Preliminary Implementation Project Information

Organization Information

- 1. Organization Name: Shasta Valley Resource Conservation District
- 2. Organization Address (City, County, State, Zip Code):

215 Executive Ct., Ste. A, Yreka, CA 96097

- 3. Contact Name/Title
 - a) Name: <u>Brandy Caporaso</u>b) Title: Finance Manager
 - c) Email: bcaporaso@yahoo.com
 - d) Phone Number (include area code): 530.572.3120
- 4. Organization Type

\boxtimes	Public Agency
	Nonprofit Organization
	Tribe
	Other:

5. Organization Information Notes:

The Shasta Valley RCD is a special district serving central Siskiyou County, California. For over 40 years the SVRCD has worked with interested landowners on a voluntary basis to enhance the management and sustainable use of natural resources in order to ensure the long term economic viability of the community. To achieve this, the SVRCD has partnered with various agencies and organizations such as the Natural Resources Conservation Service (NRCS), California Department of Water Resources (DWR), California Department of Fish and Wildlife (CDFW), North Coast Regional Water Quality Control Board (NCRWQCB), The Nature Conservancy (TNC), and various irrigation districts within the Shasta Valley. The SVRCD has also established strong relationships with firms handling environmental review and agricultural engineering. However, the most important part of the SVRCD's success comes from our professional and respectful relationships with private land owners within the Shasta Valley.

Eligibility

1. North Coast Resource Partnership and North Coast Integrated Regional Water Management Objectives

[for more information see the <u>North Coast Integrated Regional Water Management Plan</u>] Check any of the following that apply to your project:

GOAL 1: INTRAREGIONAL COOPERATION & ADAPTIVE MANAGEMENT

Objective 1 -	Respect local autonomy a	nd local knowledge in	Plan and project	development and
implementation				

Objective 2 - Provide an ongoing framework for inclusive, efficient intraregional cooperation and effective, accountable NCIRWMP project implementation

Objective 3 - Integrate Traditional Ecological Knowledge in collaboration with Tribes to incorporate these practices into North Coast Projects and Plans
GOAL 2: ECONOMIC VITALITY ☐ Objective 4 - Ensure that economically disadvantaged communities are supported and that project implementation enhances the economic vitality of disadvantaged communities by improving built and natural infrastructure systems and promoting adequate housing ☐ Objective 5 - Conserve and improve the economic benefits of North Coast Region working landscapes and natural areas
GOAL 3: ECOSYSTEM CONSERVATION AND ENHANCEMENT ☐ Objective 6 – Conserve, enhance, and restore watersheds and aquatic ecosystems, including functions, habitats, and elements that support biological diversity ☐ Objective 7 - Enhance salmonid populations by conserving, enhancing, and restoring required habitats and watershed processes
GOAL 4: BENEFICIAL USES OF WATER ☐ Objective 8 - Ensure water supply reliability and quality for municipal, domestic, agricultural, Tribal, cultural, and recreational uses while minimizing impacts to sensitive resources ☐ Objective 9 - Improve drinking water quality and water related infrastructure to protect public health, with a focus on economically disadvantaged communities ☐ Objective 10 - Protect groundwater resources from over-drafting and contamination
GOAL 5: CLIMATE ADAPTATION & ENERGY INDEPENDENCE Objective 11 - Address climate change effects, impacts, vulnerabilities, and strategies for local and regional sectors to improve air and water quality and promote public health Objective 12 - Promote local energy independence, water/ energy use efficiency, GHG emission reduction, and jobs creation
GOAL 6: PUBLIC SAFETY Objective 13 - Improve flood protection and reduce flood risk in support of public safety
Describe how your project addresses the North Coast Resource Partnership and North Coast IRWM Plan Goals and Objectives selected [1000 characters max.]
The project protects local autonomy and engages stakeholders by having additional dollars to assist
the GSA with completion of the GSP. This helps defray the cost of the study for the groundwater
users who are in the DAC. The project expands groundwater monitoring network and enables data
collection necessary to develop a groundwater model and GSP. The model and GSP will help the
GSA and other resource managers to conserve and enhance the beneficial uses such as irrigation
and freshwater habitat for anadromous species (Chinook, coho, steelhead, and lamprey) and,
through a public process, create policies to ensure viable agricultural practices and protect against
groundwater overdraft.

2.

General Project Information

1. Project Name: Groundwater Monitoring Implementation Program for the Shasta Valley GSA

2. Project Description/Summary

[2000 characters max.]

The purpose of this project is to provide technical assistance to the Groundwater Sustainability Agency (GSA) for the Shasta Valley Medium Priority Basin 1-004 (the Basin) and the Basin's public and private stakeholders, gather and submit pertinant data to the GSA to utilize in preparation of a Groundwater Sustainability Plan (GSP) to satisfy the requirements set forth by the 2014 Sustainable Groundwater Management Act (SGMA). This objective will be accomplished by establishing a groundwater and surface water monitoring network in the Basin that will establish baseline conditions in the Basin, and to assess the complex interactions between groundwater, surface water, and irrigation practices in the Shasta Valley. Data will be collected and analyzed in accordance with the Best Management Practices (BMPs) outlined by the Department of Water Resources (DWR). The data and analysis will be summarized and submitted to the Shasta Valley GSA for the purpose of informing an effective GSP.

3. Specific Project Goals/Objectives

[for each goal list specific objectives]

Goal 1: <u>EXISTING DATA ANALYSIS AND REVIEW</u> [100 characters max.]
Goal 1 Objective: Review and Analysis of Existing Well Logs [200 characters max.]
Goal 1 Objective: Existing Well Digital Map-create a georeferenced map to determine best wells for
data collection. [200 characters max.]
Goal 1 Objective: [200 characters max.]
Goal 1 Objective: [200 characters max.]

Goal 2: MONITORING IMPLEMENTATION AND DATA COLLECTION

Goal 2 Objective: <u>Targeted Outreach-to landowners of existing wells to be monitored and a subset</u> of those that have potential as strategic groundwater monitoring locations.

Goal 2 Objective: <u>Piezometer Transect Studies-on high priority reaches of surface water and/or irrigation ditches to investigate seasonal instream gains or losses.</u>

Goal 2 Objective: <u>Establish a Groundwater and Surface Baseline for the GSP-to monitor surface and groundwater levels and maintain a database.</u>

Goal 2 Objective: <u>Aquifer Performance Testing:-Conduct aquifer performance tests to obtain</u> hydrologic properties of constituent subsurface materials to provide data to geologists & modelers.

Goal 3: PUBLIC OUTREACH AND EDUCATION

Goal 3 Objective: Educational Seminars-to host, participate in and attend technical and advisory seminars with stakeholders and assist County Flood Control District and GSA with public outreach. Goal 3 Objective: Public Meeting Attendance:-Attend GSA and Goundwater Advisory Committee meetings.

Goal 3 Objective: <u>Public Outreach: -publish newsletters and newspaper articles regarding</u> groundwater sustainability issues and best management practices
Goal 3 Objective:

Additional Goals & Objectives (List)

<u>Cont. Goal 2 Objective: Basin Precipitation Measures-Obtain, install, maintain, and collect data for precipitation stations throughout the Shasta Valley GW Basin.</u>

<u>Cont. Goal 2 Objective: Upper Watershed Precipitation Measures-Obtain, install, maintain and collect data for two snow and precipition monitoring stations to be placed upslope of the Basin.</u>

Cont. Goal 2 Objective: California Irrigation Management Information System (CIMIS) Implementation-Obtain, install, maintain and collect data for two CIMIS stations within the Shasta Valley GW Basin.

Cont. Goal 2 Objective: Reporting-submit quarterly reports to GSA and Groundwater Advisory

Committee.

- 4. Projected Project Start Date (format M/d/yyyy): 11/1/2018
- 5. **Anticipated Project End Date** (format M/d/yyyy): 3/31/2022

6.	Project Type: [select all that apply] Water supply reliability, water conservation, and water use efficiency Stormwater capture, storage, clean-up, treatment, and management Removal of invasive non-native species, the creation and enhancement of wetlands, and the acquisition, protection, and restoration of open space and watershed lands Non-point source pollution reduction, management, and monitoring Groundwater recharge and management projects Contaminant and salt removal through reclamation, desalting, and other treatment technologies and conveyance of reclaimed water for distribution to users Water banking, exchange, reclamation, and improvement of water quality Non-point source pollution reduction, management, and monitoring Planning and implementation of multipurpose flood management programs Watershed protection and management
	☐ Drinking water treatment and distribution ☐ Ecosystem and fisheries restoration and protection ☐ Other:
7.	Current Project Phase: Feasibility Study Planning Environmental Documentation & CEQA Permitting Implementation / Construction Maintenance Monitoring Other: Data collection
8.	Project Elements [select all that apply] Water supply reliability, water conservation and water use efficiency Storm water capture, storage, clean-up, treatment, monitoring and management Water banking, exchange, reclamation and improvement of water quality

	 Non-point source pollution reduction, management and monitoring Groundwater recharge and management projects Contaminant and salt removal through reclamation, desalting, and other treatment technologies and conveyance of reclaimed water for distribution to users Planning and implementation of multipurpose flood management programs Removal of invasive non-native species, the creation and enhancement of wetlands, and the acquisition, protection, and restoration of open space and watershed lands Watershed protection and management
	 □ Drinking water treatment and distribution □ Ecosystem and fisheries restoration and protection □ Critical water quality or supply enhancement for Economically Disadvantaged Communities □ Stormwater management to reduce flood damage □ Monitoring / assessment of resources □ Other:
and rou Giganti 1989), as defir margin Cave ba ground flanks of dischar debris a surface these o	Project Information Notes: The Shasta Valley Groundwater Basin only encompasses 56,640 acres (40.1%) of the irrigable land ughly 11% of the Shasta River Watershed. Bulletin 118 was first published prior a paper titled ic debris avalanche of Pleistocene age from ancestral Mount Shasta volcano, California (Crandell, which identifies the debris avalanche deposits in the central portion of the Shasta Valley. The Basin, ned in Bulletin 118, adheres to mapped deposits of Quaternary fluvial alluvium on the western and northern portion of the Shasta Valley, and excludes the debris avalanche deposits and Pluto asalt on the central and eastern side of the valley. It is generally assumed that the majority of lawater in the Shasta Valley enters through fractured volcanic rocks on the eastern and southeastern of the Shasta Valley, nearest to the snow and glaciers of Mount Shasta, and issues as surface water reged through various springs on the valley margins, as well as large springs on the east side of the avalanche (Mack, 1960). However, aquifer storage capacity, residence times, and groundwatere water interactions remain poorly understood. The proposed project is intended to answer many of outstanding questions about groundwater flows in the Basin and their interactions with surface water ligation practices.
	ect Funding Total Project Cost: \$976,884.00 Total Funding Request: \$976,884.00
3.	Funding Type Loan Grant Other
	List Potential Funding Program Name(s) Department of Water Resources
5.	Total Amount of Matching Funds: \$0.00 Select the source of these funds (select all that apply): Local

•	State Federal
Se • •	lect the status of these funds: N/A Received and Date when funds were received: Pending and Date when funds were requested: 11/17/2017 Have not applied
6. Lis N/A	t Matching Fund Sources

7. Funding Information Notes:

The grant funding for the project has been awarded by the DWR. The DWR expects grant contracts to be issued to medium priority basins in September or October. Because the basin is in the Distadvantaged Community, match was not required. Please see the attached table that verifies SVRCD has been awarded the grant. The link to the grant awards is https://water.ca.gov/Work-With-Us/Grants-And-Loans/Sustainable-Groundwater.

Collaborative Partnerships

1. List all collaborating partners and agencies and nature of collaboration:

The Siskiyou County Groundwater Sustainability Agency, (GSA) is responsible for submitting a Groundwater Sustainability Plan, (GSP) to CA Department of Water Resources. SVRCD will be working closely with the GSA, the Groundwater Advisory Committee, and Larry Walker Associates, Inc (an environmental engineering and consulting subcontractor of Siskiyou County Flood Control District) to provide outreach, techincal assistance, and groundwater and surface water data that is crucial for developing the GSP.

Describe local and/or political support for this project. [500 characters max.]
 The Siskiyou County Flood Control District submitted a letter support for SVRCD's grant application to DWR. Additionally, stakeholders have been very receptive to the locally driven process to develop the GSP.

3. Partnership Information Notes:

SVRCD is integral to the larger groundwater project as it has secured funding for the Shasta Valley Groundwater basin data collection and outreach that the GSA would not have had access to and/or would have been limited to by funding. SVRCD is also crucial in the partnership because SVRCD has established relationships with many of the land owners within the basin where data will be collected. Because of our funding, SVRCD will be able to assist the GSA and the GSA's consultant with outreach activities above and beyond the funding from the GSA's grant. SVRCD is excited to collaborate with Larry Walker Associates to offer sound data to the GSA for the GSP.

Project Location

1. Project Location Site Address or Description:

The location for SVRCD's project is the Shasta Valley Groundwater Basin and two sites that are upslope of the basin in order to gather snow and precipitation information to determine how upslope precipitation affects the basin. The GSA has submitted a boundry adjustment to DWR. Please see the attached map.

Mapped Location	on	tic	ocat	Lo	ped	api	M	2.
-----------------------------------	----	-----	------	----	-----	-----	---	----

- a) County(s): Siskiyou
- b) City/Town(s): Yreka, Montague, Grenada, Big Springs, Gazelle, Lake Shastina, Weed, Edgewood
- c) Stream(s): <u>Shasta River, Parks Creek, Little Shasta River, Yreka Creek, Julien Creek, Willow</u> Creek, Big Springs Creek

3. Is this project located in a Disadvantaged Community?

[Click layer on North Coast interactive maps]

- X Entirely
- Partially
- No

List the Disadvantaged Community(s)

Severly Disadvantaged Communities-Gazelle, Grenada, Montague, Yreka, Carrick, Edgewood, Weed

Project Benefits

1. Project Benefits

[select all that apply]

nicreuse water supply
☐ Increased water supply or range in water supply (i.e. acre-feet per year)
Improved water quality
Increased recreational opportunities
Decreased reliance on imported water
Reduced groundwater overdraft
Creation of wetlands and riparian habitat
Decreased operational costs
Other <u>Protect existing water supplies</u>
Water Quality Improvement
Increased water supply
Improved aquatic and wetland species habitat and populations
☐ Increased cropland production
Creation of wetlands and riparian habitat
Improved recreation opportunities
Decreased treatment costs
Other May allow for better management of surface/groundwater interactions.
Groundwater Improvements
☐ Improved flood protection

 □ Decreased reliance on imported water □ Reduced surface water use, reduced pumping costs □ Decreased or prevention of groundwater overdraft
Other Improved knowledge of groundwater resources for better management.
Water Conservation and Reuse ☐ Increased water saving ☐ Efficient reuse of wastewater ☐ Costs savings from reduced purchases of imported water ☐ Saving construction of water storage facilities ☐ Increased nutrient levels for plant and crop use from use of reclaimed wastewater ☐ Other
Watershed Rehabilitation Long-term sediment reduction and temperature improvements Reduced surface water nutrient and bacteria concentrations (improved water supply quality) Improved fish and wildlife habitat and passage Enhanced public safety and recreational opportunities Instream rehabilitation to redress hydromodification Other
Habitat Improvement Reduced surface water nutrient and bacteria concentrations (improved water supply quality) Enhanced fish habitat Increased opportunities for recreational hunting and viewing Increased numbers of native species Reduced flood risks Education opportunities Other
Flood Management Increased aquifer recharge Runoff reduction Improved surface water quality Natural resources preservation and restoration Reduced risk to life and property Decreased flood insurance costs Other
Describe how your project benefits the Economically Disadvantaged Communities it serves: [1000 character max.] Communities and residents within the Shasta Valley rely heavily on agricultural production for their livelihoods, and therefore are dependent on the availability of surface water and groundwater for irrigation purposes. Because of their rural nature, these communities tend to be severely disadvantaged and economically depressed. While Groundwater Sustainability Agencies have been granted the authority to assess fees in order to fund groundwater monitoring and sustainability

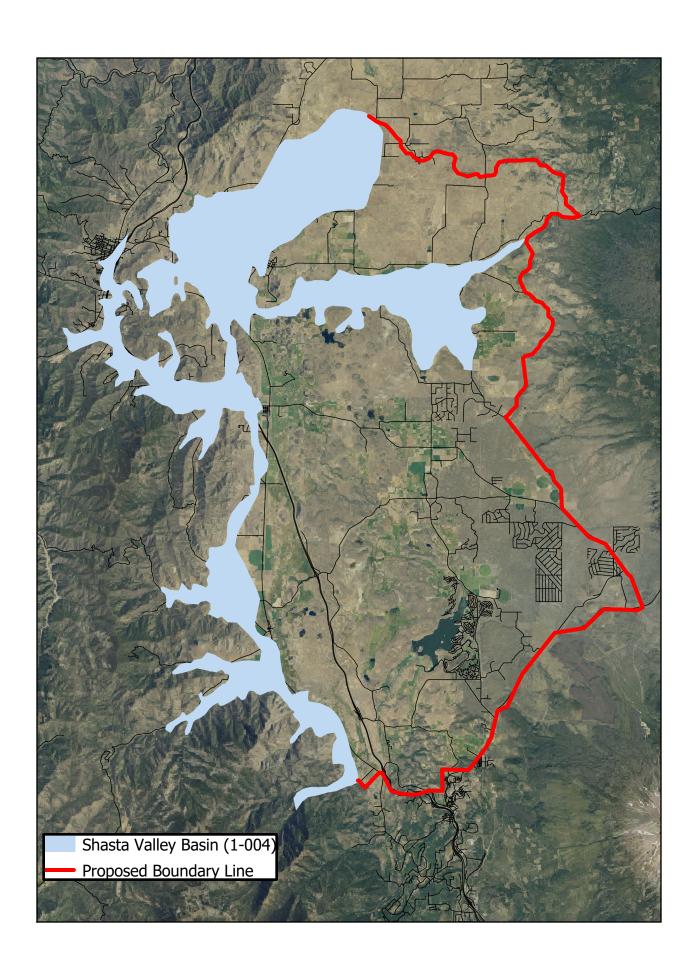
efforts, the SVRCD and the Shasta Valley GSA feel that raising enough money for the initial

2.

investment of monitoring equipment and staff time to conduct monitoring activities would put undue financial pressure on stakeholders within the severely disadvantaged communities. The proposed groundwater monitoring and associated planning activities are expected to protect economic and environmental interests of the Severely Disadvantaged Communities through the long term sustainable management of groundwater resources.

3. Project Benefits Information Notes:

The need for the proposed project arises from multiple factors. The SVRCD believes that for SGMA to be a success in the Shasta Valley Basin, education of its stakeholders and severely disadvantaged communities about issues related to groundwater, hydrology, and sustainability is absolutely essential. The SVRCD also believes that a comprehensive approach to groundwater monitoring activities will lead to an accurate and reasonable GSP, ensuring the sustainability of the groundwater resources vital to the economy and environment of the Shasta Valley.



Final Awards

2017 Groundwater Sustainability Plans and Projects Solicitation April 2018

e e	d de			Category 1	Category 2		Total
Note Cat 1 Map	at 1 Mic	Grantee	Project Title	Grant Award ^A	Grant Award		Grant Award
Ü	-	Arroyo Santa Rosa Basin Groundwater Sustainability Agency	Arroyo Santa Rosa Basin Groundwater Sustainability Plan	\$ -	\$ 177,081	\$	177,081
B 20	-	Asian Business Institute Resource Center	, ,	\$ 400,00		\$	400,000
	-	Atascadero Mutual Water Co. Bear Valley Basin Groundwater Sustainability Agency		\$ -	\$ 809,250 \$ 177,000	\$	809,250 177,000
		Bedford-Coldwater Sub-basin Groundwater Sustainability Agency	·	\$ -	\$ 1,000,000	\$	1,000,000
18		Big Bear Lake Department of Water and Power	Bedford-Coldwater Sub-basin Groundwater Sustainability Plan Proposal	\$ 782,29		Ś	782,298
_	_	Biola Community Services District	Biola Groundwater Recharge Project	\$ 705,00		\$	705,000
	E	Butte County Department of Water and Resource Conservation	Groundwater Sustainability Plan Development for the Vina, East Butte, West Butte and Wyandotte Creek Subbasins	\$ -	\$ 1,498,800	\$	1,498,800
	(Castaic Lake Water Agency	Santa Clarita Valley Groundwater Sustainability Agency 2017 Sustainable Groundwater	\$ -	\$ 416,106	¢	416,106
			Planning Grant Program Category 2 Proposal		\$ 1,000,000	ć	
	-	City of Brentwood City of Corona	, , , , , ,	\$ - \$ -	\$ 732,338	\$	1,000,000 732,338
		City of Modesto	Ü	\$ -	\$ 1,000,000	\$	1,000,000
С	-	City of Paso Robles City of Redding		\$ - \$ -	\$ 1,500,000 \$ 983,230	\$	1,500,000 983,230
	-	City of San Diego - Public Utilities Department	Groundwater Sustainability Plan for the San Pasqual Valley Groundwater Basin	\$ -	\$ 989,550	\$	989,550
	(Colusa Groundwater Authority	Colusa Subbasin Groundwater Sustainability Plan Development Facilitate Participation of Severely Disadvantaged Community Stakeholders In The Tulare	\$ -	\$ 1,000,000	\$	1,000,000
10	0 (Community Water Center	Lake Basin And Develop A Drinking Water Vulnerability Tool	\$ 614,35	3 \$ -	\$	614,353
	_	County of Glenn	Groundwater Sustainability Plan Development in the Corning Subbasin	4	\$ 999,980	\$	999,980
C 6	-	County of San Diego County of San Luis Obispo		\$ 1,000,00	\$ 2,000,000	\$	3,000,000 1,397,125
С 3	_	Cuyama Basin Groundwater Sustainability Agency	, ,	\$ 648,12		\$	2,148,124
		Del Norte County	Smith River Plain Groundwater Basin GSP	\$ -	\$ 250,000	\$	250,000
С	_	East Bay Municipal Utility District Eastern San Joaquin Groundwater Authority	,	\$ - \$ -	\$ 1,000,000 \$ 1,500,000	\$	1,000,000
		Elsinore Valley Municipal Water District	Elsinore Valley Groundwater Sustainability Agency Groundwater Sustainability Planning	\$ -	\$ 1,000,000	t '	1,000,000
+		Fillmore Piru GSA	Grant Proposal	\$ -	\$ 1,500,000	ć	1,500,000
-			Engaging Severely Disadvantaged Communities in the Development of the Solano Subbasin	•		ڊ م	
7	′ I	Freshwater Trust	Groundwater Sustainability Plan	\$ 490,00	5 -	\$	490,000
C 13	3	ndian Wells Valley Groundwater Authority	Indian Wells Valley Groundwater Basin - Groundwater Sustainability Plan Development and SDAC Groundwater Conservation Pilot Project	\$ 646,00	\$ 1,500,000	\$	2,146,000
	ı	nyo-Water Department, County of		\$ -	\$ 713,155	\$	713,155
С	ŀ	Kern River Groundwater Sustainability Agency	Kern County Subbasin Groundwater Sustainability Plan Support - 2017 Grant Application		\$ 1,500,000	\$	1,500,000
		Lassen County	Big Valley Groundwater Sustainability Plan	\$ -	\$ 999,185	\$	999,185
14	4 L	Leadership Counsel for Justice and Accountability		\$ 758,00) \$ -	\$	758,000
15	5 L	inda County Water District	Linda County Water District-Well 17 Project Funding Application Groundwater Sustainability Planning Grant Program Proposal	\$ 999,50	\$ -	\$	999,500
	-	os Angeles County Waterworks District No. 37, Acton	Fringe Area Antelope Valley Groundwater Sustainability Plan	\$ -	\$ 300,000	\$	300,000
С		Lower Tule River Irrigation District Groundwater Sustainable Agency	Lower Tule River Irrigation District GSA, SGWP Planning Grant	\$ -	\$ 1,500,000	\$	1,500,000
C 16			Groundwater Monitoring Well Installation and GSP Development For The Chowchilla	ć 1,000,00	1 500 000	۲.	2 500 000
. 10	0 1	Madera County Water and Natural Resources	Subbasin	\$ 1,000,00	5 1,500,000	Ş	2,500,000
C 11	1	Madera County Water and Natural Resources	Groundwater Monitoring Well Installation and GSP Development for the Madera Subbasin	\$ 1,000,00	\$ 1,500,000	\$	2,500,000
	ı	Marina Coast Water District	Monterey Subbasin Groundwater Sustainability Plan Development	\$ -	\$ 1,000,000	\$	1,000,000
6 4	-	Mendocino County Water Agency	Phase 2 of the Ukiah Valley Basin Groundwater Sustainability Plan Development	\$ -	\$ 764,255	\$	764,25
C 1	_	Merced Irrigation District Mid-Kaweah Groundwater Sustainability Agency	·	\$ 901,26 \$ -	\$ 1,500,000	\$	2,401,26 1,500,000
С	ſ	Mid-Kings River Groundwater Sustainability Agency	Tulare Lake Subbasin GSP Development and SGMA Compliance Project	\$ -	\$ 1,500,000	\$	1,500,000
	-	Mound Basin Groundwater Sustainability Agency North Cal-Neva Resource Conservation and Development		\$ -	\$ 758,100	\$	758,100
2	,	Council, Inc.	Big Valley GSP Monitoring and Data Development	\$ 782,34	1 \$ -	\$	782,344
С		North Fork Kings Groundwater Sustainability Agency	·	\$ -	\$ 1,500,000	\$	1,500,000
,D	-	Padre Dam Municipal Water District Pajaro Valley Water Management Agency		\$ - \$ -	\$ 600,000 \$ 1,500,000	\$	1,500,000
		Petaluma Valley GSA	, ,	\$ -	\$ 1,000,000	\$	1,000,000
0	9	Sacramento Central Groundwater Authority	Development of the South American Subbasin Groundwater Sustainability Plan (Bulletin 118 Subbasin NO. 5-21.65)	\$ -	\$ 970,693	\$	970,693
	٥	Sacramento Groundwater Authority	,	\$ -	\$ 994,276	\$	994,276
С	_	Salinas Valley Basin Ground Water Sustainability Agency		\$ -	\$ 1,500,000	\$	1,500,000
+		San Antonio Basin Groundwater Sustainability Agency	San Antonio Basin Groundwater Sustainability Plan Sustainable Groundwater Planning Grant for GSP Preparation: Bolsa, Hollister, and San	\$ -	\$ 300,000	\$	300,000
		San Benito County Water District	Juan Bautista Groundwater Subbasins	\$ -	\$ 830,336	\$	830,33
Λ	-	San Bernardino Valley Municipal Water District		\$ -	\$ 815,100	\$	815,10 2,000,00
. 4	_	San Gorgonio Pass Water Agency Santa Cruz Mid-County Groundwater Agency	2017 Sustainable Groundwater Planning Grant for the San Gorgonio Pass Subbasin Santa Cruz Mid-County Groundwater Sustainability Plan Development	\$ 1,000,00	\$ 1,500,000	\$	1,500,00
	Ş	Santa Margarita Groundwater Agency	Santa Margarita Groundwater Sustainability Plan Development	\$ -	\$ 1,000,000	\$	1,000,00
	_	Santa Rosa Plain GSA Santa Ynez River Water Conservation District		\$ - \$ -	\$ 1,000,000 \$ 1,000,000	\$	1,000,00
8	_			\$ 1,000,00		\$	1,000,00
	9 9	Shasta Valley Resource Conservation District	Groundwater Monitoring Implementation Program for the Shasta Valley GSA	\$ 976,88	1 \$ -	\$	976,88
	-	Siskiyou County Flood Control and Water Conservation District Solano Subbasin Groundwater Sustainability Agency	·	\$ - \$ -	\$ 1,367,000 \$ 1,000,000	\$	1,367,00
	-		, .	\$ -	\$ 1,000,000	\$	1,000,00
	9	Southeast Sacramento County Agricultural Water Authority	Establishing a Groundwater Sustainability Plan and Governance Structure for the Cosumnes	\$ -	\$ 1,000,000	\$	1,000,00
)		Sutter County Development Services	Groundwater Sub Basin Sutter Subbasin Groundwater Sustainability Plan Development	\$ -	\$ 956,814	\$	956,81
	1	Tehama County Flood Control & Water Conservation District		\$ -	\$ 1,498,960	\$	1,498,96
12	2	The Nature Conservancy	Demonstrating Multi-Benefit On-Farm Managed Aquifer Recharge in the Central Valley	\$ 300,00		\$	300,00
_		Tulelake Irrigation District	Protecting Our Groundwater Resource: Securing a Sustainable Future for the Tule Lake Subbasin	\$ -	\$ 721,120	\$	721,12
	-	Jpper Ventura River Groundwater Agency	Upper Ventura River Basin GSA and GSP	\$ -	\$ 630,061	\$	630,06
1-	_	Walnut Valley Water District West Stanislaus ID		\$ - \$ 1,178,50	\$ 338,500	\$	338,50 2,678,50
. 11	_	West Stanislaus ID West Turlock Subbasin GSA	-	\$ 1,178,50	\$ 1,000,000	\$	1,000,00
	-+	Western Municipal Water District	Riverside-Arlington Subbasin Groundwater Sustainability Plan	\$ -	\$ 130,000	\$	130,00
5	١ ١	Westlands Water District	Groundwater Monitoring Well Installation Project and Groundwater Sustainability Plan Development for the Westside Subbasin	\$ 1,000,00	\$ 1,500,000	\$	2,500,00
	١	White Wolf Groundwater Sustainability Agency	•	\$ -	\$ 557,998	\$	557,99
		, , ,		\$ -	\$ 1,000,000	Ś	1,000,000
	-	Yolo County Flood Control and water Conservation District	Total Substantial Control of the Con	Υ	Ψ 2,000,000	T	
	١	Yolo County Flood Control and water Conservation District Yuba County Water Agency		\$ -	\$ 893,948	\$	893,948

\$ 16,182,264 \$ 69,569,961 \$ 85,752,225

A All Category 1 Projects: Grantee shall obtain written (i.e., letter) approval of proposed scope of work from GSA, of respective basin/GSP where project is located in, prior to execution of Grant Agreement.

B Recommended funding less than requested due to recalculation of Direct Project Administration (DPA) Costs.

C Critically Over-Draft Basin included in application
D Applicant submitted an Alternative Plan to DWR for review.

Attachment

Memorandum of Mutual Understandings Integrated Regional Water Management Plan November 11, 2010

1. PURPOSE

The purpose of this Memorandum is to establish the mutual understandings of North Coast area agencies, tribes and stakeholders with respect to their joint efforts towards an ongoing, adaptive North Coast Integrated Regional Water Management Plan (IRWMP) that will increase regional coordination, collaboration and communication and help in obtaining funding for water-related projects, watershed protection and enhancement, energy programs and projects, and climate change initiatives and increase regional economic vitality.

2. GOALS

The goals of the IRWMP are:

- 2.1. To develop a comprehensive plan to facilitate regional cooperation in providing water supply reliability, water recycling, water conservation, water quality improvement, storm water capture and management, flood management, watershed protection and enhancement, wetlands enhancement and creation, and environmental and habitat protection and improvement.
- 2.2. To foster coordination, collaboration and communication between North Coast agencies, tribes and stakeholders responsible for water-related and climate/energy issues and interested stakeholders, to achieve greater efficiencies, enhance public services, and build public support for vital projects.
- 2.3. To improve regional competitiveness for State and Federal grant funding.

3. DEFINITIONS

3.1. Integrated Regional Water Management Plan: The plan envisioned by state legislators, state resource agencies and local governments and stakeholders in the North Coast Region that integrates the projects and management plans of all water-related agencies, tribes and stakeholders in the North Coast Region, in order to foster coordination, collaboration and communication among those entities and to assist decision-makers in awarding grants and other funding. The plan will address water supply, water quality, wastewater, stormwater/flood control, watershed planning and aquatic habitat protection and restoration as well as economic development, assistance to disadvantaged communities, climate change mitigation and adaptation and energy independence.

- 3.2. Agency: A public entity, be it a special district, city or other governmental entity, responsible for providing one or more services in the areas of water supply, water quality, wastewater, recycled water, water conservation, stormwater/flood control, watershed planning, aquatic habitat protection, restoration, climate change mitigation and/or adaptation and local economic development.
- 3.3. Service Function: A water or climate-related individual service function provided by an agency or tribe, i.e. water supply, water quality, wastewater, recycled water, water conservation, stormwater/flood control, watershed planning, aquatic habitat protection or restoration, or energy programs
- 3.4. Project: An integrated, multi-benefit implementation activity in need of funding that addresses: water supply, water quality, wastewater, stormwater/flood control, watershed planning or aquatic habitat protection and restoration, local economic development, climate mitigation or adaptation and energy independence
- 3.5. Management Plan: An agency's, tribe's, or organization's plan, based in part on the land-use plans within the entity's jurisdiction, that addresses how that entity will provide service in the future in one or more of the following service functions: water supply, water quality, wastewater, recycled water, water conservation, stormwater/flood control, watershed planning, climate change mitigation/adaptation, or aquatic habitat protection or restoration.
- 3.6. Integration: Assembling into one document the water-related management strategies, projects and plans in the North Coast Region. The plan will identify water management and climate mitigation/adaptation strategies and priority projects for the region and demonstrate how these strategies and priority projects work together to provide reliable water supply, protect or improve water quality, provide watershed protection and planning, mitigate the effects of climate change, assist the region in adapting to climate change, provide local economic development especially to disadvantaged communities or provide environmental restoration and fisheries protection. Projects and plans would be categorized, and the regional benefits of linkages and interrelationships between multiple water and climate change management strategies, projects and plans of separate service functions would be identified, e.g. wastewater treatment and water recycling, stormwater/flood management, climate mitigation/adaptation or habitat restoration.
- 3.7. North Coast IRWMP Policy Review Panel (PRP). The governing and decision making body for the North Coast IRWMP, described in Section 5.4. The PRP reviews and approves plans and applications for grants or other types of financial assistance on behalf of the NCIRWMP and makes policy decisions on behalf of the NCIRWMP.
- 3.8. North Coast IRWMP Technical Peer Review Committee (TPRC). The panel is comprised of up to two technical representatives from each North Coast County and three tribal representatives. The TPRC representatives from each North Coast County will be appointed by the PRP members from each County. The tribal representatives on

the TPRC will be selected through the Tribal Representation Process attached hereto as Exhibit A. The TPRC is advisory to the PRP and evaluates and makes recommendations based on technical and scientific data. They will support staff in compiling and integrating projects and management plans of the North Coast region. Review committee members will define the process of compilation and integration including format, schedules, and ground rules to ensure process consistency and uniformity.

4. IRWMP PROJECT PARTICIPANTS

- 4.1 Local Public Agencies. Public agencies, which have developed projects and management plans, and are devoting staff to the process, will contribute to the development of the NCIRWMP both via in-kind staff support and in some cases direct financial support. These agencies will be signatories to this Memorandum of Mutual Understandings. As authorized by the NCIRWMP Policy Review Panel, a local public agency may act as a contracting entity on behalf of the NCIRWMP.
- 4.2. Tribes. Tribes, which have developed projects and management plans, are responsible to their respective constituents and members, and are devoting staff to the process, will contribute to the development of the NCIRWMP both via in-kind staff support and in some cases direct financial support. These tribes will be signatories to this Memorandum of Mutual Understandings.
- 4.3 Contributing entities. Other entities (including, but not limited to, business and environmental groups, and landowner organizations) are considered valuable contributors to the process. Contributing entities will be kept informed via the NCIRWMP website, will continue to be invited and encouraged to participate in all meetings and workshops, and may be signatories to this Memorandum of Mutual Understandings.
- 4.4. State and Federal Agencies. Such agencies may include the Department of Water Resources, the State Water Resources Control Board, the North Coast Regional Water Quality Control Board, the California State Coastal Conservancy, Department of Fish and Game, National Oceanic and Atmospheric Administration, Environmental Protection Agency, Natural Resources Conservation Service, Department of Conservation, California Energy Commission, and Department of Energy. Such agencies will be invited to participate in a variety of ways, including but not limited to, providing input into the NCIRWMP planning process, and updating the PRP and staff on relevant legislative, policy, regulatory and funding initiatives and opportunities. If they cannot participate in work meetings, staff and representatives of the PRP and TPRC will keep them advised of project and plan progress and seek guidance as needed.

5. MUTUAL UNDERSTANDINGS

5.1. Need for a North Coast IRWMP

- 5.1.1. The North Coast IRWMP process is intended to foster increased coordination, collaboration and communication between North Coast agencies, tribes and interested stakeholders that may result in more effectively managed resources, cost efficiencies and better service to the public.
- 5.1.2. Also, representatives of state resource agencies and state legislators have suggested that qualification of some state grants and other funding criteria will require development and implementation of Integrated Regional Water Management Plans.
- 5.2. Subject matter scope of the IRWMP. The IRWMP will include, but may not necessarily be limited to, water supply, water quality, wastewater, recycled water, water conservation, stormwater/flood control, watershed planning and aquatic habitat protection and restoration, climate mitigation and adaptation, local economic development or energy independence programs. It is acknowledged that the management plans of each individual public agency or tribe are based, in part, on the land-use plans within an agency's or tribe's jurisdiction. Therefore, the NCIRWMP will by design incorporate the land-use plans and assumptions intrinsic to the respective service functions of these local agencies
- 5.3. Geographic scope of the IRWMP. The North Coast Region for this Memorandum is defined as the seven North Coast counties Modoc, Del Norte, Siskiyou, Humboldt, Trinity, Mendocino, and Sonoma. These counties lie within the North Coast Hydrologic Region, even though some areas of some counties and individual agencies may lay outside the North Coast hydrologic region. Where it demonstrably supports the purpose of the NCIRWMP, as determined by the NCIRWMP Policy Review Panel, collaborations may extend beyond the NCIRWMP regional boundary into other counties and/or states. In the case of energy independence endeavors, boundaries may encompass full counties.

5.4. Approach to developing the IRWMP

- 5.4.1. The first phase of the NCIRWMP formed the PRP and TPRC, developed a NCIRWMP website for stakeholder communication and data sharing, developed the North Coast IRWM plan, identified water management strategies for the region and the integrated priority projects that demonstrate how these strategies work together to provide reliable water supply, protect or improve water quality, provide watershed protection and planning, and provide environmental restoration and fisheries protection. Opportunities to identify regional benefits and linkages between multiple water management strategies among projects and plans of separate service functions were identified
- 5.4.2 Future phases of the NCIRWMP are expected to expand upon and further integrate existing strategies, add new regional strategies (including but not limited to climate mitigation and adaptation and energy independence) continue and enhance stakeholder outreach and inclusion, and coordinate and collaborate where applicable beyond the boundaries of the North Coast IRWMP with other regional, statewide and

national efforts that are relevant to NCIRWMP goals and objectives.

- 5.4.3 Policy Review Panel. The North Coast IRWMP Policy Review Panel shall consist of two representatives from each of the seven Counties (Modoc. Del Norte. Siskivou. Humboldt, Trinity, Mendocino, and Sonoma) plus three tribal representatives selected by the North Coast tribes according to the "Tribal Representation Process" attached hereto as Exhibit A. Such County representatives shall be designees of the Board of Supervisors of the County. Each County shall also designate two alternates who have expertise in water, wastewater, land-use, or energy planning, and are familiar with the North Coast IRWMP process, and who may be members of the Technical Peer Review Committee. Each tribal representative may have one alternate who would be selected according to the Tribal Representation Process (Exhibit A), and who may be a member of the Technical Peer Review Committee. In the event that the elected or tribal representatives are unavailable for a particular meeting, the alternates may participate on their behalf. All meetings of the Policy Review Panel will be subject to and carried out in accordance with the provisions of the Ralph M. Brown Act. All PRP members acknowledge and agree that the PRP is subject to the Ralph M. Brown Act. Panel members may participate in panel meetings via teleconferencing, consistent with the requirements of the Brown Act.
- 5.5. Decision-making. Decision-making will be conducted by the North Coast IRWMP Policy Review Panel. The panel shall seek to arrive at a consensus if the need for a decision arises. If the panel cannot reach consensus, decisions shall be made as follows:
- 5.5.1. Quorum. Representatives or alternates constituting one-half or more of the total number of representatives on the Policy Review Panel shall constitute a quorum for purposes of transacting business or arriving at a decision.
- 5.2.2. One vote per representative. Each representative (or alternate, if a representative is not present) shall have one vote.
- 5.2.3. Majority vote. If a quorum is present, the affirmative vote of a majority of members of the Policy Review Panel present at a meeting is required to, and is sufficient to, approve any item of business or make any necessary decision.
- 5.6. Approval of the NCIRWMP. Review and approval of the final North Coast Integrated Regional Water Management Plan will occur by voting of the NCIRWMP Policy Review Panel, with input from the NCIRWMP Technical Peer Review Committee, North Coast region stakeholders and NCIRWMP staff. The NCIRWMP will also be brought before each North Coast County's Board of Supervisors for consideration and adoption. Tribes will approve the NCIRWMP according to the Tribal Representation Process.
- 5.7. Non-binding nature; termination and withdrawal. Execution of this Memorandum and participation in this IRWMP effort are legally nonbinding, and in no way impair an

Signature	Date
Printed Name	Agency / Tribe
Signature	Date
Printed Name	Agency / Tribe
Signature	Date
Printed Name	Agency / Tribe
Signature	Date
Printed Name	Agency / Tribe
Signature	Date
Printed Name	Agency / Tribe

Signature	Date
Printed Name	Agency / Tribe
Signature	Date
Printed Name	Agency / Tribe
Signature	Date
Printed Name	Agency / Tribe
Signature	Date
Printed Name	Agency / Tribe
Signature	Date
Printed Name	Agency / Tribe

More signature blocks as required

Exhibit A - Tribal Representation Process

November 2010

In response to a proposal endorsed by 20 tribes, the Policy Review Panel (PRP) of the North Coast Integrated Regional Water Management Plan (NCIRWMP) voted to establish three seats on the PRP and three seats on the Technical Peer Review Committee (TPRC) for tribal representatives.

The tribes of the North Coast region devised the following process to select representatives and approve the NCIRWMP. This process can be modified upon a unanimous vote of the three acting tribal PRP representatives. Modifications to this document will not require approval of signatories to the MOMU and will not be treated as a modification of the MOMU.

Nomination & Voting:

The North Coast IRWMP funding region is divided into three districts – Northern, Central and Southern – for the purpose of selecting tribal representatives to fill the PRP and TPRC seats. Tribes within each district may select one PRP representative and one TPRC representative. Each representative may have one alternate. Tribes within each district may use one of the following two options to select their representatives.

Option 1:

When there is a vacancy for a tribal PRP or tribal TPRC seat in a given district, each tribe within the district will be given 31 days to select one nominee to fill the seat. The maximum number of vacancies for a given district would be two in the event that the tribal PRP and TPRC seats become vacant.

Each tribe may appoint one voting delegate. Each voting delegate will retain her/his status unless (s)he is removed or replaced by the tribe that appointed her/him.

At the end of the 31 day period allotted to nominate representatives, each voting delegate will be given ten days to cast one vote for each vacant seat in their district.

The PRP and TPRC nominees who receive the largest number of votes become the representative for that district. The PRP and TPRC nominees who receive the second largest number of votes may become an alternate representative for that district if they choose to do so. If not, then the representative with the third largest number of votes may choose to be the alternate representative for that district. Districts are not required to select alternate representatives.

Option 2:

When there is a vacancy for a tribal PRP or tribal TPRC seat in a given district, each tribe within the district will be given 31 days to select one nominee to fill the seat. The

maximum number of vacancies for a given district would be two in the event that the tribal PRP and TPRC seats become vacant.

Each tribe may appoint one voting delegate. Each voting delegate will retain her/his status unless (s)he is removed or replaced by the tribe that appointed her/him.

The majority of voting delegates within a region can meet in person and/or by conference call and choose their district's representative(s), and alternate representative(s) if any, by consensus. All voting delegates within the respective region must be notified at least two (2) weeks in advance of this meeting. Voting delegates who cannot participate in this meeting must be contacted and consent to the decision(s) reached at the meeting. If a consensus cannot be reached, Option 1 must be utilized.

Approval of the NCIRWMP:

NCIRWMP review and approval will occur by voting of the three tribal PRP members with input from tribal TPRC representatives and tribal voting delegates.

agency or tribe from continuing its own planning or undertaking its own, separate efforts to secure project funding from any source. An agency or tribe may withdraw from this Memorandum and participation in the NCIRWMP at any time by notifying the NCIRWMP contracting entity in writing. Nothing in this Memorandum is intended to give the NCIRWMP or its Policy Review Panel any decision-making authority over matters within the jurisdiction of any signatory County, agency, or tribe.

- 5.8. Personnel and financial resources. It is expected that agencies, tribes, and organizations will contribute the personnel and financial resources necessary to develop the NCIRWMP.
- 5.9. Reports and communications. Staff and the Policy Review Panel and Technical Peer Review Committee will regularly report on their progress to the agencies, tribes, and stakeholders participating in the NCIRWMP process and the associations or organizations to which they belong that are involved in the NCIRWMP process.
- 6. Entirety of Memorandum of Mutual Understandings. This Memorandum of Mutual Understandings (MOMU) shall constitute the entire MOMU between the parties relating to the Integrated Regional Water Management Plan and shall supersede all prior MOMUs concerning the same subject matter.
- 7. SIGNATORIES TO THE MEMORANDUM OF MUTUAL UNDERSTANDINGS We, the undersigned representatives of our respective agencies or tribes, acknowledge the above as our understanding of how the North Coast Integrated Regional Water Management Plan will be developed and maintained over time.

Ley Han	September 14, 2011
Signature	Date `
Kerry Mauso	Shasta Valley RCD
Printed Name	Agency / Tribe
Han the second s	
Signature	Date
Printed Name	Agency / Tribe