Marin Coastal Watersheds Permit Coordination Program 2017 Ranch Restoration Projects

The Marin Coastal Watersheds Permit Coordination Program (PCP) has and will continue to provide the catalyst for high-quality pollutant and erosion control and habitat restoration projects throughout the program

Project Reference Number	Watershed	Envir. Setting	Description of PCP Practice(s)	Materials Quantity	Project Actions	Regulatory Requirements	Potential for Listed Species	Vegetation Setting & Impacts & Planting	Actions Required due to Potential Presence of Listed Species	Presence of Barriers to Aquatic Species Migration	Funding Source
2018-01	SAN GERONIMO > TOMALES BAY	Active rangeland	Grade Stabilization Structure (410)	Length: 38 feet CY fill material: 33 CY	Protect the San Geronimo floodplain by preventing three headcuts from cutting into a pasture by installing two small rock repairs (biotechnical repair is not recommended due to site conditions: dense overstory and watershed size) and a berm (using existing cut material from site) to direct water flow from small headcuts into a grade stabilization structure.	2) CDFW Habitat Restoration (Fish & Game Code 1653); 3) Army Corps of Engineers	CRLF	Ranch vegetation consists of annual & perennial grasses & forbs. Eucalyptus and bay trees are around and within the project site (design avoids removal of live trees). Wetland vegetation species presented in limited quantities and areas with the project.	CRLF: ranch activities are ESA exempt per USFWS with no federal involvement	None within project area	319 (h) grant
			Critical Planting Area (342)	500 SF	Plant seed and plugs (<i>Juncus sp.</i> or rushes) within the soil fill behind weir. The area will be fenced to exclude livestock and to create a riparian pasture adjacent to the project site for seasonal grazing.		CRLF				
2018-02	OLEMA CREEK > TOMALES BAY	Active rangeland	Access Roads (560)	< 1 mile , < 4,000 CY	Outslope an existing road and add roling dips to reduce concentrated runoff and to improve water quality.	1) State Water Board Resources Control Board General Order for Small Habitat Restoration Authorization; 2) CDFW Habitat Restoration (Fish & Game Code 1653)	CRLF	Existing road along a tributary to Olema Creek.	Informal consultation under existing	None	319 (h) grant
			Pipeline (516)	Pipeline (2,000 LF) to be installed does not cross a channel.	Install a new gravity feed pipeline to a new trough to improve livestock management on the ranch and to provide a replacement water source for livestock. The new pipeline and trough are needed because the project includes the instllation of livestock fence to exclude livestock from accessing the creek. It is estimated that 2,060 LF of new barb-wire fence will be installed and 2,480 LF of existing fence will be repaired.		CRLF	Ranch vegetation consists of annual & perennial grasses & forbs.			
			Filter Strip (393)	< 500 LF	In an effort to improve stormwater management within a heavy use area several practices will be installed: A culvert inlet will be raised to increase capacity during high flows, which will cause water to pond near a corral drain. The existing drain will be removed to prevent contaminating stormwater. Removing the drain will require elevating and sloping the heavy use area cement pad to drain into a newly created filter strip.		CRLF	Minimal to no vegetation exists within the project area, as these practices will be installed in degraded pasture and a heavy use area (barn/corral). Once the filter strip is installed, it will be seeded with local native grasses and forbs.			
			Roof Run Off Structure (558) (not an approved Permit Coordination Practice, but Cat. Ex. Class 1)	135 LF	Gutters will be installed on two roofs to divert water around a manured area.		N/A	N/A			
			Grassed Waterway (412)	< 2,000 LF	Establish a series of grassed waterways to capture sheetflow from the hillslide before it reaches the barn area to reduce the amount of clean water entering the manured areas. In addition, gutters will be installed on the barn to prevent roof runoff from entering the manured area.		CRLF	Ranch vegetation consists of annual & perennial grasses & forbs.			
2018-03	TOMALES BAY	Active rangeland	Pipeline (516)	Pipeline (<2,500 LF) to be installed does not extend over a channel.	New pipeline will connect a new troughs part of an existing water system. The project will fence livestock out of an eroding tributary. The fence (~1,200 LF) will subsequently divide the pasture into two sections; therefore the, water trough and feeding manger are needed in the upper field for livestock management. Overall the project will reduce livestock pressure on front portion of field closests to Tomales Bay and on eroding gully, which will also decrease the pathogen loading by increasing livestock distance from water bodies	N/A	CRLF	Ranch vegetation consists of annual & perennial grasses & forbs.	CRLF: ranching activities are ESA exempt per USFWS with no federal involvement	None	319 (h) grant