Resource Conservation District of Monterey County

2011 FRGP APPLICATION

For Development of the Big Sur River Watershed Management Plan

2011 FRGP Proposal Application Form

For DFG use only	
Proposal No.	Region

☐ BDS ☐ SRC ☐ SS

Section 1: Summary Information

a. Project type:	**PL—Watershed Planning**
b. Project title:	Big Sur River Watershed Management Plan
c. Applicant name:	Resource Conservation District of Monterey County
d. Person authorized to sign grant agreement (Name and Title)**:**	Paul Robins, Executive Director
e. Contact person (Name and Title)**:**	Paul Robins
f. Mailing Address: **Check if changed from previous applications** ☐	744-A LaGuardia Street
g. City, State, Zip:	Salinas, CA 93905
h. Telephone #: **Check if changed from previous applications** ☐	(831) 424-1036, ext. 124
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j. Email address:	Paul.robins@rcdmonterey.org
1. Type:	Public Agency ☒ Nonprofit Organization ☐ Indian Tribe ☐
2. Certified nonprofit organization:	Yes ☐ No ☒ Nonprofit Organization Number: _____
3. New grantee:	Yes ☒ No ☐
4. Licensed Professional	Yes ☐ No ☒ If Yes provide: Name _____, License number _____, Affiliation _____, Contact information (phone/e-mail) _____.
5. Amount requested:	
6. Total project cost:	
7. Salmonid species benefited:	**Coho** ☐ **Steelhead** ☒ (Cutthroat ☐ Chinook ☐)
8. Project objectives:	Create a community-based watershed management plan to address limiting factors to steelhead in the Big Sur River watershed through watershed group coordination, information gathering, resource assessments and technical review and planning.
9. Task number or reference: (only list one task)	CC-10--Watershed Planning (Develop watershed assessment and restoration plans for Central Coast Streams)
10. Time frame:	24 months from project award
11. Stream:	Big Sur River; portions of BSR tributaries Post Creek and Juan Higuera Creek also host steelhead
k. Tributary to:	Pacific Ocean
l. Watershed System:	Big Sur River-HUC12 (Map 13 in PSN), USGS HU 1806006
m. County(ies):	Monterey

12. Coastal Zone:	Yes ☒ No ☐
13. Trinity River Basin:	Yes ☐ No ☒

Section 2: Location Information

1. Township, Range, Section (T/R/S): and the 7.5 USGS Quad map name.	NW corner to SE corner: T19S/R1E/S1-T20S/R3E/S14; 7.5' USGS Quads: Big Sur, Pfeiffer Point, Ventana Cones, Partington Ridge, Tassajara Hot Springs, and Chews Ridge
2. Latitude, Longitude (in decimal degrees, Geographic, NAD83):	NW corner is 36.2971 N, 121.8625 W (NAD83) SE corner is 36.3444 N, 121.6333 W (NAD83)
3. Location description:	The Big Sur River watershed is located in Coastal Monterey County; it is in the Big Sur Local Coastal Plan area, running northwest from the central peaks of the Santa Lucia Mountains to the Pacific Ocean just south of Point Sur.
4. Directions:	25 miles south of Carmel, CA on Highway 1

Section 3: Watershed Information:

All questions in this Section refer to the watershed named in Number 1 below.

1. Watershed name:	**Big Sur River**
1. Watershed area:	58.5 square miles
2. Watershed area directly affected by the proposed project:	100%
3. Land use statement:	The watershed is predominantly public land owned by U.S. Forest Service (USFS) and CA Dept of Parks and Recreation (Parks), with several private campgrounds, resorts, shops and small residences. Over 3 million visitors visit the watershed annually. Use of the watershed is primarily wilderness and recreation along with a small amount of forestry and livestock, all of which will remain as such for the foreseeable future.
4. Watershed ownership:	9% Private:18 % State:73 % Federal
5. Length of anadromous streams in watershed:	8.5 miles
6. Watershed Plan(s):	No comprehensive watershed plan exists for the entire Big Sur River watershed. However, the following documents were produced and relate to efforts in this direction. ▪ CA Parks Department commissioned a *Steelhead Enchancement Plan* for their property in the watershed in 2003. ▪ Monterey County published the *Big Sur River Protected Waterway Management Plan* in 1986. ▪ The USFS prepared the *Comprehensive River Management Plan Big Sur River* , 2003 for the portion of the watershed owned by the agency that is in the Ventana Wildnerness and relates to the Wild and Scenic River designation for the river on USFS property. None of these plans included significant private landowner participation or buy-in; nor did any of the plans take a comprehensive look at the watershed as it relates to the survival of steelhead. The proposed Plan will be that to which future projects will refer under this item in future PSNs. Other planning documents pertinent to this watershed include: CDFG (2008) *Central Coast Region South District Basin Planning & Habitat Mapping Project*; CDFG (2009) *Study Plan: Habitat And Instream Flow Relationships For Steelhead In The Big Sur River, Monterey County*

	NMFS (2008) *South-Central California Coast Steelhead Recovery Planning Area Conservation Action Planning (CAP) Workbooks Threats Assessment*; NMFS (2007) *Federal Recovery Outline for the Distinct Population Segment of South-Central Californa Coast Steelhead*; Titus et al. (2006) *History and Status of Steelhead in California Coastal Drainages South of San Francisco Bay* USFWS (2005) *The Recovery Plan for the Tidewater Goby;* USFWS (2002) *Recovery Plan for the California Red-legged Frog*;
7. Background information	The Big Sur River watershed has been identified by NOAA Fisheries and DFG as an extremely important watershed for survival of the South-Central California DPS. The watershed is primarily comprised of public ownership, the largest landowner being the USFS. A significant amount of the USFS land is designated as wilderness. The portion of the Big Sur River on USFS land has been designated a Wild and Scenic River. California State Parks owns two separate parks in this watershed: Andrew Molera and Pfeifer Big Sur State Parks. Private ownership land use is primarily related to visitor-serving businesses such as private campgrounds, small resorts, shops and restaurants; there are also some private residences. DFG has indicated through the focus matrix for this PSN that an overall watershed plan is needed before any implementation project is considered. This project is intended to take a comphrehensive look at the watershed, identify limiting factors to steelhead survival and develop a suite of management practices and restoration projects that will address these factors. In 2008, 84% of the watershed was burned in the Basin Complex Fire. Impacts of the fire and how the fire altered the watershed have not yet been studied comprehensively.

Section 4: Project Objectives

1. **List task information** (for task listed in box 19 Section 1)**:**

   This project addresses Central Coast Steelhead Recovery Task CC-10--Watershed Planning (Develop a watershed assessment and restoration plan for Central Coast Streams) as listed in the updated steelhead trout management task database for the *Steelhead Restoration and Management Plan for California* (1996); it is a high (5) priority task.

The proposed project will address the task identified above by:

a. Establishing a Watershed Group and Technical Advisory Committee to ensure broad stakeholder participation in the process of watershed assessment and restoration planning;
b. Developing a watershed assessment and GIS-based resources inventory of existing and newly collected information for several disciplines as the basis for strategic planning of watershed management;
c. Developing a strategic watershed management plan consisting of:
    i. A synthesis of current and past conditions, and reasons for change;
    ii. Determination of critical data gaps for further assessment;
    iii. Identification of critical management issues through stakeholder consensus;
    iv. Development of a project matrix to include management and monitoring actions, improvement and preservation projects, potential partners, funding mechanisms, and habitat conditions, identifying management strategies, and priority in-stream projects.

2. **Need for the project:** The Big Sur River watershed supports numerous state and federally listed species including the South-Central California Steelhead DPS, the California red-legged frog, California condor and numerous state listed plants and animals. The Big Sur River is the largest coastal stream south of the Carmel River in Monterey County. The Big Sur River watershed and

the Big Sur area attract over three million tourists every year because of its natural beauty. Tourism as a result is a very important economic engine in the watershed, as well as along the Big Sur coast and coastal Monterey County. Impacts from its many visitors, past land management practices and the 2008 Basin Complex Fire, which burned over 84% of the watershed, have degraded its environmental quality. Although no water body in the watershed is currently listed as impaired, increasing use by visitors has led both federal and state agencies to recognize the need for an overall management plan to protect the watershed's unique resources. The Habitat and Instream Flow Study Plan for the Big Sur River (DFG 2009) identified Big Sur River steelhead habitat as being of high resource value but could be at risk from increasing water rights pressure and has therefore identified the Big Sur River as one of DFG's priority streams in 2008 for future instream flow assessments.

An overall watershed assessment with a focus on steelhead needs to be developed for the entire watershed. None of the major restoration projects which were identified in the 2003 Steelhead Enhancement Plan (for Parks property) have yet been implemented. In addition, all major reports and plans created up to this point did not involve the private landowners, business interests or water companies, who are drawing water from streams and springs in this watershed. The community is extremely active in ensuring that its voice is heard. This project will deliver a plan, which will not only be greatly aided by the associated local (private landowner) knowledge going back many decades, but also will have critical local buy-in. Such buy-in enhances the likelihood of public-private partnerships as well as restoration projects on both private and public lands, and reduces potential for conflicts that might otherwise undermine the beneficial effects of restoration efforts. This is especially important in the lower, anadromous stretches of the river which run from Pfieffer-Big Sur State Park, through private lands, and then through Andrew Molera State Park to the ocean.

The entire watershed will be assessed, but due to its size, not all of the watershed needs to be visited in order to get a comprehensive picture of current conditions. A very large percentage of land (>90%) is owned by public agencies, ensuring that access will not be a hindrance to a comprehensive assessment. In order to demonstrate private landowner support, three Provisional Landowner Access Agreements are included in this application bringing the total of over 92% of the watershed area covered by these agreements.

3. Limiting factors to salmonids remediated by proposed project:	☒	Water quantity	(lack of flow, diversions, runoff)
	☒	Water quality	(temperature, chemistry, turbidity)
	☒	Riparian dysfunction	(lack of shade, excessive nutrients, roughness, elements)
	☒	Excessive sediment yield	(pool and gravel quality)
	☐	Spawning requirements	(gravel, resting areas-pools)
	☐	Rearing requirements	(velocity, lack of shelter, pools)
	☐	Estuary / lagoon issues	(closure during migration periods)
	☒	Fish passage	(emigration and immigration)

4. **Limiting factor remediation:** The steps required to develop the proposed Watershed Assessment and Restoration Plan include an overall assessment of limiting factors, which we currently lack for the Big Sur River watershed. Water quantity/alterations to natural flow regime, passage barriers, riparian corridor alterations, sedimentation, non-native invasive species, and loss of estuarine habitat are a preliminary listing of the most obvious possible limiting factors (NMFS, 2007), for which we have incorporated specific assessment tasks in the proposed plan development process: a hydrologic and geomorphic assessment, a noxious weeds inventory, and

a lagoon assessment. This watershed management plan will systematically evaluate and identify the specific limiting factors by steelhead life history stage and, where feasible, by location within the watershed. It will also identify priority projects and solutions for remediating those limiting factors, such as recommendations about water extraction from surface and alluvial aquifers, upland erosion reduction measures, wastewater treatment, and increasing habitat complexity through an LWD management plan focusing on landowner education.

Section 5: Project Description

1. *Detailed project description including all tasks to be performed:*

Central Coast Salmon Enhancement (CCSE), the RCD of Monterey County (RCDMC) and Garrapata Creek Watershed Council (GCWC) will establish a Big Sur Watershed Group and Technical Advisory Committee (TAC). The Watershed Group will be comprised of interested local stakeholders, including private and public landowners, residents, representatives of governmental agencies and technical experts. The role of this group is to provide input for the purpose of developing the watershed management plan.

- CCSE will serve as neutral facilitator to assist in formation of the group.
- RCDMC and CCSE will develop potential list of invitees, send an invitation to invitees, follow up with phone calls, set kick-off meeting dates, generate and distribute agendas, track follow up items, schedule and conduct periodic team phone conference calls, generate and distribute meeting minutes. GCWC, which is a local watershed group, will assist in making contact with local stakeholders.
- CCSE will conduct stakeholder meetings on a schedule to be established by the group but no less than quarterly. Purpose of the meetings are to review and direct preparation of work products, draft plans and provide input into the planning process.

The TAC will advise the project team (RCDMC, CCSE, Cal State Monterey Bay (CSUMB) and Stillwater Sciences) on scientific matters and make recommendations based on technical issues.

- CCSE, GCWC and RCDMC will recruit members by letters, notices and personal invitation. TAC members will include representatives from landowner groups, State Parks, US Forest Service, USDA Natural Resources Conservation Service (NRCS), CDFG, Monterey County, and other local, state, and federal representatives.
- The TAC will advise the project team on the completeness of the Watershed Assessment (see Task 2).
- The TAC will be provided review materials via email and be invited to at least two joint stakeholder/TAC meetings.

Task 2. Watershed Assessment

A systematic assessment of physical and biological conditions in the watershed is the necessary first step to determining the cause of modern declines in steelhead populations and identifying remedial measures. It can also identify current and future threats to those populations, which in turn can suggest protective measures with the greatest likelihood of achieving resource-conservation goals. We recognize seven major elements that will need to be researched and described based primarily on existing information as a necessary precursor to developing a credible watershed management plan: geology, geomorphology, hydrology, water quality, vegetation, steelhead limiting factors, and Big Sur River lagoon habitat. Each of these elements will be written up, with associated data tables and maps, as discrete sections of the watershed assessment chapter of the watershed management plan to provide one complete and comprehensive product.

2.a. Existing Information Compilation

CCSE and RCDMC will research and inventory existing information including reports, studies, maps, GIS files and technical data, covering subjects such as land use, hydrology and water supply, water quality, steelhead population and habitat. CCSE will relay relevant existing information sources to the technical lead of each Watershed Assessment element for analysis and interpretation.

2.b. Geology

Watershed geology, including bedrock framework, faults, erosion potential, and landslide history provides an immutable context for watershed condition. The geologic framework establishes the potential for excess sediment delivery processes and rates, and the sensitivity of the watershed to respond to poor or improved land management and fire. Broad geological features also set the context for more detailed geomorphic research. This information is generally found in Rosenberg (2001), and will be improved with reconnaissance-level field investigations.

2.c. Geomorphology

The geomorphology work (CSUMB) will encompass variables that control sediment delivery and transport from the upper watershed slopes to the channel, and continuing to the lagoon. Further, this work will assess stream and floodplain stability and function and stream bed material characteristics, in the context of steelhead life cycle requirements. The analysis will strive to describe and explain sediment transport and deposition dynamics across the watershed, under past, existing, and projected future conditions. Such information is a vital prerequisite for designing strategies for watershed management aimed to improve *O. mykiss* habitat within the river. The work will include literature review, GIS analysis of existing geospatial data sets, resurvey of benchmarked cross sections, and reconnaissance-level geomorphic observations that ground-truth GIS-based analyses and verify and/or update existing information sources. The details resulting from each of the sub-tasks below will be dependent on available data. Specific products for this subtask include:

- a summary of available past information and narrative on historic changes;
- predictions of hillslope and tributary sediment production;
- categorization of channel network into zones of sediment production, transfer, and storage;
- watershed map of hillslope and tributary sediment production zones and delivery pathways; and
- comments on the trajectory of geomorphic change, and potential implications for *O. mykiss.*

2.c.i. Geomorphology literature review/historical record analysis

A literature review will be conducted of the geology, geomorphology, and land use history of the watershed as they relate to hillslope sediment production, sediment delivery to the Big Sur River, and sediment transport along the Big Sur River to the ocean. Sources of information for this review will include existing technical reports, topographic surveys, geologic maps, narrative accounts, photo-monitoring, and remote-sensing datasets.

2.c.ii. Investigation of hillslope geomorphic processes

This task will characterize hillslope geomorphic processes in the Big Sur River watershed, specifically as they contribute to *O. mykiss* habitat development and change within the mainstem river corridor and the lagoon/estuary at the river mouth. Natural hillslope sediment supply varies greatly in both space and time. Spatially, the amount and size of sediment are strongly correlated with vegetation cover, hillslope gradient, and underlying geology. Temporally, delivery also varies greatly, being

greatest during rainfall events of high intensity or duration, in rainfall events that follow wildfires, and during large earthquakes with high peak ground accelerations. The spatial distribution of various hillslope processes, and along with the relative magnitude of sediment delivery from the various processes will be assessed. A reconnaissance survey of accessible hillsides will build on GIS and aerial photographic analysis (see subtask 2.c.iv) to confirm key areas of sediment production and delivery, and to develop an understanding of sediment transport connectivity in the watershed. Specific investigations that will be included under this task will include:

- a semi-quantitative prediction of annual average hillslope and tributary sediment production and delivery to the Big Sur River mainstem, based on GIS analysis of "geomorphic landscape units" of land cover, hillslope gradient, and geologic units. Sediment delivery to the mainstem will be based on erosion estimates from the literature and estimates of hillslope storage from the literature and field surveys; and
- interpretative historical assessment of land-cover effects on hillslope geomorphic processes, sediment supply, and sediment connectivity throughout the watershed.

2.c.iii. Investigation of fluvial geomorphic processes of sediment transport and morphological change

This task will characterize sediment transport and channel dynamics in the mainstem to understand how these physical processes affect the nature of fish passage, *O. mykiss* spawning and rearing habitat, bed and bank stability, and flood hazard. The hazards and habitats possessed by the Big Sur River result from a series of natural and human influences on the character and dynamics of sediment transport and channel morphology. Many changes in morphology result from direct modifications to the channel caused by human activity, and from the character and variability in sediment transport in a given reach. Variation in sediment transport may be caused by changes in the upstream supply and caliber of sediment and by systematic changes to the erodibility of the channel's bed and banks. This task will elucidate the key fluvial geomorphic processes from a historic and current perspective, and then use that understanding of geomorphic processes in the context of proposed management and/or restoration alternatives as part of the Watershed Management Plan. A reconnaissance survey (see subtask 2.c.iv) of accessible reaches of the mainstem channel and major tributaries will provide an indication of contemporary and past channel processes. Assembled data will be used to develop a process-based categorization of the channel network, emphasizing distinct processes of sediment production transport and deposition, and the formation (or degradation) of habitat types and locations of importance to *O. mykiss* populations. Specific investigations that will be included under this task will include:

- characterization of sediment transport dynamics using site reconnaissance information, applicable published reports, and available stream gauge records from this or adjacent watersheds;
- analysis of historical changes in channel morphology through aerial photographic and topographic map overlays;
- analysis of contemporary geomorphic processes in the river corridor; and
- assessment of impact of water-related infrastructure and human channel modifications on geomorphic process.

2.c.iv. Site reconnaissance

Two reconnaissance-level site visits to the Big Sur River watershed will be conducted to become familiar with the geomorphic processes of sediment supply, sediment transport, and sediment deposition within the watershed. Geomorphic observations will emphasize the processes that provide and contribute to the physical habitat features necessary for various life stages of *O. mykiss*. The initial site visit will be conducted primarily by aircraft as this will allow the project team to observe and document conditions in the entire watershed regardless of property ownership and extreme

topography. The second reconnaissance event will gather additional data on watershed conditions and will "ground-truth" certain hypotheses developed as part of conducting the various sub-tasks listed above. By this point in the project, the stakeholder process will be well underway and additional landowner access agreements will be obtained if needed.

2.d. Hydrology

Streamflow measurements and the results of any previous hydrologic modeling (e.g., Yates and Von Konyenburg 1998) will be summarized by CSUMB to the extent that existing information allows. Rainfall and hydrology data held by the U.S. Geological Survey, the Monterey County Water Resources Agency, and State Parks will be used to characterize monthly, seasonal and annual hydrologic variables over the total period of record, and to summarize groundwater conditions to the extent that data exist. Specific products for this subtask include a summary and graphic presentation of:

- streamflow frequency and duration (and time trends);
- annual precipitation magnitudes and spatial patterns (and time trends); and
- gaining versus losing reaches of the river.

2.e. Water Quality Data Collection and Compilation

Primary water quality factors of concern for steelhead in the Big Sur River relate to food resource availability and water temperature. CCSE will work with RCDMC to access public and private property sites to conduct Benthic Macroinvertebrate surveys in the low flow period of the grant time-frame. Existing habitat typing will be used to identify sample units. At least 5 sites will be sampled according to SWAMP Targeted Riffle Survey protocol. Samples will be identified according to SAFIT Level 1 protocol by a qualified lab. Stillwater Sciences will install continuously recording temperature Tidbit™ underwater dataloggers in four locations upstream of the lagoon to allow us to track temperature patterns in the river, particularly as they relate to riparian corridor (i.e., shade) conditions.

In addition, samples will be collected for bacteriological analysis of Total and Fecal coliforms during storm runoff events and during the summer baseflow period. Single event samples will be collected at two sites near the State Park campgrounds and in the lagoon during 2 storm events per year. In addition, a series of 5 samples in a single 30-day period will be collected each summer at the same two sites in order to calculate a 30-day log mean. We will incorporate data from the California Cooperative Ambient Water Monitoring Program (CCAMP) regarding other potential constituents of concern, as there are two monitoring sites in the project area, although currently none are flagged on the CCAMP website as likely impacting steelhead.

The collected information will be synthesized and illustrated in a report to the Stakeholders Group to be incorporated into the larger planning process.

2.f. Noxious Weeds Mapping

RCDMC will coordinate with State Parks personnel to map priority noxious weed populations in the riparian corridor as well as upland areas. This mapping will augment current State Parks weed inventory efforts to cover species that have yet to be mapped but which are known as present in the watershed. To support this, State Parks is contributing use of a Trimble 'Juno' GPS unit and one week of staff time for initial orientation to the unit and software and mapping assistance in the field. Priority weeds targeted under this survey include: panic veldt grass (*Ehrharta erecta*), sticky eupatorium (*Ageratina adenophora*), poison hemlock (*Conium maculatum*), Italian thistle (*Carduus*

pycnocephalus), bull thistle (*Circium vulgare*), milk thistle (*Silybum marianum*), Himalayan blackberry (*Rubus discolor*), forget-me-not (*Myosotis latifolia*), French broom (*Genista monspessulana*) and Harding grass (*Phalaris aquatica*). Weed populations will be mapped as polygons and points with relative population densities on both public and private lands where access has been granted.

The collected information will be synthesized and illustrated in a report to the Stakeholders Group to be incorporated into the larger planning process.

2.g. Steelhead Limiting Factors

Stillwater Sciences will use a limiting factors analysis (LFA) approach to prioritize the likely causes of adverse impacts to the steelhead population in the Big Sur River watershed. This will be done to identify specific restoration and management actions that can be taken to address the limiting factors, as well as recommendations for focused studies that may be needed to further refine the understanding of limiting factors. An LFA integrates the effects of habitat carrying capacity and density-independent mortality (i.e., sources of mortality such as water temperature or disease with effects that are not dependent on the density of the population) across the entire life cycle to determine mechanisms regulating population growth. Stillwater has used this approach successfully in a number of other California coastal watersheds to identify those factors that are limiting steelhead population size, the actions in the watershed that are contributing to those factors, and measures that can be taken to effectively address those factors.

2.g.i. Summarize existing fishery data

There is an abundance of steelhead population and habitat assessment information to draw upon for the LFA (e.g., the State Parks steelhead enhancement plan and DFG work by R. Titus, J. Nelson, and R. Holmes). In addition, by the time this LFA is underway it is likely that additional relevant information will be made available as a result of the June 2011 water rights hearing for the river (e.g., more detailed data from R. Titus and R. Holmes). The results of this previous work will be summarized to identify trends in steelhead population (by age class, if possible) and habitat conditions.

2.g.ii. Develop conceptual model of steelhead in Big Sur River watershed

Existing information sources will be used to develop a conceptual model of steelhead life history and habitat constraints in the watershed. From the conceptual model and other components of the watershed assessment, including the lagoon habitat assessment (see below), hypotheses of the factors likely limiting the species' population in the watershed will be developed. Because this LFA will be based primarily upon existing information from previous survey efforts, several of which already identify potential limiting factors, hypotheses for this LFA will be based upon a close and critical re-examination of the population and habitat data from those previous surveys, and in light of recent and emerging understanding of south-central steelhead life history requirements. The conceptual model will provide a synthesis of watershed conditions based on the previous watershed assessment chapters as they relate to the habitat requirements of steelhead life history stages, and will conclude with a series of implications for the management of the steelhead population. Key data gaps will also be identified.

2.g.iii. Limiting factor reconnaissance

Once initial hypotheses of limiting factors are generated, but prior to the draft Watershed Plan, Stillwater fisheries biologists will conduct a two-day reconnaissance of the portion of the watershed accessible to steelhead. This reconnaissance will provide the opportunity to both field check/verify the likelihood of suspected limiting factors, compare the relative importance of multiple limiting

factors, and identify logistical issues associated with recommendations to address limiting factors or fill key data gaps. Findings from the reconnaissance will be used to refine and finalize the steelhead conceptual model and recommendations.

2.h. Big Sur River Lagoon Habitat Assessment

Lagoon rearing has been demonstrated to be critically important for central California coast steelhead populations, with significantly higher growth rates and ocean survival by steelhead that reared in lagoons, even with lagoon water temperatures as high as 75°F (24°C) (Smith 1990, Hayes et al. 2008, Bond et al. 2008). It appears that if lagoons are well-mixed (i.e., not salinity stratified), or comprised of mostly freshwater, they can maintain a relatively cool, well-oxygenated, and food-rich environment that provides high quality habitat for juvenile steelhead (Smith 1990). This can potentially relax to some degree density dependent bottlenecks occurring in upstream habitat and provide a high growth environment and adjustment to a saline environment that improves ocean survival for both stream- and lagoon-reared fish. Conversely, when lagoons are highly saline, or salinity-stratified, they collect heat in the lower saltwater layer, have relatively lower dissolved oxygen levels, and typically have unsuitable conditions for rearing. Stillwater Sciences will conduct a lagoon habitat assessment to evaluate the extent and quality of lagoon rearing habitat for steelhead. The proposed lagoon assessment work will complement a current lagoon assessment by DFG, which includes bathymetric mapping, fish sampling, and limited grab samples to assess water quality. Based on what has been learned about the lagoon to-date, assessing water quality conditions more specifically and over a longer time-frame (the DFG study runs from December 2009 to December 2011) will complement the current DFG work (R. Holmes, pers. comm. 2011).

Habitat conditions in the lagoon can vary significantly, from slow-flowing and pond-like to low gradient riffles, depending on the year and the tides (R. Holmes, pers. comm. 2011). Ongoing work by DFG preliminarily indicates that water temperature and dissolved oxygen in the lagoon are suitable for steelhead in the winter and early spring, but this work does not include the low-flow period or a below normal water year type. By collecting water quality information continuously, the proposed lagoon assessment will identify seasonal patterns in water quality conditions that will be linked to instream flows and tidal influences.

Absolute pressure transducers will be installed by Stillwater and the Garrapata Watershed Council at two locations in and just upstream of the lagoon to record stage and temperature. The upstream pressure transducer will be used, in conjunction with discharge measurements at the USGS stream gage, to monitor streamflow into the lagoon. The pressure transducer in the lagoon will be used to monitor lagoon stage, which will serve as a proxy for habitat quantity, and sandbar breaching events. The transducers will be maintained for the duration of the proposed project and will be set to record a measurement every 1 to 2 hours. A recording barometer will be deployed at one pressure transducer location and will be used to correct for barometric pressure change. The transducers will be checked and downloaded by trained Garrapata Watershed Council staff approximately bi-monthly during normal operation and more frequently during storm runoff events (to avoid the risk of losing collected data is a transducer is washed away). Water temperature will be recorded continuously using a temperature data recorder at the location of each pressure transducer, and downloaded in conjunction with the pressure transducers.

Point measurements of in situ water quality (temperature, conductivity, and dissolved oxygen) will be recorded monthly by trained Garrapata Watershed Council (GCWC) members for the duration of the proposed project using a calibrated YSI-85 multiprobe (Yellow Springs Instruments, Yellow Springs,

OH). Prior to initiating the measurements, Stillwater will train GCWC members on the point measurement methods, equipment use and calibration, data collection and management. These data will be used to document the general water quality conditions of the lagoon and the conditions under which steelhead may be found. Approximately three months before the draft Watershed Plan is completed, data will downloaded and collected for the last time, analyzed, and summarized as a chapter of the Watershed Plan.

References not included in list under Section 3.6:

Bond, M. H., S. A. Hayes, C. V. Hanson, and R. B. MacFarlane. 2008. “Marine survival of steelhead (*Oncorhynchus mykiss*) enhanced by a seasonally closed estuary.” *Canadian Journal of Fisheries and Aquatic Sciences* 65: 2242-2252.

Hayes, S. A., M. H. Bond, C. V. Hanson, E. V. Freund, J. J. Smith, E. C. Anderson, A. J. Ammann, and R. B. MacFarlane. 2008. “Steelhead growth in a small central California watershed, upstream and estuarine rearing patterns.” *Transactions of the American Fisheries Society* 137: 114-128.

R. Holmes & J. Nelson, 2011. personal communication.

Rosenberg, L. 2001. *Geologic resources and constraints: Monterey County, California.* County of Monterey Environmental Resource Policy Department.

Smith, J. J. 1990. *The effects of sandbar formation and inflows on aquatic habitat and fish utilization in Pescadero, San Gregorio, Waddell and Pornponio Creek Estuary/Lagoon systems, 1985-1989*. Department of Biological Sciences, San Jose State University, San Jose, California.

Titus, R. 1994. Progress on Big Sur River Steelhead Habitat Use Study and Related Work. Memorandum to CDFG. August 3, 1994.

Titus, R., 2011. Pers. comm. with Stillwater Sciences.

Task 3. Watershed Management Plan

Using information generated from Task 2, and workshops to develop stakeholder input for issue identification and recommendation of priority activities, this task will develop a strategic Watershed Management Plan (WMP) focused on recommendations for restorative actions to address the factors limiting steelhead populations. The WMP will include synthesis of past and current conditions as the basis for interpreting key factors of concern, and will include the discipline-specific sub-sections of Task 2. The WMP will also include a suite of regional and site-specific prioritized actions, both structural and non-structural, that will improve conditions for *O. mykiss* in the Big Sur River watershed, including the identification of key data gaps and omissions in understanding of factors limiting populations. Watershed management recommendations will be developed on several scales, including:

- general treatments to support restoration across the watershed as a whole,
- site-specific restoration actions for high-priority sites, set in their watershed process context and;
- identification of landscape conservation measures for the long-term protection of habitats.

As examples, we expect the recommendations to include:

- Preferred methods and suggestions for timing of water extraction to minimize impacts to steelhead;
- Priority locations for restoring self-sustaining communities of riparian vegetation based on a combination of watershed physical process dynamics, consideration of landowner cooperation, feasibility and cost/benefit ratio.;
- Priority locations for managing excess fine sediment input from point and non-point sediment source impacts;
- Identification of potential restoration sites with interested landowners, in addition to those already identified by State Parks in their *Big Sur River Steelhead Enhancement Plan* (2003).

An initial draft of the WMP will be reviewed by the Watershed Group, TAC, and CDF&G prior to the completion of a final WMP.

CCSE and RCDMC will serve as the primary plan writers to:

- Define and prioritize watershed management goals and strategies through the stakeholder process (Task 1).
- Identify limiting factors to steelhead based on analysis of existing conditions (Task 2)
- Develop planning strategies for future watershed activities that focus on steelhead habitat improvement and enhancement (with assistance from CSUMB and Stillwater).
- Identify projects on willing landowners' properties that could benefit the watershed.
- Identify research and monitoring opportunities that can fill data gaps, address issues of concern and provide solutions to watershed problems (with assistance from CSUMB and Stillwater).
- Identify potentially responsible parties in recommendations of proposed actions and strategies
- Generate a draft plan for Watershed Group, TAC, and CDF&G review
- Integrate comments on draft and generate a final plan

The plan will include but not be limited to the following components:

- Definition of geographic boundaries of the watershed
- Description of the natural resource conditions within the watershed
- Description of activities and recommendations to address steelhead limiting factors, and activities to coordinate watershed planning and management efforts among agencies and stakeholders
- Description of a long term monitoring program designed to measure the effectiveness of the methods for achieving and sustaining reduction in steelhead limiting factors
- Description of outreach activities designed to maximize community awareness of the plan
- Description of how to monitor, update and maintain the plan as a living document.

Task 4. Project Management

RCDMC will serve as the primary Project Manager. Responsibilities under this task include:

- Project Initiation: subcontract development
- Kick-off meeting with all project participants. Establish time-lines based on Award date of Grant funding.
- Project coordination: Timelines are monitored per task and information flow managed between tasks. Project accounting and reporting.

2. ***Time frame:***

Task	Month from Contract Award																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Task 1. Watershed Group and TAC																								
Convene Watershed Group																								
Watershed Group meetings				x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
Convene TAC																								
TAC meetings					x						x				x							x		
Task 2. Watershed Assessment																								
a. Existing Information Compilation																								
b. Geology																								
c. Geomorph-ology																								
Literature review/ historical record analysis																								
Hillslope geomorphic processes																								
Fluvial geomorphic processes																								
Site reconnaissance																								
d. Hydrology																								
e. Water Quality																								
f. Noxious Weed Mapping																								
g. Limiting Factors Analysis																								
Summarize existing fishery data																								
Determine the extent of steelhead anadromy																								
Develop steelhead conceptual model																								
g. Lagoon Assessment																								

Task 3. Watershed Management Plan																								
Develop restoration recommend-ations																								
Initial draft to Watershed Group and TAC																								
Draft plan to CDFG Final plan to CDFG																								

3. ***Deliverables:***

Primary deliverable: Big Sur River Watershed Management Plan, comprising:

- Watershed assessment covering geology, geomorphology, hydrology, water quality, noxious weeds, steelhead limiting factors and conceptual model, and lagoon habitat;
- Synthesis of past and current conditions and process-based interpretation of changes;
- Identification of key data gaps;
- Identification of issues and key questions for management of *O. mykiss*;
- Stakeholder-derived recommendations for priority management and restoration actions
- A list of dates and number of attendees of stakeholder meetings
- A spreadsheet containing watershed resources inventory materials

4. ***DFG protocols to be used in project development and implementation (check applicable box):***

☒ DFG *California Salmonid Stream Habitat Restoration Manual*

Manual part number: II, III, IV, V, + VI

☐ DFG monitoring protocols for restoration project effectiveness and validation monitoring

List part number:

5. *Other protocols:* The lagoon assessment will use a methodology that is pre-approved by the DFG grant manager. All other protocols to be used on this project are described in the *California Salmonid Stream Habitat Restoration Manual* (Third Edition or later).

6. ***Expected quantitative results (project summary):***

Watershed Evaluation, Assessment and Planning (PL)

n. Acres of land area affected by the planning/assessment activity	28,020 acres

o. Type(s) of planning activities conducted	☒ development of a recovery plan ☐ coordination/implementation of a recovery plan ☐ coordination/implementation of watershed conservation and restoration ☒ watershed council support ☐ tribal infrastructure support ☐ support to local entities or agencies involved in salmonid restoration planning and coordination ☐ developing monitoring plans or sampling protocols ☒ habitat restoration scoping and feasibility studies ☒ evaluation/prioritization of restoration plans and projects ☐ designing and maintaining restoration data systems ☐ engineering/design work for restoration projects ☒ developing restoration action plans
p. Name of the plan developed or updated by the project	*The Big Sur River Watershed Assessment and Restoration Plan*
q. Describe extent, purpose and application of the plan	The extent of the Plan will be the entire watershed, with a focus on the conditions that most influence steelhead habitat and populations (e.g., instream and riparian conditions and hillslope sediment supply). The purpose of the Plan is to provide a source of baseline information on watershed conditions and a suite of science-based and stakeholder-vetted restoration actions to address steelhead limiting factors and otherwise improve watershed ecological conditions. The plan will ultimately be applied by individuals or organizations to implement the recommended restoration actions.
r. Type(s) of stream survey/assessment activities conducted	☐ salmonid presence/absence survey ☒ instream habitat condition assessment ☐ habitat use by salmonids ☐ fish passage barrier inventory
s. Type(s) of watershed habitat survey/assessment activities conducted	☒ riparian condition ☐ road condition/inventory ☐ upland habitat conditions ☐ wetlands ☒ estuarine/nearshore habitat conditions ☐ LiDAR or other remote mapping ☐ landscape mapping ☒ invasive species ☐ floodplain mapping ☐ forest inventories ☒ overall watershed condition assessment or mapping ☐ stream typing
t. Name of the assessment document developed by the project	The assessment documents will be incorporated in their entirety as appendices into *The Big Sur River Watershed Management Plan* and relevant portions of their contents into the text of the Plan discussion as needed.
u. Acres of habitat assessed to determine habitat conditions affecting salmonids	28,020 acres
v. Miles of stream assessed	8.5_miles
w. Miles of road assessed	__0__miles

7. ***Other products and results:***

Beyond the development of a watershed management plan, this project is designed to engage

community collaboration that will serve the watershed's resources well beyond the timeline of this project. Specific measures include educating community members on the basis of the watershed assessment and any scientific protocols to be used for conducting field-work with landowner participation and support. A collaboratively crafted, comprehensive watershed management plan will provide stakeholders with the necessary information and empowerment to voice their respective points of view, while focusing their interests on the greater good of the watershed resources upon which they depend. Furthermore, university students will directly benefit from first-hand involvement in both the science and policy components of watershed assessment and planning.

Section 6: Qualifications and experience of applicant and professionals:

1. ***Applicant's qualifications and experience:*** The Resource Conservation District of Monterey County's Executive Director (ED) will be an active participant in the proposed work as community and committee meetings co-organizer and watershed plan co-author with CCSE as well as project administrator for reporting and invoicing and subcontracts oversight. He will provide oversight and direction to the RCDMC Project Manager (PM) who will assist in compiling project and resource information, lead the invasive plant inventory, and assist with plan development and selected project meetings. The RCDMC ED coordinated and facilitated development of the *Capay Valley Watershed Stewardship Plan* with the Cache Creek Watershed Stakeholders Group in Yolo County and has successfully guided numerous grant-funded resource assessment and implementation projects in his tenure with RCDs since the mid-90's. The RCDMC PM has successfully managed projects for RCDMC with multiple subcontractors and significant report development and has over a decade of experience managing native and non-native vegetation on the Central Coast, with particular emphasis in the Big Sur region. Both are experienced and accomplished in working with people of diverse opinions towards reaching commonly-shared goals, which will be a critical aspect of this project.

2. ***Previous projects funded by FRGP:*** None. If funded, this would be our first funded FRGP project.

3. ***Professionals qualifications and experience:***
Central Coast Salmon Enhancement Watershed Project Manager, Stephnie Wald—CCSE has a proven track record of convening and facilitating stakeholder driven processes to produce comprehensive watershed management plans. Lead CCSE staff for this proposal is Stephnie Wald, who manages all watershed restoration projects for Salmon Enhancement along with a salmon pen-rearing project. Ms. Wald has also facilitated the completion of the following projects: Arroyo Grande Creek Watershed Management Plan and update, the Nipomo Watershed Management Plan, and the Pismo Creek/Edna Area Watershed Management Plan and update, the Nacimiento and San Antonio Watershed Management Plan, and is currently working with Greenspace on the Santa Rosa Creek Watershed Management Plan. Ms. Wald has extensive experience in facilitating groups dealing with complex resource issues requiring stakeholder input and holds a Masters Degree in biology with an emphasis in restoration.

Stillwater Sciences Senior Fisheries Biologist Ethan Bell, M.S., will lead the steelhead limiting factors analysis. Mr. Bell is a fisheries biologist with particular expertise with Pacific salmonids and trout. He has developed multiple field monitoring programs that included a variety of sampling techniques to document fish presence, habitat use, movement patterns, and competition with other species. Mr. Bell's current work focuses on assessing limiting factors of anadromous fish populations. He has been using a combination of field studies (such as PIT-tag mark and recapture for movement studies and gastric levage for food web ecology), habitat assessments, population abundance estimates, and survival estimates, as well as quantitative population dynamics models to assess limiting factors for salmonids in a number of watersheds, including: coho salmon and steelhead in coastal Mendocino County watersheds (client: Campbell Timber Company), steelhead in Napa River watershed (client: Napa County Resource Conservation District), steelhead in Santa Rosa Creek watershed (client: Greenspace), and steelhead in Topanga Canyon watershed (client: Santa Monica

Mountains Resource Conservation District). Mr. Bell is the lead author of two peer-reviewed journal articles of the Topanga Creek steelhead monitoring, which was funded by the FRGP.

Stillwater Sciences Fisheries Biologist Abel Brumo, M.S., will lead the existing fishery data compilation and review, and contribute to the steelhead conceptual model and limiting factors analysis. Mr. Brumo has experience with a variety of fisheries projects in diverse freshwater ecosystems. His expertise is on early life history, stock-recruitment, and sampling methodologies for Pacific lampreys, but he has extensive experience capturing and handling a range of other fish species in support of research and monitoring projects. Mr. Brumo has worked with an assortment of natural resource stakeholders, including private landowners, watershed councils, technical workgroups, and tribal, state, and federal agencies. He regularly leads fish sampling and habitat mapping efforts and was recently responsible for compiling and analyzing over 12 year of steelhead monitoring data on Santa Rosa Creek.

Stillwater Sciences Aquatic Ecologist Mike Reymann will lead the lagoon habitat assessment. Mr. Reymann has broad experience in aquatic ecology, ranging from fisheries and amphibian biology to water quality. He has conducted numerous field studies investigating habitat use of salmonids, such as steelhead and coho salmon, including electrofishing surveys, snorkel surveys, habitat typing, and benthic macroinvertebrate sampling. He is the lead field technician for several studies of lagoon habitat conditions, including stage, discharge, temperature, and other water quality parameters, on San Gregorio Creek, Santa Clara River, and the Santa Maria River.

Stillwater Sciences prior FRG-funded projects:

- PL723468 - Santa Paula Creek: Design for Modification to Harvey Diversion Passage Barrier - Stillwater Sciences as a subcontractor to Santa Paula Creek Fish Ladder Authority and RBF Engineering, Inc. (in progress)
- P0740401 – Santa Rosa Creek Watershed Management Plan –Stillwater Sciences as a subcontractor to Greenspace – The Cambria Land Trust (in progress)
- MD723349 - Topanga Creek Lifecycle Monitoring – Stillwater Sciences as a subcontractor to Resource Conservation District of the Santa Monica Mountains (in progress)
- P0550012 - Santa Paula Creek Watershed Planning Project - Stillwater Sciences as a subcontractor to Santa Paula Creek Fish Ladder Authority (completed 2010)
- P0750021 - Lifecycle Monitoring of Topanga Creek Southern Steelhead Population - Stillwater Sciences as a subcontractor to Resource Conservation District of the Santa Monica Mountains (completed in 2010)

Dr. Douglas Smith, Cal State Monterey Bay Watershed Institute, has conducted numerous resource assessments in support of the development of many watershed plans, including those for Carmel Watershed, Garrapata Creek and Williams Canyon Creek, (in San Jose Creek Watershed) and other watershed restoration projects throughout the region and the eastern United States. He has supervised student research into the fluvial geomorphic impacts from the 2008 Basin-Complex fires in the Carmel, Arroyo Seco, and Big Sur Rivers. Dr. Smith is a trained hydrologist/geomorphologist with 17 years of experience watershed science. He has published extensively on geomorphology of the Central Coast region. He will be able to employ graduates and undergraduate students under his supervision who will be able to deliver a high-quality product in the most cost-effective manner. More information on his work can be found at http://hydro.csumb.edu/html/projects.html.

As a project partner, the **Garrapata Creek Watershed Council (GCWC)**, the only watershed group currently operating in the Big Sur area, will assist CCSE and RCDMC with the group formation and co-facilitate the meetings. Members of GCWC, which has been operating continuously for over ten years, have extensive experience creating a comprehensive watershed assessment and restoration plan. They will provide a community connection, which is critical to the success of any cooperative effort in the area. GCWC has implemented an upslope erosion control project that was funded by the FRGP and California Coastal Conservancy. GCWC members bring other valuable skills such as GIS and invasive species control.

5. Examples of similar work:

The following table summarizes a select number of salmonid-focused watershed management planning projects recently completed by one or more members of the project team:

Project Name	Work Description	Project Team Participation
Santa Rosa Creek Watershed Management Plan (in progress)	Stakeholder and TAC group organization, watershed assessment, steelhead limiting factors analysis, and restoration recommendations	CCSE = stakeholder/TAC facilitation, water quality assessment; Stillwater = hydrology, geomorphology, vegetation, mercury, rare species, steelhead limiting factors assessment, and document production
San Gregorio Creek Watershed Management Plan (2010)	Stakeholder and TAC group organization, watershed assessment, steelhead/coho/goby/red-legged frog limiting factors analysis, and restoration recommendations	Stillwater = TAC meeting participation, watershed assessment, multi-species limiting factors analysis, and document production
San Geronimo Valley Salmonid Enhancement Plan (2010)	Existing conditions assessment based on existing info and field surveys, scientifically-based recommendations to restore biological and hydrological functions, TAC, resource agencies, and stakeholder coordination	Stillwater = project manager and technical lead for land use, geomorphology, fisheries, vegetation, and water quality assessment
Pismo Creek Watershed Management Plan (2006) and update (2009)	Stakeholder and TAC group organization, watershed assessment, steelhead limiting factors analysis, and restoration recommendations	CCSE = stakeholder/TAC facilitation, watershed assessment, contract management for hydrology and geomorphology assessment, steelhead limiting factor analysis, restoration recommendations, plan writer, plan production
Arroyo Grande Creek Watershed Management Plan (2005) and update (2009)	Stakeholder and TAC group organization, watershed assessment, steelhead limiting factors analysis, and restoration recommendations	CCSE = stakeholder/TAC facilitation, watershed assessment, contract management for hydrology and geomorphology assessment, steelhead limiting factor analysis, restoration recommendations, plan writer, plan production
San Antonio and Nacimiento Rivers Watershed Management Plan (2008)	Stakeholder and TAC group organization, research and document past reporting, maps and other resources, develop water quality improvement goals and strategies, and recommendations	CCSE = stakeholder/TAC facilitation assistance, plan writer and researcher, produced Watershed Resources Inventory, wrote draft and final plan, presented at public meetings
Lagunitas Creek Limiting Factors Analysis (2008)	LFA on Lagunitas Creek for three focal species: coho salmon, steelhead trout, and California freshwater shrimp	Stillwater = LFA, including training and organizing stakeholders and volunteers to help with daily trap monitoring
Garrapata Creek Watershed Assessment and Restoration Plan (2006)	Stakeholder and TAC group organization, watershed assessment, Watershed Plan development	GCWC = stakeholder/TAC facilitation/plan writing CSUMB = geomorphic and hydrological assessment
Physical and Hydrologic	Watershed assessment	CSUMB

Assessment of the Carmel River Watershed (2004)		

Section 7: Landowners Access, Permits

8. Landowners Granting Access for Project: (Attach provisional access agreement[s]) The Big Sur River Watershed is predominantly owned by state and federal agencies. The 5 attached agreements represent access to 93% of the Big Sur River Watershed, including State Parks, US Forest Service, and three private properties along the river.	
6. Permits:	Not applicable
7. Lead CEQA agency:	Not applicable.
8. Required mitigation:	Yes ☐ No ☒
9. Listed species:	South-Central California Steelhead DPS, California red-legged frog, California condor. It is not known for certain, but the Tidewater Goby may be present in the lagoon.

Section 8: Project Budget

1. *Detailed Project Budget* *(Excel spreadsheets can be used)*

DETAILED PROJECT BUDGET								
PROJECT NAME: Big Sur River Watershed Management Plan								
	Hours or Units of Amount Requested	**Hours or Units of Applicant Cost Share**	**Hours or units of Partner Cost Share**	**Hourly Rate or Unit Price**	**Amount Requested**	**Applicant Amt. of Cost Share**	**Partner Amt. of Cost Share**	**Total Project Cost**
A. PERSONNEL SERVICES								
RCD Executive Director	537	65		$57.04	$30,630.48	$3,707.60	$0.00	$34,338.08
RCD Project Manager	410	0		$41.34	$16,947.35	$0.00	$0.00	$16,947.35
Volunteers (stakeholder meeting participation)			285	$18.00	$0.00	$0.00	$5,130.00	$5,130.00
Volunteer monitoring assistance			180	$18.00			$3,240.00	$3,240.00
Subtotal					**$47,577.83**	**$3,707.60**	**$8,370.00**	**$59,655.43**
Staff Benefits @ 25% (max funded 31%)				25%	$11,894.46	$926.90		$12,821.36
				TOTAL PERSONNEL SERVICES	**$59,472.29**	**$4,634.50**	**$8,370.00**	**$72,476.79**
B. OPERATING EXPENSES								
Description (indicate type of units)	**# of Units Amount Requested**	**# of Units Applicant Cost Share**	**# of units of Partner Cost Share**	**Unit Price**	**Amount Requested**	**Applicant Amt. of Cost Share**	**Partner Amt. of Cost Share**	**Total Project Cost**
Subcontractors (indicate type of units)								
Central Coast Salmon Enhancement								
Stakeholder and TAC facilitation (hours)	306			$60.00	$18,360.00		$0.00	$18,360.00
Review and compile existing info (hours)	150			$60.00	$9,000.00		$0.00	$9,000.00
BMI-collection & tech memo draft/final (hours)	120			$45.00	$5,400.00		$0.00	$5,400.00
Draft and final plan production (hours)	350			$60.00	$21,000.00		$0.00	$21,000.00

DETAILED PROJECT BUDGET

PROJECT NAME: Big Sur River Watershed Management Plan

	Hours or Units of Amount Requested	Hours or Units of Applicant Cost Share	Hours or units of Partner Cost Share	Hourly Rate or Unit Price	Amount Requested	Applicant Amt. of Cost Share	Partner Amt. of Cost Share	Total Project Cost
Project Administration (hours)	48			$75.00	$3,600.00		$0.00	$3,600.00
Travel (mileage)	8700			$0.51	$4,437.00		$0.00	$4,437.00
CSUMB-- Geology/Hydrology/geomorphology								
Principal InvestigatorI (hour)	231			$71.00	$16,401.00		$0.00	$16,401.00
Grad student assistant (hour)	364			$20.00	$7,280.00		$0.00	$7,280.00
Undergrad student assistant (hour)	80			$16.00	$1,280.00		$0.00	$1,280.00
University 4WD truck rental fee (per day)	8			$102.00	$816.00		$0.00	$816.00
University vehicle fuel (miles)	960			$0.27	$256.00		$0.00	$256.00
Aerial reconnaissance (flight)	1			$500.00	$500.00			$500.00
Stillwater Sciences								
Personnel (hours)	416	0	0	$120.37	$50,074.00			$50,074.00
Ground Travel by rental car (day)	9	0	0	$70.00	$630.00			$630.00
Air Travel (one round-trip flight Arcata-Monterey)	1	0	0	$670.00	$670.00			$670.00
Lodging (per person per day)	1	0	0	$80.00	$80.00			$80.00
Travel Per diem (day)	9	0	0	$40.00	$360.00			$360.00
Color copies (each)	0	0	100	$0.50			$50.00	$50.00
Shipping (ounce)	0	0	50	$1.00			$50.00	$50.00
Field Equipment (week)	0	0	1	$20.00			$20.00	$20.00
Field Equipment (week)	0	0	1	$19.00			$19.00	$19.00
Field Equipment (week)	0	0	1	$50.00			$50.00	$50.00
Pressure transducer (month)	0	0	60	$60.00			$3,600.00	$3,600.00
Temperature loggers (month)	0	0	60	$18.00			$1,080.00	$1,080.00
TAC member travel reimbursement (miles)	1500			$0.51	$765.00			$765.00

DETAILED PROJECT BUDGET

PROJECT NAME: Big Sur River Watershed Management Plan

	Hours or Units of Amount Requested	Hours or Units of Applicant Cost Share	Hours or units of Partner Cost Share	Hourly Rate or Unit Price	Amount Requested	Applicant Amt. of Cost Share	Partner Amt. of Cost Share	Total Project Cost
NRCS Conservationist (hours)			100	$64.00			$6,400.00	$6,400.00
NRCS Conservationist travel (miles)			1500	$0.51			$765.00	$765.00
CA Parks Ecologist (hours)			75	$64.00			$4,800.00	$4,800.00
USFS Ecologist (hours)			35	$64.00			$2,240.00	$2,240.00
Use of CA Parks GPS Veg-mapping Unit (days)			20	$35.00			$700.00	$700.00
Subtotal of Subcontractors					$140,908.92	$0.00	$19,774.00	$160,682.92
Materials and Supplies (indicate type of units)								
BMI Lab Work--analysis (field sites)	10			$200.00	$2,000.00	$0.00	$0.00	$2,000.00
Bacterial water quality analysis (samples)	42			$50.00	$2,100.00	$0.00	$0.00	$2,100.00
Field Materials and Supplies (lump)	0.71	0.29		$350.00	$250.00	$100.00		$350.00
Binders for stakeholders (binder)	5		5	$5.00	$25.00	$0.00	$25.00	$50.00
Plan copies (plan)	50		50	$10.00	$500.00	$0.00	$500.00	$1,000.00
Misc. printing (page)	1000		1000	$0.05	$50.00	$0.00	$50.00	$100.00
Copying CDs for plan (lump)	1			$150.00	$150.00	$0.00	$0.00	$150.00
Refreshments for meetings (meeting)			19	$15.00	$0.00	$0.00	$285.00	$285.00
RCDMC Travel (miles)	3000		3000	$0.51	$1,530.00	$0.00	$1,530.00	$3,060.00
Computer rental for project (month)	24			$30.00	$720.00	$0.00	$0.00	$720.00
Office space for project use (330 square feet) x 21.90/sf x 2 yrs			330	$43.80	$0.00	$0.00	$14,454.00	$14,454.00
Subtotals of Materials & Supplies					**$7,325.00**	**$100.00**	**$16,844.00**	**$24,269.00**
				TOTAL OPERATING EXPENSES	**$148,233.92**	**$100.00**	**$36,618.00**	**$184,951.92**
C. SUBTOTALS & ADMIN								
Subtotal A + B (Personnel + Operating)					$207,706.21	$4,734.50	$44,988.00	$257,428.71

DETAILED PROJECT BUDGET

PROJECT NAME: Big Sur River Watershed Management Plan

	Hours or Units of Amount Requested	Hours or Units of Applicant Cost Share	Hours or units of Partner Cost Share	Hourly Rate or Unit Price	Amount Requested	Applicant Amt. of Cost Share	Partner Amt. of Cost Share	Total Project Cost
Administrative Overhead (max. 15%) @ 15%				15%	$10,019.59	$710.18	$0.00	$10,729.77
D. GRAND TOTAL					**$217,725.80**	**$5,444.68**	**$44,988.00**	**$268,158.48**
SOFT COST SHARE PERCENTAGE _16.78%_								
HARD COST SHARE PERCENTAGE __2.03%								
SOURCE AND AMOUNT OF COST SHARE :		Applicant =				5,444.68		
		Partners (State) =					5,500.00	
		Partners (Federal) =					25,889.00	
		Partners (Local) =					13,599.00	

2. *Budget justification:*

All cost estimates for this project are based on extensive experience in developing budgets and implementing projects for similar work. Subcontractor costs were estimated by the intended subcontractors at Central Coast Salmon Enhancement, Stillwater Sciences, and the CSUMB Watershed Institute based on their respective considerable experience in conducting resource assessments and guiding watershed planning efforts in the region with particular focus on salmonids.

RCDMC Direct Costs

RCDMC personnel duties under the project are outlined in the project description with further detail regarding distribution of labor time below. Benefits for RCDMC staff are 25% to cover payroll taxes, health and leave benefits, excluding Workers Compensation per FRGP PSN requirements.

Task 1 (Stakeholder & TAC Meetings): Executive Director (ED)—30 hrs for initial TAC & Stakeholder meeting planning/arrangement/solicitation in coordination with the CCSE facilitator, and ED—80 (+40 in-kind) hours and (Project Manager) PM—40 hours for Stakeholder and TAC meeting coordination and facilitation support for the CCSE facilitator for an estimated 18 stakeholder meetings and 5 TAC meetings during the project timeline;

Task 2.a (Existing Information Compilation): PM—80 hrs for gathering and compiling existing watershed data in cooperation with CCSE as background for the proposed assessments in 2.b-h;

Task 2.e (Water Quality): PM—40 hrs for benthic Macroinvertebrate inventory and water quality sampling and data compilation with CCSE;

Task 2.f (Noxious Weed Mapping): PM —160 hrs for an estimated 20 cumulative days of field mapping (per State Parks biologist estimate) and recording needed for the targeted noxious weeds;

Task 3 (Watershed Plan): ED—260 hrs; PM—90 hrs for Draft and Final Plan co-writing, review and printing/distribution in partnership with CCSE;

Task 4 (Project Administration): ED—167 hrs (+25 hrs in-kind) for subcontract development (4 hrs/subcontract x 3 subs), project startup/communication/troubleshooting (20 hrs), invoice and reporting template/system development (16 hrs) and monthly reporting, cost-tracking and invoicing (6 hrs/month) for two-year project period; PM—40 hrs. for assistance in compiling reporting information and periodic additional field or phone coordination with subcontractors.

RCDMC Operating Expenses:

- Benthic Macroinvertebrate lab work at approx. $200/site x 10 sites
- Water sample lab work for bacteria is split between winter storm flows and summer baseflows and based on an estimated lab fee of $50/sample at two sites plus one blank for quality assurance per event. In Winter, we'll sample 2 storm events per year x 2 years. For the summer we'll have 5 sampling events per summer x 2 summers. All told, we expect to grab and submit for analysis 42 samples x $50/sample = $2,100.
- Field materials and supplies will include alcohol for samples, sample containers, labeling stuff, batteries, etc. for BMI, water quality and vegetation mapping and supplies for project communication and stakeholder meetings such as binders for stakeholders, flip charts, map plotter paper and markers --$400, $100 of which will be matched by RCDMC and $25 by CCSE.
- Miscellaneous copy production for stakeholder/TAC meetings along with copy production

and assembly for the draft and final Watershed Plans: $1,100—1/2 matched by RCDMC and NRCS

- Copying/labeling of CDs for insertion in plans and digital plan distribution:$150
- Travel/mileage: Between meetings, project coordination and survey work, we anticipate approximately 50 trips of 120 miles average roundtrip (6,000 mi total), half of which will be matched in-kind through the use of NRCS vehicles.
- Computer rental for the project (approx. $30/mo x 24 months); and
- RCDMC office space rental for the portion and percentage relevant to the project (330 sf x $21.90/sf x 2 yrs), to be matched completely by NRCS;
- Additionally, CCSE is providing snacks for the Stakeholder meetings as in-kind match.

3. *Administrative overhead:*

RCDMC Administrative overhead is billed to the project at 15%, a total of $10,019.59, which covers a portion of actual RCDMC admin costs billable to the project per the chart below.

District Liability Insurance	$6,000/year
District Financial Audits	$7,000/year
District Bookkeeping	$6,000/year
District Office Management, Personnel Management & Communication	$12,000/year
Overall District Information Technology Service	$2,000/year
Phones for project staff	$1,200/year
Annual District 'Overhead' Expenses	**$32,200/yr**
2 yrs OH expense relative to this project (20% of RCD Annual Budget)	*$32,200/yr x 2 years x 20%* = ***$12,880***
+ Workers Compensation Ins. for project staff*	$1052
Total Overhead Billable to this project	$13,932
Overhead included in budget (15% of direct costs per PSN budget form)	**$10,019.59**

*Workers compensation cost is derived directly from the specific rates assigned for the ED and PM by State Compensation Insurance Fund, Insurer for RCDMC.

4. *Summary project costs*

Sources of Funds	Cash	In-kind (if applicable)	Status S,P,U (secured, pending, unknown)	Anticipated award date	Total
Fisheries Restoration Grant Program	217,725.80				217,725.80
Other State Agencies Name(s) and amount(s) of each: California State Parks: $5,550.00		5,500.00	S	Upon FRGP grant approval	5500.00
Federal Name(s) and amount(s) of each: USDA NRCS: $23,649.00 US Forest Service: $2,240.00		25,889.00	S	Upon FRGP grant approval	25,889.00

Applicant (indicate if Federal):	5,444.68		S	Upon FRGP grant approval	5,444.68
Other Sources Name(s) and amount(s) of each: Community volunteers (from Garrapata Creek Watershed Council and Big Sur region): $8,370.00 Stillwater Sciences: $4,869.00 Central Coast Steelhead Enhancement: $360.00			S	Upon FRGP grant approval	13,599.00
Total	223,170.48	44,988.00			268,158.48

5. ***Is any of the cost share being used as match for other (non-FRGP) funding for the project?***
No.

6. ***In-kind Detail:***

In-kind Detail: Labor				
Type of In-kind Contribution	**Source of In-kind Contribution**	**Total Hours**	**Value of Labor ($)**	**Describe how the labor value was determined**
Lagoon monitoring assistance	Garrapata Creek Watershed Council	180	3,240	We used a conservative volunteer rate of $18 based common acceptable rates for private volunteer assistance
Stakeholder Meeting participation	Stakeholder Meeting participants—committed members of the public	285	5,130	We used a conservative volunteer rate of $18 based common acceptable rates for private volunteer assistance
TAC	USFS	35	$2,240.00	We used a conservative average billing rate of $64 based on professional experience
TAC & Weed Mapping	California State Parks	75	$4,800.00	We used a conservative average billing rate of $64 based on professional experience
TAC and Public Meetings and Technical Support	NRCS	100	$6,400.00	We used a conservative average billing rate of $64 based on professional experience

In-kind Detail: Materials and Equipment		
Description of In-kind Contribution (materials, equipment, etc.) ***[Add rows as needed]***	**Source of In-kind Contribution**	**Value of contribution ($)**
Donated field equipment for project use—detailed accounting in Project Budget	Stillwater Sciences	4,869

Donated Trimble 'Juno' GPS for project use	CA State Parks	700
Binders for stakeholders, meeting materials (paper copies), and refreshments for stakeholders meetings	C. Coast Steelhead Enhancement	360
Copies of draft and final plans	NRCS	500

7. *Estimated Project Cost by Task*

NOT NEEDED FOR THIS PROJECT APPLICATION TYPE

Estimated Project Cost by Task - Project Name_____			
Type of Work	**Amount Requested**	**Cost Share**	**Total**
Fish Screens			
Fish Passage			
Instream Flow			
Instream Habitat			
Riparian Habitat			
Upland Habitat			
Wetland Habitat			
Estuarine Habitat			
Total			

Section 9: Supplemental or Specialized Information

In the order listed below, please attach the following required items to the application, as appropriate to the proposal project type:

☐ 1. Intermediate Plans.
(Project Types: FP, SC)

☐ 2. Conceptual Plans.
(Project Types: HS, HU, WC)

☐ 3. Intermediate **or** Conceptual Plans.
(Project Types: HB, HI, WD)

☒ 4. Project Location Topographic Map. **ATTACHED AS IMAGE 1**
(Project Types: FP, HB, HI, HR, HS, HU, MD, PD, PL, SC, WC, WD, WP)

☒ 5. Watershed (or County) Map. **ATTACHED AS IMAGE 2**
(Project Types: AC, HU, OR, PD, PI, PL, WD, WP)

☒ 6. Provisional Landowner Access Agreement/Provisional Resolution. **ATTACHED AS Appendix A**
(Project Types: FP, HA, HB, HI, HR, HS, HU, MD, MO, PD, PL, RE, SC, TE, WC, WD, WP)

☐ 7. Water Right Verification
(Project Types: FP, HB, SC, WC, WD, WP)

☐ 8. Photographs
(Project Types: FP, HA, HB, HI, HR, HS, PD, RE)

☐ 9. Status Report (Existing projects only).
(Project Types: OR, PI)

☐ 10. Fence Maintenance Plan.
(Project Type: HR)

☐ 11. Riparian Restoration Plan.
(Project Type: HR)

☐ 12. Quality Assurance and Quality Control (QA/QC) Plan
(Project Type: MD, MO)

☐ 13. Existing Condition Sketch.
(Project Type: PD)

☐ 14. Narrative appraisal.
(Project Type: WP)

☐ 15. Five year Management Plan
(Project Type: RE)

☐ 16. Ownership Deed
(Project Type: HA)

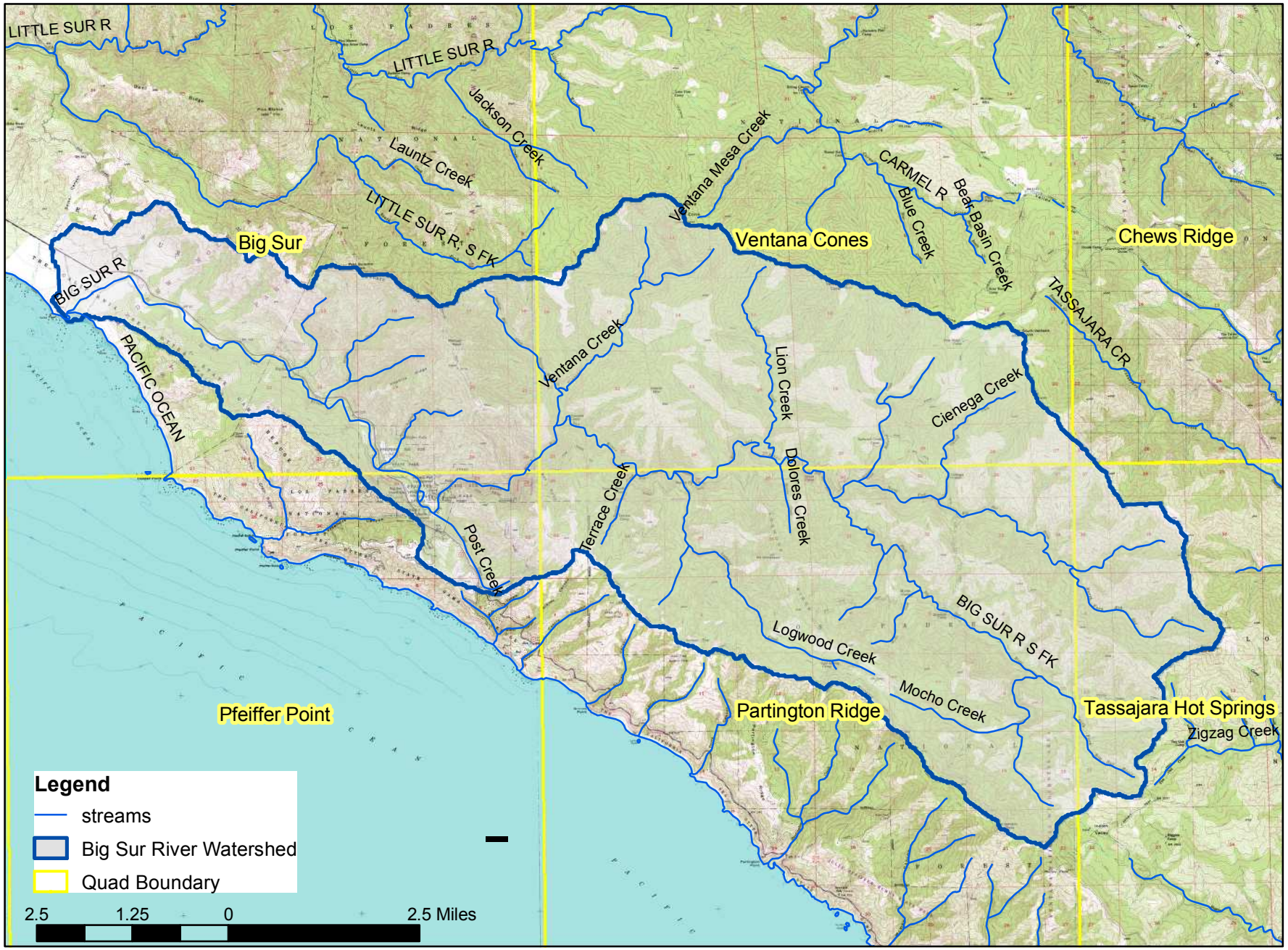
☐ 17. Regional Assessor Site Specific Map
(Project Type: HA)

☐ 18. Evaluation Plan
(Project Type: TE)

Supplemental Information Checklist by Project Type
(Refer to the item numbers above)

Project Type	Item Number	Project Type	Item Number
AC	5	OR	5, 9
FP	1, 4, 6, 7, 8	PD	4, 5, 6, 8, 13
HA	4, 5, 6, 8, 16, 17	PI	5, 9
HB	3, 4, 6, 7, 8	PL	4, 5, 6
HI	3, 4, 6, 8	RE	4, 5, 6, 8, 15
HR	4, 6, 8, 10, 11	SC	1, 4, 6, 7
HS	2, 4, 6, 8	TE	4, 5, 6, 18
HU	2, 4, 5, 6	WC	2, 4, 6, 7
MD	4, 6, 12	WD	3, 4, 5, 6, 7
MO	4, 5, 6, 12	WP	4, 5, 6, 7, 14

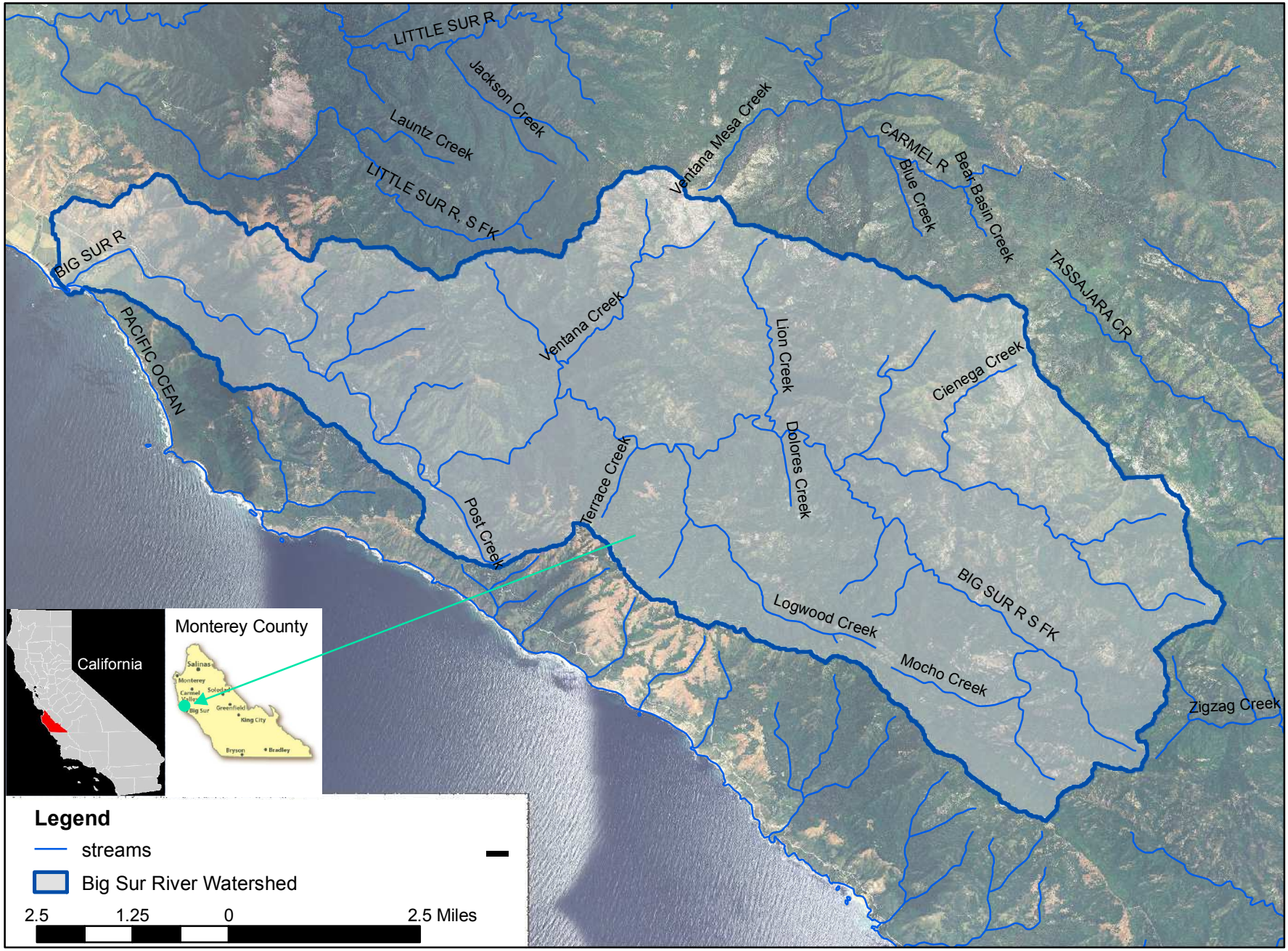
Image 1: Project Location Topographic Map



United States Geological Survey

7.5 Minute Topographic Maps: Big Sur, Ventana Cones, Chews Ridge, Pfeiffer Point, Partington Ridge, Tassajara Hot Springs

Image 2: Watershed & Location Map



Big Sur River Watershed - Monterey County

RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
744 La Guardia Street, Building A, Salinas, CA 93905 (831) 424-1036, ext. 124

APPENDIX A—Landowner Access Agreements & Provisional Resolution
For Big Sur River Watershed Management Plan FRGP 2011 Proposal

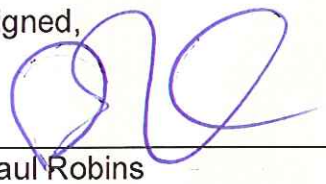
Landowner Access Agreements (following pages)

App1 Amanda McKay
App2 Everett Kronlund
App3 California State Parks (Jeff Frey)
App4 Big Sur River Inn
App5 Monterey District—Los Padres National Forest (Jeff Kwasny)

Provisional Resolution

The Resource Conservation District of Monterey County Board of Directors holds its next Regular Meeting on Thursday, March 17, 2011 and is scheduled to approve a Provisional Resolution authorizing submission of this proposal. Please see attached agenda (Page App6). It was not possible to agendize the item any sooner given the PSN release date on February 1, 2011. We will submit the resolution separately to DFG Staff shortly after the approval date.

Signed,



3/15/11

Paul Robins
Executive Director

Provisional Landowner Access Agreement

Resource Conservation District of Monterey County
744-A La Guardia Street
Salinas, CA 93905

Access/Entry Agreement

Big Sur River Watershed Assessment and Restoration Plan

I. PURPOSE

The following agreement details requirements of both the landowner and the **Resource Conservation District of Monterey County** (RCD) regarding the Big Sur River Watershed Assessment and Restoration Plan. Said property is located 5 miles upstream of ***Big Sur River***, tributary to ***Pacific Ocean***.

I, AMANDA McKAY, hereinafter called "Landowner", am aware that a habitat restoration project grant application has been submitted to the California Department of Fish and Game (DFG) for funding. The project has been explained to me by the RCD. I support the goals of the project. If the project is selected for funding, the Landowner will enter into a ~~ten-year~~ landowner agreement that will be project specific.

II. ACCESS PERMISSION

Landowner hereby grants **Resource Conservation District of Monterey County**, DFG, and NOAA Fisheries representatives permission to enter onto real property owned by the Landowner to perform pre-project evaluation. Access shall be limited to those portions of Landowner's real property where actual restoration work is proposed to be performed and those additional portions of real property that must be traversed to gain access to the work site. The applicant will contact the Landowner at least 72 hours prior to any visit. At no time will DFG or NOAA Fisheries representatives access the property without the applicant unless expressively given permission by the Landowner.

III. DURATION OF NOTICE

The term of this agreement shall commence upon signing of this Agreement and terminate on ***October 2014***.

IV. LIABILITIES

Reasonable precautions will be exercised by **Resource Conservation District of Monterey County** to avoid damage to persons and property. **Resource Conservation District of Monterey County** agrees to indemnify and hold harmless the Landowner and agrees to pay for reasonable damages proximately caused by reason of the uses authorized by this agreement, except those caused by the gross negligence or intentional conduct of the Landowner.

Landowner Signature — Date: 3/10/11

P.O. Box 3, Big Sur, CA 93920-0003 — Landowner Address

(831) 667-2154 — Landowner Phone Number

Applicant Signature — Date: 3/10/11

(Name of company, organization or agency)

Provisional Landowner Access Agreement

Resource Conservation District of Monterey County
744-A La Guardia Street
Salinas, CA 93905

Access/Entry Agreement

Big Sur River Watershed Assessment and Restoration Plan

I. PURPOSE

The following agreement details requirements of both the landowner and the **Resource Conservation District of Monterey County** (RCD) regarding the Big Sur River Watershed Assessment and Restoration Plan. Said property is located 6 miles upstream of ***Big Sur River***, tributary to ***Pacific Ocean***.

I, Everett Kronlund, hereinafter called "Landowner", am aware that a habitat restoration project grant application has been submitted to the California Department of Fish and Game (DFG) for funding. The project has been explained to me by the RCD. I support the goals of the project. If the project is selected for funding, the Landowner will enter into a ten year landowner agreement that will be project specific.

II. ACCESS PERMISSION

Landowner hereby grants **Resource Conservation District of Monterey County**, DFG, and NOAA Fisheries representatives permission to enter onto real property owned by the Landowner to perform pre-project evaluation. Access shall be limited to those portions of Landowner's real property where actual restoration work is proposed to be performed and those additional portions of real property that must be traversed to gain access to the work site. The applicant will contact the Landowner at least 72 hours prior to any visit. At no time will DFG or NOAA Fisheries representatives access the property without the applicant unless expressively given permission by the Landowner.

III. DURATION OF NOTICE

The term of this agreement shall commence upon signing of this Agreement and terminate on ***October 2014***.

IV. LIABILITIES

Reasonable precautions will be exercised by **Resource Conservation District of Monterey County** to avoid damage to persons and property. **Resource Conservation District of Monterey County** agrees to indemnify and hold harmless the Landowner and agrees to pay for reasonable damages proximately caused by reason of the uses authorized by this agreement, except those caused by the gross negligence or intentional conduct of the Landowner.

Landowner Signature	3-10-11 Date
48280 Hwy 1 Big Sur, CA. 93920 Landowner Address	831-667-0332 Landowner Phone Number
Applicant Signature *(Name of company, organization or agency)*	3/14/11 Date

Provisional Landowner Access Agreement

Resource Conservation District of Monterey County
744-A La Guardia Street
Salinas, CA 93905

Access/Entry Agreement

Big Sur River Watershed Assessment and Restoration Plan

I. PURPOSE

The following agreement details requirements of both the landowner and the **Resource Conservation District of Monterey County** (RCD) regarding the Big Sur River Watershed Assessment and Restoration Plan. Said property is located 0-3.5 miles upstream of ***Big Sur River***, tributary to ***Pacific Ocean***. approx 5.5-8

I, Jeff Frey for State Parks, hereinafter called "Landowner", am aware that a habitat restoration project grant application has been submitted to the California Department of Fish and Game (DFG) for funding. The project has been explained to me by the RCD. I support the goals of the project. If the project is selected for funding, the Landowner will enter into a ten year landowner agreement that will be project specific.

II. ACCESS PERMISSION

Landowner hereby grants **Resource Conservation District of Monterey County**, DFG, and NOAA Fisheries representatives permission to enter onto real property owned by the Landowner to perform pre-project evaluation. Access shall be limited to those portions of Landowner's real property where actual restoration work is proposed to be performed and those additional portions of real property that must be traversed to gain access to the work site. The applicant will contact the Landowner at least 72 hours prior to any visit. At no time will DFG or NOAA Fisheries representatives access the property without the applicant unless expressively given permission by the Landowner.

III. DURATION OF NOTICE

The term of this agreement shall commence upon signing of this Agreement and terminate on ***October 2014***.

IV. LIABILITIES

Reasonable precautions will be exercised by **Resource Conservation District of Monterey County** to avoid damage to persons and property. **Resource Conservation District of Monterey County** agrees to indemnify and hold harmless the Landowner and agrees to pay for reasonable damages proximately caused by reason of the uses authorized by this agreement, except those caused by the gross negligence or intentional conduct of the Landowner.

[signature]	3/7/11
Landowner Signature	Date
Cal State Parks, Big Sur Station #1	(831) 667-0148
Landowner Address: PO Box 1, Big Sur, CA 93920	Landowner Phone Number
[signature]	3/11/11
Applicant Signature	Date
(Name of company, organization or agency)	

Provisional Landowner Access Agreement

Resource Conservation District of Monterey County
744-A La Guardia Street
Salinas, CA 93905

Access/Entry Agreement

Big Sur River Watershed Assessment and Restoration Plan

I. PURPOSE

The following agreement details requirements of both the landowner and the **Resource Conservation District of Monterey County** (RCD) regarding the Big Sur River Watershed Assessment and Restoration Plan. Said property is located 31/2 miles upstream of ***Big Sur River***, tributary to ***Pacific Ocean***.

I, , hereinafter called "Landowner", am aware that a habitat restoration project grant application has been submitted to the California Department of Fish and Game (DFG) for funding. The project has been explained to me by the RCD. I support the goals of the project. If the project is selected for funding, the Landowner will enter into a ten year landowner agreement that will be project specific.

II. ACCESS PERMISSION

Landowner hereby grants **Resource Conservation District of Monterey County**, DFG, and NOAA Fisheries representatives permission to enter onto real property owned by the Landowner to perform pre-project evaluation. Access shall be limited to those portions of Landowner's real property where actual restoration work is proposed to be performed and those additional portions of real property that must be traversed to gain access to the work site. The applicant will contact the Landowner at least 72 hours prior to any visit. At no time will DFG or NOAA Fisheries representatives access the property without the applicant unless expressively given permission by the Landowner.

III. DURATION OF NOTICE

The term of this agreement shall commence upon signing of this Agreement and terminate on ***October 2014***.

IV. LIABILITIES

Reasonable precautions will be exercised by **Resource Conservation District of Monterey County** to avoid damage to persons and property. **Resource Conservation District of Monterey County** agrees to indemnify and hold harmless the Landowner and agrees to pay for reasonable damages proximately caused by reason of the uses authorized by this agreement, except those caused by the gross negligence or intentional conduct of the Landowner.

Allen McDuffy RP — 3/8/2011
Landowner Signature — Date

831-667-2700
Landowner Address — Landowner Phone Number

916 Sur River Inn, Hwy One — 3/8/2011
Applicant Signature — Date

(Name of company, organization or agency) Big Sur CA 93920 3/11/11

Provisional Landowner Access Agreement

Resource Conservation District of Monterey County
744-A La Guardia Street
Salinas, CA 93905

Access/Entry Agreement

Big Sur River Watershed Assessment and Restoration Plan

I. PURPOSE

The following agreement details requirements of both the landowner and the **Resource Conservation District of Monterey County** (RCD) regarding the Big Sur River Watershed Assessment and Restoration Plan. Said property is located 8 miles upstream of ***Big Sur River***, tributary to ***Pacific Ocean***.

I, JEFF KWASNY MONTERSY DISTRICT - LOS PADRES NATIONAL FOREST, hereinafter called "Landowner", am aware that a habitat restoration project grant application has been submitted to the California Department of Fish and Game (DFG) for funding. The project has been explained to me by the RCD. I support the goals of the project. If the project is selected for funding, the Landowner will enter into a ~~ten year~~ landowner agreement that will be project specific.

II. ACCESS PERMISSION

Landowner hereby grants **Resource Conservation District of Monterey County**, DFG, and NOAA Fisheries representatives permission to enter onto real property owned by the Landowner to perform pre-project evaluation. Access shall be limited to those portions of Landowner's real property where actual restoration work is proposed to be performed and those additional portions of real property that must be traversed to gain access to the work site. The applicant will contact the Landowner at least 72 hours prior to any visit. At no time will DFG or NOAA Fisheries representatives access the property without the applicant unless expressively given permission by the Landowner.

III. DURATION OF NOTICE

The term of this agreement shall commence upon signing of this Agreement and terminate on ***October 2014***.

IV. LIABILITIES

Reasonable precautions will be exercised by **Resource Conservation District of Monterey County** to avoid damage to persons and property. **Resource Conservation District of Monterey County** agrees to indemnify and hold harmless the Landowner and agrees to pay for reasonable damages proximately caused by reason of the uses authorized by this agreement, except those caused by the gross negligence or intentional conduct of the Landowner.

ACTING DISTRICT RANGER — 3/10/2011
Landowner Signature — Date

BIG SUR STATION #1, BIG SUR CA, 93920 — (831-667-1126
Landowner Address — Landowner Phone Number

3/11/11
Applicant Signature — Date

(Name of company, organization or agency)

Agenda

RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY

Regular Meeting
Thursday, March 17, 2011
10:00am -12:00pm

744-A LaGuardia St., Salinas, California 93905 (831) 424-1036 ext 124

Meeting called by:	Board President: P. Binsacca
Type of meeting:	Regular Monthly Board Meeting, Open to the Public
Board Members:	P. Binsacca , B. Jefferson, S. Darington, S. Cobb, M. Duflock, R. King, J. Devers (Associate), T. Roberts (Associate)
Guests:	P. Robins, R. LaFleur

Est. Time:	**Agenda topics**	
10:00 A.M.	**Call to Order**	P. Binsacca
10 minutes	**Comments from the Public:** -a time for members of the public to address the board on matters not included on the agenda	
5 minutes	**Minutes (*Review for Approval*)** -Minutes from the February 2011 Regular Board meeting (*February 17, 2011*)	P.Robins/ Directors
15 minutes	**NRCS Update**	R. LaFleur
20 minutes	**Budget and Finance (*Review for Approval*)** -Financial Summary of Cash Flow and Accrual Accounting for Period Ending March 17, 2011 -Expenses & Warrants: March 2011	P. Robins/ Directors
20 minutes	**Program Updates (*Update*)** -Watershed Coordination Grant for Carmel River Watershed -Livestock and Land -CDFA Specialty Crop Block Grant proposal for water quality management assistance for vegetatable and berry crop growers -Weed Mapping and Erosion Control support for County Agricultural Department	P. Robins/ Directors
40 minutes	**New Business *(Discussion or Consideration for Approval)*** -President's report from recent meeting with Cattlemen's group -Consideration of Resolution 2011-01 authorizing grant proposal submission to Dept. of Fish and Game for Big Sur Watershed Plan -Consideration of Resolution 2011-02 establishing an RCD Conflict of Interest Code (TENTATIVE, pending guidance from County Counsel)	Directors/ P. Robins
10 minutes	**Closing Discussion** -candidate board members and upcoming meetings -April Board Meeting and tour	P. Robins/ Directors
12:00 P.M.	**Meeting Adjournment**	P. Binsacca

Next Meeting:	**Proposed Date: Tuesday, April 19, 2011—early meeting and tour!** Location: 744 La Guardia Street, Building A, Salinas, CA 93905