

LAGUNITAS CREEK TECHNICAL ADVISORY COMMITTEE (TAC) Minutes of the January 2021 Meeting

Chair and Vice-Chair Present: Rob Carson and Sarah Phillips

Attendees: Matt Erickson, Barbara Salzman, Ann Thomas, Kristin Drumm, Lorenzo Cordova, Eric Ettlinger, Jonathan Koehler, Aaron Fulton, Larry Bragman, Sarah Phillips, Jodi Charrier, Mike Reichmuth, Leslie Ferguson, Mike Napolitano, Nicole Fairley, Todd Steiner, Preston Brown, Ayano Hayes, Phil Sotter, Jean Berensmeier, Denis Poggio, Gordon Bennett, Ken Fox, Rob Carson, Tom Gaiman, Erik Young, Joe Sanchez, Maia Gladstone, Laura Chariton, Richard Plant, Chester Lindley, Ryan Watanabe, Mandy Culpepper, Shaun Horne, Crystal Yezman, Brentley McNeil, Justin Gaison, Samantha Kuglen, Chuck Schultz, Matt Smeltzer, Willow Green, and Kallie Kull.

Introduction of TAC members

Inspirational Message

Adopt agenda

Chester Lindley asked for the November meeting notes to be corrected to specify that the SHARP process is for fine scale habitat restoration, not mapping. Agenda adopted.

1. Approve notes from the November, 2020 TAC meeting

The notes were approved.

2. Prop 68 Lagunitas Creek Watershed Enhancement Study (Jonathan Koehler)

Jonathan summarized the study goals, which are to identify 10-20 enhancement sites in two priority reaches. The first phase of field visits are complete, and identified two adjacent reaches for prioritization. The TAC subcommittee supported prioritizing the upstream "Canyon Reach" but suggested that the second reach should be geomorphically dissimilar to provide a diversity of enhancement strategies. A field visit with the subcommittee is being planned to identify a more downstream reach.

In response to a question from Larry Bragman, Jonathan stated that splitting the two restoration reaches would likely have some habitat benefits for the reach in-between.

Leslie Ferguson expressed appreciation for the collaborative nature of the project so far.

In response to a question from Preston Brown, Jonathan stated that the publicly owned reaches of San Geronimo Creek were not prioritized because they were either too short or habitat conditions were better than in the prioritized Lagunitas Creek reaches.

Mike Reichmuth asked if CA freshwater shrimp existed in the state park reach of Lagunitas. Eric Ettlinger replied affirmatively that the shrimp distribution extended to just upstream of Devil's Gulch.

3. Virtual Tour of SPAWN's Projects (Preston Brown)

Roy's Pools

Preston summarized the project to transform Roy's Pools to a roughened channel ("Roy's Riffle.") Time lapse videos showed Hanford ARC demolishing the old structure and placing rock. Rock "ribs" were strategically placed to allow channel evolution while maintaining juvenile passage. The channel has only experienced flows up to 30 cfs but higher flows will move coarse sediment through. Juvenile and adult salmonids can find resting areas throughout the roughened channel.

Matt Erickson explained that this project has been a CDFW priority for 20 years, and they paid for the design and implementation. CDFW and SPAWN crews captured and relocated 59 juvenile coho, 60 juvenile steelhead (YOY, 1+, 2+), 680 California roach, and over 2,600 threespine stickleback.

Riparian planting is ongoing and willow sprigs are already sprouting. Ayano Hayes described planting while rock was being placed. Species planted so far include arroyo willow, white alder, Oregon ash, elderberry, sedges, ferns, native grasses, California buckeye, and redwood. The site is being watered weekly.

Finally, a new pedestrian bridge was installed to span the full channel.

In response to a question from Leslie Ferguson, Ayano explained that as sun-loving plants grow and shade the banks, more shade-tolerant trees will be planted. Future plantings will take climate change into effect without simply replicating past vegetation.

In response to a question from Dennis Poggio, Preston said the contracted project cost was about \$700,000, with in-kind costs of \$100,000.

Michael Reichmuth suggested installing wood bundles or other cover to provide shade and cover for juvenile salmonids in the summer as well as installing temperature loggers through the channel.

Joe Sanchez commented that local streams were important sources of Tules, tanbark oak, and a plant that provided blue pigment for native Miwok.

In response to a question from Eric Ettliger, Preston said that roughly 3,000 cubic yards of material was removed from the channel and stabilized near the maintenance yard. A small amount of coarse bedload was returned to the channel. Matt Erickson explained that if the site had remained a golf course all that fine sediment would have been trucked off site.

Ken Fox commented that this project is much better than the original jump pools and was impressed by the diversity of plant species.

Downstream of Larsen Creek

Nine large wood structures were installed between Larsen Creek and the Meadow Way Bridge – spanning approximately 550 feet and six properties. The project was funded by CDFW, designed by Matt Smeltzer, and built by Doug Gore. The goals for the project were to encourage deposition of coarse bedload through the bedrock-dominated reach, provide slow-water refugia, deeper pools, and spawning habitat, and stabilize ongoing

bank erosion.

Matt Smeltzer described the pre-project habitat conditions, including a narrow bedrock “chute” and a long, shallow pool at the downstream end. Three locations of elevated water velocities were enhanced through a combination of laying back the stream banks and anchoring logs. Hydrologic modeling indicates that shear stresses for much of the site should be cut in half, resulting in bedload deposition.

One of the landowners, Willow Green, described watching the streambank next to her house eroding before working with Sarah, Preston, and Matt Smeltzer to design and build the project.

Gordon Bennett commented that legislation is in the works to provide private landowners with additional liability protection when enhancing stream habitat.

Sarah Phillips answered a question about preserving the work if these properties are sold. Landowners agreed not to modify the projects and allow monitoring, but the sites are not covered by conservation easements.

4. Updates

a. 2020-21 Spawner Surveys – Preliminary Results (MMWD and NPS)

Eric Ettlinger reported that the year has been exceptionally dry and almost all coho spawning has taken place in Lagunitas Creek. Surveyors have identified 128 coho redds, which is a slight increase from three years ago. Ocean survival appears to have been somewhat below average at 2.5%. Lots of redd superimposition has been observed this year.

In response to a question from Leslie, Eric reported that steelhead appear to be spawning although fish haven’t been seen yet.

Mike Reichmuth reported that NPS has surveyed lower Olema Creek and observed six coho redds, one live coho and two carcasses. He suggested having a separate discussion about encouraging Olema Creek to shift back from its eastern channel into the channel that provides spawning and shrimp habitat. There’s also some concern that the eastern channel is getting close to a wastewater treatment facility.

Mike also reported that Redwood Creek has been closed frequently and they’ve seen only two redds and one live coho female. No steelhead have been seen so far.

In response to a question from Ken Fox, Mike said they haven’t surveyed Pine Gulch due to low flows, difficulty with getting crews there, and lack of funding.

Leslie Ferguson commented that Olema Creek avulsed previously and returned to its western channel. Bill Dietrich consulted at that time and Leslie suggested he could be brought in again. Mike reiterated that this time the eastern channel is threatening the septic ponds.

Gordon commented that lower Olema Creek is evolving towards “Stage Zero” and Leslie replied that we may not want a Stage Zero channel at that location.

b. Net Pens

Video recording unexpectedly stopped at this point.

Rob and Sarah shared that they had yet to hear from Kevin Shaffer but would reach out to him about presenting at a future TAC meeting.

c. Lagunitas Flow Activation Study (SPAWN)**d. Japanese Knotweed (MKAT/Sarah Phillips)**

Sarah reported that Anna Dirkse is leaving her position with UC Cooperative Extension but will continue to be involved in knotweed eradication work. MKAT will continue to coordinate knotweed work in the watershed.

5. Reports by TAC members (miscellaneous recollections)

- Preston will share a CBS news report on the Roy's Pools project.
- Rob and Sarah will share an article on tire chemicals and salmon impacts
 - Leslie suggested a biofiltration subcommittee. Members offering to join include Sarah, Rob Carson, and Todd Steiner.
 - Larry Bragman will look into whether MMWD lab tests for tire chemicals
- Phil Sotter pointed out that PG&E tree removal in county right-of-way and private tree trimming is still a major concern.
- Leslie would like MMWD to provide an update on summer flow releases, including an explanation for flows that were below six cfs in 2020.

6. Future Agenda Items

- Cumulative Impacts Analysis for San Geronimo Creek
- Marin County and Coastal Commission coordination process to streamline permitting
- Updated Stewardship Plan/WR95-17 Temperature Analysis (MMWD)
- Brief update from NOAA/NMFS on target recovery number per species per life stage
- Mt. View Road Bridge replacement project (delayed)
- Redwood Creek and Muir Woods Road bridges
- National Seashore General Management Update
- Marin Local Coastal Plan

7. 2021 Lagunitas TAC Meeting Schedule

March 19

June 11

November 5

8. Public Comment

- Members of the Woodacre wastewater group inquired about TAC membership
- Laura Chariton also inquired about TAC membership

Adjournment