

Environmental Planning and Compliance for Stream and Road Maintenance Projects

*Napa WICC Board Meeting
March 28, 2013*



Introductions

Horizon Water and Environment, LLC

- Watershed Management, CEQA/NEPA, Permitting
- Specializes in developing stream maintenance and watershed management programs that balance land protection and natural resource protection/enhancement.
- History of working in Napa County

Jill Sunahara, Senior Associate

- Expertise in CEQA/NEPA, permitting, and water quality evaluation for water resources and restoration projects.
- Manage CEQA and NEPA compliance efforts
- Specialize in project permitting



Outline

1. Maintenance Overview
2. Permitting for Maintenance Activities
3. Regulatory Overview
4. Permitting Approaches
5. Example Stream Maintenance Programs



1. Maintenance Overview

Routine Maintenance Activities:

- Sediment Removal
- Vegetation Management
- Culvert and Streambank Repairs
- Road Maintenance
- Other Minor Activities
- TMDL Projects



Stream Maintenance Activities: Sediment Removal



Stream Maintenance Activities: Bank Stabilization



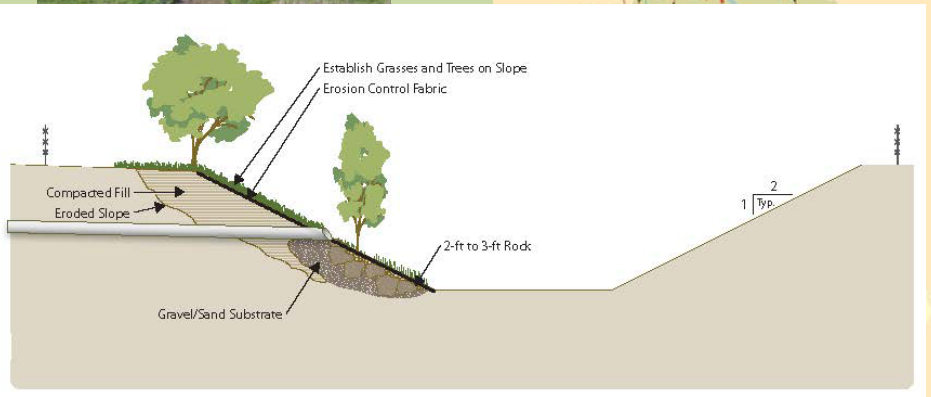
Stream Maintenance Activities: Sediment Basin/Pond Clearing



Stream Maintenance Activities: Vegetation Management



Road Maintenance Activities:



Source: Jennifer Natali Design, 2011

Other Maintenance Activities:



2. Permitting for Maintenance Activities

What Activities Trigger Permits?

- Working within the OHWM
- Ground Disturbing Activities
- Placement of Fill
- Using Herbicides Near Water
- Special-status Species and Habitat
- Water Quality Concerns (TMDL)

What Activities Do Not Need Permits?

- Non Ground Disturbing Activities
- Grass mowing
- Hand pruning



3. Regulatory Overview

Who Regulates What?

- U.S. Army Corps of Engineers
 - Waters of the U.S. – fill in streams and wetlands
 - Clean Water Act Section 404 Permits
 - Nationwide Permit Program
 - Cultural Resources
- U.S. Fish and Wildlife Service
 - Special-status plants and wildlife, including amphibians
 - Endangered Species Act Section 7 and other federal laws
- NOAA – National Marine Fisheries Service
 - Special-status anadromous fish
 - Endangered Species Act Section 7 and other federal laws



Regulatory Overview (cont.)

Who Regulates What?

- Regional Water Quality Control Boards
 - Waters of the state, wetlands, riparian areas
 - Water quality protection, including groundwater
 - Clean Water Act Section 401 Water Quality Certification
 - Waste Discharge Requirements (WDRs)
 - TMDLs, Water Rights, NPDES Discharges
- California Department of Fish and Wildlife
 - Waters of the state, wetlands, riparian areas
 - All fish and wildlife, not just special-status species
 - Section 1602 Lake and Streambed Alteration Agreements



4. Permitting Approaches

- Individual Permits
 - Project-by-project
 - One-time basis
- Programmatic Permits – Regional General Permits
 - Groups of projects or activity types
 - Implement projects over multiple years
 - Multiple agencies



Programmatic Permitting Process

1. Define program activities, work locations, and impact avoidance and minimization measures (Manual)
2. Conduct resource assessments (as needed)
3. Develop mitigation approach
4. Conduct CEQA/NEPA
5. Submit permit applications
6. Negotiate with agencies


Typically takes 2-3 years to complete



5. Example Stream Maintenance Programs

- Sonoma County
 - Sonoma County Water Agency
- Santa Clara County
 - Santa Clara Valley Water District
- Napa County
 - Napa County Flood Control and Water Conservation District

Sonoma County Stream Maintenance Program Overview







Figure 1-2
Zone 1A


Sonoma County SMP Program Overview / Goals

- Flood management in urban and rural settings
- Maintenance on owned channels, other city's channels, private lands
- Permitting delays were impacting flood protection
- Avoid and minimize environmental impacts
- Reduce maintenance frequency
- Develop watershed partnerships

1997



2007

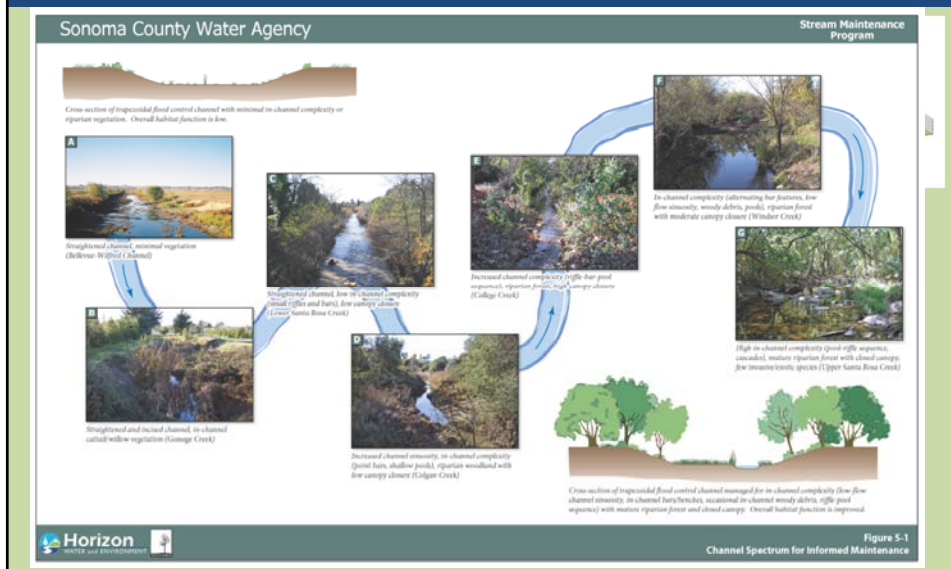


Sonoma County SMP Sediment Removal

- Localized and reach scale
- Target sediment removal zones
- Up to 25,000 cu-yds./yr
- Includes culvert clearing
- Work from top of bank if possible
- Sediment quality testing required
- Sediment local beneficial reuse program



Sonoma County SMP Vegetation Management



Sonoma County SMP Mitigation On-Site and Off-Site Restoration Activities

- Planting of trees, understory shrubs and aquatic plants to develop riparian canopy
- Geomorphic shaping of channel to enhance habitats
- Removal of exotic species
- Local erosion control and land management projects
- 10% of program maintenance costs invested in watershed grant fund
 - RCDs, Non-profits, Cities, Schools
- Headwater source area projects
- 5-yr monitoring of projects



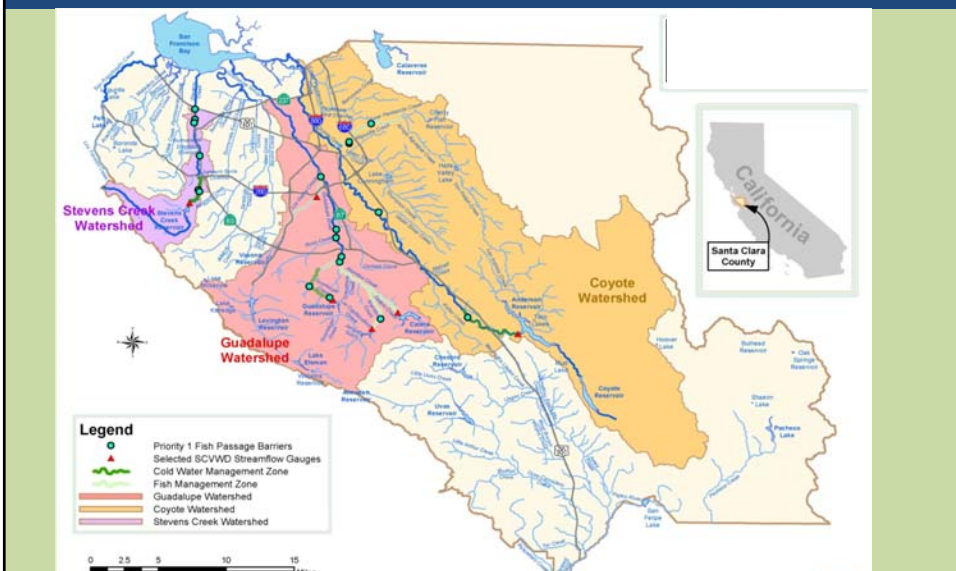
Sonoma County SMP Positive Outcomes / Lessons Learned

- High quality and resource protective manual
- SCWA environmental planners are directly involved in the maintenance work
- Watershed mitigation partnerships
- 5 or 10-year general permits received from regulatory agencies

Santa Clara County SMP



Santa Clara Valley Water District Overview

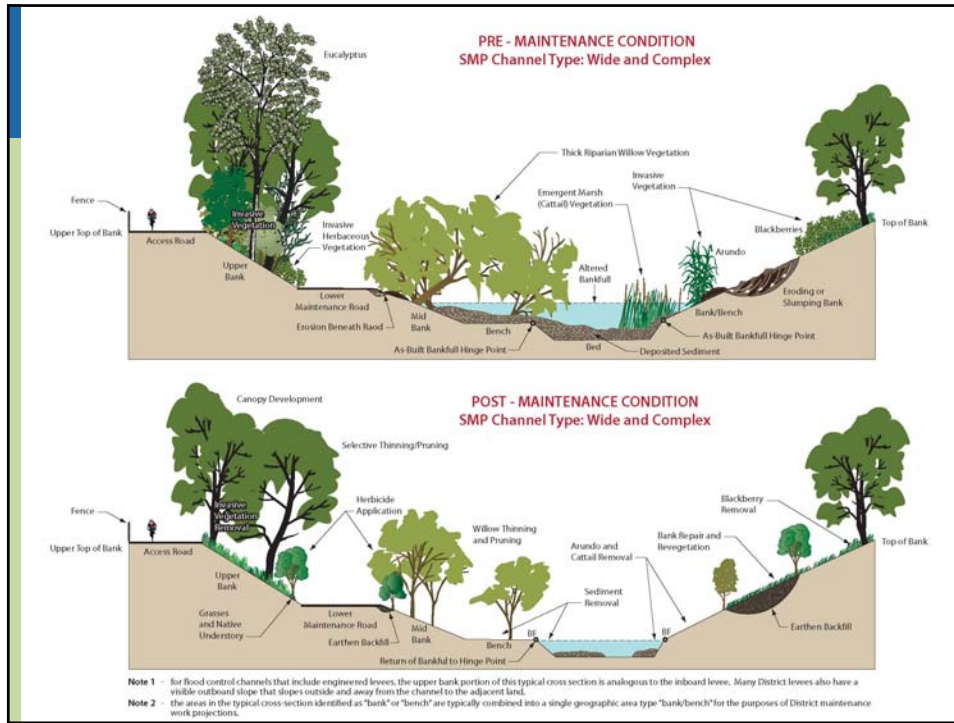


SCVWD SMP Update Program Overview / Issues

- Large program area organized by 5 watersheds
- Comprehensive maintenance program in place
- Permits expire in 2012, need to renew for next decade
- Manual Update, CEQA, and permitting:
 - Pay up-front mitigation program
 - 45,000 – 80,000 cy sediment removal annually
 - Extensive vegetation management program
 - Heavy herbicide use
 - Rodent control for levees

SCVWD SMP Update





SCVWD SMP Update



Sierra Creek

SCVWD SMP Update

Current Status

- CEQA was completed for the Manual Updates in 2012
- No permits issued yet – Regulators requesting more defined criteria for maintenance thresholds
- Mitigation – District wants more flexibility with options
- Coordinate with habitat protection and restoration efforts

Napa County Flood Control and Water Conservation District Napa County Stream Maintenance Program



Yountville Outfall, December 2009

Program Area

- Annual survey of most streams in Napa Valley
- Maintenance on District/County-owned channel reaches
- Coordinate with other public or private landowners



Napa County Stream Maintenance

- No previous documentation
- County Roads Department works in parallel
- Robust planting program
- Ecologically sensitive approach, bio-technical approaches for banks, preserve LWD



Salvador Creek at Jefferson St.



Sheehy Creek

Napa County Stream Maintenance



Gravel bars at Conn Creek



Cattail growth in Salvador Creek Collector



Culvert outfall, plantings at Yountville Collector



Steep banks at Salvador Creek



Steep banks and plantings at Tulocay Creek



Debris, sediment, trash at Tulocay Creek



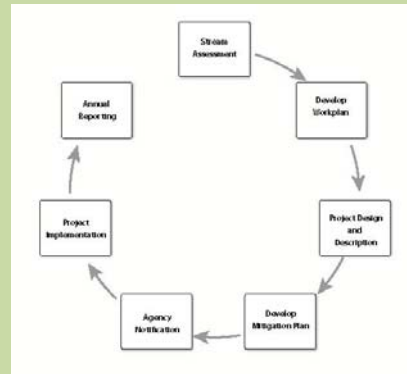
Napa County Stream Maintenance

- Heavy focus on vegetation maintenance
- Downed tree management
- Invasive plant management
- Erosion protection / bank stabilization
- Some sediment removal
- Habitat Enhancement
- Other activities:
 - Trash removal
 - Beaver management
 - Culvert replacement



Napa County Stream Maintenance Status

- Maintenance Manual finalized in 2012
- 5-year Permits received from CDFW and Regional Board 2012
- Nationwide Permit Notification on as-needed basis
- Increased maintenance efforts



Benefits of Coordinated Permitting

- Integrated Watershed Approach
- Large effort up-front leads to Long-term benefits
- Permitting certainty provides schedule and cost benefits
- Consistent, standardized methods and approval process
- Streamlined annual notifications, approvals, and reporting for multiple projects in a season
- Greater flexibility to conduct work, particularly if endangered species are present
- Defined mitigation requirements
- Permit extension flexibility

Thank You!

Contact:

Ken Schwarz or Jill Sunahara
(510) 986-1850
www.horizonh2o.com

*Anything can be accomplished with
good teamwork!*

