



United States Department of the Interior

NATIONAL PARK SERVICE
Point Reyes National Seashore
Point Reyes, California 94956

IN REPLY REFER TO:

L7617

MAR 24 2017

Notice of Scoping: Lagunitas Creek-Tocaloma/Jewell Floodplain and Riparian Enhancement Project

Dear Interested Party:

The Salmon Protection and Watershed Network (SPAWN) has proposed extensive floodplain restoration and riparian habitat enhancement on National Park Service lands in the Jewell and Tocaloma areas of Lagunitas Creek. This reach of Lagunitas Creek has been identified as an opportunity to restore high value off channel habitat for juvenile salmonids. In addition, modifications to and enhancement of the floodplain can be expected to improve geomorphic function and channel form within the creek. Significant areas of floodplain that can provide crucial habitat for coho and other salmonids when restored exist within the identified study area.

In accordance with the National Environmental Policy Act, the SPAWN is beginning preparation of an Environmental Assessment for the National Park Service. The 30-day scoping period for the public to comment on the proposed activities will end on **Monday, April 24, 2017**.

Scoping is the first step to involve the public in the NEPA process. The objective is to engage agencies, organizations, and the public early in the EA development process to receive input on the proposed action, to identify environmental issues that should be addressed in the EA, potential alternatives, and sources of data that should be considered. Scoping allows agency and public concerns to be identified early and helps focus the analysis on important issues.

Proposed Action

SPAWN proposes to enhance natural hydrological processes and riparian habitat complexity within the mile-long riparian corridor encompassing all developed sites within the Jewell and Tocaloma reach within Lagunitas Creek. Implementation of the proposed project would promote the formation of more frequently active side channels and floodplain areas, features that would provide additional critical winter habitat for juvenile coho salmon and steelhead, while improving sediment metering and sorting, and water quality conditions.

The primary method proposed for modifying creek hydrology is to remove fill, concrete retaining walls, and bulkheads from the floodplain, associated with the historic housing development, and excavate selective side channel and alcove features adjacent to the main

stem that would be activated over a range of stream flows. Additionally, creek hydrology would be encouraged to inundate floodplain areas and excavated side channels through the installation of engineered woody debris structures (LWD) in the main channel and floodplain areas to help spread the flows out across the floodplain while deflecting flows into the excavated floodplain side channels and alcoves on a more frequent basis (flows between 50 and 150 cubic feet per second, approximately). The side channels and alcoves would include the installation of LWD structures to add cover and habitat complexity for salmonids and provide hydraulic controls to maintain intended hydrologic and geomorphic function. Another result of the project will be to reduce the channel slope, through the project area and spread flows across the valley floor. This would distribute the energy of the flow over a broader area, reducing stress on the stream bed, and reducing stream bed mobility and bed scour. The large wood structures and floodplain channel features will sort, meter, and store fine sediment, particularly in the floodplain, thereby substantially enhancing the stream in the main channel.

The furthest downstream site at the existing TIRN/SPAWN offices would also see the realignment of a tributary stream that was relocated to flow away from the historic housing development and lost its natural connection to Lagunitas Creek through the installation of a fill and containment berms. The tributary stream would be reconnected with Lagunitas Creek through the removal of the berm and excavation of a new channel. Passive loading of wood in the riparian corridor through the mile-long project area would also be done to facilitate natural requirement of wood into the channel over a range of flows. These wood pieces would be placed along the channel using heavy equipment and would be recruited into the channel over time. Revegetation using native materials and local genetic plant stock would be done across the entire mile-long corridor, with heavy seeding, planting, and biotechnical treatments done at graded sites to stabilize slopes, side channel, alcoves, and floodplain areas. Non-native invasive plants including Himalayan blackberry, poison hemlock, and Japanese Knotweed would be removed through manual treatments throughout the mile-long corridor and mature native conifer and hardwood trees would be planted in the corridor to increase wood volumes in the channel over time and provide habitat to native riparian species.

Project construction would occur during the late summer and early fall months (August – October) to work outside of the sensitive bird nesting or salmonid spawning seasons. The Phase I (sites 1, and 2) would be constructed in 2018 with the Phase II (site 3) constructed when the NPS and SPAWN determine the office buildings are no longer suitable for occupancy.

SPAWN received funding from the California Department of Fish and Wildlife in 2014 to conduct a feasibility study of the restoration opportunities at the site, and received funding from the State Coastal Conservancy in 2016 to complete engineering designs, permitting, and state and federal compliance documents. The impacts analysis focuses on the mile-long stretch of Lagunitas Creek, including Tocaloma and Jewell, located entirely within the Golden Gate National Recreation Area. This NPS jurisdiction requires NPS review and approval. The CEQA analysis will be completed in an Initial Study as part of the cumulative impact analysis.

How to Comment

The 30-day comment period will close on April 24, 2017. You are encouraged to participate by submitting comments online or by letter. The preferred method for submitting comments is via the internet through the NPS Planning, Environment and Public Comment site at <http://parkplanning.nps.gov/pore>. From the main page, click on the "SPAWN Lagunitas Tocaloma/Jewell Floodplain and Riparian Enhancement Project" and then click the "Open for Comment" project link on the left column of the page to comment. You may also mail or hand deliver comments to the "SPAWN Lagunitas Project Scoping" c/o Superintendent, Point Reyes National Seashore, 1 Bear Valley Road, Point Reyes Station, CA 94956. The end of the comment period is Monday, **April 24, 2017**.

Comments will not be accepted by FAX, email, or in any other way than those specified above. Bulk comments in any format (hard copy or electronic) submitted on behalf of others will not be accepted. Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment – including your personal identifying information – may be made publically available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Project Timeline

March 24, 2017: Public Scoping Period

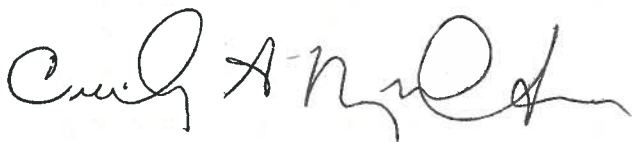
Fall 2017: Release EA for public review and comment

Winter 2017/18: planning process complete

Summer 2018: Restoration activities begin.

If you have any questions, please contact John Dell'Osso, Chief of Interpretation and Education at 415-464-5135, or John_A_Dell'Osso@nps.gov. We appreciate your participation in this process.

Sincerely,



Cicely A. Muldoon
Superintendent

Enclosures:

- Project Summary
- Site Map

Proposed Project Summary: Lagunitas Creek-Tocaloma/Jewell Floodplain and Riparian Enhancement Project

Summary

The Salmon Protection and Watershed Network (SPAWN) has proposed extensive floodplain restoration and riparian habitat enhancement on National Park Service lands in the Jewell and Tocaloma areas of Lagunitas Creek. This reach of Lagunitas Creek has been identified as an opportunity to restore high value off channel habitat for juvenile salmonids. In addition, modifications to and enhancement of the floodplain can be expected to improve geomorphic function and channel form within the creek. Significant areas of floodplain that can provide crucial habitat for coho and other salmonids when restored exist within the identified study area.

Need for Action

The Lagunitas Creek Watershed is designated as critical habitat for the coho salmon (*Onchorynchus kisutch*) and steelhead trout (*O. mykiss*) listed under the Endangered Species Act as endangered and threatened, respectively, by the National Marine Fisheries Service. Coho and steelhead are both anadromous salmonids that occupy coastal California streams from parts of southern California up into Oregon. Both species have declined significantly throughout their range in California compared to historic numbers (Stillwater Sciences 2008, NMFS 2012 and 2015) with coho in central California considered to be on the verge of extinction (NMFS 2012). Lagunitas Creek represents one of the largest and most stable populations of coho salmon throughout the state. The steelhead population in Lagunitas Creek is considered to be an essential population for the recovery of steelhead in central California (Stillwater Sciences 2008, NMFS 2015). In addition, Lagunitas Creek supports a robust population of the federally listed endangered California freshwater shrimp (*Syncaris pacifica*). Of the roughly 20 streams known to support California freshwater shrimp throughout its limited range of only Marin, Sonoma, and Napa Counties, Lagunitas Creek has been the highest rated stream for its abundance and distribution of shrimp (USFWS 1998). It is also the only stream where the shrimp occur on protected lands.

Based on extensive scientific literature regarding the conditions and life history needs of salmonids in Lagunitas Creek, and on goals outlined in planning documents of the National Park Service (NPS), SPAWN has recognized the rare opportunity to restore critical off-channel floodplain habitats and assist NPS with implementation of park facilities plans for the benefit of coho salmon, steelhead, California freshwater shrimp, and other aquatic species in Lagunitas Creek.

Project Location

Lagunitas Creek is located in western Marin County, with a significant portion of the lower part of the creek flowing through NPS lands within the Golden Gate National Recreation Area and Point Reyes National Seashore. The creek stretches approximately 22 miles from its headwaters on Mt. Tamalpais to its mouth at the tidal estuary wetlands located at the southeast end of Tomales Bay.

SPAWN received funding from the California Department of Fish and Wildlife in 2014 to conduct a feasibility study of the restoration opportunities at the site, and received funding from the State Coastal Conservancy in 2016 to complete engineering designs, permitting, and state and federal compliance documents. The impacts analysis focuses on the mile-long stretch of Lagunitas Creek, including Tocaloma and Jewell, located entirely within the Golden Gate National Recreation Area. This NPS jurisdiction requires NPS review and approval. The CEQA analysis will be completed in the forthcoming IS as part of the cumulative impact analysis.

Background

The project site is located in Marin County, at river mile 6.4 (approximately) of Lagunitas Creek, measured from the Highway 1 Bridge in Point Reyes Station. The downstream limit of the project area is

the Turtle Island Network/Salmon Protection and Watershed Network (SPAWN) office and extends upstream approximately 4,500 feet to the border of Samuel P. Taylor State Park.

Summer homes were built in the Jewell and Tocaloma areas beginning in 1934 on the land between Sir Francis Drake Blvd and Lagunitas Creek. The properties were transformed the natural site conditions, including alterations to the creek and floodplain, and placement of roughly 150,000 cubic yards of fill across these properties (ESA & SPAWN 2016). The NPS acquired most of these properties in the early 1980s, and the Reservations of Use expired in the early 2000s. In 2005, many of these structures were flooded by Lagunitas Creek. In 2016, the NPS removed hazardous and abandoned residential structures from 7 of the properties in Jewell and Tocaloma.

The project reach has several old concrete retaining walls and bulkheads, walkways, decks, and other associated hard-scape areas. These features have increased and modified local runoff, reduced infiltration and disrupted natural hydrologic and geomorphic processes. Over time, non-native vegetation has established throughout the parcels, compromising the extents and density of native vegetation, thereby degrading terrestrial and aquatic habitat values.

Functioning floodplains provide critical rearing habitat during typical seasonal flows and also provide high flow refugia during high flow storm events. Previous studies of the Lagunitas Creek watershed have documented winter habitat as the limiting factor for both coho salmon and steelhead. Both juvenile coho salmon and steelhead suffer the most concentrated population declines between fall and spring annually, with coho declines being the most dramatic.

Proposed Action

SPAWN proposes to enhance natural hydrological processes and riparian habitat complexity within the roughly mile-long riparian corridor encompassing all developed sites within the Jewell and Tocaloma reach within Lagunitas Creek. Implementation of the proposed project would promote the formation of more frequently activated side channels and floodplain areas, features that would provide additional critical winter habitat for juvenile coho salmon and steelhead, while improving sediment metering and sorting, and water quality conditions.

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excavation of a new channel. Passive loading of wood in the riparian corridor through the mile-long project area would also be done to facilitate natural requirement of wood into the channel over a range of flows. These wood pieces would be placed along the channel using heavy equipment and would be recruited into the channel over time. Revegetation using native materials and local genetic plant stock would be done across the entire mile-long corridor, with heavy seeding, planting, and biotechnical treatments done at graded sites to stabilize slopes, side channel, alcoves, and floodplain areas. Non-native invasive plants including Himalayan blackberry, poison hemlock, and Japanese Knotweed would be removed through manual treatments throughout the mile-long corridor and mature native conifer and hardwood trees would be planted in the corridor to increase wood volumes in the channel over time and provide habitat to native riparian species.

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References

- Environmental Science Associates and Salmon Protection and Watershed Network 2016. Lagunitas Creek Floodplain and Riparian Enhancement Project. Feasibility Study. California Department of Fish and Wildlife. March 2016.
- Stillwater Sciences 2008. Limiting Factors Analysis, Limiting Factors for Coho Salmon and Steelhead. Prepared for Marin Conservation District. Stillwater Sciences. March 2008.
- National Marine Fisheries Service (NMFS). 2012. Final Recovery Plan for Central California Coast coho salmon Evolutionarily Significant Unit. National Marine Fisheries Service, Southwest Region, Santa Rosa, California.
- National Marine Fisheries Service (NMFS). 2015. Public Draft Coastal Multispecies Recovery Plan. National Marine Fisheries Service, West Coast Region, Santa Rosa, California.
- U.S. Fish and Wildlife Service (USFWS). 1998. California Freshwater Shrimp (*Syncaris pacifica* Holmes) Recovery Plan. U.S. Fish and Wildlife Service, Portland, Oregon 94 pp.



Map File: Task1_Map_Topocaloma_Lagunitas_2015-0122arb
 Source: Aerial Image (NAIP 2010); Creeks and Infrastructure
 (Marin County); Project Extent (SPAWN 2013)



0 130 260 520 Feet

Lagunitas Creek Floodplain and Riparian Enhancement D121016

Figure 1
 Project Study Area

Figure 1: Site map showing the project area, with SPAWN offices at the downstream extent and the boarder with Samuel P. Taylor State Park at the upstream extent.