

Coordination of Water and Land Planning through the Arroyo Grande Creek MOU Group

Coastal San Luis Resource Conservation District
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Executive Summary

Date: January 2021

Applicant: Coastal San Luis Resource Conservation District

City: Arroyo Grande

County: San Luis Obispo

State: California

The Coastal San Luis Resource Conservation District (RCD) in coastal San Luis Obispo County will strengthen the coordination of land and water planning in the Arroyo Grande Creek watershed by revitalizing the Arroyo Grande Creek Memorandum of Understanding (MOU) Group (group). The RCD will engage a wider and more diverse group of stakeholders than currently exists including the newly forming Arroyo Grande Groundwater Sustainability Agency, Surfrider Blue Water Task Force, Meadow Creek Restoration Project Science Panel and the US Forest Service. The group will update watershed goals, inventory watershed information resources, and update an existing watershed management plan (WMP). The effort will increase coordination and planning within local stakeholder groups, resulting in more sustainable and comprehensive water and land planning in the Arroyo Grande Creek watershed.

The length of time for the project will be two years and the estimated completion date for the project is 12/23. The proposed project is not focused on a Federal facility but may involve US Forest Service lands in the Los Padres National Forest.

Project Location

The Arroyo Grande Creek watershed (figure 1) is a coastal basin located in southern San Luis Obispo County that runs through the communities of Arroyo Grande and Oceano. The drainage includes approximately 96,000 acres, rising to a maximum elevation of approximately 3,100 feet above sea level before discharging into the Oceano Lagoon and eventually the Pacific Ocean. The watershed includes the tributaries of Tally Ho (Corbett), Tar Springs and Los Berros Creeks. The watershed, highly impacted by agricultural and urban modifications, is dominated by agricultural land uses including vineyards, ranches and row crops. The urban core of the City of Arroyo Grande is at the confluence of Tally Ho Creek with Arroyo Grande Creek. The headwaters of the watershed originate in the Los Padres National Forest. Lake Lopez, approximately 13 miles upstream from the point where Arroyo Grande Creek discharges into the ocean, restricts flows and is considered a full barrier to fish passage. The San Luis Obispo Flood Control Channel constricts the lower reach of Arroyo Grande Creek, providing flood protection for the adjacent agricultural lands. The Hydrologic Unit Code for the Arroyo Grande Creek watershed is 1806000606.

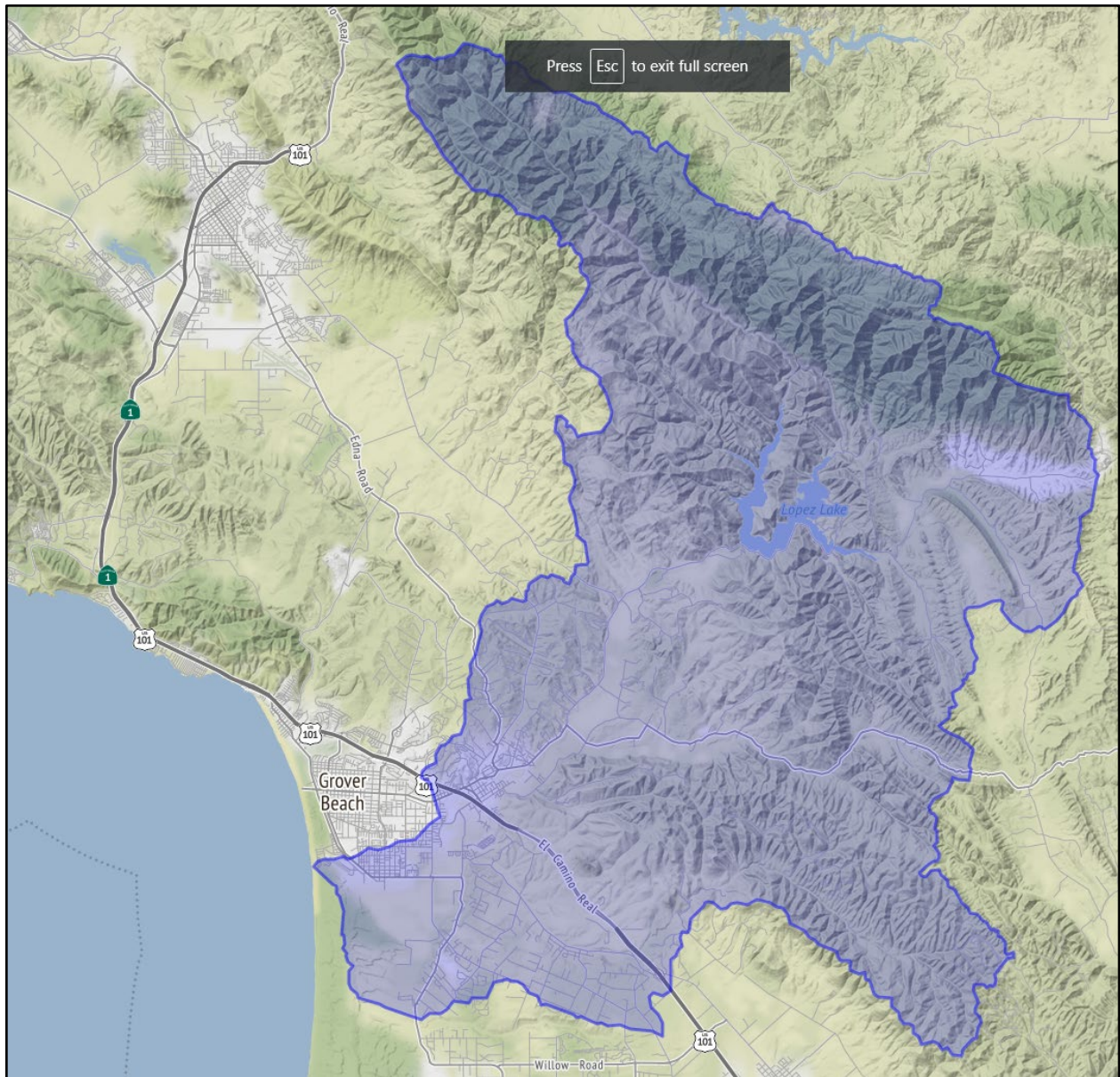


Figure 1. Arroyo Grande Creek watershed

Technical Project Description

Applicant Category

The group is applying as an Existing Watershed Group. The group was established in 2006, and includes water using landowners, representatives from local governments, flood control districts, State Parks, and regional resources agencies. The group was established following the publication of the Arroyo Grande Creek Watershed Management Plan (2005 and Update 2009) and Arroyo Grande Creek Erosion, Sedimentation and Flooding Alternatives Study (2005) to address the modifications made to the watershed that impact and threaten an environment that

is critical to human health, the economic future, safety and welfare, habitat and wildlife values, and recreation and tourism of the communities within the watershed.

The group currently meets quarterly to discuss and share ideas and concepts for collaborative projects that benefit the watershed. Outcomes from past group collaborations include:

- . Vegetation management along the County Flood Control Channel
- . Community Creek Cleanup efforts
- . Production of the Arroyo Grande Creek Care Guide for city residents
- . Ivy Removal Project in the Village of Arroyo Grande
- . Guidance for the City of Arroyo Grande's general plan for creek set-backs,
- . Collaboration on watershed education with the City of Arroyo Grande through their stormwater permit requirements
- . Collaborative Stormwater Resource Plan including the City of Arroyo Grande and County of San Luis Obispo
- . Coordination with City of Arroyo Grande on the RCD StormRewards Program, and
- . City of Arroyo Grande Creek cooperation on sediment basin easement acquisition.

Eligibility of Applicant

The applicant, the RCD, has been an integral member of the group since its incorporation in 2000 and is responsible for collaborating on grant applications with partners, providing outreach, education and technical assistance to landowners and group members, pursuing innovative solutions to water quality and conservation issues, and providing project planning, management and monitoring as required.

The RCD, a Special District of the County of San Luis Obispo, on behalf of the group, is eligible to receive an award as an Existing Watershed Group. The RCD's mission is to protect and enhance natural resources of coastal watersheds in San Luis Obispo County through education, restoration, and collaboration with local stakeholders, and is therefore committed to the quality and quantity of water in the Arroyo Grande Creek watershed. The RCD employs a diverse staff experienced in watershed restoration, water quality monitoring, hydrology and local biological systems and ecology, and has been partnering with local stakeholders and landowners in the Arroyo Grande Creek watershed since 1953 to promote the sustainable use of water resources.

Goals

The original group entered into an MOU agreement to fund programs and develop policies for the maintenance, protection, and enhancement of the Arroyo Grande Creek watershed and the creeks within the watershed including the approximate eighty-six (86) square mile area downstream of Lopez Lake dam and to recommend specific roles and responsibilities to implement those programs and policies.

An existing goal of the group is to cooperatively manage the watershed resources of the Arroyo Grande Creek to provide a powerful resource for developing innovative and creative solutions to critical problems and for leveraging resources to ensure efficient and effective use of public funds. The group has been achieving this goal by collaboratively developing recommendations, funding programs, and policies for the efficient and effective maintenance, protection, and

enhancement of the Arroyo Grande Creek watershed. To that end, the group has produced a master project list with merged recommendations/priority projects from various formative documents that have been produced in the past decade and that formed the basis of measurable objectives.

In the past several years, the group has been faced with additional challenges that promulgates the need to revisit past accomplishments and reform with updated goals and objectives. While the past geographic focus of the group was downstream of Lopez Dam along the mainstem, updated preliminary goals include:

1. Repositioning the group to include the entire watershed so that federal public lands and the concomitant use/impacts can be evaluated and addressed
2. Elevating the Los Berros Creek tributary's importance for attention given its designation as critical habitat for several listed species as well as new ownership of Cal Poly University as a creek adjoining landowner with the potential to bring agricultural innovation to the watershed
3. Integrating the newly forming Arroyo Grande Groundwater Sustainability Agency pursuant to the 2014 Sustainable Groundwater Management Act and concomitant formation of Groundwater Sustainability Plan for the watershed ([https://www.slocounty.ca.gov/Departments/Public-Works/Committees-Programs/Sustainable-Groundwater-Management-Act-\(SGMA\)/Arroyo-Grande-Groundwater-Basin.aspx](https://www.slocounty.ca.gov/Departments/Public-Works/Committees-Programs/Sustainable-Groundwater-Management-Act-(SGMA)/Arroyo-Grande-Groundwater-Basin.aspx))
4. Resolution of a NMFS Jeopardy Opinion through a Reasonable and Prudent Action for the County of San Luis Obispo through successful planning and implementation of a restoration project in the lagoon
5. Positioning the group to increase water security as the climate changes to protect the agricultural heritage in the watershed particularly considering ways to build the channel bed to increase groundwater storage capacity
6. Completing the Arroyo Grande Creek Habitat Conservation Plan to further protect watershed resources and water reliability for the communities downstream of Lopez Dam
7. Integrating the Central Coast Regional Water Quality Control Board's Irrigated Agricultural Lands Program process to elevate the regulatory framework operating in the agricultural sector in advance of its next update occurring at this time https://www.waterboards.ca.gov/centralcoast/water_issues/programs/ag_waivers/ag_order4_renewal.html
8. Updating the previous guidance documents including the Arroyo Grande Creek Watershed Management Plan to include the project matrix and progress made per project

Approach

The existing group would be the nucleus from which a more diverse group is established in order to address the above preliminary goals. This expanded group would access the various resources developed since the last group was formed including watershed and groundwater modeling, mapping and data resources, and an inventory of resources would be established

and made available to stakeholders. The majority of the group's activities would be related to Task B--Watershed Restoration Planning including:

- **Conduct water quality monitoring** at strategic locations including confluences and the estuary
- **(Re)Develop the Watershed Group** by developing master stakeholder list, conducting outreach to new sectors, convening a kick-off event, selecting venue for meetings, surveying stakeholders to solicit input/ideas on watershed improvement projects, drafting first agenda and meeting schedule, using WaterSMART program background/principles with the new group and how the grant positions the watershed to achieve a higher degree of protection for beneficial uses of water through collaborative conservation efforts
- **Review, inventory and synthesize existing watershed resource information** including geomorphic, hydrologic and hydraulic reports, fisheries surveys
- **Develop compelling outreach materials** including graphics for landowner and stakeholder outreach to convey concepts and educate about the connection between channel incision, groundwater storage capacity, erosion, protection of property and structures, and habitat
- **Update the existing watershed management plan** including the project matrix produced and inventory of watershed resource information

Conduct Water Quality Monitoring

In addition to the Central Coast Regional Water Quality Control Board Ambient Monitoring Program (CCAMP) rotational monitoring program, we propose monitoring at locations that inform tributary scale results and include quarterly estuary monitoring which is not currently part of CCAMP. The watershed group will provide input on frequency, striving for meaningful output, including possibly dry season monitoring. Regional Board staff will be engaged in setting up the program to ensure its legal defensibility, volunteers will be recruited, trained and scheduled, data to be managed and analyzed by Creek Lands Conservation (CLC), and three presentations will be made to the watershed group about the program and its results.

Resources to be utilized in developing this activity include the Blue-Ribbon Task Force for the SLO Surfriders which has expressed an interest in participating, the president of the board of directors of CLC who originally created CCAMP, and the Watershed Stewards Program volunteers, who are Americorps/California Conservation Corps members through the SLO Steelhead Initiative for whom CLC serves as a mentor through the Watershed Projects Manager.

In addition to the rotational monitoring described above we propose base flow monitoring be conducted to better understand where and when water goes subsurface and to track drying fronts to identify locations for streamflow augmentation through adjustments in water use, increasing efficiency, reducing consumptive use and increasing infiltration through application of an integrated water strategies approach that CLC has been developing with partners in watersheds in SLO, Santa Barbara and Ventura Counties.

There are at least two other entities conducting monitoring related to project permit conditions including the County of San Luis Obispo related to construction permit on flood control channel and the Irrigated Lands Agricultural Order third party monitoring by Central Coast Water Quality Preservation, Inc. These efforts will be reviewed and compiled with this project's results to the watershed group to better interpret overall results.

(Re)Develop the Watershed Group

The original watershed group was funded in 2000 through the California Department of Fish and Wildlife Fisheries Restoration Grant Program and was called the Arroyo Grande Creek Watershed Forum. The first of its kind in the region, the group attracted private and public land owners and managers, many of whom are still engaged through the MOU group. The original group's goal was to collaborate on the development of a watershed management plan that represented the widest stakeholder support possible at the time. The plan was completed in 2005 and updated in 2009 to include the watershed's first and still only fisheries assessment results completed in 2008.

In order to revamp and expand the group, the RCD would start with the existing group and engage stakeholders in developing a master stakeholder list with current contacts and their information. Messaging and outreach would occur to the contacts. A first agenda would be drafted and vetted by the existing group, along with a draft meeting schedule for the duration of the project. A kick-off event would convene the expanded group with information on how the group differs from other water related groups, and include a survey to solicit ideas on watershed improvement concepts. Pending COVID restrictions, a watershed tour would be conducted in the first quarter of the grant period from the ridges to the sea sponsored by the group and targeting allied stakeholders who may opt out of membership in the expanded group but have interest in its activities.

Stakeholders which had not been included in the original watershed group would be targeted for inclusion including homeowners' associations, service clubs, student groups, other allied NGOs (a few of which didn't exist a decade ago such as One Cool Earth which is co-located at CLC's office and with which they already collaborate in developing an environmental literacy program). Participants in the RCDs StormRewards program would also be invited along with individual landowners who have requested RCD technical assistance in the past.

An additional advantage of the current collaboration is the recent initiation of the CLC Science Panel. Regional academic science and consulting representatives are volunteering to support the CLC mission and will be available to offer their expertise to the watershed group thereby leveraging volunteer technical expertise. As watershed improvement concepts/ideas are proposed and considered the Science Panel will be asked to provide input/feedback and ideally modeling to inform consensus building to achieve a high level of agreement on proposed options.

Heightening conservation through collaboration has been a hallmark of how we approach watershed planning. Deciding together what is important to collect information about and

vetting that information with those who are directly affected, to, in turn, generate solutions for problems facing those affected in the community, means a long-term buy in for those solutions. The past 15-years provides a track record to be built upon for the next 20 years.

Review, inventory and synthesize existing watershed resource information

In order to build upon the previous watershed planning activities, we propose conducting a methodical inventory of watershed information resources by working through searches related to CEQA documents, recent groundwater modeling for recycled water/recharge projects, project permits related to recent bridge replacements in the watershed and other resources that relate to the watershed's geography. The goal is to have the inventory GIS based to permit a map-based interface for searching that is linked to a database. Such a process was recently accomplished for the Salinas River watershed by CLC and is now housed by the Upper Salinas-Las Tablas RCD. The inventory would in turn be used to develop the updated Watershed Management Plan's existing conditions section/s.

Develop compelling outreach materials

In order to clearly and accurately portray the workings of surface and groundwater, we will develop a set of graphic representations of the watershed to convey concepts and educate the watershed group and its wider communities about the connection between channel incision (there are many incised areas over 50' from surface to channel/bed elevation), groundwater storage capacity, erosion, protection of property and structures, and habitat. As project concepts are generated and vetted, we will generate graphics of potential actions and restoration projects. The outreach materials will be offered to the City of Arroyo Grande to be integrated into the city's Creek Care Guide as well as the updated watershed management plan. Finally, we will offer the products to the educators in the local school district who participated in Drought Response Outreach Program for Schools (DROPs) and received watershed education curriculum from CLC educators.

Update the existing watershed management plan

As much as an actual plan captures and prioritizes the watershed's group collaborative work, the group's interactions are the centerpiece of a plan that is useful and guides actions for the planning horizon. The group will be engaged in establishing the Table of Contents of the plan and shape its level of readability (too sciency and it will be relegated to the shelf, too simplistic and it wouldn't be taken seriously), its length, its voice and its intended audience.

As funding allows, the plan will have a digital presence on websites, mapping output, user friendly interfacing and social media platforms.

Evaluation Criteria

Evaluation Criterion A: Watershed Group Diversity and Geographic Scope

A1. Watershed Group Diversity

As summarized in the approach the stakeholders would be expanded beyond the original group and beyond the existing MOU group. The following stakeholders are affected by the quantity and quality of water within the watershed and would be invited to participate: Agriculture (row crops and ranchers including commodity groups including greenhouse and cannabis and wine growers), residential (single family, apartment/condos (HOAs), mini-ranch/hobby farms), large and small commercial, light industrial, school district, and municipal entities including the city of Arroyo Grande, the Oceano Community Services District, the California State Department of Parks and Recreation Off-Highway Vehicle Riding Area and the County of San Luis Obispo.

The original group was focused primarily on water quality/quantity (including flooding), and habitat, and had a fisheries focus. The current MOU group has a municipal focus. Since there are existing multiple other groups that have allied interests, we will engage those groups to demonstrate how the groups overlap and can leverage each other's efforts, funding and actions.

- Zone 3 Flood Control and Water Conservation District Advisory Committee--Funds the operations of the Lopez Project which includes Lopez Lake and Dam, Lopez Terminal Reservoir, Lopez Water Treatment Plant and Distribution System. The Project provides drinking water to the Five Cities communities of Arroyo Grande, Avila Beach, Grover Beach, Oceano CSD, and Pismo Beach.
- Zone 1/1A Flood Control and Water Conservation District Advisory Committee-- is responsible for the maintenance and operations of the Arroyo Grande and Los Berros Channels to provide flood protection within the Zone located near the City of Arroyo Grande and the community of Oceano.
- Groundwater Sustainability Agency (GSA)--the County of San Luis Obispo GSA and the City of Arroyo Grande GSA are jointly developing a Groundwater Sustainability Plan (GSP) for the sustainable management of the Arroyo Grande Subbasin. The technical analysis resulting from the development of the GSP will provide information necessary for the preparation of the Arroyo Grande Creek Habitat Conservation Plan under development by the San Luis Obispo County Flood Control and Water Conservation District. A key component in the GSP includes the development of an integrated surface water and groundwater model that will help decision makers better understand the interconnections between the groundwater basin and the Arroyo Grande Creek watershed.

The RCD will engage stakeholders identified above through participation in public meetings, outreach in newsletters, blogs and webinars, as well as through direct communication via email, phone calls and in-person meetings. Initial engagement will be followed with the activities described in the approach above, including a kick-off meeting, soliciting input through a survey, and a watershed tour sponsored by the group, depending on the current global health pandemic.

A2. Geographic Scope

As described above, the original composition of the group focused on the stakeholders and concerns of the lower watershed. Through this opportunity, the RCD will engage stakeholders throughout the entire geographic scope of the watershed, ensuring that planning efforts are comprehensive and equitable. Figure 2 below shows the boundaries of the Arroyo Grande Creek watershed and the geographic areas represented by the stakeholders in the watershed. By area, stakeholders currently participating in the group represent approximately 22% of the total watershed, while stakeholders anticipated to join the group make up an additional 25% of the watershed. The RCD will engage new stakeholders through the actions listed above under Watershed Group Diversity.

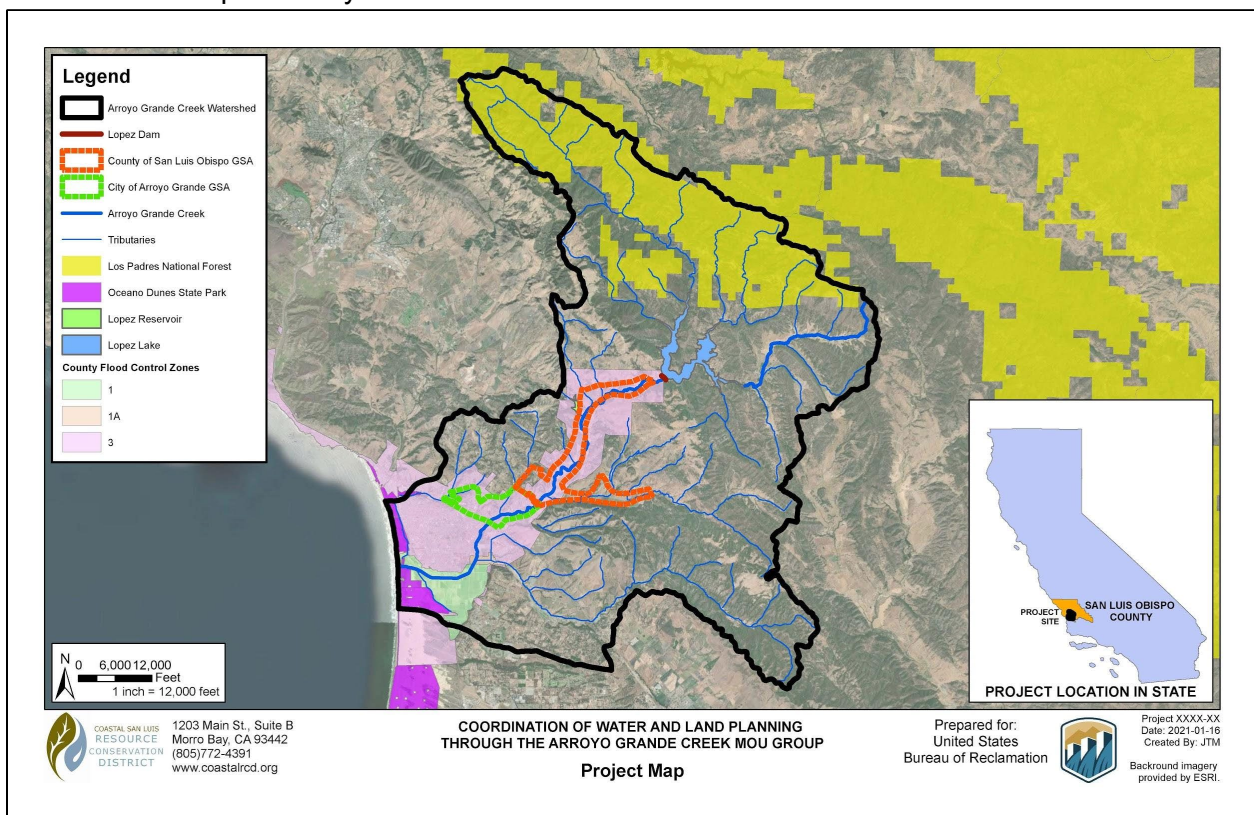


Figure 2. Stakeholders within the Arroyo Grande Watershed

Evaluation Criterion B: Addressing Critical Watershed Needs

B1. Critical Watershed Needs or Issues

The original group's purpose (2005/2009 plans) was to focus on the listing of Steelhead Trout prior to the finalization of the National Marine Fisheries Service South-Central California Coast Steelhead Recovery Plan (2012) by reviewing limiting factors for steelhead, assessing fish passage barriers and engaging stakeholders in defining and addressing watershed needs beyond fisheries.

In addition, the following identify existing watershed needs and would be within the purview of the watershed group.

- The Arroyo Grande Creek Flood Control Project was built in the 1950's through an NRCS Public Law Program. The most downstream three miles of the mainstem creek were channelized and levees were constructed. Over the intervening years, the rich agricultural land in the flood control reach was (and continues to be) cultivated with row crops, typically 3 crop rotations annually. In 2001, the Arroyo Grande Creek Flood Control Channel Levee breach flooded agricultural lands and resulted in a lawsuit settlement and eventual 218 vote to increase assessments for those benefiting from the levee and flood control appurtenances. Consequently, a waterway management program was initiated by the County, an EIR has been certified, permits and funding procured, and is being implemented to establish flood conveyance capacity.

The County received a jeopardy biological opinion for waterway management program activities and is required to implement a Reasonable and Prudent Action to continue flood control activities under grant funded programs in order to receive the NMFS permit for currently occurring activities related to flood protection.

- The completion of Lopez Dam in the late 1960's and concomitant required instream releases led to increased downstream bank erosion ("hungry" low sediment laden water has capacity to erode the alluvium and has done so down to bedrock in places and led to highly incised channel areas that are no longer able to connect to the floodplain) and sediment deposition into the Flood Control Channel thereby reducing capacity of the channel, and potentially exasperating flood risk. The completion of the flood control channel in approximately the same time period meant that two concomitant water infrastructure projects were conceived of, designed and built without full consideration of impacts and interrelated issues. To this day, the two are operated under separate zones of benefits with separate advisory bodies and funding mechanisms by the County Board of Supervisors acting as the County of SLO Flood Control and Conservation District.
- The County has yet to finalize its Habitat Conservation Plan for Arroyo Grande Creek (draft 2004) which would provide Section 10 coverage for Steelhead trout and Red-legged frogs for the County's operation of Lopez Dam. The outstanding need places species at risk as the federal agencies and the County continue to define the science and negotiate the actions necessary to provide federal protection. Most recently, the

County has contracted for habitat mapping related to modeling downstream release scenarios and how that would impact existing water supply contracts/storage for each agency.

- The US Forest Service (Los Padres National Forest) has jurisdiction over lands upstream of Lopez Reservoir within the watershed and has not been engaged with stakeholders downstream of the reservoir related to watershed management and planning. The recreational roads in the forest are in need of maintenance and sediment reduction planning. The capacity of the reservoir, which has never been dredged, continues to diminish as sediment enters the system from non-point sources throughout the contiguous forest lands. The threat of wildfire looms within this landscape and to the RCDs knowledge, this is an ever-emerging need related to how wildfire would impact the reservoir and downstream water quality.
- In 2010, Arroyo Grande Creek was listed on the SWRCB 303(d) list as impaired for E. coli and fecal coliform, and a 2016 recommendation was made not to delist the waterbody from the 303(d) list. A Total Maximum Daily Load (TMDL) for E. coli and fecal coliform has been proposed by the Central Coast Regional Water Quality Control Board (RWQCB) for Arroyo Grande Creek. Los Berros Creek, a tributary in the Southeastern area of the Arroyo Grande watershed, is listed on the SWRCB 303(d) list as impaired for Nitrates, and in 2012 a TMDL for Los Berros sub watershed was adopted for Nitrates.

There are four currently occurring water quality monitoring efforts that would be included in the project's information gathering process. (1) Central Coast Water Quality Preservation, Inc., a third-party cooperative monitoring program for the RWQCB's Irrigated Lands Agricultural Order collects monthly samples for nutrients, DO, chlorophyll, temperature, TDS, TSS, conductivity, salinity, ph, turbidity, and flow, and quarterly samples for toxicity through private consulting firm, TetraTech. (2) In the Spring of 2020, the County of SLO began collecting (as a requirement of the AG Creek Waterway Management Program--for the flood control channel), water quality samples 8 times per year (2 times per season) at each of the three bridge crossings in the project area: Highway 1, 22nd Street, and Union Pacific Railroad. Water quality sampling includes the collection of temperature and turbidity using a hand-held meter. (3) The Surfrider Blue Ribbon Task Force tests for enterococcus bacteria at 22nd Street. (4) The SLO County Health Department also tests for bacteria but on a different schedule than Surfrider.

Each of these monitoring efforts is currently occurring in a silo and the results are not currently being compiled for overall analysis to pinpoint causative land uses that can be linked back to modifying those land uses for water quality improvements through Best Management Practices. The exception might be that the enterococcus is likely linked to people experiencing homelessness who live adjacent to and sometimes in the flood control reaches. There are ongoing attempts to address this social dilemma by local law enforcement agencies and the RWQCB hosted a day-long workshop on this issue region-wide (Monterey to Ventura) to jump-start solutions.

- The Arroyo Grande Creek mainstem has undergone massive historical incision which has reduced groundwater storage, massively destabilized banks and negatively impacted steelhead habitat quality and quantity. The incised channel banks will continue to collapse and erode in coming decades as the channel seeks to widen and obtain a new geomorphic equilibrium. This process will continue to have a significant negative impact on groundwater levels, instream habitat, riparian habitat, and property and structures on the banks of the mainstem. To an extent, this process can be managed and possibly reversed by stabilizing the creek bed to prevent future incision and building channel spanning habitat structures which slowly over time can aggrade the stream bed. Preliminary observations suggest this can be a successful strategy without impacting flood risk. This issue alone could serve to unite the interests of Zone 3, Zone 1/1A and the GSA.
- Invasive species management continues to be a concern and includes invasive English and Cape Ivy in the village of Arroyo Grande and Giant Reed (*Arundo*) throughout the watershed. Annual vegetation management in the flood control reach does remove these species as well as lesser problem but widespread Castor bean, but the rest of the watershed lacks a cohesive strategy for management for ivy and *Arundo*. Seed sources for *Arundo* are located in the Los Padres National Forest. Seed sources for ivy tend to be from escaped residences and highway divide vegetation though less is being planned in the past decade as native planting regimes have become more common in the region.
- Fish passage barriers have been assessed and plans are underway for remediation. The remaining barrier will be Lopez Dam once the mainstem and tributary barriers are modified and/or removed. The dam is considered the end of anadromy and no plans exist for providing passage to some of the remaining best habitat upstream of the dam in the Los Padres National Forest. Garza, et. al., (2009) research indicates that the genetic composition of steelhead downstream and upstream of the dam are identical. Therefore, there is the potential for reuniting the populations if passage can be provided around the dam. While dam removal is beginning to gain interest and support in California and the west coast, it is unlikely that Lopez Dam would be considered for removal due to its provision of water for communities and agriculture downstream.

B2. Developing Strategies to Address Critical Watershed Needs or Issues

Watershed Group Development

The governance structure of the existing MOU group is through the MOU itself whereby individual agencies signed on to the MOU specified their role and responsibility. Individual landowners did not have a governance voice within the process at that time. With this update, the RCD would be refreshing the group under a single umbrella, updating the MOU with reformulated goals and objectives, and adding additional groups for residential, agricultural and industrial landowner groups such as the Farm Bureau, Homeowner Associations, and the Chamber of Commerce, as well as conservation groups such as the Surfrider Blue Ribbon Task Force. Once the group is formed, the group will self-determine further governance representation.

Watershed Restoration Planning

The group plans to gather information regarding critical issues and needs by starting with the MOU group's master project list from 2012 to update the list with project status, additional projects, issues and needs as solicited and vetted by the updated group.

As previously stated, a watershed resources inventory (WRI) will be built on a GIS platform to permit efficient and shared information. There is a good deal of existing information that would be gathered and compiled to interpret existing conditions within the watershed. The water quality monitoring data would also be integrated into the WRI. Both the RCD and CLC, which would serve as a subcontractor for the project, use science to inform best practices. Over the past 5 years, CLC's streamflow monitoring has informed where best to locate streamflow augmentation projects to protect base flows for listed fish and wildlife.

As was previously mentioned this effort will build on previous efforts accomplished between the finalization of the original watershed management plan and the MOU groups actions (2009-present). Going forward, the expanded watershed group will draw upon recent developments in the watershed including the completion of fish passage barrier modifications/removal plans and implementation projects, careful integration of the groundwater sustainability planning work, particularly the no degradation rules and understanding of groundwater dependent ecosystems, and how progress with the Habitat Conservation Plan will intersect with conservation measures for threatened and endangered species.

Existing programs through the RCD such as the CDFA Healthy Soils program, irrigation efficiency evaluations, and pollinator habitat enhancement program will target involved watershed landowners. Methods and models developed for other watersheds will be introduced to the group offering similar avenues to pursue solutions to the above stated watershed issues and needs. For example, in a watershed near Cambria, CA, CLC is working with a contiguous set of landowners to enhance streamflow through articulated projects such that when implemented will have a measurable increase in streamflow along that particular reach and downstream (protected legally with voluntary water rights mechanisms). A model developed for four watersheds in Santa Barbara County and one in Ventura County will be explored for export to the Arroyo Grande Creek watershed to quickly identify parcels where consumptive use can be reduced and infiltration can be increased.

CLC's watershed project manager has convened and facilitated several watershed groups and would advise our group in resolving conflicts by using data to set the stage for understanding conflicting needs/solutions and "get to yes" through a negotiated conversation that listens for underlying needs/values that motivate opinions and points of view.

A project prioritization rubric will be devised and vetted with the group. The rubric will be dependent on the complexion of the stakeholders, what their respective needs and issues are and how the group's science/data collection is represented for their consideration.

The overarching process is to reconnect decision-making within the group and the opportunities to secure safe drinking water, restore ecosystems, and build climate resilience by making water and land decisions together. The single decisions of building the dam for water supply in the absence of considering how hungry water would bring tons and tons of sediment to the constrained flood channel (versus activating floodplain storage of the material) need to be rethought and reconsidered to avoid the continuing expensive tinkering to find solutions that make sense economically and scientifically, and can get implemented with support from stakeholders.

Evaluation Criterion C: Implementation and Results

C1. Project Implementation

Task/Subtask		Milestones	*Start/End Date	Costs
1 Project Management and Administration				\$ 18,450.50
1.1	Project Management	Contract development and finalization	Jan 22 - Dec 23	
1.2	Meetings/Communication	On-going	Jan 22 - Dec 23	
1.3	Reporting/Invoicing	Quarterly throughout term	Jan 22 - Dec 23	
2 Water Quality Monitoring				\$ 31,246.62
2.1	Coordination w/ RWQCB	Summary report of needs and goals	Jul 22 - Sept 22	
2.2	Site Identification and Development	Maps, access agreements as needed	Jul 22 - Sept 22	
2.3	Develop volunteer program	Trained volunteers	Jul 22 - Sept 22	
2.4	Equipment/Supplies expenses	-	Sept 22	
2.5	Monthly monitoring	Monthly data analysis summaries	Oct 22 - Dec 23	
2.6	Base Flow Monitoring	Monthly data analysis summaries	Oct 22 - Dec 23	
2.7	Data Analysis	Data Reports presented to group	Oct 22 - Dec 23	
2.8	Presentation	Presentation materials	Dec 23	
3 (Re)Develop the Watershed Group				\$ 23,592.20
3.1	Stakeholder Engagement	Updated Master Stakeholder list	Jan 22 - Jun 22	
3.3	Programming/Planning	Draft agenda & meeting schedule	Jan 22 - Jun 22	

		project prioritization rubric	Jun 22 - Dec 22	
3.2	Outreach	Develop messaging and outreach to contacts	Jan 22 - Jun 22	
3.4	Kick-off mtg & Watershed Tour	Agenda, survey results	Jun 22	
4 Review of Existing Data				\$ 16,394.20
4.1	Literature and Resources Review	Bibliography	Jun 22 - Dec 22	
4.2	Outreach	Request data from known resources	Jun 22 - Oct 22	
4.3	GIS/database development	Live Database Publicly Accessible	Oct 22 - Jun 23	
5 Develop Outreach Materials				\$ 10,548.60
5.1	Framing/planning	-	Jan 23 - Mar 23	
5.2	Graphic designs	Draft/Final exhibits	Mar 23 - Oct 23	
5.3	Outreach/Coordination	Published Exhibits	Jan 23 - Dec 23	
6 Update WMP				\$ 27,151.85
6.1	Group Coordination	Draft WMP Table of Contents	Mar 23 - Dec 23	
6.2	WMP Update	Final WMP for circulation	Oct 23	
TOTAL				\$ 134,170.68

* Assumes the project term starts 1/1/2022 and ends 12/31/2023

** Includes a 10% IDC of \$6,786.71

C2. Building on Relevant Federal, State, or Regional Planning Efforts

The watershed group's activities complement goals of the following Federal, state and regional/local planning efforts. We describe the three most relevant plans and list several additional plans addressed by the project.

1. *Sustainable Groundwater Management Act (SGMA)*: Passed in 2014, SGMA is California's framework for sustainable groundwater management and focuses on bringing over drafted groundwater basins into balanced levels of pumping and recharge through cooperative local planning efforts. A Groundwater Sustainability Plan (GSP) is currently being developed for the Arroyo Grande subbasin which will inform planning efforts in the Arroyo Grande Creek watershed as well as provide a better overall understanding of the hydrogeologic processes (i.e., surface water and groundwater interconnections) in the watershed. The proposed activities of the watershed group complement SGMA by aligning those parts of the basin which are a focal point for SGMA with the reaches of the surface water in Arroyo Grande Creek. Of particular

emphasis is the potential to rebuild the channel to permit groundwater recharge to bring the basin into balance and address groundwater dependent ecosystems in the basin.

2. California Water Action Plan (WAP): The centerpiece for water planning in the state, the WAP goal is to move California toward more reliable water supplies, the restoration of important species and habitat, and more resilient, sustainably managed water resources systems (<https://water.ca.gov/Programs/California-Water-Plan/Update-2018>).

The six recommended actions in the Plan and how the group would utilize the plan include:

- Improve integrated watershed management--the purpose of the redeveloped watershed group is to practice and upgrade an integration of its watershed resources to more effectively manage those resources
- Strengthen resiliency and operational flexibility of existing and future infrastructure--the proposed watershed group would use technical resources available through the WAP and incorporate the group's selection of strategies into the updated watershed management plan
- Restore critical ecosystem functions--the watershed group would be reviewing ecosystem functions particularly related to groundwater recharge and management as well as updating any new limiting factors since the last watershed planning effort in order to account for and recommend restoration of ecosystem services.
- Empower California's under-represented or vulnerable communities--the watershed group may engage with issues related to homelessness and water quality in the Flood Control Channel, moving the dial on an on-going challenge and one that the existing group has considered within the past two years by inviting the homeless coalition director and sheriff to the meeting to better understand the services currently available and being offered to this population.
- Improve inter-agency alignment and address persistent regulatory challenges--the stakeholder group is itself an inter-agency entity and the proposal includes steps to improve its diversity.
- Support real-time decision making, adaptive management and long-term planning--the proposed water quality monitoring including the estuary and baseflow monitoring will bring real-time data to the group and provide the context for identifying critical/emergent issues, consideration of recommendations through shared decision making and a rubric for integrating the results of the monitoring into its long-term planning

In July 2020, the Governor released the Water Resilience Portfolio Initiative to increase the speed and efficiency of implementing the WAP. The Initiative spans three state agencies including CalEPA, California Department of Food and Agriculture and California Natural Resources Agency. Further, Cutting the Green Tape Initiative (in progress is key to rolling out the Portfolio. The watershed group will avail themselves to the Portfolio's principles in order to align project planning with future funding opportunities that emerge from the WAP and Portfolio.

3. NOAA NMFS South-Central California Coast Steelhead Recovery Plan Actions: The Federal Recovery Plan for the San Luis Obispo Terrace Biogeographic Population Group for threatened Steelhead trout identifies the following very high threats facing the Arroyo Grande Creek watershed

- Agricultural Development
- Groundwater Extraction
- Dams and Surface Water Diversions
- Levees and Channelization
- Roads

The following are identified as high threats

- Urban Development
- Agricultural Effluents

Recovery actions identified in the Recovery Plan include

- Implementing operating criteria to ensure the pattern and magnitude of groundwater extractions and water releases, including bypass flows around diversions,
- Provide the essential habitat functions to support the life history and habitat requirements of adult and juvenile steelhead
- Remove or modify instream fish passage barriers to allow steelhead natural rates of migration to upstream spawning and rearing habitats, and passage of smolts and kelts downstream to the estuary and ocean
- Identify, protect, and where necessary, restore estuarine and freshwater rearing habitats.

The proposed activities of the watershed group complement the Recovery Plan by working with stakeholders addressing groundwater (GSA,) reservoir operations (HCP), currently occurring fish passage remediation, and improving habitat throughout the watershed. CLC/RCD are listed in the Plan as responsible parties to adopt recovery actions and work with stakeholders to address threats.

Other relevant state and local planning efforts that the project complements include:

- California State Wildlife Action Plan
- California EcoRestore
- Safeguarding California Plan
- California Biodiversity Initiative
- County of SLO Lopez Low Level Release Plan
- County of SLO Integrated Regional Water Management Plan--both the RCD and CLC are signatories to the plan and serve on the governance structure
- County of SLO Water Resources Advisory Committee (WRAC)--both RCD and CLC serve on the WRAC
- SLO County Local Coastal Plan

Evaluation Criterion D: Department of the Interior and Bureau of Reclamation Priorities

1. Creating a conservation stewardship legacy second only to Teddy Roosevelt

The RCD and CLC rely on science-based information to develop and implement practices that are appropriate for specific resource management issues, geographic locations, and sociopolitical contexts. This is illustrated by the development of a model by CLC to identify parcels where consumptive use can be reduced and infiltration can be increased, and by the RCDs use of tools that calculate the potential of certain practices to sequester ambient carbon dioxide in order to maximize carbon dioxide drawdown. The RCD leverages its streamlined permitting tool, developed cooperatively with Sustainable Conservation in 2010, to ensure that relevant and meaningful conservation work is not restricted by regulatory obstacles and green tape. The RCD's role in effective management and conservation of natural resources in the Arroyo Grande Creek watershed is a direct result of the relationships and trust it has developed over the decades with landowners, local governments, natural resource agencies and fellow conservation groups.

3. Restoring trust with local communities

As discussed throughout this proposal, the strength of a watershed plan comes from a cooperative and comprehensive planning effort led by the stakeholders themselves. The RCD and CLC understand this is key to long-term buy-in and commitment from stakeholders and will ensure equitable and transparent stakeholder involvement through this planning process. This will also lay the foundation for opening lines of communication between stakeholders, and regulatory and government agencies. During the original stakeholder process, state agencies such as the California Department of Fish and Wildlife and the RWQCB did not become signatories to the MOU but expressed interest in being brought in when circumstances warranted. With new funding sources through state agencies pursuant to a recently passed proposition, there is new potential to engage state agencies and revisit their signatory interests.

4. Striking a regulatory balance

The Steelhead Recovery Plan's threats assessment and priority recovery actions, previously discussed, were vetted locally through stakeholder meetings prior to release of the draft plan. The plan utilized an assessment originated by The Nature Conservancy and key actions were reviewed by local and state agencies. Currently CDFW is slated to collect data on Steelhead populations in the watershed through its Coastal Monitoring Program which is based on strong science and would be vetted locally, possibly through this watershed group.

Bureau of Reclamation Priorities

1. The project serves to help stakeholders find new water for farms, families, businesses, and fish and wildlife by using updated models for increasing efficiency/reducing consumptive use and increasing infiltration. Not using an outside source of water, the

stakeholders will become familiar with methods for improving the watershed itself that will increase local water reliability. The group will be in a position to leverage groundwater sustainability assessment and planning efforts and apply those outputs to locate watershed alluvial sites that may be geologically appropriate for rebuilding the aquifer and thus storing more water during the rainy season for use in the dry season.

2. The RCDs experience and use of streamlined permits can be applied to off stream storage permitting along with federal programmatic permits that have become available in the past 3-5 years, since the MOU group's founding.
3. The project serves to introduce stakeholders to geomorphic and hydrologic information that was not previously available that can provide additional information and sources to potentially improve local water supplies for the community's future.
4. The group would be engaged in learning about and providing input on ongoing drought efforts including cloud-seeding upstream of Lopez Reservoir and the County's Low Level Response Plan for the Reservoir.

Project Budget

Budget Proposal

Budget Item Description	Computation		Quantity Type	Total Project Cost	Match Amount	Grant Request Amount
	\$/Unit	QTY				
Salaries and Wages				\$ 33,063.55	\$ 11,400.85	\$ 21,662.70
Project Manager	\$ 37.49	465	Hours	\$ 17,432.85	\$ 5,436.05	\$ 11,996.80
Resource Specialist	\$ 27.91	170		\$ 4,744.70	\$ -	\$ 4,744.70
District Engineer	\$ 54.68	90		\$ 4,921.20	\$ -	\$ 4,921.20
District Manager	\$ 40.78	80		\$ 3,262.40	\$ 3,262.40	\$ -
Bookkeeper	\$ 33.78	80		\$ 2,702.40	\$ 2,702.40	\$ -
Fringe Benefits				\$ 11,624.85	\$ 3,756.45	\$ 7,868.40
Project Manager	\$ 14.21	465	Hours	\$ 6,607.65	\$ 2,060.45	\$ 4,547.20
Resource Specialist	\$ 10.60	170		\$ 1,802.00	\$ -	\$ 1,802.00
District Engineer	\$ 16.88	90		\$ 1,519.20	\$ -	\$ 1,519.20
District Manager	\$ 12.85	80		\$ 1,028.00	\$ 1,028.00	\$ -
Bookkeeper	\$ 8.35	80		\$ 668.00	\$ 668.00	\$ -
Travel				\$ 336.00	\$ -	\$ 336.00
site visits, monitoring	\$ 0.56	600	miles	\$ 336.00	\$ -	\$ 336.00
Equipment				\$ 2,400.00	\$ 2,400.00	\$ -
RCD's Flow meter	\$ 25.00	48	Hours	\$ 1,200.00	\$ 1,200.00	\$ -
RCD's Multimeter	\$ 25.00	48		\$ 1,200.00	\$ 1,200.00	\$ -
Supplies and Materials				\$ 500.00	\$ -	\$ 500.00
monitoring supplies	\$ 500.00	1	L/S	\$ 500.00	\$ -	\$ 500.00
Contractual				\$ 72,739.57	\$ 9,966.20	\$ 62,773.37
CLC	\$60,239.57	1	L/S	\$ 60,239.57	\$ 9,966.20	\$ 50,273.37
Analytical Lab	\$ 250.00	30	H2O sample	\$ 7,500.00	\$ -	\$ 7,500.00
Graphic Artist	\$ 5,000.00	1	L/S	\$ 5,000.00	\$ -	\$ 5,000.00
Other				\$ 6,720.00	\$ 6,720.00	\$ -
Group participation	\$ 35.00	192	Hours	\$ 6,720.00	\$ 6,720.00	\$ -

TOTAL DIRECT COSTS			\$ 127,383.97	\$ 24,277.30	\$ 93,140.47
Indirect Costs	10.00%	MTDC	\$ 6,786.71	\$ -	\$ 6,786.71
TOTAL ESTIMATED PROJECT COSTS			\$ 134,170.68	\$ 24,277.30	\$ 99,927.18

Budget Narrative

Salaries and Wages

The project will be managed by RCD Conservation Programs Manager Hallie Richard. Additional RCD staff involved in the project are listed below along with their salaries, estimated hours contributed to this project, and pay rates. The District Manager and Bookkeeper will be responsible for all grant administration tasks, including invoicing, reporting, contracting, and tracking of grant deliverables and milestones, and are therefore included in the personnel category under Direct Costs rather than rolled into Indirect Costs.

The RCD will contribute a total of \$15,157.50 in in-kind match in support of project management (task1) in the form of staff time. Additionally, the RCD will provide a total of \$2,500 in in-kind match in support of water quality monitoring (task 2) in the form of monitoring equipment usage.

Project Personnel	Annual Wages	Hours	Pay Rate/ Hour	Fringe Benefits
Project Manager	\$ 77,979.20	465	\$ 37.49	\$ 14.21
Resources Specialist	\$ 58,052.80	170	\$ 27.91	\$ 10.60
District Engineer	\$ 56,867.20	90	\$ 54.68	\$ 16.88
District Manager	\$ 84,822.40	80	\$ 40.78	\$ 12.85
Bookkeeper	\$ 35,131.20	80	\$ 33.78	\$ 8.35

Fringe Benefits

Fringe benefit rates are included in the table above. Fringe benefit rates are calculated on a per employee basis and cover the total cost of employing each staff member. Total costs for each employee include: base rate; benefits, which include health stipend, sick, paid time off, professional development and retirement; workers' compensation; and employer payroll taxes.

Travel

Execution of this project will require RCD staff to travel across the watershed, a maximum of 50 miles round trip per trip, for an estimated 12 trips over the 2-year project at the accepted federal rate of \$.56/ mile for a total of \$336. Travel will include meeting with stakeholders in order to conduct water quality monitoring, and site visits. No overnight travel, airfare, per diem expenses or lodging is included in this project.

Equipment

Water quality monitoring tasks will be executed using the RCD's equipment, including a Sontek Acoustic doppler flow meter and YSI multimeter probe. The in-kind match value for the use of this equipment was determined following the USACE Construction Equipment Ownership and Operating Expense Schedule and is quantified at \$2,400 for the 2 year project term. No additional equipment will be purchased with grant funds for this project.

Materials and Supplies

Materials specific to water quality monitoring including calibration standards and replacement probes for the YSI multimeter will be purchased using grant funds. A total of \$500 has been budgeted for materials and equipment.

Contractual

CLC will play a large role in the scope of this project. CLC staff will manage the water quality monitoring component (task 2), including coordinating with RWQCB staff, identifying and developing monitoring sites, conducting water quality monitoring and analysis, and supporting the RCD presenting the findings to the group. CLC staff will also support the RCD in the redevelopment of the watershed group (task 3) through stakeholder engagement, outreach, programming, and co-hosting the kick-off meeting and watershed tour. CLC staff will lead the reviewing existing data (task 4), and support the update of the WMP (task 6). CLC is an essential partner in this project and party of the AG MOU group. No procurement process was used for this selection.

Task/ Subtask	Staff	Rates	Hrs	Contract	Match
Task 1 Project Management/Admin				\$ 3,293.20	\$ -
Management	Sr Scientist	\$ 67.10	20	\$ 1,342.00	\$ -
Admin/Bookkeeping	Bkpr	\$ 54.49	15	\$ 817.35	\$ -
Oversight	ED	\$ 75.59	15	\$ 1,133.85	\$ -
Task 2 Water Quality Monitoring				\$ 4,673.62	\$ 8,750.40
Coordination with RWQCB	Sr Scientist	\$ 67.10	10	\$ 671.00	\$ -
Site ID	Sr Scientist	\$ 67.10	10	\$ 671.00	\$ -
Freshwater and Estuary Monitoring		\$ -		\$ -	\$ 3,435.84
Baseflow Monitoring				\$ -	\$ 5,314.56
Analysis	Staff Sci 1	\$ 55.36	42	\$ 2,325.12	\$ -
Presentation	Sr Scientist	\$ 67.10	15	\$ 1,006.50	\$ -
Task 3 Develop Watershed Group				\$ 6,206.80	\$ -
Stakeholder Engagement	Sr Scientist	\$ 67.10	30	\$ 2,013.00	\$ -
Outreach	Staff Sci 2	\$ 47.53	30	\$ 1,425.90	\$ -
Programming/Planning	Staff Sci 2	\$ 47.53	30	\$ 1,425.90	\$ -
Kick-off Meeting	Sr Scientist	\$ 67.10	10	\$ 671.00	\$ -
Watershed Tour	Sr Scientist	\$ 67.10	10	\$ 671.00	\$ -
Task 4 Review of Existing Information				\$ 10,241.60	\$ 715.80
WRI Development	Staff Sci 1	\$ 55.36	185	\$ 10,241.60	

Outreach		\$ -	0	\$ -	\$ 715.80
Task 5 Develop Outreach Materials				\$ 2,963.60	\$ -
Framing/Planning	Sr Scientist	\$ 67.10	30	\$ 2,013.00	\$ -
Outreach and Coordination	Staff Sci 2	\$ 47.53	20	\$ 950.60	\$ -
Task 6 Update WMP				\$ 22,894.55	\$ -
	Staff Sci 1	\$ 55.36	230	\$ 14,115.55	\$ -
	Staff Sci 2	\$ 47.53	100	\$ 4,753.00	\$ -
Writing & Coordination	Sr Scientist	\$ 67.10	60	\$ 4,026.00	\$ -
Expenses--travel, office, copies, postage, etc.					\$ 500.00
TOTAL				\$ 50,273.37	\$ 9,966.20

Analysis of water quality samples (task 2) will be contracted to a state-certified analytical laboratory for analysis. We estimate a total of 30 samples will be collected for analysis. Based on a preliminary estimate of \$250 per sample, \$7,500 has been budgeted for this task. The RCD will solicit three bids for this scope of work and select the more responsive and responsible bidder.

Development of a set of graphic outreach materials (task 5) will be contracted out to a qualified graphic design firm. Based on preliminary estimates, \$5,000 has been budgeted for this task. The RCD will solicit three bids for this scope of work and select the more responsive and responsible bidder.

Third-Party In-Kind Contributions

Parties to the MOU are contributing their time spent participating in the (re)development of the watershed group (task 3) as in-kind match. This contribution is calculated at \$35/hour, for a total of approximately 192 hours over the project term, for a total of \$6,720 of in-kind match.

CLC is providing \$9,966.20 in in-kind match in support of water quality monitoring activities and supplies (task 2), and review of existing data (task 4).

Environmental and Regulatory Compliance Costs

This project includes only planning activities and water quality monitoring and is therefore exempt under CEQA per categorical exemption class 6: information collection. No permits or approvals are required in order to complete the proposed scope of work.

Indirect Costs

The RCD does not have a federally approved indirect cost rate agreement, therefore a de minimis rate of 10 percent of modified total direct costs (including salary/wages, fringe benefits, travel, supplies, and up to \$25,000 of each subcontract) has been calculated and included in the budget.

The proposed budget does not include any project costs that were incurred prior to award.

Summary and key points

The Arroyo Grande Creek watershed is unique in the county to have preserved its agricultural heritage while diversifying economically over the past 80 years. The City of Arroyo Grande continues to support its agricultural history by keeping a right-to-farm ordinance alive and functioning within the city limits. While some land use transformation has occurred from ranching to row crops to vineyards, there are still thriving family farms in the watershed started by the pioneers who settled the valley. Water is central to that continued heritage and the current stakeholders, some of which provided letters of support, deeply appreciate and understand the seriousness of preserving the water resources of the watershed. The investment thus far made by stakeholders in working together is evidenced by:

- The completion of the Arroyo Grande Creek Watershed Management Plan in 2005/09
- The initiation and implementation of the MOU group which functions to this day, meeting quarterly and supporting others projects with letters
- The drafting of a project matrix that can be advanced to the next planning effort supported by the proposal
- The continued ability of stakeholders to attract state funding for watershed improvements including a new Department of Water Resources project about to go live on the Tally Ho tributary to repair a head-cut and reduce sedimentation to the main stem
- An interest in fish passage barrier modification by the County in partnership with stakeholders that has been funded by the National Fish and Wildlife Foundation and will be constructed next year
- An estuary restoration project that will expand the estuary by 8 acres

And yet the watershed is at its next planning horizon having had almost 20 years under the existing watershed management plan. It is ever more important to continue and heighten the stakeholder engagement in the watershed to ensure that next 20-year planning horizon is accomplished with this project to set the course for enhanced collaborative care, attention and smart water planning as climate change occurs and we can call on our past successes to find workable and permissible projects to benefit watershed stakeholders.

Budget Item Description	Computation		Quantity Type	Total Project Cost	Match Amount	Grant Request Amount
	\$/Unit	Quantity				
Salaries and Wages				\$ 33,063.55	\$ 11,400.85	\$ 21,662.70
Project Manager	\$ 37.49	465	Hours	\$ 17,432.85	\$ 5,436.05	\$ 11,996.80
Resource Specialist	\$ 27.91	170		\$ 4,744.70	\$ -	\$ 4,744.70
District Engineer	\$ 54.68	90		\$ 4,921.20	\$ -	\$ 4,921.20
District Manager	\$ 40.78	80		\$ 3,262.40	\$ 3,262.40	\$ -
Bookkeeper	\$ 33.78	80		\$ 2,702.40	\$ 2,702.40	\$ -
Fringe Benefits				\$ 11,624.85	\$ 3,756.45	\$ 7,868.40
Project Manager	\$ 14.21	465	Hours	\$ 6,607.65	\$ 2,060.45	\$ 4,547.20
Resource Specialist	\$ 10.60	170		\$ 1,802.00	\$ -	\$ 1,802.00
District Engineer	\$ 16.88	90		\$ 1,519.20	\$ -	\$ 1,519.20
District Manager	\$ 12.85	80		\$ 1,028.00	\$ 1,028.00	\$ -
Bookkeeper	\$ 8.35	80		\$ 668.00	\$ 668.00	\$ -
Travel				\$ 336.00	\$ -	\$ 336.00
mtgs, site visits, monitoring	\$ 0.56	600	miles	\$ 336.00	\$ -	\$ 336.00
Equipemnt				\$ 2,400.00	\$ 2,400.00	\$ -
RCD's Flow meter (Sontek)	\$ 25.00	48	Hours	\$ 1,200.00	\$ 1,200.00	\$ -
RCD's Multi meter (YSI)	\$ 25.00	48		\$ 1,200.00	\$ 1,200.00	\$ -
Supplies and Materials				\$ 500.00	\$ -	\$ 500.00
monitoring supplies	\$ 500.00	1	L/S	\$ 500.00	\$ -	\$ 500.00
Contractual				\$ 72,739.57	\$ 9,966.20	\$ 62,773.37
Creek Lands Conservation	\$ 60,239.57	1	L/S	\$ 60,239.57	\$ 9,966.20	\$ 50,273.37
Analytical Lab	\$ 250.00	30	H2O sample	\$ 7,500.00	\$ -	\$ 7,500.00
Graphic Artist	\$ 5,000.00	1	L/S	\$ 5,000.00	\$ -	\$ 5,000.00
Other				\$ 6,720.00	\$ 6,720.00	\$ -
Group participation	\$ 35.00	192	Hours	\$ 6,720.00	\$ 6,720.00	\$ -
TOTAL DIRECT COTS				\$ 127,383.97	\$ 34,243.50	\$ 93,140.47
Indirect Costs	10.00%	MTDC		\$ 6,786.71	\$ -	\$ 6,786.71
TOTAL ESTIMATED PROJECT COSTS				\$ 134,170.68	\$ 34,243.50	\$ 99,927.18

Budget Narrative

Salaries and Wages

The project will be managed by RCD Conservation Programs Manager Hallie Richard. Additional RCD staff involved in the project are listed below along with their salaries, estimated hours contributed to this project, and pay rates. The District Manager and Bookkeeper will be responsible for all grant administration tasks, including invoicing, reporting, contracting, and tracking of grant deliverables and milestones, and are therefore included in the personnel category under Direct Costs rather than rolled into Indirect Costs.

The RCD will contribute a total of \$15,157.50 in in-kind match in support of project management (task1) in the form of staff time. Additionally, the RCD will provide a total of \$2,500 in in-kind match in support of water quality monitoring (task 2) in the form of monitoring equipment usage.

Project Personnel	Annual Wages	Hours	Pay Rate/ Hour	Fringe Benefits
Project Manager	\$77,979.20	465	37.49	\$14.21
Resources Specialist	\$58,052.80	170	27.91	\$10.60
District Engineer	\$56,867.20	90	54.68	\$16.88
District Manager	\$84,822.40	80	40.78	\$12.85
Bookkeeper	\$35,131.20	80	33.78	\$8.35

Fringe Benefits

Fringe benefit rates are included in the table above. Fringe benefit rates are calculated on a per employee basis and cover the total cost of employing each staff member. Total costs for each employee include: base rate; benefits, which include health stipend, sick, paid time off, professional development and retirement; workers' compensation; and employer payroll taxes.

Travel

Execution of this project will require RCD staff to travel across the watershed, a maximum of 50 miles round trip per trip, for an estimated 12 trips over the 2 year project at the accepted federal rate of \$.56/ mile for a total of \$336. Travel will include meeting with stakeholders in order to conduct water quality monitoring, and site visits. No overnight travel, airfare, per diem expenses or lodging is included in this project.

Equipment

Water quality monitoring tasks will be executed using the RCD's equipment, including a Sonteck Acoustic doppler flow meter and YSI multimeter probe. The in-kind match value for the use of this equipment was determined following the USACE Construction Equipment Ownership and Operating Expense Schedule and is quantified at \$2400 for the 2 year project term. No additional equipment will be purchased with grant funds for this project.

Materials and Supplies

Materials specific to water quality monitoring including calibration standards and replacement probes for the YSI multimeter will be purchased using grant funds. A total of \$500 has been budgeted for materials and equipment.

Contractual

CLC will play a large role in the scope of this project. CLC staff will manage the water quality monitoring component (task 2), including coordinating with RWQCB staff, identifying and developing monitoring sites, conducting water quality monitoring and analysis, and supporting the RCD presenting the findings to the group. CLC staff will also support the RCD in the redevelopment of the watershed group (task 3) through stakeholder engagement, outreach, programming, and co-hosting the kick-off meeting and watershed tour. CLC staff will lead the reviewing existing data (task 4), and support the update of the WMP (task 6). CLC is an essential partner in this project and party of the AG MOU group. No procurement process was used for this selection.

Task/ Subtask	Staff	Rates	Hours	Contract	Match
Task 1 Project Management/Admin				\$ 3,293.20	\$ -
Management	Sr Scientist	\$ 67.10	20	\$ 1,342.00	\$ -
Admin/Bookkeeping	BKPR	\$ 54.49	15	\$ 817.35	\$ -
Oversight	ED	\$ 75.59	15	\$ 1,133.85	\$ -

Task 2 Water Quality Monitoring				\$ 4,673.62	\$ 8,750.40
Coordination with RWQCB	Sr Scientist	\$ 67.10	10	\$ 671.00	\$ -
Site ID	Sr Scientist	\$ 67.10	10	\$ 671.00	\$ -
Freshwater and Estuary Monitoring		\$ -		\$ -	\$ 3,435.84
Baseflow Monitoring				\$ -	\$ 5,314.56
Analysis	Staff Sci 1	\$ 55.36	42	\$ 2,325.12	\$ -
Presentation	Sr Scientist	\$ 67.10	15	\$ 1,006.50	\$ -
Task 3 Develop Watershed Group				\$ 6,206.80	\$ -
Stakeholder Engagement	Sr Scientist	\$ 67.10	30	\$ 2,013.00	\$ -
Outreach	Staff Sci 2	\$ 47.53	30	\$ 1,425.90	\$ -
Programming/Planning	Staff Sci 2	\$ 47.53	30	\$ 1,425.90	\$ -
Kick-off Meeting	Sr Scientist	\$ 67.10	10	\$ 671.00	\$ -
Watershed Tour	Sr Scientist	\$ 67.10	10	\$ 671.00	\$ -
Task 4 Review of Existing Information				\$ 10,241.60	\$ 715.80
WRI Development	Staff Sci 1	\$ 55.36	185	\$ 10,241.60	
Outreach		\$ -	0	\$ -	\$ 715.80
Task 5 Develop Outreach Materials				\$ 2,963.60	\$ -
Framing/Planning	Sr Scientist	\$ 67.10	30	\$ 2,013.00	\$ -
Outreach and Coordination	Staff Sci 2	\$ 47.53	20	\$ 950.60	\$ -
Task 6 Update WMP				\$ 22,894.55	\$ -
Writing & Coordination	Staff Sci 1	\$ 55.36	230	\$ 14,115.55	\$ -
	Staff Sci 2	\$ 47.53	100	\$ 4,753.00	\$ -
	Sr Scientist	\$ 67.10	60	\$ 4,026.00	\$ -
Expenses--travel, office, copies, postage, etc.					\$ 500.00
TOTAL				\$ 50,273.37	\$ 9,966.20

Analysis of water quality samples (task 2) will be contracted to a state-certified analytical laboratory for analysis. We estimate a total of 30 samples will be collected for analysis. Based on a preliminary estimate of \$250 per sample, \$7,500 has been budgeted for this task. The RCD will solicit three bids for this scope of work and select the more responsive and responsible bidder.

Expense	QTY	Rate	TOTAL
Water Quality Samples	30	\$ 250.00	\$7,500.00

Development of a set of graphic outreach materials (task 5) will be contracted out to a qualified graphic design firm. Based on preliminary estimates, \$5000 has been budgeted for this task. The RCD will solicit three bids for this scope of work and select the more responsive and responsible bidder.

Third-Party In-Kind Contributions

Parties to the MOU are contributing their time spent participating in the (re)development of the watershed group (task 3) as in-kind match. This contribution is calculated at \$35/hour, for a total of approximately 192 hours over the project term, for a total of \$6,720 of in-kind match.

CLC is providing \$9,966.20 in in-kind match in support of water quality monitoring activities and supplies (task 2), and review of existing data (task 4).

Environmental and Regulatory Compliance Costs

This project includes only planning activities and water quality monitoring and is therefore exempt under CEQA per categorical exemption class 6: information collection.

Indirect Costs

The RCD does not have a federally approved indirect cost rate agreement, therefore a de minimis rate of 10 percent of modified total direct costs (including salary/wages, fringe benefits, travel, supplies, and up to \$25,000 of each subcontract) has been calculated and included in the budget.

D.2.2.6. Environmental and Cultural Resources Compliance

H.1. Environmental and Cultural Resource Considerations

The Proposed project is strictly a planning project and will not impact the surrounding natural or built environments or communities.

- The project will not impact the surrounding environment. The project is strictly a planning project that does not include any earth disturbance, or impacts to air, water, or animal habitat in the project area. No mitigation measures are needed to minimize impacts.
- The Arroyo Grande Creek watershed is home to a number of threatened and endangered species, including California Red-legged frog, South Central California Steelhead, and Tidewater goby. Cooperative and sustainable water resource management and planning, the objectives of this project, are essential to protecting and conserving the habitat that these species rely on.
- Jurisdictional waters of the US exist within the project area, including Arroyo Grande creek and its tributaries. The project will have no direct impact on these water bodies. Indirectly, the project will plan for the sustainable and cooperative management of both surface water within the project area.
- The Arroyo Grande Flood Control Channel was built in the 1950s to protect the low-lying agricultural lands in the Cienega valley which comprises the downstream portion of the Arroyo Grande creek watershed.
- The project will not result in any modification of or effects to individual features of an irrigation system.
- The project will have no impact on buildings, structures or features and therefore no cultural resources or archaeological review is necessary.
- The project will not have a disproportionately high and adverse effect on low income or minority populations.
- The project will not project limit access to, and ceremonial use of, Indian sacred sites or result in other impacts on tribal lands.
- The project will not contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area.



COUNTY OF SAN LUIS OBISPO
Department of Public Works
John Diodati, Interim Director

January 15, 2021

WaterSMART Cooperative Watershed Management Program (CWMP)
Department of the Interior, Bureau of Reclamation, Water Resources and
Planning Office

Re: 2021 WaterSMART CWMP grant proposal submitted by the Coastal San Luis Resources Conservation District titled
"Coordinating Water and Land Planning through the Arroyo Grande Creek MOU group"

Dear grant proposal review committee,

We are writing to express our strong support and match commitment for the Coastal San Luis Resources Conservation District (District) proposed project titled "Coordinating Water and Land Planning through the Arroyo Grande Creek MOU group". The Project will support collaborative management of resources in the Arroyo Grande Creek watershed to provide a powerful resource for developing innovative and creative solutions to critical problems and for leveraging resources to ensure efficient and effective use of public funds. This objective will be achieved by expanding the existing MOU group to include stakeholders in the upper watershed, integrating the newly forming Arroyo Grande Groundwater Sustainability Agency, and supporting efforts such as the Arroyo Grande Creek Habitat Conservation Plan, Arroyo Grande Creek Watershed Management Plan, and identifying and prioritizing opportunities for comprehensive and coordinated land and water planning for sustainably managed resources in the watershed. The outcome of this effort will coordinate the diverse efforts of surface water concerns like TMDLs, groundwater issues, such as the Arroyo Grande groundwater Basin GSA, and the groundwater dependent ecosystems existent in the watershed.

The San Luis Obispo County Public Works Department, under the auspices of the San Luis Obispo County Flood Control and Water Conservation District, Zone 1/1A ("Zone 1/1A"), is responsible for maintenance of the Arroyo Grande Creek flood control channel, which is located in the lower reach of the creek, ranging from the discharge point at the Pacific Ocean and extending approximately three miles upstream. Any upstream projects that can be implemented to reduce rates of stream sedimentation, or that can contribute to capture of suspended sediment, will reduce long-term channel maintenance costs and provide flood protection to Zone 1/1A. Furthermore, the Arroyo Grande Creek MOU group collaborates to support projects that will provide multiple watershed wide benefits. We encourage you to award grant funds to the Coastal San Luis Resource Conservation District because they along with their MOU partners, including ourselves, are dedicated to improving the health and function of the Arroyo Grande Creek Watershed. Zone 1/1A has granted approximately \$10,000 annually since 2008 to enable the District to coordinate and plan MOU group activities and intends to continue this commitment. By funding this project, you will provide valuable public benefits that will enhance the quality of life to your fellow residents.

We look forward to partnering with the District and all project partners on this exciting and meaningful effort. Thank you for your consideration of this proposal and this letter of support and match commitment.

Sincerely,

A handwritten signature in black ink that reads "Nola Engelskirger".

Nola Engelskirger, PE
CIP Engineering Unit Manager

County of San Luis Obispo Department of Public Works

County Govt Center, Room 206 | San Luis Obispo, CA 93408 | (P) 805-781-5252 | (F) 805-781-1229

pwd@co.slo.ca.us | slocounty.ca.gov



CITY OF ARROYO GRANDE

January 15, 2021

WaterSMART Cooperative Watershed Management Program (CWMP)
Department of the Interior, Bureau of Reclamation, Water Resources and
Planning Office

Re: 2021 WaterSMART CWMP grant proposal submitted by the Coastal San Luis Resources Conservation District titled "Coordinating Water and Land Planning through the Arroyo Grande Creek MOU group"

Dear Grant Proposal Review Committee:

I am writing on behalf of the City of Arroyo Grande to express our strong support for the Coastal San Luis Resources Conservation District's (District) proposed project titled "Coordinating Water and Land Planning through the Arroyo Grande Creek MOU group". The Project will support collaborative management of resources in the Arroyo Grande Creek watershed to provide a powerful resource for developing innovative and creative solutions to critical problems and for leveraging resources to ensure efficient and effective use of public funds. This objective will be achieved by expanding the existing MOU group to include stakeholders in the upper watershed, integrating the newly forming Arroyo Grande Groundwater Sustainability Agency, and supporting efforts such as the Arroyo Grande Creek Habitat Conservation Plan, Arroyo Grande Creek Watershed Management Plan, and identifying and prioritizing opportunities for comprehensive and coordinated land and water planning for sustainably managed resources in the watershed. The outcome of this effort will coordinate the diverse efforts of surface water concerns like TMDLs, groundwater issues, such as the Arroyo Grande groundwater Basin GSA, and the groundwater dependent ecosystems existent in the watershed.

The City has been an integral and engaged partner in the AG MOU group since its inception. The city has a number of conceptual projects and ongoing efforts that are impacted by the health and function of Arroyo Grande Creek and are therefore very supportive of the objectives and outcomes of this project.

I look forward to partnering with the District and all project partners on this exciting and meaningful effort. Thank you for your consideration of this proposal and this letter of support and match commitment.

Sincerely,

Robin S Dickerson, PE
City Engineer



January 15, 2021

WaterSMART Cooperative Watershed Management Program (CWMP)
Department of the Interior, Bureau of Reclamation, Water Resources and
Planning Office

Re: 2021 WaterSMART CWMP grant proposal submitted by the Coastal San Luis Resources
Conservation District titled "Coordinating Water and Land Planning through the Arroyo Grande
Creek MOU group"

Dear Grant Proposal Review Committee,

I am writing to express my strong support and match commitment for the Coastal San Luis Resources Conservation District (District) proposed project titled "Coordinating Water and Land Planning through the Arroyo Grande Creek MOU group". The Project will support collaborative management of resources in the Arroyo Grande Creek watershed to provide a powerful resource for developing innovative and creative solutions to critical problems and for leveraging resources to ensure efficient and effective use of public funds. This objective will be achieved by expanding the existing MOU group to include stakeholders in the upper watershed, integrating the newly forming Arroyo Grande Groundwater Sustainability Agency, and supporting efforts such as the Arroyo Grande Creek Habitat Conservation Plan, Arroyo Grande Creek Watershed Management Plan, and identifying and prioritizing opportunities for comprehensive and coordinated land and water planning for sustainably managed resources in the watershed. The outcome of this effort will coordinate the diverse efforts of surface water concerns like TMDLs, groundwater issues, such as the Arroyo Grande groundwater Basin GSA, and the groundwater dependent ecosystems existent in the watershed.

The USDA-Natural Resources Conservation Service (NRCS) has a long and successful history of working with the District to address local and regional projects that improve natural resources such as, water quality, wildlife habitat and groundwater efficiency. NRCS can provide technical and financial assistance through our Conservation Stewardship Program (CSP) or Environmental Quality Incentive Program (EQIP) to work with landowners or operators by addressing specific practices to meet these quality criteria.

NRCS looks forward to working with the Arroyo Grande Creek MOU group as we see this as a necessary means in our outreach efforts towards this significant area in SLO county. Thank you for your consideration of this proposal and this letter of support and match commitment.

Sincerely,
Hilary Phillips



DEPARTMENT OF PARKS AND RECREATION

California State Parks, Oceano Dunes District
Oceano Dunes SVRA • Pismo State Beach
340 James Way, Suite 270
Pismo Beach, CA 93449
805-773-7170

Armando Quintero, Director

January 14, 2021

WaterSMART Cooperative Watershed Management Program (CWMP)
Department of the Interior, Bureau of Reclamation,
Water Resources and Planning Office

Re: 2021 WaterSMART CWMP grant proposal submitted by the Coastal San Luis Resources Conservation District titled "Coordinating Water and Land Planning through the Arroyo Grande Creek MOU group"

Dear Grant Proposal Review Committee,

The California Department of Parks and Recreation, Oceano Dunes District (CDPR) submits this letter to express support for the Coastal San Luis Resources Conservation District (District) proposed project titled "Coordinating Water and Land Planning through the Arroyo Grande Creek MOU group".

CDPR owns and manages portions of Arroyo Grande Creek and lagoon for public use and enjoyment while preserving the extraordinary biological diversity unique to this area. Several listed species as well as many plants and wildlife depend on Arroyo Grande Creek and lagoon including federally-threatened California red-legged frog (*Rana draytonii*), threatened South-Central California Coast steelhead (*Oncorhynchus mykiss*), and federally-endangered tidewater goby (*Eucyclogobius newberryi*), all of which occur within CDPR. The section of Arroyo Grande creek owned by CDPR has already been impacted severely by urban development, levee construction, channelization, and agricultural activities. CDPR remains concerned that existing groundwater management and extraction practices have been unduly and significantly impacting the hydrology of Arroyo Grande Creek and associated wetland species and riparian areas.

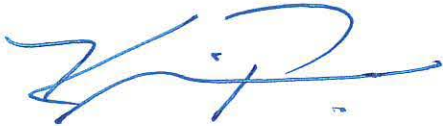
As a major stakeholder in the health of the Arroyo Grande watershed and partner of the RCD, CDPR supports the Project as beneficial because it aligns with long-term strategic efforts of CDPR to protect and restore natural resources in the Arroyo Grande watershed. The Project will support collaborative management of resources to provide a powerful resource for developing innovative and creative solutions to critical problems and for leveraging resources to ensure efficient and effective use of

public funds. This objective will be achieved by expanding the existing MOU group to include stakeholders in the upper watershed, integrating the newly forming Arroyo Grande Groundwater Sustainability Agency, and supporting efforts such as the Arroyo Grande Creek Habitat Conservation Plan, Arroyo Grande Creek Watershed Management Plan, and identifying and prioritizing opportunities for comprehensive and coordinated land and water planning for sustainably managed resources in the watershed. The outcome of this effort will coordinate the diverse efforts of surface water concerns like TMDLs, groundwater issues, such as the Arroyo Grande groundwater Basin GSA, and the groundwater dependent ecosystems existent in the watershed.

CDPR looks forward to partnering with the District and all project partners on this exciting and meaningful effort to address some of the long-standing groundwater and surface water challenges that we have had in this area.

Thank you for your consideration of this proposal and this letter of support.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Kevin Pearce', with a long horizontal stroke extending to the right.

Kevin Pearce, Superintendent
Kevin.pearce@parks.ca.gov



January 15, 2021

EMAIL ONLY

WaterSMART Cooperative Watershed Management Program (CWMP)
Department of the Interior, Bureau of Reclamation
Water Resources and Planning Office

Subject: 2021 WaterSMART Cooperative Watershed Management Program (CWMP) Endorsement for the "Coordinating Water and Land Planning through the Arroyo Grande Creek MOU Group Project"

Dear Grant Proposal Review Committee:

The Coordinating Water and Land Planning through the Arroyo Grande Creek MOU Group Project is undertaken by the Coastal San Luis Resource Conservation District (RCD) who is seeking grant funding under the WaterSMART CWMP. The project will support collaborative management of resources in the Arroyo Grande Creek watershed to provide a powerful resource for developing innovative and creative solutions to critical problems and for leveraging resources to ensure efficient and effective use of public funds. This project would also meet the criteria to be included in the San Luis Obispo County Integrated Regional Water Management (IRWM) plan and provide for planning activities for our region that maintain and improve the health of watersheds, ecosystems, and natural resources through collaborative and cooperative actions.

The County of San Luis Obispo Department of Public Works, under the auspices of the San Luis Obispo County Flood Control and Water Conservation District, serves as lead agency for the Regional Water Management Group (RWMG), the local group responsible for the development and implementation of the IRWM plan. The RWMG supports the planning, implementation, and funding of projects and programs that meet the plan objectives. The long-term goal of the project is to coordinate planning efforts for the sustainable management of water resources in the AG Creek watershed, which aligns with IRWM objectives.

As the funding request to the WaterSMART CWMP is critical for the project's success, we support the Coastal San Luis RCD's application for the Coordinating Water and Land Planning through the Arroyo Grande Creek MOU Group Project.

Sincerely,

A handwritten signature in black ink that reads "Courtney Howard".

COURTNEY HOWARD
Water Resources Division Manager

File: CF 900.49.01 IRWM

L:\Water Resources\2021\January\USBR Supporting WaterSmart AG Watershed Project Jan 2021 Ltr.docx.DT.km



Creek Lands Conservation

Creek Lands Conservation (CLC) is a tax exempt nonprofit 501(c)(3) organization that works alongside a wide range of stakeholders to sustainably manage land and water resources, with expertise in managing aquatic ecosystems such as rivers, creeks, wetlands, and estuaries. We work with municipal entities, private landowners, local businesses, allied conservation nonprofits, and government agencies to find practical, science-based solutions to complex problems. Our work commonly encompasses consideration of entire watersheds from ridgetops to the near coast environment and includes finding solutions to water security for communities and agriculture, species conservation, riparian management, stormwater management and sustainable municipal and agricultural land-water practices.

Statement of Qualifications

CLC staff have been involved in various planning, management, and scientific investigation efforts in the Arroyo Grande Creek Watershed including the development of the Arroyo Grande Creek Watershed Management Plan (2005/09), the development of groundwater recharge and streamflow enhancement projects in partnership with private agricultural land owners in the middle portion of Santa Rosa Creek (in progress), data collection of instream habitat and benthic macroinvertebrate data in San Simeon Watershed (unpublished data), and the collection and analysis of water level and water quality data in local estuaries in partnership with California State Parks and the Central Coast Wetlands Group (in progress).

In addition to Arroyo Grande Creek Watershed, the organization has been involved in large planning projects including the San Antonio and Nacimiento Rivers Watershed Management Plan for the Monterey County Water Resources Agency, the Big Sur River Watershed Management Plan for the Monterey County Resource Conservation District, and the Santa Maria River Instream Flow Study for Stillwater Sciences under contract with the State Coastal Conservancy. In addition, the organization has conducted numerous planning, scientific, and engineering projects including but not limited to:

- Arroyo Grande Creek Fisheries Assessment (2008) for the California Department of Fish and Game
- Arroyo Grande Creek Stream Gage Modification 100% Engineering Design (2009) for the California Department of Fish and Game
- Pismo Creek Watershed Management Plan (2009) for the California Department of Fish and Game
- Pismo Creek Fish Passage Improvement 100% Engineering Design (2012) for the California Department of Fish and Game
- Santa Rosa Creek Watershed Management Plan for The Cambria Land Trust (2012)
- Pismo Creek Estuary Restoration Plan (2013) for the Coastal Impact Assistance Program through the County of San Luis Obispo

- Pismo Creek Instream Flow Study (2013) for the California Department of Fish and Wildlife
- San Luis Obispo Creek City Culvert Fish Passable Improvement Project for the California Department of Fish and Wildlife (2014)
- Carmel River Lagoon Large Woody Debris Enhancement Project for the Carmel River Steelhead Association and the State Coastal Conservancy (construction completed 2017)
- Baseflow Monitoring for Stream Flow Enhancement Project Planning and Evaluation in San Luis Obispo County for the WCB Streamflow Enhancement Program (2019)
- Cecchetti Road Crossing Design for County of San Luis Obispo and California Department of Fish and Wildlife (2019)
- Endangered Species Management Component for Steelhead Trout for Camp San Luis Obispo with Terra Verde Consulting (2019)
- Lower San Luis Obispo Creek Fish Passage Design and Habitat Improvement Project for the San Miguelito Mutual Water Company and CDFW Prop 1 (in progress)
- Comprehensive Manzanita Creek Watershed Anthropogenic Sediment Reduction Assessment and Aquatic Protection/Road Restoration Planning Project for the National Fish and Wildlife Foundation Wildfires Restoration Grant Program (2018)
- Developed RFP for Villa Creek Estuary Restoration Project for California State Parks (2018)
- Salinas River Watershed Coordination for the Upper Salinas Las Tablas Resource Conservation District (in progress)
- Santa Rosa Creek Streamflow Enhancement Project for private agricultural landowners and WCB Streamflow Enhancement Project (in progress)
- San Luis Obispo Creek Stream Flow Enhancement Fox Hollow Reservoir Modification Project for the City of San Luis Obispo and the WCB Streamflow Enhancement Project (in progress)
- Integrated Water Strategies Planning Project in Santa Barbara and Ventura Counties for private landowners and the WCB Streamflow Enhancement Program (in progress)
- Baseline Estuary Water Quality and Estuary Breaching Dynamics for California State Parks. Villa Creek, San Simeon, and Santa Rosa Estuaries (in progress)
- Crowd Hydrology a Citizen Science Program to collect flow data funded by various organizations (www.crowdhydrology.org) (on-going)

Specific to qualifications for BoR and CSL RCD

- As a 501(c)3, CLC can qualify the team and make the team more competitive for funding/financing of certain state and federal grants including Proposition 1 Restoration and Stream Flow Enhancement Program through CDFW. Certain funding programs are accompanied by programmatic permitting, allowing for a stream-lined permit approach.
- High quality and cost effective data collection, management and analysis of surface and groundwater hydrologic data, water quality data, stream and estuarine habitat assessments, and spatial mapping of intermittent stream pools.
- Facilitation of diverse stakeholders and development of effective long-term strategies that provide water security and support of local, state, and federal agencies.
- Environmental planning and permit services including CDFW SAA, CDP, RWQCB 401.

- Completed the Pismo Instream Flow Study and provided input on both the Arroyo Grande Creek Habitat Conservation Plan and the Coastal Parks Habitat Conservation Plan.
- Extensive experience in Arroyo Grande Creek Watershed including knowledge of and working relationships with local landowners.

High Lighted Projects

1. Santa Rosa Creek Watershed Management Plan

<https://greenspacecambria.org/srcwmp>

Client: Greenspace The Cambria Land Trust
Client Contact: Andrea Wogsland, Executive Director (805) 927-2866
Start and end dates: May 2009-June 2012
Key staff role: Steph Wald facilitated planning and coordinated stakeholder input and assisted in preparation of draft and final plan documents. Staff conducted benthic macro-invertebrate surveys to inform water quality section of the plan.
Contractor fees: \$38,860 (CLC). \$353,614 (Overall GreenSpace budget).
Project Description: The purpose of the plan was to produce a stakeholder generated and supported Steelhead Watershed Management Plan led by Greenspace to establish prioritized recommendations to queue restoration projects. Several subsequent projects have been funded in the watershed as a result including stream flow enhancement, described below.

2. Baseflow Monitoring for Stream Flow Enhancement Project Planning and Evaluation in San Luis Obispo County

Client: Wildlife Conservation Board Proposition 1 Streamflow Enhancement Program
Contact: Brian Cary, (916) 324-7487
Start and end dates: May 2016-April 2019
Key staff roles: Aleks Wyzdga was the project manager and technical lead on the project overseeing all hydrologic data collection, analysis, and producing draft and final reports. Steph facilitated stakeholder outreach and input including partners such as the Central Coast Water Board, the County of SLO Public Works, and various local cities and NGO's.
Contractor fees: \$193,000 overall budget to CLC (\$41,400 to Stillwater Sciences)
Project Description: The goal of the project is to improve instream flow data in SLO County in a manner that leads to tangible improvements in how instream flows are conserved and enhanced to realize ecological benefits. To this extent the project includes the measurement of spring and summer base flows at 65 sites through-out SLO County and the evaluation of an existing streamflow augmentation project at Cal Poly. The grant is also funded CLC to coordinate with the County of San Luis Obispo to help convert the county's flow depth monitoring network into flow rates or discharges.

3. Santa Rosa Creek Streamflow Enhancement Pilot Project

Client: Private Agricultural Landowners and the Wildlife Conservation Board
Proposition 1 Streamflow Enhancement Program

Contact: Alyssa Persau, (916) 445-0367

Start and end dates: June 2018-March 2021

Key staff roles: Steph Wald is the project manager on aspects of the projects and coordinating diverse interests including agricultural, municipal, and environmental. Aleks Wyzga is the technical lead on all aspects of the projects including groundwater, geologic, hydrologic, and engineering aspects of the project. The team products include the development of surface-groundwater model (Misgana Muelta, Ph.D., PE Cal Poly), hydrogeologic characterization (Cleath Harris Geologists, Bwalaya Malama, Ph.D. Cal Poly, CLC), fisheries assessments (Stillwater Sciences, CLC), hydrologic assessments (Stillwater Sciences, CLC), and engineering (Stillwater Sciences, Watershed Progressive)

Contractor fees: \$627,225 overall budget to CLC (\$484,495 to subcontractors).

Project Description: The goal of the project is to improve spring and summer instream flows and steelhead habitat in middle Santa Rosa Creek and to increase groundwater levels in the adjacent alluvial aquifer. The project involves working with seven private agricultural land owners to collect the data and to develop projects that result in measurable and legally protected instream flow increases. Projects are anticipated to include both non-structural management solutions and structural engineering solutions such as recharge basins, floodplain reconnection and infiltration, subsurface clay dams, tanks and ponds, and instream log structures to enhance habitat.

4. Integrated Water Strategies to Enhance Flows in Santa Barbara and Ventura Counties

Client: Private and Public Landowners and the Wildlife Conservation Board
Proposition 1 Streamflow Enhancement Program

Contact: Adam Ballard, (916) 324-7487

Start and end dates: August 2017-March 2021

Key staff roles: Steph Wald is the project manager and facilitator coordinating subcontractors including engineering, legal, landowner contacts and modeling development.

Contractor fees: \$581,141 overall budget to CLC (\$541,141 to subcontractors)

Project Description: The purpose of the project is to frame, geographically identify and prioritize water conservation (reduced consumptive use) and increased infiltration opportunities that promote the highest potential for instream flow contributions in five different watersheds in Santa Barbara and Ventura Counties. The study assesses a variety of acquisition and implementation projects that together present a unique non-regulatory strategy to reduce surface and/or groundwater diversions that lead to enhanced flows for Steelhead trout.



January 18, 2021

WaterSMART Cooperative Watershed Management Program (CWMP)
Department of the Interior, Bureau of Reclamation, Water Resources and
Planning Office

Re: 2016 WaterSMART CWMP grant proposal submitted by the Coastal San Luis Resources Conservation District titled
“Coordinating Water and Land Planning through the Arroyo Grande Creek MOU group”

Dear grant proposal review committee,

I am writing to express my strong support and match commitment for the Coastal San Luis Resources Conservation District (District) proposed project titled “Coordinating Water and Land Planning through the Arroyo Grande Creek MOU group.” The Project will support collaborative management of resources in the Arroyo Grande Creek watershed to provide a powerful resource for developing innovative and creative solutions to critical problems and for leveraging resources to ensure efficient and effective use of public funds. This objective will be achieved by expanding the existing MOU group to include stakeholders in the upper watershed, integrating the newly forming Arroyo Grande Groundwater Sustainability Agency, and supporting efforts such as the Arroyo Grande Creek Habitat Conservation Plan, Arroyo Grande Creek Watershed Management Plan, and identifying and prioritizing opportunities for comprehensive and coordinated land and water planning for sustainably managed resources in the watershed. This effort will coordinate a diverse watershed group to address water quality critical issues such as TMDLs and other surface water concerns, as well as needs to address groundwater issues in the Arroyo Grande groundwater basin such as managing groundwater dependent ecosystems that exist in the watershed.

Creek Lands Conservation (CLC) completed the Arroyo Grande Creek Watershed Management Plan and has been engaged with watershed stakeholders since 2001. The Plan recommended the formation of a Memorandum of Understanding and Group which was subsequently initiated and has been operating since the late 2000’s, and will form the nucleus of the stakeholder group for this project. CLC will be contributing institutional knowledge and landowner/agency relationships cultivated and advanced over the past 20 years along with nearly \$10,000 in match funding for staff support. CLC views this project as a timely extension of existing investment in the watershed and is excited to be considered a partner in continuing critical stakeholder work in the watershed.

I look forward to partnering with the District and all project partners on this exciting and meaningful effort. Thank you for your consideration of this proposal and this letter of support and match commitment.

Sincerely,

Don Chartrand
Executive Director
Creek Lands Conservation