Soil Conservation Project on the Bank of Arcade Creek at Sacramento Horsemen's Association

Proud to count this as a Creek Week project! A big thank you to Tim Vendlinski for being the brains behind this complicated repair. Thanks to the MLHS "Special Ops Team" for supplying the brawn. See Tim's photo captions to learn about the day's work & partners who contributed to the effort. The young scientists from MLHS (below) lived up to their billing as the "Special Ops Team" as they tackled this ambitious soil conservation project.



George Hagel, Dmitri Moua, Chris Holt, Ila Uronen, Ean Krenzin-Blank, yours truly, Kyle Gerard, Amanda Segura-Moon, Munim Mir, Ethan Hall, Jordan Kelly, Jaskaran Rai, Kyler Plouffe.

And thanks so much to teachers Joel Carson (who assembled the Special Ops Team), Scott Martinez (who accompanied them to the project site and did all their paperwork), Dean Kaeragianes (who remains our guiding light), and of course Cindy Suchanek (who devoted her remarkable career to cofounding and stewarding the IB program at MLHS).



Thanks to Laurie Bogart (left) from NORMAC who delivered the erosion control blanket and fiber rolls to the project site, and who provided advice, tools, and encouragement.

President of EARTHSAVERS, Doug Bailey, graciously donated all the fabric, stakes, and pins needed for the project even though I just totally cold-called him!

I'm also grateful for the technical advice generously shared by Julie Etra (Western Botanical Services) and Lynn Friesner from EARTHSAVERS.

And of course, THANK YOU to Alta Tura who organized Creek Week, and my dear colleagues Blythe Blue and John Mayfield who I have the honor of working with every day to restore the Arcade Creek watershed.





Left: Steve Jones from the SHA Team importing soil with a high clay content needed to fill the gully. Right: This specially made fabric is made with biodegradable materials that turn into compost as the project ages - we need to transition away from erosion control materials wrapped in plastic mesh.



BEFORE
Left: Top of the
bank of the nowretired bridle trail
that received a
large volume of
unimpeded runoff
from the
surrounding
facility. The old
trail began eroding
into a gully that
was head-cutting
back toward the
facility.



Above right: Roots of nearby mature oaks were being exposed as the gully formed; for scale, see the top of the picture for my hand tool.



We anchored the blanket into the top of the slope.



It's all about the TAMPING.







As his classmates filled-in and packed the ruts and gully below, George began setting pins to anchor the blanket to the face of the slope.

The students brought ~2 cubic yards of clay soil into the project area by hand. Such great workers!







Above left: Once the soil was packed, we scored and top-seeded the surface with three species of native grass - California fescue, purple needle-grass, and creeping wild rye from Hedgerow Farms (courtesy of Zarah Wyly at the Sacramento Tree Foundation).

Middle: We installed the fiber roll upslope of the blanket to deflect rushing stormwater away from the fragile project site. This was one of the most difficult tasks, and the students demonstrated great patience and perseverance!

Right: Next we will gently sprinkle the blanket over the course of the warm/hot spring and summer so the grass seed will sprout and begin setting-down roots in the face of the repaired slope.



I did some corrective pruning on oaks in the vicinity and placed them on the blanket to discourage the use of this historic trail segment.



Common sharp-tailed snake

The above photos document work done on Saturday, April 29, 2017 by Creek Week volunteers. Photos and captions by Tim Vendlinski.