifics and revise the plan accordingly. The Project Matrix used by the Board during its evaluation of the projects is attached to this document, including the criteria used to evaluate the projects. Some of the key criteria include 1) removes institutional barriers, 2) facilitates best habitat conditions, 3) addresses a long term strategic or catalytic issue, and 4) availability of funding. Following is a list and brief explanation of the high priority projects:

I. In the area of Policies and Planning, three projects ranked in the top tier.

1. Elk Grove Drainage Master Plan (DMP) (Not listed in the LC WMAP)

Nuts and bolts of the project.

This project involves working with the City of Elk Grove on revising the Drainage Master Plan. At the time that the draft WMAP was being prepared, the opportunity to work with the City of Elk Grove on revisions to the DMP was just emerging, thus it was not included as a project. However, a number of projects included in the WMAP that focus on developing sub-watershed plans for Elk Grove, Toad, Sheldon, and Whitehouse Creeks are likely to be addressed as part of the DMP. The DMP is a guidance document for the City on the management of stormwater, flood risk, and aquatic resources. The history of the LCWC's effort traces back to the release of the draft DMP by the City in 2007 (appended to this document). At that time, members of the WC reviewed the draft and found that it failed to consider newer approaches to stormwater management. The emphasis for managing stormwater and flood flows remained on the traditional conveyance system, moving runoff away from property through a network of primarily pipes and some ditches and releasing into nearby streams. The harmful consequences of this approach to Laguna Creek and its tributaries have been well documented. The WC prepared a letter to the City identifying what we saw as weaknesses with the approach contained in the draft DMP. Through a series of events, including the downturn in the housing market, a lawsuit brought against the City by the Stone Lakes National Wildlife Refuge Association (SLNWRA), and a change

in management within the City structure, an opportunity arose to revisit many of the issues raised in our letter. A series of public workshops as well as planning meetings between the WC, SLNRWA, and the City were held. The result is a new plan to develop a revised DMP that is based on a set of Guidelines that reflect a progressive approach to managing stormwater as well as the formation of an Expert Advisory Committee composed of representatives of the SLNRWA, The Sheldon Community Association, and the LCWC. Two highly-respected consultants with knowledge on integrating low impact development practices with traditional conveyance techniques have been hired by the City. Three representatives with expertise in hydrology, aquatic toxicology, and hydrogeology from the LCWC sit on this committee. This is a significant commitment of time and energy of WC members.

Why it is important.

The way that water moves through the watershed is an issue central to protecting our streams. Alterations in stream channels, the stream corridor, and the historic use of the streams as a “drainage canal” associated with stormwater management have significantly degraded our waterways. In 2008, a taskforce of the National Academy of Sciences concluded that the Clean Water Act’s goal of protect water quality in the nation’s rivers and streams had not been reached in large part due to the poor management of stormwater volume. Because the DMP will guide how stormwater is managed in the future, working with Elk Grove to ensure that modern stormwater management practices and aquatic resource protection programs are included in the Plan helps us to advance our mission and vision. We welcome the opportunity to work constructively with Elk Grove on a project which is anticipated to take about one year to complete.

2. Water Use Efficiency Programs (Project 41 in the LC WMAP)

Nuts and bolts of the project.

Water use efficiency, or water conservation, refers to practices that reduce use and increase re-use of water. This project was initially conceived of as an educational program to provide information to a broad audience on the link between surface and groundwater, the importance of water conservation, and mechanisms for achieving improved efficiency. Since that time, additional opportunities have arisen to work with watershed partners, including the Elk Grove Water District and the Sloughhouse and California Resource Conservation Districts. These opportunities involve removal of lawns and replanting with native vegetation (Cash for Grass program, grant submitted to the Integrated Regional Water Management Program, Regional Water Authority, May 2009), gray water programs, sprinkler adjustment programs, and water meter installation efforts (working with the Elk Grove Water District). For the purposes of this Work Plan, all of these efforts are being consolidated as water use efficiency programs. Depending on available opportunities and partners, any aspect of this project could be the focus of our efforts.

Why it is important.

The aquifer under Laguna Creek and the neighboring Cosumnes River watershed to the south, is falling at a rate of about 1 foot per year. Recharge of the aquifer has decreased and use has increased in recent decades. In the summer, runoff from inefficient landscape sprinklers causes pollution in some portions of Laguna Creek, stimulating the growth of

bulrush and other aquatic vegetation that clogs the waterway and impedes winter flows, increasing flood risks. Taken together, these conditions combined with the potential for water shortages associated with climate change point to the need to implement water conservation efforts wherever possible.

3. **Oversight of the Use of Best Management Practices for Development Projects**
(No Project Number in LC WMAP)

Nuts and bolts of the project.

This project reflects the consolidation of a number of individual projects within the LC WMAP that share a common characteristic – oversight of development projects. The projects in our management plan that are grouped together under this umbrella include Carmencita Reach Oversight (#13), Ogden Reach Oversight (#14), Elk Grove Rural Block Reach (#17), Poplar Hollow Reach (#20), Lower Bypass Area Reach (#27), Bradshaw Christian School Reach (#15), and Sun Creek Development (#2). This umbrella project reflects the desire of the watershed council to provide input and review to development projects to ensure that both traditional conveyance and newer stormwater management practices such as low impact development (LID), are considered when new developments are being planned.

Why it is important.

This project provides the opportunity for the LCWC to advance a progressive approach to new development; one that places the protection of natural resources at the beginning of the planning process, not at the end; that protects the integrity of the streams and surrounding corridor; and that integrates stormwater source control measures (also referred to as LID) into projects to the maximum degree possible. Currently, the LCWC is included in the project review checklist in the City of Elk Grove, which provides an opportunity to offer suggestions, although somewhat late in the process. In the past, a number of developers have made presentations to the watershed council seeking input and the watershed council's stamp of approval. Discussions with developers are especially useful because they usually occur earlier in the development process when suggestions can be implemented without great difficulty. Due to the current recession, little development is occurring. However, as the economy recovers, we plan to resume an active role reviewing projects with relevant municipalities and developers and coordinating these efforts with the Sacramento Regional Stormwater Quality Partnership.

II. In the area of Stewardship Projects, two projects ranked in the top tier.

1. **Tree Planting Program** (Project 32 in the LC WMAP)

Nuts and bolts of the project.

This watershed- wide activity includes tree plantings in upland areas of the watershed, in both rural and urban areas. The benefits of tree plantings are numerous, and the Sacramento Tree Foundation offers several programs which can be implemented in the Laguna Creek watershed. They also offer technical support and planting supplies. This project has the potential for many partners including various municipalities, park districts, neighborhood associations, and schools, as well as numerous adult and youth

organizations. The Sheldon Community Association has already initiated a program to plant trees with which we could coordinate our efforts.

Why is it important.

This program offers an opportunity for broad participation of the public and has high visibility within the community. Further, this project would support other efforts of the watershed council to utilize “interceptor trees” as part of an integrative approach to managing stormwater. The LCWC would like to develop a comprehensive plan to implement this program throughout the watershed.

2. SRCSD Bufferlands Education Program (Project 30 in the LC WMAP)

Nuts and bolts of the project.

The Bufferlands is one of the gems of the Laguna Creek Watershed, providing hundreds of acres of wildlife habitat, farmland and opens space in a rapidly urbanizing area of the watershed. The Bufferlands was developed by the Regional Sanitation District to provide a “buffer” between the wastewater treatment plant and residential/commercial neighborhoods. They currently run a successful educational outreach program including tours and field trips for schools and the annual “Walk on the Wildside” which draws hundreds of visitors. The LCWC would like to explore a partnership with the Bufferlands to provide education opportunities for high school students to conduct field work. This project might include units on habitat restoration, natural resource management, and farming, which would enhance the watershed and possibly create a permanent nature/learning center on the site. This education/stewardship program could offer an opportunity for participation from students throughout the watershed and has the potential for high visibility within the community.

Why it is important.

This project would provide an opportunity to promote community outreach and education, and enhance a location within the lower watershed for education and service learning.

III. In the area of Implementation Projects, two projects ranked in the top tier.

1. LID-related demonstration projects (Not listed in the LC WMAP)

Nuts and bolts of the project.

This project unifies 3 different projects identified in the WMAP, the Vineyard Storm Drain Daylighting(#11), Jordan Ranch Swales project (# 16), and the River Friendly Demonstration Gardens (#40). All of these projects provide the opportunity to apply specific LID or restoration practices that will improve or protect the conditions within Laguna Creek and its tributaries. Project 11 focuses on removal of an old stormdrain pipe and replacing it with swales. Project 16 would enhance existing swales whose stormwater quality function is questionable. Project 40 involves building rain gardens and native gardens at public and privately owned sites that have high visibility. Rain gardens are depressed areas containing amended soils and native vegetation that infiltrate and/or detain stormwater. They are one way to minimize the entry of polluted runoff into the creeks. All of these projects would provide an opportunity to demonstrate how alternative

stormwater management practices work. The watershed council and the Public Works Department of Elk Grove have already prepared a grant application to obtain funds to build rain gardens on public and private (both commercial and residential) properties. When opportunities arise, this grant will be submitted for funding.

Why it is important.

Much of the degradation seen today in Laguna Creek and its tributaries is associated with the damaging effects of stormwater runoff. Not only does stormwater carry pollutants into the creeks, but the sheer volume of water acts like a pressure washer on the creeks degrading aquatic habitat. Low impact development and related management practices minimize the water quality and habitat degradation associated with traditional conveyance systems by reducing the volume of stormwater that reaches the creeks. They are the most up-to-date approaches to managing stormwater and flood risk while at the same time reducing damage to local waterways. The watershed council seeks to popularize the best available scientific and engineering information for managing stormwater. This cluster of projects would put these concepts into practice for all to see.

2. Arboretum Restoration (Project #3 in the LC WMAP)

Nuts and bolts of the projects.

The Arboretum is a new planned community the straddles upper Laguna Creek above Jackson Highway. This development, as currently planned, will be constructed using sustainable and river friendly practices, including a wide stream buffer and LID BMPs. The restoration project included in the WMAP focuses on a reach of Laguna Creek below Blodgett Reservoir. The project would restore meander to the creek, which was channelized many years ago, and reconnect the creek to its natural floodplain.

Why it is important.

This project provides the opportunity to work with willing landowners and developers to make meaningful changes in the creek that would help to restore it to a more natural system. Meander will help dissipate energy associated with storm events that can cause incision, a common characteristic of urban streams. Reconnecting the creek to its floodplain also reduces energy and fertilizes the floodplain, providing the nutrients for trees and plants that promote a healthy stream corridor. In light of the draft plans for the Arboretum, wide stream corridors will also provide many recreational and wildlife viewing opportunities for the public.

IV. In the area of Visioning Plans, two projects ranked in the top tier.

1. Laguna Creek Bypass Extension Alternatives (Project #26 in LC WMAP)

Nuts and bolts of the project.

The idea for this project arose when the watershed council learned about the planned construction of a bypass channel east of Highway 99 at the confluence of Laguna and Whitehouse creeks. The goal of the second phase of this project was to shrink the 100 year floodplain by building a second channel parallel to Laguna Creek through the middle of a small wetland. Although the bypass plan was abandoned when the US Army Corp permit

expired, attention was drawn to the need to improve flood control in this location along with an opportunity to preserve and enhance the existing wetlands. The area adjacent to this site is a 100+ acre undeveloped site owned by a few different entities that is linked to the Cambden area. This presents the opportunity to plan this area around the natural features, specifically the wetland and two creeks.

Why it is important.

This site provides an excellent opportunity to construct a multi-functional flood control project that would include a wide stream corridor, including trails connecting various other sections of the Laguna Creek trail system, restoration of Whitehouse Creek, which has been straightened and disconnected from the floodplain, and preservation of a wetland. This effort would involve the participation of numerous stakeholders and would not be simple to achieve. However, it would protect one of the few large undeveloped open spaces remaining along the creek within the Elk Grove city limits.

2. Integration of Upper Laguna Creek Collaborative (ULCC) Process and Products into Overall Watershed Management Efforts

Nuts and bolts of the project.

This project will assure that the work done by the ULCC will be continued by the LCWC. The multi-year ULCC includes multiple stakeholders working toward the planning of a multi-functional stream corridor. The plan includes a wide stream corridor, habitat preservation, the development of a trail system, plans for stormwater management, and an easement to provide for possible sewer infrastructure within the corridor. The ULCC and LCWC share the vision to eventually connect the future Upper to the existing Lower Laguna Creek Corridor. The ULCC will dissolve shortly after completion of its Master Plan (MP). The LCWC will be an active participant in the review, outreach and adoption of the ULCC MP. LCWC is the logical custodian and successor to products and tools developed by ULCC. To accomplish this integration, LCWC must work for continued participation by upper watershed stakeholders in the LCWC membership and board of directors. Needed actions include involvement in the ULCC MP outreach, adoption and implementation efforts; transferring the ULCC web site functions to the LCWC web site; and pursuit of funding to implement, test, and refine the ULCC MP.

Why it is important.

Integrating the work of the ULCC and the LCWC makes good sense. The goals of both organizations are essentially the same, although the development of each organization followed a slightly different path. In order to implement the LCWC's mission, the Council needs to include stakeholders throughout the entire watershed and recognizes that what occurs upstream in the watershed affects the conditions downstream.

V. Conclusion

At the completion of preparation of this Work Plan, the watershed council finds itself without a full time co-ordinator and, due to the state budget crisis, no obvious opportunities to obtain funding to support a new one in the near future. An energetic Board of Directors is doing a great job at taking up the slack, but this is challenging for a group of already busy people. In

these times, partnerships are more important than ever, and a flexible approach to implementation of this plan is a must. Currently, much energy is devoted to working with the City of Elk Grove on the revision of the Drainage Master Plan. Work with the Service-Learning Program at Elk Grove Unified School District could help build demonstration rain gardens throughout Elk Grove. Work with interns from UC Davis or CSUS could also provide assistance with this and other projects. Working with the Sheldon Community Association, the Sacramento Tree Foundation, and the City of Elk Grove to implement the tree planting program is another partnership that could be fruitful. Working with the Bufferlands on service-learning projects is yet another partnership that we will want to explore. All of these projects could be accomplished with the efforts of watershed council members, volunteers from local schools and regional universities, and modest support from the City of Elk Grove, the Bufferlands, and others.

Currently, the Council is working on a few projects outside of the high priority group because they provide partnership opportunities that advance our overall goal. One such project is with the Sacramento Weed Warriors and Florin Resource Conservation District on a project to remove weeds (invasive species) from the stream corridor. Another is an effort to revitalize the Creek Walks for elementary school children that has been popular in the past and generated a small amount of revenue.

In challenging times like we face today, the watershed council will emphasize developing partnership with others on projects of common interest and focusing our efforts on those projects that provide the greatest opportunity to advance our mission, the protection and restoration of the Laguna Creek Watershed.