

What SMPL can do for you:

If you are a Contra Costa County resident with a creek on the property, these services are available to you at *no charge*.

- **Site Visit and Consultation:**

California Urban Streams Partnership staff will provide a site evaluation and advice on how to address issues such as creek bank failure, erosion, and flooding.

- **Neighborhood Workshops:**

Your actions can change the condition of your creek upstream, downstream, and across from your property. CUSP can provide hands-on, local workshops. Learning and working with your neighbors can ensure a coordinated effort that works for everyone!

- **Technical Advice:**

CUSP staff will provide information on restoration techniques you can implement. We can also direct you to qualified local engineers, landscape architects, and other related consultants and contractors. In some circumstances, technical advice and assistance may be available from the Contra Costa County Resources Conservation District or Natural Resources Conservation Services.

- **Restoration Project Permitting:**

Restoration projects must meet federal, state and local agency regulations in the form of permits. CUSP will provide information on the regulatory process.

- **Community Presentations:**

Is your neighborhood interested in learning about your creek? CUSP can provide a night or weekend presentation on common creeks problems, including successful and inexpensive solutions.

California Urban Streams Partnership

◆ The California Urban Streams Partnership is an organization of local, regional and statewide groups which protect, restore and steward urban streams. CUSP works to increase the quality of city life and neighborhoods and return functioning ecosystems for fish, birds and wildlife to urban environments. An important part of this mission is to reduce creek erosion and flooding problems so that creeks are neighborhood amenities. The directors and advisors of the California Urban Streams Partnership have over a 35 year history (since 1982) of pioneering in organizing, funding, designing, constructing and evaluating urban stream restoration projects. This history successfully demonstrates the replacement of conventional engineering using concrete and rock channels with innovative restoration project designs that rely on natural processes, including daylighting creeks from culverts. **For more information or to set up a site visit, please email or call CUSP at: custreams@gmail.com, or 510-932-2370.**

◆ Contra Costa County Flood Control and Water Conservation District (CCCFCWCD) maintains almost 80 miles of improved channels within Contra Costa County, including cities. CCCFCWCD provides services such as Parks and Recreation, Sand Bag Distribution and Flood Control throughout unincorporated areas of Contra Costa County. For more information about CCCFCWCD, please visit: www.cccounty.us/floodcontrol.

California Urban Streams Partnership
A Project of Earth Island Institute
2150 Allston Way 460
Berkeley, CA 94704

Streamside Management Program for Landowners in Contra Costa County (SMPL)

The California Urban Streams Partnership provides free advice about creek care, restoration, and maintenance for Contra Costa County residents.

Funding for this service is provided by the Contra Costa County Flood Control and Water Conservation District.



Installing willow posts with a mallet to control stream bank erosion is an easy solution for property owners



Erosion Control, Naturally

The **California Urban Streams Partnership** promotes soil bioengineering — a biotechnical technique that uses a combination of plant materials and soil to accomplish the following: bank stabilization, erosion control, improved habitat and water quality. It combines structural and ecological methods recommended in federal engineering manuals. This approach has many benefits over “traditional” erosion control methods. Some additional benefits include:

- **Cost Effectiveness:** Willow cuttings can be locally harvested. Many of these techniques can be performed by the homeowner. Soil bioengineering is much cheaper when compared against long-term maintenance and lifespan replacement costs associated with traditional structural solutions such as riprap and concrete.
- **Long-term Stability:** Planting riparian vegetation can offer the best long-term protection against erosion. The roots have a similar or greater tensile strength than concrete and absorb the stream’s erosive energy without deflecting the problem to another section of channel. Fast rooting riparian vegetation quickly provides structure and stability to a slope and controls channel incision.
- **Improved Habitat for Local Flora and Fauna:** Riparian plants provide food and shelter for birds and wildlife. Furthermore, once established, trees grow into a riparian canopy that keeps water temperatures cool, allowing stream life to thrive.
- **Highly Encouraged by Regulatory Community:** These techniques are often required by permitting agencies like CA Fish and Wildlife and the San Francisco Bay Water Quality Control Board

A typical problem experienced by streamside properties is bank erosion.

Below is an example employing two commonly applied soil bioengineering techniques: brushlayering and live staking to replace failing concrete banks.

NOT WHAT YOU WANT!



RECOMMENDED APPROACH!!

Same reach of Wildcat Creek under large flood conditions stabilized with soil bioengineering



Contact CUSP at: custreams@gmail.com also at 510-932-2370

Riparian Plants for Creeks



Zone A: Edge of active channel, at toe of slope to mid-bank.

Some Zone A Plants:

- ◆ Willows
- ◆ Alders
- ◆ Dogwood

Zone B: Mid-bank to top of bank.

Some Zone B Plants:

- ◆ Willows
- ◆ Alders
- ◆ Dogwood
- ◆ Ninebark
- ◆ Native Blackberry

Zone C: Top of Terrace.

Some Zone C Plants:

- ◆ California Sycamore
- ◆ Oaks
- Big Leaf Maple
- ◆ California Buckeye
- ◆ Toyon
- ◆ Coyote Bush
- ◆ Wild Rose