

COASTAL CONSERVANCY

Staff Recommendation
February 15, 2023

DUTCH BILL CREEK STREAMFLOW PROJECT

Project No. 08-046-02
Project Manager: Morgan Wright

RECOMMENDED ACTION: Authorization to disburse up to \$470,900 to Gold Ridge Resource Conservation District to construct upgrades to the potable water treatment facility and its water source for the Alliance Redwood Conference Grounds and the communities of Camp Meeker and Occidental, to reduce surface water diversions and increase dry season flows for salmonids in Dutch Bill Creek in Sonoma County, and the adoption of findings under the California Environmental Quality Act.

LOCATION: Alliance Redwood Conference Grounds, Occidental, Sonoma County

EXHIBITS

- Exhibit 1: [Project Location Map](#)
 - Exhibit 2: [Project Photos](#)
 - Exhibit 3: [Alliance Redwood Conference Grounds \(ARCG\) Water Treatment Facility Design](#)
 - Exhibit 4: [Mitigated Negative Declaration](#)
 - Exhibit 5: [Project Letters](#)
-

RESOLUTION AND FINDINGS

Staff recommends that the State Coastal Conservancy adopt the following resolution and findings.

Resolution:

The State Coastal Conservancy hereby authorizes a grant of an amount not to exceed four hundred seventy thousand nine hundred dollars (\$470,900) to Gold Ridge Resource Conservation District (“the grantee”) to construct upgrades to the potable water treatment facility and its water source for the Alliance Redwood Conference Grounds and the communities of Camp Meeker and Occidental, to reduce surface water diversions and increase dry season flows for salmonid habitat in Dutch Bill Creek in Sonoma County.

Prior to commencement of the project, the grantee shall submit for the review and written approval of the Executive Officer of the Conservancy (Executive Officer) the following:

1. A detailed work program, schedule, and budget.
2. Names and qualifications of any contractors to be retained in carrying out the project.
3. A plan for acknowledgement of Conservancy funding.
4. Evidence that all permits and approvals required to implement the project have been obtained.
5. Evidence that the grantee has entered into agreements sufficient to enable the grantee to implement, operate, and maintain the project.

Findings:

Based on the accompanying staff recommendation and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed authorization is consistent with Chapter 5.5 of Division 21 of the Public Resources Code, regarding integrated coastal and marine resource protection.
2. The proposed project is consistent with the current Conservancy Project Selection Criteria.
3. The Conservancy has independently reviewed and considered the Initial Study-Mitigated Negative Declaration (IS-MND) for the 2020 Fisheries Habitat Restoration Project and the associated Mitigation Monitoring and Reporting Program, adopted by the California Department of Fish and Wildlife on November 16, 2020, pursuant to the California Environmental Quality Act ("CEQA") and attached to the accompanying staff recommendation as Exhibit 4. The Conservancy finds that the proposed project as designed and mitigated avoids, reduces, or mitigates the potentially significant environmental effects to a less-than-significant level, and that there is no substantial evidence based on the record as a whole that the project will have a significant effect on the environment.

STAFF RECOMMENDATION

PROJECT SUMMARY:

Staff recommends the Conservancy authorize a \$470,900 grant to Gold Ridge Resource Conservation District (GRRCD) to construct upgrades to the water treatment facility and its water source that provides potable water for the Alliance Redwood Conference Grounds (ARCG) property and the communities of Camp Meeker and Occidental, to reduce surface water diversions and increase dry season flows for salmonid habitat in Dutch Bill Creek in Sonoma County.

The project recommended for Conservancy funding consists of upgrading the CMRPD water treatment facility and replacing and upgrading the potable water source for the water treatment facility. The water source will be moved from the sidehill wells to a well in Monte Rio owned by Camp Meeker Recreation and Park District (CMRPD). The Monte Rio well will undergo pumping capacity upgrades to support the increased capacity. The water will be

conveyed by the existing pipeline to the CMRPD treatment facility, located on ARCG property. The potable water will be sanitized and pumped across the highway to ARCG's water distribution system for use. The CMRPD water treatment facility will undergo upgrades to support the increased capacity including new water disinfection facilities, tanks, piping and valves, and a current standard telemetry system. Implementation of this project will allow water to flow through Dutch Bill Creek before being diverted. Implementation of this project will increase drought resiliency in Dutch Bill Creek by increasing streamflow in the summer by 0.05 cubic feet per second (CFS) and it is expected to increase downstream flow for 1-1.5 miles. A Sonoma County Building Permit is pending for the upgrades to the water treatment facility.

Dutch Bill Creek supports juvenile salmonids and is prime spawning and rearing habitat for salmonids and fish species. However, summer and fall dry season water flows in Dutch Bill Creek reach low levels where salmonid habitat pools become disconnected, causing juvenile fish to become isolated and survival rates to drop. In the era of climate change, pool isolation is expected to be a frequent occurrence due to increased rainfall variability and persistent droughts. The Russian River Coho Water Resources Partnership and Trout Unlimited documented stream levels throughout the Russian River watershed from 2009 to present day. Flow monitoring during the 2011-2015 drought showed a progressive drying of the stream and discharge levels decreased to under 0.5 CFS and have been as low as zero CFS. The Russian River Coho Partnership's 2017 Dutch Bill Creek Streamflow Improvement Plan identified Dutch Bill Creek as one of five key subwatersheds of the Russian River that is critical to restoring coho salmon. The plan selects Dutch Bill Creek as a core component for flow improvement efforts.

The project will increase dry season flows in Dutch Bill Creek. Flow increases can dramatically improve juvenile fish survival rate by reducing or eliminating pool isolation. The Alliance Redwoods Water Conservation Implementation Project, which was not funded by the Conservancy, implemented water conservation measures at the ARCG property and included minimizing the area for non-potable water irrigation from 0.5 acres to 0.38 acres, replacing grass with drought-tolerant turf grass, and the replacement of the irrigation system with an efficient system that eliminates overwatering. GGRCD estimates that water conservation measures reduce the demand for non-potable irrigation water by 50% during the summer and fall. That project included switching the non-potable water source from the direct stream diversion to sidehill wells that had previously been used to supply potable water. Prior to that, ARCG's non-potable water was sourced from two surface water diversions on the ARCG property, with the primary diversion located approximately 1,000 feet upstream of the confluence of Dutch Bill Creek and Redwood Gulch, a major tributary of Dutch Bill Creek. ARCG used approximately 500,000 gallons of water during summer and fall. Potable water use has averaged 2.3 million gallons over the last several years. The water demand has decreased about 20 acre-feet per year due to the implementation of water conservation measures over the past 25 years.

Camp Meeker is a town of 425 people and lies approximately 1 mile south of ARCG on the Bohemian Highway. A portion of Camp Meeker is classified as a disadvantaged community. Members of the community are on the CMRPD board and have been in strong support during the development of the project. Occidental has a population of 870 residents and is located about 2.5 miles south of ARCG. Residents of both Camp Meeker and Occidental receive potable

water from a water treatment facility that is located on the ARCG property and is owned by CMRPD and maintained and operated by a licensed water system contractor. The ARCG is a 501(c)(3) non-profit organization. Multiple discussions took place between ARCG, the CMRPD and the Occidental Community Services District regarding the project and a final operating agreement was reached and is additionally discussed under Selection Criterion 6, Community Engagement, below. Upgrades to the water treatment facility are needed to provide residents of Camp Meeker and Occidental with higher quality water and greater disinfection capability. The CMRPD facility shuts down during Russian River flood events, forcing the towns to rely on a limited supply of stored water. The upgrades will cease shutdowns to the facility. Water treatment will operate at greater efficiency with upgrades to electrical controls and an outmoded telemetry. The CMRPD contracts with a licensed water system operator to operate the water treatment facility. The operator is involved in the planning, design, and specifications for the water system upgrades. Conservancy tribal consultation letters were sent on December 7, 2024, to 13 tribes. No responses have been received.

In 2005, the Conservancy funded GRRCD to implement the Dutch Bill Creek Sediment Control Project which reduced sediment in the creek to improve anadromous fish habitat. In 2008, the Conservancy funded GRRCD to implement the Dutch Bill Fish Passage Improvement Project, which restored 3.4 miles of fish passage in Dutch Bill Creek by replacing an undersized culvert and enhancing habitat, removing the Camp Meeker dam, and installing a pedestrian bridge to improve access. The recommended project aligns with previous work in the area by further supporting streamflow improvements in Dutch Bill Creek.

Site Description:

The Dutch Bill Creek watershed spans almost 12 square miles and features grassland, scrubland and forested areas of coast redwood, tanoak, California bay, and California black oak. Dutch Bill Creek is a tributary of the Russian River in Sonoma County and is home to endangered coho salmon and threatened steelhead trout.

ARCG is a summer camp and conference facility in Occidental, Sonoma County that is owned and operated by ARCG. The property was purchased in 1946 and serves over 32,000 guests per year. The property features a 117-acre outdoor classroom area for science camps, cabins and cottages for overnight accommodations, a climbing wall, challenge courses, and activities such as archery and kayaking. Sonoma Canopy Tours also operates on the ARCG property and sees an additional 25,000 visitors per year.

Grant Applicant Qualifications:

GRRCD is a special district dedicated to promoting resiliency to climate change, ecological literacy, protecting and restoring water resources, managing watersheds, and protecting and restoring wildlife habitat species. Over the past 80 years, GRRCD has collaborated with land managers and public and private landowners to plan, design, and implement a wide range of resource focused activities including scientific investigation and monitoring, climate change adaptation and resilience, sediment reduction, wildlife habitat restoration and enhancement, and water conservation and instream flow enhancement. Other work includes watershed assessments, forest management projects, and conservation planning and permitting. GRRCD

employs conservation planners, project managers, administrative staff, outreach specialists and biologists, geomorphologists, and ecologists. The applicant has managed grants from the Coastal Conservancy and from other local, state, and federal funders.

GRRCD's involvement in the proposed project is one component of an expansive streamflow improvement program within Dutch Bill Creek. A project at Westminster Woods Camp and Conference Center eliminated a dry season diversion from Dutch Bill Creek. There is an ongoing effort for forest management to reduce the risk of wildfire in the watershed which is expected to enhance streamflow and habitat.

ARCG will maintain and operate the water distribution system for use on their grounds. The CMRPD water system is operated and maintained by a contracted licensed water system operator. Fees will be split between ARCG, Camp Meeker, and Occidental based on the volume of water treated and used. ARCG funding comes from organizational revenue and Camp Meeker and Occidental receive funds from water customers.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA:

The proposed project is consistent with the Conservancy's Project Selection Criteria, last updated on September 23, 2021, in the following respects:

Selection Criteria

1. Extent to which the project helps the Conservancy accomplish the objectives in the Strategic Plan.

See the "Consistency with Conservancy's Strategic Plan" section below.

2. Project is a good investment of state resources.

The proposed project will enhance habitat and fish passage and will provide important benefits to Californians. Construction of the project will provide ARCG with a reliable source of potable water using a method of diverting excess flows of Dutch Bill Creek and Redwood Gulch while minimizing impacts to salmonids. Dutch Bill Creek provides water for ARCG, Camp Meeker, and Occidental. The project will increase flows and provide more reliable low flow habitat and fish passage downstream from the facility for salmon and steelhead.

The project budget is based upon cost estimates developed during the ongoing Phase I design project funded by the California Department of Fish and Wildlife (CDFW) and the project goals have been developed in consultation with CDFW, ARCG, and CMRPD.

The proposed project is consistent with the ***Dutch Bill Creek Streamflow Improvement Plan*** (The Russian River Coho Water Resources Partnership, 2017).

The 2017 Russian River Coho Water Resources Partnership Streamflow Improvement Plan includes the following priority recommended action that is furthered by this project:

We recommend working with the institutional water users along Dutch Bill Creek, especially the camps and conference centers, to reduce or eliminate demand from the creek during the dry season. Such partnerships can present tremendous opportunities to improve flow, in large part

because of the magnitude of water demand at these sites and because demand typically peaks during the dry season.

The Partnership has worked with the Westminster Woods Camp and Conference Center to develop a project that demonstrates a combined approach of water conservation and storage/forbearance, which is described in the case study below.

The Partnership is in the early stages of developing a project with the Alliance Redwoods Conference Grounds (just upstream of Westminster Woods), which we are optimistic can eliminate all surface and spring water diversion for both potable and non-potable uses. The project is likely to include a suite of approaches, including the development of alternative water sources for the site, construction of water storage, and implementation of water conservation strategies.

3. Project benefits will be sustainable or resilient over the project lifespan.

The project will continue to deliver benefits over an extended period. Completion of the project will reduce streamflow impacts by eliminating the surface water diversion from Redwood Gulch and shifting the largest water demand to a well in the Dutch Bill Creek watershed. The project increases the resilience of the community by providing ARCG with a reliable source of water and water treated at a higher quality level. The project follows a successful 25-year effort to reduce overall water demand at the ARCG property.

An unrecorded landowner agreement is in place with ARCG, the Wildlife Conservation Board, and North Coast Resource Conservation and Development Council (NCRC&DC). GRRCD is a subcontractor for NCRC&DC for this project and is responsible for implementation of the project.

4. Project delivers multiple benefits and significant positive impact.

The facility upgrades and relocation of the water source will increase streamflow in Dutch Bill Creek and enhance habitat for salmonids and other aquatic species by increasing low-velocity pool habitat volume, provide increased cover with submerged wood from higher water levels, and better water quality for salmonids from sustained pool connection. As a public works project, prevailing wages will create jobs and apprenticeship opportunities. The project will improve Camp Meeker, Occidental, and ARCG's resilience to drought by improving potable water supply, removing the surface diversion, and reducing water demand for irrigation. A portion of Camp Meeker has been identified as a disadvantaged community. The recommended project increases equity and benefits the underserved community by improving the equipment at the water treatment facility and increasing community resilience to drought.

5. Project planned with meaningful community engagement and broad community support.

The planning effort had strong support from the board of directors of the Camp Meeker Recreation and Park District, which is composed of Camp Meeker residents. The CMRPD water treatment operator was involved in the design phase for the upgrades to the treatment facility. Project development and design discussions took place between ARCG and the boards of CMRPD and the Occidental Community Services District to finalize project details and an operating agreement for the shared water treatment facility. The community strongly supports

projects that improve stream flow and aquatic habitat and recover endangered fish populations in the Dutch Bill Creek watershed.

PROJECT FINANCING

Coastal Conservancy	\$470,900
Wildlife Conservation Board	\$872,500
California Department of Fish and Wildlife	\$221,300
Project Total	\$1,664,700

The anticipated source of the Conservancy funding is the FY 2022/2023 appropriation from the General Fund to the Conservancy for the purpose of “urgent sea level rise and coastal resilience needs using nature-based solutions and other strategies” (Budget Act 2022, SB 154 as amended by the Budget Act of 2023, SB 101). The coastal resilience funds are available for the purposes set forth in Section 52 of Chapter 258 of the Statutes of 2021, which sets forth a detailed description of the purposes of the coastal resilience funds and includes projects for the purposes of coastal resilience projects along the coast, including coastal wetlands and watersheds, beaches, dunes, bluffs, bays, fisheries, and other wildlife, and projects that build resilience for coastal communities, public access, and critical infrastructure. The proposed project is consistent with this funding source because it will build resilience for water supply facilities that are critical infrastructure, and benefit salmonids in Dutch Bill Creek by improving streamflow and enhancing habitats to respond to climate change impacts and maintain healthy ecosystem function.

GGRCD, through (NCRC&DC), has received \$872,500 from the Wildlife Conservation Board and \$221,300 from the California Department of Fish and Wildlife. ARCG is expected to fundraise and contribute \$100,000 towards the project.

Unless specifically identified as “Required Match,” the other sources of funding and in-kind contributions described above are estimates. The Conservancy does not typically require matching funds or in-kind services, nor does it require documentation of expenditures from other funders or of in-kind services. Typical grant conditions require grantees to provide any funds needed to complete a project.

CONSISTENCY WITH CONSERVANCY’S ENABLING LEGISLATION:

The proposed project will be undertaken pursuant to Chapter 5.5 of the Conservancy’s enabling legislation, Division 21 of the Public Resources Code (Section 31200), regarding integrated coastal and marine resource protection.

Consistent with section 31220(a), the Conservancy consulted with the State Water Resources Control Board in the development of this grant to ensure consistency with Chapter 3

(commencing with Section 30915) of Division 20.4 of the Public Resources Code pertaining to its Clean Beaches Program.

The Conservancy may award grants for coastal watershed restoration projects that meet one or more of the objectives specified in Section 31220(b). Consistent with Section 31220(b)(2), the proposed project will enhance streamflow, thereby restoring fish habitat within coastal waters and coastal watersheds. Consistent with Section 31120(b)(3), the proposed project will reduce threats to coastal and marine fish by enhancing habitat that will foster population successes. Consistent with Section 31220(b)(4), the proposed project will increase stream function (by increasing water supplies and enhancing riparian and wetland systems in a coastal watershed.

As required by Section 31220(c), the project will include a monitoring and evaluation component through the MMRP.

The project is consistent with the Water Quality Control Plan for the North Coast Region as described in the Consistency with Local Watershed Management Plan/State Water Quality Control Plan section below.

CONSISTENCY WITH CONSERVANCY'S [2023-2027 STRATEGIC PLAN](#):

Consistent with **Goal 1.1, Benefit Systemically Excluded Communities**, the proposed project will increase resilience to drought events and provide expanded capacity for treated water to the communities of Camp Meeker, a portion of which is classified as a disadvantaged community, Occidental, and ARCG.

Consistent with **Goal 3.2, Restore or Enhance Habitats**, the proposed project will improve approximately 2.4 acres of instream habitat for salmonids in Dutch Bill Creek, increase summer streamflow and flow downstream for 1-1.5 miles in Dutch Bill Creek, increase low-velocity habitat volume, cover from higher water levels, and sustain pool connection for salmonids.

CONSISTENCY WITH LOCAL WATERSHED MANAGEMENT PLAN/STATE WATER QUALITY CONTROL PLAN:

The proposed project is in the Guerneville Hydrological Subarea of the Russian River Hydrologic Unit identified as Area 114.11 of the Water Quality Control Plan ("Basin Plan") for the North Coast Region.

The Basin Plan defines Inland Surface Waters as "rivers, streams, lakes, reservoirs, and inland wetlands." (2-16). "The numerous streams and rivers of the North Coast Region contain anadromous fish, and the reservoirs, although few, support both coldwater and warmwater fish. The North Coast Region's native fish species include salmonids such as coho, Chinook, pink and chum salmon, as well as steelhead, coastal cutthroat and rainbow trout. Other native fish include green and white sturgeon, eulachon, Pacific and western brook lamprey, stickleback, five sculpin species, two sucker species, and several minnow species. (1-5)"

Beneficial uses for this hydrological unit are numerous and the proposed project specifically addresses and seeks to enhance those characteristics identified in the plan under Section

2.5.1.1 Rivers and Streams. The proposed project will support and enhance the following beneficial uses as identified in the Basin Plan: Spawning, Reproduction, and Development; Migration of Aquatic Organisms; Cold Freshwater Habitat; Warm Freshwater Habitat; Rare, Threatened, or Endangered Species; and the Municipal and Domestic Supply.

CEQA COMPLIANCE:

On November 16, 2020, CDFW adopted the Initial Study-Mitigated Negative Declaration (IS-MND) for the 2020 Fisheries Habitat Restoration Project located in Del Norte, Humboldt, Monterey, Santa Barbara, Siskiyou, and Sonoma Counties and the associated Mitigation Monitoring and Reporting Program (MMRP) and approved the Alliance Redwoods Water Conservation Implementation Project. The proposed project is a component of the project analyzed in the IS-MND.

In addition, CDFW issued a Notice of Determination on July 20, 2022, regarding ARCG's change in location of the points of diversion in water right Licenses 9450 and 9541 from Unnamed Streams in Redwood Gulch tributary to Dutch Bill Creek to a diversion well located downstream at the confluence of Dutch Bill Creek and the Russian River in Monte Rio. CDFW's NOD found that this change would have no significant adverse effect on the environment. Staff concurs that there is no substantial evidence that the proposed project will have a significant effect on the environment.

The IS-MND identified potentially significant environmental effects in the areas of Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Transportation, Tribal Cultural Resources, and Wildfire. Some of these impacts, such as the transportation impacts, apply to the overall CDFW 2020 Fisheries Habitat Restoration Project, but not to the project proposed for Conservancy funding. With the project's incorporated mitigation measures, summarized below, these environmental effects will be less than significant.

- **Biological Resources:** Mitigation measures, such as restricting work windows to the summer low-flow dry season, will be incorporated to avoid impacts to aquatic stream habitat. Additional measures will be incorporated to mitigate potential impacts to endangered, rare, or threatened species that could occur at the project site, such as the Northern Spotted Owl and the Foothill Yellow-Legged Frog.
- **Cultural Resources and Tribal Cultural Resources:** Cultural resource surveys were completed prior to any ground disturbing activities. No cultural resources were identified. However, additional protective measures listed in the MMRP on pages B28 – B30 will be implemented if cultural resources are identified during construction at the project location, and if inadvertent discovery of human remains or cultural resources are found, identified procedures will be undertaken.
- **Geology and Soils:** Temporary increases in surface erosion will be avoided by implementing erosion control measures, limiting the time period excavated materials are stockpiled, and soil compaction will be minimized by using equipment that uses less pressure per square inch or has a greater reach.

- Hazards and Hazardous Materials: Protocols for operating, staging, storing, fueling and maintaining vehicles and heavy equipment will be followed to reduce impacts to the stream including avoiding spills and leaks. A Spill Prevention and Response Plan will be prepared.
- Hydrology and Water Quality: Erosion control best management practices will be implemented, and instream work will be conducted during the period of lowest flow. CDFW will inspect and assess turbidity control measures and may require sediment control devices to be installed. Additional conditions for water conservation projects may be required and are listed in the MMRP on pages B-36 – B37. Construction equipment will be cleaned prior to use, wastewater will not drain sediment water back into the channel, sediment-laden water will be filtered before it enters the aquatic resource area, and if no sealant is used, poured concrete is to be excluded from the wetted channel for two weeks after it's poured.
- Noise: Personnel will wear hearing protection while operating or working near noisy equipment.
- Wildfire: Safety precautions to decrease wildfire risks consist of smoking only in designated areas, federal/state approved spark arrestors on mechanized hand tools, one fire extinguisher per chainsaw for tree cutting crews, fire extinguishers will be near or on generators and heavy equipment, each vehicle will have one axe or Pulaski and a long-handed shovel, and during construction designated parking areas will be cleared of dry vegetation.

With implementation of the project's mitigation measures, environmental effects to Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Transportation, Tribal Cultural Resources, and Wildfire will be less than significant. Staff recommends that the Conservancy find that the project as mitigated avoids, reduces, or mitigates the potentially significant environmental effects to a level of less-than-significant and that there is no substantial evidence that the project will have a significant effect on the environment.

Upon approval of the project, Conservancy staff will file a Notice of Determination.