

What SMPPL can do for you:

If you own property along a creek in Contra Costa County, these services are available to you at *no charge*. This service is funded by the Contra Costa Clean Water Program.

- **Site visit and consultation.** Urban Creeks Council staff will visit your property and provide free advice on how to address issues such as failing banks, erosion, and flooding.
- **Neighborhood workshops.** Your actions can influence the shape of your creek both upstream and downstream from your property. Working with your creekside neighbors is important to ensure a comprehensive restoration effort that works for everyone!
- **Technical advice on urban stream restoration.** Not sure how to begin? UCC staff can provide information on restoration techniques you can implement and direct you to qualified local engineers, landscape architects, and contractors.
- **Restoration project permitting.** Even restoration projects must meet federal, state and local agency regulations, including securing permits for certain types of work. UCC staff can help guide you through this process.

About Urban Creeks Council

The Urban Creeks Council of California was formed to preserve, protect, and restore and enhance urban creeks through community based movements and organizations. Since its inception, UCC has promoted numerous restoration and preservation projects, both independently and in conjunction with affiliates. UCC now has four chapters and over forty affiliate organizations throughout California.

Activities of the Council include physical stream restoration projects (including daylighting culverts); redesign of flood control projects; training programs for citizen volunteers, government officials, consultants and conservation corps; public education; development of publications and manuals; and the development of streamside greenways, parks, and regional trails.

Urban Creeks Council

1250 Addison Street, Suite 107
Berkeley, CA 94702

Phone: (510) 540-6669

Fax: (510) 848-2219

E-mail: ucc_berkeley@earthlink.net

Web: www.urbancreeks.org

Stream Management Program for Private Landowners in Contra Costa County (SMPPL)

A program providing free advice about creek care for Contra Costa County landowners. Funding for this service is provided by the Contra Costa Clean Water Program.

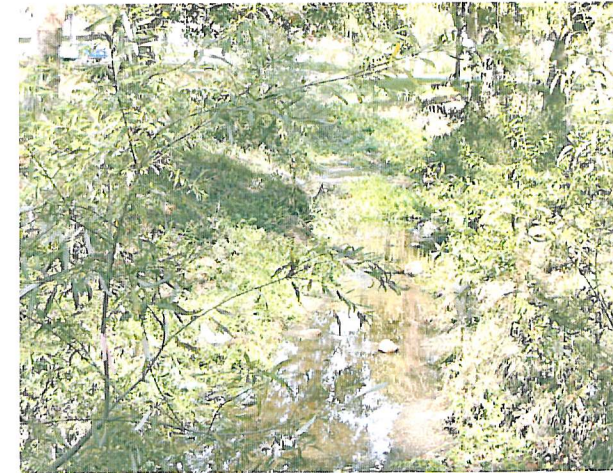
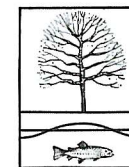


Photo of Baxter Creek at Booker T. Anderson, Jr. Park in Richmond, CA.



Urban Creeks Council
of California

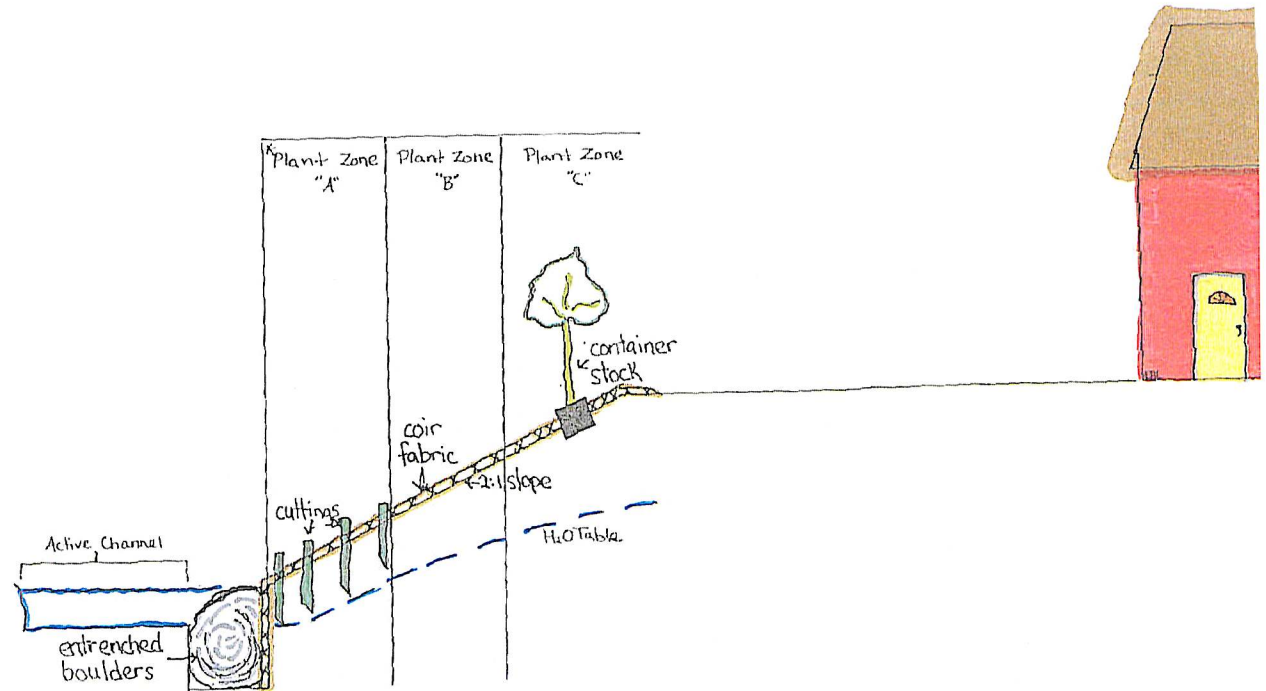


Our Approach...

The Urban Creeks Council promotes soil bioengineering — the use of streamside plants — to stabilize creek banks. This approach has many benefits over “traditional” engineering methods to erosion control, such as the placement of rip rap and concrete. Some benefits include:

- Lower cost: Willow cuttings can be taken from nearby trees at low cost. Installation is cheaper than pouring concrete.
- Effective: Planting riparian vegetation can offer the best long-term protection against erosion by binding and restraining soil particles in place, retarding the velocity of runoff, and serving as an energy dissipater. Even when first planted, vegetation provides immediate structure and stability to a slope.
- Low maintenance: Once established, tree roots help stabilize the soil and shade hinders excessive growth of channel-choking plants such as Himalayan blackberry and cattails. And unlike concrete, willows will continue to grow and put down roots even as the creek channel shifts over time.
- Improved habitat: Riparian plants provide food and shelter for wildlife, and the tree canopy keeps water cool for native fish like steelhead trout (*Oncorhynchus mykiss*).
- Cleaner water: Plants have an incredible capacity to filter contaminants — they are a natural water treatment facility!

A typical problem experienced by streamside landowners is bank erosion. Below is a sketch of a “Toe Reinforcement” using boulders at the base and soil bioengineering on the banks:



Riparian Species List:

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

Some Zone A Plants:

- ♦ White Alder
- ♦ California Bay
- ♦ Big Leaf Maple
- ♦ Cottonwood
- ♦ Red Willow
- ♦ Pacific Willow
- ♦ Arroyo or White Willow
- ♦ Currant
- ♦ Dogwood
- ♦ Blue Elderberry
- ♦ Gooseberry
- ♦ Ninebark
- ♦ Snowberry
- ♦ Wild Rose

Zone B: Mid-bank to top of channel.

Some Zone B Plants:

- ♦ White Alder
- ♦ California Bay
- ♦ Big Leaf Maple
- ♦ California Buckeye
- ♦ California Blackberry
- ♦ Currant
- ♦ Dogwood
- ♦ Blue Elderberry
- ♦ Gooseberry
- ♦ Hazelnut
- ♦ Ninebark
- ♦ Snowberry
- ♦ Wild Rose
- ♦ Dwarf Coyote Bush
- ♦ Honeysuckle

Zone C: Top of bank.

Some Zone C Plants:

- ♦ California Bay
- ♦ California Buckeye
- ♦ Ceanothus spp
- ♦ Coast Live Oak
- ♦ California Blackberry
- ♦ Dwarf Coyote Bush
- ♦ Gooseberry
- ♦ Hazelnut
- ♦ Ninebark
- ♦ Toyon
- ♦ Western Redbud
- ♦ Honeysuckle