



LAGUNITAS CREEK TECHNICAL ADVISORY COMMITTEE (TAC)

NOTICE OF MEETING

Notice is hereby given that a meeting of the Lagunitas Creek TAC will be held as follows:

MEETING DATE: Friday, March 15, 2019
TIME: 9:00 a.m. – 12 p.m.
LOCATION: Marin Municipal Water District, **MMWD Board Room**
 220 Nellen Ave., Corte Madera, CA 94925

AGENDA

ITEM	SCHEDULED	RECOMMENDATION
<input type="checkbox"/> CALL TO ORDER AND INTRODUCTION OF TAC MEMBERS	9:00-9:05	
<input type="checkbox"/> ADOPT AGENDA	9:05-9:10	Action
<input type="checkbox"/> AGENDA ITEMS		
1. Approve Notes from 11/9/2018 TAC meeting	9:10-9:15	Action
2. 2019 TAC Meeting Schedule Revision.	9:15-9:20	Action
3. Japanese Knotweed Coordination (MKAT – Marin Knotweed Action Team)	9:20-10:00	Information
4. Updates: a. MMWD WR95-17 Reports to State Water Board (MMWD); b. 2018/2019 Spawner Surveys and flooding events (MMWD, NPS, SPAWN, Others); c. Project Updates - Lagunitas Creek Winter Habitat Project (MMWD) and Lagunitas Floodplain & Roys Pools Projects (SPAWN); and d. Lagunitas Flow Activation Study (SPAWN).	10:00-11:30	Information
5. Reports by TAC members	11:30-11:45	Information
6. Future TAC Agenda Items: <ul style="list-style-type: none"> • Risks from Introduction/Reintroduction & Procedures to Reduce Impacts • Overview of the Coastal Monitoring Plan (CMP) • Cumulative Impacts Analysis for San Geronimo Cr. • Redwood Creek and Muir Woods Road bridges • Marin Local Coastal Plan • River Otters, River Otter Ecology Project • Mt. View Road Bridge replacement project • CDFW fish release/fish rescue policy 	11:45-11:50	Information
7. Public Comment	11:50-12:00	Information

A Collaborative, Multi-Party Forum on Fisheries, Water Quality & Ecosystem Restoration:

California Dept. of Fish and Wildlife

California State Parks Department

Environmental Action Committee of W. Marin

Marin Agricultural Land Trust

Marin Audubon Society

Marin Conservation League

Marin County

Marin County Open Space District

Marin Municipal Water District

Marin Resource Conservation District

National Marine Fisheries Service

National Park Service

NOAA Restoration Center

Regional Water Quality Control Board

Salmon Protection & Watershed Network

San Geronimo Valley Planning Group

San Geronimo Valley Stewards

Save Our Seashore

State Coastal Conservancy/Ocean

Tomales Bay Association

Tomales Bay Watershed Council

Trout Unlimited

U.S. Fish and Wildlife Service

ADA NOTICE AND HEARING IMPAIRED PROVISIONS: The board room is equipped with sound amplifying units for use by the hearing impaired. The units operate in conjunction with the room's sound system. You may request the personal sound amplifier from the Board Secretary for use during meetings.

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**LAGUNITAS CREEK TECHNICAL ADVISORY COMMITTEE/TAC
Meeting Notes from the November 9, 2018**

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

Committee Members Present: Jean Berensmeier, Terence Carroll, Ryan Watanabe, Barbara Salzman, Gordon Bennett, Steve Tognini, Denis Poggio, Erik Young, Sara Azat, Lorenzo Cordova, Jared McKee, Preston Brown, Phil Sotter, Ann Thomas, Matt Erickson, Michael Reichmuth, Gregory Andrew, Eric Ettlinger, Ken Fox, Richard Plant, Jack Liebster, and Jon Campo.

Other Attendees: Maya Gladstern (Woodacre/San Geronimo Flats Wastewater Group); Bolt Seymour (SPAWN); Laura Chariton (Watershed Alliance of Marin); Manfred Kittle (CDFW); Niz Brown and Mark Daley (San Geronimo Valley residents); Mike Swezy, Aaron Fulton, Shaun Horne, and Matt Sagues (MMWD); Pat Samuel (CalTrout); Laura Kelly (PRNSA); Teresa Urrutia and Ayano Hayes (WSP – PRNS); Keana Richmond and Alex Johanson (WSP – MMWD); and Jonathan Owens (Balance Hydrologics).

Introduction of TAC members (Call to Order @9:07 am).

Adopt agenda.

Agenda adopted.

1. Approve notes from the June 15, 2018 TAC meetings.

Notes were approved.

2. 2019 TAC Meeting Schedule.

The 2019 TAC Meeting schedule was approved with one change: the November 1, 2019 meeting date was changed to November 15, 2019. It was also discussed that the February 1, 2019 field trip would be to the SPAWN Tocaloma project site.

3. San Geronimo Creek Habitat Enhancement at the Lagunitas Booster Station Site (MMWD).

Gregory Andrew (MMWD) gave a brief introduction and Jonathan Owens (Balance Hydrologics) presented the project. Jonathan reviewed the project history (including previously completed hydraulic analysis) and enhancement goals. He described existing conditions and site features. He presented the habitat enhancement project plans, which focused on the elements for instream habitat with large wood structures. He then revisited photographs of existing site conditions and described where and how the instream habitat elements would be located and situated on the site.

Comments by TAC:

It was noted that the existing site features include water discharge energy dissipaters and it was discussed how these function. A comment was made about bank erosion providing gravel to the existing riffle in the stream channel. Another comment was on high flows over topping the wood structures and flows that could flood above the top of bank. There was a

discussion about how the instream habitat elements might affect the existing pool and riffle in this section of San Geronimo Creek. Most of the discussion was on the design and construction of the instream wood structures with comments and recommendations about how to improve the designs so that they are providing more instream habitat enhancement with less emphasis on bank stabilization. It was suggested that elements be added to the far side of the stream, on the San Geronimo Valley Land Trust property, to get even more habitat enhancement out of the project, in order to expand the project for a larger area of habitat to be enhanced.

4. River Otters (River Otter Ecology Project).

Terence Carroll gave this presentation to the TAC. Terence first described the River Ecology Project's (ROEP's) mission and partners and described why they are conducting their work on river otters. He described the otter observations they are tracking and the monitoring surveys they perform, including night-time camera tracking and research sites. He compared the CDFW otter range map with ROEP observations and how they have proposed to expand the range map based on ROEP's observations. He presented data on otter population trends and described otter's diet and prey diversity. He elaborated on the prey research the River Otter Ecology Project is conducting on Point Reyes and in Martinez. His presentation included some videos from their camera stations that showed both daytime and nighttime otter behavior.

Comments by TAC:

The TAC was very appreciative of Terence's presentation and the work being conducted by ROEP. One comment prompted a discussion on roadways and travel corridors that river otters use. Another comment was made about otter observations in White House Pool and carp as a prey item for otters. There was a discussion about otter behavior at latrine sites and activity along levees in Corte Madera. The discussion of otters also included mention of beavers and the historic range of beavers.

5 Updates:

a) 2018 Juvenile Salmonid Surveys in Lagunitas, Olema, and Walker Creeks (MMWD, NPS, and CDFW)

Eric Ettlinger presented the draft results on MMWD's 2019 juvenile survey in Lagunitas Creek. Eric reviewed that the prior spawning year had been poor but that winter/spring flow and egg incubation conditions lead to reproductive success and a good 2018 juvenile coho population. He indicated the population estimate for Lagunitas Creek was about 16,000 juvenile coho which is on par with the long-term average for Lagunitas Creek. He included results from Olema Creek which had low numbers of coho and so overall, the watershed-wide coho population was below average. Eric indicated it had been one of the largest steelhead populations. Eric concluded with a predication for a large coho spawner run for 2018/2019. Gregory Andrew presented results from juvenile surveys in Walker Creek. He showed where surveys had been conducted and found 43 juvenile coho and 656 juvenile steelhead in 15 of 24 pools sampled. Greg and Ryan Watanabe also reviewed sampling conducted by CDFW in the lower reach of Walker Creek where a good number of steelhead and California freshwater shrimp were found

but no coho. Greg also commented that CDFW had recently released about 4,000 juvenile coho at the Walker Creek Ranch.

Comments by TAC members:

One comment reviewed the coho population in relation to the coho recovery target. Another comment brought up coho year class trends and how the juvenile coho in this year class performed better than may have been predicted; a similar year class trends analysis cannot be done for steelhead. The distinction of main stem Lagunitas Creek and San Geronimo sample sites was discussed, pointing out that there were very few coho found in San Geronimo Creek. Other comments focused on juvenile salmonid growth in relation to flows and population densities. The source of the juvenile coho released into Walker Creek from the Coho Broodstock Program was reviewed other comments focused on habitat conditions in Walker Creek.

b) Japanese knotweed (Marin RCD)

Sarah Phillips updated the TAC on knotweed management activities and presented a knotweed identification chart. Sarah reviewed coordinator and outreach efforts through the Marin Knotweed Action Team (MKAT). The efforts have included: newspaper articles, door-to-door canvassing (in San Geronimo Valley), and seeking to establish a Coordinator position, parcel owner surveys and treatments, grant funding. Sarah presented information from NPS on knotweed survey and reduction management. NPS 2017 – 2018 data indicates knotweed patch treatments with herbicides have resulted in a 95% reduction in stem counts; a total stem count reduction from over 8,000 down to 635; and total area coverage from a half acre down to a quarter acre. Sarah concluded with information on the effectiveness and positive results in knotweed eradication from herbicide treatments.

Comments by TAC

Tomales Bay Association (TBA) included an article on knotweed in the TBA annual newsletter. Another comment discussed the relationship between knotweed and waterways and herbicide treatments in these areas. Other comments focused on other aspects of the use, treatment locations, treatment/application methods, and effectiveness of herbicides to eradicate knotweed. One comment suggested tapping NextDoor as an outreach tool.

c) Project Updates - Lagunitas Creek Winter Habitat Project (MMWD) and Lagunitas Floodplain & Roy's Pools Projects (SPAWN)

Gregory Andrew reported on MMWD's Lagunitas Creek Winter Habitat project and that ongoing planning efforts to revise project designs extended through 2018 construction season, so no new work was conducted this year. Greg reviewed that MMWD has been working on designs to replace a failed structure at Site 4, implement repairs at Site 3, and review all designs for the project's Phase 2 sites. Greg introduced Aaron Fulton whom the district has hired and who will be helping work on the engineering designs and project management.

Preston Brown reported that the Phase 1 site of SPAWN's Lagunitas Creek Floodplain project had been constructed, including the removal of over 11,000 cubic yards of soil to excavate a floodplain channel to increase winter rearing habitat for salmonids. He described one project feature was to create overhanging bank structures as California freshwater shrimp habitat. Preston indicated that they were preparing to install native plants at the site. Preston then provided an update on the Roy's Pools project with current efforts focused on working with Marin County to tie in the Roy's Pools project with the County's San Geronimo Valley Drive Bridge.

d) Lagunitas Flow Activation Study (SPAWN)

Preston Brown reported they had formed an advisory committee and were finalizing the study plan. They plan to target reaches of the creek to evaluate flows in different reaches this winter.

4. Reports by TAC members

Sarah Phillips reported on a salmon soiree happening on Saturday, November 10th, organized by NOAA Fisheries – Secret Life of Salmon: Science and Art Celebration.

Ken Fox corrected that on the Mattole River, knotweed herbicide treatments had only used one half gallon of herbicide in the past decade, and two teaspoons in the past year, with 2% of the original infestation remaining.

Jon Campo reported MCOSD found foothill yellow-legged frogs in San Anselmo Creek and they were starting a monitoring program to get more information on distribution and status in the creek.

Michael Reichmuth reported Point Reyes N.S. has a General Plan amendment out for public scoping with an open house planned for November 14th at West Marin School and November 15th at the Bay Model. Mike also reported: sampling conducted in Giacomini Wetlands and found a coho salmon smolt in a tidal channel but did not find any tidewater goby; sampling in Olema Creek found over 500 California freshwater shrimp in the lower km of the creek; and the DIDSON camera has been installed in Lagunitas Creek.

Preston Brown introduced Bolt Seymour as a SPAWN staff member.

Ryan Watanabe reported the Prop1/Prop 68 solicitation notice has been released with a proposed submittal deadline of December 16th, with two online workshops on November 14th and 28th, and priority fish passage projects include Highway 1 at John West Fork of Olema Creek and Sir Francis Drake at Larson Creek.

Jean Berensmeier report the SGVPG is working on three major issues: the Mt. Barnabe/San Geronimo Valley fire; affordable housing; and the San Geronimo Golf Course. She noted Marin County Board of Supervisors gave Touchstone a 60-day notice to close operations of golfing.

Rob Caron reported TBWC was holding a Leave No Trace workshop on November 11th, 12:00 – 3:00pm, free with a lunch, immediately followed by the annual meeting of the TBWC from 3:00 – 4:00 pm.

Matt Erickson reported that all FRGP project funding would be announced by the end of the year.

5. Future Agenda Items

- WR95-17 Reports
- Overview of the Coastal Monitoring Plan (CMP)
- Cumulative Impacts Analysis for San Geronimo Cr.
- Redwood Creek and Muir Woods Road bridges
- Marin Local Coastal Plan
- Mt. View Road Bridge replacement project
- CDFW fish release/fish rescue policy

Others:

- Developing procedures for TAC communications
- Letter of appreciation for Krishna Kumar
- Net Pen Subcommittee – include in TAC Updates (Gordon Bennett will Chair the subcommittee).
- Sediment monitoring in Lagunitas Creek
- MMWD future stewardship plan projects
- Knotweed presentation by NPS/State Parks

6. Public Comment

None.

Adjournment: Sarah Phillips commented to reach out to Butte County post-fire and expressed sympathies and rest in peace for Debra Dibenedetto; she then adjourned the meeting.



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- State Coastal Conservancy/Ocean
- Tomaes Bay Association
- Tomaes Bay Watershed Council
- Trout Unlimited
- U.S. Fish and Wildlife Service

2019 MEETING SCHEDULE

Revised: 3/15/2019

Friday, February 1, 2019	10 a.m. – 2 p.m.
	Field Trip to Lagunitas Creek
Friday, March 15, 2018	9 a.m. – 12 noon
	MMWD Board Room
Friday, June 14, 2018	9 a.m. – 12 noon
	MMWD Board Room
Friday, November 22, 2019	9 a.m. – 12 noon
	MMWD Board Room

Notes:

Sarah Phillips	2019 TAC Chair
Rob Carson	2019 TAC Vice Chair
TBD	FRGP Proposal Due Date
4/23/19 – 4/26/19	Salmonid Restoration Federation Annual Conference; Santa Rosa, Ca. https://www.calsalmon.org/conferences/37th-annual-salmonid-restoration-conference
9/29/19 – 10/3/19	American Fisheries Society, Cal-Neva Chapter Annual Conference; Reno, NV. - Joint AFS-Wildlife Society conference http://afstws2019.org/