

**ADDENDUM TO CONTRACT FOR SERVICES
BY INDEPENDENT CONTRACTOR**

THIS FIRST ADDENDUM is to that Contract executed on August 14, 2018 between the Siskiyou County Flood Control and Water Conservation District and Larry Walker Associates, Inc. (Contractor).

WHEREAS, certain labor rates provided under the contract are expected to increase and certain language in the contract needs to be amended; and

WHEREAS, the parties desire to increase the labor rates allowable under the contract and amend the needed language; and

WHEREAS, the Scope of Service, Exhibit A, needs to be revised to reflect this increase in labor rates and Section 4.02 needs to be revised to reflect new language; and

WHEREAS, the parties desire to recognize and incorporate all applicable terms of the County's grant funding agreement, which finances Contractor's work.

NOW THEREFORE, THE PARTIES MUTUALLY AGREE AS FOLLOWS:

Paragraph 3 of the Contract, Scope of Services, Exhibit "A", shall be deleted and replaced in its entirety with the new Exhibit "A", Scope of Services, attached hereto and hereby incorporated by reference.

Article 4.02 COMPENSATION, shall be revised to read as follows: "Invoices: Contractor shall submit detailed invoices for all services being rendered including original itemized receipts".

Section 5.21 is added and shall read as follows: "Terms of Project Funding. Contractor agrees to, and shall, comply with all applicable terms of the County's grant funding agreement entered into to finance the Work, which terms are attached hereto as Exhibit "B" (Grant Agreement Between the State of California (Department of Water Resources) and Siskiyou County Flood Control and water Conservation District, Agreement Number 4600012838, 2017 Proposition 1 Sustainable Groundwater Planning (SGWP) Grant), and are incorporated herein by reference. Contractor shall give all notices and comply with all laws, ordinances, rules, regulations and lawful orders bearing on the performance of the Work as required therein."

Exhibit "B", (Grant Agreement Between the State of California (Department of Water Resources) and Siskiyou County Flood Control and water Conservation District, Agreement Number 4600012838, 2017 Proposition 1 Sustainable Groundwater Planning (SGWP), attached hereto and hereby incorporated by reference, shall be appended to the Contract.

All other terms and conditions of the Contract shall remain in full force and effect.

IN WITNESS WHEREOF, County and Contractor have executed this addendum on the dates set forth below, each signatory represents that he/she has the authority to execute this agreement and to bind the Party on whose behalf his/her execution is made.

COUNTY OF SISKIYOU

Date: 5/7/19

Brandon A. Criss
BRANDON A. CRISS, CHAIR
Board of Supervisors
County of Siskiyou
State of California

ATTEST:

LAURA BYNUM, COUNTY CLERK
Clerk, Board of Supervisors

By: Wendy Welf
Deputy

CONTRACTOR: Larry Walker Associates

Date: 5/3/19 Brian Lawrenson
Vice President
Jeff Walker
CFO

License No.: _____
(Licensed in accordance with an act providing for the registration of contractors)

Note to Contractor: For corporations, the contract must be signed by two officers. The first signature must be that of the chairman of the board, president or vice-president; the second signature must be that of the secretary, assistant secretary, chief financial officer or assistant treasurer. (Civ. Code, Sec. 1189 & 1190 and Corps. Code, Sec. 313.)

TAXPAYER I.D. 94-2610668

ACCOUNTING:

Fund	Organization	Account	Activity Code (if applicable)
1026	207050	723000	SGMA Grant

Encumbrance number E1900231

If not to exceed, include amount not to exceed: \$250,000 for fiscal year 2018/2019

If needed for multi-year contracts, please include separate sheet with financial information for each fiscal year.

In July of 2017, the District was authorized as the Groundwater Sustainability Agency for the Shasta, Scott and Butte Valley Groundwater Basins by the California Department of Water Resources. The District has received a grant award, and associated cost-share waiver, from the California Department of Water Resources (DWR) for development of Groundwater Sustainability Plans for the the three basins, and portions of this grant award will be expended towards the activities outlined below. Larry Walker Associates (LWA), as Lead Consultant, is teamed with Davids Engineering, Inc., and the University of California, Davis (UC Davis) Department of Land, Air and Water Resources (LAWR) to deliver the tasks and subtasks outlined within this Exhibit. The LWA Team brings more than three decades of proven experience, extensive knowledge of statewide water quality regulations and policies, understanding of California agricultural practices and challenges, skill in developing data expertise in groundwater modeling, and ability to communicate complex data, analytical process, and modeling results to stakeholders ranging from farmers and environmental advocates to County agricultural commissioners and North Coast Water Board staff. Having previously worked together to deliver successful projects, LWA's established relationships and work processes will ensure that they deliver high-quality and responsive services. The LWA Team has experience in all relevant groundwater models and with many members of the Shasta, Scott, and Butte Valley Groundwater Basins.

Project 1: Scott Valley Groundwater Basin

1. Develop and Document Conceptual Model:

This task will provide the central technical information necessary for developing other elements of the Groundwater Sustainability Plan. Under this task, the contractor will develop the hydrogeologic conceptual model, the water budget, and the numerical integrated hydrologic model of the Scott Valley. The development of the information will be an interactive process with the GSA, advisory committee, stakeholders, and the public. The deliverables will provide the required conceptual model, numerical model, and water budget documentation for the GSP. The information will provide the basis for engagement, education, and outreach among stakeholders and a decision-support tool for the GSA in the development of sustainability criteria (minimum thresholds, triggers, measurable objectives), of monitoring networks, and for designing potential projects. This task will expand on the existing efforts by UC Davis and the groundwater advisory committee, including the groundwater study plan (Harter et al., 20081) and the subsequent development of the Scott Valley Integrated Hydrologic Model (SVIHM, Foglia et al., 20132, 20183, Tolley et al., in prep), which represent hydrologic conditions for 1991 – 2011.

Conceptual and Numerical Model

The contractor will work with GSA staff to collate and summarize current programs relevant to the GSP (including any new programs developed between proposal submittal and GSP submittal), including:

- Existing water resources monitoring and management programs;
- Land use plans and land use elements of the general plan within the basin;
- Land use plans and land use elements of the general plan outside the basin that potentially impact basin groundwater and groundwater-surface water interaction;
- Wellhead protection;
- Existing groundwater contamination sites, monitoring, and cleanup programs;

- Well abandonment and destruction programs;
- Groundwater replenishments;
- Conjunctive use;
- Diversions to storage;
- Water conservation and water recycling;
- Water conveyance;
- Efficient water management practices;
- Well construction policies;
- Groundwater management plan;
- Groundwater management practices;
- Relationship with state and federal agencies;
- Adjudications;
- North Coast Regional Water Board TMDL Program;
- North Coast IRWMP; and
- Monitoring programs of groundwater levels, groundwater quality, surface water flows, surface water quality, fish populations, groundwater-dependent ecosystems, and land subsidence.

Collate, review, summarize, and archive existing reports and data sources

As a foundation for the conceptual hydrogeologic model, water level, well construction, streamflow, water quality, climate, ecosystem monitoring data, and other relevant data will be retrieved and organized electronically. Scientific papers and technical reports that are relevant to the understanding of the groundwater basin will be assembled in an electronic library that is web-accessible, including:

- Geography, climate, and land use;
- Geology and hydrogeology;
- Description of beneficial uses and users of water;
- Streamflow, water rights, and instream flow requirements;
- Groundwater-dependent ecosystems, stream ecology related to baseflow; and
- Water quality.

Develop conceptual hydrogeologic model

The hydrogeologic conceptual model (HCM) will be developed based on a review of the conceptual model elements of the Scott Valley Groundwater Study Plan and the findings of the ongoing UC Davis numerical modeling efforts (Foglia et al., 2013, 2018). The conceptual model will include a description of the hydrology, land use, soils, geology and geologic structure, hydrogeology and aquifer system, water quality, and groundwater-dependent ecosystems in the Scott Valley groundwater basin. The conceptual model will identify the various water budget elements of the surface water system, the land use – soil system, and the groundwater system. The conceptual model will also explain the conceptual basis of relevant corresponding elements in the numerical integrated hydrologic model of the Scott Valley groundwater system. The conceptual model provides the basis for the development of the water budget and for the development of the numerical model. It provides the context and supporting information for identifying undesirable results and for developing sustainability criteria and monitoring systems. It will

be an essential tool for stakeholder education and engagement in the decision-making process. The work will be performed through a review of relevant data sources, reports and publications, leading to documentation in a report that includes maps and cross-sections. A draft report will be reviewed by the GSA and the advisory committee before it is finalized. Extend SVIHM modeling period through water year 2018 and produce model documentation.

UC Davis is currently developing a calibrated Scott Valley Integrated Hydrologic Model (SVIHM) that includes model components for the upper watershed, upstream and outside of the Scott Valley groundwater basin area, for the stream system overlying the Scott Valley groundwater basin, for the land use and soil system overlying the Scott Valley basin, and for the groundwater basin itself. SVIHM is a numerically based model system that encompasses most of the groundwater basin within the boundaries identified by DWR. We will be assembling the climate and streamflow data from 2011 through current from Scott Valley climate stations, including a CIMIS weather station in operation since 2015, to extend the model components of SVIHM through September 30, 2018. All model assumptions, model equations, and model input data will be documented in ways that will closely follow the hydrogeologic conceptual model description. Simulation results for the extended modeling period will be compared to measured data to determine whether re-calibration of the model is needed and, if that is the case, what data to be collected for re-calibration. A DWR compliant documentation of the entire modeling system will be written that includes description of the various model system components, of data sources and data preparation processes, and the model calibration process. We will document the results of the updated model with discussion of new findings. SVIHM results will include description and discussion of the following, aided by maps, graphics, and tables:

- Stream inflows to the Scott Valley from the Scott River and its tributaries;
- Land use and land use changes, including changes in cropping and irrigation systems;
- Irrigation timing and amount, by water source;
- Soil moisture changes;
- Groundwater recharge areas and amount of groundwater recharge
 - from the landscape
 - from streams
 - from major canals;
- Groundwater discharge areas and amount of groundwater discharge:
 - Groundwater pumping, including well location
 - Seepage to the landscape (groundwater discharge areas)
 - Groundwater discharge to streams (baseflow);
- Streamflows in tributaries and along the main-stem of the Scott River including the location and timing of dry stream sections; and
- Water level maps tracking the elevation of the water table in Scott Valley over the simulation period.

All input and output data will be made available digitally in addition to producing digital maps of model results in ArcGIS format and tables in MS Office compatible spreadsheet format.

Deliverables

- *Technical Memorandum: Basin setting, including hydrogeologic conceptual model*
- *Technical Memorandum: Existing program, numerical model development, including model description, input data description, model calibration, model results, and discussion of model results*
- *Digital data: web-based bibliography of resources (existing programs, literature, reports) with embedded links*
- *Digital data: maps and tables derived from the modeling results in ArcGIS shapefile and MS Office spreadsheet or database format, respectively Digital data: model simulation software, model input data.*

2. Historical Water Budget, 1991-2018

The historical water budget will be constructed using the hydrogeologic conceptual model as a framework, using the data used to develop the input to the numerical model, and applying the results from the numerical model (SVIHM) where needed. Water budgets will be derived from data for the same period as the modeling period, October 1990 through September 2018 (water years 1991 – 2018). One or multiple forecasted future water budget(s), accounting for climate scenarios, planned projects and management actions, will be developed after the Groundwater Management task is complete. The water budget will consider the following water budget components:

- Evapotranspiration;
- Agricultural water demand;
- Urban water demand;
- Managed wetlands water demand;
- Precipitation;
- Surface water deliveries;
- Groundwater extraction;
- Applied water reuse and recycled water;
- Runoff;
- Return flow;
- Surface water inflows and outflows;
- Conveyance evaporation;
- Conveyance seepage;
- Imported water;
- Exported surface water;
- Stream-lake interaction;
- Pond evaporation;
- Recharge from irrigation and precipitation;
- Subsurface inflows and outflows to/from basin;
- Stream-groundwater interaction;
- Lake-groundwater interaction;
- Managed recharge;
- Groundwater banking extraction; and
- Groundwater report.

For each of the above water budget components, we will provide a methods description including data sources and data analysis. Using these data, including precipitation and runoff, we will develop a water year type specification following recommendations in the work by Deas et al. (20064). Separate water budgets will then be developed for:

- Each month (season) of the modeling period;
- Each year of the modeling period;
- Average monthly (seasonal) water budget (January through December);
- Average annual water budget;

- Average dry year monthly (seasonal) water budget (January through December);
- Average dry year annual water budget;
- Average wet year monthly water budget (January through December);
- Average wet year annual water budget;
- Average normal year monthly (seasonal) water budget (January through December); and
- Average normal year annual water budget.

Deliverables

- *Technical Memorandum: documentation of water budget development, analysis and results including extraction sites, recharge and replenishment sites, water sources used for irrigation, and other information derived from the water budget, outline of results for various water year types, and bibliography.*
- *Digital data: maps and tables in GIS shapefile and MS Office spreadsheet or database format, respectively.*

3. Public Outreach During Model, Water Budget and GSP Development

As part of the Contractor's efforts, it is anticipated that that contractor members will attend a total of two to four meetings per year, at the direction of the GSA. This includes meetings of the Scott Valley Groundwater Advisory Committee, GSA Board meetings, and public outreach meetings. In outreach meetings, the contractor will provide educational background on its work and explain technical aspects of the GSP development through slide presentations that will also be made available electronically as PDF files. The contractor will engage in discussions to hear comments, opinions, and answer questions from the advisory committee or the public attending the advisory committee meeting. We consider outreach and public engagement an essential aspect of collaboratively building local knowledge and constructive support for effective decision-making in groundwater management.

As needed, the contractor will support the GSA in responding to educational and technical questions from GSA staff, advisory committee members, stakeholders, and the public, either via email, phone calls, or during meetings as needed.

Deliverables

- *Document to be included in GSP outlining the completed public outreach efforts*
- *Two to four outreach sessions annually with the GSA, advisory committee, and the public*
- *Individual meetings with stakeholders to explore technical issues, as needed (four days per year)*
- *PDF files of technical and educational presentations*
- *Document to be included in GSP outlining the completed outreach efforts by the Contractor*

4. Data Collection, Development, and Management

The goal of this task is to assemble and manage available environmental data needed for the identification of data gaps, for the development of the conceptual model, for the development of the numerical model and the water budget, for the development of monitoring networks and sustainability

metrics, and for scenario analyses. This will be completed in coordination and at the direction of the GSA and District staff who are also performing data collection efforts.

The Contractor will be using ArcGIS, Microsoft Excel, Microsoft Access, Microsoft Word, Microsoft PowerPoint, and Adobe Acrobat compatible software to store and deliver all data in a digital format that can easily be transferred into the GSA's data management system (DMS) and uploaded as needed through the Department of Water Resources' GSP Portal. The contractor will work closely with the GSA to ensure efficient and frequent data exchange. Our GIS shapefiles covering the groundwater basin will include:

- Land use (including crop type) for 2000 and 2010;
- Jurisdictional boundaries, including those of the adjudicated area;
- Topography;
- Surficial geology;
- Soils;
- Hydrogeologic zones;
- Well density, by section;
- Water level contours;
- Recharge areas;
- Existing and planned monitoring programs;
- Map of current groundwater quality;
- Potential groundwater nitrate loading;
- Potential non-ag pollution sources; and
- Potential groundwater-dependent ecosystems.

The MS Excel (or MS Access) DMS files will include:

- Historical groundwater quality data;
- Historical groundwater elevation measurements (including a separate database for transducer data, if we have any);
- Groundwater extraction data (if available);
- Well location and construction (screen interval) database;
- Surface water diversion and deliveries; and
- Climate data (e.g., ET and precipitation).

The contractor has completed significant data collection to develop water budgets and an integrated hydrologic model of the Scott Valley groundwater basin that represents the period from October 1990 through September 2011. We will expand our data collections efforts to include all data needed to building water budgets and expanding the integrated hydrologic model through the water year 2018. Necessary climatic, geographic, and hydrologic data will be collected from public sources compatible with requirements and recommendations by the Department of Water Resources. Data will include required future climate scenarios to be considered in water budget and modeling scenarios.

The contractor will prepare, document, and archive computer programming code to annually perform statistical analysis on updated daily precipitation, streamflow, ET/climate and water level time series. Results will be included in presentations to the GSA and used as needed for water budget analyses and modeling.

Deliverables

- *Documentation of data collection, data management, and processing protocols*
- *GIS shapefiles covering the groundwater basins*
- *MS Excel or MS Access database files*
- *Graphics in PDF file format, with a minimum of two geologic cross-sections*

Subtask – County Well Program Refinement

As needed, the contractor will provide technical advice to the GSA on the refinement of its well program based on the development of the hydrogeologic conceptual model, based on modeling results, and based on data made available through the previous subtask. This may include digitization of well records and well logs.

Deliverables

- *GIS database that outlines permitted and active groundwater wells, and abandoned and destroyed wells*
- *Document outlining the results of the well audit*

County CASGEM Program Transition

As needed, the contractor will provide technical advice to the GSA on the transition of its CASGEM program using information developed in Tasks 2 through 6.

Deliverables

- *Well monitoring data*

Identify Data Gaps

Data gaps may become apparent during any phase of this project, including the conceptual and numerical model development phase, the water budget development phase, development of sustainability criteria, the monitoring design network phase, and with other tasks and subtasks needed to develop the GSP. The project contractor will identify data gaps at each step and propose measures to address the observed data gaps and a necessary timeline within which data gaps will need to be addressed to appropriately support the GSP development.

Deliverables

- *Document outlining data gaps and data needs*

Project 2: Shasta Valley

1. Develop and Document Conceptual Model:

This task includes three significantly inter correlated parts: Hydrological Conceptual Model (HCM), Numerical Model, and Water Budget. The Contractor will conduct the work related to this task in response to the requirements outlined in the GSP Regulations, Subarticle 2, § 354.12, § 354.14, and § 354.14. As the first step, groundwater basin setting will be characterized by producing topographic maps, utilizing soil survey maps to outline soil characteristics, and defining the regional geologic and structural setting of the basin. This includes the description of immediate surrounding area, lateral basin boundaries, major geologic features that significantly affect groundwater flow, and the definable bottom of the basin. Basin setting lays the foundation for defining HCM and developing the numerical modeling and water budget. Upon conclusion of this task, a complete understanding of historical and current groundwater conditions within the basin will be formed that is necessary for successful development of the GSP as well as defining applicable and effective management actions and future scenarios.

Deliverables

- *Document outlining groundwater conditions within the Basin*

Conceptual and Numerical Model

GSP Regulations require a descriptive HCM of the basin that characterizes the physical components and interaction of the surface water and groundwater systems in the basin based on technical studies and qualified maps (GSP Regulations, Subarticle 2, § 354.14). The Contractor, specifically the UCD and Dr. Thomas Harter, have been involved in the similar work utilized for the Scott Valley Integrated Hydrologic Model. A similar but independent procedure will be followed to develop a complete understanding of the Shasta Valley Basin. All data obtained during data collection will be analyzed and referenced, and Contractor's extensive familiarity with the basin will be utilized to prepare an HCM that provides expected information with regards to identification and description of principal aquifers and aquitards, and their hydrogeological attributes including:

- Aquifer thickness, general lithology and depositional environment, formation names;
- Average well depths and production values;
- Physical properties of aquifers such as hydraulic conductivity, storativity, storage coefficients, and specific yield;
- General water quality of the aquifers and its distribution throughout the basin; and
- Identification of the primary use of each aquifer.

In addition, work under this subtask will include a sufficient and complete response to the requirements of the GSP Regulations, Subarticle 2, § 354.16 titled as "Groundwater Conditions". The documentation of groundwater conditions will form the basis for evaluating the sustainability of the basin and assessing

the presence or potential for undesirable results. We will review available historic maps on groundwater elevations and groundwater flow directions in the Basin and prepare a current water level elevation contour map (or maps, as necessary) using recent static water level available from wells owned by current pumpers, and from groundwater monitoring wells available through Geotracker and DWR SGMA Portal. In accordance with § 354.16, contour maps depicting seasonal high and seasonal low water levels for each principal aquifer within the basin will be created.

Groundwater level hydrographs coupled with well construction information will be used to identify water level trends in the basin, and help to determine the driving forces behind those trends (i.e. precipitation trends, concentrated areas of groundwater extraction, etc.). Those hydrographs will be compared to rainfall trends identified on accumulated departure of rainfall graphs. Hydrographs will be prepared for the GSP in accordance with the regulations of § 352.4 (e) and will include the requisite information listed therein. Subsequently, change in groundwater storage is estimated for every subarea (possible management area) of the basin for different time periods to support the goals of the GSP development and help with developing and calibrating the numerical model.

Surface water and groundwater interaction will be carefully examined and documented. Davids Engineering has a longstanding history of work in this area that will assist in prioritizing the sources of data available, data needs, and appropriate methods to investigate stream-aquifer interactions and groundwater-surface water exchanges in the Basin Water Budget. In particular, prioritization of efforts to improve understanding of surface water interaction will rely upon the 2013 Davids Engineering report prepared for the Shasta Valley Resource Conservation District entitled "Stream-Aquifer Data Collection Program to Support Preparation of a Groundwater Management Plan for the Shasta Valley." This report provides an overview of the hydrologic and hydrogeologic conceptualization of the Shasta Valley, and inventory of historical and existing hydrologic monitoring, review of basic regional data collection, framework for monitoring to support sustainable groundwater management, and plans for and prioritization of a wide range of specific monitoring activities. The Contractor will prepare an inclusive report after concluding the aforementioned processes to accordingly describe Basin setting and its respective HCM.

The information collected and produced for HCM will be used as the underlying foundation of the numerical model. The numerical mode is expected to provide scientifically justifiable results based on available monitored or hard data with regards to:

- Verification of the Basin hydrogeologic conceptual model, aquifer characteristics, and flow;
- Development and verification of the Basin water budget including agricultural demand;
- Evaluation of potential Basin flow conditions in the future;
- Assessment of groundwater/surface water interaction;
- Analysis of potential future groundwater production and aquifer recharge alternatives;
- Possibility and extent of land subsidence;

- Analysis of the potential effects of future climate variability and change on (i) recharge and other water budget components, (ii) groundwater flow conditions, and (iii) groundwater production and recharge alternatives; and
- Evaluation of different management scenarios.

The Contractor will prepare a report that outlines the model development process in this stage. As a future step, we plan to develop for the Shasta Basin an integrated hydrological model similar to the one developed for the Scott Basin. Because of the potentially significant contribution of the snowmelt from Mount Shasta, we will consider coupling the MODFLOW groundwater model to PRMS (a semi distributed Rainfall-Runoff model) through the GSFLOW tool developed by the USGS. Numerical model will undergo a rigorous calibration process to ensure its ability to accurately simulate major aquifers and aquitards according to the HCM and affirm its consistency with previously developed water budgets.

Deliverables

- *Report: Basin setting, including hydrogeologic conceptual model*
- *Development of model input and output data management systems (public domain)*

2. Historical Water Budget

A water budget will be quantified for historical and current conditions per Reg. § 354.18. This will involve use of past studies such as a similar approach to what has been done in Scott Valley Project by Dr. Foglia, recent monitoring data and investigations, developed numerical model under the previous subtask, and other relevant data about water balance components from Task 2. We will closely coordinate our water budget and numerical model to ensure that the conceptual water budget and the numerical modeling tool are consistent. Nonetheless, we also recognize that independent water budget analysis allows cross-checking of the model and analysis of specific issues that are not effectively addressed with a regional model.

All the available information with respect to the components of the water budget such as: evapotranspiration, water demand (agricultural, urban, managed wetlands, groundwater extraction, surface water deliveries, etc.), precipitation, runoff, surface and subsurface inflow and outflow, surface water (stream and river) and groundwater interaction, applied water reuse and recycled water, return flow, conveyance evaporation and seepage, imported and exported surface water, natural and managed recharge, etc. will be evaluated and documented. Existing water budgets will be used as a starting point for development of the water balance. Consistent methods will be applied to estimate the inflows and outflows for the historical water balance and these same methods will be applied to a forecasted future water balance under climate change. It is understood that DWR has provided and will continue to provide additional guidance and tools for evaluating climate change and forecasted changes to precipitation, air temperature, and seawater level. We will evaluate the applicability of DWR Guidance and Tools to the Basin conditions and conceptual projects. Assumptions on future conditions such as climate, water use and water availability will be documented, and the uncertainty of the future water balance will be addressed.

The numerical model will be leveraged to provide information on historical and current water budget components not directly extractable from available data such as subsurface inflows and outflows, and changes in flow rates over time. Throughout the use of the model, relative uncertainty in the aquifer parameters and modeling results will be documented. Analysis of the water budget will be automated using computer programs to ease the process of assessing alternatives and inspecting different scenarios. Similar process for typical dry, wet, and average water years will be used to produce and document detailed and independent water budget analyses. Seasonal budgets will also be provided for each of these water year types to describe interannual dynamics and variability of the water budget. Because of this in-depth water budget analysis, we will be able to prepare individual reports on surface water budget, soil-plantcrop- landscape budget, and groundwater budget for all three types of water years. Water budgets will be derived from data for the same period as the modeling period, most likely October 1990 through September 2018 as in the Scott Project (water years 1991-2018).

- Evapotranspiration;
- Agricultural water demand;
- Urban water demand;
- Managed wetlands demand;
- Precipitation;
- Surface water deliveries;
- Groundwater extraction;
- Applied water reuse and recycled water;
- Runoff;
- Return flow;
- Surface water inflows and outflows;
- Conveyance evaporation;
- Conveyance seepage;
- Imported water;
- Exported surface water;
- Stream-lake interaction;
- Pond evaporation;
- Recharge from irrigation and precipitation;
- Subsurface inflows and outflows to/from basin;
- Stream-groundwater interaction;
- Lake-groundwater interaction;
- Managed recharge;
- Groundwater banking extraction; and
- Groundwater report.

For each of the above water budget components, we will provide a methods description including data sources and data analysis. Using these data, including precipitation and runoff, we will develop a water year type specification following recommendations in the work by Deas et al. (2008). Separate water budgets will then be developed for:

- Each month (season) of the modeling period;
- Each year of the modeling period;
- Average monthly (seasonal) water budget (January through December);
- Average annual water budget;
- Average dry year monthly (seasonal) water budget (January through December);
- Average dry year annual water budget;
- Average wet year monthly water budget (January through December);
- Average wet year annual water budget;

- Average normal year monthly (seasonal) water budget (January through December); and
- Average normal year annual water budget.

Deliverables

- *Technical Memorandum: documentation of water budget development, analysis and results including extraction sites, recharge and replenishment sites, water sources used for irrigation, and other information derived from the water budget, outline of results for various water year types, and bibliography*
- *Digital data: maps and tables in GIS shapefile and MS Office spreadsheet or database format, respectively*

3. Coordination with the District

The Contractor will work with the District to establish and maintain a close relationship. We understand that we will have a designed point of contact within the District. In support of all tasks contemplated in Attachment A (including those other tasks outlined below), the Contractor may require information that is in

possession of the District, such as existing historical data. We recognize that data acquisition is inherently the responsibility of the Contractor, but that the District will be involved to facilitate coordination with other entities, local agencies, organizations, and individuals. As needed, we will receive advice from the District regarding the project scope of work, and the District maintains the authority to review and validate project deliverables.

Public Outreach During Model, Water Budget and GSP Development

As part of the Contractor's efforts, it is anticipated that that contractor members will attend a total of two to four meetings per year, at the direction of the GSA. This includes meetings of the Scott Valley Groundwater Advisory Committee, GSA Board meetings, and public outreach meetings. In outreach meetings, the contractor will provide educational background on its work and explain technical aspects of the GSP development through slide presentations that will also be made available electronically as PDF files. The contractor will engage in discussions to hear comments, opinions, and answer questions from the advisory committee or the public attending the advisory committee meeting. We consider outreach and public engagement an essential aspect of collaboratively building local knowledge and constructive support for effective decision-making in groundwater management.

As needed, the contractor will support the GSA in responding to educational and technical questions from GSA staff, advisory committee members, stakeholders, and the public, either via email, phone calls, or during meetings as needed.

Deliverables

- *Document to be included in GSP outlining the completed public outreach efforts*
- *Two to four outreach sessions annually with the GSA, advisory committee, and the public*
- *Individual meetings with stakeholders to explore technical issues, as needed (four days per year)*

- *PDF files of technical and educational presentations*
- *Document to be included in GSP outlining the completed outreach efforts by the Contractor*

4. Data Collection, Development, and Management

Task 2 will entail development of a data management program and by using and improving existing tools and data sets such as the County Well Program Refinement and County CASGEM Program. Data gaps identification will be carried out as an important step in this task. The GSP Regulations, § 352.6. Data Management System, state, "Each Agency shall develop and maintain a data management system that can store and report information relevant to the development or implementation of the Plan and monitoring of the basin." As per § 354.40, monitoring data shall be stored in the data management system. In summary, Task 5 will accomplish the following subtasks:

- Data Collection and Data Management Program;
- County Well Program Refinement;
- County CASGEM Program Transition; and
- Identify Data Gaps.

Data Collection

For this initial project effort, the Contractor will collect available data and reports that are relevant to the development of a hydrogeologic conceptual model, a numerical groundwater flow model, and the GSP. Key sources of information for this effort will include:

- The Cities of Yreka, and Montague and the County of Siskiyou;
- Grenada Irrigation District, Montague Water Conservation District, and Shasta River Water
- Association;
- California Geological Survey, DWR, DOGGR, and NCRWQCB; and
- Federal agencies, for example USEPA, USGS, and NOAA.

The following is a preliminary list of the types of data needed for GSP preparation. Our contractor has already obtained many of the documents and databases listed below, which are necessary to complete the hydrogeologic conceptual model and prepare the GSP. These existing data sets will be augmented with new studies or updated data collected over time for the Basin. Data will be organized on a data sharing site to help centralize data collection; data sharing protocols will be developed. This data sharing site will become the shared data set for the components of the GSP development work, so that our contractor and the interested parties are working with and reviewing a common data set. If/where appropriate, relational databases may be developed for some of the data sets as part of an additional task.

Key data compiled for the GSP work will include:

- Accurate location information (land survey and global positioning system [GPS] data plotted in a GIS database) of currently known water-supply wells, groundwater monitoring wells, and surface water gaging stations, proximal rainfall stations, and significant spring sources.

- A topographic base map of the area, and a digital elevation model (DEM) of the Basin.
 - GIS-based watershed boundaries, groundwater basin boundaries, and groundwater subbasin boundaries.
 - Drilling permit data from Siskiyou County Environmental Health Division for both historic well drilling work and recently-drilled wells and monitoring wells in the SVB.
 - State DWR well completion reports (driller's logs) and depths/screen intervals of known, historically drilled, private and municipal monitoring and supply water wells in the Basin, including geophysical data where available.
 - Geologic and geophysical data for the numerous wildcat oil wells drilled over
- Flow
- Available information on the hydraulic characteristics of faults, and their effects on groundwater
 - Soil surveys, including maps in GIS format (as available) and soil characteristics within the Basin.
 - Climatic data, including precipitation and potential evapotranspiration (PET) data over time from climate and CIMIS (California Irrigation Management Information System) stations. This will include LA County DPW data stations (as available), plus isohyetal (USGS, County, PRISM) and ET maps (DWR).
 - Historical and recent surface water runoff/discharge data as available, plus relevant information on stormwater management practices.
 - Historical and current cropping and land use information and aerial photos to evaluate
- the years in the Basin to help identify the thickness of water-bearing sediments and the depth to the underlying nonwaterbearing bedrock at those drill sites. The bottom of the water-bearing sediments represents the base of fresh water in the Basin.
- Hydrogeologic characterization of key aquifer/aquicludes, as available from pumping test data and existing modeling efforts within the Basin; all available aquifer test data and calculations by others for the hydrogeologic properties of the aquifers (transmissivity, storativity and hydraulic conductivity). Geologic fault data collected over the years to display the locations and alignments of various faults in/near Basin.
- extent and density of urbanization, and to identify large landscape areas, large water areas (unlined, if any), channelized streams, and natural vegetation including riparian areas.
- Water demand information, particularly acreages and amounts of water use for landscaping (e.g., recycled water use, municipal data for large landscape customers), but including estimates of real losses (e.g. pipeline leaks) over time from the municipal water suppliers in the Basin.
 - Additional water supply information, including imports to the Basin, recycled water, and groundwater pumping amounts over time for Basin and the adjoining hill/mountain areas, as well as waters used for municipal, industrial, remediation, dewatering, agricultural, landscaping, and domestic purposes.

- Wastewater disposal practices, including location, extent and density of areas depending on septic systems within the Basin.
- Groundwater elevation contour maps and change maps for different time periods.

Groundwater quality data from known wells and groundwater monitoring wells, local LUST data from the GeoTracker website, and key current data.

- Groundwater-dependent ecosystems, stream ecology related to baseflow.
- Water quality data from Shasta River and other surface waters.

Deliverables

- *GIS shapefiles covering the groundwater basins*
- *MS Excel or MS Access database files*
- *Graphics in PDF file format with a minimum of two geologic cross-sections*
- *Documentation of data collection, data management and processing tools*

County Well Program Refinement

Information on permitting and inspecting domestic, agricultural, and groundwater monitoring wells have been recorded through the “Water Wells” program run by the County Environmental Health Division since 1991. Prior to that date, data are kept by DWR. A dynamic GIS dataset including well permit, abandoning, and destruction information will be developed for the available groundwater wells drilled before and after 1991. For that matter, data from DWR and the County will be integrated using a standardized format. In addition, a “Well Audit” program will be performed to determine if the developed GIS data set has covered all of the existing active, abandoned, or destructed groundwater wells within the County. The GIS dataset will be built flexible enough to ensure future data addition would be happening seamlessly. As an important subtask of Data Collection, Development, and Management, the County’s well program will be refined to ensure an efficient connection and communication pathway is created between the County Environmental Health Division and the Natural Resources Department. The Natural Resources Department will be notified of new permit issuance and abandoning/destruction of wells by developing an effective process. The process will be devised to address needs of the Natural Resources Department and to be compatible with the dynamic GIS data set.

Deliverables

- *GIS database that outlines permitted and active groundwater wells, and abandoned and destroyed wells*
- *Document outlining the results of the well audit*

Identify Data Gaps

The Contractor will review the compiled data and information and will identify data gaps in surface and

ground water data sets. Identification of duplicate data and qualitative assessment of the quality of each data source, with pertinent data from lower quality sources used when necessary to fill data gaps. Data gap identification results will be used to determine what type of additional data and at which location are needed. The results will be further used to propose potential new sampling locations and/or modifications needed to monitoring plans and protocols. In addition, recommendations for methods/studies to fill those data gaps will be suggested and prioritized. Data gaps and the needs for new studies will be documented and shared.

Deliverables

- *Document outlining data gaps and data needs*

Writing and Reporting of Documents

For each of the previous tasks, administrative draft and stakeholder draft GSP sections will have been developed. Under this task, the Contractor will compile all the draft GSP sections, address stakeholder comments on those draft sections and add the remaining items, such as the executive summary, to create a complete plan. The technical work to prepare the GSP will have been conducted during previous tasks. As a result, this task consists primarily of compiling the technical work and GSA and interested parties' inputs on the interim work products into a document that can be adopted by the GSA. We will carefully tailor our findings from the previous tasks and proposed sustainable management plan to fully comply with Article 5 of the Emergency Regulations. Under this task, the Contractor will prepare the remaining analyses necessary to complete the GSP and develop draft documents for review and comment by the interested parties and public. Feedback will be incorporated into a final public review draft GSP. Written comments from the public and interested stakeholders will be sought, and oral public comments will be received during GSA workshops.

The Contractor will compile the public comments and will work with the GSA to decide how public comments will be addressed and a final report will be prepared. Conflicting comments and significant policy differences implied by conflicting comments will be resolved by decision of the GSA. Public comments will be used to prepare the final GSP that will be considered for adoption by the GSA. The Executive Summary and reference documents will also be revised and finalized as needed based on public comments. A draft resolution to adopt the GSP will be prepared by the Contractor for consideration. The Contractor has extensive experience in developing regulatory documents that support stakeholder interests as outlined in this experience will allow us to prepare a GSP document that meets the needs of interested stakeholders and regulatory requirements necessary to adopt the GSP.

Deliverables

- *GSP drafting and completion*

Butte Valley

1. Water Budget Development (Including Groundwater Conditions and Conceptual Model) – Led by UC Davis

This task will provide the central technical information necessary for developing other planning elements of the Groundwater Sustainability Plan. Under this task, we develop the hydrogeologic conceptual model and the water budget for the Butte Valley groundwater basin. The development of the information will be an interactive process with the GSA, advisory committee, stakeholders, and the public. The deliverables will provide the required hydrogeologic conceptual model and water budget documentation for the GSP. The information will provide the basis for engagement, education, and outreach among stakeholders and a decision-support tool for the GSA in the development of sustainability criteria (minimum thresholds, triggers, measurable objectives), of monitoring networks, and for designing potential projects.

Groundwater Conditions (Including Conceptual Model)

The Contractor will work with GSA staff to collate and summarize current programs relevant to the GSP (including any new programs developed between proposal submittal and GSP submittal), including:

- Existing water resources monitoring and management programs;
- Land use plans and land use elements of the general plan within the basin;
- Land use plans and land use elements of the general plan outside the basin that potentially impact basin groundwater and groundwater-surface water interaction;
- Wellhead protection;
- Existing groundwater contamination sites, monitoring, and cleanup programs;
- Well abandonment and destruction programs;
- Groundwater replenishments;
- Conjunctive use;
- Diversions to storage;
- Water conservation and water recycling;
- Water conveyance;
- Efficient water management practices;
- Well construction policies;
- Groundwater management plan;
- Groundwater management practices;
- Relationship with state and federal agencies;
- Adjudications;
- North Coast Regional Water Board TMDL Program;
- North Coast IRWMP; and
- Monitoring programs of groundwater levels, groundwater quality, surface water flows, surface water quality, groundwater-surface water interaction, fish populations, groundwater-dependent ecosystems, and land subsidence.

Collate, review, summarize, and archive existing reports and data sources. As a foundation for the

conceptual hydrogeologic model, water level, well construction, streamflow, water quality, climate, ecosystem monitoring data, and other relevant data will be retrieved and organized electronically. Scientific papers and technical reports that are relevant to the understanding of the groundwater basin will be assembled in an electronic library that is web-accessible, including:

- Geography, climate, and land use;
- Geology and hydrogeology;
- Description of beneficial uses and users of water;
- Streamflow, water rights, and instream flow requirements;
- Groundwater-dependent ecosystems, stream ecology related to baseflow; and
- Water quality.

Develop hydrogeologic conceptual model.

The hydrogeologic conceptual model (HCM) will be developed based on a review of past hydrological and groundwater studies, especially the work of Wood (1960), well logs and other available hydrological, geologic, and geographic information. The conceptual model will include a description of the hydrology, land use, soils, geology and geologic structure, hydrogeology and aquifer system, water quality, and groundwater-dependent ecosystems in the Butte Valley groundwater basin. This work will include reviewing available well logs to create maps, cross-sections, and a three dimensional representation of the geologic setting of Butte Valley illustrating surface topography and the depth and extent of water-bearing surficial alluvial deposits. Aquifer properties and geologic features such as faults or offsets will be identified, and all borehole logs and results from aquifer tests used to inform the model will be assembled. The HCM will be sufficiently detailed to allow for clear identification of water system components for water budget calculations. We will also prepare tables and graphs to support the geologic cross-sections. The conceptual model will identify the various water budget elements of the surface water system, the land use – soil system, and the groundwater system. The conceptual model provides the basis for the development of the water budget. It provides the context and supporting information for identifying undesirable results and for developing sustainability criteria and monitoring systems. It will be an essential tool for stakeholder education and engagement in the decision making process.

The work will be performed through a review of relevant data sources, reports and publications, leading to documentation in a report that includes maps and cross-sections. A draft report will be reviewed by the GSA and the advisory committee before it is finalized. All data will be made available digitally in addition to producing digital maps of model results in ArcGIS format and tables in MS Office compatible spreadsheet format.

Deliverables

- *Technical Memorandum: Existing programs*
- *Technical Memorandum: Basin setting, including hydrogeologic conceptual model*
- *Digital data: web-based bibliography of resources (existing programs, literature, reports) with embedded links*

- *Digital data: maps and tables in ArcGIS shapefile and MS Office spreadsheet or database format, respectively*

Subtask – Water Budget

The water budget will be constructed using the hydrogeologic conceptual model as a framework, and using all the available data, including crop maps and climate data. Water budgets will be derived from data for the same period as the other basins, October 1990 through September 2018 (water years 1991 – 2018). The water budget will consider the following water budget components:

- Evapotranspiration;
- Agricultural water demand;
- Urban water demand;
- Managed wetlands water demand;
- Precipitation;
- Surface water deliveries;
- Groundwater extraction;
- Applied water reuse and recycled water;
- Runoff;
- Return flow;
- Surface water inflows and outflows;
- Conveyance evaporation;
- Conveyance seepage;
- Imported water;
- Exported surface water;
- Stream-lake interaction;
- Pond evaporation;
- Recharge from irrigation and precipitation;
- Subsurface inflows and outflows to/from basin;
- Stream-groundwater interaction;
- Lake-groundwater interaction;
- Managed recharge;
- Groundwater banking extraction; and
- Groundwater report.

For each of the above water budget components, we will provide a methods description including data sources and data analysis. Using these data, including precipitation and runoff, we will develop a water year type specification following recommendations in the work by Deas et al. (2006). Separate water budgets will then be developed for:

- Each month (season) of the modeling period;
- Each year of the modeling period;
- Average monthly (seasonal) water budget (January through December);
- Average annual water budget;
- Average dry year monthly (seasonal) water budget (January through December);
- Average dry year annual water budget;
- Average wet year monthly water budget (January through December);
- Average wet year annual water budget;
- Average normal year monthly (seasonal) water budget (January through December); and
- Average normal year annual water budget.

Deliverables

- *Technical Memorandum: documentation of water budget development, analysis and results including extraction sites, recharge and replenishment sites, water sources used for irrigation,*

and other information derived from the water budget, outline of results for various water year types, and bibliography

- *Digital data: maps and tables in ArcGIS shapefile and MS Office spreadsheet or database format; respectively*

2. Coordination with the District

The Contractor will work with the District to establish and maintain a close relationship. We understand that we will have a designated point of contact within the District. In support of all tasks contemplated in Attachment A (including those other tasks outlined below), the Contractor may require information that is in possession of the District, such as existing historical data. We recognize that data acquisition is inherently the responsibility of the Contractor, but that the District will be involved to facilitate coordination with other entities, local agencies, organizations, and individuals. As needed, we will receive advice from the District regarding the project scope of work, and the District maintains the authority to review and validate project deliverables.

Public Outreach During Model, Water Budget and GSP Development

As part of the Contractor's efforts, it is anticipated that that contractor members will attend a total of two to four meetings per year, at the direction of the GSA. This includes meetings of the Scott Valley Groundwater Advisory Committee, GSA Board meetings, and public outreach meetings. In outreach meetings, the contractor will provide educational background on its work and explain technical aspects of the GSP development through slide presentations that will also be made available electronically as PDF files. The contractor will engage in discussions to hear comments, opinions, and answer questions from the advisory committee or the public attending the advisory committee meeting. We consider outreach and public engagement an essential aspect of collaboratively building local knowledge and constructive support for effective decision-making in groundwater management.

As needed, the contractor will support the GSA in responding to educational and technical questions from GSA staff, advisory committee members, stakeholders, and the public, either via email, phone calls, or during meetings as needed.

Deliverables

- *Document to be included in GSP outlining the completed public outreach efforts*
- *Two to four outreach sessions annually with the GSA, advisory committee, and the public*
- *Individual meetings with stakeholders to explore technical issues, as needed (four days per year)*
- *PDF files of technical and educational presentations*
- *Document to be included in GSP outlining the completed outreach efforts by the Contractor*

Data Collection, Development, and Management

The goal of this task is to assemble and manage available environmental data needed for the identification of data gaps, for the development of the conceptual model, for the development of the water budget, for the development of monitoring networks and sustainability metrics, and for scenario analyses.

The Contractor will be using ArcGIS, Microsoft Excel, Microsoft Access, Microsoft Word, Microsoft PowerPoint, and Adobe Acrobat compatible software to store and deliver all data in a digital format that can easily be transferred into the GSA's data management system (DMS) and uploaded as needed through the Department of Water Resources' GSP Portal. The contractor will work closely with the GSA to ensure efficient and frequent data exchange. Our GIS shapefile covering the groundwater basin will include:

- Land use (including crop type) for 2000 and 2010;
- Jurisdictional boundaries, including those of the adjudicated area;
- Topography;
- Surficial geology;
- Soils;
- Hydrogeologic zones;
- Well density, by section;
- Water level contours;
- Recharge areas;
- Existing and planned monitoring programs;
- Groundwater quality;
- Potential groundwater nitrate loading;
- Potential non-ag pollution sources; and
- Potential groundwater-dependent ecosystems.

The MS Excel (or MS Access) DMS files will include:

- Well logs database;
- Stream gauge measurements;
- Surface water diversion and deliveries; and
- Climate data (e.g., ET and precipitation).

The contractor will need to perform a significant data collection to develop water budgets of the Butte Valley groundwater basin that represents the period from October 1990 through September 2018. Necessary climatic, geographic, and hydrologic data will be collected from public sources compatible with requirements and recommendations by the Department of Water Resources. Data will include required future climate scenarios to be considered in water budget and eventually future modeling scenarios.

The contractor will prepare, document, and archive computer programming code to annually perform statistical analysis on updated daily precipitation, streamflow, ET/climate and water level time series. Results will be included in presentations to the GSA and used as needed for water budget analyses and modeling.

Deliverables

- *Program that outlines data management protocols and material*
- *GIS shapefiles covering the groundwater basins*
- *MS Excel or MS Access database files*
- *Graphics in PDF file format, with a minimum of two geologic cross-sections*
- *Documentation of data collection and processing protocols*

County Well Program Refinement

The project contractor will provide technical advice to the GSA on the refinement of its well program based on the development of the hydrogeologic conceptual model, based on modeling results, and based on data made available through the previous subtask. This may include digitization of well records and well logs.

Deliverables

- *GIS database that outlines permitted and active groundwater wells, and abandoned and destroyed wells*
- *Document outlining the results of the well audit*

County CASGEM Program Transition

The project Contractor will provide technical advice to the GSA on the transition of its CASGEM program using information developed in Tasks 2 through 6.

Deliverables

- *Document outlining CASGEM program under the Siskiyou County Department of Natural Resources*
- *Well monitoring data*

Identify Data Gaps

Data gaps may become apparent during any phase of this project, including the conceptual model development phase, the water budget development phase, the monitoring design network phase, and with other tasks and subtasks needed to develop the GSP. The project contractor will identify data gaps at each step and propose measures to address the observed data gaps and a necessary timeline within which data gaps will need to be addressed to appropriately support the GSP development.

Deliverables

- *Document outlining data gaps and data needs*

Writing and Reporting of Documents

Using the deliverables from Task 1 through Task 6, the project Contractor will work closely with the GSA to produce early, intermediate, and final drafts of the GSP.

Deliverables

- *GSP drafting and completion*
- *Writing and reporting of documents*

**Project 1 –
Scott Valley
LARRY WALKER
ASSOCIATES**

Rate Schedule

PERSONNEL	Rate \$/Hour	REIMBURSABLE COSTS
<i>Administrative</i>	\$88	Travel:
<i>Contract Administrator</i>	\$155	Local Mileage Current IRS rate
<i>Project Staff I-C</i>	\$113	Transportation Actual expense
<i>Project Staff I-B</i>	\$144	Auto rental Actual commercial rate
<i>Project Staff I-A</i>	\$170	Fares Actual expense
<i>Project Staff II-B</i>	\$180	Room Actual expense
<i>Project Staff II-A</i>	\$200	Subsistence ⁽¹⁾ \$48 per day
<i>Senior Staff</i>	\$232	The rate for each meal as follows: ⁽¹⁾
<i>Associate</i>	\$258	Breakfast \$9
<i>Vice President</i>	\$283-\$294	Lunch \$13
<i>Senior Executive</i>	\$309	Dinner \$21
<i>President</i>	\$309	Incidentals \$5
		Report Reproduction and Copying:
		Actual expense
		Black and white copy, in-house \$0.08
		Color copy, in-house \$0.89
		Binding, in-house \$1.95
		Special Postage and Express Mail:
		Actual expense
		Other Direct Costs:
		Actual expense
		Daily Equipment Rental Rates:
		Single parameter meters & equipment \$30
		Digital Flow Meter \$60
		Multi-parameter field meters & sondes \$100
		Dye/tracer mapping or residence time \$200
		Multi-parameter continuous

remote sensing \$40

Subcontractors:

Actual expense plus 10% fee

Note: ⁽¹⁾Charged when overnight lodging is required

**DAVIDS
ENGINEERING,
INC.**

Labor Rates

Effective January
1, 2018

Labor Classification	Hourly Rate
Sr. Principal Engineer	\$220.00
Principal Engineer	\$207.00
Supervising Engineer/Scientist	\$196.00
Senior Engineer/Scientist	\$172.00
Associate Engineer/Scientist II	\$159.00
Associate Engineer/Scientist I	\$151.00
Staff Engineer/Scientist II	\$147.00
Graduate Engineer/Scientist	\$108.00
Engineering Intern II	\$62.00
Engineering Intern I	\$41.00
Student Intern	\$21.00
Technical/project Assistant	\$93.00
Secretary/Clerical II	\$89.00
Secretary/Clerical I	\$73.00

Note: Labor rates are subject to revision at the beginning of each calendar year.

**Vehicle and
Equipment
Rates**

Effective January
1, 2018

Item	Rate
Automobiles	Current federal rate
Field Vehicle (4x4)	\$1.00/mile
SonTek RiverSurveyor M9 ADCP	\$275.00/day
SonTek FlowTracker Handheld ADVN	\$55.00/day
Fuji Electric Portflow-C Transit Time Meter	\$100.00/day

Pressure Transducer	\$50.00/month
SCADA Equipment and Materials	At cost
Color plotter	\$6.50/sq. ft.

Note: Equipment rates are subject to revision at the beginning of each calendar year.

Subcontractor - California State University, Chico
1047 Almedia Ct., Chico, CA 95926
Steffen William Mehl - \$150.00/hour

**Project 2 –
Shasta Valley
LARRY WALKER
ASSOCIATES**

Rate Schedule

PERSONNEL	Rate \$/Hour	REIMBURSABLE COSTS
<i>Administrative</i>	\$88	Travel:
<i>Contract Administrator</i>	\$155	Local Mileage
<i>Project Staff I-C</i>	\$113	Transportation
<i>Project Staff I-B</i>	\$144	Auto rental
<i>Project Staff I-A</i>	\$170	Fares
<i>Project Staff II-B</i>	\$180	Room
<i>Project Staff II-A</i>	\$200	Subsistence ⁽¹⁾
<i>Senior Staff</i>	\$232	The rate for each meal as follows: ⁽¹⁾
<i>Associate</i>	\$258	Breakfast
<i>Vice President</i>	\$283-\$294	Lunch
<i>Senior Executive</i>	\$309	Dinner
<i>President</i>	\$309	Incidentals
		Report Reproduction and Copying:
		Actual expense
		Black and white copy, in-house
		Color copy, in-house
		Binding, in-house
		Special Postage and Express Mail:
		Actual expense
		Other Direct Costs:
		Actual expense
		Daily Equipment Rental Rates:
		Single parameter meters & equipment
		Digital Flow Meter
		Multi-parameter field meters & sondes
		Dye/tracer mapping or residence time
		Multi-parameter continuous remote sensing

Subcontractors:

Actual expense plus 10% fee

Note: ⁽¹⁾Charged when overnight lodging is required

**DAVIDS ENGINEERING,
INC.**

Labor Rates

Effective January 1, 2018

Labor Classification	Hourly Rate
Sr. Principal Engineer	\$220.00
Principal Engineer	\$207.00
Supervising Engineer/Scientist	\$196.00
Senior Engineer/Scientist	\$172.00
Associate Engineer/Scientist II	\$159.00
Associate Engineer/Scientist I	\$151.00
Staff Engineer/Scientist II	\$147.00
Graduate Engineer/Scientist	\$108.00
Engineering Intern II	\$62.00
Engineering Intern I	\$41.00
Student Intern	\$21.00
Technical/project Assistant	\$93.00
Secretary/Clerical II	\$89.00
Secretary/Clerical I	\$73.00

Note: Labor rates are subject to revision at the beginning of each calendar year.

**Vehicle and
Equipment
Rates**

Effective January
1, 2018

Item	Rate
Automobiles	Current federal rate
Field Vehicle (4x4)	\$1.00/mile
SonTek RiverSurveyor M9 ADCP	\$275.00/day
SonTek FlowTracker Handheld ADVN	\$55.00/day
Fuji Electric Portflow-C Transit Time Meter	\$100.00/day
Pressure Transducer	\$50.00/month
SCADA Equipment and Materials	At cost
Color plotter	\$6.50/sq. ft.

Note: Equipment rates are subject to revision at the beginning of each calendar year.

Subcontractor - California State University, Chico
1047 Almedia Ct., Chico, CA 95926
Steffen William Mehl - \$150.00/hour

**Project 3 –
Butte Valley
LARRY WALKER
ASSOCIATES**

Rate Schedule

PERSONNEL	Rate \$/Hour	REIMBURSABLE COSTS
<i>Administrative</i>	\$88	Travel:
<i>Contract Administrator</i>	\$155	Local Mileage Current IRS rate
<i>Project Staff I-C</i>	\$113	Transportation Actual expense
<i>Project Staff I-B</i>	\$144	Auto rental Actual commercial rate
<i>Project Staff I-A</i>	\$170	Fares Actual expense
<i>Project Staff II-B</i>	\$180	Room Actual expense
<i>Project Staff II-A</i>	\$200	Subsistence ⁽¹⁾ \$48 per day
<i>Senior Staff</i>	\$232	The rate for each meal as follows: ⁽¹⁾
<i>Associate</i>	\$258	Breakfast \$9
<i>Vice President</i>	\$283-\$294	Lunch \$13
<i>Senior Executive</i>	\$309	Dinner \$21
<i>President</i>	\$309	Incidentals \$5
		Report Reproduction and Copying:
		Actual expense
		Black and white copy, in-house \$0.08
		Color copy, in-house \$0.89
		Binding, in-house \$1.95
		Special Postage and Express Mail:
		Actual expense
		Other Direct Costs:
		Actual expense
		Daily Equipment Rental Rates:
		Single parameter meters & equipment \$30
		Digital Flow Meter \$60
		Multi-parameter field meters & sondes \$100
		Dye/tracer mapping or residence time \$200
		Multi-parameter continuous remote sensing \$40

Subcontractors:

Actual expense plus 10% fee

Note: ⁽¹⁾Charged when overnight lodging is required

DAVIDS ENGINEERING, INC.

Labor Rates

Labor Classification	Hourly Rate
Sr. Principal Engineer	\$220.00
Principal Engineer	\$207.00
Supervising Engineer/Scientist	\$196.00
Senior Engineer/Scientist	\$172.00
Associate Engineer/Scientist II	\$159.00
Associate Engineer/Scientist I	\$151.00
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Engineering Intern II	\$62.00
Engineering Intern I	\$41.00
Student Intern	\$21.00
Technical/project Assistant	\$93.00
Secretary/Clerical II	\$89.00
Secretary/Clerical I	\$73.00

Note: Labor rates are subject to revision at the beginning of each calendar year.

**Vehicle and
Equipment
Rates**

Effective January
1, 2018

Item	Rate
Automobiles	Current federal rate
Field Vehicle (4x4)	\$1.00/mile
SonTek RiverSurveyor M9 ADCP	\$275.00/day
SonTek FlowTracker Handheld ADVM	\$55.00/day
Fuji Electric Portflow-C Transit Time Meter	\$100.00/day
Pressure Transducer	\$50.00/month
SCADA Equipment and Materials	At cost
Color plotter	\$6.50/sq. ft.

Note: Equipment rates are subject to revision at the beginning of each calendar year.

Exhibit B

**GRANT AGREEMENT BETWEEN THE STATE OF CALIFORNIA
(DEPARTMENT OF WATER RESOURCES) AND
SISKIYOU COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
AGREEMENT NUMBER 4600012838
2017 PROPOSITION 1 SUSTAINABLE GROUNDWATER PLANNING (SGWP) GRANT**

THIS GRANT AGREEMENT is entered into by and between the Department of Water Resources of the State of California, herein referred to as the "State" or "DWR" and the Siskiyou County Flood Control and Water Conservation District, a public agency in the State of California, duly organized, existing, and acting pursuant to the laws thereof, herein referred to as the "Grantee," which parties do hereby agree as follows:

- 1) **PURPOSE.** The State shall provide funding from the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1) to assist the Grantee in financing the planning and/or selected project activities (Project) that will improve sustainable groundwater management, pursuant to Water Code Section 79700 et seq. The provision of State funds pursuant to this Agreement shall not be construed or interpreted to mean that the Groundwater Sustainability Plan (GSP), or any components of the GSP, implemented in accordance with the Work Plan as set forth in Exhibit A, will be: adopted by the applicable Groundwater Sustainability Agency (GSA); obtain the necessary desirable results of Sustainable Management Criteria; or, meet all of the evaluation and assessment criteria when submitted to the Department of Water Resources as required by the Sustainable Groundwater Management Act and implementing regulations.
- 2) **TERM OF GRANT AGREEMENT.** The term of this Grant Agreement begins on the date this Grant Agreement is executed by the State, through final payment plus three (3) years unless otherwise terminated or amended as provided in this Grant Agreement. However, all work shall be completed in accordance with the Schedule as set forth in Exhibit C.
- 3) **GRANT AMOUNT.** The maximum amount payable by the State under this Grant Agreement shall not exceed \$1,367,000.
- 4) **GRANTEE COST SHARE.** The Grantee is required to provide a Local Cost Share (non-State funds) of not less than 50 percent of the Total Project Cost. The cost share requirement for projects benefiting a Severely Disadvantaged Community (SDAC), Disadvantaged Community (DAC), or an Economically Distressed Areas (EDA) may be waived or reduced. The Grantee agrees to provide a Local Cost Share (non-State funds) for the amount as documented in Exhibit B (Budget). Local Cost Share may include Eligible Project Costs directly related to Exhibit A incurred after January 1, 2015.
- 5) **BASIC CONDITIONS.** The State shall have no obligation to disburse money for a project under this Grant Agreement until the Grantee has satisfied the following conditions (if applicable):
 1. Prior to execution of this Grant Agreement, selected applicants (Groundwater Sustainability Agency) for GSP Development projects must submit evidence of a notification to the public and DWR prior to initiating development of a GSP in compliance with California Code of Regulations, title 23, Section 350 et seq. (GSP Regulations) and Water Code Section 10727.8.
 2. The Grantee must demonstrate compliance with all relevant eligibility criteria as set forth on pages 7 and 8 of the 2015 Grant Program Guidelines for the SGWP Grant Program.
 3. For the term of this Grant Agreement, the Grantee submits timely reports and all other deliverables as required by Paragraph 16, "Submission of Reports" and Exhibit A.
- 6) **DISBURSEMENT OF FUNDS.** The State will disburse to the Grantee the amount approved, subject to the availability of funds through normal State processes. Notwithstanding any other provision of this Grant Agreement, no disbursement shall be required at any time or in any manner which is in violation of, or in conflict with, federal or state laws, rules, or regulations, or which may require any rebates to the federal government, or any loss of tax-free status on state bonds, pursuant to any federal statute or regulation. Any and all money disbursed to the Grantee under this Grant Agreement shall be deposited in a non-interest bearing account and shall be used solely to pay Eligible Project Costs.

- 7) **ELIGIBLE PROJECT COST.** The Grantee shall apply State funds received only to eligible Project Costs in accordance with applicable provisions of the law and Exhibit B. Eligible Project Costs include the reasonable costs of studies, engineering, design, land and easement acquisition, legal fees, preparation of environmental documentation, environmental mitigations, monitoring, project construction, and/or any other scope of work efforts as described in Exhibit A. Reimbursable administrative expenses are the necessary costs incidental but directly related to the Project included in this Agreement. Work performed on the Project after July 1, 2017, but before April 30, 2022, shall be eligible for reimbursement.

Costs that are not eligible for reimbursement with State funds cannot be counted as Cost Share. Costs that are not eligible for reimbursement include, but are not limited to, the following items:

1. Costs, other than those noted above, incurred prior to the award date of this Grant.
 2. Costs for preparing and filing a grant application belonging to another solicitation.
 3. Operation and maintenance costs, including post construction performance and monitoring costs.
 4. Purchase of equipment that is not an integral part of a project.
 5. Establishing a reserve fund.
 6. Purchase of water supply.
 7. Monitoring and assessment costs for efforts required after project construction is complete.
 8. Replacement of existing funding sources for ongoing programs.
 9. Support of existing agency requirements and mandates (e.g., punitive regulatory agency requirement).
 10. Purchase of land in excess of the minimum required acreage necessary to operate as an integral part of a project, as set forth and detailed by engineering and feasibility studies, or land purchased prior to the execution date of this Grant Agreement.
 11. Overhead and indirect costs: "Indirect Costs" means those costs that are incurred for a common or joint purpose benefiting more than one cost objective and are not readily assignable to the funded project (i.e., costs that are not directly related to the funded project). Examples of Indirect Costs include, but are not limited to: central service costs; general administration of the Grantee; non-project-specific accounting and personnel services performed within the Grantee's organization; depreciation or use allowances on buildings and equipment; the costs of operating and maintaining non-project-specific facilities; tuition and conference fees; and, generic overhead or markup. This prohibition applies to the Grantee and any subcontract or sub-agreement for work on the Project that will be reimbursed pursuant to this Agreement.
- 8) **METHOD OF PAYMENT FOR REIMBURSEMENT.** After the disbursement requirements in Paragraph 5 "Basic Conditions" are met, the State will disburse the whole or portions of State funding to the Grantee, following receipt from the Grantee via U.S. mail or Express mail delivery of a "wet signature" invoice for costs incurred, including Cost Share, and timely Progress Reports as required by Paragraph 16, "Submission of Reports." Payment will be made no more frequently than monthly, in arrears, upon receipt of an invoice bearing the Grant Agreement number. The State will notify the Grantee, in a timely manner, whenever, upon review of an Invoice, the State determines that any portion or portions of the costs claimed are not eligible costs or is not supported by documentation or receipts acceptable to the State. The Grantee may, within thirty (30) calendar days of the date of receipt of such notice, submit additional documentation to the State to cure such deficiency(ies). If the Grantee fails to submit adequate documentation curing the deficiency(ies), the State will adjust the pending invoice by the amount of ineligible or unapproved costs.

Invoices submitted by the Grantee shall include the following information:

1. Costs incurred for work performed in implementing the project during the period identified in the particular invoice.

2. Costs incurred for any interests in real property (land or easements) that have been necessarily acquired for a project during the period identified in the particular invoice for the implementation of a project.
3. Invoices shall be submitted on forms provided by the State and shall meet the following format requirements:
 - a. Invoices must contain the date of the invoice, the time period covered by the invoice, and the total amount due.
 - b. Invoices must be itemized based on the categories (i.e., tasks) specified in the Exhibit B. The amount claimed for salaries/wages/consultant fees must include a calculation formula (i.e., hours or days worked times the hourly or daily rate = the total amount claimed).
 - c. One set of sufficient evidence (i.e., receipts, copies of checks, time sheets) must be provided for all costs included in the invoice.
 - d. Each invoice shall clearly delineate those costs claimed for reimbursement from the State's funding amount, as depicted in Paragraph 3, "Grant Amount" and those costs that represent the Grantee's costs, as applicable, in Paragraph 4, "Grantee Cost Share."
 - e. Original signature and date (in ink) of the Grantee's Project Representative. Submit the original "wet signature" copy of the invoice form to the address listed in Paragraph 22, "Project Representative."

All invoices submitted shall be accurate and signed under penalty of perjury. Any and all costs submitted pursuant to this Agreement shall only be for the tasks set forth herein. The Grantee shall not submit any invoice containing costs that are ineligible or have been reimbursed from other funding sources unless required and specifically noted as such (i.e., match costs). Any eligible costs for which the Grantee is seeking reimbursement shall not be reimbursed from any other source. Double or multiple billing for time, services, or any other eligible cost is illegal and constitutes fraud. Any suspected occurrences of fraud, forgery, embezzlement, theft, or any other misuse of public funds may result in suspension of disbursements of grant funds and/or termination of this Agreement requiring the repayment of all funds disbursed hereunder plus interest. Additionally, the State may request an audit pursuant to Exhibit D and refer the matter to the Attorney General's Office or the appropriate district attorney's office for criminal prosecution or the imposition of civil liability. (Civ. Code, §§ 1572-1573; Pen. Code, §§ 470, 489-490.)

- 9) ADVANCED PAYMENT. Water Code Section 10551 authorizes advance payment by the State for projects included and implemented in an applicable integrated regional water management plan, and when the project proponent is a nonprofit organization; a DAC; or the project benefits a DAC. If the project is awarded less than \$1,000,000 in grant funds, the project proponent may receive an advanced payment of up to 50% of the grant award; the remaining 50% of the grant award will be reimbursed in arrears. Within ninety (90) calendar days of execution of the Grant Agreement, the Grantee may provide the State an Advanced Payment Request. Advanced Payment Requests received ninety-one (91) calendar days after execution of this Agreement, or later, will not be eligible to receive advance payment. The Advanced Payment Request must contain the following:
 1. Documentation demonstrating that each Local Project Sponsor (if different from the Grantee, as listed in Exhibit I) was notified about their eligibility to receive an advanced payment and a response from the Local Project Sponsor stating whether it wishes to receive the advanced payment or not.
 2. If the Local Project Sponsor is requesting the advanced payment, the request must include:
 - a. A funding plan which shows how the advanced funds will be expended within 18 months of this Grant Agreement's execution (i.e., for what, how much, and when).
 - b. A discussion of the Local Project Sponsor's financial capacity to complete the project once the advance funds have been expended, and include an "Audited Financial Statement Summary Form" specific to the DAC.

3. If a Local Project Sponsor is requesting advanced payment, the Grantee shall also submit a single Advance Payment Form Invoice, containing the request for each qualified project, to the State Project Manager with “wet signature” and date of the Grantee’s Project Representative, as indicated in Paragraph 22, “Project Representative.” The Grantee shall be responsible for the timely distribution of the advanced funds to the respective Local Project Sponsor(s). Within sixty (60) calendar days of receiving the Advanced Payment Form Invoice and subject to the availability of funds, the State will authorize payment of the advanced funds sought of up to 50% of the grant award for the qualified project(s). The Advanced Payment Form Invoice shall be submitted on forms provided by the State and shall meet the following format requirements:
 - a. Invoice must contain the date of the invoice, the time period covered by the invoice, and the total amount due.
 - b. Invoice must be itemized based on the categories (i.e., tasks) specified in Exhibit B.
 - c. The State Project Manager will notify the Grantee, in a timely manner, when, upon review of an Advance Payment Form Invoice, the State determines that any portion or portions of the costs claimed are not eligible costs. The Grantee may, within thirty (30) calendar days of the date of receipt of such notice, submit additional documentation to cure such deficiency(ies). After the distribution requirements in Paragraph 5, “Basic Conditions” are met, the State will disburse the whole or portions of State funding to the Grantee, following receipt from the Grantee via US mail or Express mail delivery of a “wet signature” invoice for costs incurred, including Cost Share, and timely Progress Reports as required by Paragraph 16, “Submission of Reports.”
 4. On a quarterly basis, the Grantee will submit an Accountability Report to the State that demonstrates how actual expenditures compare with the scheduled budget. The Accountability Report shall include the following information:
 - a. An itemization of how advanced funds have been expended to-date (Expenditure Summary), including documentation that supports the expenditures (e.g., contractor invoices, receipts, personnel hours, etc.). Invoices must be itemized based on the budget categories (i.e., tasks) specified in Exhibit B.
 - b. A funding plan which shows how the remaining advanced funds will be expended.
 - c. Documentation that the funds were placed in a non-interest bearing account, including the dates of deposits and withdrawals from that account.
 - d. The State Project Manager will notify the Grantee, in a timely manner, when, upon review of the Expenditure Summary, the State determines that any portion of the expenditures claimed are not eligible costs. The Grantee may, within thirty (30) calendar days of the date of receipt of such notice, submit additional documentation to cure such deficiency(ies). If costs are not consistent with the tasks in Exhibit B, the State will reject the claim and remove them from the Expenditure Summary.
 5. Once the Grantee has expended all advanced funds, then the method of payment will revert to the reimbursement process specified in Paragraph 8, “Method of Payment for Reimbursement.”, and any remaining requirements of Paragraph 5, “Basic Conditions.”
- 10) **REPAYMENT OF ADVANCES.** The State may demand repayment from the Grantee of all or any portion of the advanced State funding along with interest at the California general obligation bond interest rate at the time the State notifies the Grantee, as directed by the State, and take any other action that it deems necessary to protect its interests for the following conditions:
1. A project is not being implemented in accordance with the provisions of the Grant Agreement.
 2. The Grantee has failed in any other respect to comply with the provisions of this Grant Agreement, and if the Grantee does not remedy any such failure to the State’s satisfaction.

3. Repayment amounts may also include:
 - a. Advance funds which have not been expended within 18 months of the Grant Agreement's execution.
 - b. Actual costs incurred are not consistent with the activities presented in Exhibit A, not supported, or are ineligible.
 - c. At the completion of the project, the funds have not been expended.

For conditions 10) 3.a. and 10) 3.b., repayment may consist of deducting the amount from future reimbursement invoices. The State may consider the Grantee's refusal to repay the requested advanced amount a substantial breach of this Grant Agreement subject to the default provisions in Paragraph 12, "Default Provisions." If the State notifies the Grantee of its decision to demand repayment or withhold the entire funding amount from the Grantee pursuant to this paragraph, this Grant Agreement shall terminate upon receipt of such notice by the Grantee and the State shall no longer be required to provide funds under this Grant Agreement and the Grant Agreement shall no longer be binding on either party.

- 11) WITHHOLDING OF DISBURSEMENTS BY THE STATE. If the State determines that a project is not being implemented in accordance with the provisions of this Grant Agreement, or that the Grantee has failed in any other respect to comply with the provisions of this Grant Agreement, and if the Grantee does not remedy any such failure to the State's satisfaction, the State may withhold from the Grantee all or any portion of the State funding and take any other action that it deems necessary to protect its interests. Where a portion of the State funding has been disbursed to the Grantee and the State notifies the Grantee of its decision not to release funds that have been withheld pursuant to Paragraph 13, "Continuing Eligibility," the portion that has been disbursed shall thereafter be repaid immediately with interest at the California general obligation bond interest rate at the time the State notifies the Grantee, as directed by the State. The State may consider the Grantee's refusal to repay the requested disbursed amount a contract breach subject to the default provisions in Paragraph 12, "Default Provisions." If the State notifies the Grantee of its decision to withhold the entire funding amount from the Grantee pursuant to this paragraph, this Grant Agreement shall terminate upon receipt of such notice by the Grantee and the State shall no longer be required to provide funds under this Grant Agreement and the Grant Agreement shall no longer be binding on either party.
- 12) DEFAULT PROVISIONS. The Grantee will be in default under this Grant Agreement if any of the following occur:
 1. Substantial breaches of this Grant Agreement, or any supplement or amendment to it, or any other agreement between the Grantee and the State evidencing or securing the Grantee's obligations;
 2. Making any false warranty, representation, or statement with respect to this Grant Agreement or the application filed to obtain this Grant Agreement;
 3. Failure to operate or maintain project in accordance with this Grant Agreement.
 4. Failure to make any remittance required by this Grant Agreement.
 5. Failure to comply with Labor Compliance Plan requirements.
 6. Failure to submit timely progress reports.
 7. Failure to routinely invoice the State.
 8. Failure to meet any of the requirements set forth in Paragraph 13, "Continuing Eligibility."

Should an event of default occur, the State shall provide a notice of default to the Grantee and shall give the Grantee at least ten (10) calendar days to cure the default from the date the notice is sent via first-class mail to the Grantee. If the Grantee fails to cure the default within the time prescribed by the State, the State may do any of the following:

9. Declare the funding be immediately repaid, with interest, which shall be equal to the State of California general obligation bond interest rate in effect at the time of the default.
10. Terminate any obligation to make future payments to the Grantee.
11. Terminate the Grant Agreement.
12. Take any other action that it deems necessary to protect its interests.

In the event the State finds it necessary to enforce this provision of this Grant Agreement in the manner provided by law, the Grantee agrees to pay all costs incurred by the State including, but not limited to, reasonable attorneys' fees, legal expenses, and costs.

13) CONTINUING ELIGIBILITY. The Grantee must meet the following ongoing requirement(s) to remain eligible to receive State funds:

1. An urban water supplier that receives grant funds pursuant to this Grant Agreement must maintain compliance with the Urban Water Management Planning Act (UWMP; Wat. Code, § 10610 et seq.) and Sustainable Water Use and Demand Reduction (Wat. Code, § 10608 et seq.) by doing the following:
 - a. Have submitted their 2015 UWMP and had it deemed consistent by DWR. If the 2015 UWMP has not been submitted to DWR funding disbursements to the urban water supplier will cease until the 2015 UWMP is submitted. If the 2015 UWMP is deemed inconsistent by DWR, the urban water supplier will be ineligible to receive funding disbursements until the inconsistencies are addressed and DWR deems the UWMP consistent. For more information, visit the following website: <https://www.water.ca.gov/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Urban-Water-Management-Plans>.
 - b. All urban water suppliers must submit documentation that demonstrates they are meeting the 2015 interim gallons per capita per day (GPCD) target. If not meeting the interim target, the Grantee must submit a schedule, financing plan, and budget for achieving the GPCD target, as required pursuant to Water Code Section 10608.24. Urban water suppliers that did not meet their 2015 interim GPCD target must also submit annual reports that include a schedule, financing plan, and budget for achieving the GPCD target by June 30 of each year.
2. An agricultural water supplier receiving grant funding must:
 - a. Comply with Sustainable Water Use and Demand Reduction requirements outlined in Water Code Section 10608, et seq. Submit to the State a schedule, financing plan, and budget for implementation of the efficient water management practices, required pursuant to Water Code Section 10608.48.
 - b. Have their Agricultural Water Management Plan (AWMP) deemed consistent by DWR. To maintain eligibility and continue funding disbursements, an agricultural water supply must have their 2015 AWMP identified on the State's website. For more information, visit the following website: <https://www.water.ca.gov/Work-With-Us/Grants-And-Loans/Agriculture-Water-Use-Efficiency>.
3. The Grantee diverting surface water must maintain compliance with diversion reporting requirements as outlined in Part 5.1 of Division 2 of the Water Code.
4. If applicable, the Grantee must demonstrate compliance with the Groundwater Management Act set forth on pages 7 and 8 of the 2015 SGWP Grant Program Guidelines, dated October 2015.
5. Grantees that have been designated as monitoring entities under the California Statewide Groundwater Elevation Monitoring (CASGEM) Program must maintain reporting compliance, as required by Water Code Section 10932 and the CASGEM Program.

14) PERMITS, LICENSES, APPROVALS, AND LEGAL OBLIGATIONS. The Grantee shall be responsible for obtaining any and all permits, licenses, and approvals required for performing any work under this Grant Agreement, including those necessary to perform design, construction, or operation and maintenance of

the Project(s). The Grantee shall be responsible for observing and complying with any applicable federal, state, and local laws, rules or regulations affecting any such work, specifically those including, but not limited to, environmental, procurement, and safety laws, rules, regulations, and ordinances. The Grantee shall provide copies of permits and approvals to the State.

- 15) RELATIONSHIP OF PARTIES. If applicable, the Grantee is solely responsible for design, construction, and operation and maintenance of projects within the work plan. Review or approval of plans, specifications, bid documents, or other construction documents by the State is solely for the purpose of proper administration of funds by the State and shall not be deemed to relieve or restrict responsibilities of the Grantee under this Grant Agreement.
- 16) SUBMISSION OF REPORTS. The submittal and approval of all reports is a requirement for the successful completion of this Grant Agreement. Reports shall meet generally accepted professional standards for technical reporting and shall be proofread for content, numerical accuracy, spelling, and grammar prior to submittal to the State. All reports shall be submitted to the State's Project Manager, and shall be submitted via Department of Water Resources (DWR) "Grant Review and Tracking System" (GRanTS). If requested, the Grantee shall promptly provide any additional information deemed necessary by the State for the approval of reports. Reports shall be presented in the formats described in the applicable portion of Exhibit F. The timely submittal of reports is a requirement for initial and continued disbursement of State funds. Submittal and subsequent approval by the State of a Project Completion Report is a requirement for the release of any funds retained for such project.
 1. Progress Reports: The Grantee shall submit Progress Reports to meet the State's requirement for disbursement of funds. Progress Reports shall be uploaded via GRanTS, and the State's Project Manager notified of upload. Progress Reports shall, in part, provide a brief description of the work performed, Grantees activities, milestones achieved, any accomplishments and any problems encountered in the performance of the work under this Grant Agreement during the reporting period. The first Progress Report should be submitted to the State no later than four (4) months after the execution of the agreement, with future reports then due on successive three-month increments based on the invoicing schedule and this date.
 2. Groundwater Sustainability Plan: The Grantee shall submit a Final Groundwater Sustainability Plan (GSP) to DWR by the date as specified per the Sustainable Groundwater Management Act (SGMA). The GSP shall be formatted, drafted, prepared, and completed as required by the GSP Regulations, and in accordance with any other regulations or requirements that are stipulated through SGMA.
 3. Coordination Agreement: The Grantee shall provide the State a copy of the executed Coordination Agreement, and all supporting documentation. This condition is only required in basins where GSAs develop multiple GSPs pursuant to Water Code Section 10727(b)(3). Refer to the GSP Regulations for necessary details and requirements to prepare and submit a Coordination Agreement.
 4. Accountability Report: The Grantee shall prepare and submit to the State an Accountability Report on a quarterly basis if the Grantee received an Advanced Payment, consistent with the provisions in Paragraph 9, "Advanced Payment."
 5. Completion Report: The Grantee shall prepare and submit to the State a separate Completion Report for each project or component included in Exhibit A. The Grantee shall submit a Completion Report within ninety (90) calendar days of project/component completion. Each Completion Report shall include, in part, a description of actual work done, any changes or amendments to each project, and a final schedule showing actual progress versus planned progress, copies of any final documents or reports generated or utilized during a project. The Completion Report shall also include, if applicable for Implementation Project(s), certification of final project by a registered civil engineer, consistent with Exhibit D. A "Certification of Project Completion" form will be provided by the State.
 6. Grant Completion Report: Upon completion of the Project included in Exhibit A, the Grantee shall submit to the State a Grant Completion Report. The Grant Completion Report shall be submitted within

ninety (90) calendar days of submitting the Completion Report for the final component or project to be completed under this Grant Agreement. The Grant Completion Report shall include reimbursement status, a brief description of each component completed, and how those components will further the goals of the GSP and sustainable groundwater. Retention for the last component, or project, to be completed as part of this Grant Agreement will not be disbursed until the Grant Completion Report is submitted to be approved by the State.

- 17) OPERATION AND MAINTENANCE OF PROJECT. For the useful life of construction and implementation projects (pertinent to Implementation Projects) and in consideration of the funding made by the State, the Grantee agrees to ensure or cause to be performed the commencement and continued operation of the project, and shall ensure or cause the project to be operated in an efficient and economical manner; shall ensure all repairs, renewals, and replacements necessary to the efficient operation of the same are provided; and shall ensure or cause the same to be maintained in as good and efficient condition as upon its construction, ordinary and reasonable wear and depreciation excepted. The State shall not be liable for any cost of such maintenance, management, or operation. The Grantee or their successors may, with the written approval of the State, transfer this responsibility to use, manage, and maintain the property. For purposes of this Grant Agreement, "useful life" means period during which an asset, property, or activity is expected to be usable for the purpose it was acquired or implemented; "operation costs" include direct costs incurred for material and labor needed for operations, utilities, insurance, and similar expenses, and "maintenance costs" include ordinary repairs and replacements of a recurring nature necessary for capital assets and basic structures and the expenditure of funds necessary to replace or reconstruct capital assets or basic structures. Refusal by the Grantee to ensure operation and maintenance of the projects in accordance with this provision may, at the option of the State, be considered a breach of this Grant Agreement and may be treated as default under Paragraph 12, "Default Provisions."
- 18) STATEWIDE MONITORING REQUIREMENTS. The Grantee shall ensure that all groundwater projects and projects that include groundwater monitoring requirements are consistent with the Groundwater Quality Monitoring Act of 2001 (Wat. Code, § 10780 et seq.) and, where applicable, projects that affect water quality shall include a monitoring component that allows the integration of data into statewide monitoring efforts, including where applicable, the Surface Water Ambient Monitoring Program carried out by the State Water Resources Control Board. See Exhibit G for web links and information regarding other State monitoring and data reporting requirements.
- 19) NOTIFICATION OF STATE. The Grantee shall promptly notify the State, in writing, of the following items:
1. Events or proposed changes that could affect the scope, budget, or work performed under this Grant Agreement. The Grantee agrees that no substantial change in the scope of a project will be undertaken until written notice of the proposed change has been provided to the State and the State has given written approval for such change. Substantial changes generally include changes to the scope of work, schedule or term, and budget.
 2. Any public or media event publicizing the accomplishments and/or results of this Grant Agreement and provide the opportunity for attendance and participation by the State's representatives. The Grantee shall make such notification at least fourteen (14) calendar days prior to the event.
 3. Applicable to Implementation Projects only, Final inspection of the completed work on a project by a Registered Professional (Civil Engineer, Engineering Geologist, or other State approved certified/license Professional), in accordance with Exhibit D. The Grantee shall notify the State's Project Manager of the inspection date at least 14 calendar days prior to the inspection in order to provide the State the opportunity to participate in the inspection.
- 20) NOTICES. Any notice, demand, request, consent, or approval that either party desires or is required to give to the other party under this Grant Agreement shall be in writing. Notices may be transmitted by any of the following means:
1. By delivery in person.

2. By certified U.S. mail, return receipt requested, postage prepaid.
3. By "overnight" delivery service; provided that next-business-day delivery is requested by the sender.
4. By electronic means.
5. Notices delivered in person will be deemed effective immediately on receipt (or refusal of delivery or receipt). Notices sent by certified mail will be deemed effective given ten (10) calendar days after the date deposited with the U.S. Postal Service. Notices sent by overnight delivery service will be deemed effective one business day after the date deposited with the delivery service. Notices sent electronically will be effective on the date of transmission, which is documented in writing. Notices shall be sent to the addresses listed below. Either party may, by written notice to the other, designate a different address that shall be substituted for the one below.

21) PERFORMANCE EVALUATION. Upon completion of this Grant Agreement, the Grantee's performance will be evaluated by the State and a copy of the evaluation will be placed in the State file and a copy sent to the Grantee.

22) PROJECT REPRESENTATIVES. The Project Representatives during the term of this Grant Agreement are as follows:

Department of Water Resources

Arthur Hinojosa
Chief, Division of Integrated Regional Water Management
P.O. Box 942836
Sacramento, CA 94236-0001
Phone: (916) 653-4736
Email: Arthur.Hinojosa@water.ca.gov

Siskiyou County

Elizabeth Nielsen
1312 Fairlane Road
Yreka, CA 96097
Phone: (530) 842-8012
Email: enielsen@co.siskiyou.ca.us

Direct all inquiries to the Project Manager:

Department of Water Resources

Patricia Vellines
2440 Main Street
Red Bluff, CA 96080
Phone: (530)529-7344
Email: Patricia.Vellines@water.ca.gov

Siskiyou County

Terry Barber
1312 Fairlane Road
Yreka, CA 96097
Phone: (530) 842-8005
Email: tbarber@co.siskiyou.ca.us

Either party may change its Project Representative or Project Manager upon written notice to the other party.

23) STANDARD PROVISIONS. The following Exhibits are attached and made a part of this Grant Agreement by this reference:

Exhibit A – Work Plan

Exhibit B – Budget

Exhibit C – Schedule

Exhibit D – Standard Conditions

Exhibit E – Authorizing Resolution Accepting Funds

Exhibit F – Report Formats and Requirements

Exhibit G – Requirements for Data Submittal

Exhibit H – State Audit Document Requirements and Cost Share Guidelines for Grantees

Exhibit I – Local Project Sponsors (Not Used)

Exhibit J – Project Location

IN WITNESS WHEREOF, the parties hereto have executed this Grant Agreement.

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES



Arthur Hinojosa, Chief
Division of Integrated Regional Water
Management

Date 12/5/18

SISKIYOU COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT



Ray A. Haupt, Chair
Flood Control and Water Conservation
District

Date 10-30-18

Approved as to Legal Form and Sufficiency



Robin Brewer, Assistant Chief Counsel
Office of Chief Counsel

Date 11-28-18

ATTEST:
COLLEEN SETZER
County Clerk & Ex-Officio
Clerk of the Board

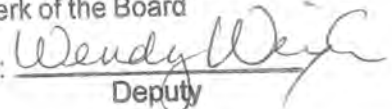
By: 
Deputy

EXHIBIT A WORK PLAN

Project Title: Scott, Shasta and Butte Valley Groundwater Basins GSP Development

Project Description: The primary goal is to complete the work necessary to develop GSPs for the Shasta River Valley, Scott Valley, and Butte Valley Groundwater Basins, and ensure sustainability into the future.

Component 1: Grant Administration

Prepare and submit required documents outlined in the grant award letter. Work with DWR staff to develop and execute the Grant Agreement. Prepare progress reports detailing work completed during reporting period as outlined in Exhibit F of this Agreement. Progress Reports will include sufficient information for DWR program manager to understand and review backup documentation submitted with invoices. Quarterly invoices should accompany the Progress Reports and should be submitted to the DWR Project Manager for review to receive reimbursement on eligible funds per the Grant Agreement. Collect and organize backup documentation by task and prepare a summary document.

Prepare Draft Grant Completion Report and submit to DWR for Project Manager's comment and review no later than 90-days after work completion. Prepare Final Grant Completion Report addressing the Project Manager's comments. The report shall be prepared and presented in accordance with the provisions of Exhibit F.

Deliverables:

- Environmental Information Form
- Quarterly invoices and backup documentation
- Quarterly Progress Reports
- Final Grant Completion Report

Component 2: GSP Development for the Scott River Valley Groundwater Basin

Category (a): Stakeholder Outreach and Engagement

Provide public outreach and engagement through regular GSA meetings, special meetings, outreach letters and emails, and opportunities to provide comments through Scott Valley Groundwater Advisory Committee (Advisory Committee) meetings. Provide training for staff to attend seminars to become educated on GSP development and implementation. Organize and host meetings and events, distribute public notices and documents, create and maintain a SGMA website and social media page(s), provide SGMA updates at city meetings, irrigation/water GSA meetings, etc., and develop educational handouts for distribution. Outreach to and appoint Advisory Committee board, organize and host meetings, manage and administer activities of the Advisory Committee.

Deliverables:

- Link to District website/webpage
- Resolution outlining formation of Advisory Committee and list of appointed members
- Summary of all outreach and engagement activities included as an attachment in the quarterly Progress Report

Category (b): Planning Activities

Task 1: Data Collection, Development, and Management

Compile and organize available data for GSP development, determine data gaps and collect additional necessary data to complete the GSP. Refine the existing Siskiyou County Well Program and perform a well audit. Transition the Siskiyou County CASGEM Program from Siskiyou County Environmental Health Division to the Department of Natural Resources for work associated with the Scott River Valley Groundwater Basin (Basin). Identify and determine how to address data gaps.

Deliverables:

- Document outlining CASGEM program
- Document outlining data gaps and needs

Task 2: Conceptual Model, Numerical Model Development, and Water Budget

Develop and document a conceptual model of the groundwater basin, develop an enhanced version and documentation of the Scott Valley Integrated Hydrologic Model, and develop the Scott Valley water budget. Prepare water budget for wet year, dry year, and average year scenarios, including seasonal water budgets for each.

Deliverables:

- Technical Memorandum on the updated model and results

Task 3: Sustainability Criteria Development

Develop the protocols for achieving and/or maintaining groundwater sustainability throughout the Basin by identifying potential undesirable results and determining how to meet sustainability criteria; identifying criteria that are being met and determining how to best sustain them over the long-term through implementation of the GSP; and establishing minimum thresholds and measurable objectives to achieve sustainability in the Basin.

Deliverables:

- Summary of findings

Task 4: Monitoring Programs, Protocols and Networks

Develop a groundwater monitoring program to assess conditions throughout the Basin and provide a centralized data and information management system. Develop a Basin-Wide Groundwater Sustainability Data Collection and Monitoring Plan (Plan), including discussion of:

- Groundwater monitoring network development;
- CASGEM program update to include reporting protocols (separate from Task 1 work);
- Monitoring database development;
- Monitoring annual report requirements and identification of monitoring entity; and
- Stream gauging program that includes current stream gauges and assesses the need for additional stream gauges for long term data collection

Deliverables:

- Monitoring Plan

Task 5: Groundwater Management Actions

Develop groundwater management programs and implement projects like the Scott Valley Recharge Pilot Study, in-lieu recharge, and Beaver Dam Analogues, to assist in-groundwater recharge development and study beneficial impacts to the Scott River when additional flows are needed during certain times of the year. Develop future groundwater modeling scenarios (from which proposed water budgets will be prepared) which may include DWR climate change scenarios and groundwater replenishment projects. Expand the existing

Groundwater Level Monitoring Program and stream discharge and temperature monitoring building on work from Task 1.

Deliverables:

- Summary of findings

Category (c): GSP Preparation

Develop a comprehensive GSP for the Basin based on the results from Category (b) tasks that meets the SGMA requirements and DWR regulations.

Deliverables:

- Proof of submittal of Final Scott River Valley GSP to DWR

Component 3: GSP Development for the Shasta Valley Groundwater Basin

Category (a): Stakeholder Outreach and Engagement

Provide public outreach and engagement through regular GSA meetings, special meetings, outreach letters and emails, and opportunities to provide comments through Scott Valley Groundwater Advisory Committee (Advisory Committee) meetings. Provide training for staff to attend seminars to become educated on GSP development and implementation. Organize and host meetings and events, distribute public notices and documents, create and maintain a SGMA website and social media page(s), provide SGMA updates at city meetings, irrigation/water GSA meetings, etc., and develop educational handouts for distribution. Outreach to and appoint Advisory Committee board, organize and host meetings, manage and administer activities of the Advisory Committee.

Deliverables:

- Link to District website/webpage
- Resolution outlining formation of Advisory Committee and list of appointed members
- Summary of all outreach and engagement activities included as an attachment in the quarterly Progress Report

Category (b): Planning Activities

Task 1: Data Collection, Development, and Management

Compile and organize available data for GSP development, determine data gaps and collect additional necessary data to complete the GSP. Refine the existing Siskiyou County Well program and perform well audit. Transition the Siskiyou County CASGEM Program from Siskiyou County Environmental Health Division to the Department of Natural Resources for work associated with the Shasta Valley Groundwater Basin (Basin). Identify and determine how to address data gaps.

Deliverables:

- Document outlining CASGEM program
- Document outlining data gaps and needs

Task 2: Conceptual Model, Numerical Model Development, and Water Budget

Develop and document a conceptual model of the groundwater basin, develop the Shasta Valley Hydrologic Numerical Model including recharge areas, and develop the Shasta Valley water budget for wet year, dry year, and average year scenarios, including seasonal water budgets for each.

Deliverables:

- Technical Memorandum on the updated model and results

Task 3: Sustainability Criteria Development

Develop the protocols for achieving and/or maintaining groundwater sustainability throughout the Basin by identifying potential undesirable results and determining how to meet sustainability criteria; identifying criteria that are being met and determining how to best sustain these over the long-term through implementation of the GSP; and establishing minimum thresholds and measurable objectives to achieve sustainability in the Basin.

Deliverables:

- Summary of findings

Task 4: Monitoring Programs, Protocols and Networks

Develop a groundwater monitoring program to assess conditions throughout the Basin and provide a centralized data and information management system. Develop Basin-Wide Groundwater Sustainability Data Collection and Monitoring Plan (Plan), including discussion of:

- Groundwater monitoring network development;
- CASGEM program update to include reporting protocols;
- Monitoring database development;
- Monitoring annual report requirements and identification of monitoring entity; and
- Stream gauging program that includes current stream gages and assesses the need for additional stream gauges.

Deliverables:

- Monitoring Plan

Task 5: Groundwater Management Actions: Development, Assessment, and Implementation

Develop groundwater management programs and implement projects like the Scott Valley Recharge Pilot Study, in-lieu recharge, and Beaver Dam Analogues, to assist in-groundwater recharge development and study beneficial impacts to the Scott River, when additional flows are needed during certain times of the year. Develop future groundwater modeling scenarios (from which proposed water budgets will be prepared) which may include DWR climate change scenarios and groundwater replenishment projects. Expand the existing Groundwater Level Monitoring Program and stream discharge and temperature monitoring building on work from Task 1.

Deliverables:

- Summary of findings

Category (c): GSP Preparation

Develop a comprehensive GSP for the Basin based on the results from Category (b) tasks that meets the SGMA requirements and DWR regulations.

Deliverables:

- Proof of submittal of Final Shasta Valley GSP to DWR

Component 4. GSP Development for the Butte Valley Groundwater Basin

Category (a): Stakeholder Outreach and Engagement

Provide public outreach and engagement through regular GSA meetings, special meetings, outreach letters and emails, and opportunities to provide comments through Scott Valley Groundwater Advisory Committee (Advisory Committee) meetings. Provide training for staff to attend seminars to become educated on GSP development and implementation. Organize and host meetings and events, distribute public notices and documents, create and maintain a SGMA website and social media page(s), provide SGMA updates at city meetings, irrigation/water GSA meetings, etc., and develop educational handouts for distribution. Outreach to and appoint Advisory Committee board, organize and host meetings, manage and administer activities of the Advisory Committee.

Deliverables:

- Link to District website/webpage
- Resolution outlining formation of Advisory Committee and list of appointed members
- Summary of all outreach and engagement activities included as an attachment in the quarterly Progress Report

Category (b): Planning Activities

Task 1: Data Collection, Development and Management, and SGMA Education

Compile and organize available data for GSP development, determine data gaps and collect additional necessary data to complete the plan. Refine the existing Siskiyou County Well Program and perform a well audit. Transition the Siskiyou County CASGEM Program from Siskiyou County Environmental Health Division to the Department of Natural Resources for work associated with the Butte Valley Groundwater Basin (Basin). Identify and determine how to address data gaps.

Deliverables:

- Document outlining CASGEM program
- Document outlining data gaps and needs

Task 2: Document Groundwater and Surface Water Conditions and Develop Water Budget

Document current and historic groundwater and streamflow conditions and prepare a water budget incorporating climate, streamflow, land use, soil properties, and hydrogeologic data collected in other Tasks.

Deliverables:

- Summary of findings

Task 3: Sustainability Criteria Development

Develop the protocols for achieving and/or maintaining groundwater sustainability throughout the Basin by identifying potential undesirable results and determine how to meet sustainability criteria; identifying criteria that are being met and determine how to best sustain these over the long-term through implementation of the GSP, and establishing minimum thresholds and measurable objectives to achieve sustainability in the Basin.

Deliverables:

- Summary of findings

Task 4: Monitoring Programs, Protocols and Networks

Develop a groundwater monitoring program to assess conditions throughout the Basin and provide a centralized data and information management system. Develop Basin-Wide Groundwater Sustainability Data Collection and Monitoring Plan (Plan), including discussion of:

- Groundwater monitoring network development;
- CASGEM program update to include reporting protocols;

- Monitoring database development;
- Monitoring annual report requirements and identification of monitoring entity; and
- Stream gauging program that includes current stream gages and assesses the need for additional stream gauges

Deliverables:

- Plan to be included in GSP

Task 5: Groundwater Management Actions: Development, Assessment, and Implementation

Develop groundwater management programs by implementing projects like the Scott Valley Recharge Pilot Study, in-lieu recharge, and Beaver Dam Analogues, to assist in-groundwater recharge development and study beneficial impacts to the Scott River when additional flows are needed during certain times of the year.

Develop future groundwater modeling scenarios (from which proposed water budgets will be prepared) which may include DWR climate change scenarios and groundwater replenishment projects. Expand the existing Groundwater Level Monitoring Program and stream discharge and temperature monitoring building on work from Task 1.

Deliverables:

- Summary of findings

Category (c): GSP Preparation

Develop a comprehensive GSP for the Basin based on the results from Category (b) tasks that meets the SGMA requirements and DWR regulations.

Deliverables:

- Proof of submittal of Final Butte Valley GSP to DWR

EXHIBIT B BUDGET

Project Name: Scott, Shasta, and Butte Valley Groundwater Basins GSP Development					
COMPONENTS		Grant Amount	Required Cost Share (non-state source)*	Other Cost Share**	Total Cost
1	Grant Administration	\$15,600	\$0	\$36,000	\$51,600
2	GSP Development for the Scott Valley Groundwater Basin	\$359,800	\$0	\$65,000	\$424,800
3	GSP Development for the Shasta Valley Groundwater Basin	\$688,300	\$0	\$75,500	\$763,800
4	GSP Development for the Butte Valley Groundwater Basin	\$303,300	\$0	\$70,500	\$373,800
TOTAL Project		\$1,367,000	\$0	\$247,000	\$1,614,000

NOTES:

*The Grantee received a 100% Required Cost Share waiver.

**Other Cost Share is an estimation on the part of the grantee and is used only to estimate the Total Cost for each category and the entire project. The Other Cost Share is not tracked by DWR as part of the invoicing and reporting procedures.

Component 1 – Budget					
Component 1: Grant Administration					
Budget Category		Grant Amount	Required Cost Share (non-state source)	Other Cost Share	Total Cost
(a)	Grant Administration	\$15,600	\$0	\$36,000	\$51,600
TOTAL COSTS		\$15,600	\$0	\$36,000	\$51,600

Component 2 – Budget					
Component 2: GSP Development for the Scott Valley Groundwater Basin					
Budget Category		Grant Amount	Required Cost Share (non-state source)	Other Cost Share	Total Cost
(a)	Stakeholder Outreach and Engagement	\$9,000	\$0	\$16,000	\$25,000
(b)	Planning Activities	\$340,800	\$0	\$49,000	\$389,800
(c)	GSP Preparation	\$10,000	\$0	\$0	\$10,000
TOTAL COSTS		\$359,800	\$0	\$65,000	\$424,800

Component 3 – Budget					
Component 3: GSP Development for the Shasta Valley Groundwater Basin					
Budget Category		Grant Amount	Required Cost Share (non-state source)	Other Cost Share	Total Cost
(a)	Stakeholder Outreach and Engagement	\$9,000	\$0	\$16,000	\$25,000
(b)	Planning Activities	\$669,300	\$0	\$59,500	\$728,800
(c)	GSP Preparation	\$10,000	\$0	\$0	\$10,000
TOTAL COSTS		\$688,300	\$0	\$75,500	\$763,800

Component 4 – Budget					
Component 4: GSP Development for the Butte Valley Groundwater Basin					
Budget Category		Grant Amount	Required Cost Share (non-state source)	Other Cost Share	Total Cost
(a)	Stakeholder Outreach and Engagement	\$9,000	\$0	\$16,000	\$25,000
(b)	Planning Activities	\$284,300	\$0	\$54,500	\$338,800
(c)	GSP Preparation	\$10,000	\$0	\$0	\$10,000
TOTAL COSTS		\$303,300	\$0	\$70,500	\$373,800

EXHIBIT C
SCHEDULE

Project Schedule			
Project Title: Scott, Shasta, and Butte Valley Groundwater Basins GSP's Development			
Categories		Start Date	End Date
Component 1: Grant Administration		06/2016	01/2022
(a)	Grant Administration	7/2018	03/2022
Component 2: GSP Development for the Scott Valley Groundwater Basin		06/2016	01/2022
(a)	Stakeholder Outreach and Engagement	06/2016	01/2022
(b)	Planning Activities	06/2016	01/2022
(c)	GSP Preparation	06/2016	01/2022
Component 3: GSP Development for the Shasta Valley Groundwater Basin		06/2016	01/2022
(a)	Stakeholder Outreach and Engagement	06/2016	01/2022
(b)	Planning Activities	06/2016	01/2022
(c)	GSP Preparation	06/2016	01/2022
Component 4: GSP Development for the Butte Valley Groundwater Basin		06/2016	01/2022
(a)	Stakeholder Outreach and Engagement	06/2016	01/2022
(b)	Planning Activities	06/2016	01/2022
(c)	GSP Preparation	06/2016	01/2022

EXHIBIT D
STANDARD CONDITIONS

D.1) ACCOUNTING AND DEPOSIT OF FUNDING DISBURSEMENT:

- a) **Separate Accounting of Funding Disbursements:** The Grantee shall account for the money disbursed pursuant to this Grant Agreement separately from all other Grantee funds. The Grantee shall maintain audit and accounting procedures that are in accordance with generally accepted accounting principles and practices, consistently applied. The Grantee shall keep complete and accurate records of all receipts and disbursements on expenditures of such funds. The Grantee shall require its contractors or subcontractors to maintain books, records, and other documents pertinent to their work in accordance with generally accepted accounting principles and practices. Records are subject to inspection by the State at any and all reasonable times.
- b) **Disposition of Money Disbursed:** All money disbursed pursuant to this Grant Agreement shall be deposited in a non-interest bearing account, administered, and accounted for pursuant to the provisions of applicable law.
- c) **Remittance of Unexpended Funds:** The Grantee shall remit to the State any unexpended funds that were disbursed to the Grantee under this Grant Agreement and were not used to pay Eligible Project Costs within a period of sixty (60) calendar days from the final disbursement from the State to the Grantee of funds or, within thirty (30) calendar days of the expiration of the Grant Agreement, whichever comes first.

D.2) ACKNOWLEDGEMENT OF CREDIT AND SIGNAGE: The Grantee shall include appropriate acknowledgement of credit to the State for its support when promoting the Project or using any data and/or information developed under this Grant Agreement. Signage shall be posted in a prominent location at Project site(s) (if applicable) or at the Grantee's headquarters and shall include the Department of Water Resources color logo and the following disclosure statement: "Funding for this project has been provided in full or in part from the Water Quality, Supply, and Infrastructure Improvement Act of 2014 and through an agreement with the State Department of Water Resources." The Grantee shall also include in each of its contracts for work under this Agreement a provision that incorporates the requirements stated within this paragraph.

D.3) AMENDMENT: This Grant Agreement may be amended at any time by mutual agreement of the Parties, except insofar as any proposed amendments are in any way contrary to applicable law. Requests by the Grantee for amendments must be in writing stating the amendment request and the reason for the request. The State shall have no obligation to agree to an amendment.

D.4) AMERICANS WITH DISABILITIES ACT: By signing this Grant Agreement, the Grantee assures the State that it complies with the Americans with Disabilities Act (ADA) of 1990, (42 U.S.C. § 12101 et seq.), which prohibits discrimination on the basis of disability, as well as all applicable regulations and guidelines issued pursuant to the ADA.

D.5) AUDITS: The State reserves the right to conduct an audit at any time between the execution of this Grant Agreement and the completion of the Project, with the costs of such audit borne by the State. After completion of the Project, the State may require the Grantee to conduct a final audit to the State's specifications, at the Grantee's expense, such audit to be conducted by and a report prepared by an independent Certified Public Accountant. Failure or refusal by the Grantee to comply with this provision shall be considered a breach of this Grant Agreement, and the State may elect to pursue any remedies provided in Paragraph 12 or take any other action it deems necessary to protect its interests.

Pursuant to Government Code Section 8546.7, the Grantee shall be subject to the examination and audit by the State for a period of three (3) years after final payment under this Grant Agreement with respect of all matters connected with this Grant Agreement, including but not limited to, the cost of administering this Grant Agreement. All records of the Grantee or its contractor or subcontractors shall

be preserved for this purpose for at least three (3) years after receipt of the final disbursement under this Agreement. If an audit reveals any impropriety, the Bureau of State Audits or the State Controller's Office may conduct a full audit of any or all of the Funding Recipient's activities. (Wat. Code, § 79708, subd. (b).)

- D.6) **BUDGET CONTINGENCY:** If the Budget Act of the current year covered under this Grant Agreement does not appropriate sufficient funds for this program, this Grant Agreement shall be of no force and effect. This provision shall be construed as a condition precedent to the obligation of the State to make any payments under this Grant Agreement. In this event, the State shall have no liability to pay any funds whatsoever to the Grantee or to furnish any other considerations under this Grant Agreement and the Grantee shall not be obligated to perform any provisions of this Grant Agreement. Nothing in this Grant Agreement shall be construed to provide the Grantee with a right of priority for payment over any other Grantee. If funding for any fiscal year after the current year covered by this Grant Agreement is reduced or deleted by the Budget Act, by Executive Order, or by order of the Department of Finance, the State shall have the option to either cancel this Grant Agreement with no liability occurring to the State, or offer a Grant Agreement amendment to the Grantee to reflect the reduced amount.
- D.7) **CEQA:** Activities funded under this Grant Agreement, regardless of funding source, must be in compliance with the California Environmental Quality Act (CEQA). (Pub. Resources Code, § 21000 et seq.) Any work that is subject to CEQA and funded under this Grant Agreement shall not proceed until documents that satisfy the CEQA process are received by the State's Project Manager and the State has completed its CEQA compliance. Work funded under the Grant Agreement subject to a CEQA document shall not proceed until and unless approved by the State Project Manager. Such approval is fully discretionary and shall constitute a condition precedent to any work for which it is required. If CEQA compliance by the Grantee is not complete at the time the State signs this Agreement, once the State has considered the environmental documents, it may decide to require changes, alterations, or other mitigation to the Project; or to not fund the Project. Should the State decide to not fund the Project, this Agreement shall be terminated in accordance with Paragraph 12.
- D.8) **CHILD SUPPORT COMPLIANCE ACT:** The Grantee acknowledges in accordance with Public Contract Code Section 7110, that:
- a) The Grantee recognizes the importance of child and family support obligations and shall fully comply with all applicable state and federal laws relating to child and family support enforcement, including, but not limited to, disclosure of information and compliance with earnings assignment orders, as provided in Family Code Section 5200 et seq.; and
 - b) The Grantee, to the best of its knowledge is fully complying with the earnings assignment orders of all employees and is providing the names of all new employees to the New Hire Registry maintained by the California Employment Development Department.
- D.9) **CLAIMS DISPUTE:** Any claim that the Grantee may have regarding performance of this Agreement including, but not limited to, claims for additional compensation or extension of time, shall be submitted to the DWR Project Representative, within thirty (30) days of the Grantee's knowledge of the claim. The State and the Grantee shall then attempt to negotiate a resolution of such claim and process an amendment to this Agreement to implement the terms of any such resolution.
- D.10) **COMPETITIVE BIDDING AND PROCUREMENTS:** The Grantee shall comply with all applicable laws and regulations regarding securing competitive bids and undertaking competitive negotiations in the Grantee's contracts with other entities for acquisition of goods and services and construction of public works with funds provided by the State under this Grant Agreement.
- D.11) **COMPUTER SOFTWARE:** The Grantee certifies that it has appropriate systems and controls in place to ensure that State funds will not be used in the performance of this Grant Agreement for the acquisition, operation, or maintenance of computer software in violation of copyright laws.

- D.12) **CONFLICT OF INTEREST:** All participants are subject to state and federal conflict of interest laws. Failure to comply with these laws, including business and financial disclosure provisions, will result in the application being rejected and any subsequent contract being declared void. Other legal action may also be taken. Applicable statutes include, but are not limited to, Government Code Section 1090 and Public Contract Code Sections 10410 and 10411, for State conflict of interest requirements.
- a) **Current State Employees:** No State officer or employee shall engage in any employment, activity, or enterprise from which the officer or employee receives compensation or has a financial interest and which is sponsored or funded by any State agency, unless the employment, activity, or enterprise is required as a condition of regular State employment. No State officer or employee shall contract on his or her own behalf as an independent contractor with any State agency to provide goods or services.
 - b) **Former State Employees:** For the two-year period from the date he or she left State employment, no former State officer or employee may enter into a contract in which he or she engaged in any of the negotiations, transactions, planning, arrangements, or any part of the decision-making process relevant to the contract while employed in any capacity by any State agency. For the twelve-month period from the date he or she left State employment, no former State officer or employee may enter into a contract with any State agency if he or she was employed by that State agency in a policy-making position in the same general subject area as the proposed contract within the twelve-month period prior to his or her leaving State service.
 - c) **Employees of the Grantee:** Employees of the Grantee shall comply with all applicable provisions of law pertaining to conflicts of interest, including but not limited to any applicable conflict of interest provisions of the California Political Reform Act. (Gov. Code, § 87100 et seq.)
 - d) **Employees and Consultants to the Grantee:** Individuals working on behalf of the Grantee may be required by DWR to file a Statement of Economic Interests (Fair Political Practices Commission Form 700) if it is determined that an individual is a consultant for Political Reform Act purposes.
- D.13) **DELIVERY OF INFORMATION, REPORTS, AND DATA:** The Grantee agrees to expeditiously provide throughout the term of this Grant Agreement, such reports, data, information, and certifications as may be reasonably required by the State.
- D.14) **DISPOSITION OF EQUIPMENT:** The Grantee shall provide to the State, not less than 30 calendar days prior to submission of the final invoice, an itemized inventory of equipment purchased with funds provided by the State. The inventory shall include all items with a current estimated fair market value of more than \$5,000.00 per item. Within 60 calendar days of receipt of such inventory the State shall provide the Grantee with a list of the items on the inventory that the State will take title to. All other items shall become the property of the Grantee. The State shall arrange for delivery from the Grantee of items that it takes title to. Cost of transportation, if any, shall be borne by the State.
- D.15) **DRUG-FREE WORKPLACE CERTIFICATION:** Certification of Compliance: By signing this Grant Agreement, the Grantee, its contractors or subcontractors hereby certify, under penalty of perjury under the laws of State of California, compliance with the requirements of the Drug-Free Workplace Act of 1990 (Gov. Code § 8350 et seq.) and have or will provide a drug-free workplace by taking the following actions:
- a) Publish a statement notifying employees, contractors, and subcontractors that unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited and specifying actions to be taken against employees, contractors, or subcontractors for violations, as required by Government Code Section 8355.
 - b) Establish a Drug-Free Awareness Program, as required by Government Code Section 8355 to inform employees, contractors, or subcontractors about all of the following:

- i) The dangers of drug abuse in the workplace,
 - ii) The Grantee's policy of maintaining a drug-free workplace,
 - iii) Any available counseling, rehabilitation, and employee assistance programs, and
 - iv) Penalties that may be imposed upon employees, contractors, and subcontractors for drug abuse violations.
- c) Provide, as required by Government Code Section 8355, that every employee, contractor, and/or subcontractor who works under this Grant Agreement:
- i) Will receive a copy of the Grantee's drug-free policy statement, and
 - ii) Will agree to abide by terms of the Grantee's condition of employment, contract or subcontract.

D.16) **EASEMENTS:** Where the Grantee acquires property in fee title or funds improvements to real property already owned in fee by the Grantee using State funds provided through this Grant Agreement, an appropriate easement or other title restriction providing for floodplain preservation and agricultural and/or wildlife habitat conservation for the subject property in perpetuity, approved by the State, shall be conveyed to a regulatory or trustee agency or conservation group acceptable to the State. The easement or other title restriction must be in first position ahead of any recorded mortgage or lien on the property unless this requirement is waived by the State.

Where the Grantee acquires an easement under this Agreement, the Grantee agrees to monitor and enforce the terms of the easement, unless the easement is subsequently transferred to another land management or conservation organization or entity with State permission, at which time monitoring and enforcement responsibilities will transfer to the new easement owner.

Failure to provide an easement acceptable to the State can result in termination of this Agreement.

D.17) **FINAL INSPECTIONS AND CERTIFICATION OF REGISTERED PROFESSIONAL:** Upon completion of the Project, the Grantee shall provide for a final inspection and certification by a California Registered Professional (i.e., Professional Civil Engineer, Engineering Geologist, that the Project has been completed in accordance with submitted final plans and specifications and any modifications thereto and in accordance with this Grant Agreement.

D.18) **GRANTEE'S RESPONSIBILITY.** The Grantee and its representatives shall:

- a) Faithfully and expeditiously perform or cause to be performed all project work as described in Exhibit A and in accordance with Project Exhibit B and Exhibit C.
- b) Accept and agree to comply with all terms, provisions, conditions, and written commitments of this Grant Agreement, including all incorporated documents, and to fulfill all assurances, declarations, representations, and statements made by the Grantee in the application, documents, amendments, and communications filed in support of its request for funding.
- c) Comply with all applicable California, federal, and local laws and regulations.
- d) Implement the Project in accordance with applicable provisions of the law.
- e) Fulfill its obligations under the Grant Agreement and be responsible for the performance of the Project.
- f) Obtain any and all permits, licenses, and approvals required for performing any work under this Grant Agreement, including those necessary to perform design, construction, or operation and maintenance of the Project. The Grantee shall provide copies of permits and approvals to the State.
- g) Be solely responsible for design, construction, and operation and maintenance of projects within the work plan. Review or approval of plans, specifications, bid documents, or other construction documents by the State is solely for the purpose of proper administration of funds by the State and shall not be deemed to relieve or restrict responsibilities of the Grantee under this Agreement.

- h) Be solely responsible for all work and for persons or entities engaged in work performed pursuant to this Grant Agreement, including, but not limited to, contractors, subcontractors, suppliers, and providers of services. The Grantee shall be responsible for any and all disputes arising out of its contracts for work on the Project, including but not limited to payment disputes with contractors and subcontractors. The State will not mediate disputes between the Grantee and any other entity concerning responsibility for performance of work.
- D.19) GOVERNING LAW: This Grant Agreement is governed by and shall be interpreted in accordance with the laws of the State of California.
- D.20) INCOME RESTRICTIONS: The Grantee agrees that any refunds, rebates, credits, or other amounts (including any interest thereon) accruing to or received by the Grantee under this Agreement shall be paid by the Grantee to the State, to the extent that they are properly allocable to costs for which the Grantee has been reimbursed by the State under this Agreement.
- D.21) INDEMNIFICATION: The Grantee shall indemnify and hold and save the State, its officers, agents, and employees, free and harmless from any and all liabilities for any claims and damages (including inverse condemnation) that may arise out of the Project and this Agreement, including, but not limited to any claims or damages arising from planning, design, construction, maintenance and/or operation of this Project and any breach of this Agreement. The Grantee shall require its contractors or subcontractors to name the State, its officers, agents and employees as additional insureds on their liability insurance for activities undertaken pursuant to this Agreement.
- D.22) INDEPENDENT CAPACITY: The Grantee, and the agents and employees of the Grantees, in the performance of the Grant Agreement, shall act in an independent capacity and not as officers, employees, or agents of the State.
- D.23) INSPECTION OF BOOKS, RECORDS, AND REPORTS: During regular office hours, each of the parties hereto and their duly authorized representatives shall have the right to inspect and to make copies of any books, records, or reports of either party pertaining to this Grant Agreement or matters related hereto. Each of the parties hereto shall maintain and shall make available at all times for such inspection accurate records of all its costs, disbursements, and receipts with respect to its activities under this Grant Agreement. Failure or refusal by the Grantee to comply with this provision shall be considered a breach of this Grant Agreement, and the State may withhold disbursements to the Grantee or take any other action it deems necessary to protect its interests.
- D.24) INSPECTIONS OF PROJECT BY STATE: The State shall have the right to inspect the work being performed at any and all reasonable times during the term of the Grant Agreement. This right shall extend to any subcontracts, and the Grantee shall include provisions ensuring such access in all its contracts or subcontracts entered into pursuant to its Grant Agreement with the State.
- D.25) LABOR CODE COMPLIANCE: The Grantee agrees to be bound by all the provisions of the Labor Code regarding prevailing wages and shall monitor all contracts subject to reimbursement from this Agreement to assure that the prevailing wage provisions of the Labor Code are being met. Current Department of Industrial Relations (DIR) requirements may be found at <http://www.dir.ca.gov/lcp.asp>. For more information, please refer to DIR's *Public Works Manual* at: <http://www.dir.ca.gov/dlse/PWManualCombined.pdf>. The Grantee affirms that it is aware of the provisions of Section 3700 of the Labor Code, which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance, and the Grantee affirms that it will comply with such provisions before commencing the performance of the work under this Agreement and will make its contractors and subcontractors aware of this provision.
- D.26) MODIFICATION OF OVERALL WORK PLAN: At the request of the Grantee, the State may at its sole discretion approve non-material changes to the portions of Exhibit A which concern the budget and schedule without formally amending this Grant Agreement. Non-material changes with respect to the budget are changes that only result in reallocation of the budget and will not result in an increase in the

amount of the State Grant Agreement. Non-material changes with respect to the Project schedule are changes that will not extend the term of this Grant Agreement. Requests for non-material changes to the budget and schedule must be submitted by the Grantee to the State in writing and are not effective unless and until specifically approved by the State's Program Manager in writing.

- D.27) NONDISCRIMINATION: During the performance of this Grant Agreement, the Grantee and its contractors or subcontractors shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex (gender), sexual orientation, race, color, ancestry, religion, creed, national origin (including language use restriction), pregnancy, physical disability (including HIV and AIDS), mental disability, medical condition (cancer/genetic characteristics), age (over 40), marital status, and denial of medial and family care leave or pregnancy disability leave. The Grantee and its contractors or subcontractors shall ensure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment. The Grantee and its contractors or subcontractors shall comply with the provisions of the California Fair Employment and Housing Act (Gov. Code, § 12990.) and the applicable regulations promulgated there under (Cal. Code Regs., tit. 2, § 11000 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing the California Fair Employment and Housing Act are incorporated into this Agreement by reference. The Grantee and its contractors or subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.
- The Grantee shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under the Grant Agreement.
- D.28) OPINIONS AND DETERMINATIONS: Where the terms of this Grant Agreement provide for action to be based upon, judgment, approval, review, or determination of either party hereto, such terms are not intended to be and shall never be construed as permitting such opinion, judgment, approval, review, or determination to be arbitrary, capricious, or unreasonable.
- D.29) PRIORITY HIRING CONSIDERATIONS: If this Grant Agreement includes services in excess of \$200,000, the Grantee shall give priority consideration in filling vacancies in positions funded by the Grant Agreement to qualified recipients of aid under Welfare and Institutions Code Section 11200 in accordance with Public Contract Code Section 10353.
- D.30) PROHIBITION AGAINST DISPOSAL OF PROJECT WITHOUT STATE PERMISSION: The Grantee shall not sell, abandon, lease, transfer, exchange, mortgage, hypothecate, or encumber in any manner whatsoever all or any portion of any real or other property necessarily connected or used in conjunction with the Project, or with the Grantee's service of water, without prior permission of the State. The Grantee shall not take any action, including but not limited to actions relating to user fees, charges, and assessments that could adversely affect the ability of the Grantee to meet its obligations under this Grant Agreement, without prior written permission of the State. The State may require that the proceeds from the disposition of any real or personal property be remitted to the State.
- D.31) REMEDIES NOT EXCLUSIVE: The use by either party of any remedy specified herein for the enforcement of this Grant Agreement is not exclusive and shall not deprive the party using such remedy of, or limit the application of, any other remedy provided by law.
- D.32) RETENTION: The State shall withhold ten percent (10%) of the funds requested by the Grantee for reimbursement of Eligible Project Costs until the Project is completed and Final Project Completion Report is approved. Any retained amounts due to the Grantee will be promptly disbursed to the Grantee, without interest, upon completion of the Project.
- D.33) RIGHTS IN DATA: The Grantee agrees that all data, plans, drawings, specifications, reports, computer programs, operating manuals, notes and other written or graphic work produced in the performance of this Grant Agreement shall be made available to the State and shall be in the public domain to the extent to which release of such materials is required under the California Public Records Act. (Gov.

Code, § 6250 et seq.) The Grantee may disclose, disseminate and use in whole or in part, any final form data and information received, collected and developed under this Grant Agreement, subject to appropriate acknowledgement of credit to the State for financial support. The Grantee shall not utilize the materials for any profit-making venture or sell or grant rights to a third party who intends to do so. The State shall have the right to use any data described in this paragraph for any public purpose.

- D.34) SEVERABILITY: Should any portion of this Grant Agreement be determined to be void or unenforceable, such shall be severed from the whole and the Grant Agreement shall continue as modified.
- D.35) SUSPENSION OF PAYMENTS: This Grant Agreement may be subject to suspension of payments or termination, or both if the State determines that:
- a) The Grantee, its contractors, or subcontractors have made a false certification, or
 - b) The Grantee, its contractors, or subcontractors violates the certification by failing to carry out the requirements noted in this Grant Agreement.
- D.36) SUCCESSORS AND ASSIGNS: This Grant Agreement and all of its provisions shall apply to and bind the successors and assigns of the parties. No assignment or transfer of this Grant Agreement or any part thereof, rights hereunder, or interest herein by the Grantee shall be valid unless and until it is approved by State and made subject to such reasonable terms and conditions as the State may impose.
- D.37) TERMINATION BY GRANTEE: Subject to State approval which may be reasonably withheld, the Grantee may terminate this Agreement and be relieved of contractual obligations. In doing so, the Grantee must provide a reason(s) for termination. The Grantee must submit all progress reports summarizing accomplishments up until termination date.
- D.38) TERMINATION FOR CAUSE: Subject to the right to cure under Paragraph 12, the State may terminate this Grant Agreement and be relieved of any payments should the Grantee fail to perform the requirements of this Grant Agreement at the time and in the manner herein, provided including but not limited to reasons of default under Paragraph 12.
- D.39) TERMINATION WITHOUT CAUSE: The State may terminate this Agreement without cause on 30 days advance written notice. The Grantee shall be reimbursed for all reasonable expenses incurred up to the date of termination.
- D.40) THIRD PARTY BENEFICIARIES: The parties to this Agreement do not intend to create rights in, or grant remedies to, any third party as a beneficiary of this Agreement, or any duty, covenant, obligation or understanding established herein.
- D.41) TIMELINESS: Time is of the essence in this Grant Agreement.
- D.42) TRAVEL – DAC, EDA, or SDAC PROJECT/COMPONENT: If a Project/Component obtains a DAC, EDA, or SDAC Cost Share Waiver, the Grantee may submit travel and per diem costs for eligible reimbursement with State funds. Travel includes the reasonable and necessary costs of transportation, subsistence, and other associated costs incurred by personnel during the term of this Grant Agreement. Any reimbursement for necessary travel and per diem shall be at rates not to exceed those set by the California Department of Human Resources. These rates may be found at: <http://www.calhr.ca.gov/employees/Pages/travel-reimbursements.aspx>. Reimbursement will be at the State travel and per diem amounts that are current as of the date costs are incurred. No travel outside the State of California shall be reimbursed unless prior written authorization is obtained from the State. All travel approved expenses will be reimbursed at the percentage rate of the DAC, EDA, or SDAC Cost Share Waiver. For example, if the Grantee obtains a 100% Waiver, 100% of all approved travel expenses can be invoiced for reimbursement. If the Grantee obtains a 50% Waiver, only 50% of eligible travel expenses will be reimbursed by these grant funds.

- D.43) TRAVEL – NON-DAC, EDA, or SDAC PROJECT/COMPONENT: The Grantee agrees that travel and per diem costs shall NOT be eligible for reimbursement with State funds, unless the Grantee's service area is considered a DAC, EDA, or SDAC. The Grantee also agrees that travel and per diem costs shall NOT be eligible for computing Grantee Local Cost Share. Travel includes the costs of transportation, subsistence, and other associated costs incurred by personnel during the term of this Grant Agreement.
- D.44) UNION ORGANIZING: The Grantee, by signing this Grant Agreement, hereby acknowledges the applicability of Government Code Sections 16645 through 16649 to this Grant Agreement. Furthermore, the Grantee, by signing this Grant Agreement, hereby certifies that:
- a) No State funds disbursed by this Grant Agreement will be used to assist, promote, or deter union organizing.
 - b) The Grantee shall account for State funds disbursed for a specific expenditure by this Grant Agreement to show those funds were allocated to that expenditure.
 - c) The Grantee shall, where State funds are not designated as described in (b) above, allocate, on a pro rata basis, all disbursements that support the program.
 - d) If the Grantee makes expenditures to assist, promote, or deter union organizing, the Grantee will maintain records sufficient to show that no State funds were used for those expenditures and that the Grantee shall provide those records to the Attorney General upon request.
- D.45) VENUE: The State and the Grantee hereby agree that any action arising out of this Agreement shall be filed and maintained in the Superior Court in and for the County of Sacramento, California, or in the United States District Court in and for the Eastern District of California. The Grantee hereby waives any existing sovereign immunity for the purposes of this Agreement.
- D.46) WAIVER OF RIGHTS: None of the provisions of this Grant Agreement shall be deemed waived unless expressly waived in writing. It is the intention of the parties here to that from time to time either party may waive any of its rights under this Grant Agreement unless contrary to law. Any waiver by either party of rights arising in connection with the Grant Agreement shall not be deemed to be a waiver with respect to any other rights or matters, and such provisions shall continue in full force and effect.

EXHIBIT E
AUTHORIZING RESOLUTION ACCEPTING FUNDS

RESOLUTION NO. FUD 17-03

**RESOLUTION OF THE BOARD OF DIRECTORS OF THE SISKIYOU COUNTY
FLOOD CONTROL AND WATER CONSERVATION DISTRICT APPROVING
APPLICATION FOR A 2017 SUSTAINABLE GROUNDWATER PLANNING GRANT
FOR FUNDING OF DEVELOPMENT OF GROUNDWATER SUSTAINABILITY PLANS
FOR THE SHASTA VALLEY, SCOTT VALLEY, AND BUTTE VALLEY
GROUNDWATER BASINS**

WHEREAS, Groundwater resources are essential to the people, environmental, plant and animal species, and economics of Siskiyou County, and;

WHEREAS, in September of 2014, the Governor of the State of California signed legislation requiring that groundwater resources throughout California be managed by local agencies through the Sustainable Groundwater Management Act (SGMA), and;

WHEREAS, SGMA authorizes local agencies to manage groundwater in a sustainable fashion, and;

WHEREAS, SGMA requires all high- and medium-priority groundwater basins, as designated by the California Department of Water Resources (DWR), to be managed by a Groundwater Sustainability Agency (GSA), and;

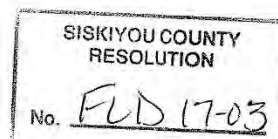
WHEREAS, in April of 2017, the Siskiyou County Flood Control and Water Conservation District (District) submitted their intent to the Department of Water Resources to serve as the GSA for the Shasta, Scott and Butte Valley Groundwater Basins (Basins), and;

WHEREAS, in July 2017, the District was approved as the GSA for the Basins by the Department of Water Resources (DWR), and;

WHEREAS, in September 2017, the DWR announced a grant funding opportunity under the 2017 Sustainable Groundwater Planning Grant Program pursuant to the Water Quality, Supply, and Infrastructure Improvement Act of 2014, for which the District would like to apply; and

WHEREAS, the Program requires that an applicant acting as the sole GSA over multiple basins submit one consolidated application.

NOW, THEREFORE, BE IT RESOLVED, by the Board of Directors of the Siskiyou County Flood Control and Water Conservation District that a consolidated application be made to the California Department of Water Resources to obtain a grant under the 2017 Sustainable Groundwater Planning Grant Program pursuant to the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1), and to enter into an



agreement to receive a grant for development of the Groundwater Sustainability Plans for the Shasta Valley, Scott Valley, and Butte Valley Groundwater Basins.

BE IT FURTHER RESOLVED that Terry Barber, CAO, or her designee, is hereby authorized and directed to file such application, and execute a grant agreement with the California Department of Water Resources.

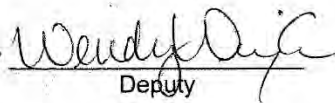
PASSED AND ADOPTED by the Board of Directors of the Flood Control and Water Conservation District at a regular meeting of said Board, held on the 7th day of November, 2017, by the following vote:

AYES: Directors Criss, Haupt, Valenzuela, Nixon and Kobseff
NOES: NONE
ABSENT: NONE
ABSTAIN: NONE



Michael N. Kobseff, Chair
Board of Directors

ATTEST:
COLLEEN SETZER,
COUNTY CLERK

By 
Deputy



COUNTY OF SISKIYOU COUNTY ADMINISTRATIVE OFFICE

Terry Barber, County Administrator
P.O. Box 750 • 1312 Fairlane Rd, Yreka, CA 96097
Phone: (530) 842-8005, Fax Number: (530) 842-8013
www.co.siskiyou.ca.us

November 27, 2018

Kelley L. List
Senior Engineering Geologist
California Department of Water Resources
901 P Street, 2nd Floor
SACRAMENTO, ca 94236-0001

Re: Grant Agreement 4600012838

Dear Ms. List:

This letter is informing you that at their October 30th meeting the Siskiyou County Flood Control and Water Conservation District authorized Director Haupt to sign the grant agreement between the District and the Department of Water Resources. Chair Haupt signed the agreement on my behalf as the acting Director of the District which serves as the Groundwater Sustainability Agency for the Shasta, Scott and Butte Valley Groundwater Basins. I recognize that this letter will be included as part of the grant agreement and will therefore require that the page numbers after 31 be edited in the grant.

Thank you,

A handwritten signature in cursive script that reads 'Terry Barber'.

Terry Barber
County Administrator

EXHIBIT F

REPORT FORMATS AND REQUIREMENTS

The following reporting formats should be utilized. Please obtain State approval prior to submitting a report in an alternative format.

PROGRESS REPORTS

Progress reports shall generally use the following format. This format may be modified as necessary to effectively communicate information. For the Project, or each component, discuss the following at the task level, as organized in Exhibit A:

- Percent complete estimate.
- Discussion of work accomplished during the reporting period.
- Milestones or deliverables completed/submitted during the reporting period.
- Meetings held or attended.
- Scheduling concerns and issues encountered that may delay completion of the task.

For each project, discuss the following at the project level, as organized in Exhibit A:

- Work anticipated for the next reporting period.
- Photo documentation, as appropriate.
- Any schedule or budget modifications approved by DWR during the reporting period.

COMPLETION REPORT

The Completion Report shall generally use the following format provided below for each Component or Project after completion.

Executive Summary

The Executive Summary should include a brief summary of project information and include the following items:

- Brief description of work proposed to be done in the original Grant application.
- Description of actual work completed and any deviations from Exhibit A. List any official amendments to this Grant Agreement, with a short description of the amendment.

Reports and/or Products

The following items should be provided, unless already submitted as a deliverable:

- A copy of the Groundwater Sustainability Plan (GSP) that meets all the requirements of the GSP Regulations (for GSP Development Projects), or verification (e.g., acceptance email, or other approved documentation from SGMA), that the GSP was submitted to DWR as required.
- A copy of any final technical report or study, produced for or utilized in this Project as described in the Work Plan
- Electronic copies of any data collected, not previously submitted
- Discussion of problems that occurred during the work and how those problems were resolved
- Final Component schedule showing actual progress versus planned progress

Additional information that may be applicable for Implementation Projects and/or Components includes the following:

- As-built drawings
- Final geodetic survey information
- Project or Component photos

Cost & Disposition of Funds

A list showing:

- Summary of Project costs including the following items:
 - Accounting of the cost of project expenditure
 - Include all internal and external costs not previously disclosed (i.e., additional cost share); and
 - A discussion of factors that positively or negatively affected the project cost and any deviation from the original Project cost estimate.

Additional Information

- Benefits derived from the Component, with quantification of such benefits provided, applicable for Implementation Components.
- A final project schedule showing actual progress versus planned progress as shown in Exhibit C.
- Certification from a California Registered Professional (Civil Engineer or Geologist, as appropriate) that the project was conducted in accordance with the approved work plan and any approved modifications thereto.
- Submittal schedule for the Post Performance Report.

GRANT COMPLETION REPORT

The Grant Completion Report shall generally use the following format. This format may be modified as necessary to effectively communicate information on the various projects in the SGWP Grant Program funded by this Grant Agreement, and includes the following:

Executive Summary

The Executive Summary consists of a maximum of ten (10) pages summarizing information for the grant as well as the individual components.

Reports and/or products

- Brief comparison of work proposed in the original 2017 SGWP Grant application and actual work done.
- Brief description of the Project or components completed and how they achieve either or both of the following:
 - Serve SDAC(s) and support groundwater sustainability planning and management in the basin (Implementation Projects); and/or
 - Support planning, development, and/or preparation of GSP(s) that will comply with and meet the requirements of the GSP Regulations (GSP Development Projects).
- Identify remaining work and mechanism for their implementation (Implementation Projects).
- If applicable (e.g., if a DAC, EDA, or SDAC Cost Share Waiver was approved), a discussion of the benefits to DAC, EDA, and/or SDAC as part of this Grant Agreement.

Cost & Disposition of Funds Information

- A summary of final funds disbursement for the Project, or each component.

Additional Information

- Summary of the submittal schedule for the Post Performance Reports applicable for the Project, or each of the components in this Grant Agreement.

EXHIBIT G

REQUIREMENTS FOR DATA SUBMITTAL

Surface and Groundwater Quality Data:

Groundwater quality and ambient surface water quality monitoring data that include chemical, physical, or biological data shall be submitted to the State as described below, with a narrative description of data submittal activities included in project reports, as described in Exhibit F.

Surface water quality monitoring data shall be prepared for submission to the California Environmental Data Exchange Network (CEDEN). The CEDEN data templates are available on the CEDEN website. Inclusion of additional data elements described on the data templates is desirable. Data ready for submission should be uploaded to your CEDEN Regional Data Center via the CEDEN website. (CEDEN website: <http://www.ceden.org>).

If a project's Work Plan contains a groundwater ambient monitoring element, groundwater quality monitoring data shall be submitted to the State for inclusion in the State Water Resources Control Board's Groundwater Ambient Monitoring and Assessment (GAMA) Program Information on the GAMA Program can be obtained at: http://www.waterboards.ca.gov/water_issues/programs/gama/. If further information is required, the Grantee can contact the State Water Resources Control Board (SWRCB) GAMA Program. A listing of SWRCB staff involved in the GAMA program can be found at: http://www.swrcb.ca.gov/water_issues/programs/gama/contact.shtml

Groundwater Level Data

The Grantee shall submit to DWR groundwater level data collected as part of this grant. Water level data must be submitted using the California Statewide Groundwater Elevation Monitoring (CASGEM) online data submission system. The Grantee should use their official CASGEM Monitoring Entity or Cooperating Agency status to gain access to the online submittal tool and submit data. If the data is from wells that are not part of the monitoring network, the water level measurements should be classified as voluntary measurements in the CASGEM system. If the Grantee is not a Monitoring Entity or Cooperating Agency, please contact your DWR grant project manager for further assistance with data submittal. The activity of data submittal should be documented in appropriate progress or final project reports, as described in Exhibit F. Information regarding the CASGEM program can be found at: <http://www.water.ca.gov/Programs/Groundwater-Management/Groundwater-Elevation-Monitoring--CASGEM>

EXHIBIT H

STATE AUDIT DOCUMENT REQUIREMENTS AND COST SHARE GUIDELINES FOR GRANTEES

The following provides a list of documents typically required by State Auditors and general guidelines for Grantees. List of documents pertains to both State funding and the Grantee's Cost Share and details the documents/records that State Auditors would need to review in the event of this Grant Agreement is audited. Grantees should ensure that such records are maintained for each funded project.

State Audit Document Requirements

Internal Controls

1. Organization chart (e.g., Agency's overall organization chart and organization chart for the State funded Program/Project).
2. Written internal procedures and flowcharts for the following:
 - a) Receipts and deposits
 - b) Disbursements
 - c) State reimbursement requests
 - d) Expenditure tracking of State funds
 - e) Guidelines, policy, and procedures on State funded Program/Project
3. Audit reports of the Agency internal control structure and/or financial statements within the last two years.
4. Prior audit reports on the State funded Program/Project.

State Funding:

1. Original Grant Agreement, any amendment(s) and budget modification documents.
2. A listing of all bond-funded grants, loans, or subventions received from the State.
3. A listing of all other funding sources for each Program/Project.

Contracts:

1. All subcontractor and consultant contracts and related or partners documents, if applicable.
2. Contracts between the Agency and member agencies as related to the State funded Program/Project.

Invoices:

1. Invoices from vendors and subcontractors for expenditures submitted to the State for payments under the Grant Agreement.
2. Documentation linking subcontractor invoices to State reimbursement, requests and related Grant Agreement budget line items.
3. Reimbursement requests submitted to the State for the Grant Agreement.

Cash Documents:

1. Receipts (copies of warrants) showing payments received from the State.
2. Deposit slips (or bank statements) showing deposit of the payments received from the State.
3. Cancelled checks or disbursement documents showing payments made to vendors, subcontractors, consultants, and/or agents under the grants or loans.
4. Bank statements showing the deposit of the receipts.

Accounting Records:

1. Ledgers showing entries for the Grantee's receipts and cash disbursements.
2. Ledgers showing receipts and cash disbursement entries of other funding sources.
3. Bridging documents that tie the general ledger to requests for Grant Agreement reimbursement.

Administration Costs:

1. Supporting documents showing the calculation of administration costs.

Personnel:

1. List of all contractors and Agency staff that worked on the State funded Program/Project.
2. Payroll records including timesheets for contractor staff and the Agency personnel who provided services charged to the program

Project Files:

1. All supporting documentation maintained in the project files.
2. All Grant Agreement related correspondence.

Cost Share Guidelines

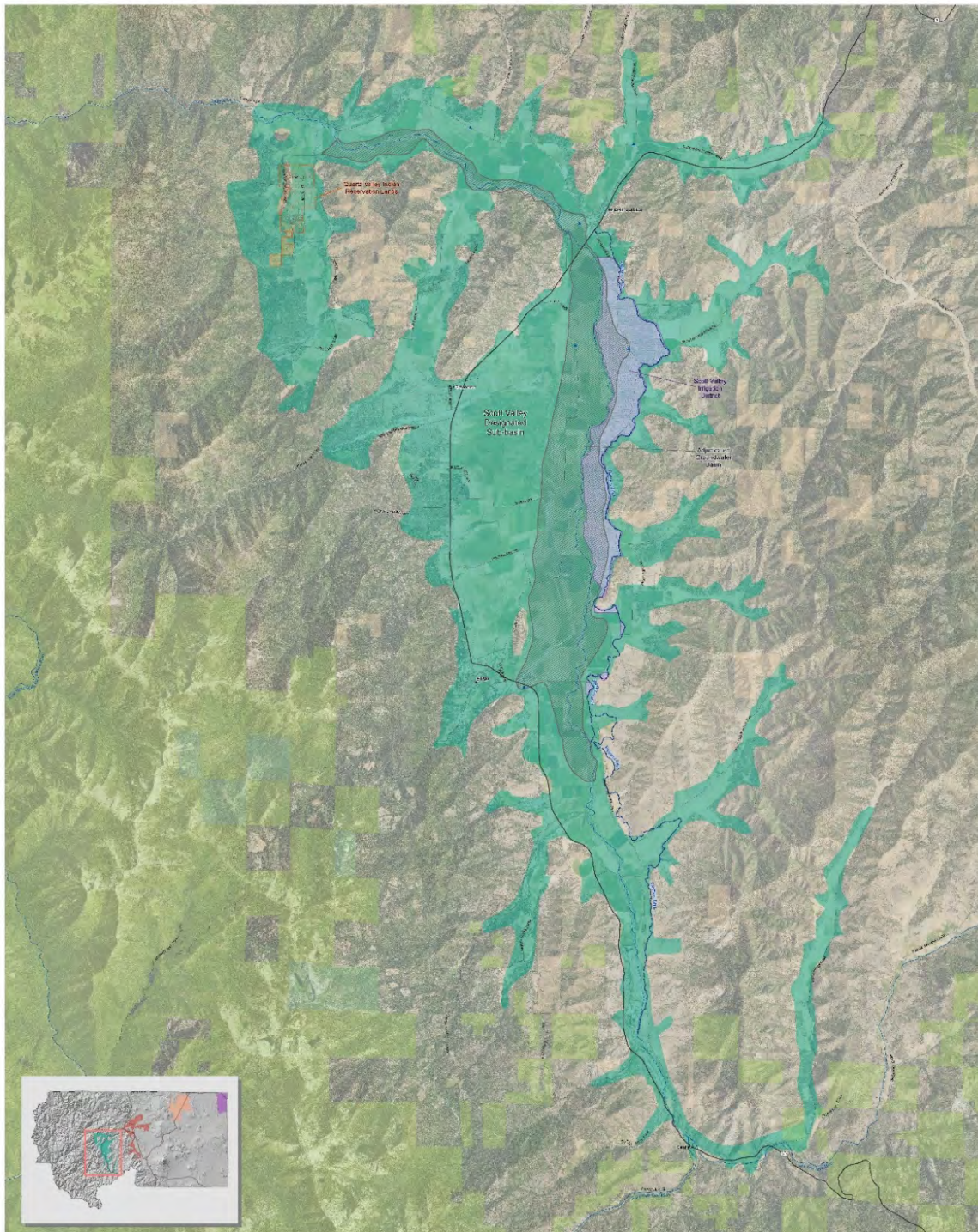
Cost Share consists of non-State funds, including in-kind services. In-kind services are defined as work performed (i.e., dollar value of non-cash contributions) by the Grantee (and potentially other parties) directly related to the execution of the funded project. Examples include volunteer services, equipment use, and use of facilities. The cost of in-kind service can be counted as cost share in-lieu of actual funds (or revenue) provided by the Grantee. Other cost share and in-kind service eligibility conditions may apply. Provided below is guidance for documenting cost share with and without in-kind services.

1. Although tracked separately, in-kind services shall be documented and, to the extent feasible, supported by the same methods used by the Grantee for its own employees. Such documentation should include the following:
 - a. Detailed description of the contributed item(s) or service(s)
 - b. Purpose for which the contribution was made (tied to project work plan)
 - c. Name of contributing organization and date of contribution
 - d. Real or approximate value of contribution. Who valued the contribution and how was the value determined? (e.g., actual, appraisal, fair market value, etc.). Justification of rate. (See item #2, below)
 - e. Person's name and the function of the contributing person
 - f. Number of hours contributed
 - g. If multiple sources exist, these should be summarized on a table with summed charges
 - h. Source of contribution if it was provided by, obtained with, or supported by government funds
2. Rates for volunteer or in-kind services shall be consistent with those paid for similar work in the Grantee's organization. For example, volunteer service of clearing vegetation performed by an attorney shall be valued at a fair market value for this service, not the rate for professional legal services. In those instances in which the required skills are not found in the recipient organization, rates shall be consistent with those paid for similar work in the labor market. Paid fringe benefits that are reasonable, allowable and allocable may be included in the valuation.
3. Cost Share contribution (including in kind services) shall be for costs and services directly attributed to activities included in the Grant Agreement. These services, furnished by professional and technical

personnel, consultants, and other skilled and unskilled labor may be counted as in-kind if the activities are an integral and necessary part of the project funded by the Grant Agreement.

4. Cash contributions made to a project shall be documented as revenue and in-kind services as expenditure. These costs should be tracked separately in the Grantee's accounting system.

EXHIBIT I
LOCAL PROJECT SPONSORS (NOT USED)



Scott Valley Designated Groundwater Basin

Groundwater Basin Prioritization Under the Sustainable Groundwater Management Act

This is an overview of the Scott Valley designated groundwater basin as granted as a medium-priority basin by the California Department of Water Resources. Currently, it has high potential to be a future designated basin that is subject to the requirements of the Sustainable Groundwater Management Act.

Disclaimer:
 This map was prepared by the California Department of Water Resources. The map is not intended to be used for any purpose other than informational purposes. The map is not intended to be used for any purpose other than informational purposes. The map is not intended to be used for any purpose other than informational purposes.



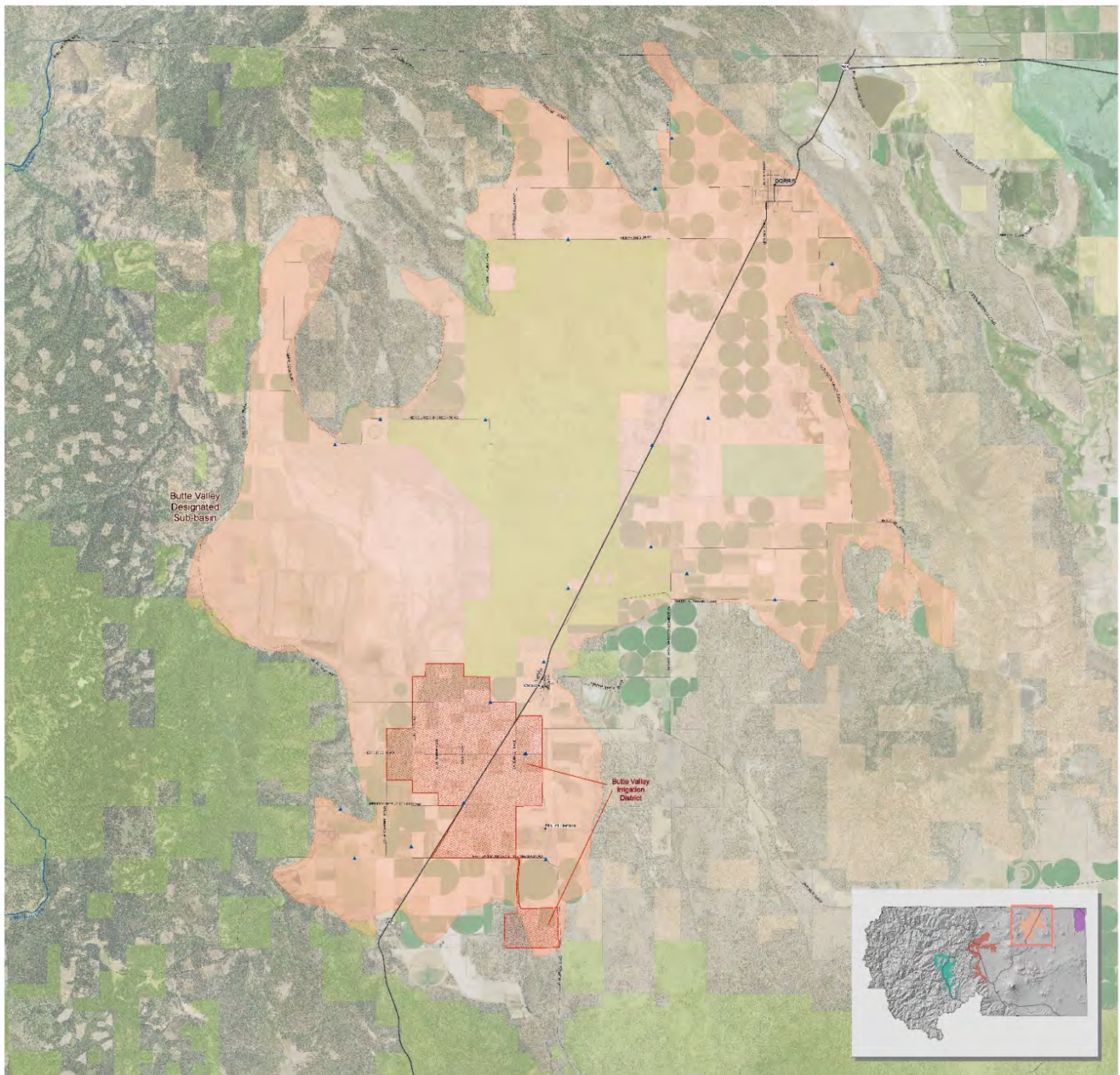
Map Created by the State
 California Department of Water Resources
 Date: 12/15/2015
 Prepared for the Scott Valley
 Designated Groundwater Basin



SCALE 1:35,000

0 1 2 Miles
 0 1 2 Kilometers
 Coordinate System: NAD83 StatePlane California Zone 5
 Datum: North American Datum of 1983
 Units: Meter
 Contour Interval: 100 Feet

Other	CA Dept Water Resources Modified Wells	Irrigation Entities and Districts	Federal Lands
<ul style="list-style-type: none"> INCORPORATED CHS State POPULATION Roads Major Rivers Land Parcels 	<ul style="list-style-type: none"> CA Dept Water Resources Modified Wells CA Dept Water Resources Modified Wells Scott Valley Scott Valley Scott Valley Tahoe 	<ul style="list-style-type: none"> Scott Valley Irrigation District Scott Valley Irrigation District Scott Valley Irrigation District Grant Valley Indian Reservation 	<ul style="list-style-type: none"> US Forest Land Management US Forest Land US Forest Land US Forest Land US Forest Land



Butte Valley Designated Groundwater Basin

Groundwater Basin Prioritization Under the Sustainable Groundwater Management Act

This is an overview of the Butte Valley groundwater basin designated as a medium-priority basin by the California Department of Water Resources (CDWR). This map details those portions of the Butte Valley groundwater basin that are subject to the requirements of the Sustainable Groundwater Management Act.

Disclaimer
 This map was prepared for informational purposes only. Lines, roads, geographical features, and other information shown on this map may not be up-to-date or may not be accurate. No liability for the accuracy of the data shown on this map is assumed.

This map was created by Esri/Mapbox, CountyNet and Rezonance. The basins, regulated from the State or California Department of Water Resources and other county and local agencies. This map was designed as a reference to give approximate locations of groundwater monitoring basins and wells in Stanislaus County.



Map Created by Holly Ryan
 Stanislaus County Agricultural Department
 November 2018
 Map Reviewed by Elizabeth Nixson
 Stanislaus County Natural Resources Department

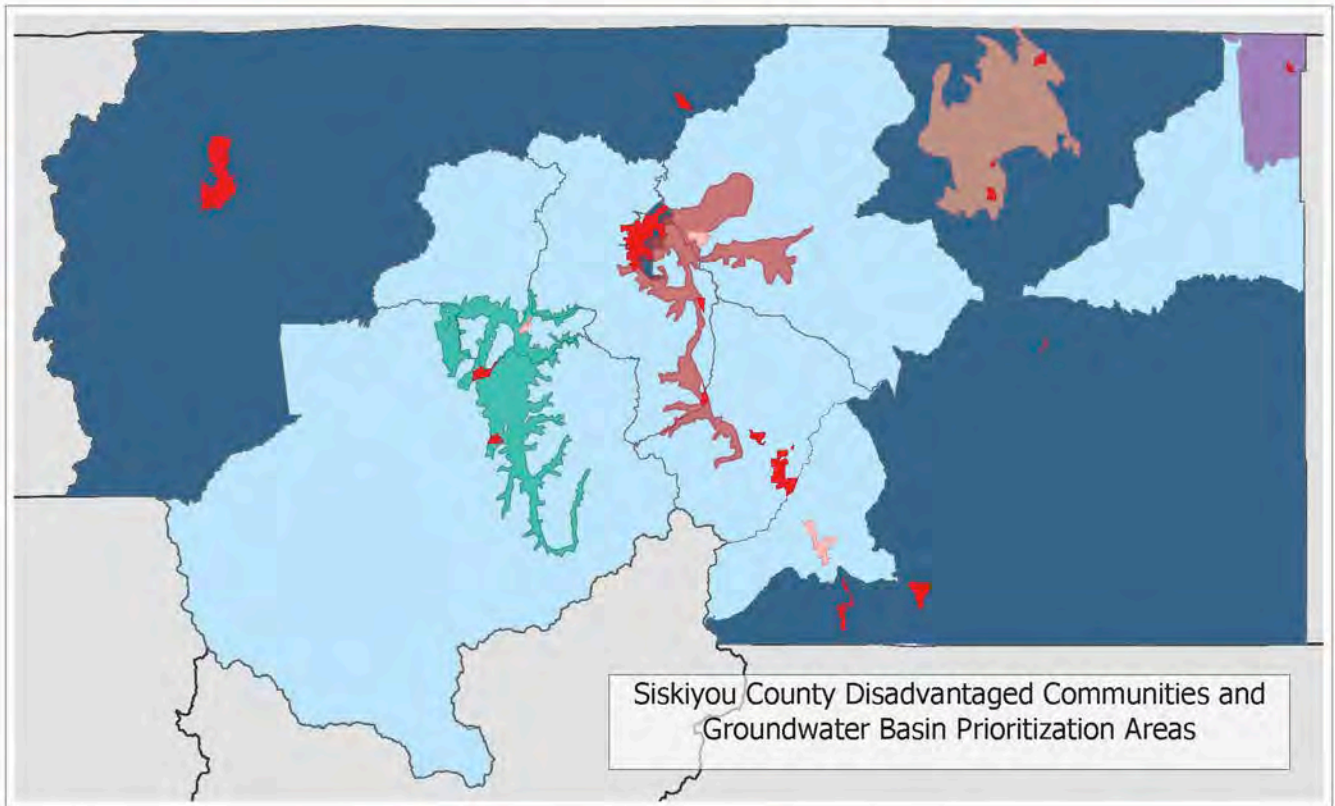


SCALE 1:35,000



Color Base Layer: NAD 83 USGS Topographic Data 1:75,000
 Metadata: USGS Catalog (2012)
 USGS: 30m resolution data

Cities	CA Dept Water Resources Monitored Wells	Butte Valley Irrigation District	Federal Lands
<ul style="list-style-type: none"> Incorporated Cities Towns 	<ul style="list-style-type: none"> Butte Valley Scott Valley Steens Valley Tulelake 	<ul style="list-style-type: none"> Butte Valley Irrigation District 	<ul style="list-style-type: none"> US Bureau of Land Management US Bureau of Reclamation US Fish and Wildlife Service USFS Klamath National Forest USFS Shasta-Trinity National Forest



Map created by Holly Baun, 2017
Credits Paul Shipman, Tanya Meeth



Description Map for evaluating Disadvantaged Communities (DAC) status throughout the state using US Census American Community Survey (ACS) Data (2010-2014).

Scale 1:1,025,000

Disadvantaged Community Places

- Severely Disadvantaged Community
- Disadvantaged Community

Disadvantaged Community Tracts

- Severely Disadvantaged Community
- Disadvantaged Community

CASGEM Basins

- Butte Valley
- Scott Valley
- Shasta Valley
- Tulelake

DEPARTMENT OF WATER RESOURCES

1416 NINTH STREET, P.O. BOX 942836
SACRAMENTO, CA 94236-0001
(916) 653-5791



COPY

December 6, 2018

Ms. Terry Barber
CAO
Siskiyou County
1312 Fairlane Road
Yreka, California 96097

2017 Proposition 1 Sustainable Groundwater Planning (SGWP) Grant; Agreement #4600012838

Dear Ms. Barber:

Enclosed is an original executed copy of Agreement #4600012838.

If you have any questions, please contact Patricia Vellines, Project Manager at (530)529-7344 or via email at Patricia.Vellines@water.ca.gov.

Sincerely,

Lana Quidgeon Graber
Associate Government Program Analyst
Financial Assistance Branch
Division of Integrated Regional Water Management

Enclosures

cc: Patricia Vellines, Project Manager