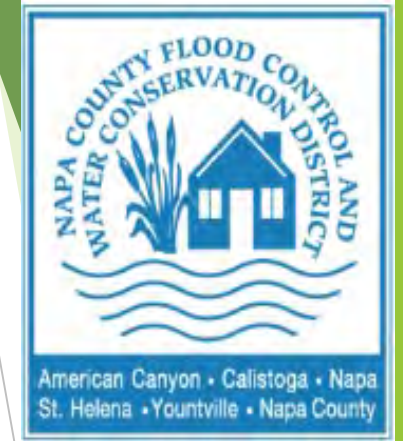


Napa County Flood Control and Water Conservation District



Maintenance and Watershed Management Program, Project No. 96-1
Highlighted projects from Fiscal Year 2020-2021

Biotechnical Streambank Stabilization

In 2020, the three projects described below all utilized vegetated soil lifts to stabilize eroding streambanks. The sites presented different levels of risk and the proposed solutions varied significantly in terms of cost. The District was able to support each project with a distinct approach appropriate to its unique scope and scale.

- ▶ Conn Creek: Stream Maintenance Program project
 - ▶ Informal agreement, in-kind landowner contributions
- ▶ Salvador Creek: Stream Maintenance Program project
 - ▶ Unique funding agreement approved by Flood Board
- ▶ Lower Napa River: Non-District project, landowner holds permits
 - ▶ Cost-share program agreement

Stream Maintenance Program, District Project- *Conn Creek (District Easement)*



Conn Creek

- ▶ Citizen initiated emergency application for bank repair
- ▶ Resource agencies engaged Flood District
- ▶ District scoped project and coordinated with landowner
 - ▶ District contributions: Project management, permitting, design, contractor oversight, monitoring
 - ▶ Landowner contributions: Rock, willow material, irrigation water
- ▶ Napa RCD conducted channel cross sections
- ▶ District completed design drawings
- ▶ District included project in Stream Maintenance Program (SMP) Notification to CA Department of Fish and Wildlife and Water Board, and acquired permit authorization from US Army Corps of Engineers
- ▶ Contractor built project with landowner support in September 2020
- ▶ Cost \$84,400

Biotechnical Streambank Stabilization Public-Private Partnership *Salvador Creek: Valle Verde/Heritage House*



Salvador Creek

- ▶ Property owner requested District support to implement streambank stabilization and restoration project
- ▶ Property owner engaged private consultant to design project, District reviewed plans
- ▶ Consultant conducted channel cross sections and hydraulic analysis
- ▶ District and property owner entered into agreement for owner to reimburse District for contractor cost to implement project
- ▶ District included project in Stream Maintenance Program Notification to agencies, and acquired permit authorization from US Army Corps of Engineers
- ▶ District put project out for public bid and selected contractor
- ▶ Contractor implemented project in September 2020
- ▶ Cost \$142,198

Biotechnical Streambank Stabilization Cost-Share Program- *Napa River, HdV Winery*



Napa River, HdV Winery

- ▶ Property owner engaged private consultant to design project. District provided comments on design and permitting approach.
- ▶ Property owner secured project permits, provided evidence of multiple bids for project construction.
- ▶ District and property owner entered into cost-share agreement for District to reimburse owner for 75% of costs up to maximum \$30,000.
- ▶ Contractor implemented project August - October 2020.
- ▶ District reviewed completed project and issued payment.
- ▶ Private construction contract- \$872,349.

Other Annual Stream Maintenance Activities

- ▶ Downed tree management
- ▶ Vegetation management/channel clearing
- ▶ Sediment removal
- ▶ Trash clean-up
- ▶ Riparian restoration

... and District Roles and Responsibilities

- ▶ Survey, monitor and assess priority stream channels
- ▶ Respond to citizen concerns
- ▶ Support municipal partners on regulatory issues in streams
- ▶ Secure grant funding for projects



Homeless Encampment Trash Clean-up

- ▶ ArcGIS StoryMap by Leif Bryant to illustrate the District's recent efforts to address trash from homeless encampments:
- ▶ <https://storymaps.arcgis.com/stories/f8b5313dd588457db5fd70ce19d77e03>
- ▶ Any Questions?