Proposal Full View

Applicant Information

Organization Name: Mendocino City Community Services District
Tax ID: 942274273
Proposal Name: Mendocino Groundwater Quality Assessment

Proposal Objective
The main objectives of the Mendocino Groundwater Quality Assessment project are to initiate groundwater quality monitoring in Mendocino and to identify and assess areas vulnerable to groundwater contamination with the goal of maintaining a safe water supply. The Mendocino City Community Services District (MCCSD) service area encompasses the Town of Mendocino, which covers a one square mile area. This area is predominantly characterized by residential and tourist based commercial development. Mendocino does not have a municipal water system and groundwater production is from privately-owned wells. Due to the shallow groundwater supply and a number of older shallow unsealed wells, there is a substantial risk for groundwater contamination to the town’s primary water supply. Since there is no municipal water system in Mendocino, and property owners rely on privately owned wells, a source water assessment to identify potential sources of water contamination is not required and has not been performed. A comprehensive dataset of groundwater quality will be assembled for the project. Using this information, MCCSD will analyze the regional water system using both an existing groundwater flow model and geographical information system software and classify the water quality threat to areas of the District. Water quality conditions and threats in the Mendocino area will be evaluated. The project would include a survey of District wells, sampling and analysis of groundwater quality, and a groundwater quality assessment. This would be a GIS project that would create water quality and groundwater vulnerability map layers. MCCSD will complete an inventory of known and potential water quality threats to the area’s ability to support a sustainable water supply. Based on the study, an assessment of economic, water supply, and environmental resource impacts will be prepared.

Budget

Other Contribution: $0.00
Local Contribution: $0.00
Federal Contribution: $0.00
Inkind Contribution: $0.00
Amount Requested: $249,977.00
Total Project Cost: $249,977.00

Geographic Information

Latitude: 39°18'27"
Longitude: 123°47'56"
Location: Mendocino
County: Mendocino
Ground Water Basin: Fort Bragg Terrace Area
Hydrologic Region: North Coast
Watershed: 12-1113 Mendocino Coast

Legislative Information

Assembly District: 1st Assembly District
Senate District: 2nd Senate District
US Congressional District: District 1 (CA)

Project Information

Project Name: Mendocino Groundwater Quality Assessment
Mendocino City Community Services District

Proposed Start Date 4/1/2013
Proposed End Date 6/30/2014

**Project Scope**
MCCSD is proposing to complete a technically feasible and comprehensive assessment of water quality risks for the Mendocino Headlands Aquifer for water users within the District. This work will include an assessment of known and potentially contaminating activities that may impact aquifer sustainability as a public water supply. The Project tasks include: water quality sampling, a Groundwater Threat Assessment, Groundwater Model Analysis, and development of a Groundwater Protection Plan.

**Project Description**
The Mendocino Groundwater Quality Assessment is a four segment project: water quality sampling, Groundwater Threat Assessment, Groundwater Model Analysis, and developing a Groundwater Protection Plan. Water quality sampling is used to develop a baseline of groundwater quality. 24 monitoring wells will be sampled for general constituents and potential contaminants. Wells will be sampled twice, once during high groundwater conditions and once during low groundwater conditions. A dataset of regulated environmental sites, business activities, sewer locations, stormwater runoff and other possible threats to water quality will be assembled in a GIS platform. The Groundwater Threat Assessment is based on a source–pathway–receptor approach. A DRASTIC methodology developed by the US EPA will be used to map the intrinsic or specific threats to water quality. The analysis will screen and rank the relative vulnerability of local groundwater to contamination. The Mendocino Groundwater Model will be used to delineate potential contaminant flowpaths in the aquifer. The flowpath analysis will simulate the movement of particles under various aquifer and climatic conditions. This will identify those areas threatened by potential contamination from known or potentially contaminating activities. The existing groundwater model is based on MODFLOW. Model scenarios using particle tracking code MODPATH and flow/transport code MT3D will simulate contaminant movement to evaluate the potential risk of contamination to the drinking water supply. The Groundwater Protection Plan (GPP) will categorize and prioritize water quality threats and any contaminating activities. The GPP has two parts: recommendation of best management practices, and development of a groundwater monitoring program. Based on the vulnerability analysis, a GPP will be developed to monitor groundwater quality, give well installation guidelines, and provide a plan to address sub-standard well water quality concerns.

**Project Objective**
The objective of the Project is to complete a groundwater quality assessment and initiate water quality monitoring with the goal of maintaining a safe water supply in Mendocino. Groundwater production is primarily from 400 closely spaced privately-owned wells. The groundwater supply is suspected to be vulnerable to contamination due to shallow groundwater, and because a number of the wells are the old unsealed well construction that is vulnerable to surface contamination.

**Project Benefits Information**

<table>
<thead>
<tr>
<th>Project Benefit Type</th>
<th>Benefit Type</th>
<th>Measurement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>Management Plans-Groundwater</td>
<td>0</td>
<td>develop a monitoring program to protect groundwater quality</td>
</tr>
<tr>
<td></td>
<td>Modeling-Groundwater</td>
<td>Use existing Model for groundwater</td>
<td></td>
</tr>
</tbody>
</table>
### Project Objective

<table>
<thead>
<tr>
<th>Secondary</th>
<th>Modeling developed or improved</th>
<th>0</th>
<th>Quality and vulnerability assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tertiary</td>
<td>Modeling-Simulations performed</td>
<td>0</td>
<td>Develop GIS vulnerability and groundwater quality map layers to areas vulnerable to water quality degradation</td>
</tr>
<tr>
<td>Quaternary</td>
<td>Groundwater Management-Groundwater quality samples taken</td>
<td>0</td>
<td>Collect groundwater samples to assess quality of groundwater supply</td>
</tr>
</tbody>
</table>

### Budget

<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Contribution</td>
<td>0</td>
</tr>
<tr>
<td>Local Contribution</td>
<td>0</td>
</tr>
<tr>
<td>Federal Contribution</td>
<td>0</td>
</tr>
<tr>
<td>Inkind Contribution</td>
<td>0</td>
</tr>
<tr>
<td>Amount Requested</td>
<td>249977</td>
</tr>
<tr>
<td>Total Project Cost</td>
<td>249977</td>
</tr>
</tbody>
</table>

### Geographic Information

<table>
<thead>
<tr>
<th>Latitude DD(+/-)</th>
<th>MM</th>
<th>SS</th>
</tr>
</thead>
<tbody>
<tr>
<td>39</td>
<td>18</td>
<td>27</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Longitude DD(+/-)</th>
<th>MM</th>
<th>SS</th>
</tr>
</thead>
<tbody>
<tr>
<td>123</td>
<td>47</td>
<td>56</td>
</tr>
</tbody>
</table>

### Legislative Information

<table>
<thead>
<tr>
<th>Assembly District</th>
<th>1st Assembly District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senate District</td>
<td>2nd Senate District</td>
</tr>
<tr>
<td>US Congressional District</td>
<td>District 1 (CA)</td>
</tr>
</tbody>
</table>

### Section: Applicant Information and Question's Tab

**Q1. Applicant Information**

Provide the agency name, address, city, state, and zip code of the applicant submitting the application.

Mendocino City Community Services District P. O. Box 1029 10500 Kelly Street Mendocino, CA 95460

**Q2. Proposal Description:**

Provide a brief abstract of the Proposal. This abstract must provide an overview of the proposal including the main issues and priorities addressed in the proposal. Within the abstract, please describe how the proposal relates to the GWMP’s BMO’s.

The Town of Mendocino is located on the Mendocino Headlands along the Pacific Coast. The Mendocino Headlands form a broad peninsula bounded by sea cliffs. The Mendocino City Community Services District (MCCSD) service area encompasses the Town of Mendocino, which covers approximately a one square mile area. This area is predominantly characterized by residential and tourist based commercial development. This physical setting presents a challenge in managing groundwater resources. Groundwater production in Mendocino is primarily from 400 closely spaced privately-owned wells. The groundwater supply is suspected to be vulnerable to contamination due to the shallow nature of the groundwater, and because the town sits on top of the bulk of the aquifer recharge area. A
number of the wells still used in Mendocino are the old unsealed well construction that is vulnerable to surface contamination. MCCSD is proposing to complete a technically feasible groundwater quality risk assessment of Mendocino Headlands aquifer. This work will include an assessment of known and potentially contaminating activities that may impact aquifer sustainability as a public water supply. The Mendocino Groundwater Quality Assessment is a four segment project: water quality sampling, Groundwater Threat Assessment, Groundwater Model Analysis, and developing a Groundwater Protection Plan. Water quality sampling is used to develop a baseline of groundwater quality. 24 monitoring wells will be sampled for general constituents and potential contaminants. Wells will be sampled twice, during both the wet and dry seasons. A dataset of regulated environmental sites, business activities, sewer locations, stormwater runoff and other possible threats to water quality will be assembled in a GIS platform. The Groundwater Threat Assessment is based on a source?pathway?receptor approach. A DRASIC methodology developed by the US EPA will be used to map the intrinsic or specific threats to water quality. The analysis will screen and rank the relative vulnerability of local groundwater to contamination. The Mendocino Groundwater Model will be used to delineate potential contaminate flowpaths in the aquifer. The flowpath analysis will simulate particles movement under various aquifer and climatic conditions. This will identify those areas threatened by potential contamination from known or potentially contaminating activities. The existing groundwater model is based on MODFLOW. Model scenarios using particle tracking code MODPATH and flow/transport code MT3D will simulate contaminante movement to evaluate the potential risk of contamination to the drinking water supply. The Groundwater Protection Plan (GPP) will categorize and prioritize water quality threats and any contaminating activities. The GPP has two parts: recommendation of best management practices, and a monitoring program. Based on the vulnerability analysis, a GPP will be developed to monitor groundwater quality, give well installation guidelines, and provide a plan to address sub-standard well water quality. The GWMP was developed to ensure a viable groundwater resource for beneficial uses to provide a reliable and safe water supply. The current grant project is designed to advance the GWMP goal of ensuring groundwater quality is protected, and the objectives of the project are to initiate groundwater quality monitoring and develop of Groundwater Protection Plan. The 2012 GWMP does not address groundwater quality, so the groundwater quality assessment project will fill that gap. However, this assessment is clearly at the heart of the GWMP goals and objectives. Local well owners want to understand the potential impacts of various contaminants in the local water supply. Based on identifying and prioritizing these threats, the District will have an important tool for near and long-term planning to mitigate against these potential impacts.

Q3. Project Director:

Provide the name and details (including email) of the person responsible for executing the grant agreement for the applicant. Persons that are subcontractors to be paid by the grant cannot be listed as the Project Director.

Steven Acker Mendocino City Community Services District Superintendent P.O. Box 1029 Mendocino, CA 95460 Phone: 707-937-5790 Fax: 707-937-3837 E-mail: mccsd@mcn.org

Q4. Project Manager:

Provide the name and contact information (including email) of the Project Manager from the applicant agency or organization that will be the day-to-day contact on this application.

Michael Maley Kennedy/Jenks Consultants 303 Second Street, Suite 300 South San Francisco, CA 94107 Phone: 415-243-2495 Fax: 415-896-0999 E-mail: MikeMaley@kennedyjenks.com

Q5. Additional Information:

Based on the region’s location, what is the applicable DWR region office (Northern, North Central, South Central, or Southern)? The following link can be used to view each DWR region office boundaries:

http://www.water.ca.gov/groundwater/groundwater_basics/gw_contacts_info.cfm

1) [ ] Northern Region
2) [ ] North Central Region
3) [ ] South Central Region
4) [ ] Southern Region

Q6. Additional Information:

Provide the Date of GWMP Adoption, if any, and list the pursuant Water Code Section or other legal Authority in which it was adopted.

February 26, 1990 California Water Code Section 10700-10717

Q7. Additional Information:

Provide a list of documents that support and indicate collaboration with other local public agencies with regard to the management of the affected groundwater basin (e.g., MOUs, MOAs, JPAs, adoption of a GWMP, recognition of county ordinances in permitting processes, or party to a groundwater basin adjudication order).

Q8. Additional Information

Name the entity(ies) providing the fund(s) reported in the above Budget section under the category "Other Contribution". If there are no “Other Contributions” Please answer this question with, “No Other Contributions”.

No Other Contributions

Q9. Eligibility:

List the urban water suppliers that will receive funding from the proposed grant. Please provide the agency name, a contact phone number and email address. Those listed must submit self certification of compliance with CWC §525 et seq. and AB1420, see Attachment 10. If there are none, so indicate.

None

Q10. Eligibility:

Have all of the urban water suppliers, listed in Q9 above, submitted complete 2010 UWMP to DWR? If not, explain why. Have those plans been verified as complete by DWR? If not, explain current status.

Mendocino City Community Services District (MCCSD) is not an urban water supplier, and is not required to comply with AB1420 (CWC 10631.5) and the Water Meter Implementation (CWC 525 et seq.) requirements. MCCSD was not required to submit a 2010 UWMP to DWR. MCCSD does not have a municipal water system. There are no municipal water connections, and the District does not supply water to the Town of Mendocino. Mendocino's residential and commercial water source is from approximately 400 privately owned wells. Therefore, self-certification for California Water Code (CWC 525 et seq.) and AB 1420 (CWC 10631.5) is not required.

Q11. Completeness Check:

Have all of the fields in the application been completed?

Yes

Q.11. Completeness Check (cont)

If no, please explain. If yes, answer this question with "NA".

NA

Section : Application Attachments Tab

APPLICATION ATTACHMENTS TAB

Attachment 1. Authorizing Documentation

Upload authorizing documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att1_LGA12_MCCSD_AuthDoc_1of1.pdf

Attachment 2. Eligible Applicant Documentation

Upload eligible documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att2_LGA12_MCCSD_EligDoc_1of1.pdf

Attachment 3. Status of GWMP

Upload the GWMP documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Attachment 4. Project Description

Upload project description here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".
Last Uploaded Attachments: Att4_LGA12_MCCSD_ProjD_1of1.pdf

Attachment 5. Work Plan

Upload work plan here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".
Last Uploaded Attachments: Att5_LGA12_MCCSD_WrkPln_1of1.pdf

Attachment 6. Budget

Upload budget here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".
Last Uploaded Attachments: Att6_LGA12_MCCSD_BUDGET_1of1.pdf

Attachment 7. Schedule

Upload schedule here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".
Last Uploaded Attachments: Att7_LGA12_MCCSD_SCHED_1of1.pdf

Attachment 8. Quality Assurance

Upload quality assurance documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".
Last Uploaded Attachments: Att8_LGA12_MCCSD_QA_1of1.pdf

Attachment 9. Past Performance

Upload past performance documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Attachment 10. AB1420 and Water Meter Implementation Compliance

Upload 1420 and water meter implementation documentation here, if applicable. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".
Last Uploaded Attachments: Att10_LGA12_MCCSD_1420_1of1.pdf