



REFUGIO CREEK WATERSHED VISION PLAN

9 SEPTEMBER 2009

Public Meeting #6 (Final Meeting)

Meeting Notes / Compiled: 10 SEPTEMBER 2009

MEETING #6: HERCULES PUBLIC LIBRARY
109 CIVIC DRIVE, HERCULES, CALIFORNIA 94547 7:00 PM

ATTENDING: ROBERT REBER / CITY OF HERCULES
DREW GOETTING, RICH WALKLING / RESTORATION DESIGN GROUP (RDG)
DR. PHILLIP BACHAND / BACHAND & ASSOCIATES
REPRESENTATIVES OF THE CITY OF HERCULES
COMMUNITY MEMBERS

CC/EMAIL: ROBERT REBER (FOR FILE & DISTRIBUTION THROUGH WEBSITE)

NOTES: SIXTH AND FINAL COMMUNITY MEETING

INFORMATIONAL SESSION

MEETING INTRODUCTION

Drew Goetting welcomed the group, reviewed progress to date, and reviewed the agenda for the evening.

PONDS 101

Dr. Phillip Bachand of Bachand & Associates in Davis, California, spoke to the group about ponds and wetlands. Bachand & Associates researches how to better manage ponds and wetlands and recommends ways to minimize water quality impacts.

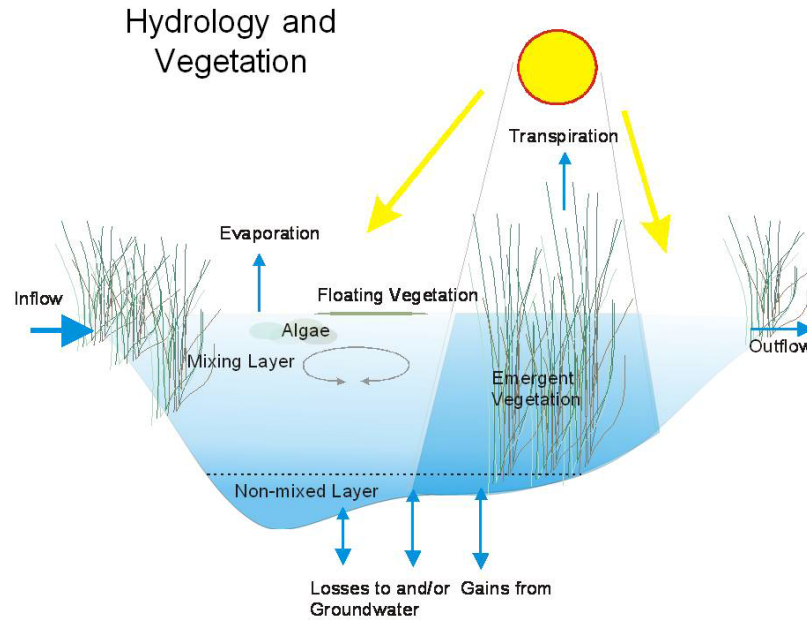
Dr. Bachand showed several examples of lakes, ponds, and wetlands in California. These included Lake Tahoe; North Davis Pond; North Davis Storm Water Wildlife Wetland; Sequoia Canyon Wetland; Yolo Bypass Permanent Wetland; Yolo Bypass Seasonal Wetland; and an agricultural tail water pond in Yolo.

Dr. Bachand described the types of plants and algae that grow in lakes depends on how much sunlight and how many nutrients are available. Dr. Bachand used the diagram below to show the physical processes that drive vegetation growth in lakes and ponds and to demonstrate that by managing the water level, one can control vegetation. In systems shallower than 1.5–2.5 feet, emergent vegetation can colonize a pond, out-compete emergent and floating vegetation, and keep the water column clear and clean. As ponds get deeper, emergent vegetation cannot colonize and algae and floating vegetation become more prevalent. The quantity of algae is dependent, in part, on the quantity of nitrogen and phosphorous (nutrients) in the lake.

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Dr. Bachand described stratification and mixing and the role that they play in the chemistry of lakes and ponds. He explained that the chemistry of these systems was very complicated.

Vision plan members asked Dr. Bachand about what causes lakes and ponds to smell bad. Dr. Bachand explained that ponds can smell like methane or sulfur when decaying organic matter breaks down in an oxygen-deprived environment. Generally, these problems are treated by aerating ponds (such as the fountain-like structures that spray water into the air in Refugio Lake).

Vision plan members asked about birds using the ponds. Dr. Bachand said that the ducks and geese using Refugio Lake are likely a source for nutrients in the system, but given how small the creek was, it may not have a great impact downstream. Vision plan members asked about the value of natural wetlands vs. artificial wetlands. Dr. Bachand indicated that natural wetlands are almost always more diverse and provide more ecological value than artificial ones, but that artificial ones in urban settings can provide recreational, educational, and other benefits that may make them worthwhile to maintain.

WORKING SESSION

On Friday, September 4, Robert Reber distributed a copy of the draft Vision Plan (via the City's website) to the vision planning group email list. At the September 9 meeting, Drew Goetting described the organization of the draft Vision Plan and informed the group that they had two weeks to provide comments and edits to Rich Walkling at RDG (rich@rdgmail.com). Drew solicited initial comments from the planning group.

Vision plan members commented that some actions listed in the plan are very specific and some are general. They indicated that they would like to see some language in the document that insures that just because a recommendation is not described in detail that would not preclude its consideration later on. Vision plan members also wanted to make sure that the Vision Plan would help in addressing the pond issues in the lower watershed.

SETTING PRIORITIES

Thirty one recommended actions across six categories were posted on the wall. Actions included were from the list of proposed actions the group had generated in June. The list was truncated slightly to remove redundant actions or value statements and focus on potential priority actions. Each vision plan member in attendance was given ten stickers with which to “vote” for their priorities. Members could place all ten stickers on one action, one sticker on each of ten different actions, or any combination in between. The results of the exercise are below. Total number of stickers a category received is indicated in parenthesis next to the category name. Total number of stickers an action received is indicated in parenthesis after the action.

ACCESS (23)

Proposed Actions

- Connect Refugio Creek Trail with Bay Area Ridge Trail at the top of watershed (5)
- Boardwalk between Sycamore Ave. and John Muir Parkway along San Pablo Ave./Eastern Preserve (3)
- Create a loop trail along the ridges of the upper watershed (5)
- Create a loop trail between Community Center/Teen Center and Refugio Valley Park
- Improve trail connections between Creekside Center and San Pablo Ave. (4)
- Trail to connect upper watershed with lower watershed (across San Pablo Ave.) (1)
- Create an interpretive program along the trails that tells the story of Hercules, the watershed, its plants and wildlife (2)
- Complete creek trails to San Francisco Bay Trail (3)

EDUCATION AND OUTREACH (24)

Proposed Actions

- Create a creek group (7)
- Provide watershed tours
- Establish a Refugio “Creekfest” (1)
- Hold creek clean up days (5)
- Water quality testing and creek docent programs through the schools (2)
- Creek steward program at Teen Center with garden, native plantings, improved access, and a loop trail (9)
- Self-guided watershed tour pamphlet
- Refugio Creek website
- Refugio Creek book

CREEKS (14)

Proposed Actions

- Remove invasive plants and plant native vegetation (8)
- Install stream gauges to gather data on flow (3)
- Evaluate fish passage at Refugio Valley Park drop structure (1)
- Daylight the creek downstream of the fire station alongside Refugio Valley Road (2)

PONDS (24)

Proposed Actions

- Evaluate ways to improve water quality in Lake Refugio (4)
- Evaluate ways to improve water quality in lower watershed ponds (10)

- Investigate costs and benefits of Refugio Valley Park lake (4)
- Investigate increasing water flow in and out of lower watershed ponds to naturally eliminate mosquito habitat (6)

WILDLIFE/NATURE (5)

Proposed Actions

- Identify mitigation sites for threatened and endangered species (1)
- Create wildlife enhancement projects (3)
- Reduce impacts of feral cats, wild turkeys, and other non-native animals on native wildlife (1)

STORM WATER/WATER QUALITY (9)

Proposed Actions

- Place “Drains to Bay” signs at all storm drains
- Evaluate opportunities to filter trash, grease, and pollutants at pipe outflows and storm drain inflows (continuous deflective separation systems) (3)
- Improve retention of storm water runoff through swales, rain gardens, bio-retention cells, and other green measures (2)
- Use pavers and pervious surfaces instead of concrete and asphalt (2)
- Create a storm water master plan (including creeks in/outflows, wetlands) (2)

NEXT STEPS

Drew surveyed the group for interest in creating a community-based, volunteer creek group. He explained that the creek group would be able to tackle some of the proposed actions and maintain the energy and momentum of the vision planning. Several vision plan members expressed their interest in a creek group and Drew offered to help facilitate a first meeting. Through email, the group will set a location and date to meet in the next month or so.

COMPLETION OF THE DRAFT VISION PLAN

Restoration Design Group has completed a draft of the Vision Plan that is available on the City’s website. If you have edits or comments on the draft, please provide them to Rich Walking at: rich@rdgmail.com before Friday, September 24, 2009. Based on these comments, RDG will produce a final draft available on the City’s website this fall.

These Meeting Notes represent RDG’s understanding of meeting events and community member comments. If information included in these notes is incorrect or requires clarification please notify RDG within 30 days and a revised set of Meeting Notes will be distributed.