

PSP Cover Sheet

Proposal Title: Butte County Water Inventory/Needs Assessment
 Applicant Name: Butte County Water Division
 Mailing Address: 316 Nelson Avenue, Oroville, CA 95965
 Telephone: (530) 538-7621
 Fax: (530) 538-6891
 Email: _____

Amount of funding requested: \$ 770,000 for 2 years

Indicate the Topic for which you are applying (check only one box).

- | | |
|---|---|
| <input type="checkbox"/> Fish Passage/Fish Screens | <input type="checkbox"/> Introduced Species |
| <input type="checkbox"/> Habitat Restoration | <input type="checkbox"/> Fish Management/Hatchery |
| <input checked="" type="checkbox"/> Local Watershed Stewardship | <input type="checkbox"/> Environmental Education |
| <input type="checkbox"/> Water Quality | |

Does the proposal address a specified Focused Action? yes no

What county or counties is the project located in? Butte

Indicate the geographic area of your proposal (check only one box):

- | | |
|---|---|
| <input type="checkbox"/> Sacramento River Mainstem | <input type="checkbox"/> East Side Trib: _____ |
| <input checked="" type="checkbox"/> Sacramento Trib: <u>Butte & Big Chico Creek</u> | <input type="checkbox"/> Suisun Marsh and Bay |
| <input type="checkbox"/> San Joaquin River Mainstem <u>Feather River</u> | <input type="checkbox"/> North Bay/South Bay: _____ |
| <input type="checkbox"/> San Joaquin Trib: _____ | <input type="checkbox"/> Landscape (entire Bay-Delta watershed) |
| <input type="checkbox"/> Delta: _____ | <input type="checkbox"/> Other: _____ |

Indicate the primary species which the proposal addresses (check all that apply):

- | | |
|--|---|
| <input type="checkbox"/> San Joaquin and East-side Delta tributaries fall-run chinook salmon | <input checked="" type="checkbox"/> Spring-run chinook salmon |
| <input type="checkbox"/> Winter-run chinook salmon | <input checked="" type="checkbox"/> Fall-run chinook salmon |
| <input type="checkbox"/> Late-fall run chinook salmon | <input type="checkbox"/> Longfin smelt |
| <input type="checkbox"/> Delta smelt | <input checked="" type="checkbox"/> Steelhead trout |
| <input type="checkbox"/> Splittail | <input type="checkbox"/> Striped bass |
| <input type="checkbox"/> Green sturgeon | <input type="checkbox"/> All chinook species |
| <input type="checkbox"/> Migratory birds | <input type="checkbox"/> All anadromous salmonids |
| <input type="checkbox"/> Other: _____ | |

Specify the ERP strategic objective and target (s) that the project addresses. Include page numbers from January 1999 version of ERP Volume I and II:

Volume I: Central Valley Stream Flow (pp 48-56); Central Valley. Stream temperature (pp 57-65); Essential Fish habitats (pp 160-164) Chinook Salmon (pp 211-244); Steelhead trout (pp 225-237)
 Volume II: Butte Basin Ecological Management Zone (pp 246-274) Feather River Basin Ecological Management Zone (pp 275-304)

Indicate the type of applicant (check only one box):

- | | |
|---|---|
| <input type="checkbox"/> State agency | <input type="checkbox"/> Federal agency |
| <input type="checkbox"/> Public/Non-profit joint venture | <input type="checkbox"/> Non-profit |
| <input checked="" type="checkbox"/> Local government/district | <input type="checkbox"/> Private party |
| <input type="checkbox"/> University | <input type="checkbox"/> Other: _____ |

Indicate the type of project (check only one box):

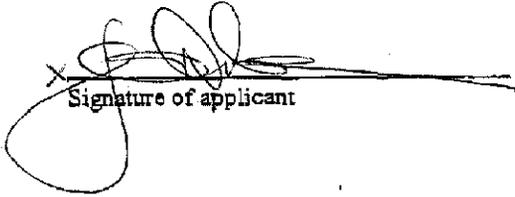
- | | |
|--|---|
| <input checked="" type="checkbox"/> Planning | <input type="checkbox"/> Implementation |
| <input type="checkbox"/> Monitoring | <input type="checkbox"/> Education |
| <input type="checkbox"/> Research | |

By signing below, the applicant declares the following:

- 1.) The truthfulness of all representations in their proposal;
- 2.) The individual signing the form is entitled to submit the application on behalf of the applicant (if the applicant is an entity or organization); and
- 3.) The person submitting the application has read and understood the conflict of interest and confidentiality discussion in the PSP (Section 2.4) and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent as provided in the Section.

Jane Dolan

Printed name of applicant


Signature of applicant

I. Title Page

A. Title

Butte County Water Inventory/Needs Assessment – Establishing a Countywide Water Resources Baseline for Effective Watershed Management Planning to Promote Multiple Benefits

B. Primary Contact

Butte County Water Commission
316 Nelson Avenue
Oroville, CA 95965

Attention: Ms. Susan Minasian
County Counsel

Phone: (530) 538-7291

Fax: (530) 538-7291

E-mail: sminasian@buttecountycalifornia.gov



II. Executive Summary

Project Description

Butte County Water Inventory/Needs Assessment is a project of Butte County and the Butte County Water Commission (BC/WC). The project will establish a countywide water resources baseline for effective watershed management planning to promote multiple benefits. Being located in the eastern part of California's Sacramento Valley, Butte County is within the geographic area of CALFED's Bay/Delta Program.

The objective of the proposed project is to develop a comprehensive surface and groundwater database for coordinated surface and groundwater water management programs. In achieving the project's objective, the BC/WC recognizes the utmost importance of having stakeholder participation and input in putting together a plan having broad local support that meets multiple needs.

Data from this project would be used to develop a watershed management program for the county. The program, depending on results obtained from the proposed project, could provide the following benefits: (1) increased flexibility, and hence, and efficient use of water stored in Lake Oroville, (2) facilitate water quality management in the San Francisco Bay/Delta through the development of water transfers and conjunctive uses, and (3) simultaneously provide, by reducing local demands, enhanced in-stream flows for spring-run Chinook salmon and steelhead trout in Butte Creek, Big Chico Creek, and the Feather River.

Project Approach

The water inventory/needs assessment will be conducted in two phases. Phase I is the actual water inventory/needs analysis, and Phase II is the installation of dedicated groundwater monitoring wells and extensionmeters in areas identified where such data is insufficient or not available. For Phase I, the BC/WC staff and consultant will perform the following key tasks: (1) review the historical development and current management of water resources in the county, (2) conduct a comprehensive inventory of surface water and groundwater supplies and demands, (3) arrange and facilitate a stakeholder workshop, and (4) prepare a report summarizing the findings of Phase I. Regarding Phase II, the BC/WC staff will be responsible for the installation of 12 continuous recording groundwater-monitoring wells and 3 extensionmeters.

Primary Ecological/Biological Objectives

Protecting and restoring habitat needed by spring-run Chinook salmon and steelhead trout within and outside of Butte County is the primary ecological/biological objective of the water inventory/needs assessment. The protection and restoration of the natural seasonal distribution of flows are important to maintain high quality aquatic and riparian habitats. However, the BC/WC also recognizes that in addition to the environmental need for water in the county, other agriculture and urban needs exists as well. To this end, the water inventory/needs assessment is needed to ensure that reliable sources of surface water and groundwater are provided in a balanced manner to promote all needs.

Cost

Phase I (water inventory/needs analysis) of the project will cost \$200,000. Costs for Phase II (installation of 12 groundwater-monitoring wells and 3 extensionmeters) is approximately \$570,000. The total cost of the project is \$770,000.

Third Party Impacts

Benefits to third parties will include reliable water supplies to other users in the County and State including agriculture and urban entities. The project should benefit habitat for other aquatic and riparian species along Butte County streams, as well as, carry natural flow patterns downstream to the Sacramento River and the greater San Francisco Bay/Delta. Agriculture and urban users should benefit by increased efficiency of water use through coordinated water transfers, conjunctive uses, and water conservation efforts.

Applicant Qualifications

The Butte County Water Commission has recommended the retention of the highly skilled and knowledgeable consulting team Camp Dresser & McKee Inc./Anthony Saracino to conduct Phase I (water inventory/needs analysis) of the Butte County Water Inventory/Needs Assessment. Consultant team members have extensive experience in planning watershed resources (surface water and groundwater management), developing and maintaining informational databases, working in collaboration with stakeholders to solve problems, and facilitating public informational workshops. Phase II of the project (installation of the groundwater monitoring wells and extensionmeters), will be performed by other contractors under the responsibility of the BC/WC.

Monitoring and Data Evaluation

Phase I of the Butte County Water Inventory/Needs Analysis project will be monitored and guided by stakeholder participation and involvement, starting at the beginning of the project and continuing through to completion. Data collected from various sources will be evaluated and input into a project database, which will be compatible with geographic information system (GIS) technology, where available.

In Phase II, groundwater data from the newly installed monitoring wells and other county wells will be continuously collected. The data collected will be applied to the county's groundwater model for model verification and groundwater analyses. Data collected from the three extensionmeters will be used to determine whether or not land subsidence is occurring in the southwestern part of Butte County.

Local Support/Coordination

The proposed project approach is decidedly a collaborative effort, one that involves willing stakeholders that live, work and recreate in Butte County. Together, stakeholders and BC/WC staff and consultant will establish a solid baseline condition of County's water resources. Two public meetings and one public workshop will be arranged by the BC/WC with facilitation services provided by the consultant. These meetings and the workshop will afford opportunities for stakeholder input and feedback regarding the project.

Compatibility with CALFED Objectives

The proposed project is compatible with, and supports other key CALFED objectives including water supply availability, water use efficiency, water transfers, and watershed management. Results of this project can help improve the comparability of water inventories from other watersheds within the greater San Francisco Bay/Delta region by establishing consistent procedures for performing and reporting this type of project.

III. Project Description

A. Proposed Scope of Work

The proposed scope of work contains three parts: an overview, the proposed work plan, and a project schedule. All three parts are presented below.

Overview

Butte County is located within the geographic area of CALFED's Bay/Delta Program, as illustrated. A key objective of the CALFED program is ecosystem quality, which is addressed in CALFED's "Ecosystem Restoration Program" (ERP). The goal of the ERP is "to improve and increase aquatic and terrestrial habitats, and to improve ecological functions in the San Francisco Bay-Delta to support sustainable populations of diverse and valuable plant and animal species." Implementation of the ERP is guided by its Strategic Plan.

The Butte Creek and other drainages within Butte County still provide good quality habitat for wild spring-run Chinook salmon, steelhead trout and other species. Watershed management plans are currently being prepared for Butte Creek and Big Chico Creek, both of which have received Category III funds (CVPIA, 1994) for improving the migration of spring-run Chinook salmon. Recent efforts to improve the spring-run Chinook salmon habitat include the removal of four dams on Butte Creek. Restoration efforts along Butte and Big Chico Creeks, however, must be coordinated with other county efforts. A water inventory/needs assessment is needed to ensure that a reliable source of water is available for habitat needs, as well as other uses within the county and state.



To build on the Butte Creek and Big Chico Creek efforts and plan for future ecosystem restoration work in the county, Butte County and the Butte County Water Commission (BC/WC) is proposing to conduct a countywide water inventory/needs assessment. The objective of this project is to develop a comprehensive surface and groundwater database for coordinated surface and groundwater water management programs. The BC/WC recognizes the utmost importance of having stakeholder participation and input in achieving the project's objective.

The data from the proposed project would be used to develop a watershed management program for Butte County. Depending upon the data developed and the conclusions reached, such a program could provide the following benefits: (1) increased flexibility, and hence, efficient use of water stored in Lake Oroville, (2) facilitate water quality management in the Delta through the development of a conjunctive use and water transfer program, and (3) simultaneously provide, by reducing local water demands, enhanced in-stream flows for spring-run Chinook and steelhead trout in Butte and Big Chico Creeks and the Feather River.

Proposed Work Plan

Balancing the multiple water needs both within and outside of the County with available supplies is a key long-term goal of the County. The proposed work plan for conducting a countywide water inventory/needs assessment is a first step towards meeting this goal. The water inventory/needs assessment is in two phases. Phase I involves conducting the water inventory/needs analysis. Phase II will be the installation of groundwater monitoring wells and extension meters to augment existing data collection efforts made by the development of the Butte Basin Groundwater Model (BBGM). The general approach to the technical analysis of the project makes optimal use of previously compiled data.

Phase I – Water Inventory/Needs Analysis

Task 1. Project Administration – The BC/WC staff and consultant will conduct project administration activities. These activities will include managing contracts, communicating with project team members and with CALFED, budgeting, scheduling, invoicing, developing monthly progress reports, and conducting 12 monthly project team meetings. Included in this task, are two public informational meetings for stakeholder participation and input.

Task 2. Historical Development and Current Management of Water Resources – Under this task a review of the historical development of water resources in Butte County will be conducted. This work will include water (surface and groundwater) sources, distribution, water rights, end uses, and the pertinent technical, social, environmental, and political aspects of water development in the county. In addition, current water management programs of various water companies/districts and of neighboring counties, where such programs may affect Butte County, will be reviewed as part of this task. The BC/WC staff and consultant will meet with representatives of the water companies and districts to obtain their local knowledge of water resources. A technical memorandum (TM No. 1) summarizing historical water development and trends with respect to the agricultural, urban, and environmental needs in the county will be prepared.

Task 3. Conduct Inventory of Surface Water and Groundwater Supplies and Demands – The BC/WC staff and their consultant will conduct a comprehensive inventory of all existing surface water and groundwater supplies and demands. For surface water supplies, the assessment will address hydrologic features such as precipitation, runoff, streams and other watercourses (i.e., channels, ditches, etc.), drainage capacities and stream flows where available, and the channelization of water. Current water deliveries made, the amount of water available for existing uses (environmental with particular emphasis on the in-stream flow needs of salmon and steelhead trout, agricultural, and urban), and water rights (adjudicated and pre-1914) will be part of the analysis. For groundwater supplies, the assessment will include area geology, soils, soil percolation, well data, groundwater basins, groundwater recovery, biennial (spring, fall) variations, subsidence, safe yields, groundwater recharge zones, and current demand requirements. In addition to surface water and groundwater supplies, potential sources of reclaimed water will be identified. Data will be gleaned from available information, and meetings with local water companies/districts will be conducted to obtain their input regarding surface water and groundwater supplies in the county. A technical memorandum (TM No. 2) that summarizes the information obtained in this task will be prepared. Maps showing the important surface water and groundwater features of the county will be developed in GIS, where available, or other electronic media. TM No. 2 will be provided to workshop participants for review prior to the workshop, which is discussed below.

Task 4. Conduct Stakeholder Workshop - The BC/WC staff and their consultant will conduct a workshop for stakeholder participation. Stakeholders, through a consensus building process, will identify, discuss, and prioritize key concerns regarding water supply and demands in the county. Key issues such as water quality (nitrates, pesticides, and agricultural runoff), flooding/storm run-off,

environmental issues (water conservation, in-stream uses, Endangered Species Act, water supply) and others (erosion, levee maintenance, loss of farmland, etc.) will be addressed at the workshop. Preliminary concepts for solving key concerns will be identified as an important outcome of the workshop. A Technical memorandum (TM No. 3) will be prepared that summarizes the results of the workshop.

Task 5. Prepare Water Inventory Report – A report summarizing the approach, methodology, and results (findings and conclusions) regarding the investigation of existing water resources and related concerns in Butte County will be prepared. Recommendations for future actions will be identified in the report. The report will be prepared in a reader-oriented style with emphasis on graphic display of findings.

Phase II – Installation of Groundwater Monitoring Wells and Extensionmeters

Successful assessment of the benefits and risks of a groundwater basin water management program requires a complete understanding of the basin’s hydrogeology and the relationship between surface water and groundwater.

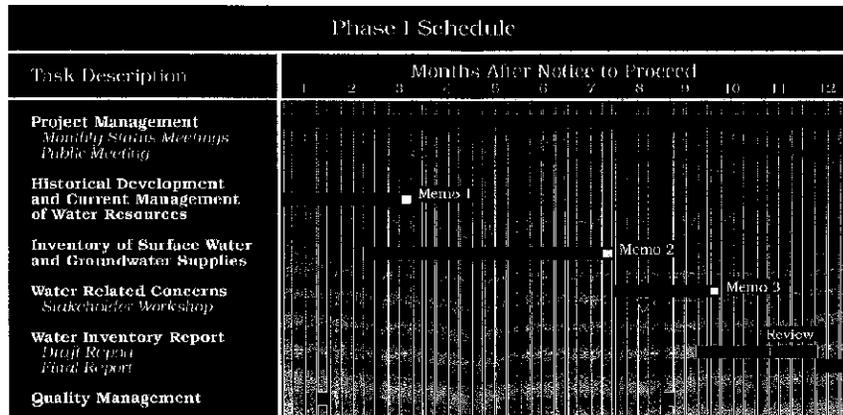
Task 1. Install Twelve Groundwater Monitoring Wells – The BC/WC staff has identified twelve locations where installation of groundwater monitoring wells will enhance the County’s existing groundwater monitoring well grid, improving our understanding of the basin. Also, groundwater data obtained from these wells will be used to augment existing data collection efforts for validating the county’s groundwater model. The model is presently being developed and updated.

Task 2. Install Three Extensionmeters – Overpumping of groundwater can and has resulted in significant land subsidence problems within the greater Sacramento Valley. Monitoring must be performed in order to determine the amount of water that may be safely extracted from areas susceptible to subsidence. The BC/WC has identified three areas in the southwester portion of Butte County where the potential for land subsidence exists. The BC/WC will install extensionmeters in these three areas.

Project Schedule

Phase I, water inventory /needs analysis, will be completed in 12 months. A project schedule for Phase I is shown at right, which identifies key milestones, project deliverables and review periods.

The installation of groundwater monitoring wells and extensionmeters will be performed after completion of Phase 1.



B. Geographic Location

Located in the eastern part of California's Sacramento Valley, Butte County's geographic borders extend from the Sacramento River on the west to the Plumas County and Sierra County boundaries on the east. To the north is the county line of Tehama County, and to the south are the county lines of Sutter County and Yuba County. Butte County consists topographically of fertile farmlands in the Sacramento Valley that gradually rise to the foothills of the Sierra Nevada Mountains. In addition to Butte and Big Chico Creeks, other significant watersheds include Dry Creek, Mud Creek, Rock Creek, and the Feather River that discharges into Lake Oroville, which is the initial water supply for the State Water Project (SWP). A U.S.G.S. topographic map of the county is provided at the back of this section.

IV. Ecological/Biological Benefits

Ecological/Biological Objectives

The primary ecological/biological objective of conducting the proposed water inventory/needs assessment for Butte County is the protection and restoration of habitat needed by salmon and steelhead trout within the major watersheds of the County. The water inventory/needs assessment is needed to ensure a reliable source of water is provided to the environment, as well as other users within the County and State. The protection and restoration of the natural seasonal distribution of flows are important to maintain high quality aquatic and riparian habitats. Maintenance of the natural flow distribution is the basis for the expected benefits.

The primary environmental stressors addressed by this project include water diversion, un-natural seasonal flow rates, and warmer water temperature. These stressors have a direct impact on the following primary species of concern: chinook salmon (spring-run and fall-run) and steelhead trout, along with their essential fish habitats for migrating, holding, spawning, and rearing the young.

The benefits of managing water supplies can be quantified by monitoring: (1) instream flow rates and temperature levels to ensure the flows and temperatures are maintained at established seasonal levels; (2) populations of returning salmon and trout; and (3) the level of participation by stakeholders in the water management program established for the County. In addition, this project should also benefit habitat for other aquatic and riparian species along Butte County streams, as well as, carry the natural flow patterns downstream to the Sacramento River and the San Francisco Bay/Delta. Benefits to third parties include reliable water supplies to other users in the County and State including agricultural and urban. The benefits to the environment and fish populations are anticipated to continue as long as the flow targets for the various streams are maintained. The durability of a water management program will also require a buy-in from all stakeholders. Partial buy-in from the stakeholders will not generate a long-term solution.

The proposed project will answer the scientific question: Can the water required for the environment in Butte County be balanced with the available supplies and other users? This water inventory/needs assessment is one component of an ecosystem-based approach that is being applied in Butte County. Results of the project will be integrated into the watershed management plans being developed presently for Butte Creek and Big Chico Creek watersheds in Butte County. Principles of adaptive management will be applied because demand for water will change with changes in populations, environmental needs, and agricultural practices. Updating water needs would be an ongoing task in any watershed management program. Creation of the comprehensive database will facilitate future water needs analysis.

Linkages

A number projects have been implemented in Butte County with the same objective as the proposed water inventory/needs assessment, that being the protection and restoration of habitat needed by salmon and steelhead trout. These projects include: Category III funded-project to improve fish passage at Mutual Dam, Parrot-Phelan Dam, and Western Canal Water District diversions on Butte Creek; Category III and FY 1997 CALFED funded-projects to improve fish passage at Adams Dam and Gorrill Dam diversions on Butte Creek; Category III funded-project to assist in the development of the Butte Creek Watershed Management Strategy; FY 1997 and FY 1998 funded projects to assist in the

acquisition and restoration of riparian habitat along Butte Creek; and FY 1997 funded-project to develop the Big Chico Watershed Plan.

The proposed water inventory/needs assessment project can be linked to several future ERP actions and goals. Strategic goals and targets of the ERP linked to this proposal include:

- Goal 1: Endangered Species
 - Restore spring-run Chinook salmon
 - Restore self-sustaining Central Valley Steelhead
 - Restore self-sustaining fall-run Chinook salmon
- Goal 2: Ecosystem Processes and Biotic Communities
 - Create flow and temperature regimes in regulated rivers such as the Feather River
 - Make sure high flows are frequent in regulated streams such as the Feather River
- Goal 3: Habitats
 - Restore aquatic habitats in the Central Valley; protect and enhance the quality of existing freshwater fish habitat

Restoration of stream flows to a more natural seasonal variation addresses specific sections of the January 1999 version of the ERP. In Volume 1, these sections include Central Valley stream flow (pp. 48-56); Central Valley stream temperature (pp. 57-65); essential fish habitats (pp. 160-164); Chinook salmon (pp. 211-224); and Steelhead trout (pp. 225-237). In Volume 2, the proposed project is linked to the Butte Basin Ecological Management Zone (pp. 246-274); and the Feather River Basin Ecological Management Zone (pp. 275-304).

System-Wide Ecosystem Benefits

The proposed water inventory/needs assessment will help CALFED to achieve two of its overall objectives: ecosystem quality and water supply. Restoring or mimicking natural flow variations in the streams will improve aquatic and riparian habitat, ecological functions, and populations of critical species such as the salmon and steelhead trout. By defining the balance between water supplies and the needs of the local watersheds (environmental, agricultural, and urban) and the San Francisco Bay-Delta region, the current mismatch experienced throughout the entire region could be reduced. System-wide ecosystem benefits (synergistic benefits) of the proposed project include the linkage to the habitat restoration projects currently being performed on Butte Creek. Providing a reliable water supply will ensure sufficient water is available for the salmon and trout that are returning to the newly opened sections of the stream. As mentioned earlier, a water inventory/needs assessment is a required component of watershed management plans being developed for Butte Creek and Big Chico Creek.

Compatibility with Non-Ecosystem Objectives

The proposed project is compatible with, and supports other key CALFED objectives including water supply availability, water use efficiency, water transfers, and watershed management. The water basins encompassed by this proposed project are important if there are to be water transfer and conjunctive use programs in the Butte Basin. The Butte Basin is one of California's larger groundwater supplies and the one most easily replenished by gravity flows of surface waters. Development of water transfer and conjunctive use programs will require broad local support, which in turn requires clear and comprehensive data bases, effective presentation of those data, and adequate models of potential costs, benefits, and means to avoid potential impacts to third parties. Results of this project

can help improve the comparability of water inventories from other watersheds within the greater San Francisco Bay/Delta region by establishing consistent procedures for performing and reporting this type of project.

V. Technical Feasibility and Timing

In performing the proposed project, the BC/WC seeks to establish a solid and thorough understanding of water resources within Butte County as an essential first step toward developing watershed management plans. The BC/WC could have taken the approach to look at each watershed in the county on a case by case basis, developing watershed specific baseline conditions and management plans. However, the BC/WC believes it more prudent to first develop an understanding of the big picture, countywide, in order to identify critical watersheds with challenging and perhaps more urgent water resources needs than other watersheds. Prioritizing the county's watersheds based on their respective needs and degree of urgencies will aid the county to effectively allocate funds where most needed.

Money, through Category III funding of the 1994 CVPIA and other sources, has been targeted for developing watershed management plans regarding the Butte Creek and Big Chico Creek watersheds and associated ecosystem restoration efforts. The BC/WC desires to expand such habitat restoration efforts in other watersheds of the county. However, BC/WC also realizes that a balanced approach is necessary in order to meet the important water needs of agriculture and urban communities. By taking a countywide approach to watershed management planning with a water inventory/needs assessment as the first step, the BC/WC believes that feasible projects with multiple benefits in prioritized watersheds will be identified and implemented successfully. Such projects will not only provide in-county benefits, but also be beneficial downstream in the greater San Francisco Bay/Delta.

The BC/WC anticipates that the proposed project will take about two years to complete. At this time, there are no foreseen delays that would prevent completion of the proposed project, since it is primarily a planning effort. CEQA and NEPA environmental compliance will not be required in the preparation of the proposed countywide water inventory/needs assessment.

VI. Monitoring and Data Collection Methodology

Phase I of the Butte County Water Inventory/Needs Assessment project will be monitored and guided by stakeholder participation and involvement, starting at the beginning of the project and continuing through to completion. Data sources will include, but not be limited to, water purveyors in Butte County, Butte Basin Water Users Association (groundwater model), the Department of Water Resources, U. S. Geologic Survey, U.S. Bureau of Reclamation, Department of Fish and Game (Natural Diversity Database), Department of Conservation (farmland mapping), U.S. Army Corps of Engineers, and the U.S. Fish and Wildlife Service. Once the data is collected and reviewed, pertinent information will be input into a project database. The project database will also include data that is compatible with geographic information system (GIS) technology, where available.

In Phase II, if implemented, groundwater data from the newly installed monitoring wells and other county wells will be continuously collected. The data collected will be applied to the county's groundwater model for model verification and groundwater analyses. Data collected from the three extensionmeters will be used to determine whether or not land subsidence is occurring in the southwestern part of Butte County.

VII. Local Involvement

The proposed project approach is decidedly a collaborative effort, one that involves willing stakeholders that live, work and recreate in Butte County. Stakeholders include water districts, concerned citizen groups, non-government organizations (NGO), and agencies (county, state, and federal). Together, stakeholders and BC/WC staff and consultant will establish a solid baseline condition of County's water resources. In future phases, environmentally sound watershed management plans will be developed and implemented to effectively address the multiple demands in and outside of the County. With the implementation of these watershed management plans, the County will also, in part, be enhancing downstream water needs in the greater San Francisco Bay/Delta.

Two public meetings and one public workshop will be arranged by the BC/WC with facilitation services provided by the consultant. These meetings and the workshop will afford opportunities for stakeholder input and feedback regarding the project. The public meetings and workshop are scheduled approximately at three-month intervals throughout the project, which have been identified on the project schedule. The BC/WC staff and consultant will prepare all pertinent materials, present information to workshop participants, and develop follow-up notes or memorandums.

VIII. Cost

Provided in Table 1 is the budget by task for the proposed project. The project budget is also provided on a quarterly basis as presented in Table 2.

<i>Task Description</i>	<i>Direct Labor Hours</i>	<i>Direct Salary and Benefits</i>	<i>Service Contracts</i>	<i>Material and Acquisition Costs</i>	<i>Misc. and Other Direct Costs</i>	<i>Overhead and Indirect Costs</i>	<i>Total Cost</i>
Phase I							
1 - Project Management			13,653				13,653
2 - Historical Development and Current Management of Water			17,514				17,514
3 - Inventory of Surface & Groundwater Supplies			92,902				92,902
4 - Conduct Stakeholder Workshop			44,091				44,091
5 - Prepare Water Inventory Report			31,940				31,940
Phase II							
6 - Monitoring Well Installation			120,000				120,000
7 - Extensionmeter Installation			450,000				450,000

<i>Task Description</i>	<i>Quarterly Budget Oct-Dec 99</i>	<i>Quarterly Budget Jan-Mar 00</i>	<i>Quarterly Budget Apr-Jun 00</i>	<i>Quarterly Budget Jul-Sep 00</i>	<i>Quarterly Budget Oct-Dec 00</i>	<i>Quarterly Budget Jan-Mar 01</i>	<i>Quarterly Budget Apr-Jun 01</i>	<i>Quarterly Budget Jul-Sep 01</i>	<i>Total Cost</i>
Phase I									
1 - Project Management	3,413.25	3,413.25	3,413.25	3,413.25					13,653
2 - Historical Development and Current Management of Water	17,514								17,514
3 - Inventory of Surface & Groundwater Supplies	13,258	39,772	39,772						92,802
4 - Conduct Stakeholder Workshop	22,045.50			22,045.50					44,091
5 - Prepare Water Inventory Report				31,940					31,940
Phase II									
6 - Monitoring Well Installation					30,000	30,000	30,000	30,000	120,000
7 - Extensionmeter Installation					112,500	112,500	112,500	112,500	450,000
TOTAL	56,230.75	43,185.25	43,185.25	57,398.75	142,500	142,500	142,500	142,500	770,000

IX. Cost Sharing

The Butte County Board of Supervisors has made a significant commitment towards addressing their water resource needs. The investments made toward this effort include the creation of the Butte County Water Commission, the development of the Commission's bylaws, and the staff who serve them and attend their monthly meetings and implement their goals. Letters from the Butte County Board of Supervisors and the Butte County Water Commission are provided on the following pages.

In addition, the County, having a 35 percent cost-share, is a member of the Butte Basin Water Users Association, which by the end of 1998 had spent a total of \$600,000 developing a hydrologic groundwater model. The model is instrumental in understanding the exchange between surface water and groundwater within the basin.

Recognizing there are many diverse programs and projects underway in the County, and as a result of these efforts there exists a need to organize these activities from a regional perspective. The proposed project addresses this need and seeks to establish a plan that is accompanied by the tools necessary to support and implement it. The result of this effort will be a strong, focused program that facilitates the County's participation in many different partnerships that ultimately results with the implementation of on the ground projects, in meeting the regions stated ecological and biological needs.



BOARD OF SUPERVISORS

ADMINISTRATION CENTER

25 COUNTY CENTER DRIVE - OROVILLE, CALIFORNIA 95965

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Fourth District

FRED C. DAVIS
Fifth District

April 15, 1999

Wendy Halverson Martin
Restoration Coordinator
CalFed Bay Delta Program
Restoration Coordination Program
1416 9th Street
Room 1155
Sacramento, CA 95814

Re: CalFed Bay Delta Restoration Coordination Program; Butte County
Water Inventory/Needs Application for CalFed Funding

Dear Ms. Halverson Martin:

As you know, a significant number of salmonid habitat restoration efforts have recently taken place in Butte County. Widespread speculation has occurred concerning whether the aquifer known as the Butte Basin contains a sufficient quantity of groundwater, over and above that needed for water use in the County, to assist in providing additional water for restoration efforts.

Identifying a reliable water supply in order to establish adequate base flows is a critical restoration methodology component. As you know, however, identifying supply sources which can be tapped to contribute to base flows can be a difficult and contentious process, unless competing interests are balanced in a consensus-based process.

Butte County is currently attempting to establish a County groundwater inventory/analysis program in order to more completely assess the demands on its water supply. The County has already spent approximately \$200,000 over the last seven years contributing to the creation and maintenance of a groundwater model by the Butte Basin Water Users Association, of which the County is a member. The various Butte County water user-members of the Association have spent approximately \$600,000 on the creation and maintenance of the groundwater model.

I have attached two exhibits for your perusal. The first indicates the various members of the Butte Basin Water Users Association, the

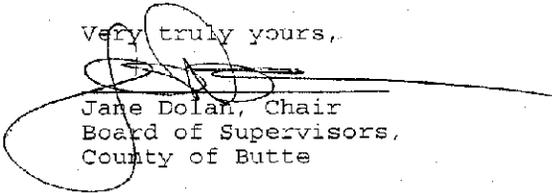
Wendy Halverson Martin
April 15, 1999
Page Two

Association's expenses for the period of 1992-98 and the contributions of each member. The second shows a summary of the Association's expenses for the same period. The GWM(HCI) category reflects most of the expenses which have been incurred for the groundwater model (\$563,945.27). The fact that most of the large water users in Butte County belong to a water users association and have collaborated on an expensive project in an effort to educate themselves about local water supplies is a good indicator that a local water inventory analysis is the best way to resolve the difficult issues necessary to restore fish populations.

As the Chair of the Butte County Board of Supervisors, I have been significantly involved in the County's efforts to build consensus around water issues. I strongly believe that Butte County can bring the various water user groups together through our inventory/analysis program to complete an accurate assessment of whether water users in Butte County can assist in providing water supply sources for restoration programs.

The Butte County Water Inventory/Needs Proposal provides an excellent vehicle for the County to participate in the identification of water supply sources for restoration programs. I urge you to support Butte County's proposal.

Very truly yours,



Jane Dolan, Chair
Board of Supervisors,
County of Butte

Enclosure

BUTTE BASIN
WATER USERS ASSOCIATION

	1992	1993	1994	1995	1996	1997	1998	TOTALS
Funding Payments								
January 4 1999								
Oroville-Wyandotte	\$ 3,036.11	\$ 4,864.32	\$ 1,912.94	\$ 2,456.43	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	\$ 12,269.80
Richvale ID	\$ 10,019.16	\$ 12,324.35	\$ 8,130.69	\$ 18,511.65	\$ 4,570.75	\$ 11,230.72	\$ 14,471.42	\$ 79,258.74
Biggs-West Gridley	-----	\$ 15,624.35	\$ 7,966.89	\$ 20,219.93	\$ 4,147.72	\$ 10,222.38	\$ 13,167.08	\$ 71,348.15
Butte Water District	\$ 8,318.95	\$ 9,600.34	\$ 6,751.44	\$ 16,005.66	\$ 3,792.75	\$ 9,329.96	XXXXXXXXXX	\$ 53,799.10
County of Butte	\$ 50,451.38	\$ 35,803.98	\$ 30,799.68	\$ 69,530.68	\$ 18,239.82	\$ 42,546.89	\$ 54,810.16	\$ 302,182.59
Western Canal WD	\$ 17,002.22	\$ 41,491.28	\$ 13,798.43	\$ 28,800.65	\$ 7,755.69	\$ 19,077.14	\$ 24,590.44	\$ 152,515.85
Paradise ID	\$ 2,975.39	\$ 4,767.04	\$ 2,414.67	\$ 4,428.45	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	\$ 14,585.55
Butte Sutter Basin	\$ 6,072.23	\$ 6,000.74	\$ 4,927.87	\$ 12,679.70	\$ 2,766.77	\$ 6,814.92	\$ 4,386.74	\$ 43,648.97
City of Biggs	\$ 47.38	\$ 293.22	\$ 95.65	\$ 290.71	\$ 68.08	\$ 162.26	\$ 205.96	\$ 1,163.26
City of Gridley	\$ 4,500.00	-----	-----	\$ 2,445.34	\$ 695.34	\$ 1,703.74	\$ 2,196.80	\$ 11,541.22
California Water	\$ 13,055.27	\$ 20,916.57	\$ 10,595.61	\$ 19,544.18	\$ 5,946.84	\$ 14,649.76	\$ 18,878.76	\$ 103,586.99
Thermalito ID	\$ 677.06	\$ 1,084.74	\$ 182.82	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	\$ 1,944.62
Durham Mutual WC	\$ 250.00	\$ 250.00	\$ 171.00	\$ 157.26	\$ 205.87	\$ 162.26	\$ 205.96	\$ 1,402.35
Durham ID	\$ 500.00	-----	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	\$ 500.00
City of Chico	XXXXXXXXXX	XXXXXXXXXX	\$ 500.00	\$ 500.00	\$ 500.00	\$ 500.00	\$ 500.00	\$ 2,500.00
Del Oro WC	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	\$ 5,952.40	\$ 692.40	XXXXXXXXXX	XXXXXXXXXX	\$ 6,644.80
	\$ 116,905.15	\$ 153,020.93	\$ 88,247.49	\$ 201,523.04	\$ 49,362.03	\$ 116,400.03	\$ 133,413.32	\$ 858,891.99
----- denotes pre payment or back payment								
XXXX denotes non-member								

1-017800

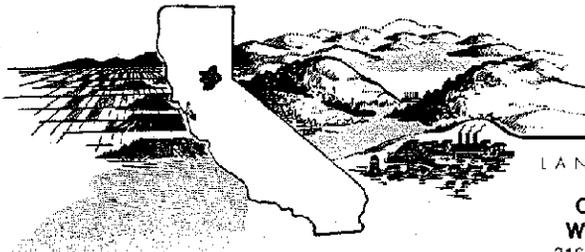
1-017800

BUTTE BASIN WATER USERS ASSOCIATION EXPENSE SUMMARY

YEAR PAID	320 OFFICE EQUIP	330 GWM (HCI)	820 CONSULTIN ENGINEERS	830 ADMIN	830 GWM	830 EDUCATION	900 LEGAL	910 MISC	950 OFFICE EXPENSE	951 COPYING	952 POSTAGE EXPENSE	970 TRAVEL	982 PHONE	TOTALS
1992		\$ 62,779.76	\$ 280.00	\$ 223.00				\$ 185.64	\$ 166.37					\$ 63,624.77
1993		\$201,048.15		\$ 1,839.81			\$ 1,217.50	\$ 450.00	\$ 428.35	\$ 299.56			\$ 115.28	\$ 205,398.65
1994	\$5,461.09	\$ 30,213.48		\$14,850.26			\$ 6,530.37	\$ 61.50	\$ 1,189.08	\$ 2,392.06			\$ 377.16	\$ 61,075.00
1995	\$1,611.90	\$118,094.28		\$ 7,356.00	\$ 7,655.00	\$ 470.00	\$ 18,708.22	\$ 26.00	\$ 1,815.49	\$ 5,966.47			\$ 330.80	\$ 162,032.96
1996				\$ 7,967.50	\$ 7,839.35	\$ 87.50	\$ 20,981.89	\$ 174.40	\$ 100.00	\$ 5,731.02	\$ 1,583.99		\$ 288.72	\$ 44,774.37
1997		\$108,261.00		\$16,461.30	\$ 14,891.25	\$ 160.00	\$ 30,375.36	\$ 916.72	\$ 1,221.51	\$ 8,335.89	\$ 1,556.98	\$375.72	\$ 368.80	\$ 182,914.53
1998**		\$ 43,548.60		\$18,140.00	\$ 3,192.50		\$ 20,840.79	\$ 221.07	\$ 370.86	\$ 3,212.80	\$ 1,074.52		\$ 345.98	\$ 90,747.12
TOTALS -	\$7,072.99	\$563,945.27	\$ 280.00	\$66,856.87	\$ 33,578.10	\$ 707.50	\$ 96,454.13	\$ 2,035.33	\$ 5,281.66	\$25,937.80	\$ 4,215.49	\$375.72	\$ 1,826.54	\$ 810,567.40
1999 Budget		\$ 45,000.00		\$14,500.00	\$ 10,000.00	\$ 2,000.00	\$ 10,000.00	\$ 500.00	\$ 500.00	\$ 4,000.00	\$ 1,500.00	\$500.00	\$ 500.00	\$ 89,000.00
** 1998 December payables estimated at \$5000.00														

1-017801

1-017801



Butte County

LAND OF NATURAL WEALTH AND BEAUTY

**OFFICES OF AGRICULTURAL COMMISSIONER
WEIGHTS AND MEASURES • WATER DIVISION**
316 NELSON AVENUE • CROVILLE, CALIFORNIA 95965-3318
AGRICULTURAL DEPT.: (530) 538-7381 • WATER: (530) 538-6265
FAX: (530) 538-7594

RICHARD B. PRICE
Agricultural Commissioner
Director of Weights and Measures/
Water Division

LOUIE B. MENDOZA, JR.
Assistant Agricultural Commissioner/
Weights and Measures/Water Division

April 14, 1999

Ecosystem Roundtable Members
CalFed
1416 9th Street
Room 1155
Sacramento, CA 95814

Re: CalFed Bay Delta Ecosystem Roundtable Proposal Program; Butte
County Water Inventory/Needs Application for CalFed Funding

Dear Ecosystem Roundtable Members:

As you know, a significant number of salmonid habitat restoration efforts have recently taken place in Butte County. Widespread speculation has occurred concerning whether the aquifer known as the Butte Basin contains a sufficient quantity of groundwater, over and above that needed for water use in the County, to assist in providing additional water for restoration efforts.

It goes without saying that identifying a reliable water supply in order to establish adequate base flows is a critical restoration methodology component. Identifying supply sources which can be tapped to contribute to base flows, however, can be a difficult and contentious process, unless competing interests are balanced in a consensus-based process.

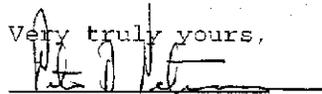
Butte County is currently attempting to establish a County groundwater inventory/analysis program in order to more completely assess the demands on its water supply. The County has already spent approximately \$200,000 over the last seven years contributing to the creation and maintenance of a groundwater model by the Butte Basin Water Users Association. Butte County has sought funding for the establishment of the above program through CalFed in order to carry out the mandate of a voter-enacted Groundwater Conservation Ordinance which requires the County to manage its groundwater aquifer for the health, welfare and safety of Butte County Residents.

Ecosystem Roundtable Members
April 14, 1999
Page Two

As the Chair of the Butte County Water Commission, I have been significantly involved in the County's efforts to build consensus and establish a reasonable, responsible groundwater assessment/regulatory program. I strongly believe that Butte County can bring the various water user groups together through our inventory/analysis program to complete an accurate assessment of whether water users in Butte County can assist in providing water supply sources for restoration programs.

The Butte County Water Inventory/Needs Proposal provides an excellent vehicle for the County to Participate in the identification of water supply sources for restoration programs. I urge you to support Butte County's proposal.

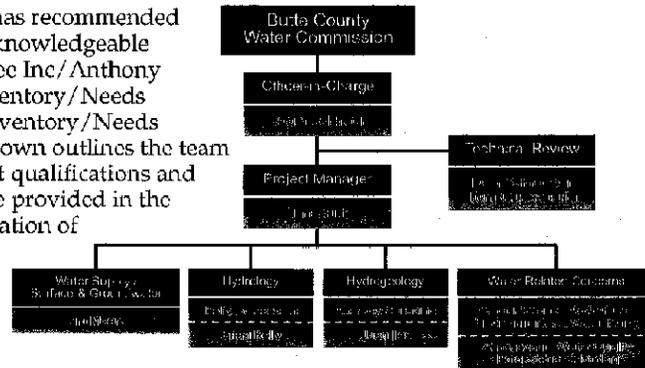
Very truly yours,



Pete Peterson, Chair
Butte County Water Commission

X. Applicant Qualifications

The Butte County Water Commission has recommended the retention of the highly skilled and knowledgeable consulting team Camp Dresser & McKee Inc./Anthony Saracino to perform Phase I (Water Inventory/Needs Analysis) of the Butte County Water Inventory/Needs Assessment. The organization chart shown outlines the team structure. Brief descriptions of relevant qualifications and experience of project team members are provided in the following paragraphs. Phase II (Installation of Groundwater Monitoring Wells and Extensionmeters) of the project will be conducted by BC/WC staff.



Butte County Water Commission/Butte County

The Butte County Water Commission has existed for many years. It was reorganized by provision of Measure G, titled "An Ordinance to Protect the Groundwater Resources in Butte County", which was approved by the voters in November 1996. It is staffed by the Water Bureau staff, currently under the Agricultural Department. As of April 13, 1999, the Board of Supervisors voted to make it a separate department, due to the significance of the issues at stake. Their primary mission is to research information regarding funding for water-related issues, monitor state and federal water policies, review concerns of water users in order to define problems, and create and maintain a library of water-related documents.

Butte County is a local public entity whose services include welfare, sheriff, tax collection, planning and land use, and agriculture. These services are funded by state and federal tax dollars, grants, and other revenue sources. It is governed by an elected Board of Supervisors. A major responsibility of the Board of Supervisors is protecting and enhancing water supply.

Camp Dresser & McKee Inc./Anthony Saracino

Roger Johnson. Mr. Johnson is a CDM Vice President with over 16 years of professional experience. He has directed and or participated in the development of environmental documentation for compliance with both the California Environmental Quality Act, (CEQA) and the National Environmental Policy Act, (NEPA). Mr. Johnson is currently CDM's Program Manager for the Joint EIR/EIS being prepared in support of the Los Angeles International Airport, (LAX) Master Plan. He coordinated the water and natural resources analysis in the preparation of the Joint EIR/EIS for the Playa Vista Project in Los Angeles. In addition to these Mr. Johnson has provided environmental analysis under CEQA for Hetch Hetchy Water and Power in support of operations involving the Mokelumne River and several reservoirs. He has participated and directed environmental analysis for projects impacting numerous rivers including the Mokelumne, Santa Ana, and Kaweah Rivers.

Tim Rust. Mr. Rust is a project manager at CDM with more than 15 years of experience as a planning environmental engineer. Mr. Rust is presently serving as project manager of the *Kaweah River Delta Corridor Enhancement Study* for the Kaweah River Water Conservation District. He is managing a multi-discipline project team that is investigating the hydrological, hydrogeological, and biological

characteristics of the Oakes Basin site for the eventual development of a floodwater retention/groundwater recharge basin with habitat for wildlife benefit. He was also technical manager of the *Phase I San Pablo Baylands Partnership* project for the Save San Francisco Bay Association, *Phase II Watershed Priority Ranking Assessment* project for the Colusa Basin Drainage District, and the *American Basin Open Space Feasibility Study* for the Nature Conservancy.

Polly Boissevain. Ms. Boissevain has more than 15 years of professional experience specializing in water resources planning and evaluation. Ms. Boissevain had directed and/or participated in a number of water supply evaluation, including the Santa Cruz Water Supply Study, the San Ramon Valley Water Supply Master Plan, and Sand Diego County Water Supply Study. In addition, Ms. Boissevain has participated in water rights evaluations for numerous public and private sector clients throughout Northern California. Ms. Boissevain has directed and/or participated in a number of watershed wide water surveys including the Ulatis Creek Watershed Study in Solano County, and the Kaweah River Delta Corridor Enhancement Study.

Anthony Saracino. Anthony Saracino is an independent geosciences consultant, specializing in water resource studies, hydrogeology, water quality issues, and environmental science. Mr. Saracino has over 13 years of experience in geoscientific consulting, with an emphasis on groundwater management and water quality issues. He is one of four authors of *California Groundwater Management*, a reference book and guidance manual on California groundwater issues. Mr. Saracino helped the CALFED Bay-Delta Program to develop and coordinate its groundwater outreach program. For the Sacramento Valley Water Resources Study, he coordinated and directed work involving the collection of data from a variety of sources and evaluations of surface water availability, hydrogeologic conditions, and groundwater supply and quality in the Sacramento Valley.

Jim Moore. Mr. Moore has over 35 years experience in water, land, and power resource management. His experience includes a strong background in resource development policies as they have evolved throughout the West. He is intimately familiar with the operations of federal water development, including the Orland, Central Valley, Solano, Cachuma, Newlands, Wahoe, and Klamath projects in California, Nevada, and Oregon. For the Bureau of Reclamation's Mid-Pacific Region, Mr. Moore directed a 95-person staff which managed maintenance and resource activities for multi-million dollar federal water and power projects throughout northern California and Nevada, and southern Oregon.

Ginger Strong. Ms. Strong has 10 years of experience in integrated resource management and related program development. She has initiated programs that integrate habitat protection, open space, and a broad variety of water issues. Her involvement includes managing programs with widely divergent interests, building consensus among these groups, preparing public education programs, and identifying funding to develop the projects. Ms. Strong is project director for the Kaweah River Delta Corridor Enhancement Study in Visalia, California. This project involves a multi-agency task force investigating the feasibility of integrating groundwater recharge, flood protection, stormwater detention and wildlife habitat enhancement. She was the project director for the American Basin Open Space Feasibility Study for the Nature Conservancy, the Phase II Watershed Priority Ranking Assessment for the Colusa Basin Drainage District, and Phase I of the San Pablo Baylands Partnership Stewardship Plan for the Save San Francisco Bay Association.

XI. Compliance with Standard Terms and Conditions

On the following pages, the BC/WC is providing the standard forms identified below.

- U.S. Department of the Interior, "Certification Regarding Debarment, Suspension, and Other Responsibility Matters, Drug-Free Workplace Requirements and Lobbying".
- Standard Form 424, "Application for Federal Assistance".
- Standard Form 424A, "Budget Information - Non-Construction Programs".
- Standard Form 424B, "Assurances - Non-Construction Programs".
- State of California, "Nondiscrimination Compliance Statement" for Camp Dresser & McKee Inc./Anthony Saracino.

U.S. Department of the Interior

**Certifications Regarding Debarment, Suspension and
Other Responsibility Matters, Drug-Free Workplace
Requirements and Lobbying**

Persons signing this form should refer to the regulations referenced below for complete instructions:

Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions - The prospective primary participant further agrees by submitting this proposal that it will include the clause titled, "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions. See below for language to be used; use this form for certification and sign; or use Department of the Interior Form 1954 (DI-1954). (See Appendix A of Subpart D of 43 CFR Part 12.)

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions - (See Appendix B of Subpart D of 43 CFR Part 12.)

Certification Regarding Drug-Free Workplace Requirements - Alternate I. (Grantees Other Than Individuals) and Alternate II. (Grantees Who are Individuals) - (See Appendix C of Subpart D of 43 CFR Part 12)

Signature on this form provides for compliance with certification requirements under 43 CFR Parts 12 and 18. The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Department of the Interior determines to award the covered transaction, grant, cooperative agreement or loan.

**PART A: Certification Regarding Debarment, Suspension, and Other Responsibility Matters -
Primary Covered Transactions**

CHECK IF THIS CERTIFICATION IS FOR A PRIMARY COVERED TRANSACTION AND IS APPLICABLE.

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

**PART B: Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion -
Lower Tier Covered Transactions**

CHECK IF THIS CERTIFICATION IS FOR A LOWER TIER COVERED TRANSACTION AND IS APPLICABLE.

- (1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- (2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

PART C: Certification Regarding Drug-Free Workplace Requirements

CHECK IF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS NOT AN INDIVIDUAL

Alternate J. (Grantees Other Than Individuals)

A. The grantee certifies that it will or continue to provide a drug-free workplace by:

- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
- (b) Establishing an ongoing drug-free awareness program to inform employees about--
 - (1) The dangers of drug abuse in the workplace;
 - (2) The grantee's policy of maintaining a drug-free workplace;
 - (3) Any available drug counseling, rehabilitation, and employee assistance programs; and
 - (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
- (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);
- (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will --
 - (1) Abide by the terms of the statement; and
 - (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;
- (e) Notifying the agency in writing, within ten calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer on whose grant activity the convicted employee was working, unless the Federal agency has designated a central point for the receipt of such notices. Notice shall include the identification numbers(s) of each affected grant;
- (f) Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to any employee who is so convicted --
 - (1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
 - (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;
- (g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a) (b), (c), (d), (e) and (f).

B. The grantee may insert in the space provided below the site(s) for the performance of work done in connection with the specific grant:

Place of Performance (Street address, city, county, state, zip code)

316 Nelson Avenue, Oroville, CA 95965

Check if there are workplaces on file that are not identified here.

PART D: Certification Regarding Drug-Free Workplace Requirements

CHECK IF THIS CERTIFICATION IS FOR AN APPLICANT WHO IS AN INDIVIDUAL

Alternate II. (Grantees Who Are Individuals)

- (a) The grantee certifies that, as a condition of the grant, he or she will not engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in conducting any activity with the grant;
- (b) If convicted of a criminal drug offense resulting from a violation occurring during the conduct of any grant activity, he or she will report the conviction, in writing, within 10 calendar days of the conviction, to the grant officer or other designee, unless the Federal agency designates a central point for the receipt of such notices. When notice is made to such a central point, it shall include the identification number(s) of each affected grant.

PART E: Certification Regarding Lobbying
Certification for Contracts, Grants, Loans, and Cooperative Agreements

CHECK IF CERTIFICATION IS FOR THE AWARD OF ANY OF THE FOLLOWING AND THE AMOUNT EXCEEDS \$100,000: A FEDERAL GRANT OR COOPERATIVE AGREEMENT; SUBCONTRACT, OR SUBGRANT UNDER THE GRANT OR COOPERATIVE AGREEMENT.

CHECK IF CERTIFICATION IS FOR THE AWARD OF A FEDERAL LOAN EXCEEDING THE AMOUNT OF \$150,000, OR A SUBGRANT OR SUBCONTRACT EXCEEDING \$100,000, UNDER THE LOAN.

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, and officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

As the authorized certifying official, I hereby certify that the above specified certifications are true.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL

Chair, Butte County Board of Supervisors

DATE

**APPLICATION FOR
FEDERAL ASSISTANCE**

OMB Approval No. 0348-0043

1. TYPE OF SUBMISSION: Application <input type="checkbox"/> Construction <input checked="" type="checkbox"/> Non-Construction		Preapplication <input type="checkbox"/> Construction <input type="checkbox"/> Non-Construction	2. DATE SUBMITTED	Applicant Identifier
			3. DATE RECEIVED BY STATE	State Application Identifier
			4. DATE RECEIVED BY FEDERAL AGENCY	Federal Identifier
5. APPLICANT INFORMATION				
Legal Name: Butte County Board of Supervisors			Organizational Unit: Butte County Water Commission	
Address (give city, county, State, and zip code): 316 Nelson Avenue Oroville, CA 95965			Name and telephone number of person to be contacted on matters involving this application (give area code): Susan Minasian (530) 538-7621	
6. EMPLOYER IDENTIFICATION NUMBER (EIN): 94 - 6000506			7. TYPE OF APPLICANT: (enter appropriate letter in box) B	
8. TYPE OF APPLICATION: <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuation <input type="checkbox"/> Revision If Revision, enter appropriate letter(s) in box(es) <input type="checkbox"/> <input type="checkbox"/> A. Increase Award B. Decrease Award C. Increase Duration D. Decrease Duration Other (specify): _____			A. State B. County C. Municipal D. Township E. Interstate F. Intermunicipal G. Special District H. Independent School Dist. I. State Controlled Institution of Higher Learning J. Private University K. Indian Tribe L. Individual M. Profit Organization N. Other (Specify) _____	
			9. NAME OF FEDERAL AGENCY: CalFed Bay-Delta Programs	
10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER: TITLE: [] - [] [] [] []			11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT: Butte County Water Inventory/ Needs Assessment	
12. AREAS AFFECTED BY PROJECT (Cities, Counties, States, etc.): Butte County				
13. PROPOSED PROJECT		14. CONGRESSIONAL DISTRICTS OF:		
Start Date 9/99	Ending Date 9/2001	a. Applicant 2nd	b. Project 2nd	
15. ESTIMATED FUNDING:		16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?		
a. Federal	\$ 770,000	a. YES. THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON: DATE _____		
b. Applicant	\$	b. No. <input type="checkbox"/> PROGRAM IS NOT COVERED BY E. O. 12372 <input type="checkbox"/> OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW		
c. State	\$			
d. Local	\$			
e. Other	\$			
f. Program Income	\$			
g. TOTAL	\$ 770,000	17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT? <input type="checkbox"/> Yes If "Yes," attach an explanation. <input checked="" type="checkbox"/> No		
18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT, THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED.				
a. Type Name of Authorized Representative Jane Dolan		b. Title Chair, Board of Supervisors		c. Telephone Number
d. Signature of Authorized Representative			e. Date Signed 4/14/99	

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Standard Form 424 (Rev. 7-87)
Prescribed by OMB Circular A-102

BUDGET INFORMATION - Non-Construction Programs

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. CalFed Category III		\$	\$	\$ 770,000	\$	\$ 770,000
2.						
3.						
4.						
5. Totals		\$	\$	\$ 770,000	\$	\$ 770,000

SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY				Total (5)
	(1)	(2)	(3)	(4)	
a. Personnel	\$	\$	\$	\$	\$
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual			770,000		770,000
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. TOTALS (sum of 6i and 6j)	\$	\$	\$ 770,000	\$	\$ 770,000
7. Program Income	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0

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SECTION C. NON-FEDERAL RESOURCES					
(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) TOTALS	
8.	\$	\$	\$	\$	
9.					
10.					
11.					
12. TOTAL (sum of lines 8 - 11)	\$	\$	\$	\$	
SECTION D. FORECASTED CASH NEEDS					
Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	
13. Federal	\$ 200,000	\$ 43,185.25	\$ 43,185.25	\$ 57,398.75	
14. Non-Federal					
15. TOTAL (sum of lines 13 and 14)					
SECTION E. BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT					
(a) Grant Program	FUTURE FUNDING PERIODS (Years)				
	(b) First	(c) Second	(d) Third	(e) Fourth	
16.	\$	\$	\$	\$	
17.					
18.					
19.					
20. TOTAL (sum of lines 16-19)	\$	\$	\$	\$	
SECTION F. OTHER BUDGET INFORMATION					
21. Direct Charges:					
22. Indirect Charges:					
23. Remarks:					

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ASSURANCES - NON-CONSTRUCTION PROGRAMS

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0040), Washington, DC 20503.

**PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET.
SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.**

NOTE: Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.
7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
8. Will comply, as applicable, with provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 278a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally-assisted construction subagreements.
10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).
12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).
14. Will comply with P.L. 93-34B regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.
15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. §§2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.
15. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.
17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."
18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL 	TITLE Chair
APPLICANT ORGANIZATION Butte County Board of Supervisors	DATE SUBMITTED 4/14/99

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NONDISCRIMINATION COMPLIANCE STATEMENT

STD. 19 (REV. 3-85) FMC

COMPANY NAME

Camp Dresser & McKee Inc.

The company named above (hereinafter referred to as "prospective contractor") hereby certifies, unless specifically exempted, compliance with Government Code Section 12990 (a-f) and California Code of Regulations, Title 2, Division 4, Chapter 5 in matters relating to reporting requirements and the development, implementation and maintenance of a Nondiscrimination Program. Prospective contractor agrees not to unlawfully discriminate, harass or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, disability (including HIV and AIDS), medical condition (cancer), age, marital status, denial of family and medical care leave and denial of pregnancy disability leave.

CERTIFICATION

I, the official named below, hereby swear that I am duly authorized to legally bind the prospective contractor to the above described certification. I am fully aware that this certification, executed on the date and in the county below, is made under penalty of perjury under the laws of the State of California.

OFFICIAL'S NAME

Roger A. Johnson

DATE EXECUTED

4/15/99

EXECUTED IN THE COUNTY OF

Sacramento

PROSPECTIVE CONTRACTOR'S SIGNATURE

PROSPECTIVE CONTRACTOR'S TITLE

Vice President

PROSPECTIVE CONTRACTOR'S LEGAL BUSINESS NAME

Camp Dresser & McKee Inc.