

Mount Diablo Creek Watershed Planning Program Year-End Assessment

December 13, 2006

Prepared by Jessica Hamburger, Contra Costa Resource Conservation District

This assessment summarizes what the Mount Diablo Creek Watershed Planning Program set out to do, what we have achieved, and how we might proceed in the coming year to achieve our goals.

1. Principles, Philosophy and Goals

1.1 Coordinated Resources Management Planning (CRMP) Principles

- 1) Local Control
- 2) Consensus-Based Decision Making
- 3) Voluntary Implementation

1.2 CRMP Philosophy

Source: CRMP Handbook, <http://www.crmp.org/resources/handbook.htm>.

“The philosophy behind CRMP is that those who live, work and recreate on a given piece of land are the people most interested in and capable of developing and implementing plans for its use. Face-to-face communication among all interested groups and individuals solves the inevitable conflicts that arise from the mixture of diverse interests and goals. Experience has shown that people with diverse viewpoints who voluntarily meet together as a planning team will find common ground as they interact with one another and have a chance to observe resource problems firsthand. Through discussion, landowners, users and resource managers learn to understand and respect each other’s viewpoints. Although each member of the group may have different interest in the land, the CRMP process can help them realize they also have a common interest: the continued health and productivity of the land and its resources. The end result is constructive problem-solving through cooperative resource planning.”

“The ultimate goal of CRMP is to protect, improve and maintain natural resources. The objective of each CRMP effort is to develop and carry forward a unified program of action for resource use and management that minimizes conflict. Actions should be consistent with land and water capabilities and supported by people whose interests are affected.”

1.3 Mount Diablo Creek Watershed CRMP Program Goals

Source: Project Assessment and Evaluation Plan, submitted by CCRCD to State Water Resources Control Board, April 25, 2005.

The Mount Diablo Creek Watershed CRMP Program is designed to assess current conditions and issues in the watershed and build consensus among diverse stakeholders regarding watershed management.

Short Term Goals

- Enable project participants to learn about ecological processes and management practices in the watershed.
- Develop a watershed management plan containing recommendations on voluntary actions regarding flood management, water quality, stream bank stabilization, parks and trails, and other issues.

Long Term Goals

- Build trust and good working relationships among potential adversaries.
- Inspire the community to take action to protect the watershed.
- Lay the groundwork for obtaining grants for watershed restoration and education projects.

2. Progress to Date

2.1 Watershed Planning Timeline, 2005-2006

May 23, 2005	Kick-Off Meeting for the Watershed Planning Project
July 16, 2005	Upper Watershed Tour
Aug. 4, 2005	Planning Group reached consensus on Meeting Ground Rules
Aug. & Sep., 2005	Tours of Concord Naval Weapons Station
Sep. 17, 2005	Coastal Cleanup Day on Mount Diablo Creek
Dec. 14, 2005	Planning Group reached consensus on Working Mission Statement and Goals
Jan. 30, 2006	Watershed Assessment was published and distributed
Jan. 17, 2006	Planning Group committees began drafting recommendations
Feb. 8, 2006	Planning Group began seeking consensus on recommendations
Apr. 8, 2006	Spring Tour of Concord Naval Weapons Station
Jul. 12, 2006	Watershed Inventory findings were presented to Planning Group
Oct. 11, 2006	Reached consensus on recommendations in six areas
Nov. 8, 2006	Water quality monitoring results presented to Planning Group
Dec. 13, 2006	Year-End Assessment and Celebration

2.2 Program Accomplishments

Planning Group Accomplishments

- Experienced the watershed through tours, creek monitoring, and a creek cleanup
- Learned about what we can do to protect the watershed through technical presentations and brochures
- Developed meeting ground rules, a mission statement and goals for the watershed
- Discussed property rights concerns
- Developed recommendations for voluntary efforts to protect and restore our watershed
- Influenced the future of the Concord Naval Weapons Station by making recommendations to the Concord City Council
- Monitored water quality with support from Friends of Mount Diablo Creek

Watershed Coordinator Accomplishments

- Organized Planning Group meetings and tours and distributed meeting notes via email, regular mail and website
- Created and maintained a Planning Group website containing an archive of meeting notes, library of technical documents, and links to partner organizations
- Documented environmental conditions and management programs in the Mount Diablo Creek Watershed Assessment
- Collaborated with partners to conduct education and outreach
- Improved coordination among agencies, organizations and individuals working on resource management in our watershed
- Designed and supervised water quality monitoring program

2.3 Watershed Plan: Status of Recommendations

Consensus Achieved¹: Watershed Education, Creek Bank and Flood Management, Future of the Concord Naval Weapons Station, Landscaping and Gardening, Pollution Prevention, Rangeland Management.

Recommendations Drafted: Habitat Conservation and Restoration, Water Conservation.

Other Possible Topics: Parks and Trails, Responsible Industry.

¹ Consensus has been achieved for the majority of recommendations in these six categories, which are listed in a separate document. Items remaining to be discussed are provided in Appendices 4 and 5.

3. Tasks for 2007

3.1 Complete the Watershed Plan

Timeline

Feb. 28, 2007	First Draft of Watershed Plan due
March, 2007	Technical Advisory Committee reviews draft plan
Apr. 30, 2007	Second Draft of Watershed Plan due
Jun. 30, 2007	Watershed Plan to be published

In our remaining time, we need to:

- Finalize the mission statement and goals (see Appendix 2);
- Address items that require further discussion (see Appendices 4 and 5); and
- Decide whether to draft recommendations on parks and trails, responsible industry and/or other topics.

3.2 Decide on Presentation Topics and Tours for 2007

Possible Future Presentation Topics (additional suggestions are welcome)

Creek Bank Stabilization (Mike Vukman, Urban Creeks Council)
Wastewater Treatment and Household Hazardous Waste Program (Central Contra Costa Sanitary District)
Historical Ecology (Robin Grossinger, San Francisco Estuary Institute)
Watershed History (Dean McLeod, local historian)
Responsible Industry (Tesoro and Cemex)
Rangeland Management (Sheila Barry, UC Cooperative Extension)

Possible Future Tours (additional suggestions are welcome)

Clayton Quarry (George Allen, Cemex)
Golden Eagle Refinery (Alan Savage, Tesoro)
Bollman Water Treatment Plant and Water Conservation Garden (Contra Costa Water District)
Los Vaqueros Reservoir (Contra Costa Water District)

3.3 Determine Future of Watershed Group after Plan is Complete

Who is interested in continuing to meet as a watershed group?

For those interested in continuing, what are your priority projects within the watershed plan?

Who would consider taking a leading role on a project?

Who would like to be the watershed group's liaison to the City of Concord's reuse planning process for the Concord Naval Weapons Station?

Appendix 1.

Meeting Ground Rules (Adopted Aug. 4, 2005; Amended, Oct. 11, 2006)

- Come with an open mind and respect for others' interests and differing opinions.
- Listen to understand.
- Treat one another with courtesy—no personal attacks.
- Let one person speak at a time.
- Be honest, fair and as candid as possible.
- Think outside the box and welcome new ideas.
- Respect time constraints—be succinct.
- Be comfortable—take personal breaks as needed.
- Turn off cell phones and pagers.
- Humor is welcome and important—but should not be used at someone else's expense.
- If you missed a meeting, study the notes and materials on your own and learn from others who did attend.
- Take responsibility for group decisions and be able to explain them to others.
- No one speaks twice until everyone has had the opportunity to speak.
- No questions until the end of the presentation.

Appendix 2.

Mount Diablo Creek Watershed Planning Group Working Mission Statement

“We are an inclusive planning group of people who care about the watershed and are working to develop a plan that identifies voluntary ways to maintain the watershed.”

Goals for the Mount Diablo Creek Watershed (Working Draft)

The Mount Diablo Creek Watershed Planning Group has identified a set of goals to guide the development of recommendations for its watershed management plan. CALFED’s goals, which are a requirement of this project, have been added to the list, as indicated below. When developing any set of recommendations about a specific topic, such as the future of the Concord Naval Weapons Station or voluntary homeowner actions to protect the creek, the Planning Group can use these goals as a checklist.

I. Health and Safety

- Maintain a safe and healthy creek and watershed for kids and families
 - Raise safety awareness for recreational users
 - Reduce water-related health risks
 - Reduce illegal dumping
 - Provide good water quality for all beneficial uses (CALFED)

II. Ecosystem Quality

- Foster a natural, self-maintaining system
 - Educate the public about watershed conservation
 - Promote “C.3” practices (on-site water infiltration) in all areas
 - Protect against excessive erosion
 - Protect and restore native fish in the creek
 - Improve and increase aquatic and terrestrial habitats and improve ecological functions (CALFED)
 - Promote water conservation (CALFED)

III. Quality of Life

- Enhance access to local recreation
 - Provide creekside recreation, trails, public access and views of the creek on the Concord Naval Weapons Station
- Optimize compatibility of economic, social and environmental values
 - Respect and protect private property rights
 - Consider economic realities
 - Reduce flood damage
- Promote cultural and historical preservation

IV. Organization and Process

- Ensure a fair, open and inclusive process
 - Present/debate various opinions on topics presented—balance the bias
 - Maintain dialogue with all interested parties
 - Recognize different land use types
- Sustained Watershed Management
 - Consider opportunities and constraints

Appendix 3. Presentations and Field Trips

Presentations to Date

Watershed Management (Dennis Bowker, CALFED Bay-Delta Program)

Cultural and Natural Resources on the Concord Naval Weapons Station (John Keibel)

Mount Diablo Creek Watershed Issues; Moving from Conflict to Consensus (Jessica Hamburger, Contra Costa Resource Conservation District)

The Alhambra Creek Experience (Igor Skaredoff, Alhambra Watershed Council)

Key Species in Mount Diablo Creek Watershed (Jim Hale, Contra Costa Fish and Wildlife Committee)

Virtual Tour of the Creek and How Creeks Form Habitats (John Cain, Natural Heritage Institute)

Water Quality Panel Discussion (Aspen Madrone, Contra Costa County Volunteer Monitoring Program; Nelia White, Regional Water Quality Control Board, Surface Water Ambient Monitoring Program; Lisa Anich, Friends of Mount Diablo Creek; Jeff Roubal, City of Concord Clean Water Program; and Laura Hoffmeister, City of Clayton Clean Water Program)

Flood Management (Mitch Avalon, Contra Costa County Public Works Dept./Flood Control District)

Soil Ecology and Erosion Management (Lisa Hokholt, USDA Natural Resources Conservation Service)

Managing Invasive Species (Cathy Roybal, Contra Costa Agriculture Dept.)

Education Strategies for the Watershed (Lisa Anich, Friends of Mount Diablo Creek)

Watershed-Friendly Development: Village Homes and Ahwahnee Water Principles (Judy Corbett, Local Government Commission)

Concord Naval Weapons Station: Environmental Cleanup and Reuse (Jerry Dunaway and Mary Jane Beck, U.S. Navy; Phillip Ramsey, U.S. Environmental Protection Agency; Mary Lou Williams, Restoration Advisory Board)

West Nile Virus (Deborah Bass, Contra Costa Mosquito and Vector Control District)

Wildfire in the Watershed (Maria Morales, Diablo FireSafe Council)

Mount Diablo Creek Watershed Inventory (Rich Walkling, Natural Heritage Institute)

Watersheds and Schools (Sylvia Chatagnier, Diablo View Middle School)

Parks and Trails (Cyndy Shafer and John Roskelley, State Parks Dept.; Brian Holt and Beverly Lane, East Bay Regional Park District)

Concord Naval Weapons Station Reuse Project Update (Michael Wright, Concord Reuse Project Manager)

Water Supply and Water Conservation Programs (Chris Dundon, Contra Costa Water District)

Field Trips to Date

Upper Watershed Tour: Walking tour of Mount Diablo Creek next to Clayton Library, Donner Creek in Mount Diablo State Park, Peacock Creek along the Black Diamond Mines Trail (Arlene Kikkawa-Nielsen, Clayton Community Library Foundation; Mary Malko and Lisa Anich, Friends of Mount Diablo Creek; Laura Hoffmeister, Clayton Clean Water Program)

CNWS Tour #1: Wildlife and Native American history (Jim Hale, Contra Costa Fish and Wildlife Committee)

CNWS Tour #2: Overview of contamination issues on the base (Phillip Ramsey, U.S. Environmental Protection Agency), land use planning (Phillip Woods, City of Concord), ranching (Phil Torres, rancher) and wildlife (Jim Hale, Contra Costa Fish and Wildlife Committee)

CNWS Tour #3: Wildlife and Native American history (Jim Hale, Contra Costa Fish and Wildlife Committee), overview of contamination issues on the base (Jerry Dunaway, U.S. Navy; Phillip Ramsey, U.S. Environmental Protection Agency), opportunities for public involvement in base reuse planning (Leslye Asera, City of Concord)

Appendix 4. Issues to be Discussed

Note: “Parking Lot Items” and “Parking Lot Issues” refer to items or issues that one or more group members would like to continue discussing. “Items Not Yet Discussed” were not yet discussed because the group ran out of time at the meeting at which they were on the agenda. Parking lot items and items not yet discussed will be put on the agenda of a future meeting.

MISSION STATEMENT AND GOALS

Note: The Mission Statement and the list of Goals for the Mount Diablo Creek Watershed are “working drafts.” The Planning Group needs to decide whether to adopt them in their current form or have further discussion in order to finalize it for inclusion in the watershed plan.

Parking Lot Issues

Glossary

There was a suggestion that the group create a glossary to define the terms in the Mission Statement.

Trails

There was a suggestion that the group adopt a goal of ensuring that trails permit access for all types of recreation, e.g., horseback riding, mountain biking, dog walking, etc. Some members felt that certain trails should be off-limits to some types of activities.

1. WATERSHED EDUCATION

No Parking Lot Items

(Note: Unresolved items from the first meeting on watershed education recommendation in February 2006 were resolved at the second meeting on this topic in August 2006.)

2. CREEK BANK AND FLOOD MANAGEMENT

Items Not Yet Discussed

Goal: Use a watershed approach to reduce the potential for damage due to flooding and bank collapse. Adopt flood management and bank stabilization strategies that integrate the enhancement of wildlife habitat and recreation opportunities and the protection of private property rights.

3. FUTURE OF THE CONCORD NAVAL WEAPONS STATION

Parking Lot Item

Maximize public recreation for all uses, e.g. equestrian facilities, dog walking.

4. LANDSCAPING AND GARDENING

No Parking Lot Items

5. POLLUTION PREVENTION

No Parking Lot Items

6. RANGELAND MANAGEMENT

Parking Lot Items

Actions	Lead Organization, Agency or Individual
Prevent manure runoff from entering waterways.	Public and private land managers
Support manure composting and distribution to gardeners and landscapers.	Contra Costa Resource Conservation District ²

HABITAT CONSERVATION AND RESTORATION

Parking Lot Issue

The group was unable to reach consensus because of a fundamental disagreement about whether to include wildlife corridors as an objective of our watershed plan. One faction felt very strongly that they should be part of the plan and another faction felt equally strongly that they should not be part of the plan.

² Consult with the Alameda Resource Conservation District to learn about their program in this area.

One participant suggested leaving wildlife corridors out of the plan since the group could not reach consensus. Another participant suggested putting the issue in the parking lot because the majority of participants still want to find a way to include wildlife corridors while protecting property rights.

Items Not Yet Discussed

The remainder of the draft recommendations for habitat conservation and restoration developed by the Parks and Habitat Committee. (See Appendix 5.)

WATER CONSERVATION

Items Not Yet Discussed

Draft recommendations developed by a subgroup of the Planning Group at the November 8, 2006, meeting.

- Restore stock ponds and encourage new ponds in Mount Diablo State Park.
- Residential indoor: support high-efficiency toilets, high-efficiency clothes washers and low flow showerheads.
- Promote water efficient landscapes.
- Promote water efficient irrigation systems.
- Education: develop list of resources [and make available through a] website, library.
- Encourage City of Clayton to audit water use (CCWD can assist).

PARKS AND TRAILS (Potential Topic)

Recommendations on this topic have not yet been drafted.

Appendix 5. Recommendations on Habitat Conservation and Restoration, Excluding Wildlife Corridor Recommendations

Goal: To conserve and restore habitat in the Mount Diablo Creek Watershed.

Objectives

1. Manage Mount Diablo Creek to enhance fish and wildlife habitat.
2. Encourage adoption of best management practices to protect water quality in the creek and ensure appropriate sediment transport.
3. Gather sufficient data to form a sound scientific basis for specific recommendations.

Stream Restoration

General Strategies

- 1) Re-vegetate sections of the stream channel with native plants
- 2) Restore floodplain connectivity and complexity³

[Include map showing locations of reaches referenced below.]

Action	Lead Organization, Agency or Individual
<i>Mitchell Canyon Rd. Reach:</i> Restore native plant community.	City of Clayton
<i>Flood Control Reach:</i> Widen and re-vegetate the channel and restore some sinuosity (curves). Minimize human impacts to the creek, currently made possible by numerous crossings, perhaps through the construction of foot bridges.	City of Concord
<i>Bailey Rd. Reach:</i> Widen channel to create space for flood terraces within the channel (two-stage channel). Manage cattle access to the stream channel while providing adequate water to cattle. [Add picture of an off-channel trough for cattle.]	Land manager?
<i>CNWS Reaches:</i> Restore two-stage channels in locations where they do not exist and where significant amounts of existing riparian vegetation would not be negatively impacted by excavation. Where channels are widened, construct banks at lower angles in order to prevent bank failure and create safe public access. Stabilize areas of bank instability if they are contributing to fine sediments in the creek. Continue managing cattle access to the creek.	LRA
<i>Diablo Creek Golf Course:</i> Expand the riparian corridor through this reach by establishing and maintaining a buffer on either side of the creek that does not get mowed, while maintaining feasibility of golf course operations.	Diablo Creek Golf Course
<i>Downstream of Port Chicago Highway:</i> Re-vegetate the channel and restore some of the creek's natural meander.	Private landowners
<i>EBMUD Wasteway Reach:</i> Re-vegetate the channel. (When channel connectivity with Hastings	East Bay Municipal Utility District

³ Where possible, consideration should be given to widening the channel at approximately the water level that occurs every two years (bankfull stage) to create a two-stage channel. This will enhance floodplain connectivity, improve habitat diversity, increase the flood capacity of the channel and allow for denser re-vegetation.

Slough is restored, monitor any resulting changes in soil salinity to determine whether restoration with salt tolerant plants is appropriate.)	
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Steelhead Passage Restoration

Action	Lead Organization, Agency or Individual
<i>EBMUD Wasteway Blockage:</i> Remove the blockage. It may require relocating pipelines, depending on the elevation at which the pipelines cross the creek channel. ⁴	EBMUD, Contra Costa Mosquito and Vector Control District, pipeline owners
<i>Bailey Road Debris Gate:</i> Modify the debris gate to allow passage beneath it or remove it altogether when the CNWS is decommissioned.	Base Realignment and Closure (BRAC) office, LRA
<i>Mt. Diablo State Park Barriers:</i> Remove remaining barriers. ⁵	California State Parks

Habitat Conservation

Action	Lead Organization, Agency or Individual
Maintain or create adequate access to water for wildlife.	LRA
Preserve and protect the palustrine wetlands ⁶ in the upland areas of the watershed (e.g., freshwater ponds and marshes in the Los Medanos Hills).	LRA
Preserve a key wetland complex immediately north and south of Highway 4 and Mount Diablo Creek near the overpass.	LRA
Base the determination of the 100-year floodplain on restored conditions, not current conditions. ⁷ [Add drawing showing how creek restoration would change the 100-year floodplain.]	LRA
Design riparian areas to include an inner zone of native vegetation adjacent to an outer zone that may contain parks, trails, and storm water treatment systems. ⁸	LRA

⁴ Removal of the barrier will impact the hydrology of the entire area. The tidal range may increase upstream. The ponding behind the blockage will cease, changing the local distribution of high flows. The removal of the blockage will also remove a potential mosquito nuisance by restoring flushing flows and preventing ponding in the area. These issues should be studied and accommodated in planning for the barrier removal.

⁵ In the past few years, California State Parks has removed an earthen dam and is studying the removal or modification of the remaining barriers.

⁶ Palustrine wetlands include all freshwater wetlands except those along lakeshores and rivers. Generally, they are small in size and shallow. Palustrine wetlands may be connected by surface or groundwater to rivers or lakes, or they may be isolated. For a more technical definition, see <http://www.coastal.ca.gov/wetrev/wetglos.html>.

⁷ In order to be eligible for assistance from the Federal Emergency Management Agency, cities must ensure that no new structures are built in the 100-year floodplain. Basing the determination of the flood zone on current conditions could limit the amount and type of restoration possible in the future.

⁸ Stormwater treatment systems, such as detention basins and vegetated swales, will be designed to hold standing water for less than 72 hours to reduce the risk of breeding mosquitoes and other vectors, as required by the Contra Costa Clean Water Program's Vector Control Plan, Provision C.3.e.iv, <http://www.cccleanwater.org/construction/Publications/CCCWP%20Vector%20Control%20Plan%20Final.pdf>

Future Studies

Future studies of the Mount Diablo Creek Watershed should focus on filling the gaps in existing information.

Study	Lead Organization, Agency or Individual
<i>Rainy Season Surveys (Flood Management Rec)</i> Conduct field surveys during the rainy season, particularly during large storm events, and complete detailed hydrograph studies.	LRA
<i>Flow and floodplain modeling (Flood Management Rec)</i> Determine how much of the floodplain would be inundated by flood flows of various recurrence intervals. ⁹	LRA
<i>Study of actual imperviousness (Flood Management Rec)</i> Use aerial photos, field investigations and GIS to determine the percentage of impervious cover in the watershed. ¹⁰	LRA
<i>Alternative futures modeling (Future of CNWS Rec)</i> Use alternative futures modeling in the development of the Concord Reuse Project to assess the impacts of alternative development scenarios on hydrology, fluvial geomorphology, water quality, and wildlife habitat quality and connectivity. ¹¹	LRA
<i>Sediment analysis and management</i> Study sediment sources and transport in the watershed and develop management recommendations. ¹²	SFEI?
<i>Document the value of grazed watershed lands</i> Study the potential impacts of converting grazed land to either to urban development or to ungrazed open space. ¹³	UC Cooperative Extension?
<i>Creek channel survey of upper watershed (Flood Management Rec)</i> Survey creek channels in the upper reaches of the watershed, above the major tributary junctions.	CCRC?

⁹ While FEMA maps do depict the floodplain, they are limited to only the 100-year flood zone. FEMA maps do not include the CNWS lands.

¹⁰ This information could be used to determine whether the watershed is nearing a threshold that would shift the creek's status from "impacted" to "non-supporting," i.e., poor aquatic habitat, highly unstable banks and high bacteria levels.

¹¹ This type of modeling can help the LRA site development in a way that would have the least environmental impact.

¹² Sediment management in the watershed is necessary to maintain water quality, provide sediment to the system for geomorphic and ecological function, and prevent or reduce conflicts between flood control and biological objectives.

¹³ If grazing land is converted to other uses, habitats shaped by current grazing practices will be lost or transformed and the species that depend on them will be impacted. Changes in grazing will also lead to changes in vegetation cover, evapotranspiration, infiltration, and other factors critical to determining rainfall-runoff relationships. These changes could impact watershed hydrology.

Figure 2.1 Mt. Diablo Creek Watershed

