

## Appendix A

# Memorandum of Understanding, Bylaws and Ground Rules

# MOU

## Memorandum of Understanding for Integrated Regional Water Management in the Madera Region [Initially Adopted January 2, 2010]

### 1. PURPOSE

The purpose of this Memorandum of Understanding (MOU) is to recognize a mutual understanding among entities in the greater Madera County area regarding their joint efforts toward Integrated Regional Water Management (IRWM) governance, development, planning, funding, and implementation. The mutual understanding of the signatories to this MOU (herein collectively referred to as the "Parties") will facilitate future coordination, collaboration, and communication for comprehensive management of water resources in the greater Madera County area.

### 2. RECITALS

- 2.1 The State of California desires to foster Integrated Regional Water Management (IRWM) planning and encourages local public, non-profit, and private entities to define planning regions appropriate for managing water resources and to integrate strategies within these planning regions.
- 2.2 A comprehensive group of stakeholders, including the Parties, developed an Integrated Regional Water Management Plan for the greater Madera County area (IRWMP), which also considers broader watershed issues.
- 2.3 The Madera County Board of Supervisors accepted the IRWMP on April 14, 2008. Prior to entering into this MOU, the respective decision making body of each Party adopted the IRWMP.
- 2.4 The IRWMP defines a water management planning region that takes into consideration jurisdictional limits, powers and responsibilities, and watershed and groundwater basin boundaries. For purposes of this MOU, "Region" refers to the IRWMP water management planning region as it may be amended from time to time through amendments to the IRWMP.
- 2.5 Water resources management authority in the Region is currently distributed among various public agencies with a range of legal powers and regulatory responsibilities. These public agencies have jurisdictional boundaries defined by political considerations rather than hydrologic conditions. Therefore, sensible water resources planning and management frequently requires coordinated actions by multiple jurisdictions. Private entities within the Region have considerable interests in cooperating with public entities to protect, manage, and enhance water resources within the Region.
- 2.6 By and through this MOU, various public entities and non-profit entities in the Region with responsibility and interests in management of water resources intend to form a regional water management group, pursuant to Water Code section 10539, for the purposes of governing, further developing, implementing, and funding the IRWMP, as well as cooperating with the stakeholders in shared watersheds, either through separate memorandums of understanding, joint powers agreements, and/or eventual inclusion of other adjoining areas into the Region by amendment of the IRWMP (e.g., the portions of the upper Chowchilla and San Joaquin river watersheds that lie outside of the Madera County boundaries).

- 2.7 The Parties desire to link and integrate efforts to jointly oversee the further development, implementation, funding, and governance of the IRWMP.

### 3. GOALS

The goals of the collaborative effort undertaken by the Parties pursuant to this MOU are:

- 3.1 To develop and implement a governance structure for the IRWMP for the Region that meets the requirements set forth in the Integrated Regional Water Management Planning Act of 2002, codified at Water Code sections 10530 et seq., the Water Security, Clean Drinking Water, Coastal and Beach Protection Fund of 2002, codified at Water Code sections 79500 et seq. (Proposition 50), and the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006, codified at Public Resources Code section 75001 et seq. (Proposition 84).
- 3.2 To work together to develop updates, changes, amendments, additions and/or other modifications to the IRWMP to ensure that the plan continually utilizes the best science and data available to address the Region's changing conditions, needs and concerns, including but not limited to ecosystem restoration, environmental and habitat protection and improvement, water supply reliability, flood management, groundwater management, recreation and public access, storm water capture and management, water conservation, water quality protection and improvement, water recycling, wetlands enhancement and creation, imported water, land use planning, nonpoint source pollution control, surface storage, watershed planning, water and wastewater treatment, water transfers and water banking.
- 3.3 To improve and maximize cooperation among stakeholders and coordination of public, private, and non-profit agency plans, programs and projects for mutual benefit and optimal gain within the Region.
- 3.4 To help identify, develop, prioritize, and implement collaborative plans, programs, and projects that may be beyond the scope or capability of individual stakeholders, but which would be of mutual benefit if implemented in a cooperative manner.
- 3.5 To facilitate regional water management efforts that provide multiple benefits and include one or more of the following elements: water supply (including without limitation, banking, efficiency, conservation, and reliability), water quality, flood control, and environmental protection and enhancement objectives.
- 3.6 To foster coordination, collaboration, and communication between stakeholders, adjacent IRWM regions and other interested parties, to achieve greater efficiencies, enhance public services, and build public support for vital projects.
- 3.7 To realize regional water management objectives at the least cost possible through mutual cooperation, elimination of redundancy and to enhance regional competitiveness for State and Federal grant funding.
- 3.8 To identify disadvantaged communities in the Region and take the water-related needs of those communities into consideration.

#### 4. DEFINITIONS

- 4.1 Integrated Regional Water Management Plan (IRWMP). Consistent with Water Code section 10534, IRWMP hereinafter refers to the comprehensive plan for the Region as described in the recitals above, including any amendments, revisions, or updates thereto.
- 4.2 Non-Profit Organization. Consistent with Water Code section 79505(g) and Public Resources Code section 75005(k), "Nonprofit Organization" as used herein means any nonprofit corporation qualified to do business in California, including a nonprofit corporation formed pursuant to the Nonprofit Public Benefit Corporation law (Corporations Code section 5000 et seq.) and qualified under Section 501(c)(3) of the United States Internal Revenue Code.
- 4.3 Project. An action or construction project that addresses a need identified within the IRWMP and Water Code section 10537.
- 4.4 Local Agency. Consistent with Water Code section 10535, "Local Agency" herein refers to any city, county, city and county, special district, joint powers authority, or other political subdivision of the state, a public utility as defined in Section 216 of the Public Utilities Code, or a mutual water company as defined in Section 2725 of the Public Utilities Code.
- 4.5 Regional Water Management Group (RWMG). Consistent with Water Code section 10539, RWMG generally refers to a group of three or more Local Agencies in the Region, at least two of which have statutory authority over water supply or water management, as well as those other entities in the Region that may be necessary for the further development and implementation of the IRWMP. As specifically used in this MOU, RWMG shall refer to the Parties to this MOU.
- 4.6 Stakeholder. An interested party, including without limitation a Non-Profit Organization, Local Agency, or private property owner that directly participates in or relies upon water management within the Region or that represents the interests of those (including flora and fauna) who do.

#### 5. MUTUAL UNDERSTANDING

- 5.1 Additional Parties and RWMG Members. Each Party to this MOU must adopt the IRWMP prior to executing this MOU. For a Local Agency, adoption of the IRWMP is by formal resolution of the governing body or its equivalent (e.g., by a board of directors or other management entity). For any other entities, adoption by way of acknowledgement of acceptance of the IRWMP by the individual(s) authorized to bind the entity is required. Additional Local Agencies, Non-Profit Organizations, or other entities in the Region that desire to participate in the adoption, further development, funding, and implementation of the IRWMP may seek to join the RWMG at any time. To join the RWMG, an entity must submit a request to the RWMG. The RWMG shall determine whether the requesting party is a party qualified under Water Code section 10539 and this MOU to participate as a member of the RWMG. If so, the requesting party may join the RWMG by adopting the IRWMP and executing this MOU.
- 5.2 RWMG Governance. The RWMG will determine their governance structure and operating procedures.
- 5.3 Lead Agency. The RWMG shall mutually agree upon a designated signatory Local Agency to facilitate IRWMP implementation and coordinate RWMG activities in furtherance of this MOU (Lead Agency).

The Lead Agency will serve at the pleasure of the RWMG. Unless otherwise designated as the Grant Administrator responsible for funding or the Project proponent for an individual Project pursuant to this MOU, the Lead Agency shall not be responsible for any Project, including without limitation completion, funding, or environmental review thereof.

- 5.4 Technical Advisory Committee. The RWMG will organize a committee to advise the RWMG and other Stakeholders concerning implementation, funding, and further development of the IRWMP. The RWMG shall appoint individuals to the Technical Advisory Committee who have technical backgrounds in the fields of water, biology, ecology, geology, engineering, hydrogeology, planning, resource conservation, riparian systems, water conservation, and/or water quality. Appointees to the Technical Advisory Committee shall serve at the pleasure of the RWMG.
- 5.5 Approach to Implementing the IRWMP. Any Stakeholder may propose an implementation project (Project Proposal) to the RWMG at any time. Each Project Proposal shall include a funding component, including application and administration costs, in addition to direct Project costs. Each Project Proposal must meet the standards identified in the IRWMP or they will not qualify for additional consideration by the RWMG. The RWMG will review the Project Proposals for consistency with the IRWMP. The RWMG will hold two public hearings each year to allow Stakeholder comments on any Project Proposals. Notice of each hearing shall be made at least 30 days in advance to allow all Stakeholders ample time to prepare alternatives, or to compile data for presentation at the hearing. Public hearings shall be held at least twice per year, once in April and once in October, and other times as needed.
- 5.6 Prioritization of Projects. At least twice a year, the RWMG will generate and approve a list that prioritizes the Projects to be carried out within the Region. The final prioritized Project list will be approved by majority vote of the RWMG after receiving input from Stakeholders at a public hearing held consistent with section 5.5 above.
- 5.7 Amendment of IRWMP. The IRWMP may be amended from time to time by majority vote of the Parties at a meeting of the RWMG, open to all Stakeholders. Any member of the RWMG may request that the Lead Agency convene a meeting of the RWMG, open to all Stakeholders, to consider amendments to the IRWMP. Except in unusual circumstances, the IRWMP will be amended no more frequently than bi-annually in April and October. Any amendments to the IRWMP must be consistent with Water Code sections 10530 et seq. and any IRWM guidelines of the State Water Resources Control Board and California Department of Water Resources. The RWMG shall consider all public input and input from Stakeholders and shall adopt or reject proposed amendments by majority vote of the RWMG, after compliance with the publication and notice requirements set forth in Water Code section 10543.
- 5.8 Project Implementation. The individual Project proponent(s) will be responsible for completing their respective proposed Projects, complying with all applicable laws related thereto, conducting any necessary environmental review thereon, hiring any appropriate consultants to assist in administering their respective Projects, identifying funding for said Projects, and providing Project reports to the Lead Agency. The Parties will reasonably cooperate with the individual Project proponent(s) to support Projects approved by the RWMG.
- 5.9 Monitoring. The RWMG will be responsible for monitoring the implementation of the IRWMP. The Technical Advisory Committee will regularly report to the RWMG regarding progress on the development and implementation of the IRWMP. The Lead Agency will be responsible for coordinating

data collection among the Parties and dissemination to the RWMG. Unless specifically tasked therewith, the Lead Agency is not responsible for data production or collection.

- 5.10 Grant Applications. The RWMG will designate the appropriate Local Agency or Non-Profit Organization within the RWMG, or other appropriate third-party grant administrator, (hereafter referred to as a "Grant Administrator") to apply for grant funds and other potentially available funding. The Grant Administrator for each grant application should have a mission and expertise consistent with the purpose of the subject grant(s). The grant applications shall adhere to the Project prioritization identified by the RWMG. Funding for any grant application shall be provided for by the Local Agency(ies) that will benefit from the grant, as determined by the RWMG.
- 5.11 Grant Awards and Agreement. Unless otherwise designated by the RWMG, the Grant Administrator designated to apply for the identified grant funds pursuant to section 5.10 above will be the grantee and administer the grant on behalf of the RWMG and Stakeholders. The individual Project proponent will be responsible for compiling any and all documentation for the respective Project that may be required by the grantor or requested by the Grant Administrator. The individual Project proponent shall timely provide any such documentation to the Grant Administrator.
- 5.12 Withdrawal. A Party to this MOU may withdraw from participation upon 30 days advance notice to the other Parties. A withdrawing party will remain obligated for its proportionate share of any financial obligation incurred in furtherance of this MOU and/or implementation of the IRWMP prior to the effective date of withdrawal.
- 5.13 Personnel and Financial Resources. The general managers and/or other authorized officials of each Party will periodically meet to ensure that adequate resources are available to the RWMG to implement the MOU. In the event sufficient funding is not available to implement the MOU, the Parties agree to exercise in good faith all reasonable efforts to identify and provide for adequate funding to implement the MOU.
- 5.14 Other On-Going Regional Efforts. The IRWMP is separate from efforts of other organizations to develop water-related plans on a regional basis around Madera County. As the IRWMP is implemented, work products may be shared to provide other entities and groups with current information. The Parties agree to cooperate with the stakeholders in shared watersheds, either through separate memorandums of understanding, joint powers agreements, and/or eventual inclusion of other adjoining areas into the Region by amendment of the IRWMP (e.g., the upper Chowchilla and San Joaquin river watersheds outside of the Madera County boundaries).
- 5.15 Amendment of Memorandum of Understanding. This MOU may be amended only by a subsequent written agreement approved and executed by all of the Parties. If one or more of the Parties propose amendments to the MOU, the Lead Agency will convene a meeting to vote on the proposed amendments. If a majority of the RWMG votes in favor of the proposed amendments, the MOU as proposed for amendment shall be approved by the decision-making bodies of the Parties within 30 days of the affirmative vote. Any Parties not wishing to continue in the MOU due to the amendments or modifications will have no obligation to sign the amended MOU. The amendments will take effect 30 days after the affirmative vote of a majority of the RWMG so long as, by that time, at least three Local Agencies, at least two of which have authority over water supply or management, have signed the amended MOU.

- 5.16 Counterparts. This MOU may be signed in any number of counterparts by the Parties, each of which will be deemed to be an original, and all of which together will be deemed to be one and the same instrument.
- 5.17 Good Faith. Each Party shall use its best efforts to, in good faith, work towards completion of the objectives of this MOU and the satisfactory performance of its terms. The Parties will reasonably cooperate with each other to carry out the purpose and intent of this MOU.
- 5.18 Dispute Resolution. The Parties shall make reasonable efforts to resolve any disputes that may arise from this MOU in a prompt and timely manner. The Parties must apply the dispute resolution process set forth in this section to all disputes arising under this MOU. In the event of a dispute, the Party claiming a dispute shall give notice of the dispute to the Lead Agency. Such notice shall include a brief description of the matter in dispute and the relief sought. Upon receipt of the dispute notice, the Lead Agency shall immediately notify all Parties of the dispute and timely convene at least two RWMG meetings to resolve the dispute. If the dispute is not resolved in these meetings, the Parties shall consider terminating or amending this MOU. Prior to entering into any legal action arising out of this MOU, the Parties hereby commit to first pursue mediation. In such event, the Parties shall select a neutral mediator by majority vote. If the Parties cannot come to majority agreement, the Lead Agency will select a neutral mediator. Costs of the mediator shall be borne by the Parties in equal shares, with the Parties bearing their own costs of participation. The dispute resolution process called for in this section is binding on Parties to this MOU only to the extent of their mutual understanding herein and in no way affects the method by which Parties can lawfully resolve disputes concerning their legal or regulatory obligations arising under any other law, agreement, or contract.
- 5.19 Mutual Indemnification. This MOU shall not be construed to shift liability from any given Party to another for any actions taken in furtherance of this MOU. Each Party will remain wholly responsible for any actions it takes pursuant to this MOU. Each Party agrees, to the fullest extent permitted by law, to indemnify, defend, and hold all other Parties and any directors, officers, agents, employees, and insurers thereof from and against any and all claims, judgments, damages, penalties, costs, liabilities, and losses arising out of or related in any way to each Party's respective activities in furtherance of this MOU.
- 5.20 Effective Date; Term. This MOU shall take effect upon signature of three or more Local Agencies, at least two of which have statutory authority over water supply or water management, and shall thereafter continue so long as the criteria set forth in this section are met until terminated by mutual written agreement of the Parties.

6. SIGNATORIES TO THE MEMORANDUM OF UNDERSTANDING

We, the duly authorized undersigned representatives of our respective entities, acknowledge the above as our understanding of the intent to oversee the governance, funding, further development, and implementation of the Integrated Regional Water Management Plan for the Region.

**REGIONAL WATER MANAGEMENT GROUP**

[Signatories Follow on original document; see page \_ for list of signatories]

\_\_\_\_\_  
Entity

\_\_\_\_\_  
By

# BYLAWS

## Bylaws and Rules of Order Of the Madera Region Regional Water Management Group (RWMG) Adopted September 10, 2012

### 1. Authority

- 1.1. Authorization: These bylaws and rules are authorized by majority vote of the Madera Region Regional Water Management Group (RWMG) and shall apply to all meetings and proceedings of the RWMG.
- 1.2. Water Code Reference: Consistent with Water Code section 10539, a RWMG generally refers to a group of three or more Local Agencies in the Region, at least two of which have statutory authority over water supply or water management, as well as those other entities in the Region that may be necessary for the further development and implementation of the Integrated Regional Water Management Plan (IRWMP). As specifically used in these bylaws, RWMG shall refer to the Parties to the Memorandum of Understanding for Integrated Regional Water Management in the Madera Region (MOU).

### 2. Membership

- 2.1. Eligibility: Membership in the RWMG is open to local agencies, non-profit organizations, or other entities in the Region that desire to participate in the adoption, further development, funding, and implementation of the IRWMP. Interested parties may seek to join the RWMG at any time.

#### 2.2. Dues Paying Members:

- 2.2.1. Adoption Procedure for Dues Paying Members: Each Party of the RWMG must adopt the Madera Region IRWMP prior to executing the MOU. For a Local Agency, adoption of the IRWMP is by formal resolution of the governing body or its equivalent (e.g., by a board of directors or other management entity). For any other entities, adoption by way of acknowledgement of acceptance of the IRWMP by the individual(s) authorized to bind the entity, is required. To join the RWMG, an entity must submit a request to the RWMG and become signatory on the MOU. The RWMG shall determine whether the requesting party is a party qualified under Water Code section 10539 and this MOU to participate as a member of the RWMG. If so, the requesting party may join the RWMG by adopting the IRWMP and executing the MOU.

#### 2.3. Disadvantaged Community (DAC) Group Members:

- 2.3.1. Adoption Procedure for DAC Group Members: As the RWMG seeks the participation of disadvantaged communities, interested DACs that do not have the ability to contribute substantial financial resources are encouraged to become members of the DAC Group. DAC Group members are not required to contribute monetary dues. DACs desiring to become part of the DAC Group shall submit an application to the RWMG requesting DAC Group member status.

**2.3.2. Selection of the voting representative and alternate representative to the RWMG from the DAC Group:**

The DAC Group is recognized as a single voting entity for the purpose of governance of the RWMG. The DAC Group shall be entitled to one representative and one alternate representative on the RWMG of its own selection (although all DAC Group members are encouraged to attend all meetings). Selection of the DAC Group representative and alternate shall be administered as follows: a letter soliciting nomination of a RWMG candidate to represent the DAC Group will be sent to each DAC within the Madera Region. From the responses received, a list of candidates will be compiled and a ballot distributed to all DACs within the Madera Region; each DAC having one vote in the election. Upon receipt of all ballots within a stated time period, the individual with the most votes shall become the DAC Group representative and the individual with the second most votes shall be the alternate. Said representative and alternate shall serve a two-year term with no limit on the number of terms that an individual can serve.

2.4. **Affiliate Members:** The RWMG defines affiliate members as agencies or organizations procedurally precluded from contributing monetary dues. Entities that qualify to be Affiliate Members include, but are not limited to, California Department of Fish and Game, California Department of Forestry and Fire Protection, United States Forest Service, State Water Quality Control Board. Entities desiring to become Affiliate Members shall submit an application to the RWMG.

2.5. **Active Membership:** Each agency/signatory group must have representation at each meeting; if three consecutive meetings are missed, a notice will go to the agency/signatory group in regards to the absence with the option of ending their relationship with the RWMG.

2.6. **Withdrawal:** A member may withdraw from the RWMG upon 30 days advance notice to the other members. A withdrawing member will remain obligated for its proportionate share of any financial obligation incurred in furtherance of the MOU and/or implementation of the IRWMP prior to the effective date of the withdrawal.

**3. Officers, Lead Agency, Fiscal Agent/Sponsor and Staff**

3.1. **Terms:** Each officer will be elected at the first meeting; with one year terms for officers and no term limits. The RWMG shall have the following officers:

3.2. **Officers:**

3.2.1. **Chairperson:** The RWMG shall have a chairperson. The chairperson shall be elected by the RWMG in March of each year. The person holding the chair position must have participated as a representative for a RWMG member for one year. The chairperson does not have to be a representative of the Lead Agency.

3.2.1.1. **Duties:** The chairperson is the presiding officer of the RWMG and as such, shall have the following duties:

3.2.1.1.1. In coordination with the RWMG Administrative Assistant set meeting agendas.

3.2.1.1.2. Convene the meeting and call the RWMG to order at the time at which the RWMG is to meet, when a quorum is present, or when there is no prospect of there being a quorum.

3.2.1.1.3. Announce the business before the RWMG in the order in which it is to be acted upon.

- 3.2.1.1.4. Conduct public hearings as provided.
- 3.2.1.1.5. State and put to vote all motions which are regularly made, or necessarily arise in the course of the meeting, and announce the result of the vote.
- 3.2.1.1.6. Expedite business in every way compatible with the lawful conducting of business.
- 3.2.1.1.7. Enforce on all occasions the observance of order and decorum among members and the public.
- 3.2.1.1.8. Decide all questions of order and procedure, subject, however, to an appeal to the RWMG as a whole. In the event of an appeal, the decision of the majority of the members present at the meeting shall decide questions of order and procedure.
- 3.2.1.1.9. Gather the information/topics from the group and create the agenda for each meeting.
- 3.2.1.1.10. If the Administrative Assistant is unable to attend a meeting, the chair will appoint a temporary note taker for that meeting.

3.3. Chair Pro Tem: The RWMG shall have a chair pro tem, who shall be elected in the same manner, at the same time, and for the same term as the chair. The chair pro tem shall have and perform all powers and duties of the chair in the absence of the chair.

3.4. Lead Agency: The RWMG shall mutually agree upon a designated signatory Local Agency to facilitate IRWMP implementation and coordinate RWMG activities in furtherance of the MOU. The Lead Agency will serve at the pleasure of the RWMG. Unless otherwise designated as the Grant Administrator responsible for funding or the Project proponent for an individual Project pursuant to the MOU, the Lead Agency shall not be responsible for any Project, including without limitation completion, funding, or environmental review thereof.

3.5. Staff:

3.5.1. Administrative Assistant: The RWMG will have an Administrative Assistant. The Administrative Assistant provides notice of all meetings as required by law; prepares, keeps and maintain the files, minutes, findings, resolutions, orders, and all other documents and papers relative to those items of business which are or have been before the RWMG; and attends each meeting and records each item of business. This person may be a designee from one of the MOU signatory entities.

3.6. Fiscal Agent/ Agency Sponsor/Grantee:

3.6.1. The Fiscal Agent/Sponsor will be Project Manager and Grant Administrator for the Planning grant for the Region as well as Grant Administrator for the Implementation Grants that will be ran through the RWMG. They will complete the reporting, invoicing, and contracting with DWR and other funders for the planning stage and contract with consultants or employee to manage the IRWMP Project and provide administrative support or project assistance. They will have legal obligations for grants with DWR and other funders.

#### 4. Meetings

Proposed agenda items and any corresponding supporting documents must be submitted to the Chairperson a minimum of two weeks prior to the scheduled meeting date. When a vote of the RWMG is needed for an action, the item will be designated as an action item on the agenda.

4.1. Regular Meetings:

4.1.1. Unless otherwise designated in the agenda, all regular meetings of the RWMG shall be held alternately in the following three locations: Madera, Chowchilla, and Oakhurst. Meetings will be held on the second Monday of each month at 1:30 pm.

4.2. Special Meetings:

4.2.1. Special meetings of the members shall be held at a time, place and frequency to be specified by a vote of the members. Special meetings shall conform with the noticing and conduct requirements of regular meetings.

4.3. Brown Act:

4.3.1. All regular and special meetings shall conform to the requirements of the Ralph M Brown Act (Government Code section 54950 et seq.) including the preparation and posting of agendas, providing notice, inspection of records, conducting of closed sessions, and the like.

4.4. Participation:

4.4.1. Members agree to work in good faith. Good faith implies an obligation to regularly attend and participate in meetings, to strive to understand all perspectives, to engage in dialogue and deliberation, and to earnestly work with fellow RWMG members.

**5. Meeting Procedure**

5.1. Quorum: A majority of the MOU Signatories (voting members) shall constitute a quorum. Except as may otherwise specifically be required by law or these Bylaws, every act or decision done or made by majority of the members present at a meeting duly held at which a quorum is present shall be regarded as the act and decision of the members.

5.2. Calling Meeting to Order: When a quorum is present or when there is no prospect of there being a quorum, the chair shall convene the meeting and call the RWMG to order.

5.3. In the absence of the Chair and Chair Pro Tem: The Administrative Assistant shall convene the meeting and call the RWMG to order, whereupon a temporary chair shall be elected by the members who are present. The temporary chair shall relinquish the chair upon arrival of the chair or chair pro tem and after the conclusion of the item of business then being considered.

5.4. Order of Business

5.4.1. Quorum not Present: If no quorum exists, only the following business may be transacted: taking measures to obtain a quorum, fixing the time to which to adjourn, the action to adjourn, to take a recess or to receive information.

5.4.2. When a quorum is present, business shall be conducted in the following order:

5.4.2.1. Reading or waiver of reading, and approval of the minutes of the previous meeting;

5.4.2.2. A period, not to exceed 15 minutes, to allow public comment on matters within the jurisdiction of the members that are not on the current meeting's agenda, with each

speaker to give his or her name and address for the record and not to speak in excess of three minutes;

- 5.4.2.3. Review of agenda items. For agenda items that are informational only the chair will call the item and facilitate discussion as appropriate. For decisional agenda items the chair will call the item and follow the procedure outlined under '6 Decision Making' below.
- 5.4.2.4. Setting the next meeting date.
- 5.4.2.5. Adjournment

## **6. Decision Making**

6.1. Administrative Decisions: Administrative decisions are about the logistical activities of the RWMG (including but not limited to: meeting dates and times, agenda revisions, and schedules) All administrative decisions will be made on a simple majority vote of all Dues Paying members, the DAC Group, and Affiliate Members present. Upon request of a Dues Paying member a prospective decision shall be treated as a Substantive Decision.

6.2. Substantive Decisions: All other decisions (including but not limited to updates to the MOU or By-Laws, IRWM Plan adoption, budget/finances, projects related priorities, expenditures or implementation issues) will be made using the following procedure designed to include and value as wide a range of perspectives as feasible.

6.2.1. Introductory Discussion: The chair will provide an opportunity for discussion of the item by all active group members.

6.2.2. Non-Binding Poll of All Meeting Participants: The RWMG will use polling to assess the degree of preliminary support for an idea before it is submitted as a formal proposal for a vote. The poll results will potentially indicate the need for subsequent work to revise the text of a recommendation and to prepare it for a vote. The RWMG will use the following three levels to indicate a degree of approval & support for a proposal or being considered.

6.2.2.1. Thumbs Down / I do not agree with the proposal. I feel the need to block its adaptation and propose an alternative.

6.2.2.2. Thumbs Sideways / I can accept the proposal although I do not necessarily support it.

6.2.2.3. Thumbs Up / I think this proposal is the best choice of the options available to us.

6.2.2.3.1. The RWMG will strive to have participants in the 'Thumbs Up' or 'Thumbs Sideways' indicators of support on a given proposal. If a participant is at a 'Thumbs Down' level, that person should provide a counter proposal that legitimately attempts to achieve his/her interests and the interests of all the RWMG members. The RWMG will evaluate how best to proceed when a counterproposal is presented.

6.2.2.3.2. 'Thumbs Down' viewpoints will be documented in the meeting minutes. If a participant would also like to document their alternate view, the said participant may submit a write up to the RWMG Administrative Assistant within one week of the meeting in which the discussion took place. The write up will be attached to the meeting minutes. The write up should be expressed in the following manner: a) Outlines the key concern from an organizational or interest-based stance. b) Provides a recommendation for improving the decision/product in question.

6.3. Formal Voting

6.3.1. Dues Paying Member and DAC Group Voting: The Dues Paying members and the DAC Group representative will be referred to as the "RWMG Voting Members." Each Dues Paying Member can have as many representatives attend as they wish, but at the time of a vote only one person will be allowed to vote per Dues Paying Member entity. As specified in Section 2.3.2. of these by-laws, the

DAC Group Representative will vote on behalf of the DAC Group. As with Dues Paying Members, the DAC Group can have as many representatives attend as they wish, but at the time of vote only the designated representative will be allowed to vote.

- 6.3.2. Designated Voting Representative: Each Dues Paying Member entity will designate who the voting party will be to represent their entity. As outlined in Section 2.3.2 of these by-laws, the DAC Group representative will be chosen as specified.
- 6.3.3. Designated Voting Alternate: Each Dues Paying Member will designate an alternate. As specified in Section 2.3.2. of these by-laws, the DAC Group alternate will be chosen as specified.
- 6.3.4. Calling for Motion Upon the conclusion of the discussion among the RWMG Voting Members on an item of business requiring a vote, the chair shall call for a motion. A motion must be seconded before the chair may put it to a vote of the RWMG Voting Members. If, after a reasonable time, a motion is not seconded, the motion shall die for lack of a second and the chair shall call for a new motion.
- 6.3.5. Putting Motion to a Vote. When a motion has been made and seconded, the chair shall then state the motion and call for a vote. The chair shall first ask for all RWMG Voting Members voting in favor of the motion to give their vote orally, and shall then ask those Voting Members opposed to the motion to give their vote orally. Upon request of any Voting Member, the chair shall call for a roll-call vote, with the chair to vote last.
- 6.3.6. Minimum Votes Needed to Pass Motion The RWMG shall not approve any item of business except upon the majority vote of those casting a vote.
- 6.3.7. Abstention Abstaining votes are not counted.
- 6.3.8. Announcement of Vote. When all voting is complete, the chair shall announce whether the motion is approved or denied, or whether a new motion is needed.
- 6.3.9. Change of Vote. A member can change his or her vote up to the time the chair announces the result of the vote. After the chair announces the vote, no changes shall be allowed.

## 7. Dues

- 7.1. Justification: Baseline administration of the RWMG requires financial support from participating members.
- 7.2. Procedure: In May of each calendar year the Chair will propose an administrative operating budget for the coming fiscal year running from July 1 – June 30. The RWMG will seek to formally adopt the budget proposed at the May meeting at the subsequent June meeting.
- 7.3. Dues Paying Members: MOU signatories, including water agencies, irrigation districts, local government, and other entities will pay an equal dues amount.
- 7.4. DAC Group Members: The RWMG will not require monetary financial support from the DAC Group members through dues. But the DACs will be expected to provide support for sponsored implementation projects (which could be supplied through in-kind support).
- 7.5. In-Kind Administrative Services: In the case that a RWMG member organization provides administrative support (i.e. sending invoices, receiving dues payments, creating expenditure/receivable reports) that entity may subtract from their dues the cost of providing those services for the year.  
The amount of credit for In-Kind Administrative Services shall be approved by a majority vote of the Regular Members of the RWMG.
- 7.6. Special Projects: A “Special Project” is an activity undertaken by fewer than all the Parties in the RWMG. The activity must be consistent with the scope of the RWMG’s efforts. Prior to undertaking a Special Project, the Parties electing to participate in the Special Project shall enter into a ‘Special Project’

agreement. Such activity agreement shall provide that (i) no Special Project undertaken pursuant to such agreement shall conflict with the terms of the RWMG MOU and (ii) the Parties to the activity agreement shall indemnify, defend and hold the other Parties harmless from and against any liabilities, costs or expenses of any kind arising as a result of the Special Project described in the activity agreement. All assets, rights, benefits, debts, liabilities and obligations attributable to a Special Project shall be assets, rights, benefits, debts, liabilities and obligations solely of those parties that have entered into the activity agreement for that Special Project, in accordance with the terms of the activity agreement, and shall not be the assets, rights, benefits, debts, liabilities and obligations of those parties that have not executed the activity agreement.

- 7.7. Unforeseen Circumstances: Due to the uncertainty of the grant funding process and other factors outside the control of the RWMG, circumstances could arise wherein members would need to decide whether an additional financial contribution is necessary. This decision would take place through the RWMG's voting procedures.
- 7.8. Donations: Donations by participating members are welcomed and will be accepted.
- 7.9. Conflicts of Interest: Should any member have a financial interest, as defined by Government Code section 87103 and its regulations, in the outcome of any item being considered by the RWMG, that a member shall declare his or her interest and refrain from participation as a member in any debate or discussion and any vote on the item. The recused member shall not be counted toward the existence of a quorum.

## **8. Miscellaneous**

- 8.1. Public Records: The Lead Agency shall be the repository for all records of the RWMG, for purposes of responding to requests for inspection and copying of public records.
- 8.2. Subcommittees: The RWMG may form subcommittees for the purposes of carrying out its duties, or for addressing issues affecting particular areas of the Madera Region or for certain issues within the general jurisdiction of the RWMG.
- 8.3. Amendments: These rules and procedures may be amended as needed, in a manner provided by law.
- 8.4. Roberts Rules of Order: Where these bylaws do not cover an issue; Roberts Rules of Order shall apply.

# GROUND RULES

## Regional Water Management Group Madera Region Integrated Regional Water Management Plan

### **MEMBER CODE OF ETHICS** **Ground Rules**

As a member of the Regional Water Management Group I will:

- ✓ Listen carefully to my Group members
- ✓ Respect the opinion of my fellow Group members
- ✓ Respect and support the majority decisions of the Group
- ✓ Recognize that all authority is vested in the Group when it meets in legal session
- ✓ Keep well informed of developments relevant to issues that may come before the Group and come to meetings well prepared
- ✓ Participate actively in Group meetings and actions
- ✓ Bring to the attention of the Group any issues that I believe will have an adverse effect on the Group or those we serve
- ✓ Attempt to interpret the needs of those we serve to the Group, and interpret the actions of the Group to those we serve
- ✓ Recognize that my job is to ensure that the Group is well managed, not to manage the Group
- ✓ Represent all those whom this Group serves within the designated Region
- ✓ Consider myself a "trustee" of the Group and do my best to ensure that the best interest of those we serve
- ✓ Always work to learn how to do my job better
- ✓ Declare conflicts of interest between my personal life and my position on the Group and abstain from the voting when appropriate
- ✓ Strive to find common ground
- ✓ Stay focused on issues not on people
- ✓ Stick to the topic during meetings and not waste valuable Group time

As a member of the Regional Water Management Group, I will not:

- ✓ Criticize the fellow Group members or their opinions, in or out of the Group meetings
- ✓ Use the Group for my personal advantage or that of my friends or relatives
- ✓ Promise how I will vote on any issue before a meeting
- ✓ Interfere with the duties of the facilitator/coordinator or undermine his or her authority with staff members

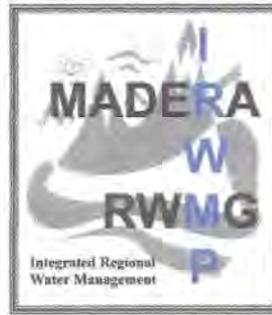
All RWMG meetings are open to the public.

Date \_\_\_\_\_

\_\_\_\_\_  
Name (please print)

\_\_\_\_\_  
Signature

Appendix B  
Adoption Resolution



**RESOLUTION NO 01-15**

**RESOLUTION OF THE MADERA REGIONAL WATER MANAGEMENT GROUP  
AUTHORIZING ADOPTION OF THE UPDATED MADERA INTEGRATED REGIONAL  
WATER MANAGEMENT PLAN**

**WHEREAS**, beginning in 2013, the Madera Regional Water Management Group (RWMG) began work to update an Integrated Regional Water Management Plan (IRWMP), which was originally prepared in 2008; and

**WHEREAS**, the IRWMP was developed with input from the public, community organizations and public agencies; and

**WHEREAS**, the RWMG received a presentation on the IRWMP at a regularly scheduled RWMG meeting on February 9, 2015, and approved the IRWMP by minute order; and

**WHEREAS**, it is desired to formally adopt the IRWMP by resolution, for purposes of compliance with the California Water Code and the requirements of the California Department of Water Resources.

**NOW, THEREFORE, BE IT RESOLVED** by the Madera Regional Water Management Group that:

1. The updated Integrated Regional Water Management Plan is approved as presented to the RWMG on February 9, 2015, together with all additions and amendments stated on the record in the public meeting held on that date.

The foregoing Resolution was adopted this day of February 9, 2015 by the following vote:

AYES:

Chowchilla Red Top RCD	Vote - Yes
Chowchilla Water District	Vote - Yes
City of Chowchilla	Vote - Yes
City of Madera	Vote - Yes
Fairmead Comm, & Friends	Vote - Yes
Gravelly Ford	Vote - Yes
Madera County	Vote - Yes
Madera County Special Dist	Vote - Yes
Madera Irrigation District	Vote - Yes
Root Creek Water District	Vote - Yes
Self Help Enterprises	Vote - Yes
SEMCU	Vote - Yes
Yosemite/Sequoia RC & D	Vote - Yes

NOES:               None

ABSTAIN:           None

ABSENT:

Coarsegold Resource Conservation District  
Madera Valley Water Company  
Madera Water District  
North Fork – Mono Rancheria



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Chair

ATTEST:



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Secretary

## Appendix C

### Estimated Agricultural Water Demands

**Madera Integrated Regional Water Management Plan**  
**Estimated Agricultural Water Demands (valley portion of Madera County)**

Crop	2003 <sup>1</sup>			2011 <sup>1</sup>			2013 (projected) <sup>2</sup>				2013 Ag Commissioner <sup>5</sup>		
	Irrigated Crop Area (1,000 ac)	Applied Water Requirements (AF/acre) <sup>6</sup>	Estimated Annual Irrigation (1,000 AF)	Irrigated Crop Area (1,000 ac)	Applied Water Requirements (AF/acre)	Estimated Annual Irrigation (1,000 AF)	Average Annual Change (2003-2011)	Irrigated Crop Area (1,000 ac)	Applied Water Requirements (AF/acre)	Estimated Annual Irrigation (1,000 AF)	Irrigated Crop Area (1,000 ac)	Applied Water Requirements (AF/acre)	Estimated Annual Irrigation (1,000 AF)
Grain	1.0	1.2	6.8	42.1	1.3	54.7	5.1	52.3	1.3	68.0	10.5	1.3	13.6
Rice	0.0	0.0	0.0	0.5	5.2	2.4	0.1	0.6	5.2	2.9	0.0	5.2	0.0
Cotton	18.2	3.2	58.2	5.6	2.9	16.5	-1.6	2.5	2.9	7.3	2.3	2.9	6.7
Sugar Beet	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	1.8	0.0	0.0	1.8	0.0
Corn <sup>5</sup>	20.6	2.7	56.4	4.3	2.3	10.0	-2.0	0.3	2.3	0.6	25.3	2.3	58.3
Dry Bean	1.0	2.5	2.5	0.6	2.0	1.3	0.0	0.6	2.0	1.1	0.4	2.0	0.7
Safflower	0.0	0.0	0.0	0.2	1.2	0.3	0.0	0.3	1.2	0.4	0.0	1.2	0.0
Other Field	18.2	2.7	49.1	4.6	2.4	11.0	-1.7	1.2	2.4	3.0	6.4	2.4	15.3
Alfalfa <sup>5</sup>	38.8	4.5	174.2	29.1	4.2	122.1	-1.2	26.6	4.2	111.8	19.6	4.2	82.2
Pasture <sup>5</sup>	4.7	4.4	20.6	4.2	4.3	17.9	-0.1	4.1	4.3	17.4	1.7	4.3	7.1
Process Tomato	1.6	2.5	4.0	2.3	3.6	8.1	0.1	2.4	3.6	8.7	3.8	3.6	13.8
Fresh Tomato	0.4	1.6	0.7	0.0	2.5	0.0	-0.1	0.0	2.5	0.0	0.8	2.5	2.0
Cucumber	0.4	1.2	0.5	0.1	2.4	0.2	0.0	0.0	2.4	0.0	0.1	2.4	0.3
Onion/Garlic	0.4	1.5	0.6	0.0	3.8	0.1	0.0	0.0	3.8	0.0	0.4	3.8	1.6
Other Truck Crops	1.1	1.2	1.3	2.2	1.2	2.6	0.1	2.5	1.2	3.0	2.2	1.2	2.6
Almond/Pistachio	81.1	3.5	280.6	145.1	3.3	481.6	8.0	161.1	3.3	534.7	170.8	3.3	567.0
Other Deciduous	18.4	3.7	68.1	20.9	3.4	72.1	0.3	21.6	3.4	74.3	16.2	3.4	55.7
Subtropical	6.4	2.9	18.8	8.8	2.7	23.5	0.3	9.4	2.7	25.1	7.9	2.7	20.9
Vine	94.0	2.6	240.6	81.8	2.1	174.1	-1.5	78.7	2.1	167.6	80.8	2.1	172.2
Multiple Crop <sup>3</sup>	8.5	3.2	27.2	8.5	2.8	23.8	0.0	8.5	2.8	23.8	8.5	2.8	23.8
<b>Total Acres</b>	<b>314.8</b>	-	-	<b>360.9</b>	-	-	-	<b>372.6</b>	-	-	<b>357.7</b>	-	-
<b>Weighted Avg Water Req.</b>	-	<b>3.2</b>	-	-	<b>2.8</b>	-	-	-	<b>2.8</b>	-	-	<b>2.8</b>	-
<b>Total Applied Water</b>	-	-	<b>1,010</b>	-	-	<b>1,022</b>	-	-	-	<b>1,050</b>	-	-	<b>1,044</b>

Notes

1 - 2003 and 2011 cropping data from California Department of Water Resources

2 - Cropping in 2013 was projected based on average annual increases between 2003 and 2011

3 - 'Multiple Crop' acreage was not provided in 2011 data and was assumed to be same as 2003 data

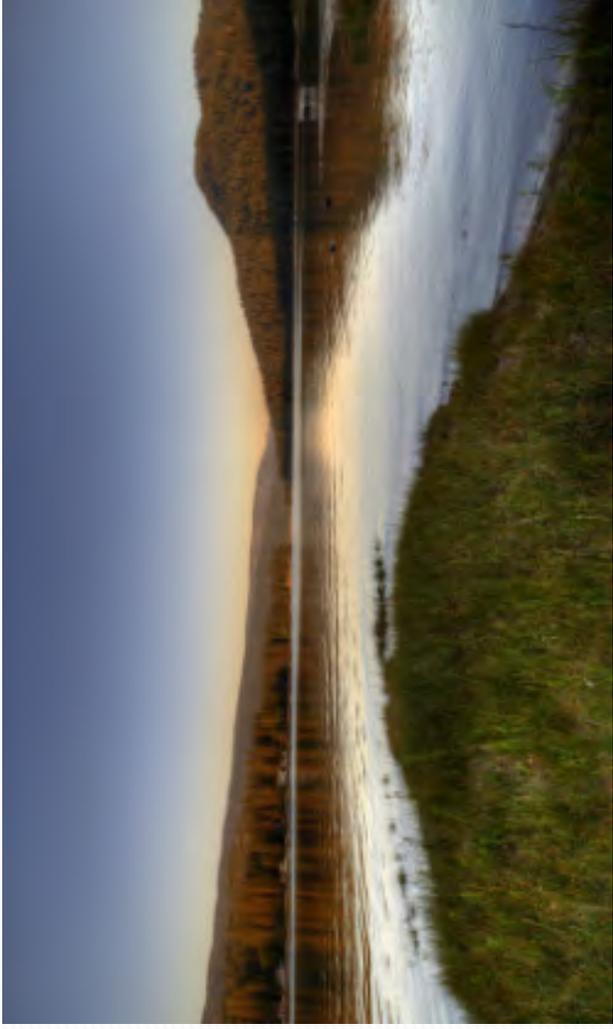
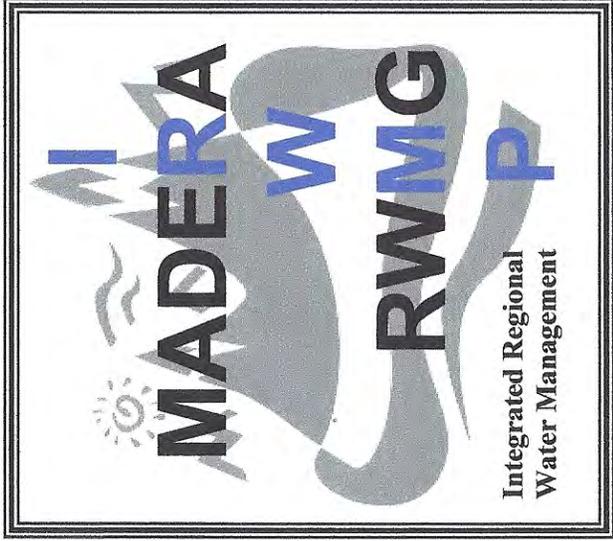
4 - County Ag Commissioner data received from Madera Irrigation District, filtered to include data for 2013 issued pesticide permits.

5 - County Ag Commissioners data adjusted up slightly to account for a large organic dairy that did not require permits in 2013 due to no pesticide application. Correction (based on 2011 Ag Commissioner data) accounts for about 1,600 acres total across three crops.

6 - Unit water demands based on those used in the Madera 2008 IRWMP and are from California DWR Irrigated Crop Area and Crop Water Use - Applied Water for Madera County. Water demands are assumed to include effective precipitation and account for 80% irrigation efficiency. Unit water demands vary for different years due to difference in effective precipitation in different years.

## Appendix D

### Public Outreach Presentations



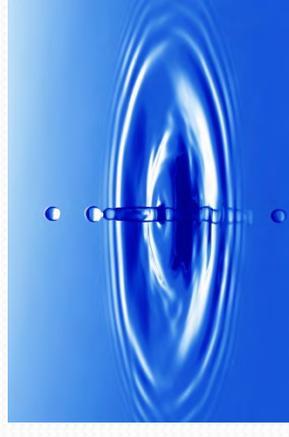
# Madera Integrated Regional Water Management

# What is Integrated Regional Water Management Planning?

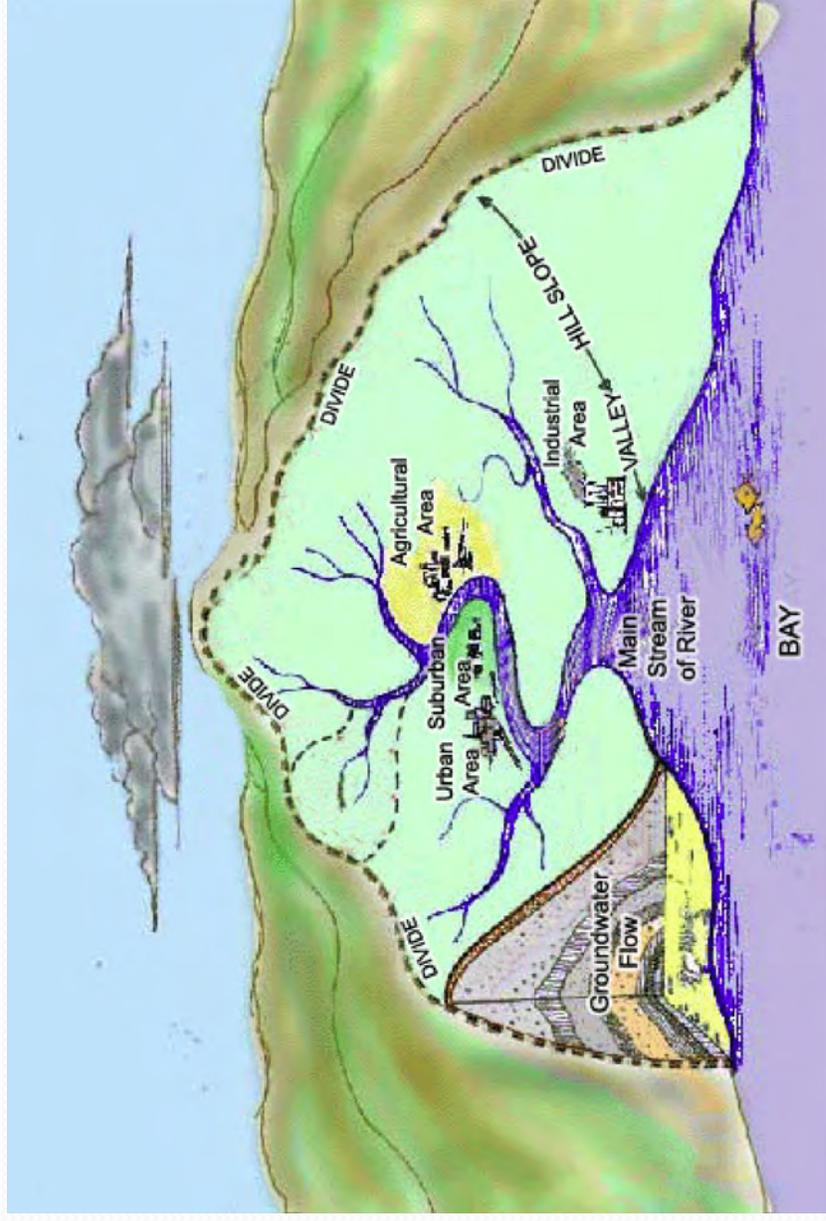
- Collaborative effort to coordinate management of many types of water resource programs and projects in a region that deal with:

- Water Supply
- Water Quality
- Waste Water Management
- Flood and Storm Management

- Opportunity to formulate comprehensive, sustainable solutions for a watershed



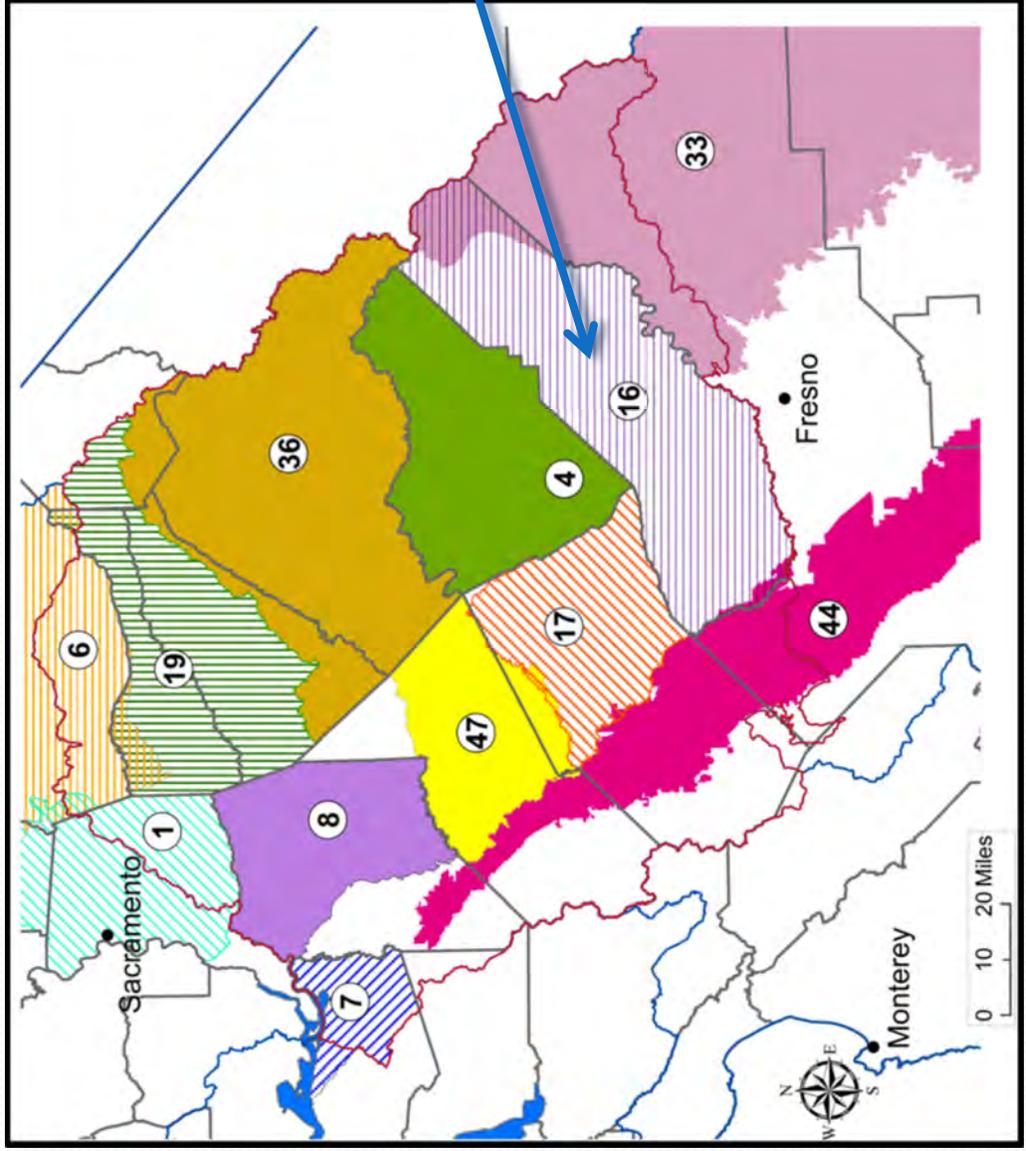
# What is a Watershed?



A watershed is the “area of land” where all of the water that is under it or drains off of it goes into a common waterway, such as a stream, lake, river, etc. and/or ultimately to the ocean. Watersheds come in all shapes and sizes; and cross county, state, and national boundaries.

Everyone lives in a watershed!

# Madera Region



Madera  
Region



# Goals of an IRWM

- To encourage integrated regional strategies for management of water resources
- To meet the long term water needs including the delivery of safe drinking water, protection of water quality, reducing negative consequences of flooding, and supporting a healthy ecosystem
- Provide an opportunity for local agencies and organizations to accomplish more than they could individually



## Benefits of an IRWM

- **Non-regulatory, consensus-based approach**
- **Builds capacity, cooperation and increases efficiency**
- **Develops multiple-interest water resource projects and fosters upstream-downstream communication**
- **Provides access to funding opportunities**

## It's Voluntary – So Why Do One?

- Encourages a broad, long-term perspective.
- Identifies broad benefits, costs, and tradeoffs.
- Promotes sustainable resource management.
- Increases regional drought preparedness.
- Uses open forums that includes all communities.



# It's Voluntary – So Why Do One?

(Continued)

- Promotes coordination and collaboration among local agencies and governments.
- Uses sound science, best data, and local knowledge.
- Collaboration strengthens regional clout, reduces conflict, increases benefits across the region and may reduce costs for individual agencies.



# CA State IRWM History



- 2002: IRWM Act (SB1672)
- 2002: Prop 50 passes - provides \$500,000,000
- ! ● 2006: Prop 1E passes - provides \$300,000,000
- 2006: Prop 84 passes - provides \$1,000,000,000
  - Planning Grants (Prop 84)
  - Implementation Grants (Prop 84)

# Madera IRWM History



- **2006: County of Madera began development of an IRWM Plan**
- **2008: Completed and Board Accepted IRWM Plan**
- **2010: Formed Regional Water Management Group (RWMG)**



# Madera IRWM History

(Continued)

- 2011/12: Received \$9,413,947 Implementation Grant. Used to fund:

- Ash Slough Arundo and Sediment Removal
- Cottonwood Creek, Dry Creek & Berenda Creek – Arundo and Sediment Removal
- Root Creek Recharge Project
- Sierra National Forest Fuel Reduction Project



# Madera IRWM History

(Continued)



- 2012/13: Received \$271,438 Planning Grant to update IRWM Plan to meet Prop 84 standards
- 2013: Established Disadvantaged Community (DAC) membership process and application
- ● 2014: In process of updating IRWM Plan (expected completion by Dec. 2014)



# Status of Plan Update and Projects

March – July 2014: DAC Outreach

July 2014: Drought Funds Applications

July 2014: Call for projects for the Plan Update

August 2014: Draft Plan expected to be ready for review

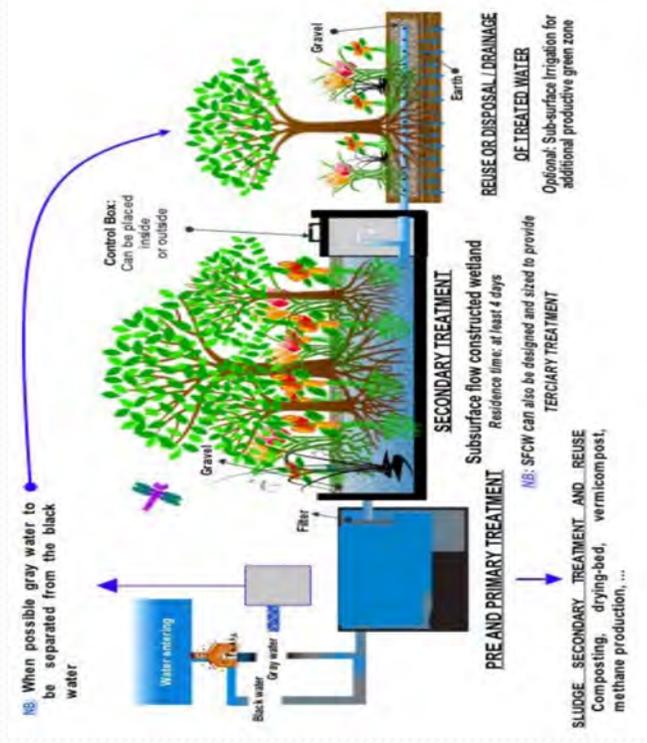
September 2014: Plan adoption & Announcement of Recipients of the Expedited Drought Funding

Mid-Summer 2015: Apply for Final Round of Implementation Grant Funding

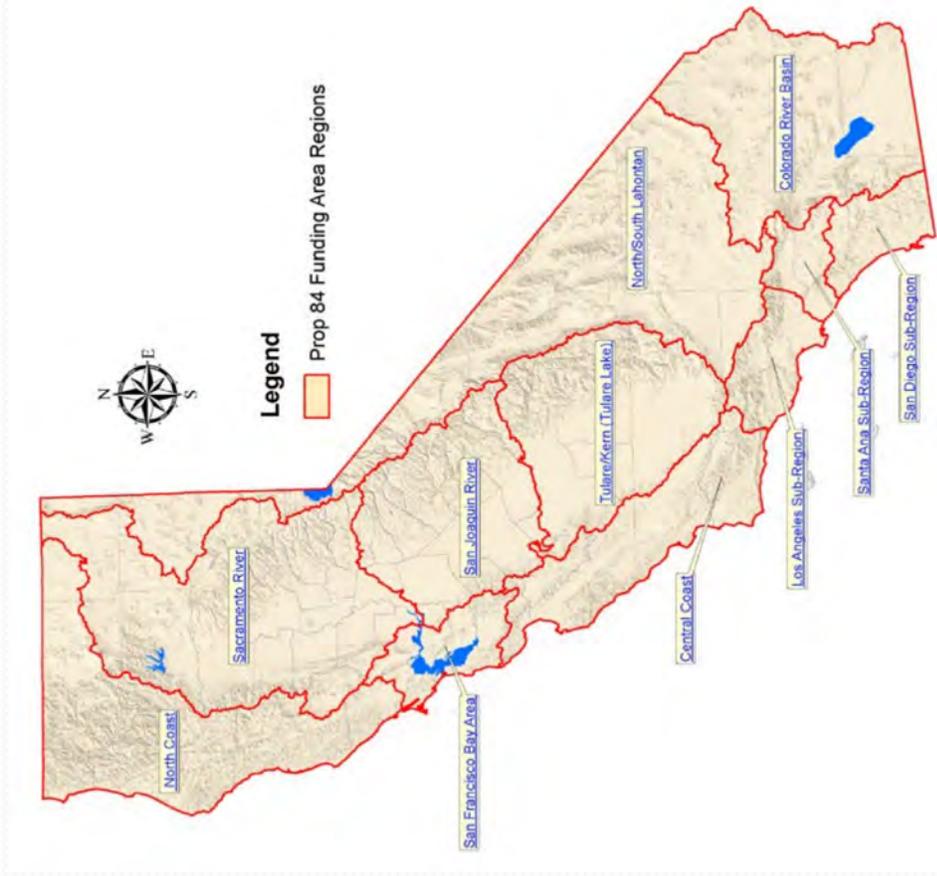
Mid 2017: Complete Round 1 Projects

# Possible Project Areas

- Water supply and distribution
- Wastewater management
- Water conservation
- Restoration
- Groundwater studies
- Fuel load management
- Pollution prevention
- Storm water drainage management
- Increase capacity of water ways
- Invasive/non-native plant eradication



# San Joaquin River Funding Area



**\$200 million Expedited  
Drought Funds**

**2015 Implementation Funds**

# Integrated Regional Water Planning

- All stakeholders are encouraged to participate:
  - Water purveyors
  - Wastewater agencies
  - Flood control agencies
  - Native American tribes
  - State, federal and regional agencies and universities
  - Private landowners
  - Resource-related non-profits





# **RWMG Members**

**Chowchilla Red Top Resource  
Conservation District**

**Chowchilla Water District**

**City of Chowchilla**

**City of Madera**

**Coarsegold Resource  
Conservation District**

**Gravelly Ford Water District**

**Madera County**

**Madera County Special Districts**

**Madera Irrigation District**

**Madera Valley Water Company**

**Madera Water District**

**North Fork – Mono Rancheria**

**Root Creek Water District**

**South East Madera Citizens  
United (SEMCU)**

**Yosemite/Sequoia Resource  
Conservation and Development  
Council**

**DAC Group**

**Current Rep: Self-Help  
Enterprises  
Friend of Fairmead**



# The RWMG's regular meetings are:

**2nd Monday of each month: 1:30 p.m. — 3:30 p.m.**

**Meetings rotate between:**

**Madera**

**Chowchilla**

**Oakhurst**

**Contact Information:**

**Jeannie Habben**

**Phone: 559-642-3263**

**email: [info@cfwatershed.org](mailto:info@cfwatershed.org)**

**Learn more at:**

**<http://www.madera-id.org/index.php/rwmg>**



# Questions & Discussion

What are your issues and concerns regarding:

- Water supply
- Water quality
- Wastewater treatment
- Flood and storm water management
- Other?

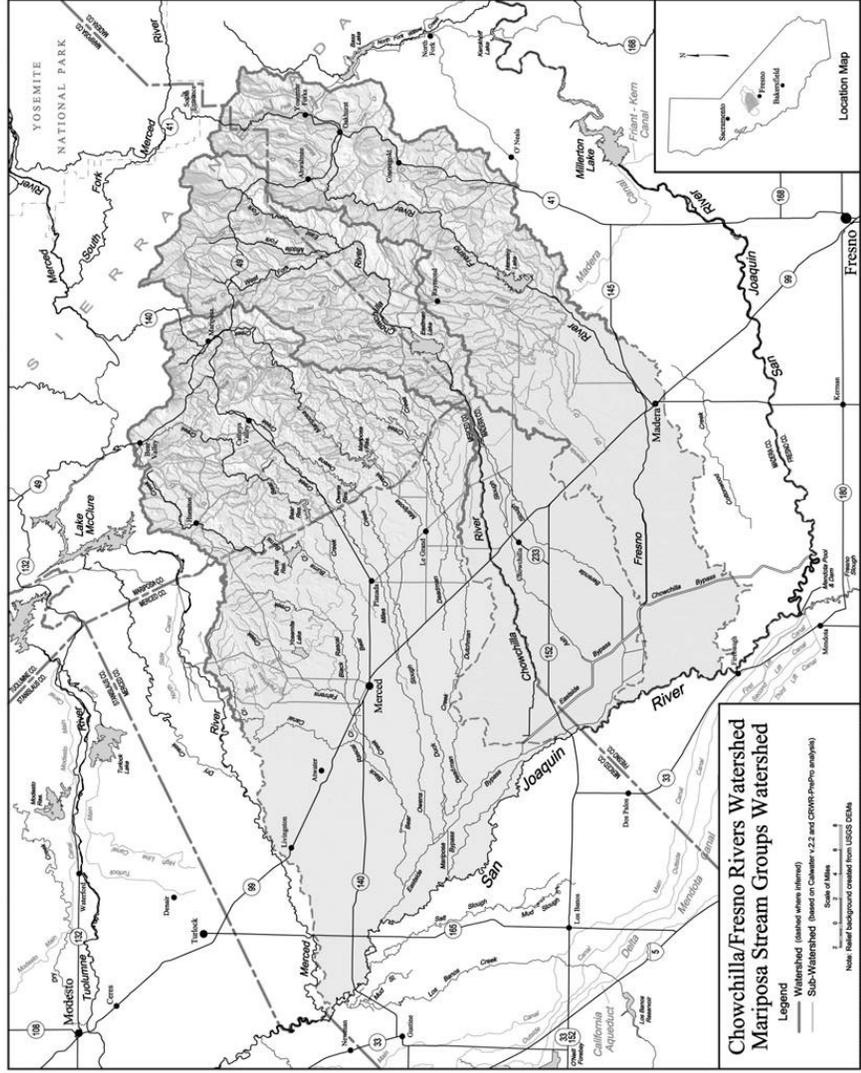
# Madera County Groups Who

## Address Water

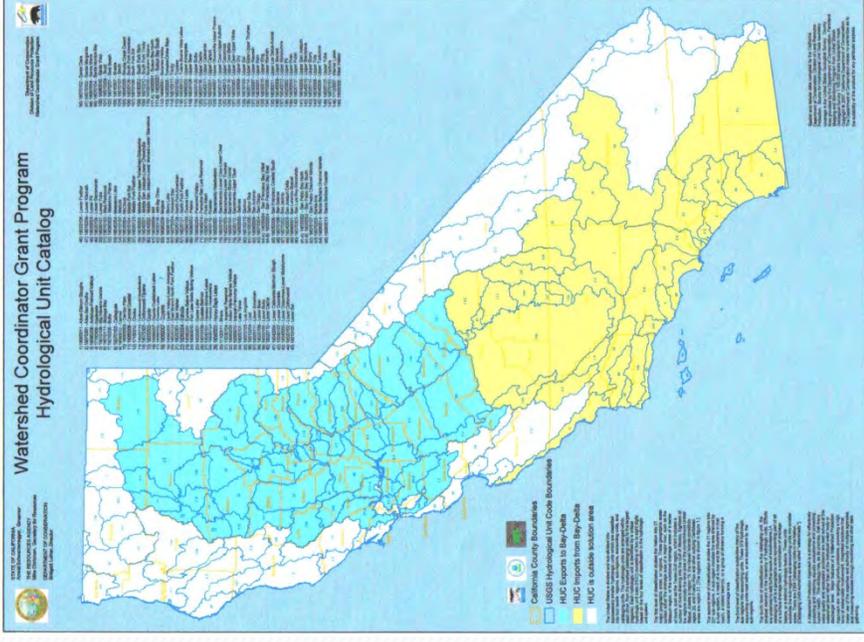
- Watershed Coordinator
- Central Sierra Watershed Committee
- Resource Conservation Districts
- Tribal Conservation Districts
- Resource Conservation and Development Councils
- Sierra-San Joaquin Noxious Weed Alliance
- Regional Water Management Group
- Madera County Water Advisory Commission



# Watershed Coordinator Program



Appendix A: Watershed Map (8-Digit USGS HUC)



# Watershed Coordinator

- Upper Chowchilla/Upper Fresno & Lower Chowchilla/Middle San Joaquin – 2.2 million acres
- Grant from Department of Conservation
- Grant held by Chowchilla Red Top RCD
- 1<sup>st</sup> Round started June 2004
- Current & 3<sup>rd</sup> Round began August 2011
- 153 Watersheds in the State
- Last round of grant funds – through August 2014
  - 116 applications and only 40 were funded
  - Only 1 was funded in the San Joaquin Region
  - 2<sup>nd</sup> part time Watershed Coordinator added - 2012



# Watershed Coordinator

- Liaison between agencies, water groups, and stakeholders in the watershed
- Education – Field Trips, Workshops, Community Presentations
- Fuel Reduction and Fire Breaks
- Noxious and Invasive Weeds – Vegetation Management



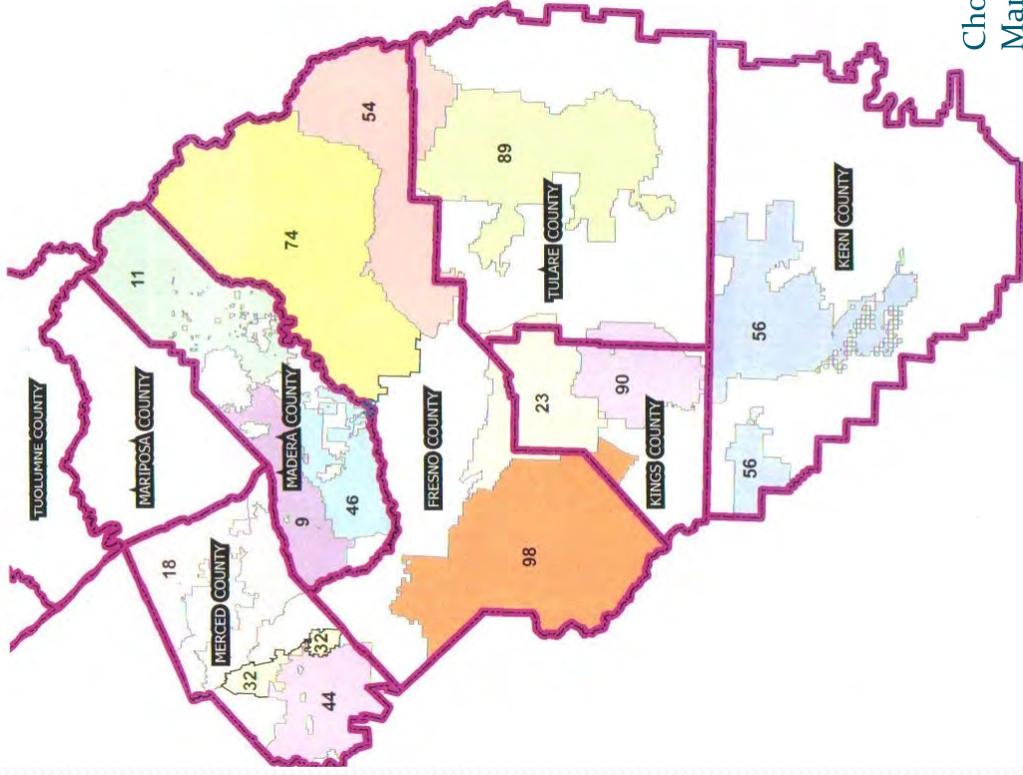
# Central Sierra Watershed Committee

The mission of the Central Sierra Watershed Committee is to promote the quality, quantity, and aesthetic values of our water resources through the conservation and restoration of our watersheds.

- Formed 1997
- Foothill Areas of Three Counties – Mariposa, Madera, Fresno
- Ad Hoc Committee of over 50 partners
- 15 to 20 in attendance at each meeting
- Develop common ground solutions &/or agreements for improving watershed and local habitat

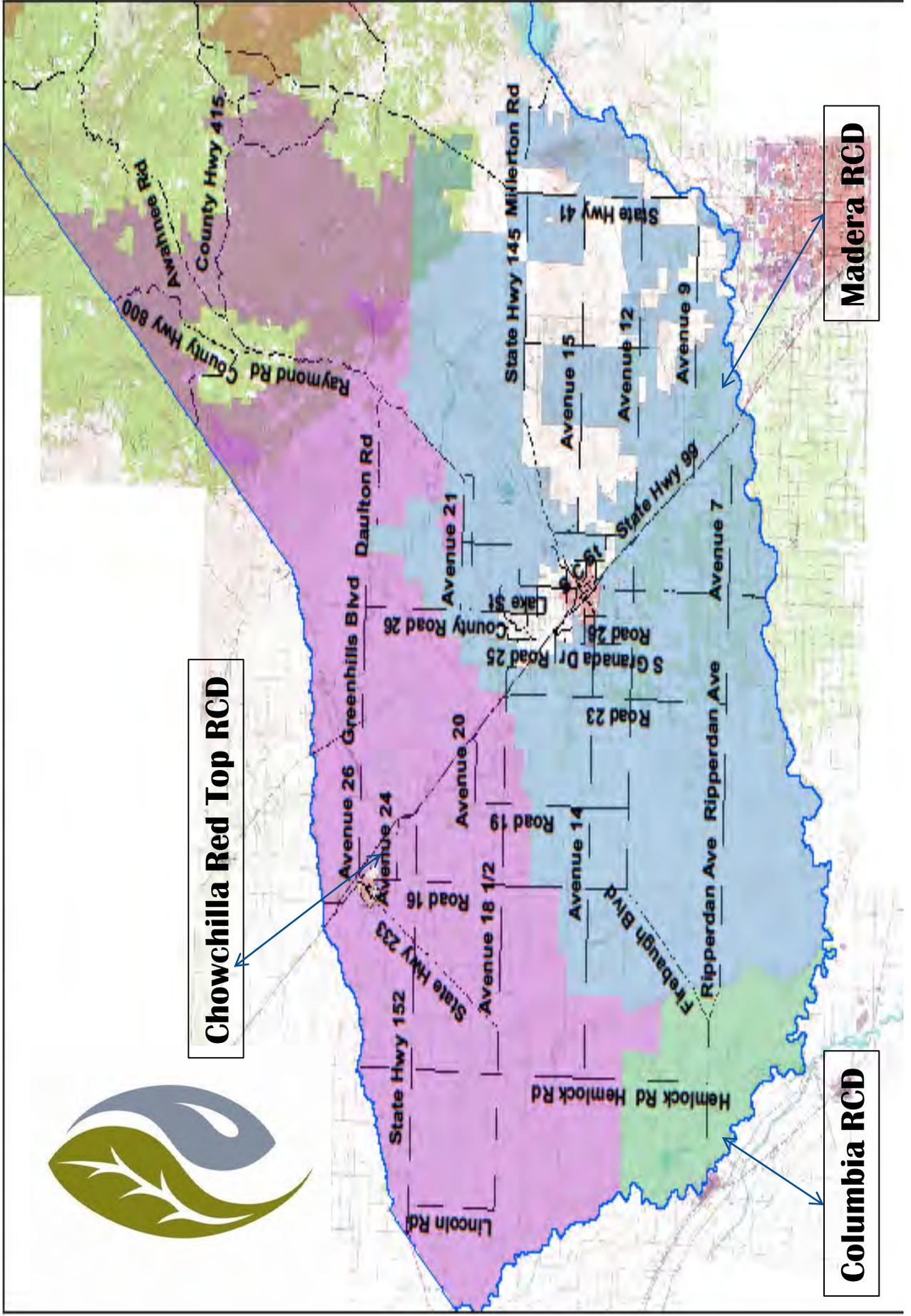


# Resource Conservation Districts

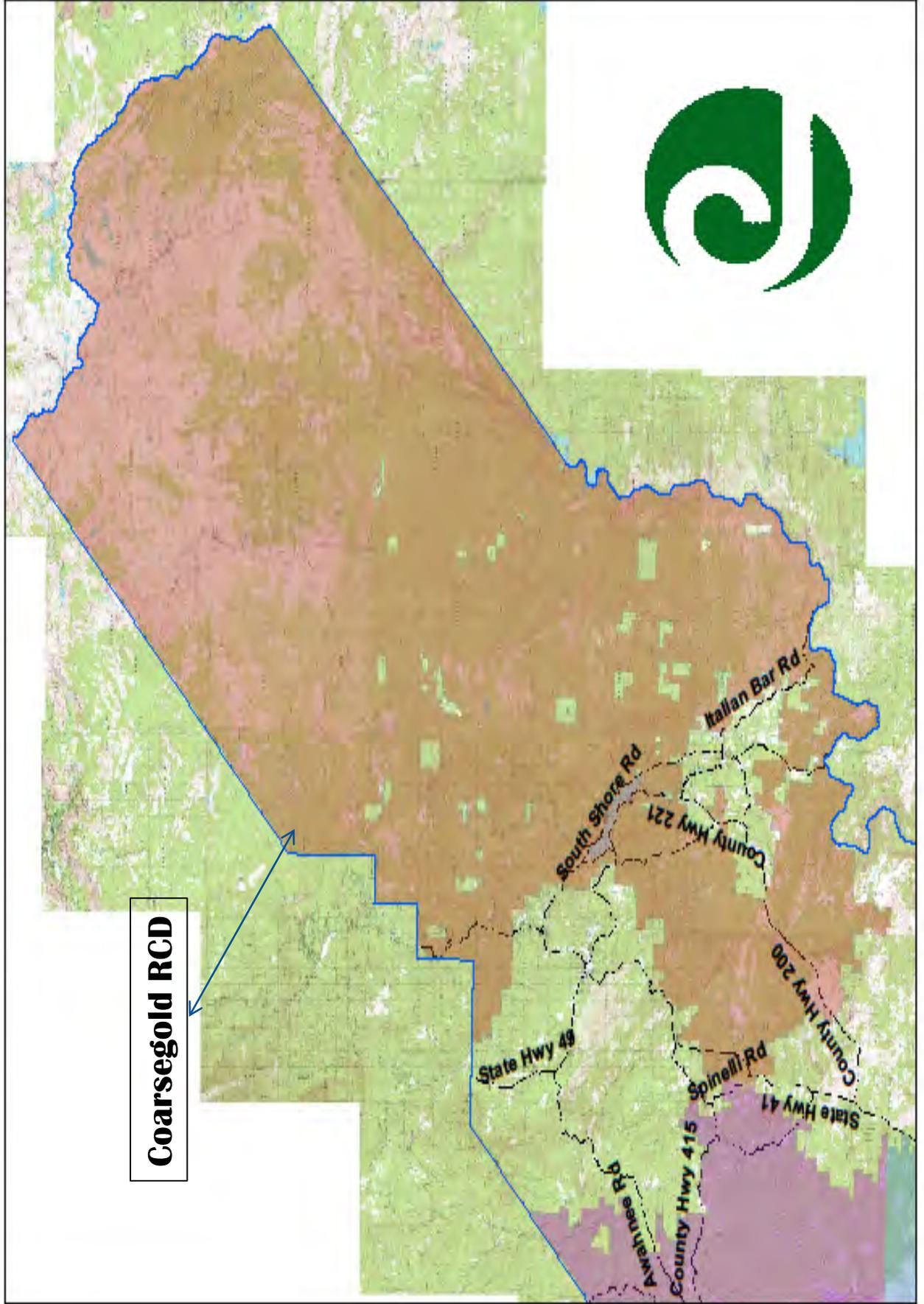


- ❖ “Special Districts” of the state of California, set up under California law to be locally governed agencies
- ❖ Locally appointed independent boards of directors
- ❖ Authorized under Division 9 of the Public Resources Code
- ❖ 99 RCDs in California
- ❖ 4 RCDs in Madera County

**Madera County CA Resource Conservation Districts  
Columbia, Chowchilla-Red Top, Madera RCDs**



**Madera County CA Resource Conservation Districts  
Coarsegold RCD**



**Coarsegold RCD**

# Chowchilla Red Top

## Resource Conservation District

- **Location:** Madera County
- **Year Formed:** 1956
- **District Size:** 278,731 acres
- **Resource Concerns:**
  - Air Quality
  - Arundo Eradication
  - Erosion Control
  - Irrigation Water Management
  - Soil Nutrient Depletion
  - Urban Planning & Development
  - Water – Flooding, Quality, Quantity, Drainage
- **Meetings:**
  - 300 Kings Avenue,  
Chowchilla, California
  - Third Tuesday of each  
month
  - 11:00 am



# Coarsegold

## Resource Conservation District

- **Location:** Madera County, Foothills
- **Year Formed:** 1966
- **District Size:** 534,380 acres
- **Resource Concerns:**
  - Fire & Fuels Reduction
  - Forest Stewardship
  - Recreational Land Restoration
  - Soil and Water Management on Rangeland
  - Wildlife Habitat Enhancement
  - Water – Quality, Quantity, Enhancement
- **Meetings:**
  - Old Mill Site, North Fork, California,
  - Fourth Thursday each month
  - 10:00 am



[www.crcd.org](http://www.crcd.org)

# Madera

## Resource Conservation District

- **Location:** Madera County
- **Year Formed:** 1995
- **District Size:** 273,404 acres
- **Resource Concerns:**
  - Irrigation Water Management
  - Ground Water Recharge
  - Rural Subdivision Encroachment
  - Soil Erosion
  - Surface Water Availability
- **Meetings:** 425 N. Gateway, Suite E,  
Madera
  - Fourth Wednesday each month
  - 5:00 pm



# Columbia

## Resource Conservation District



- **Location:** Madera County, Firebaugh, CA
- **Year Formed:** 1997
- **Year New Board Appointed:** 2008
- **Resource Concerns:**
  - Columbia Canal
  - Columbia Water District
  - Westside/San Joaquin IRWMP
- **Meetings:** Contact Randy Houk, for more information
  - [rghccc@sbcglobal.net](mailto:rghccc@sbcglobal.net)
  - 559-659-2426

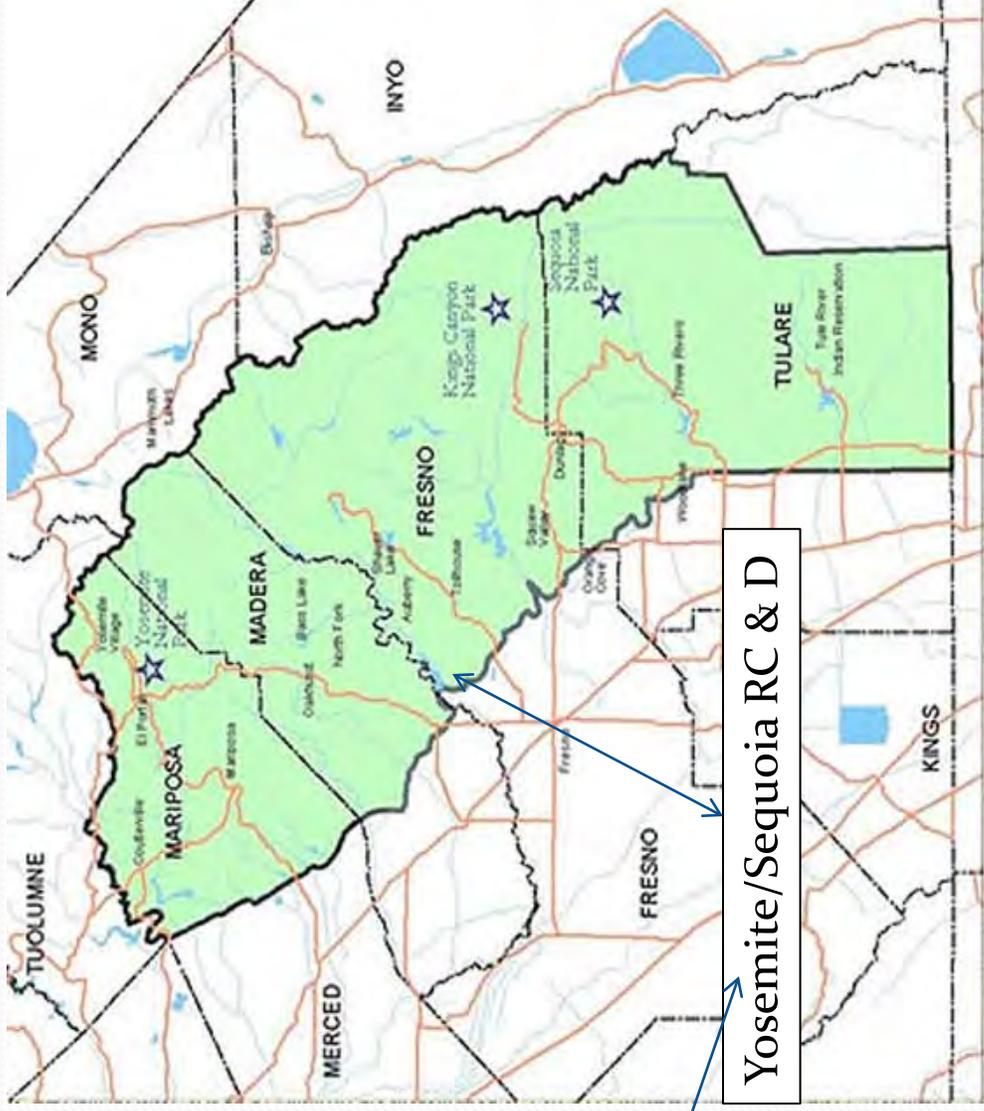
# Tribal Conservation Districts

- 564 Recognized Tribes in the United States
- Majority of Tribes on West Coast
  - 234 in Alaska
  - 110 in California
- Three Tribal Conservation Districts in California
  - North Fork Mono Rancheria
  - Chukchansi Picayune Rancheria
  - Hoopa (Northern California)



# Resource Conservation and

# Development Councils (RC&D)



# RC & Ds

- USDA initiated the program in 1962
- 375 RC & Ds in the US, Caribbean, and the Pacific Basin
- 16 RC & Ds in California
- 2 RC & Ds in Madera though one is now in-active
- Were managed under USDA/Natural Resource Conservation Service until Federal funding was pulled in April 2011
- Works to improve the general level of economic activity and to enhance the environment and standard of living in all communities.
- Provide a system of rural development to encourage the wise use of natural resources, and improve the quality of life



California Association of  
Resource Conservation  
and Development Councils

# Yosemite/Sequoia Resource

## Conservation & Development Council

- Helps people care for and protect their natural resources in a way that improves our economy, environment, and way of life.
- Formed by CSWC and authorized by Congress in 2001
- Articles of incorporation endorsed(501c3)
  - – October 21, 2002
- Region – Mariposa, Eastern Madera County, Eastern Fresno County, Tulare
- All RC & Ds Lost Federal funding
  - – April 2011



# Sierra-San Joaquin Noxious

## Weed Alliance

- Formed: 1998
- Region Covered: Fresno, Madera, & Mariposa Counties
- Meet 3 times a year @ the Bass Lake Ranger Station
- Publications:
  - Top 10 Noxious Weeds
  - Field Guide to Invasive Non-Native Weeds

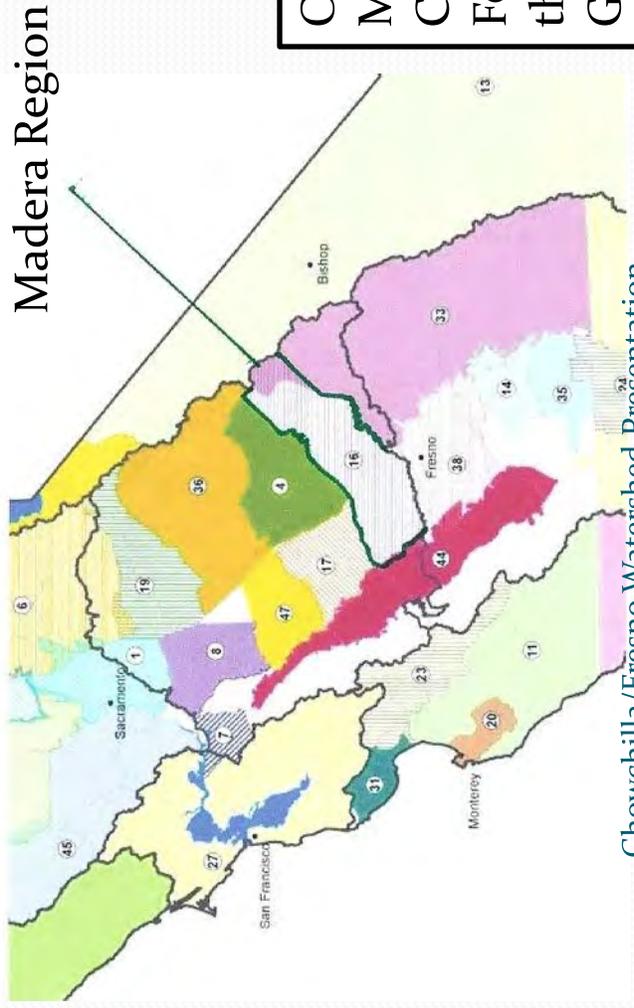


# The Madera Region Regional Water Management Group has the exact borders of Madera County. This Region was approved June 6, 2011.

*In 2006 the County of Madera began the process of developing an IRWMP.*

IRWMP Plan completed for the Madera Region under Prop 50 on April 14, 2008

On November 24, 2009, the Madera County Water Advisory Commission created the Formation Committee to create the Regional Water Management Group.



Chowchilla/Fresno Watershed Presentation – March 2013

# Round 1 Implementation Grant Awarded -

\$9,413,947.00

Project #1 – Ash Slough  
Arundo and Sediment  
Removal

Project #2 – Cottonwood  
Creek, Dry Creek, &  
Berenda Creek - Arundo  
and Sediment Removal

Project #3 – Root Creek  
Recharge Project



Arundo on  
Ash Slough



Project #4 – Fuel  
Reduction for Forest  
Health & Fire Safety in the  
Sierra National Forest (The  
first Forest Management Project funded  
as part of an IRWM which recognizes  
Watershed Health as a whole.)



# Successes

## **MOUs with our adjacent IRWM Regions:**

- Southern Sierra Integrated Regional Water Management Group
- Yosemite/Mariposa Regional Water Management Group
- Merced Integrated Regional Water Management Group
- Inyo-Mono IRWMP – Devil’s Postpile National Monument
- Westside-San Joaquin RWMG – (pending signature)
- Kings River IRWM

## **Completion of Integrated Regional Water Management Plan under Prop 50 standards:**

This is a complete plan that includes both the foothill and the valley areas – creating many new partnerships and involvement. The stakeholders understand the importance of both areas within the region.



# Future Milestones/Goals

1. Formalize the Governance structure regarding the roles and responsibilities of the RWMG's Project Manager/Coordinator, as well as stakeholders and voting members.
2. Conduct successful outreach to DACs that results in the addition of DAC stakeholders and/or members to the RWMG, and inclusion of DAC water quality and wastewater issues in the Plan's project list.
3. Begin the process of updating the current Plan, **received \$271, 438.00 - Round 2 Planning Grant**, to Proposition 84 standards by identifying items needed to update and improve the Plan before we engage the services of a consultant.

# Madera County Water Advisory

## Commission

- August 2007 – Madera County Board of Supervisors dismissed /disbanded the:
  - 1) Water Oversight Committee,
  - 2) Eastern Madera County Water Oversight Committee, and
  - 3) Madera County Flood Control and Water Conservation Advisory Council
- Formed the MC Water Advisory Commission by each Supervisor appointing one Commissioner for each District
- In place to review water issues and projects and present them to the County Board of Supervisors

**MEMBERS OF THE COMMISSION:**

<b>JAMES WATKINS,</b>	<b>District 5</b>
<b>EDWARD J MCINTYRE,</b>	<b>District 4</b>
<b>LOREN FREEMAN,</b>	<b>District 3</b>
<b>CASE VLOT,</b>	<b>District 2</b>
<b>ROBERT L STANFIELD,</b>	<b>District 1</b>

**PAST COMMISSIONERS:**

<b>JOHN REED,</b>	<b>District 5</b>
<b>STEVE SAGOUSPE,</b>	<b>District 3</b>
<b>EDGAR DEJAGER,</b>	<b>District 2</b>

# Other Partners and Agencies

## Local and Neighbors

- Oakhurst River Parkway
- Sierra RCD
- East Merced RCD
- Mariposa County RCD
- Upper Merced Watershed
- San Joaquin River Parkway
- Mariposa IRWM Group
- Southern Sierra IRWM Group
- San Joaquin Leadership Forum
- Chowchilla Joint Powers Authority
- E. M. County Fire Safe Council
- California Association of RCDs
- Sierra Nevada Alliance
- CSU, Fresno/CA Water Institute
- Many, Many More

## Government

- Department of Conservation
- Dept. of Water Resources
- CA Dept. of Fish & Wildlife
- US Fish & Wildlife Service
- USDA, Natural Resources Conservation Service
- Sierra Nevada Conservancy
- UC Cooperative Extension
- Regional Water Quality Control Board
- Madera County
- USDA Forest Service
- Cities of Chowchilla & Madera
- Many, Many More

# Thank You

Jeannie Habben  
Chowchilla/Fresno River Watershed  
Central Sierra Watershed Committee

Post Office Box 1061  
Coarsegold, CA 93614  
559-642-3263  
[info@cfwatershed.org](mailto:info@cfwatershed.org)  
[www.cfwatershed.org](http://www.cfwatershed.org)



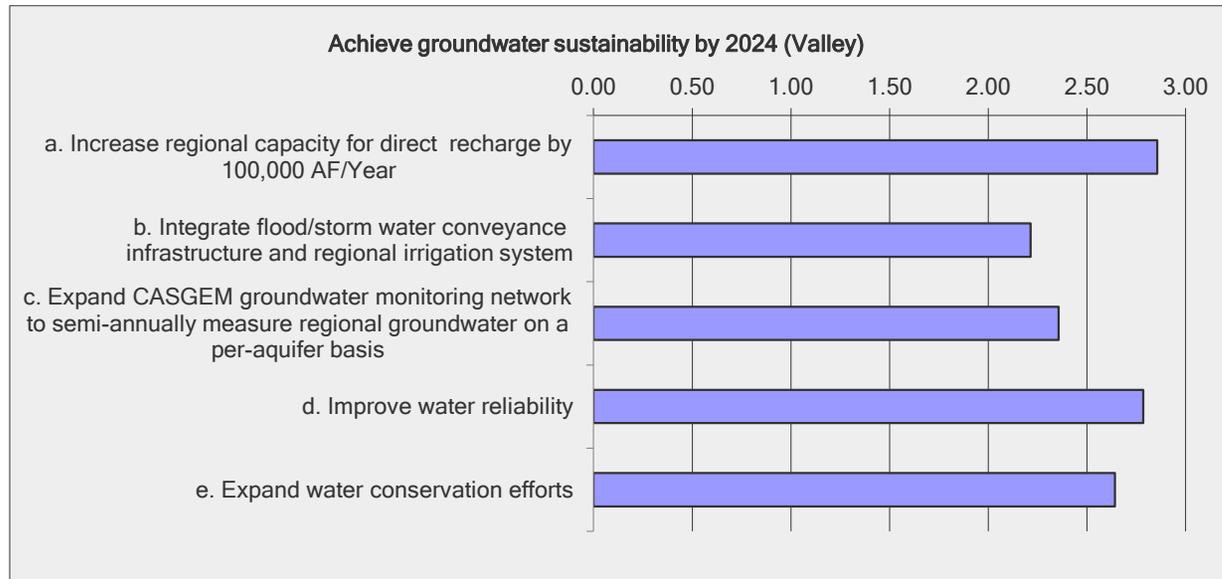
## Appendix E

### Results of Regional Objectives Ranking Survey

## Madera Integrated Regional Water Management Plan Results of Regional Objectives Ranking Survey

### 1) Achieve groundwater sustainability by 2024 (Valley)

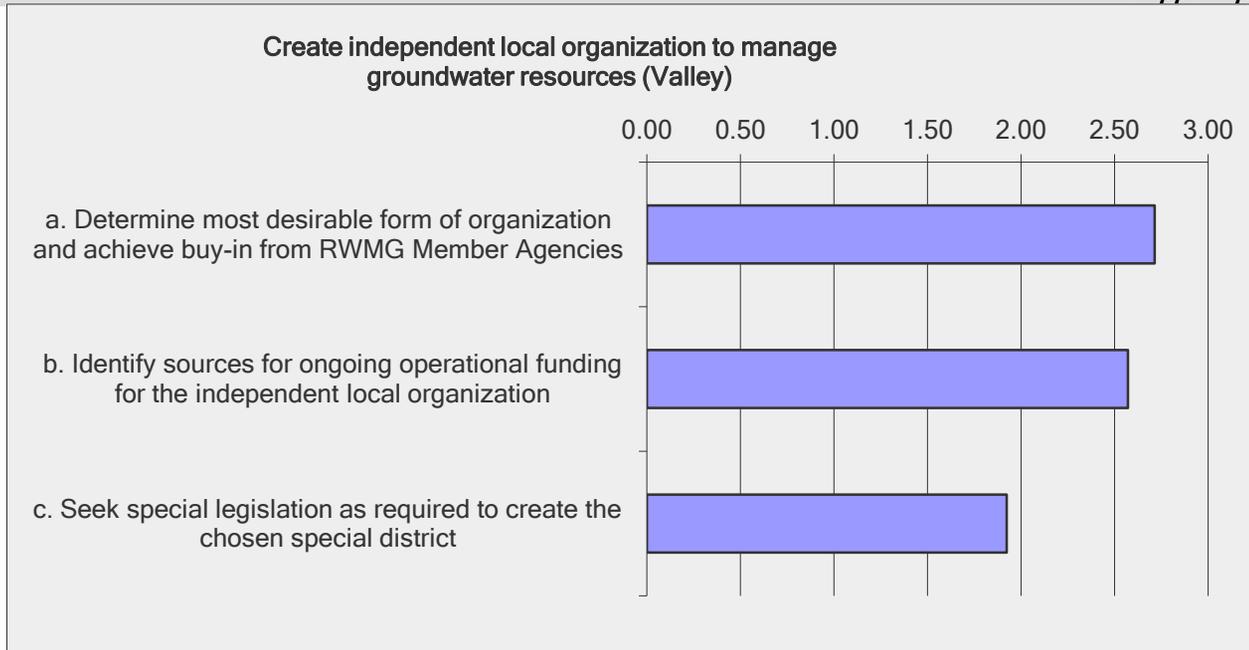
Answer Options	Low	Medium	High	Rating Average	Response Count
a. Increase regional capacity for direct recharge by 100,000 AF/Year	0	2	12	2.86	14
b. Integrate flood/storm water conveyance infrastructure and regional irrigation system	2	7	5	2.21	14
c. Expand CASGEM groundwater monitoring network to semi-annually measure regional groundwater on a per-aquifer basis	1	7	6	2.36	14
d. Improve water reliability	0	3	11	2.79	14
e. Expand water conservation efforts	0	5	9	2.64	14
<i>answered question</i>					<b>16</b>
<i>skipped question</i>					<b>0</b>



## Madera Integrated Regional Water Management Plan Results of Regional Objectives Ranking Survey

### 2) Create independent local organization to manage groundwater resources (Valley)

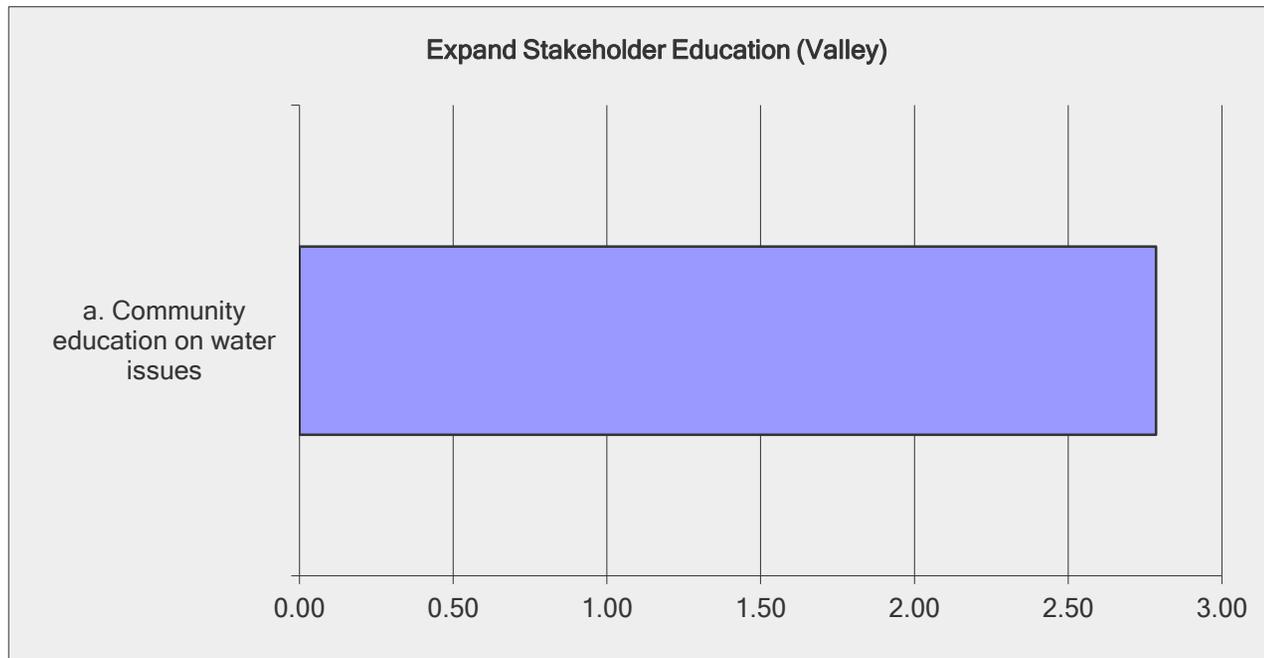
Answer Options	Low	Medium	High	Rating Average	Response Count
a. Determine most desirable form of organization and achieve buy-in from RWMG Member Agencies	1	2	11	2.71	14
b. Identify sources for ongoing operational funding for the independent local organization	0	6	8	2.57	14
c. Seek special legislation as required to create the chosen special district	4	6	3	1.92	13
<i>answered question</i>					<b>16</b>
<i>skipped question</i>					<b>0</b>



## Madera Integrated Regional Water Management Plan Results of Regional Objectives Ranking Survey

### 3) Expand Stakeholder Education (Valley)

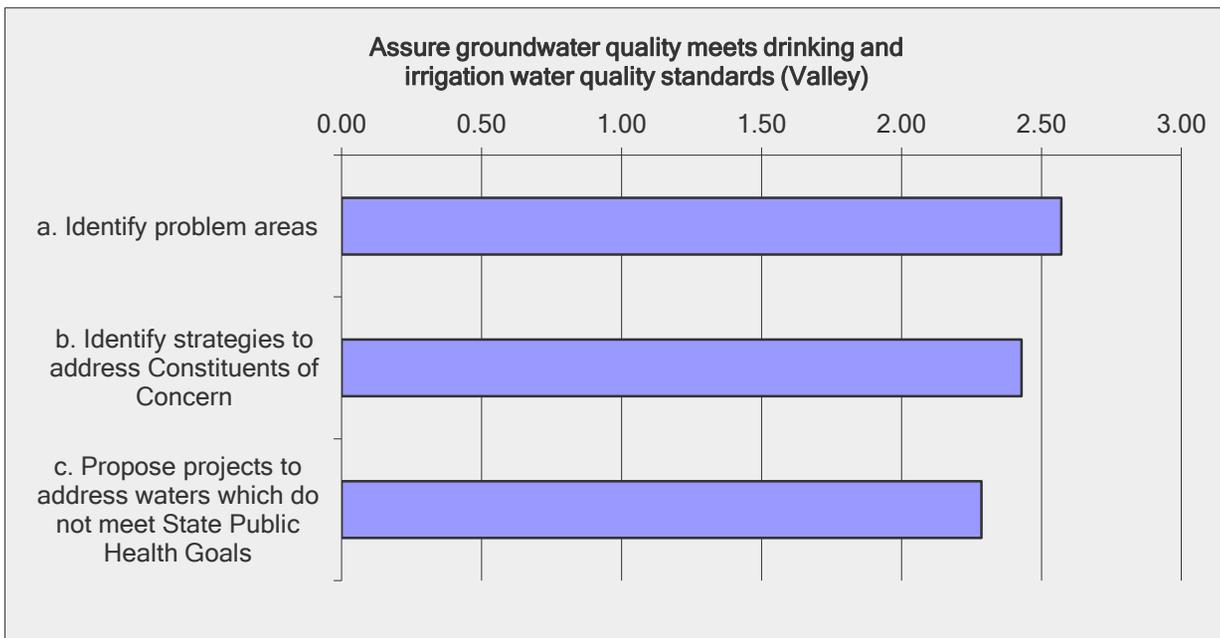
Answer Options	Low	Medium	High	Rating Average	Response Count
a. Community education on water issues	0	3	11	2.79	14
				<i>answered question</i>	<b>16</b>
				<i>skipped question</i>	<b>0</b>



## Madera Integrated Regional Water Management Plan Results of Regional Objectives Ranking Survey

### 4) Assure groundwater quality meets drinking and irrigation water quality standards (Valley)

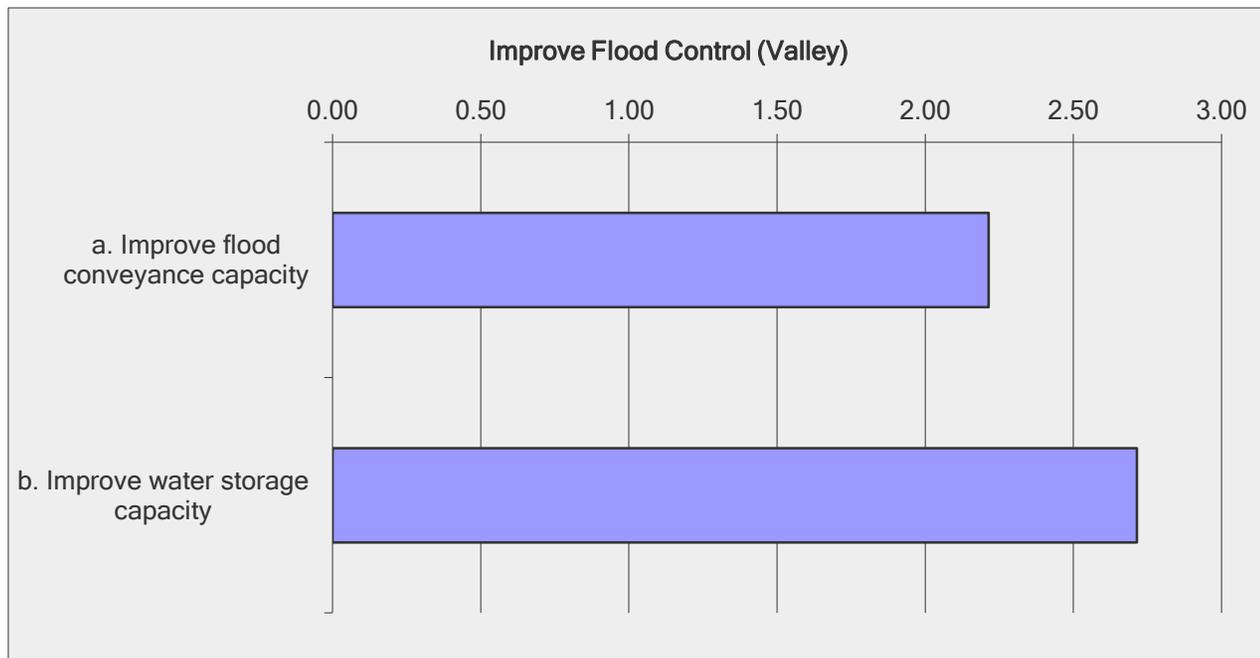
Answer Options	Low	Medium	High	Rating Average	Response Count
a. Identify problem areas	2	2	10	2.57	14
b. Identify strategies to address Constituents of Concern	1	6	7	2.43	14
c. Propose projects to address waters which do not meet State Public Health Goals	2	6	6	2.29	14
<i>answered question</i>					<b>16</b>
<i>skipped question</i>					<b>0</b>



## Madera Integrated Regional Water Management Plan Results of Regional Objectives Ranking Survey

### 5) Improve Flood Control (Valley)

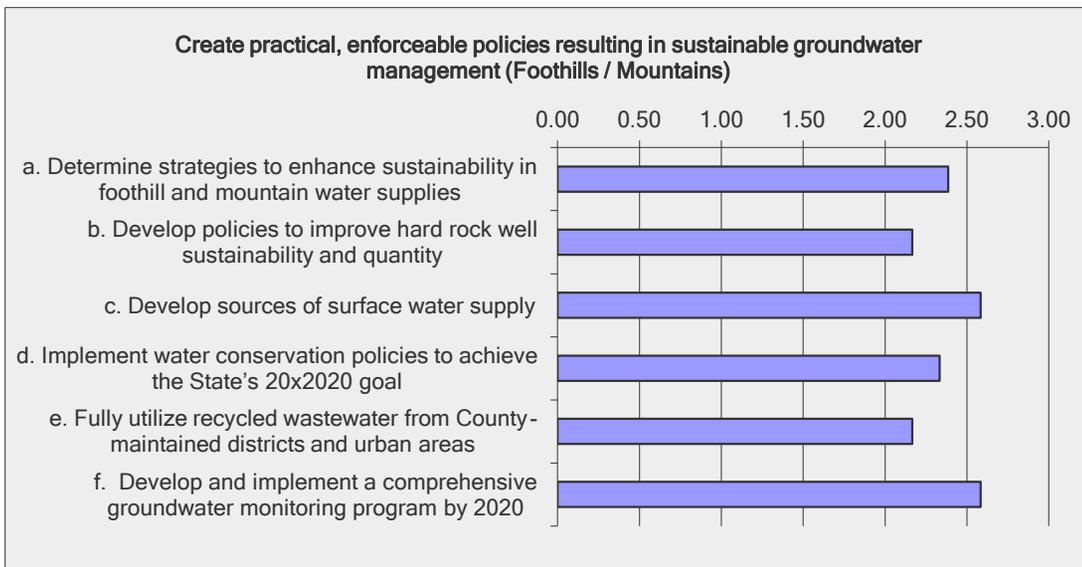
Answer Options	Low	Medium	High	Rating Average	Response Count
a. Improve flood conveyance capacity	2	7	5	2.21	14
b. Improve water storage capacity	1	2	11	2.71	14
				<i>answered question</i>	<b>16</b>
				<i>skipped question</i>	<b>0</b>



## Madera Integrated Regional Water Management Plan Results of Regional Objectives Ranking Survey

### 6) Create practical, enforceable policies resulting in sustainable groundwater management (Foothills/Mountains)

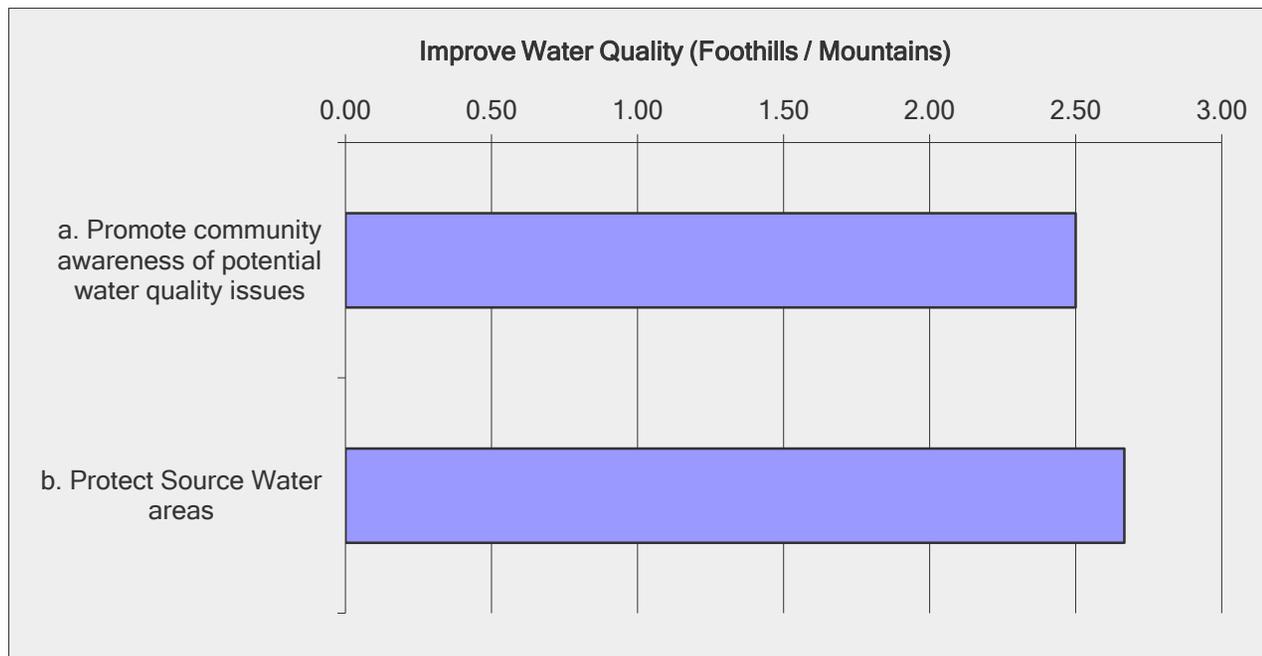
Answer Options	Low	Medium	High	Rating Average	Response Count
a. Determine strategies to enhance sustainability in foothill and mountain water supplies	1	6	6	2.38	13
b. Develop policies to improve hard rock well sustainability and quantity	2	6	4	2.17	12
c. Develop sources of surface water supply	0	5	7	2.58	12
d. Implement water conservation policies to achieve the State's 20x2020 goal	1	6	5	2.33	12
e. Fully utilize recycled wastewater from County-maintained districts and urban areas	3	4	5	2.17	12
f. Develop and implement a comprehensive groundwater monitoring program by 2020	0	5	7	2.58	12
<i>answered question</i>					<b>14</b>
<i>skipped question</i>					<b>2</b>



## Madera Integrated Regional Water Management Plan Results of Regional Objectives Ranking Survey

### 7) Improve Water Quality (Foothills / Mountains)

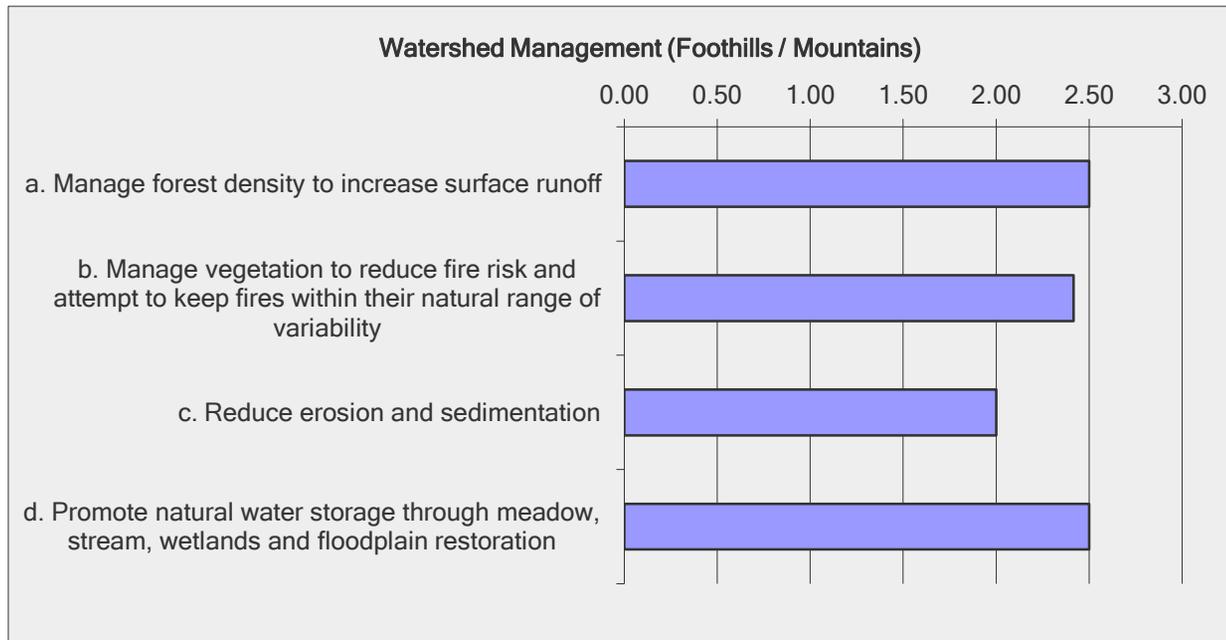
Answer Options	Low	Medium	High	Rating Average	Response Count
a. Promote community awareness of potential water quality issues	0	6	6	2.50	12
b. Protect Source Water areas	0	4	8	2.67	12
				<i>answered question</i>	<b>14</b>
				<i>skipped question</i>	<b>2</b>



## Madera Integrated Regional Water Management Plan Results of Regional Objectives Ranking Survey

### 8) Watershed Management (Foothills / Mountains)

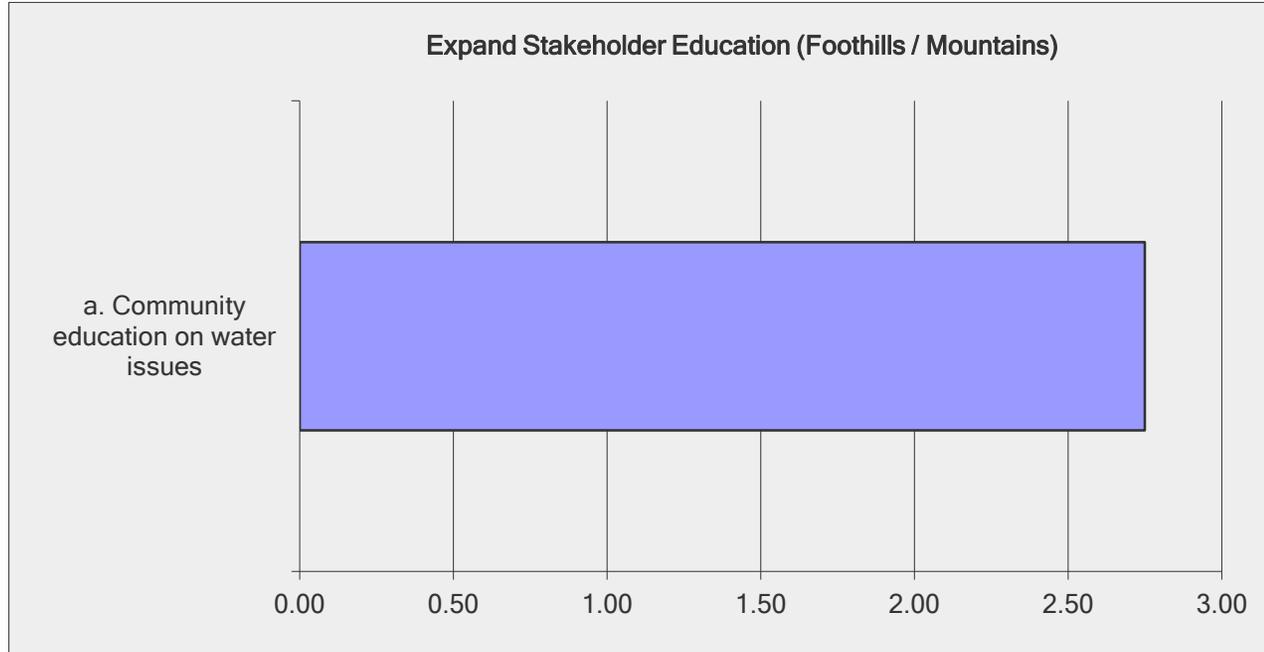
Answer Options	Low	Medium	High	Rating Average	Response Count
a. Manage forest density to increase surface runoff	1	4	7	2.50	12
b. Manage vegetation to reduce fire risk and attempt to keep fires within their natural range of variability	2	3	7	2.42	12
c. Reduce erosion and sedimentation	3	6	3	2.00	12
d. Promote natural water storage through meadow, stream, wetlands and floodplain restoration	1	4	7	2.50	12
<i>answered question</i>					<b>14</b>
<i>skipped question</i>					<b>2</b>



## Madera Integrated Regional Water Management Plan Results of Regional Objectives Ranking Survey

### 9) Expand Stakeholder Education (Foothills / Mountains)

Answer Options	Low	Medium	High	Rating Average	Response Count
a. Community education on water issues	0	3	9	2.75	12
				<i>answered question</i>	14
				<i>skipped question</i>	2



## Appendix F

### Project List

## Madera Regional Water Management Group

### Project List - September 2014

Number	Project Name	Implementation Agency	Project Status	Project Description Form Completed	Notes or Comments
1	Improved Water Level Control Structures in CWD	Chowchilla Water District	Leave on list		Feasibility Study required
2	Improved Water Measurement Structures in CWD	Chowchilla Water District	Leave on list		Feasibility Study required
3	Land Acquisitions for Groundwater Recharge Basins	Chowchilla Water District	New		Feasibility Study required
4	Regulating/Recharge Basins in CWD a. Berenda Canal/Greenhills Basin	Chowchilla Water District	Leave on list		Feasibility Study required
5	Regulating/Recharge Basins in CWD c. Water Supply Development Study	Chowchilla Water District	Awaiting Authorization		Study to evaluate the potential of developing new supply for future farming and development
6	Replacement of Cast-in-Place Pipe	Chowchilla Water District	In Progress		CWD currently replacing 1/2 mile per year
7	Regulating/Recharge Basins in CWD b. Joint use of City of Chowchilla Basins	Chowchilla Water District/City of Chowchilla	Leave on list		Feasibility Study required
8	Merced Irrigation District CWD Water Transfer	Chowchilla Water District/Merced ID	Scope of work & Feasibility Study		Further evaluations of alternatives required.
9	Expansion of CWD Service Area	Chowchilla Water District/USBR	In Process		USBR processing application to add 10,000 acres
10	Surface Water Storage Reservoirs in CWD	Chowchilla Water District/USBR	Leave on list		Feasibility Study of sites near the Madera Canal required
11	Ultra-low Flush Toilet Replacement Program	City of Chowchilla	Currently no program		Water savings based on AWWARP study and costs based on City of Fresno costs
12	WWTP Effluent Reuse (Agricultural Reclamation)	City of Chowchilla/Chowchilla Water District	On Hold		Current 1.8 MGD WWTP to be used for industrial wastewater when the new plant is online
13	City of Madera Water Meter Installation Project	City of Madera	In design	Yes	Install 850 meters on industrial, commercial, multi-family and institutional connections

## Madera Regional Water Management Group

### Project List - September 2014

Number	Project Name	Implementation Agency	Project Status	Project Description Form Completed	Notes or Comments
14	Fresno River Consolidated Stormwater Quality Enhancement Project	City of Madera	New		
15	Ultra-low Flush Toilet Replacement Program	City of Madera	Currently no program		Water savings based on AWWARP study and costs based on City of Fresno costs
16	Water Conservation Program	City of Madera	New		Provide rebates, loans or incentives for installation of high efficiency water fixtures, appliances, smart irrigation clocks or irrigation components, synthetic lawn, etc.
17	City of Madera Water Well Project	City of Madera	In design	Yes	Construct municipal well to counter well capacity loss due to drought
18	Install recycled water storage, treatment and conveyance systems	City of Madera	New		
19	City of Madera / MID Schmidt Creek Recharge and Flood Control Project	City of Madera / Madera Irrigation District	New		
20	City of Madera/MID Storm water Recharge/Retention Basin Projects	City of Madera/Madera Irrigation District	Leave on list		City & MID need to work cooperatively to implement existing agreement & further develop project description
21	Create an Assessment District for Madera Ranchos	Madera County	New		Feasibility Study required
22	Retirement of Irrigated Agricultural Lands	Madera County	Conceptual		Further development of potential program required
23	Berenda Slough Arundo removal	Madera County	New		
24	Broadview Terrace Sewer System	Madera County	New		
25	Chuk-Chanse sewer and water system improvements	Madera County	Conceptual	Yes	30 lots are DAC. Replace portion of sewer line and install meters
26	Fairmead - New Well	Madera County	New		Feasibility Study required

## Madera Regional Water Management Group

### Project List - September 2014

Number	Project Name	Implementation Agency	Project Status	Project Description Form Completed	Notes or Comments
27	Fairmead - Sewer Treatment Plant/Sewer System (MD-33)	Madera County	Conceptual	Yes	Complete plans, specifications and cost estimate for complete wastewater collection, treatment and disposal system
28	Fresno River channel clearing	Madera County	New		
29	Groundwater Management Plan Update	Madera County	New		
30	Hidden Lakes water treatment and collection systems repair	Madera County	New		
31	Indian Lakes Pond Dredging and Clearing	Madera County	New		
32	MD - 6 Water Reliability Project	Madera County			
33	MD - 8 North Fork Sewer System Repair	Madera County	Conceptual	Yes	Replace septic systems and private wastewater system with new wastewater system
34	MD-10A Sewer System	Madera County	New		
35	MD-10A Storm water and flood control system	Madera County	New		
36	MD - 95 well water supply reliability project	Madera County	New		
37	Parksdale water meter water conservation Project	Madera County	New		
38	Parkwood Water meter water conservation Project	Madera County	Conceptual	Yes	Install self-reading electronic meters on about 633 connections
39	Parkwood Well Water Supply Reliability Project	Madera County	Conceptual	Yes	Install new well to allow Parkwood to meet their maximum daily demands
40	Root Creek Detention Facility	Madera County	New		
41	Bonadelle Ranchos Groundwater Recharge Project	Madera County or SEMCU			
42	Illegal Marijuana grow site clean-up - Hazardous waste, Rodenticides, grow supplies	Madera County/CRCO/ RC&D	Y/S	New	Studies have been done - this is an ongoing concern and project
43	Arundo Removal Project	Madera County/CWD/MID	In Progress		Continued funding required

## Madera Regional Water Management Group

### Project List - September 2014

Number	Project Name	Implementation Agency	Project Status	Project Description Form Completed	Notes or Comments
44	Downtown Fresno River Project	Madera County/MID/City of Madera	Conceptual		County and City of Madera seeking funds for feasibility study
45	Root Creek Flood Control and Water Supply	Madera County/MID/RCWD	Conceptual		Feasibility Study required
46	Madera Canal/Hidden Dam Pump Storage Project - Replacement of Low Flow Gate	Madera Irrigation District	In Progress		MID pursuing USACE authorization
47	Madera Lake Regulating and Recharge Project	Madera Irrigation District	In Progress		MID may pursue installation of a permanent water elevation control structure in the Fresno River & additional recharge basins.
48	Madera Lake/Fresno River Diversion Structure & Fresno River to Madera Canal Diversion Structure	Madera Irrigation District	Leave on list		Feasibility Study Required
49	Pipeline for Allende Pond	Madera Irrigation District	New		Feasibility Study required
50	Replacement/Rehabilitation of Pipe	Madera Irrigation District	Conceptual		For Safety
51	Town of Irrigosa Water System	Madera Irrigation District	New		Feasibility Study required
52	Water Enhancement Project (Madera Water Bank)	Madera Irrigation District	In Progress		Developing funding sources and continuing pilot testing
53	Western Madera County Subsidence Solutions - Shallow Water Supply Replacement Wells	Madera Irrigation District / Chowchilla Water District	Conceptual	Yes	Develop approximately 30 new shallow wells to replace deep wells
54	Western Madera County Subsidence Solutions - Recharge Ponds and Turnouts	Madera Irrigation District / Chowchilla Water District	Conceptual	Yes	720 acres of recharge ponds in Red Top Area
55	Western Madera County Subsidence Solutions - Surface Water Distribution System	Madera Irrigation District / Chowchilla Water District	Conceptual / In design	Yes	Provide distribution system to serve 25,640 acres of agricultural land and groundwater recharge
56	Subsidence around the Bypass & Red Top area in Madera	Madera Irrigation District/Madera County	New		Feasibility Study required

## Madera Regional Water Management Group

Project List - September 2014

Number	Project Name	Implementation Agency	Project Status	Project Description Form Completed	Notes or Comments
57	Acquisition	Madera Irrigation District/Madera County	New		Feasibility Study required
58	Expansion of MID Service Area	Madera Irrigation District/USBR	In Process		Feasibility Study required
59	Root Creek Parkway Water Conservation Project	Root Creek Water District	In design	Yes	Mutli-use facilities to reuse effluent, recharge stormwater and recharge surface water supplies
60	Root Creek Avenue 10 Intentional Recharge Project	Root Creek Water District	In design	Yes	
61	Liberty Groves - Madera Ranchos South Drainage	SEMUCU	New		Potential to create basin for groundwater recharge at Ave 11 ¼ alignment (existing vineyard)
62	Madera Ranchos North Drainage – Section north of Avenue 12 between Road 34 ½ & 35. Location in the back portion of 10-acre parcels accessed by Avenue 12 ¼.	SEMUCU	New		Potential to create off-channel basin or in-channel basin for groundwater recharge. Feasibility Study is Required.
63	Madera Ranchos North Drainage: South of Avenue 12 to Avenue 11, Road 31	SEMUCU	New		Feasibility Study is Required
64	Madera Ranchos South – Detention Basin: North of Avenue 12 & Road 38,	SEMUCU	New		Feasibility Study is Required
65	MD-10A & Rolling Hills Service Area 19 - Residential Water Metering & Conservation Project	SEMUCU	New		Similar to the City of Madera and Chowchilla projects - Also meters are required by 2025 for existing public water systems.
66	Madera Ranchos: Water Fixture Retrofit	SEMUCU	New		

## Madera Regional Water Management Group

Project List - September 2014

Number	Project Name	Implementation Agency	Project Status	Project Description Form Completed	Notes or Comments
67	Madera Ranchos: Water Meter Installations	SEMUCU	New		
68	Madera Ranchos - Repair Leaking Water System	SEMUCU	New		
69	Madera Ranchos: Install 1-million Gallon Water Storage Tank	SEMUCU	New		
70	Valley Teen Ranch /MD10A Water System Consolidation	SEMUCU	Grant application submitted		Grant application has been submitting to the State Revolving Fund
71	Replacement of Discharge Valve at Friant Dam - Madera Canal	USBR	working w/bureau		Feasibility Study Required
72	San Joaquin River Storage - Temperance Flat	USBR	Requires State Legislation		County needs to support authorization legislation & obtain its share of the project yield.



## Project Criteria

Please review the project against the Statewide Priorities, Program Preferences, and Water Plan Management Strategies and place in the box if the project meets the criteria:

### Statewide Priorities

Long-term drought preparedness

Use and reuse water more efficiently

Climate change response actions (assess vulnerabilities, adapt to climate change, reduce greenhouse gas emissions, and reduce energy consumption)

Expand environmental stewardship

Practice integrated flood management

Protect surface water and groundwater quality

### Program Preferences

Include regional projects or programs

Effectively integrate water management programs and projects within a hydrologic region

Effectively resolve significant water-related conflicts within or between regions

Contribute to one or more of the objectives of the CALFED Bay-Delta Program

Address critical water supply or water quality needs of DACs within the region

Effectively integrate water management with land use planning

Flood control or flood prevention projects that provide multiple benefits, including but not limited to: water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge

### CA Water Management Plan – Resource Management Strategies

Agricultural Lands Stewardship

Agricultural Water Use Efficiency

Conjunctive Management and Groundwater Storage

Conveyance – Regional/Local

Conveyance to Conveyance – Delta

Desalination

Drinking Water Treatment and Distribution

Drought Planning

Economic Incentives

Ecosystem Restoration

Flood Management

Forest Management

Groundwater/Aquifer Remediation

Land Use Planning and Management

Matching Water Quality to Water Use

Outreach and Education

Pollution Prevention

Precipitation Enhancement

Recharge Areas Protection

Recycled Municipal Water

Salt and Salinity Management

Sediment Management

Surface Storage - CALFED

Surface Storage - Regional/Local

System Reoperation

Urban Runoff Management

Urban Water Use Efficiency

Water and Culture

Water Transfers

Water-Dependent Recreation

Watershed Management

Other Strategies



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Climate change response actions (assess vulnerabilities, adapt to climate change, reduce greenhouse gas emissions, and reduce energy consumption)

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Practice integrated flood management

Protect surface water and groundwater quality

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Effectively integrate water management programs and projects within a hydrologic region

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Conveyance to Conveyance – Delta

Desalination

Drinking Water Treatment and Distribution

Drought Planning

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Flood Management

Forest Management

Groundwater/Aquifer Remediation

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Precipitation Enhancement

Recharge Areas Protection

Recycled Municipal Water

Salt and Salinity Management

Sediment Management

Surface Storage - CALFED

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System Reoperation

Urban Runoff Management

Urban Water Use Efficiency

Water and Culture

Water Transfers

Water-Dependent Recreation

Watershed Management

Other Strategies



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### CA Water Management Plan – Resource Management Strategies

Agricultural Lands Stewardship

Agricultural Water Use Efficiency

Conjunctive Management and Groundwater Storage

Conveyance – Regional/Local

Conveyance to Conveyance – Delta

Desalination

Drinking Water Treatment and Distribution

Drought Planning

Economic Incentives

Ecosystem Restoration

Flood Management

Forest Management

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Land Use Planning and Management

Matching Water Quality to Water Use

Outreach and Education

Pollution Prevention

Precipitation Enhancement

Recharge Areas Protection

Recycled Municipal Water

Salt and Salinity Management

Sediment Management

Surface Storage - CALFED

Surface Storage - Regional/Local

System Reoperation

Urban Runoff Management

Urban Water Use Efficiency

Water and Culture

Water Transfers

Water-Dependent Recreation

Watershed Management

Other Strategies



## Project Criteria

Please review the project against the Statewide Priorities, Program Preferences, and Water Plan Management Strategies and place in the box if the project meets the criteria:

### Statewide Priorities

Long-term drought preparedness

Use and reuse water more efficiently

Climate change response actions (assess vulnerabilities, adapt to climate change, reduce greenhouse gas emissions, and reduce energy consumption)

Expand environmental stewardship

Practice integrated flood management

Protect surface water and groundwater quality

### Program Preferences

Include regional projects or programs

Effectively integrate water management programs and projects within a hydrologic region

Effectively resolve significant water-related conflicts within or between regions

Contribute to one or more of the objectives of the CALFED Bay-Delta Program

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Agricultural Water Use Efficiency

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## Root Creek Avenue 10 Intentional Recharge Basin – Project Description

The project consists of approximately 80 acres of basins that are ultimately planned for wastewater disposal from the planned new development within RCWD. Recent borings have suggested that portions of this site, after removal of a hard pan layer, would be conducive to intentional recharge activities. It is assumed at this time that half the site or 40 acres would be developed for intentional recharge and would be connected to the newly constructed conveyance irrigation line in Road 40. The new lateral would be constructed along Avenue 10. Water Supply to the site will consist of storm water and imported water per the District's water supply contracts.



## Project Criteria

Please review the project against the Statewide Priorities, Program Preferences, and Water Plan Management Strategies and place in the box if the project meets the criteria:

### Statewide Priorities

Long-term drought preparedness

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Climate change response actions (assess vulnerabilities, adapt to climate change, reduce greenhouse gas emissions, and reduce energy consumption)

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## Project Description.

The water conservation project consists of multi use facilities that will be used to 1) conserve and reuse wastewater effluent, 2) conserve and recharge storm water and 3) intentionally recharge surface waters available to the District when agricultural demand is low to maximize the conjunctive use of both surface and groundwater. Additionally, the facilities will be planned to enhance the environmental biodiversity of the Root Creek stream corridor. The plan consists of installing a service pipeline from the wastewater treatment plant to run within the planned parkway. Other key facilities consist of control structures constructed to control water within the low depressions found within the parkway. These structures are planned to be incorporated at road crossings and pedestrian bridges. At these locations it is envisioned that a flow control structure will be incorporated so that water can be controlled during the non flood times allowing for water to pond behind the structure. It is envisioned that the modified channel will consist of a low flow section that will be able to handle the flood or storm flows with a higher bench that can be flooded with the use of these structures forming a small pond area. Facilities include: 1) approximately 1.5 miles of 12" purple pipe, five water control structures, regulation basin structure, earthwork to build storm retention basin and modify channel.

This project would have water supply benefits, storm and flood control benefits, environmental benefits, recreation benefits, water conservation and drought protection benefits. The project is anticipated to reuse and intentionally recharge 700 af annually.



## Project Criteria

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### CA Water Management Plan – Resource Management Strategies

- |  |                                  |
|--|----------------------------------|
| Agricultural Lands Stewardship                 | Pollution Prevention             |
| Agricultural Water Use Efficiency              | Precipitation Enhancement        |
| Conjunctive Management and Groundwater Storage | Recharge Areas Protection        |
| Conveyance – Regional/Local                    | Recycled Municipal Water         |
| Conveyance to Conveyance – Delta               | Salt and Salinity Management     |
| Desalination                                   | Sediment Management              |
| Drinking Water Treatment and Distribution      | Surface Storage - CALFED         |
| Drought Planning                               | Surface Storage - Regional/Local |
| Economic Incentives                            | System Reoperation               |
| Ecosystem Restoration                          | Urban Runoff Management          |
| Flood Management                               | Urban Water Use Efficiency       |
| Forest Management                              | Water and Culture                |
| Groundwater/Aquifer Remediation                | Water Transfers                  |
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| Matching Water Quality to Water Use            | Watershed Management             |
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## Appendix G

### Project Review Process



## Project Criteria

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# **Madera Regional Water Management Group Outline for Grant Pre-Application**

## **1 – PROJECT DESCRIPTION**

- 1.1 – Project Summary
- 1.2 – Goals and Objectives of Project
- 1.3 – Relation to Southern Sierra IRWMP

## **2 – PROJECT TASKS**

## **3 – PROJECT BENEFITS**

- 3.1 - Water Supply
- 3.2 - Water Quality
- 3.3 - Flood Damage Reduction
- 3.4 - Ecosystem
- 3.5 - Other Benefits

## **3 – PERMITTING AND ENVIRONMENTAL ISSUES**

## **4 – DATA MANAGEMENT AND MONITORING DELIVERABLES**

## **5 – PROJECT BUDGET**

## **6 – PROJECT SCHEDULE**

## **8 – IRWM PROGRAM PREFERENCES AND STATEWIDE PRIORITIES**

## **9 – CONCLUSIONS AND JUSTIFICATION FOR IRWMP GRANT APPLICATION**

### **Attachments**

- 1 – Vicinity Map
- 2 – Project Location Map
- 3 – Cost Estimate

## **APPENDICES**

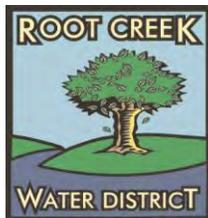
# ROOT CREEK WATER DISTRICT

Regional Water Management Group Submission  
for  
Root Creek Water District In-Lieu Groundwater  
Recharge Project

Submitted to  
Madera Integrated Regional Water Management Group

November 2010

Prepared by:





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    1.2 – Goals and Objectives ..... 2

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**Attachments**

- 1 – Vicinity Map
- 2 – Project Location Map
- 3 – Cost Estimate

SAMPLE PRE-APPLICATION

## 1 – PROJECT DESCRIPTION

### 1.1 – Project Summary

The Root Creek Water District 'In-Lieu Groundwater Recharge Project' includes the acquisition of surface water supplies and construction of a new 48-inch diameter pipeline that would deliver surface water to an initial 3,200 acres of lands that currently rely exclusively on groundwater. The project would deliver surface water 'in-lieu' of groundwater pumping and thus preserve groundwater resources. Funding is requested for constructing the pipeline to convey water supplies that have already been secured by RCWD. **Figure 1** is a vicinity map showing the location of the project in Madera County. **Figure 2** is a project location map showing the area that would be served by the surface water, and the locations of the proposed facilities.

Surface water would be delivered to Root Creek Water District (RCWD) through Madera Irrigation District (MID) facilities under existing water purchase, conveyance and exchange agreements. Water would be diverted into RCWD through a proposed turnout on MID's Lateral 6.2. Additional facilities would include 2.7-miles of 48-inch diameter concrete pipe, 4.2-miles of lateral pipes ranging in diameter from 4 to 24 inches, and approximately ten to twelve connections to existing irrigation pump stations.

Using available surface water supplies, the proposed pipeline will be able to deliver, on average, 6,100 AF/year to the project area. In some years the pipeline would be able to provide all of the water demands in the project area, or about 9,400 AF/year. The pipeline will have capacity to convey about 50 cfs, or about 36,000 AF/year if operated continuously. Therefore, the project yield could be increased if the project area is expanded or the pipeline is connected to recharge facilities. The proposed project is the first phase in a potentially larger project that could deliver water to most of RCWD.

The water sources include San Joaquin River Section 215 floodwater, CVP water supplies purchased from Madera Irrigation District, and a firm water supply purchased from the Westside Mutual Water Company.

The project would import a new surface water supply into Madera County. Every acre-foot of surface water delivered by the project will offset an acre-foot of groundwater pumping and reduce overdraft in the local area and surrounding communities. The project will help to reverse the net overdraft in Southeastern Madera County of 22,000 AF/year, as referenced in a report by Kenneth D. Schmidt Associates entitled '*Hydrogeologic Investigation – Southeastern Madera County*', prepared in 1998 and updated in 2001. The estimated overdraft within RCWD is 3,400 AF, which is referenced in the same study. The project yield of 6,100 AF will not only mitigate for this local overdraft, but also deliver a net positive balance of  $(6,100 - 3,400) = 2,700$  AF/year within RCWD. The surface water delivery will also help to improve local water quality and improve water reliability.

The estimated cost for constructing the pipeline and appurtenant facilities is \$5.5 million.

RCWD is requesting grant funds of \$4.125 million and can fund a cost share of \$1.375 million.

Significant work has already been completed on the project including a DWR funded feasibility study, designs, permitting, legal agreements, and a previous grant application. Construction of the project can begin within five months of receiving a grant award, and be completed in six months thereafter.

## **1.2 – Goals and Objectives**

Goals and objectives for the project include the following:

1. Expand the available water supply by importing 6,100 AF of new surface water into the area each year.
2. Improve water reliability by providing alternate water sources.
3. Reduce groundwater overdraft by reducing the rate of groundwater pumping.
4. Reduce groundwater pumping costs and the need to deepen wells or install new wells.
5. Maintain the viability of irrigated agriculture in the area.
6. Improve water quality by importing high quality surface water that will mix with lower quality groundwater

## **1.3 – Relation to Madera IRWMP**

Following is a list of IRWMP sections that mention the project or include goals and objectives that are compatible with the project:

- The Executive Summary (page ES-1) states that “*The main objectives of the IRWMP are water resources management optimization, evaluating and increasing water supplies, water quality protection and improvement, and flood control planning*”. All of these goals will be met with the proposed project.
- The Executive Summary (page ES-15) states that “*The major water supply issue in the Valley Floor is the continuing overdraft of the groundwater basins.*” The project will directly address this issue through importation of surface water that will supplant a minimum of 6,100 AF/year of groundwater pumping.
- Pages 1-1 to 1-4 list several goals for the Valley Floor that are consistent with the project. These goals cover the topics of groundwater overdraft, conjunctive use, groundwater quality improvement, and acquiring new water supplies.
- The 2003 feasibility study for this proposed project is listed in Table 1-1 as a reference used in preparing the IRWMP.
- Section 3.1.1.6 discusses the proposed project including the construction of a turnout on Lateral 6.2 and acquisition of a Section 215 water contract.

- The project is listed in Table 8-1: Potential Water Supply Augmentation and Overdraft Reduction Projects on the Valley Floor (Project No. 7 – Root Creek Water District Surface Water Project).
- The RCWD In-Lieu Groundwater Recharge Project is not specifically mentioned in Chapter 9 –Conclusions and Recommendations of the IRWMP, however the project is consistent with the theme of several other recommendations in Chapter 9. In addition, the IRWMP recommends that Madera County purchase Section 215 water and develop agreements with MID, Chowchilla Water District and USBR facilities to convey the water (page 9-13). The proposed project is identical except RCWD would import and use the water, instead of Madera County.

#### **1.4 – Project Tasks**

Significant tasks completed to date include:

1. Project Feasibility Study funded by a planning grant from the Department of Water Resources (May 2003)
2. Proposition 13 Grant Application for proposed project (June 2003)
3. 30% complete specifications and contract documents
4. 95% design drawings for the turnout and main pipeline (April 2010)
5. Numerous permits and agreements (see Section 1.5)

Remaining task to complete are described below:

Task 1 – Finalize permitting and agreements. Finalize any outstanding permits and contracts including: CEQA Compliance, USBR Section 215 water Contract, and design approvals from USBR and MID. It is anticipated that these will all be completed before the DWR awards grants in June 2011.

Task 2 - Finalize Design. Complete the specifications, bidding documents and design drawings for the turnout, pipeline, and laterals.

Task 3 - Project Bidding. Solicit and review bids from qualified contractors and award a construction contract.

Task 4 – Construction. Construct the project according to the plans and specifications and prepare record drawings.

#### **1.5 – Permits**

RCWD has signed several water purchase agreements that will ensure a surface water supply and conveyance for the project. RCWD is finalizing several other permits and a USBR Section 215 water contract, which are all expected to be completed in late 2010 and early 2011. Following is a description of each permit/agreement and its status.

**California Environmental Quality Act.** The Root Creek Water District prepared a CEQA Initial Study for the project, and issued a notice of intent to adopt a Negative Declaration on October 15, 2010. A public hearing is scheduled for November 17, 2010 to adopt the Negative Declaration. USBR has accepted the biological studies and cultural and historical resources studies for the project, and is expected to support the Negative Declaration.

**Agreements with Landowners.** No property acquisition will be needed for the project. RCWD has easements from private landowners for all of the proposed pipelines.

**Agreement Concerning Agricultural, Municipal, and Industrial Water Use Within Root Creek Water District (December 1999).** This is a cooperative agreement with the Friant Water Users Authority, Madera Irrigation District, and Chowchilla Water District and RCWD to sell and deliver surplus waters to RCWD when possible.

**Agreement Between Madera Irrigation District and Root Creek Water District For The Conveyance and Sale of Water (March 2002).** This agreement outlines terms for RCWD to purchase up to 10,000 AF/year of surplus Class 2 water from MID. This agreement also provides for all conveyance of the RCWD water from Millerton Lake to the new RCWD turnout.

**USBR 215 Water Contract.** The District has been negotiating for a long-term Section 215 floodwater contract with the USBR. The environmental review is underway and the contract is expected to be finalized in early 2011.

**Approvals from MID and USBR.** The proposed turnout would be on Lateral 6.2, a facility jointly owned by MID and USBR, who will both need to approve the turnout design. RCWD has sent a copy of the turnout design drawings to MID for approval. After MID approval the drawings will be sent to USBR. The design follows standard engineering practices and it is anticipated that both agencies will approve the design by December 2010.

**Water Supply Agreements with Westside Mutual Water Company.** RCWD has an agreement with Westside Mutual Water Company (Westside) to deliver a firm water supply of up to 7,000 AF/year for 50 years.

**Exchange Agreement.** RCWD has an agreement with Westside, MID, and Shafter Wasco ID to exchange the Westside water to MID for delivery to RCWD's turnout.

**Other Permits.** Other required permits include a grading permit and encroachment permit from Madera County. RCWD does not anticipate any problems securing these permits.

### **1.6 – Data Management and Monitoring Deliverables**

RCWD has already developed a data management and monitoring program for the project. The information will be compiled into an annual report for at least ten years after project construction. The aim of the monitoring program is to document and verify the project's intended benefits, namely a positive impact on the region's groundwater levels. The primary monitoring parameters are listed below:

- Surface water deliveries. Surface water deliveries will be measured and recorded at the new turnout on Lateral 6.2.
- Groundwater levels. RCWD has already established a network of wells that have been used for annual groundwater-level monitoring since 1998. The data is stored in the District's groundwater Geographic Information System, which was developed using a Local Groundwater Assistance Grant from the Department of Water Resources.
- Groundwater quality. Groundwater quality will be tested in several monitoring wells annually to verify that the groundwater quality is improving, or determine if the project is adversely impacting groundwater quality.

### **1.7 – Consistency with Basin Plan**

The proposed project is in the San Joaquin Valley Basin and is subject to the Regional Water Quality Control Board's *Water Quality Control Plan for the Sacramento and San Joaquin River Basins* (Basin Plan). The proposed project will be in full compliance with the Basin Plan. The water supply will be beneficially used for irrigation, and the project will not contribute to groundwater quality degradation. Instead, the project will improve groundwater quality by importing high quality surface water that will result in some groundwater quality improvement.

## 2 – PROJECT BUDGET

A cost estimate for the proposed project is included as **Attachment 1**. The total estimated cost for project construction and remaining engineering services is \$5.5 million. The cost estimate includes a 15% contingency to reflect the level of design completed to date.

RCWD requests \$4.125 million for construction of the pipeline and appurtenant facilities. The grant guidelines require at least a 25% funding match, which equates to 25% x \$5.5 million = \$1.375 million. Root Creek Water District has signed agreements with landowners served by the project to provide the cost share either through a direct cash payment or assessments applied to their lands.

To date approximately \$3.7 million has already been spent on the project for water contracts with MID and Westside Mutual Water Company, feasibility studies, surveying, design, permitting, USBR processing fees, and legal fees. These expenditures illustrate the amount of work already performed on the project, and exemplify RCWD's financial commitment to the project.

SAMPLE PRE-APPLICATION

### 3 – PROJECT SCHEDULE

A proposed schedule for the project is shown below. RCWD anticipates having all permits and approvals by the anticipated grant award date in June 2011. As a result, RCWD can begin finalizing designs in July 2011 and begin construction within five months of the contract award. Project construction would be completed by the end of May 2012.



Task	2010			2011												2012				
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
CEQA Compliance	█	█	█																	
Design Approval from MID and USBR	█	█																		
Secure Contract for Section 215 Water	█	█	█	█	█	█	█													
Finalize Pipeline and Turnout Design										▲	█									
Complete Lateral Pipeline Design											█	█	█							
Bid Solicitation													█	█						
Construction															█	█	█	█	█	█

▲ Anticipated Contract Award

SAMPLE PRE-

#### 4 – WATER SUPPLY COSTS AND BENEFITS

Root Creek Water District will be able to provide an economic analysis of water supply costs and benefits. In 2003, an economic analysis of the project was prepared for a Proposition 13 grant application. This analysis followed Department of Water Resources guidelines and tables, which are similar to the guidelines in the Implementation Grant Proposal Solicitation Package. These analyses will be reviewed and updated based on inflation, minor adjustments to the project design, and the increase in project yield (from 4,200 AF/year to 6,100 AF/year) due to the recent acquisition of the Westside Mutual water supply. The previous analysis estimated a project yield of 4,200 AF/year, a benefit cost ratio of 2.02, and a unit water price of \$99/AF. A recent, preliminary financial analysis shows that project will still have a water cost of about \$100/AF, however the benefit cost ratio will increase to approximately 2.30.

SAMPLE PRE-APPLICATION

## 5 – WATER QUALITY BENEFITS

Root Creek Water District will be able to provide an analysis of water quality benefits. These analyses will be based on those presented in the Proposition 13 Grant Application submitted in 2003, with some additional refinements and improvements.

San Joaquin river water will be diverted for the project. This water originates in the Sierra Nevada Mountains and has excellent quality for irrigation or municipal use. Ground water quality in the District is generally adequate for agricultural use, but there are groundwater quality problems in certain areas, including in and near the proposed project. These problems include elevated levels of salinity, chloride, manganese, arsenic, and slime producing organisms.

The project will provide water quality benefits by reducing the recirculation of lower quality groundwater and importing an average of 6,100 AF/year of high quality surface water. Some of the surface water will percolate and mix with the groundwater, thus improving its overall quality. Groundwater quality problems also increase with depth, and the project will help to maintain higher groundwater levels and provide better quality groundwater.

SAMPLE PRE-APPLICATION

## 6 – FLOOD DAMAGE REDUCTION COSTS

The proposed project will help deliver San Joaquin floodwater to RCWD. The diversions will not reduce flooding in a specific area, but rather they will reduce flood flows along the entire San Joaquin River system. Therefore, quantifying the reduction in flood damage costs from these diversions would not be practical or feasible. Nevertheless, the proposed project will make a real and tangible contribution to flood management on the San Joaquin River.

SAMPLE PRE-APPLICATION

## 7 – IRWM PROGRAM PREFERENCES

Following is a discussion on how the proposed project meets the IRWMP Program Preferences and California Statewide Priorities.

1. **Include regional projects or programs.** The project has regional benefits with multiple parties benefitting from its implementation. RCWD and neighboring communities of Rolling Hills and Madera Ranchos will directly benefit from the imported surface water and higher groundwater levels. Madera ID and Chowchilla WD will benefit from selling water to RCWD. The entire IRWMP area will benefit from the importation of a new water supply into the region.
2. **Effectively integrate water management programs and projects within a hydrologic boundary identified in the California Water Plan, RWQCB region, or DWR.** The proposed project will offer regional benefits throughout the Madera IRWMP area.
3. **Effectively resolve significant water-related conflicts within or between regions.** The project will help to resolve the most significant water-related conflict in the region – groundwater overdraft.
4. **Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program.** The four CALFED Bay-Delta objectives include: Water Quality, Levee Integrity, Water Supply Reliability and Ecosystem Restoration. The project will improve the local groundwater quality and quality of water delivered to farms (see Section 5), reduce the stress on San Joaquin River levees (Section 6), and improve water reliability by importing a new water supply.
5. **Address critical water supply or water quality needs of disadvantaged communities within the region.** The area served by the project is not a disadvantaged community. However, the project has regional benefits, and therefore will indirectly benefit other disadvantaged communities in the IRWMP region. The project will also create job opportunities that may employ individuals from disadvantaged communities.
6. **Effectively integrate water management with land use planning.** The project includes a water supply from the Westside Mutual Water Company that will be used in the future to offset groundwater pumping by new residential developments.

7. **SWFM funded projects are not receiving state funding or provide multiple benefits.** The Root Creek Water District is not currently seeking funding for Stormwater Flood Management (SWFM) projects and this Program Preference is therefore not applicable.

### **Statewide Priorities**

1. **Drought Preparedness.** The project will improve drought preparedness by increasing the total water supplies available to RCWD through the acquisition of new water purchase agreements, including a firm water supply from Westside Mutual Water Company. In addition, the project will reduce demands on groundwater thus helping to preserve groundwater reserves for use in droughts.
2. **Use and Reuse Water More Efficiently.** The project will use water more efficiently by capturing floodwater (section 215 water) and surplus water (MID Class 2 water) that may otherwise go unused and flow out of the IRWMP area.
3. **Climate Change Response Actions.** Climate change may result in earlier snowmelts and greater quantities of floodwater and surplus water. This project provides an opportunity to beneficially use those flows. The project will also help to reduce groundwater pumping leading to a reduction in greenhouse emissions.
4. **Expand Environmental Stewardship.** The project will enhance the environment through improvements in the quality of water used in the area. The project will also help reduce greenhouse gas emissions by reducing the need for groundwater pumping.
5. **Practice Integrated Flood Management.** The project will help to decrease flooding on the San Joaquin River by diverting and using floodwaters for irrigation. The project will harness local high flows and convert them into a dependable supply.
6. **Protect Surface Water and Groundwater Quality.** The project will import high quality surface water that will mix with the groundwater and improve its overall quality.
7. **Improve Tribal Water and Natural Resources.** The area directly served by the project does not include any tribal communities or resources. However, the

project has regional benefits and therefore will indirectly benefit tribal communities and resources throughout the IRWMP region.

8. **Ensure Equitable Distribution of Benefits.** The landowners directly benefiting from the project will be responsible for its payment, either through a one-time cash payment, or more likely through long-term assessments applied to their land. This will help to ensure that the primary beneficiaries are paying for the project.

SAMPLE PRE-APPLICATION

## 8 – IRWMP GRANT APPLICATION

Below are discussions on why RCWD believes the project would score well on an IRWMP Implementation Grant application.

### Technical and Scientific Documentation

The project is well developed through numerous studies, designs and legal agreements. A list of relevant documents on the project is provided in Section 9 – References. The technical and economic feasibility of the project is well demonstrated, and the District is ready to proceed with final design and construction.

### Previous Grant Application

RCWD submitted a Proposition 13 grant application to DWR for the proposed project in 2003. The project was not selected for funding, however, the previous grant application is a significant asset that will help improve the project's chances for funding. DWR provided written comments on the application, and RCWD has addressed most of their comments and concerns. In addition, many of the application sections can be used in the IRWMP grant application after they are reviewed, improved, and updated, making the grant application to the State easier to prepare.

### Public Support

The project has widespread support from the public. The 2003 grant application included letters of support from the Madera County Board of Supervisors, Rolling Hills Citizens Association, Madera Irrigation District, Chowchilla Water District, and Madera County Farm Bureau. Letters of support will be sought from these parties, and other stakeholders, for the new grant application.

### Resources to Complete Application

RCWD has adequate resources to complete the grant application by the end of December 2010. RCWD's engineer, Provost & Pritchard Consulting Group, has a staff of 130, is familiar with the project and RCWD, and has staff dedicated to work on the grant application. In addition, District staff and legal counsel are thoroughly familiar with the project and can contribute to the application effort.

### Implementation Grant Application

RCWD is ready to prepare an Implementation Grant Application. Using previous studies and the previous grant application, many of the application sections are currently complete or in the draft stage as seen in Table 1.

**Table 1 – IRWMP Application Attachment Checklist**

<b>No.</b>	<b>Attachment</b>	<b>Status</b>
1	Authorization and Eligibility Requirements	Draft
2	Adopted Plan and Proof of Formal Adoption	Complete
3	Workplan	Draft
4	Budget	Complete
5	Schedule	Draft-Final
6	Monitoring, Assessment, & Performance Measures	Draft
7	Economic Analysis – Water Supply	Draft
8	Water Quality and Other Expected Benefits	Complete
9	Economic Analysis – Flood Damages	Complete
10	Costs and Benefits Summary	Draft
11	Program Preferences	Draft
12	Disadvantaged Community Assistance	Draft
13	AB1420 Compliance	Not Applicable
14	Consent Form	To be completed

Based on a review of the scoring criteria, RCWD believes that the proposed project will receive a score of 75 to 85 out of 85. This high score is a reflection of the project's readiness to proceed, proven project feasibility, water supply benefits, and the documentation in the previous grant application that can be reused.

SAMPLE PRE-APPLICATION

## 9 – REFERENCES

**“Water Exchange Agreement”** (January 2009), Westside Mutual Water, Shafter Wasco Irrigation District and Root Creek Water District.

**“Water Supply Agreement between Root Creek Water District and Westside Mutual Water Company, LLC”**, (November 2006), Root Creek Water District and Westside Mutual Water Company.

**“Root Creek In-Lieu Groundwater Recharge and Storage Project – Proposition 13 Groundwater Storage Program Construction Grant Application”** (June 2003), Root Creek Water District.

**“Root Creek Water District In-Lieu Groundwater Recharge Facilities Feasibility Study”** (April 2003), Provost & Pritchard Engineering Group, Inc.

**“Root Creek Water District AB303 Report”** (May 2003), Provost & Pritchard Engineering Group, Inc. in conjunction with Kenneth D. Schmidt & Associates.

**“Hydrogeologic Investigation: Southeastern Madera County”** (October 2001), Kenneth D. Schmidt & Associates in conjunction with Provost & Pritchard Engineering Group, Inc.

**“Hydrogeologic Investigation: Southeastern Madera County”** (June 1998), Kenneth D. Schmidt & Associates in conjunction with Provost & Pritchard Engineering Group, Inc.

**“Ground Water Management Plan for Root Creek Water District”** (October 1997), Provost & Pritchard Engineering Group, Inc.

**“Agreement Between Madera Irrigation District and Root Creek Water District for the Conveyance and Sale of Water”** (March 2002), Madera Irrigation District and Root Creek Water District

**“Agreement Concerning Agricultural, Municipal and Industrial Water Use within Root Creek Water District”** (December 1999), Madera Irrigation District, Chowchilla Water District, the Friant Water Users Authority and Root Creek Water District.

**“Hydrogeologic Investigation – Southeastern Madera County”** (1998, Updated in 2001), Kenneth D. Schmidt and Associates and Provost & Pritchard Engineering Group, Inc.

## Appendix H

### Grant Programs and Funding Sources

**MADERA REGIONAL WATER MANAGEMENT GROUP  
INTEGRATED REGIONAL WATER MANAGEMENT PLAN  
GRANT PROGRAMS AND FUNDING SOURCES**

No.	Agency/Organization	Grant Program	Projects Funded	Available Funding	Recurrence	Website
1	Bureau of Land Management	Fish, Wildlife and Plant Conservation Resource Management	Protect, Restore, & Enhance Fish, Wildlife, & Plant Conservation Resources	\$500 - \$1,400,000		<a href="http://www.federalgrantswire.com/fish-wildlife-and-plant-conservation-resource-management.html">http://www.federalgrantswire.com/fish-wildlife-and-plant-conservation-resource-management.html</a>
2	Bureau of Land Management	Habitat Restoration	Restores Areas on the Land in Need of Attention - Like Abandoned Roads or Erosion Scars			<a href="http://www.blm.gov/ca/st/en/fo/hollister/fort_ord/restoration_fo.html">http://www.blm.gov/ca/st/en/fo/hollister/fort_ord/restoration_fo.html</a>
3	Bureau of Land Management	Environmental Quality & Protection Resource Management	Reduce or Remove Pollutants in the Environment for the Protection of Human Health, Water & Air Resources			<a href="http://www.federalgrantswire.com/environmental-quality-and-protection-resource-management.html">http://www.federalgrantswire.com/environmental-quality-and-protection-resource-management.html</a>
4	Bureau of Land Management	Rangeland Resource Management	Manage, Develop, & Protect Public Lands & Enhance the Understanding of Rangeland & Watershed Resources	\$49,000 Avg. Per Project		<a href="http://www.federalgrantswire.com/rangeland-resource-management.html">http://www.federalgrantswire.com/rangeland-resource-management.html</a>
5	Bureau of Land Management	Recreation Resource Management	Manage and/or Upgrade Recreational Resources & Related Facilities in Lands Administered by the BLM	\$33,000 Avg. Per Project		<a href="http://www.federalgrantswire.com/recreation-resource-management.html">http://www.federalgrantswire.com/recreation-resource-management.html</a>
6	Bureau of Land Management	Secure Rural Schools & Community Self - Determination	Road & Trail Construction, Culvert Replacements for Fish Passage, Stream Channel Enhancement, Watershed Restoration	\$83,000 Avg. Per Project		<a href="http://www.federalgrantswire.com/secure-rural-schools-and-community-self-determination.html">http://www.federalgrantswire.com/secure-rural-schools-and-community-self-determination.html</a>
7	Bureau of Land Management	Wildland Fire & Resource Management	Wildland Fire Management Needs	\$30,000 Avg. Per Project		<a href="http://www.federalgrantswire.com/wildland-fire-research-and-studies-program.html">http://www.federalgrantswire.com/wildland-fire-research-and-studies-program.html</a>
8	Bureau of Reclamation	WaterSMART Programs (Water & Energy Efficiency Grants)	Increase Water Conservation & Efficiency	\$20 Million / \$1 million per project		<a href="http://www.usbr.gov/WaterSMART/weeg/index.html">http://www.usbr.gov/WaterSMART/weeg/index.html</a>
9	California Department of Conservation	California Farmland Conservancy Program	Agricultural Conservation Easements			<a href="http://www.conservation.ca.gov/dlrp/cfcp/Pages/Index.aspx">http://www.conservation.ca.gov/dlrp/cfcp/Pages/Index.aspx</a>
10	California Department of Conservation	Resource Conservation District Assistance Program		Currently Inactive (01/03/2014)		<a href="http://www.conservation.ca.gov/dlrp/RCD/Pages/Index.aspx">http://www.conservation.ca.gov/dlrp/RCD/Pages/Index.aspx</a>
11	California Department of Conservation	Watershed Coordinator Grants Program	Watershed Improvements & Management			<a href="http://www.conservation.ca.gov/dlrp/wp/grants/Pages/wcgp_intro.aspx">http://www.conservation.ca.gov/dlrp/wp/grants/Pages/wcgp_intro.aspx</a>
12	California Dept. of Fish & Wildlife	Landowner Incentive Program	Habitat Management Plans that Benefit at-Risk Species			<a href="http://www.dfg.ca.gov/lands/liip/">http://www.dfg.ca.gov/lands/liip/</a>
13	California Dept. of Fish & Wildlife	Traditional Section 6 Species Recovery Program	Conserve & Recover Federally Threatened & Endangered Species by Focusing on Habitat Restoration			<a href="http://www.dfg.ca.gov/wildlife/grants/tradsec6/">http://www.dfg.ca.gov/wildlife/grants/tradsec6/</a>
14	California Dept. of Fish & Wildlife	Natural Community Conservation Planning Local Assistance Grants	Conservation Planning & Purchases of Vital Habitat for Threatened & Endangered Fish, Wildlife, & Plant Species			<a href="http://www.dfg.ca.gov/habcon/nccp/grants.html">http://www.dfg.ca.gov/habcon/nccp/grants.html</a>
15	California Dept. of Parks & Recreation	Land & Water Conservation Fund	Acquisition or Development of Recreation Areas & Facilities	50% Match	Annually	<a href="http://www.parks.ca.gov/?page_id=21360">http://www.parks.ca.gov/?page_id=21360</a>
16	California Dept. of Parks & Recreation	Habitat Conservation Fund	Acquisition or Development of Wildlife Corridors & Trails	\$2 Million	Annually	<a href="http://www.parks.ca.gov/?Page_id=21361">http://www.parks.ca.gov/?Page_id=21361</a>
17	California Dept. of Parks & Recreation	Statewide Park Program	Creation of New Parks and Recreation Facilities in Critically Underserved Communities	\$368 Million		<a href="http://www.parks.ca.gov/?page_id=26025">http://www.parks.ca.gov/?page_id=26025</a>
18	California Dept. of Parks & Recreation	Recreational Trails Program	Recreational Trails & Trails Related	\$1.47 Million; Max. Funding is 88% of Project	Annually	<a href="http://www.parks.ca.gov/?Page_id=24324">http://www.parks.ca.gov/?Page_id=24324</a>
19	California Dept. of Parks & Recreation	Environmental Enhancement & Mitigation Program	Acquisition, Restoration, or Enhancement of Resource Lands	Currently Inactive (01/03/2014)		<a href="http://www.resources.ca.gov/eem/">http://www.resources.ca.gov/eem/</a>
20	California Dept. of Public Health	American Recovery & Reinvestment Act	Infrastructure Development for California's Drinking Water Systems	\$20 Million Per Project		<a href="http://www.cdph.ca.gov/services/funding/Pages/ARRA.aspx">http://www.cdph.ca.gov/services/funding/Pages/ARRA.aspx</a>
21	California Dept. of Water Resources	IRWMP Implementation Grant	IRWM Plan process developed water management projects	TBD, 25% Match	Round 3, Summer 2014	<a href="http://www.water.ca.gov/irwm/grants/implementation.cfm">http://www.water.ca.gov/irwm/grants/implementation.cfm</a>
22	California Dept. of Water Resources	IRWMP Prop 1E Stormwater Flood Management Grant	Projects designed to manage stormwater runoff to reduce flood damages consistent with IRWMP and the Basin Plan	Up to \$30 Million Per Project, 50% Match	Future Round unknown	<a href="http://www.water.ca.gov/irwm/grants/stormwaterflood.cfm">http://www.water.ca.gov/irwm/grants/stormwaterflood.cfm</a>
23	California Dept. of Water Resources	Local Groundwater Assistance (LGA)	Groundwater studies or carry out groundwater monitoring and management activities	Up to \$250,000. No Match	Future unknown	<a href="http://www.water.ca.gov/lgrant/">http://www.water.ca.gov/lgrant/</a>
24	California Dept. of Water Resources	Urban Streams Restoration Program	Reduce flooding and erosion & associated property damages; restore, enhance, or protect the natural ecological values of streams; & promote	Less than \$1 Million	Spring 2014 PSP	<a href="http://www.water.ca.gov/urbanstreams/">http://www.water.ca.gov/urbanstreams/</a>
25	California Dept. of Water Resources	FloodSAFE	Various programs: Delta Levee, Flood Control Subventions, Flood Corridor, Flood Emergency Response and Local Levee Assistance	Varies	Varies	<a href="http://www.water.ca.gov/floodsafe/grants/">http://www.water.ca.gov/floodsafe/grants/</a>

**MADERA REGIONAL WATER MANAGEMENT GROUP  
INTEGRATED REGIONAL WATER MANAGEMENT PLAN  
GRANT PROGRAMS AND FUNDING SOURCES**

No.	Agency/Organization	Grant Program	Projects Funded	Available Funding	Recurrence	Website
26	California Edison	Corporate Contributions	Environmental			<a href="http://www.edison.com/community/contribution_guidelines.asp">http://www.edison.com/community/contribution_guidelines.asp</a>
27	California Infrastructure Bank	Infrastructure State Revolving Fund Program	Drainage, Water Supply & Flood Control, Environmental Mitigation Measures	\$50,000 - \$25 Million		<a href="http://www.ibank.ca.gov/infrastructure_loans.htm">http://www.ibank.ca.gov/infrastructure_loans.htm</a>
28	Chuckchansi Tribe	Community Grant Program	Various community projects including water resources related projects	\$1 million / year through 2016	Due March 1	<a href="http://www.chukchansi.net/communitygrant.html">http://www.chukchansi.net/communitygrant.html</a>
29	Edison International	Environmental Giving Program	Environmental Sustainability	\$2.7 Million		<a href="http://www.edison.com/community/programs.asp?id=7873">http://www.edison.com/community/programs.asp?id=7873</a>
30	Environmental Protection Agency	Clean Water State Revolving Fund	Water Quality Protection Projects for Wastewater Treatment, Non-Point Source Pollution Control & Watershed Management	\$5 Billion	Annually	<a href="http://water.epa.gov/grants_funding/cwsrf/cwsrf_index.cfm">http://water.epa.gov/grants_funding/cwsrf/cwsrf_index.cfm</a>
31	Environmental Protection Agency	Drinking Water State Revolving Fund	Public Health Protection, Compliance with Drinking Water Standards, & Affordable Access to Drinking Water			<a href="http://water.epa.gov/grants_funding/dwsrf/index.cfm">http://water.epa.gov/grants_funding/dwsrf/index.cfm</a>
32	Farm Services Agency	Water & Waste Disposal Direct Loans & Grants	Develop Water & Waste Disposal Systems in Rural Areas			<a href="http://www.rurdev.usda.gov/UWP-dispdirectloansgrants.htm">http://www.rurdev.usda.gov/UWP-dispdirectloansgrants.htm</a>
33	Farm Services Agency	Water & waste Revolving Fund Grant	Assist Communities with Water & Wastewater Systems			<a href="http://www.rurdev.usda.gov/UWP-revolvingfund.html">http://www.rurdev.usda.gov/UWP-revolvingfund.html</a>
34	Federal Emergency Management Agency	Flood Mitigation Assistance Programs	Flood Mitigation Plans, & Implement Measures to Reduce Flood Losses	\$120 Million		<a href="http://www.fema.gov/flood-mitigation-assistance-program">http://www.fema.gov/flood-mitigation-assistance-program</a>
35	National Fish & Wildlife Foundation	Five Star & Urban Waters Restoration Grant Program	Water Quality Issues in Priority Watersheds			<a href="http://www.nfwf.org/fivestar/Pages/home.aspx">http://www.nfwf.org/fivestar/Pages/home.aspx</a>
36	National Fish & Wildlife Foundation	Sierra Nevada Meadow Restoration	Restore & Protect Meadows in the Sierra Nevada			<a href="http://www.nfwf.org/sierranevada/Pages/home.aspx">http://www.nfwf.org/sierranevada/Pages/home.aspx</a>
37	National Forest Foundation	Matching Awards Program	Conservation & Restoration Projects	1:1 Match	Annually	<a href="http://www.nationalforests.org/conserv/grantprograms/ont/heground/map">http://www.nationalforests.org/conserv/grantprograms/ont/heground/map</a>
38	National Forest Foundation	Wilderness Stewardship Challenge	Conservation Projects Benefiting National Forest Wilderness Areas	Match up to \$50,000	Annually	<a href="http://www.nationalforests.org/conserv/grantprograms/ont/heground/wilderness">http://www.nationalforests.org/conserv/grantprograms/ont/heground/wilderness</a>
39	National Forest Foundation	Ski Conservation Fund	Watershed Restoration, Recreation Enhancements, & Forest Projects		Annually	<a href="http://www.nationalforests.org/conserv/grantprograms/ont/heground/scf">http://www.nationalforests.org/conserv/grantprograms/ont/heground/scf</a>
40	National Forest Foundation	Community Capacity & Land Stewardship	Watershed Restoration	\$5,000 - \$24,000	Annually	<a href="http://www.nationalforests.org/conserv/grantprograms/capacitybuilding/ccls">http://www.nationalforests.org/conserv/grantprograms/capacitybuilding/ccls</a>
41	National Institute of Food & Agriculture	Foundational Program	Agriculture, Community Development, Natural Resources & Environmental	\$82 Million		<a href="http://www.csrees.usda.gov/fo/foundationalprogramafri.cfm">http://www.csrees.usda.gov/fo/foundationalprogramafri.cfm</a>
42	National Science Foundation	Hydrologic Science	Studying Processes from Rainfall to Runoff to Infiltration & Streamflow	\$10 Million	Annually	<a href="http://www.nsf.gov/funding/pgm_summ.jsp?piims_id=13684&amp;org=ERE">http://www.nsf.gov/funding/pgm_summ.jsp?piims_id=13684&amp;org=ERE</a>
43	Natural Resources Conservation Service	Conservation of Private Grazing Lands	Grazing Land Management & Conservation of Water	\$47 Million for Technical Assistance		<a href="http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/pr/ogams/technical/cppl/">http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/pr/ogams/technical/cppl/</a>
44	Natural Resources Conservation Service	Conservation Reserve Program	Establishing Conservation Practices	50% of Costs		<a href="http://www.fsa.usda.gov/FSA/webapp?area=home&amp;subject=copr&amp;topic=crp">http://www.fsa.usda.gov/FSA/webapp?area=home&amp;subject=copr&amp;topic=crp</a>
45	Natural Resources Conservation Service	Conservation Stewardship Program (CSP)	Maintain and improve existing conservation systems and adopting additional conservation activities to address resource concerns	\$200,000		<a href="http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/pr/ogams/financial/csp/?cid=stelprdb1242683">http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/pr/ogams/financial/csp/?cid=stelprdb1242683</a>
46	Natural Resources Conservation Service	Conservation Technical Assistance	Opportunities, Concerns, & Problems Related to Natural Resource Projects	Technical Assistance		<a href="http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/pr/ogams/technical/">http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/pr/ogams/technical/</a>
47	Natural Resources Conservation Service	Environmental Quality Incentives Program (EQIP)	Establishing Conservation Practices that address various Natural Resource Concerns	Varies		<a href="http://www.nrcs.usda.gov/wps/portal/nrcs/detail/ca/programs/?cid=nrcs144p2_063939">http://www.nrcs.usda.gov/wps/portal/nrcs/detail/ca/programs/?cid=nrcs144p2_063939</a>
48	Natural Resources Conservation Service	Wildlife Habitat Incentive Program (Now folded into EQIP)	Establish & Improve Fish & Wildlife Habitat	Technical Assistance & up to 75% Cost-Share Assistance		<a href="http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/pr/ogams/financial/whip/?cid=nrcs143_008423">http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/pr/ogams/financial/whip/?cid=nrcs143_008423</a>
49	Natural Resources Conservation Service	Watershed Protection & Flood Prevention Program	Watershed Planning			<a href="http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/pr/ogams/landscape/wfpo/">http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/pr/ogams/landscape/wfpo/</a>
50	Natural Resources Conservation Service	Emergency Watershed Protection Program	Projects that Address Watershed Impairments	75% of Construction Cost		<a href="http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/pr/ogams/landscape/ewpp/">http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/pr/ogams/landscape/ewpp/</a>

**MADERA REGIONAL WATER MANAGEMENT GROUP  
INTEGRATED REGIONAL WATER MANAGEMENT PLAN  
GRANT PROGRAMS AND FUNDING SOURCES**

No.	Agency/Organization	Grant Program	Projects Funded	Available Funding	Recurrence	Website
51	Natural Resources Conservation Service	Farm & Ranch Lands Protection Program (Now folded into ACEP)	Acquisition of Conservation Easements or Other Interests in Land from Landowners	50% of Fair Market Easement Value		<a href="http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/prgrams/easements/farmranch/">http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/prgrams/easements/farmranch/</a>
52	Natural Resources Conservation Service	Grassland Reserve Program (Now folded into ACEP)	Protection of Grassland, Enhancement of Plant & Animal Biodiversity, & Grazing Operations	Currently Inactive (01/03/2014)		<a href="http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/prgrams/easements/grassland/">http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/prgrams/easements/grassland/</a>
53	Natural Resources Conservation Service	Healthy Forests Reserve Program	Restoring & Protecting Forests			<a href="http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/prgrams/easements/forests/">http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/prgrams/easements/forests/</a>
54	Natural Resources Conservation Service	Wetlands Reserve Program (Now folded into ACEP)	Wetland Improvements	Currently Inactive (01/03/2014)		<a href="http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/prgrams/easements/wetlands/">http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/prgrams/easements/wetlands/</a>
55	Natural Resources Conservation Service	Agriculture Conservation Easement Program (ACEP)	Wetland Reserve and Agriculture Land Easements			<a href="http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/prgrams/easements/acep/?cid=stelprdb1242695">http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/prgrams/easements/acep/?cid=stelprdb1242695</a>
56	Natural Resources Conservation Service	Conservation Security Program	Conservation & Improvement of Water	Currently Inactive (01/03/2014)		<a href="http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/prgrams/alphabetical/csp/">http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/prgrams/alphabetical/csp/</a>
57	Pacific Gas & Electric	Nature Restoration Trust	Restoration Projects that Benefit Wildlife	\$30,000/ Request		<a href="http://www.nfwf.org/nrt/Pages/home.aspx">http://www.nfwf.org/nrt/Pages/home.aspx</a>
58	Pacific Gas & Electric	Community Investment Program	Projects Vary			<a href="http://www.pge.com/en/about/community/contributions/index.page">http://www.pge.com/en/about/community/contributions/index.page</a>
59	Regional Water Quality Control Boards	Supplemental Environmental Projects Regional Water Quality Improvement Projects Program	Various Environmental Projects			<a href="http://www.waterboards.ca.gov/rwqcb5/water_issues/enforcement/index.shtml">http://www.waterboards.ca.gov/rwqcb5/water_issues/enforcement/index.shtml</a>
60	Resources Legacy Fund Foundation	California Water Foundation	Improving Water Management			<a href="http://www.californiawaterfoundation.org/page.php?id=32&amp;menuid=94">http://www.californiawaterfoundation.org/page.php?id=32&amp;menuid=94</a>
61	Rotary Club of Auberry Intermountain	Charitable Foundation	Projects That Support Broad Goals of an Organization and Groups			<a href="http://auberryrotary.org/requests.php">http://auberryrotary.org/requests.php</a>
62	Sierra Nevada Conservancy	Prop 84 Grant Program	Forest Management to increase Forest resilience , Enhance Water Supply & Quality	\$350,000		<a href="http://www.sierranevada.ca.gov/other-assistance">http://www.sierranevada.ca.gov/other-assistance</a>
63	Sloan Foundation		Various-grants for original research and broad-based education related to science, technology, and economic performance		Year Round	<a href="http://www.sloan.org/apply-for-grants/grant-proposals/?l=ilbfjfrwngn">http://www.sloan.org/apply-for-grants/grant-proposals/?l=ilbfjfrwngn</a>
64	State Water Resources Control Board	Non-Point Source Grant Program	Water Quality Problems in Surface & Ground Water Resulting from NPS Pollution	\$40 Million	Annually	<a href="http://www.waterboards.ca.gov/water_issues/programs/nps/grant_program.shtml">http://www.waterboards.ca.gov/water_issues/programs/nps/grant_program.shtml</a>
65	US Bureau of Indian Affairs	Numerous	Water and environmental resources projects on tribal reservations	Varies		<a href="http://www.federalgrants.com/Bureau-of-Indian-Affairs-Grant-23918.html">http://www.federalgrants.com/Bureau-of-Indian-Affairs-Grant-23918.html</a>
66	US Fish & Wildlife Service	North American Wetlands Conservation Act	Wetlands Conservation Projects	\$75,000		<a href="http://www.fws.gov/birdhabitat/Grants/NAWCA/index.shtml">http://www.fws.gov/birdhabitat/Grants/NAWCA/index.shtml</a>
67	US Fish & Wildlife Service	Wildlife Restoration Grant Program	Habitat Management, Species Restoration, & Land Acquisition			<a href="http://www.fws.gov/southwest/federal_assistance/wr.html">http://www.fws.gov/southwest/federal_assistance/wr.html</a>
68	US Fish & Wildlife Service	Sport Fish Restoration Grant Program	Protect, Manage, & Restore Aquatic Habitats			<a href="http://www.fws.gov/midwest/wsfr/sfr.htm">http://www.fws.gov/midwest/wsfr/sfr.htm</a>
69	US Fish & Wildlife Service	Clean Vessel Act Grant Program	Construction, Renovation, Operation, & Maintenance of Pump Out Stations & Waste Reception Facilities for Recreational Boaters			<a href="http://www.fws.gov/southwest/federal_assistance/cva.html">http://www.fws.gov/southwest/federal_assistance/cva.html</a>
70	US Fish & Wildlife Service	State Wildlife Grant Program	Develop & Implement Programs that Benefit Wildlife & their Habitats			<a href="http://wsfrprograms.fws.gov/Subpages/GrantPrograms/SWG/SWG.htm">http://wsfrprograms.fws.gov/Subpages/GrantPrograms/SWG/SWG.htm</a>
71	US Fish & Wildlife Service	Multistate Grant Program	Wildlife & Sport Fish Restoration	\$6 Million	Annually	<a href="http://wsfrprograms.fws.gov/Subpages/GrantPrograms/MultiState/MS.htm">http://wsfrprograms.fws.gov/Subpages/GrantPrograms/MultiState/MS.htm</a>
72	US Fish & Wildlife Service	Neotropical Migratory Birds Conservation Act	Conservation of Habitat for Hundreds of Neotropical Migratory Birds			<a href="http://www.fws.gov/birdhabitat/Grants/NMBCA/index.shtml">http://www.fws.gov/birdhabitat/Grants/NMBCA/index.shtml</a>
73	US Forest Service	Woody Biomass Utilization	Removal of Hazardous woody Biomass	Currently Inactive (01/03/2014)		<a href="http://www.fs.usda.gov/detail/r1/communityforests/?cid=stelprdb5339807">http://www.fs.usda.gov/detail/r1/communityforests/?cid=stelprdb5339807</a>
74	US Forest Service	Collaborative Forest Landscape Restoration Program	Achieve Ecological and Watershed Health	\$40,000,000	Annually	<a href="http://www.fs.fed.us/restoration/CFLRP/">http://www.fs.fed.us/restoration/CFLRP/</a>
75	US Forest Service	Legacy Roads & Trails Restoration Program	Forest Service Roads that may be Contributing to Water Quality Problems in Streams & Water Bodies			<a href="http://www.fs.fed.us/restoration/Legacy_Roads_and_Trails/">http://www.fs.fed.us/restoration/Legacy_Roads_and_Trails/</a>

**MADERA REGIONAL WATER MANAGEMENT GROUP  
INTEGRATED REGIONAL WATER MANAGEMENT PLAN  
GRANT PROGRAMS AND FUNDING SOURCES**

No.	Agency/Organization	Grant Program	Projects Funded	Available Funding	Recurrence	Website
76	Wildlife Conservation Board, State of California	Prop. 40	Wildlife Corridors & Landscapes, Public Access, Land Management	\$89,000,000		<a href="https://www.wcb.ca.gov/FundingSources/Prop40.aspx">https://www.wcb.ca.gov/FundingSources/Prop40.aspx</a>
77	Wildlife Conservation Board, State of California	Prop. 50	Protect & Improve Regional Water Quality	\$140,000,000	Continuously	<a href="https://www.wcb.ca.gov/FundingSources/Prop50/WaterCodeandFundingUses.aspx">https://www.wcb.ca.gov/FundingSources/Prop50/WaterCodeandFundingUses.aspx</a>
78	Wildlife Conservation Board, State of California	Prop. 84	Water Quality & Supply, Flood Control	\$823,855		<a href="http://bondaccountability.resources.ca.gov/p84.aspx">http://bondaccountability.resources.ca.gov/p84.aspx</a>
79	Wildlife Conservation Board, State of California	Prop. 1E	Flood Protection	\$65,646		<a href="http://bondaccountability.resources.ca.gov/p1e.aspx">http://bondaccountability.resources.ca.gov/p1e.aspx</a>

## Appendix I

### Regional Water Management Group Brochure

## IMPORTANT PARTNERSHIPS

### RWMG MEMBERS

Chowchilla Red Top Resource Conservation District

Chowchilla Water District

City of Chowchilla

City of Madera

Coarsegold Resource Conservation District

Gravelly Ford Water District

Madera County

Madera County Special Districts

Madera Irrigation District

Madera Valley Water Company

Madera Water District

North Fork - Mono Rancheria

Root Creek Water District

South East Madera County United (SEMUCU)

Yosemite/Sequoia Resource Conservation and Development Council

DAC Groups:

Self-Help Enterprises

Fairmead Community & Friends

For meeting schedule, application packet, copy of IRWMP, MOU/Bylaws, and other information—visit our website at :

<http://www.madera-id.org/index.php/rwmg>



Integrated Regional Water Management (IRWM) is a collaborative effort to manage all aspects of water resources in a region. IRWM crosses jurisdictional, watershed, and political boundaries; involves multiple agencies, stakeholders, individuals, and groups; and attempts to address the issues and differing perspectives of all the entities involved through mutually beneficial solutions.

*Reaching both the Foothills and the Valley in the Center of California*



### Madera RWMG

#### REGIONAL WATER MANAGEMENT GROUP

Madera Regional Water Management Group

Lead Agency - Madera Irrigation District

Chairperson - Carl Janzen

[cjanzen@madera-id.org](mailto:cjanzen@madera-id.org)

Phone: 559-479-1070

Administrative Assistant

Jeannie Habben

Phone 559-642-3263

E-mail: [info@cfwatershed.org](mailto:info@cfwatershed.org)



## Madera Regional Water Management Group

#### Mission Statement

The mission of the Regional Water Management Group (RWMG) will facilitate future coordination, collaboration, and communication for comprehensive management of water resources in the Madera Region. Through the mutual understanding among entities in the Madera Region regarding their joint efforts toward Integrated Regional Water Management we will ensure governance, development, planning, funding, and implementation to make certain that optimal and affordable water supplies & facilities are available now and in the future to sustain this region and its responsible growth.

February 2010

INTEGRATED REGIONAL WATER MANAGEMENT PLANNING



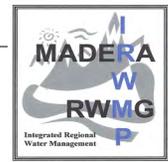
# PLAN UPDATE IS COMPLETE

The idea of integrated regional water management first surfaced in the state of California in Proposition 50, the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002, Water Code Section 79500, et seq., which was passed by California voters in the November 2002 general election. In response to this substantial new challenge and opportunity from the State, in 2006 Madera County solicited a planning grant to prepare the region's initial Integrated Regional Water Management Plan (IRWMP). Though Madera County was the lead agency for the original IRWMP, many stakeholders from throughout the County were involved in the process of writing the IRWMP which was accepted in 2008 and adopted in 2009. The original Plan was approved by DWR for meeting Prop 50 standards and a new group was formed to implement the projects and the ideas of the Plan. This group, the Madera Regional Water Management Group (RWMG) was created by a Formation Committee who followed parameters set by the State. The RWMG grew and evolved to include a more diverse group of stakeholders who formally organized under a Memorandum of Understanding in 2010. Now to move ahead; RWMG has now completed four implementation projects, two Facilitation Support contracts, and updating the Plan to the new Prop 84 Standards.

By Updating the IRWM Plan they completed a new list of projects, a new section on Disadvantaged Communities, and a new section on Climate Change. They also created processes for ranking goals and objectives, a project review process, and polished up their - already in place - governance process.

# MILESTONES

- 2006 - the County of Madera (MC) began the process of developing an Integrated Regional Water Management Plan (IRWMP) for managing and protecting its water resources.
- April 14, 2008 - MC Board of Supervisors accepted the IRWMP.
- November 2008 - Advisory committees formed to assist in deliberation of issues addressed in IRWMP or regional water issues.
- November 24, 2009 - MC Board of Supervisors passed a resolution approving the IRWMP to officially adopt the Plan
- January 2, 2010 - RWMG was officially formed. Since the formation we have created a standing MOU for all members along with the Mission and Vision statement and other official documents for the formation.
- October 2010 - Madera RWMG applied for the Planning Grant with DWR and in January 2011 the Implementation Grant was submitted also to DWR.
- May 23, 2011 - Madera Region was recommended for Proposition 84 Implementation funding in the amount of \$9,413,947.00.
- June 6, 2011 - Madera Region was recommended for full acceptance as a region during the Region Acceptance Process.
- February 2, 2012 - facilitation task orders for Madera was approved to start Facilitation Support Services with a contracted Facilitator.
- June 5, 2012 - Madera RWMG signed contract for Prop 84 Implementation funding to begin four projects.
- November 29, 2012 - Madera RWMG received final notice of \$271,438 award to update their IRWM Plan
- January 2013 - Finalized creation and writing of New Members Packet and application for DisAdvantaged Communities (DAC)
- May 8, 2013 - Received second Facilitation Support Contract
- September 2014 - Completed the Update of the IRWM Plan to Prop 84 Standards



## ROUND I PROJECTS

☐ **2011/12: Received \$9,413,947 Implementation Grant. Used to fund:**



**Cottonwood, Berenda, & Dry Creek Arundo & Sediment Removal**



**Ash Slough Arundo & Sediment Removal**



**Sierra National Forest Fuel Reduction Program**



**Root Creek Recharge Project**

### MOUs with our Adjacent IRWM Regions:

- Southern Sierra IRWM Group
- Yosemite/Mariposa Regional Water Advisory Council
- Merced Integrated Regional Water Management Group
- Inyo-Mono IRWMP—Devil's Postpile National Monument
- Kings River IRWM
- Westside-San Joaquin RWMG (pending signature)

## Appendix J

### Public Notices

## **NOTICE OF INTENTION TO ADOPT UPDATED MADERA INTEGRATED REGIONAL WATER MANAGEMENT PLAN**

NOTICE IS HEREBY GIVEN that the Madera Regional Water Management Group (RWMG) plans to adopt an update to their Integrated Regional Water Management Plan (IRWMP), which was originally prepared in 2008. The updated IRWMP was prepared in accordance with the State of California Department of Water Resources IRWMP Guidelines. The IRWMP includes groundwater, surface water, and flood control management objectives and a listing of planned strategies to accomplish the objectives of the IRWMP throughout Madera County. Additional information on the RWMG and a draft copy of the updated IRWMP can be found at <http://madera-id.org/index.php/rwmq>. A copy of the IRWMP is also available at the office of the Madera County Resource Management Agency Building, 2037 W. Cleveland Avenue, Madera, California for public review. Landowners and other interested parties who wish to provide comments on the draft IRWMP may submit them in writing through August 15, 2014 to Jeannie Habben at Chowchilla/Fresno Watershed, Post Office Box 1061, Coarsegold, CA 93614, 559-642-3263, or [info@cfwatershed.org](mailto:info@cfwatershed.org). A regularly scheduled RWMG will be held at 1:30 pm on September 8, 2014 at the Oakhurst Library Conference Room, 49044 Civic Circle Drive, Oakhurst, California to adopt the updated IRWMP. This Notice has been prepared in accordance with Government Code 6066 requirements per the IRWMP Guidelines.

# Proof of Publication

(2015.5 C.C.P.)

## NOTICE OF INTENTION TO UPDATE MADERA INTEGRATED REGIONAL WATER MANAGEMENT PLAN

STATE OF CALIFORNIA )  
                                  ) ss.  
County of Madera      )

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above entitled matter. I am the principal clerk of the printer of the Madera Tribune, a newspaper of general circulation, published in the City of Madera, County of Madera, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Madera, State of California, under the date of November 9, 1966, Case Number 4875 that the notice, of which the annexed is a printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

DECEMBER 31, 2013, JANUARY 7, 2014

I certify (or declare) under penalty of perjury that the foregoing is true and correct.



Signature

Date: January 7, 2014

### NOTICE OF INTENTION TO UPDATE THE MADERA INTEGRATED REGIONAL WATER MANAGEMENT PLAN

NOTICE IS HEREBY GIVEN that the Madera Regional Water Management Group (RWMG) plans to update the 2008 Madera Integrated Regional Water Management Plan (IRWMP). The updated IRWMP will be prepared in accordance with the State of California Department of Water Resources IRWMP Guidelines. The IRWMP includes groundwater, surface water, and storm water management objectives and a listing of planned strategies to accomplish the objectives of the IRWMP throughout Madera County. Additional information on the RWMG can be found at <http://madera-id.org/index.php/rwmg>. Landowners and other interested parties who wish to participate in updating the IRWMP may do so by contacting Jeannie Habben at 559-642-3263 or [info@cfwatershed.org](mailto:info@cfwatershed.org), or attending the next RWMG meeting at the Chowchilla City Hall, Training Room, 130 S. Second Street, Chowchilla at 1:30 pm on January 13, 2014. This Notice has been prepared in accordance with Government Code 6066 requirements.  
No. 758 - Dec. 31, 2013, Jan. 7, 2014

# SIERRA STAR

Bridging the mountain communities together since 1957

57, No. 26 — Oakhurst

Thursday, April 24, 2014

## Water planning

Dear Editor,

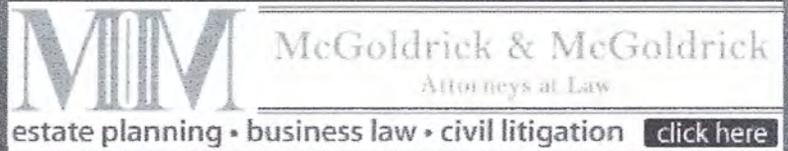
It is important to have a say in the planning of our water. The Madera Regional Water Management Group is currently update this area's water management plan. The Madera Regional Water Management Group is a group of water agencies, organizations, and other interested parties that meet monthly to discuss regional water management issues, projects, and opportunities for funding new projects.

The group successfully secured \$9.4 million for water resources projects in Madera County in 2011 and an additional \$271 thousand to update the Integrated Regional Water Management Plan (IRWMP) in 2013.

The group is currently updating this IRWMP, which was originally prepared in 2007. The Plan will address surface water, groundwater and flood control issues in Madera County, and include strategies to accomplish water management goals.

The updated Plan will also allow the group to remain eligible for certain State grant programs. Landowners, agencies, organizations and other interested parties who wish to participate in updating the IRWMP may do so by contacting me at (559) 642-3263 or [info@cfwatershed.org](mailto:info@cfwatershed.org), or attending the next Regional Water Management Group meeting. Meeting times and locations can be found at [madera-id.org/index.php/rwmg](http://madera-id.org/index.php/rwmg).

**Jeannie Habben,  
Oakhurst**



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Sunday, 23 March 2014 13:05

font size Print Email Be the first to comment!

# Regional Water Management Plan Updated

Pin this item (0 votes)

Submitted by Jeannie Habben

It is important to have a say in the planning of our water. The Madera Regional Water Management Group is currently updating this area's water management plan.

The Madera Regional Water Management Group is a group of water agencies, organizations, and other interested parties that meet monthly to discuss regional water management issues, projects, and opportunities for funding new projects. The group successfully secured \$9.4 million for water resources projects in Madera County in 2011 and an additional \$271,000 to update the Integrated Regional Water Management Plan (IRWMP) in 2013.

The group is currently updating this IRWMP, which was originally prepared in 2007. The Plan will address surface water, groundwater and flood control issues in Madera County, and include strategies to accomplish water management goals. The updated Plan will also allow the group to remain eligible for certain State grant programs.

Landowners, agencies, organizations and other interested parties who wish to participate in updating the IRWMP may do so by contacting Jeannie Habben at 559-642-3263 or [info@cfwatershed.org](mailto:info@cfwatershed.org) , or by attending the next Regional Water Management Group meeting. Meeting times and locations can be found at <http://madera-id.org/index.php/rwmg>.

Remember to be Green Not Mean!

Jeannie Habben

Central Sierra Watershed Committee

Madera Regional Water Management Group

Chowchilla/Fresno Rivers Watershed

Phone: 559-642-3263

FAX: 559-658-7170

[info@cfwatershed.org](mailto:info@cfwatershed.org)

Read 431 times

Last modified on Tuesday, 25 March 2014 15:40

## Appendix K

### Letters of Agreement with Neighboring IRWMPs

May 10, 2010

State of California  
Department of Water Resources  
Division of Planning and Local Assistance  
Attn. Ralph Svetich  
Post Office Box 942836  
Sacramento, CA 94236-0001

Dear Mr. Svetich:

**Integrated Regional Water Management -  
Letter of Agreement on Regions Common Shared Areas**

The Madera and Southern Sierra Regional Water Management Groups (RWMG), through a process of open discussion, collaboration and mutual agreement, have established a common shared area. This Letter of Agreement establishes that the Madera and Southern Sierra RWMGs accept this area for purposes of defining their respective Integrated Regional Water Management Plan (IRWMP) regions, as set forth in the Department of Water Resources' (DWR) 2009 *Final IRWM Region Acceptance Process Guidelines* (RAP Guidelines).

The shared area between the Southern Sierra RWMG and the Madera RWMG will be the subwatershed area upstream of Mammoth Pool Reservoir and north of the southern Madera County Line as shown on Attachment 1. The parties will work to maintain communication and collaboration on a variety of watershed-based issues. In accordance with the RAP Guidelines, this area takes into account the water management issues of the two regions, including water quality and supply, environmental stewardship, flood management and drought preparedness, as well as stakeholder concerns and water infrastructure.

The Madera and Southern Sierra RWMGs have both identified water management issues and objectives that are applicable to the entire San Joaquin River watershed. Subsequently, the Madera and Southern Sierra RWMGs agree to collaborate on water management issues related to the entire San Joaquin River watershed, including, but not limited to the following mutually identified items:

1. Protection of water quality, including headwater protection;
2. Control and/or removal of invasive species;
3. Riparian habitat restoration; and
4. Post-fire restoration
5. The relationship between land use and water quality and quantity

Note: A formal process for collaboration will be defined and agreed to in a second letter agreement to be established once both RWMGs have adopted their respective long-term governance structures. Until such time, the Madera and Southern Sierra RWMGs agree to continue to actively collaborate in accordance with the existing governance procedures of both RWMGs.

**On behalf of the Madera Regional Water Management Group:**

Mr. Michael Neveu, YSPUC

Mr. B. Neveu

Lead Agency: YSPUC

Contact: MICHAEL NEVEU

Phone number: (559) 658-7406

**On behalf of the Southern Sierra Regional Water Management Group:**

Bobby Kamansky

Lead Agency: Sequoia Riverlands Trust

Contact: Bobby Kamansky, Project Manager

Phone number: (559) 287-3311

cc: Tracie Billington, Department of Water Resources  
Jim Lin, Department of Water Resources

## INTEGRATED REGIONAL WATER MANAGEMENT

### Merced and Madera Regions

### Letter of Agreement

For

### Regions Common Boundary

and

### Overall Cooperation and Collaboration

The Merced and Madera Integrated Water Management Regions (IWMR), through collaboration and mutual agreement, have established a common boundary line. This Letter of Agreement establishes that the Madera and Merced IWRMs accept this common boundary line for purposes of defining their respective Integrated Regional Water Management Plan (IRWMP) regions, as set forth in the Department of Water Resources' (DWR) 2009 *Final IRWM Region Acceptance Process Guidelines* (RAP Guidelines). The IWRMs also agree to cooperate and collaborate on goals common to the San Joaquin River Watershed.

The shared boundary line between the Merced and the Madera regions will begin at the easterly boundary of Merced Groundwater Basin as identified in the DWR Bulletin 118, and continues westerly along Chowchilla River to its intersection with Madera County Boundary line, where it departs along said county line to its intersection with the San Joaquin River, as shown on Attachment 1. The common boundary line is intended to eliminate any gaps between the two regions. The parties will work to maintain communication and collaboration on a variety of watershed-based issues.

The Madera and Merced IWRMs are both located within the San Joaquin River Watershed and certain water management issues and objectives are applicable to the entire San Joaquin River watershed. Subsequently, the Madera and Merced IWRMs agree to collaborate on such water management issues, including, but not limited to the following mutually identified items:

1. Protection of water quality, including headwater protection;
2. Control and/or removal of invasive species;
3. Riparian habitat restoration; and
4. Post-fire restoration
5. The relationship between land use and water quality and quantity

A formal process for collaboration will be defined and agreed to in a second letter agreement to be established once both IWRMs have adopted their respective long-term governance structures. Until such time, the Madera and Merced agree to continue to actively collaborate in accordance with the existing governance procedures of both RWMGs.

**On behalf of the Madera Regional Water Management Plan:**

Carl Janzen 4-11-11

Lead Agency:  
Contact: Carl Janzen  
Phone number: (559) 479-1070

**On behalf of the Merced Regional Water Management Plan:**

Hicham Eltal 4-12-11

Lead Agency: Merced Irrigation District  
Contact: Hicham Eltal  
Phone number (209) 722-5761

cc: Michelle Dooley, Department of Water Resources  
Tracie Billington, Department of Water Resources  
Jim Lin, Department of Water Resources

**Integrated Regional Water Management -  
Letter of Agreement on Coordination and Communication Between Regions**

The Madera and Yosemite-Mariposa Regional Water Management Groups (RWMG), through a process of open discussion, collaboration and mutual agreement have established an agreement on coordination and communication between their regions. This Letter of Agreement establishes the procedures and intentions regarding such coordination and communication.

Intent: The Yosemite-Mariposa and Madera regions share a common border and portions of the upper watersheds of the Chowchilla, Fresno and Merced Rivers. The two regions, represented by their respective Regional Water Management Groups, will work to maintain coordination and communication on a variety of common water and watershed-based issues.

Procedure: The Yosemite-Mariposa RWMG will be developing its Integrated Regional Water Management (IRWM) Plan over the next several years and the Madera RWMG will be updating its existing plan to meet new State requirements during the same time period. In both cases, a revised governance structure is likely to result from the Plan development. The two RWMGs agree to include a formal procedure for coordination and communication between their regions as part of their revised governance structures. Until such time, the Yosemite-Mariposa and the Madera RWMGs agree to actively coordinate and communicate in accordance with the existing procedures of both RWMGs

**On behalf of the Madera Regional Water Management Group:**

Carl Janzen

Lead Agency: Madera Regional Water Management Group

Contact: Carl Janzen or Jeannie Habben

Phone Number: 559-673-3514 or 559-642-3263

10/10/11

**On behalf of the Yosemite-Mariposa Regional Water Management Group:**

Glenn Franklin

Lead Agency: MARIPOSA COUNTY RESOURCE CONSERVATION DISTRICT

Contact: GLENN FRANKLIN OR PAT GARCIA

Phone Number: 209-966-3431 - SEPT. 22, 2011

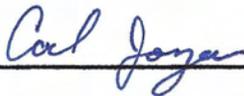
**Integrated Regional Water Management -  
Letter of Agreement on Communication Between Regions**

The Madera and Kings Basin Regional Water Management Groups (RWMG), through a process of open discussion, collaboration and mutual agreement have established an agreement on communication between their regions. This Letter of Agreement establishes the procedures and intentions regarding such communication.

**Intent:** The Kings Basin and Madera regions share a common border along the Fresno and Madera County line. The two regions, represented by their respective RWMGs, will work to maintain communication on a variety of common water and watershed-based issues.

**Procedure:** The Kings Basin and Madera RWMGs will be updating their existing Integrated Regional Water Management Plans (IRWMPs) to meet new State requirements over the course of the next several years. As a task to update its IRWMP, the Kings Basin RWMG will add language which describes the nature of its cooperative and collaborative relationship with the Madera RWMG. In the case of Madera RWMG, a revised governance structure is likely to result from its IRWMP update. Madera RWMG will include a formal procedure for communication with Kings Basin RWMG as part of their revised governance structure, or, will describe the nature of its cooperative and collaborative relationship with the Kings Basin RWMG within its updated IRWMP. Until such time, the Kings Basin and the Madera RWMGs agree to actively communicate in accordance with the existing procedures of both RWMGs

**On behalf of the Madera Regional Water Management Group:**

  
\_\_\_\_\_

Lead Agency: Madera Irrigation District

Contact: Carl Janzen

Phone Number: 559-673-3514

**On behalf of the Kings Basin Regional Water Management Group:**

  
\_\_\_\_\_

Lead Agency: Upper Kings Basin IRWM Authority

Contact: David Orth, Secretary/Treasurer

Phone Number: 559-237-5567

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INYO-MONO INTEGRATED REGIONAL WATER MANAGEMENT PLANNING  
PROJECT

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TO: Mr. Svetich  
State of California  
Department of Water Resources  
Division of Planning and Local Assistance

FROM: Dr. Mark Drew, Project Manager, Inyo-Mono IRWMP Launch Project

SUBJECT: Integrated Regional Water Management-Letter of Agreement on Devils Postpile  
National Monument and Mammoth Mountain Ski Area

DATE: 4/24/2009

CC: Tracie Billington, Department of Water Resources  
Jim Lin, Department of Water Resources

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Dear Mr. Svetich:

This letter addresses the shared interest among the Inyo-Mono, South Sierra, and Madera IRWMPs in the Devils Postpile National Monument and Mammoth Mountain Ski Area.

Devils Postpile National Monument is located near the headwaters of the Upper Middle Fork of the San Joaquin in Madera County, and can only be accessed by road from the Town of Mammoth Lakes in Mono County CA. Through the discussions among the representatives of the Madera, Southern Sierra, and Inyo-Mono IRWMPs, and Devils Postpile, there is consensus that it is important to include Devils Postpile in these IRWMPs and include each other in discussions that affect this shared area of interest.

Mammoth Mountain Ski Area operates under a Special Use Permit administered by the Inyo National Forest. The permit area encompasses 3500 acres, covers both Madera and Mono Counties, and is split by two distinct watersheds/aquifers. The majority of the permit area is covered by the South Lahontan Watershed and its two drainages: Dry Creek, which flows northeast into Mono County, and Mammoth Creek, which flows southeast into Mono County. The 535 acres of the permit area in Madera County are in the North Fork of the San Joaquin Watershed flowing west from the top of Mammoth Mountain towards Reds Meadow and Devils Postpile National Monument.

The representatives of these five entities agree to communicate and collaborate regarding water-related projects in these shared areas of interest in line with the goals of the IRWM program.

Sincerely,



Mark Drew, Inyo-Mono IRWMP Launch Project Manager  
Lead Agency: California Trout  
Contact: Dr. Mark Drew, (760) 924-1008



## United States Department of the Interior

NATIONAL PARK SERVICE  
 Devils Postpile National Monument  
 P. O. Box 3999  
 Mammoth Lakes, California 93546  
 760-934-2289



L317

March 9, 2009

Norman Shopay  
 Department of Water Resources  
 PO Box 942836  
 Sacramento, CA 94236

Subject : Devils Postpile National Monument within Madera, Southern Sierra, and Mono/Inyo IRWMP

Dear Mr. Shopay,

Thank you for the opportunity for inclusion of Devils Postpile (DEPO) into the Integrated Regional Management Groups process that is underway within California. The purpose of this letter is to inform Dept of Water Resources of an agreement between Madera, Southern Sierra, and Mono/Inyo IRWMPs to identify this as an area of shared interest and overlapping boundaries, and to request approval of this agreement to help facilitate the regional acceptance process.

Devils Postpile National Monument is located near the headwaters of the Upper Middle Fork of the San Joaquin in Madera County, and can only be accessed by road from the Town of Mammoth Lakes in Mono County CA. Devils Postpile is at the core of the glaciated river valley with abundant wetlands and wildlife, and as a National Park Service unit is a destination visited by many people that brings satisfaction to them and revenue to the local gateway communities in Mono County. The Monument which is along the Upper Middle Fork of the San Joaquin in Madera County is interconnected to Mono County by the shared groundwater aquifer on Mammoth Mountain, migratory corridors for wildlife and shared biodiversity, and the ecotourism benefits to the gateway communities. By maintaining a healthy watershed, biodiversity and migratory corridors will be preserved, while there is a clean and sustainable water supply for downstream users. Additionally, visitors and gateway communities will benefit from the recreational and ecotourism benefits, and an intact watershed will reduce risk of catastrophic fires and eroded slopes that could cause flooding and siltation and have a negative impact on gateway communities sustainable tourism economy and downstream users. Another important aspect of insuring the watershed's integrity, is maintaining the resilience of the watershed and the ability to adapt to climate change scenarios that may significantly impact water resources.

IRWMPs share the goals of understanding the watershed resources, and making sound decisions. Through the discussions among the representatives of the Madera, Southern Sierra, and Inyo/Mono IRWMP, and DEPO, there is consensus that it is important to include DEPO in these IRWMPs and include each other in discussions that affect this shared area of interest. Thank you again for your consideration, and if any further information can be provided, please contact me.

Sincerely,  
 /s/ Deanna M. Dulen  
 Superintendent

## Appendix L

# Comments on Draft Integrated Regional Water Management Plan

**Draft Madera Integrated Regional Water Management Plan - September 2014**  
**Comments and Draft Responses**  
**Executive Summary**

No.	Comment Received By	Chapter	Section/Page	Comments	Draft Response
1	Steve Haze, Yosemite Sequoia RC & DC	ES	ES	I would recommend that a simplified chart is made available that illustrates what the overall surface/groundwater water budget is for the Madera County IRWM area. The information is in various parts of the plan. However, it has to be pieced together to gain a general idea.	The IRWMP has been modified to state that a detailed water budget for Madera County is not available, but is critically needed and a high priority for the Region. Some components of a water budget were recently calculated for the 2014 Draft Madera Regional Groundwater Management Plan (GMP), and some of that data is summarized in the IRWMP. Discussions were added on how the work for the GMP only included certain portions of the Valley and no work in the foothills or mountains, and that data was lacking to prepare a thorough water budget, so more monitoring and analyses will be needed in the future.
2	Steve Haze, Yosemite Sequoia RC & DC	ES	ES	I would recommend that an estimate of remaining groundwater supply is made as a starting point for a finite resource that could be depleted and economically no longer available.	The IRWMP has been modified to explain that estimating the available groundwater resources is not possible with current data. The depth to saline groundwater has not been estimated on a regional scale since 1973 when USGS performed a study. This study, conducted by R.W. Page, is referenced in the IRWMP. The depth to saline water varies throughout the County. Other constituents, such as arsenic, also impact the depth to usable water and a detailed delineation of the water quality is not available in all areas. Some other factors, such as the economics of drilling and operating deep wells, also impact the available groundwater supply. A spatial evaluation of total groundwater supplies is needed and has been added as a goal for the Region.
3	Steve Haze, Yosemite Sequoia RC & DC	ES	ES	I would recommend that the ratio of surface to groundwater used annually is illustrated with a simplified chart – with the amount and percentage.	Complete data for the County is not available. Some data is provided but it only covers part of the County. A comparison of water uses is not highlighted because it can cause conflict and be divisive. Urban interests claim most of the water is used by agriculture, but agriculture claims that urban areas would not exist, or would be very small, without the agricultural industry. A large percentage of the water is also used for environmental flows.
4	Steve Haze, Yosemite Sequoia RC & DC	ES	ES-2	Region Description: "... Region's experience with land subsidence due to (add) <u>unsustainable and significant</u> groundwater pumping."	Comment addressed
5	Steve Haze, Yosemite Sequoia RC & DC	ES	ES-3	I would suggest that the Evapotranspiration Zones are briefly mentioned as a part of the descriptions: <a href="http://www.cimis.water.ca.gov/App_Themes/images/etozonemap.jpg">http://www.cimis.water.ca.gov/App_Themes/images/etozonemap.jpg</a> This can be very helpful to understanding to what extent this drives the demand for water	Reference was added to the suggested website and a discussion provided on how evapotranspiration rates in the Valley portion of Madera County are higher than the Statewide average, thus leading to large water demands. The map was not added to the report since it contains a lot of information in small print and is difficult to read in a report sized page.

**Draft Madera Integrated Regional Water Management Plan - September 2014**  
**Comments and Draft Responses**  
**Executive Summary**

No.	Comment Received By	Chapter	Section/Page	Comments	Draft Response
6	Steve Haze, Yosemite Sequoia RC & DC	ES	ES-3	Paragraph for water supplies mentions 2012-2014. However, weren't 2009 & 2010 below average as well? Thus, isn't 5 out of 6 years with below average precipitation?	According to an index for the San Joaquin Valley 2009 was below normal but 2010 was slightly above normal
7	Steve Haze, Yosemite Sequoia RC & DC	ES	ES-4	I would suggest that the California Water Plan Update 2013 (Bulletin 160) be referenced side by side with Bulletin 118, 2003. Beginning with CWP 2013, groundwater information is now being continually updated for regional reports and a separate reference volume on groundwater will be available as well. Bulletin 118 has not been update for 11 years – version B160 is updated approximately every 5 years.	The California Water Plan Update was added as a useful reference for groundwater data, as suggested.
8	Steve Haze, Yosemite Sequoia RC & DC	ES	ES-4	24K acre ft - domestic versus 1M acre ft agriculture water demand should be noted as 2.5% and 97.5% respectively (if I did my math correctly!).	Complete data for the County is not available. The data referenced only covers part of the County. This data is provided in the IRWMP, but not emphasized since it can cause conflict and be divisive. Urban interests claim most of the water is used by agriculture, but agriculture claims that urban areas would not exist, or be very small, without the agricultural industry. A large percentage of the waters is also used for environmental flows.
9	Chowchilla Water District	ES	ES-4	ES-4 concerning Land Subsidence. There needs to be an acknowledgement a major reason for the recent land subsidence is the huge amount of surface water lost to the River Restoration Program, thus requiring farmers to use deep wells.	Comment addressed as suggested in the Executive Summary and Section 3.13 – Land Subsidence
10	Steve Haze, Yosemite Sequoia RC & DC	ES	ES-6	Thought it was very good that Drought Planning is noted as an additional strategy	Comment noted.
11	Steve Haze, Yosemite Sequoia RC & DC	ES	ES-7	Data Management – would it include identification of all known infrastructure for water resource management?	Updated. This was added as a data management goal and addressed in the Data Management Chapter and executive summary.
12	Steve Haze, Yosemite Sequoia RC & DC	ES	ES-9	Stakeholder Involvement – Last paragraph include Tribal Governments?	Tribal Governments added to the goals of future outreach efforts

**Draft Madera Integrated Regional Water Management Plan - September 2014**  
**Comments and Draft Responses**  
**Executive Summary**

No.	Comment Received By	Chapter	Section/Page	Comments	Draft Response
13	Chowchilla Water District	ES	ES-10	<p>ES 10-11 concerning climate change. There needs to be an acknowledgement that the climate warming data shows that the goal of reviving self-sustaining salmon runs on the San Joaquin River will not work. We should not ignore the obvious, especially when the surface water lost is so critical to the success of the IRWMP.</p>	<p>In the Climate Change chapter, reference added to the 2007 Natural Resources Defense Council document entitled “<i>In Hot Water – Water Management Strategies to Weather the Effects of Global Warming</i>”. The following highlights from the document were added to the IRWMP:</p> <ol style="list-style-type: none"> <li>1. Higher temperatures (from climate change) will decrease salmon and other cold water fish habitat. According to studies by the Intergovernmental Panel on Climate Change, up to 38 percent of locations currently suitable for cold-water fish could become too warm to provide habitat by 2090.</li> <li>2. As water temperatures rise, the amount of dissolved oxygen (DO) in water drops. On the Lower San Joaquin River, reduced DO has caused fish kills and created temporary seasonal barriers to salmon migration</li> <li>3. Adequate flows are essential to sustain aquatic ecosystems since higher flows and deeper water can reduce water temperatures. But non flow actions such as removing migration barriers, improving water quality, and restoring habitat can significantly reduce the need for additional flows.</li> </ol>

**Draft Madera Integrated Regional Water Management Plan - September 2014**  
**Comments and Draft Responses**  
**Chapter 1 - Introduction**

No.	Comment Received By	Chapter	Section/Page	Comments	Draft Response
14	Chowchilla Water District	1	1-1	1-1 & 1-2. Again, we need to emphasize in the Background the detrimental effect of the River Restoration on surface water supplies.	Statement added on the long-term impacts the River Restoration will have on surface water supplies and groundwater overdraft.
15	Steve Haze, Yosemite Sequoia RC & DC	1	1-2	If overall average water demand is 1.09M acre ft/yr – and the average surface water supply is 347K/yr (ref: Table 3.3) – then this implies that groundwater is used to make up the difference – or approximately 742K acre ft/yr (ref: Table 3.2). Is this a correct assumption – and if so, how does the 250K overdraft fit into that assumption?	A brief discussion on water budget was added, and these values are presented in several tables. The reader is cautioned that the data only cover a portion of the Valley and more detailed monitoring and analysis are needed to develop an accurate water budget.
16	Steve Haze, Yosemite Sequoia RC & DC	1	1-2	Does it make sense to note that the average storage capability is based upon 15% porosity? Also, does it make sense to note that fractured rock areas are approximately 2% in maximum storage (based upon DWR Facts publications)?	Specific yields in the Valley were estimated to be 12-13% in the Draft Madera Regional Groundwater Management Plan. This was added to the IRWMP. The Department of Water Resources publication “ <i>Water Facts – Ground Water in Fractured Hard Rock</i> ” has also been referenced and quoted as saying that the specific yield of fractured hard rock is estimated to be less than two percent. This emphasizes the groundwater challenges in the mountain areas.
17	Steve Haze, Yosemite Sequoia RC & DC	1	1-2	Mission Statement “...clean, adequate and affordable... (placeholder discussion for Group)	Revisions to the Mission Statement will require discussion with the RWMG
18	Gravelly Ford Water District	1	1.2	Page 1-2 First paragraph - Needs to make reference to the SJR Restoration Project as a new and permanent contributor to the reduction in surface water supplies and will compound the overdraft problems of the Madera and Chowchilla groundwater basins.	Comment addressed as suggested.
19	Steve Haze, Yosemite Sequoia RC & DC	1	1-3	“Purpose, Need, and Common Understanding for the IRWMP”. Should a bullet be added that talks about identifying, understanding, quantifying and qualifying all available water resources within the IRWM boundary – and what the water budget values and characteristics are; as well as vulnerabilities and deficiencies?	Identifying, understanding and quantifying all available water supplies is beyond the scope of an IRWMP which takes a regional approach looking broadly at the water supplies, with the focus on the main water supplies. There is currently no detailed water budget for Madera County, but language has been added to emphasize the critical need for a comprehensive water budget. The IRWMP does look at vulnerabilities and deficiencies and this has been added to the list of the purposes of the IRWMP.
20	Steve Haze, Yosemite Sequoia RC & DC	1	1-7	Not certain as to where this may fit in. However, Data collection & management requires qualitative/quantitative and trend analysis in order to have value. This is probably mentioned elsewhere? Maybe in monitoring?	Comment addressed in Plan Performance and Monitoring chapter

**Draft Madera Integrated Regional Water Management Plan - September 2014**  
**Comments and Draft Responses**  
**Chapter 2 - Governance**

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
21	City of Madera	2	2-1	Page 2-1: Last Paragraph. The second sentence states that the "Madera RWMG has sixteen members". This seems to conflict with other references in the document, which indicate that there are 17 members.	Updated. Correct number of members is 17.
22	Jeannie Habben, Administrative Assistant Madera RWMG	2	2-1	Page 2-1: Last sentence -- change "The Madera RWMG has sixteen" to "The Madera RWMG has seventeen"	Comment addressed.
23	City of Madera	2	2-2	Page 2-2: Table 2.1. The marks in the column that define which signatories have "Statutory Authority" seems to be in conflict with the list of agencies that have statutory authority as described in the second paragraph on Page 2-3.	Table 2.1 and page 2.3 corrected to be consistent
24	Jeannie Habben, Administrative Assistant Madera RWMG	2	2-2	References to SEMCU – County vs. Citizens Page 2-2: also page 10-1 also page 14-5	Updated throughout document to say 'County'
25	Jeannie Habben, Administrative Assistant Madera RWMG	2	2-3	Page 2-3: MD22A is also a Madera County Special District – Oakhurst Sewer	List updated to include MD22A
26	Jeannie Habben, Administrative Assistant Madera RWMG	2	2-3	Page 2-3: Statutory Authority for Water Management Seven members of the RWMG have statutory authority Chowchilla Red Top RCD DOES NOT have statutory Authority	Chowchilla Red-Top RCD removed from list of agencies having statutory authority for water management
27	Madera Irrigation District	2	2-3	In Table 2.1, MID is not listed as a Statutory Authority, but the following Page 2-3 lists Madera Irrigation District as a Statutory Authority.	Updated to show Madera Irrigation District having statutory authority for water management in both locations.
28	Jeannie Habben, Administrative Assistant Madera RWMG	2	2-5	Page 2-5: Public Outreach Process Paragraph 1 and paragraph 3 in this section are duplicates	These two paragraphs were combined and the repetitive information was deleted.

**Draft Madera Integrated Regional Water Management Plan - September 2014**  
**Comments and Draft Responses**  
**Chapter 2 - Governance**

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
29	Gravelly Ford Water District	2	2-5	Page 2-5 2.5 Meeting Notices and Agendas - Are these regularly posted two weeks in advance of monthly meetings?	Posting the Meeting Notices and Agendas two weeks in advance at the Madera Irrigation District Office is the suggested protocol according to the Regional Water Management Group Administrative Assistant.  This section was also expanded to include details on email and newspaper notices for each meeting.
30	Steve Haze, Yosemite Sequoia RC & DC	2	2-10	Add Natural Resources Conservation Services (NRCS) to list in which to outreach with?	Comment addressed
31	Jeannie Habben, Administrative Assistant Madera RWMG	2	2-10	Page 2-10 #2.12 Collaborative... Penultimate sentence in opening paragraph – an extra space in DWR	Comment addressed
32	Jeannie Habben, Administrative Assistant Madera RWMG	2	2-10	Page 2-10 – Coordination with State and Federal Agencies (2.11) State Agencies and Federal Agencies CANNOT sign on the MOU.  I have no copy of one for any state or federal agencies – the RWMG never came up with a membership level for them. They cannot pay dues and they cannot sign a resolution.	Sentences removed that stated that California Department of Fish and Wildlife and Sierra National Forest are MOU signatories. Text also added that internal rules at most State and Federal agencies prevent them from signing the MOU and paying dues, but they can be Interested Parties.

**Draft Madera Integrated Regional Water Management Plan - September 2014**  
**Comments and Draft Responses**  
**Chapter 3 – Region Description**

	<b>Comment Received By</b>	<b>Chapter</b>	<b>Section/Page</b>	<b>Comments</b>	<b>Draft Response</b>
33	Steve Haze, Yosemite Sequoia RC & DC	3	3-5	Table 3.1 and last paragraph – Should 2009 and 2010 be added to both since these were below average years as well, thus making 5 of the last 6 years below average?	According to an index for the San Joaquin Valley, 2009 was below normal but 2010 was slightly above normal
34	Steve Haze, Yosemite Sequoia RC & DC	3	3-15	Table 3.2 – How does this relate to the 250K groundwater overdraft as described in the 1 <sup>st</sup> paragraph on page 1-2?	A discussion on water budget has been added. The readers are cautioned though that this data is preliminary and only covers a portion of the Valley and does not include any data from the foothills or mountains.
35	Madera Irrigation District	3	3-15	Do you know where the estimated average annual groundwater pumped (2004-2013) values came from in Table 3.2 on Page 3-15? I'm wondering if MID provided these in the past or were these estimates from our past USBR WMP 5-year updates?	These values came from the Draft Madera Regional Groundwater Management Plan. Several tables were updated to reference this document.
36	Chowchilla Water District	3	3-15	3-15 & 16. Same as comment 14.	Statement added on the long-term impacts the River Restoration will have on surface water supplies and groundwater overdraft.
37	Steve Haze, Yosemite Sequoia RC & DC	3	3-16	Section 3.5 – I would recommend that a table be established that shows what each of the three rivers provide annually in surface water in order to reach the 347K acre feet delivered as noted in Table 3.3	This information is not provided because the data cannot be reported in a simple manner. Flows would have to be reported over a long-term hydrologically average period. Other issues such as carryover storage, reservoir evaporation, reservoir seepage, and river seepage also need to be considered. These values could be reported and compared to water used more accurately after a detailed water budget is prepared for Madera County.
38	Steve Haze, Yosemite Sequoia RC & DC	3	3-16	Is there an estimated percent of increase over time for additional water due to maturation of orchards?	The text has been modified to state that the water demand estimates assume full maturation, but these values are not expected to be reached until 2017. Insufficient data is available on the maturity of all tree crops in the County to estimate the current demand versus the 2017 demand
39	Steve Haze, Yosemite Sequoia RC & DC	3	3-16	The paragraph on groundwater in the foothill/mountain areas – it may be useful to again state DWR's estimate of 2% water content. Also, there was the Todd Engineering Technical Memorandum of Groundwater Conditions that was performed on behalf of Madera County in 2002	The Department of Water Resources publication "Water Facts – Ground Water in Fractured Hard Rock" has been referenced and quoted as saying that the specific yield of fractured hard rock is estimated to be less than two percent. This emphasizes the groundwater challenges in the mountain areas. The Todd Engineers report is also mentioned, and the content of the report briefly summarized.
40	Steve Haze, Yosemite Sequoia RC & DC	3	3-16	Another study dealing with water resources in Madera County is Bulletin No. 135 – Madera Area Investigation , 1966 This may be useful reference	This document was added to the References.

**Draft Madera Integrated Regional Water Management Plan - September 2014**  
**Comments and Draft Responses**  
**Chapter 3 – Region Description**

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
41	Gravelly Ford Water District	3	3-16	Page 3-16 Surface Water Supplies - MID, CWD and GFWD each meet significant portions of their water demands with surface water. This may have been true before SJR Restoration. GFWD only expects to receive any B of R water one year out of three in the future which puts the onus on ground water.	Updated to say that in the past significant portions of water demands were met with surface waters. However, the demand met with surface water has decreased due to impacts from the San Joaquin River Restoration Settlement. In GFWD they now only expect to receive Friant water in one out of three years, which puts the onus on groundwater.
42	City of Madera	3	3-17	Page 3-17. First sentence under section 3.6. Typo..... "us" should probably be "is".	Comment addressed
43	Gravelly Ford Water District	3	3-17	Page 3-17/18 Water Demands for Environmental Needs – Environmental needs for surface water needs to be accountable to efficiency standards the same as houses and farms. These needs should also be judged on meeting stated goals and objectives, the same as for other users.	Under Section 3.7 – Water Demands for Environmental Needs, the following was added: "The RWMG supports the development of efficiency standards for River Restoration Flows to help ensure that they are used as effectively as possible, benefits to aquatic species are maximized, and impacts to water contractors are minimized."
44	Chowchilla Water District	3	3-17	3-17 or 18 - Water Demands for Environmental Needs. We need to make a statement that this water must also adhere to efficiency standards. Currently, there exists no requirement for environmental releases be efficient or even accomplish the goal for which they were taken	Under Section 3.7 – Water Demands for Environmental Needs the following was added: "The RWMG supports the development of efficiency standards for River Restoration Flows to help ensure that they are used as effectively as possible, benefits to aquatic species are maximized, and impacts to water contractors are minimized."
45	Steve Haze, Yosemite Sequoia RC & DC	3	3-18	My understanding is that the average amount of water for the restoration is 200K acre ft. Does it make sense to have as reference the settlement agreement? Also, within the agreement is supposed to be 1:1 replacement of water used and infrastructure enhancements to be supported for capturing and recirculating water. Additionally, it is my understanding that the Madera Canal would be upgraded. These may be significant opportunities for infrastructure enhancements within the Madera County IRWM boundary. I believe that this could be further explored.	The quantity of restoration flows lost to the river varies with precipitation year type. 200K AF is not the average, but is the number for a range of years above and below average annual rainfall. In wetter years, the quantity increases to over 400K AF, while in the driest years (like 2014) no restoration flows are required.  The San Joaquin River Restoration has a goal of a 1:1 return on lost water, but that goal is not a formal promise nor is it stated in the final settlement agreement. The text was modified to reference this goal and the water contractor's plans to track progress on meeting the goal. The Madera Canal Expansion would be one way to help meet this goal by allowing for larger water deliveries during wet years.
46,	Chowchilla Water District	3	3-18	3-18. I object to the sentence in last paragraph of 3-7, "... the net effect on ag users may not be as severe as initially appears." I recommend deleting that sentence.	Updated. That portion of the sentence was deleted.

**Draft Madera Integrated Regional Water Management Plan - September 2014**  
**Comments and Draft Responses**  
**Chapter 3 – Region Description**

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
47	Steve Haze, Yosemite Sequoia RC & DC	3	3-19	3.10 – Geology – Again Bulletin 118 is referenced, and I would suggest that CWP 2103 and its separate groundwater technical report may be another reference going forward since it will be updated every 5 years.	The California Water Plan Update was added as a useful reference for groundwater data, as suggested.
48	Steve Haze, Yosemite Sequoia RC & DC	3	3-20	Same potential for referencing more recent data from CWP Update 2013	The California Water Plan Update was added as a useful reference for groundwater data, as suggested.
49	Steve Haze, Yosemite Sequoia RC & DC	3	3-24	3.12 – Geomorphology and Soils: Paragraph 2 indicates freshwater zone of approximately 3K ft. Should the marine/saline zone underneath be noted as well in order to demonstrate the finiteness of the freshwater zone – and potential exposure of saline water creating contamination. As an example, it is my understanding is that a couple years ago, a well was drilled 2K ft on the westside and that it was saline and very warm water that had to be blended with better water.	The IRWMP has been modified to explain that estimating the available groundwater resources is not possible with current data. The depth to saline water has not been estimated on a regional scale since a USGS study, conducted by R.W. Page, in 1973. This study is referenced in the IRWMP.  The depth to saline water varies throughout the County. Other constituents, such as arsenic, also impact the depth to usable water. A detailed delineation of water quality is not available in all areas. Other factors, such as the economics of drilling and operating deep wells, also impact the available groundwater supply. A spatial evaluation of total groundwater supplies is needed and has been added as a goal for the Region.
50	Steve Haze, Yosemite Sequoia RC & DC	3	3-26	Take 'the' out before Madera County in the 2 <sup>nd</sup> paragraph	Comment addressed
51	Steve Haze, Yosemite Sequoia RC & DC	3	3-26	Does it make sense to show a profile of these deposits and their average depth for illustration purposes to go along with the narrative?	Generalized geologic cross section from a USGS report added to Section 3.10 – Geology
52	Steve Haze, Yosemite Sequoia RC & DC	3	3-30	Is this an opportunity to discuss the role of CASGEM in the future? Water Data library?	Discussions added on the role of CASGEM and the Water Data Library and reference made to the Plan Monitoring and Performance chapter that also includes some discussions on these programs.
53	Madera County	3	3-37	Page 3-37, Second paragraph – “Groundwater in the foothill and mountain portion of the Region is also of generally-acceptable quality for domestic and municipal uses without treatment, though many wells do require well head treatment to remove naturally-occurring iron, manganese and gross alpha radiation resulting from granitic decay.”  Uranium and Arsenic are other contaminants of concern in our mountain areas.	Uranium and arsenic were added to list of constituents of concern in the mountain areas.

**Draft Madera Integrated Regional Water Management Plan - September 2014**  
**Comments and Draft Responses**  
**Chapter 3 – Region Description**

	<b>Comment Received By</b>	<b>Chapter</b>	<b>Section/Page</b>	<b>Comments</b>	<b>Draft Response</b>
54	Jeannie Habben, Administrative Assistant Madera RW/MG	3	3-37	Page 3-37 and 3-38 Groundwater Quality What about Uranium added to the list of contaminants?	Uranium added to the list of constituents of concern in the County, especially in mountain areas.
55	Madera County	3	3-38	Page 3-38, Second paragraph – “Arsenic is found in numerous Valley areas but has not been a constituent of concern in foothill and mountain wells.” This statement is incorrect. Prior to the revised Maximum Contaminant Level (MCL) of 10 µg/L for arsenic, this was probably true. However, now there are six districts in our mountain areas that exceed the MCL for arsenic, including MD42 Still Meadows, MD6 Lakeshore, MD7 Marina View, MD8A North Fork, MD24 Teaford Meadows, and MD46 Miami Creek Estates.	Comment addressed as suggested.
56	Madera County	3	3-39	Page 3-39, Sixth paragraph – “Nitrate contamination, at levels above or slightly below the MCL, has been observed in certain wells in County Maintenance District 10A (MD 10A – Madera Ranchos) and in MD 33 – Fairmead.” Nitrates are currently only an issue at MD10A, Madera Ranchos. The groundwater well at MD33, Fairmead is not exceeding MCLs for Nitrate. The current sewer feasibility study for MD33 is being prepared as a proactive measure since the community is served by individual septic systems.	Comment addressed as suggested.
57	Jeannie Habben, Administrative Assistant Madera RW/MG	3	3-42	Page 3-42 Social and Cultural Makeup of the Region The second paragraph should it say “Largely a rural area, it includes only TWO cities”	Revised as suggested.

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**Chapter 4 – Disadvantaged Communities**

	<b>Comment Received By</b>	<b>Chapter</b>	<b>Section/Page</b>	<b>Comments</b>	<b>Draft Response</b>
58	Jeannie Habben, Administrative Assistant Madera RWMG	4	4-2	Page 4-2 – Tribal Government Involvement and Collaborative "North Fork Mono Indian Tribe" should be "North Fork Rancheria of Mono Indians" The North Fork Mono Indians are not a recognized tribe.	Comment addressed
59	Steve Haze, Yosemite Sequoia RC & DC	4	4-9 / 14-8	Does the county have a list of water quality and/or water supply issues affecting DACs?	Common issues affecting DACs are listed throughout Chapter 4. Due to the nature of the IRWMP it is not intended to provide specific details on every community and water user. However, a list of issues at 13 County DACs will be added to the text as further examples.

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**Chapter 5 – Goals and Objectives**

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
60	City of Madera	5	5-3	Page 5-3, Table 5.1 and the following discussion on goals and objectives. Although the objectives for the foothill/mountain areas call for the development of surface water supply sources (Objective 6c), the stated objectives for the valley do not include this language. Should the RWMG include this objective, or similar language, for the valley? It seems like it might be appropriate, in light of the emphasis the IRWMP places on acquiring new water supplies for the valley, such as discussion on the top of Page 3-43.	Updated. Language added under Objective 1d. Improve Water Reliability for Valley area, including securing outside water rights to import water to the RWMG area, and making greater use of floodwater supplies through surface and subsurface storage projects.
61	Madera Irrigation District	5	5-4	On Page 5-4 Objective 1a states 100,000 AF/YR, but Table 5.2 on Page 5-14 states 50,000 AF/YR.	Updated. Change to 50,000 AF/year to reflect the most recent version of the draft Madera Regional Groundwater Management Plan
62	City of Madera	5	5-6	Page 5-6, Objective 2a. As drafted, Objective 2a seems to link the new "Independent Local Organization" to the RWMG. Although there will be significant overlap between the membership of these two entities, and the new organization's goals would be consistent with those of the RWMG, the two entities will not be formally linked and the objective should probably be rewritten to avoid language which states that buy will be achieved from RWMG members. Additionally, with regard to the Methods for Measurement of Objective 2a (Page 5-14, Table 5-2), the methods should be revised to reflect the process the JPA Formation Committee is following. There is intention to prepare an internal report on organizational options.	Text modified to state that the group developing the Organization would engage the RWMG to gain their input on the formation of a new Organization. Text was also modified to describe the JPA Formation Committee and their current efforts to prepare a report on organizational options
63	Madera County	5	5-8	Page 5-8, last paragraph – "...heterotrophic place count..." Replace the word place with "plate".	Comment addressed.
64	Madera County	5	5-9	Page 5-9, Fourth paragraph, Second sentence – Remove "Flood Control." Looks like this was accidentally removed from another sentence.	Comment addressed.
65	Madera County	5	5-11	Page 5-11, Fourth paragraph – "Existing issues include certain wells with levels of iron, manganese, nitrate, gross alpha radiation and uranium in excess of CDPH MCLs." Include arsenic as an additional constituent of concern.	Arsenic has been added to the list of water quality issues.
66	Steve Haze, Yosemite Sequoia RC & DC	5	5-14	Table 5.2: 1a Objective – should it be 100,000 rather than 50,000?	Updated to say 50,000 AF/year to be consistent with the Draft Madera Regional Groundwater Management Plan

**Draft Madera Integrated Regional Water Management Plan - September 2014**  
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**Chapter 5 – Goals and Objectives**

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
67	Steve Haze, Yosemite Sequoia RC & DC	5	5-14	Table 5.2: 3a, 9a Objectives – Number of DACs and other special needs groups involved?	Table 4.2 in the Disadvantaged Communities Chapter lists the DACs in the County. Thirty DACs were identified using the documented criteria. This information was added to the discussions in Objectives 3a and 9a, both related to stakeholder outreach and education.
68	Madera County	5	5-14	Page 5-14, Table 5-2, No. 1a – “Increase regional capacity for direct recharge by a minimum of 50,000 AF/Year” Inconsistent with Page 5-4, Goal 1a which states as a Valley goal to increase regional capacity for direct recharge by a minimum of 100,000 AF/Year.	Modified to say 50,000 AF/year to be consistent with the draft Madera Regional Groundwater Management Plan

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**Chapter 6 – Resource Management Strategies**

	<b>Comment Received By</b>	<b>Chapter</b>	<b>Section/Page</b>	<b>Comments</b>	<b>Draft Response</b>
69	Steve Haze, Yosemite Sequoia RC & DC	6	6-4	Other EWMPS: Last paragraph – refer to RDI, Regulated Deficit Irrigation (Kearny Research)	A definition of Regulated Deficit Irrigation was provided along with a reference to literature on the topic and the benefits and challenges in using this method.
70	Gravelly Ford Water District	6	6-8	Page 6-8 2nd paragraph - The Bureau is already reoperating Friant Dam attempting to meet the Restoration demands.	Comment addressed as suggested
71	Chowchilla Water District	6	6-8	6-8 Water Transfers, 2 <sup>nd</sup> Paragraph, 2) "Consistency with Friant Water Authority..." Chowchilla Water District, Gravelly Ford, and Madera County are all Friant contractors who do NOT belong to Friant Water Authority. Recommend deleting that.	"Consistency with Friant Water Authority" deleted.
72	Steve Haze, Yosemite Sequoia RC & DC	6	6-9	Section 6.4 – Increase Water Supply: add reference to MID Water Bank in 3 <sup>rd</sup> paragraph?	Updated to include brief description of MID Water Bank
73	Steve Haze, Yosemite Sequoia RC & DC	6	6-11	Precipitation Enhancement: According to some studies by CA Fish & Wildlife Silver Iodide may be present in upper elevation fish that are caught for consumption (A Gordus)	Text modified to state that there is no clear consensus on the impacts of silver iodide on aquatic wildlife. It continues to be used as a cloud seeding agent and research is ongoing into new cloud seeding agents.
74	Madera County	6	6-12	Page 6-12, Fourth paragraph – " This will occur particularly in new Greenfield residential and mixed-use developments which are being entitled within the southeast portion of the County." Reclaimed water will be utilized in areas within the Rio Mesa area plan.	Text has been modified to include "For example, in the planned Rio Mesa area, reclaimed water will be beneficially used."
75	Steve Haze, Yosemite Sequoia RC & DC	6	6-14	6.6 Improve Water Quality: What is potential of WQ impairment due to CECs – Constituents of Emerging Concern for domestic and ag use?	CECs are not currently monitored in Madera County and there are no regulations or requirements to monitor them, and no established MCLs. As a result there is nothing to report on this topic.
76	Gravelly Ford Water District	6	6-14	Page 6-14 Flood Management - GFWD has an offstream pond that is used to divert flood flows for recharge. GFWD also diverts flood water from Cottonwood Creek into the Gravelly Ford Canal for percolation and recharge. As previously provided to P&P by email on 5/27/14.	Information added.
77	Steve Haze, Yosemite Sequoia RC & DC	6	6-20	Should SB375 be referenced for 2 <sup>nd</sup> paragraph?	Text modified under the Land Use Planning and Management Section to reference California Senate Bill 375 – The Sustainable Communities and Climate Protection Act of 2008. The bill encourages more-dense developments to reduce transportation and air pollution and to reduce water consumption.

**Draft Madera Integrated Regional Water Management Plan - September 2014**  
**Comments and Draft Responses**  
**Chapter 6 – Resource Management Strategies**

	<b>Comment Received By</b>	<b>Chapter</b>	<b>Section/Page</b>	<b>Comments</b>	<b>Draft Response</b>
78	Steve Haze, Yosemite Sequoia RC & DC	6	6-21	Should MID water bank be referred with its storage capacity of 250 acre ft?	Updated to include brief description of MID Water Bank.
79	Chowchilla Water District	6	6-25	6-25 -26 Crops Idling for Water Transfers. Last paragraph in which it is implied that obstacles need to be overcome so water saved in Madera can be sent out of the area. I object to that if that is the intent. Of course, I am OK with other areas idling land and sending water to us.	This strategy is intended to conserve water through crop idling to allow water transfers to other lands in Madera County, and not to other Counties. Text has been modified to make this clear.
80	Steve Haze, Yosemite Sequoia RC & DC	6	6-26	Again, should RDI, Regulated Deficit Irrigation be referred to? It is my understanding that 20% less water is used. There is also a film that can be applied to foliage that can reduce transpiration by plants, (Kearyn Research)	Regulated Deficit Irrigation is referenced in the sub-section on Agricultural Water Use Efficiency. Text also modified to include brief description of anti-transpirants. They are commercially available and used in gardens, nurseries, on cut flowers and Christmas trees, etc. Use on large-scale agriculture is still experimental and has several obstacles to overcome, including potential reduction in crop yields, high cost, and difficulty applying to large leaf/foliage areas of some crops.
81	City of Madera	6	6-26	<p>Page 6-26, Irrigated Land Retirement. The RWMG should consider incorporating the following observations into the discussion regarding irrigated land retirement.</p> <ul style="list-style-type: none"> <li>As long as the demand for farm commodities remains relatively high, the retirement of irrigated lands in one location may naturally lead to the conversion of other native or non-irrigated agricultural lands in another location. For this reason, a program focusing on irrigated land retirement may be less effective at achieving conservation goals within the region without a limitation on the conversion of other lands to uses that require an increase in water consumption.</li> <li>Should the region look to a land retirement as a tool to reduce overall consumption or to facilitate water balance on a project or sub-regional level, a program should be developed that encourages consistency regarding key elements such as the mechanisms that that can be used to confirm land retirement; the methodology for calculating net reductions in water usage; and the subsequent uses of the properties after they have been retired.</li> </ul>	Text updated as suggested

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**Chapter 8 – Impacts and Benefits**

	<b>Comment Received By</b>	<b>Chapter</b>	<b>Section/Page</b>	<b>Comments</b>	<b>Draft Response</b>
82	City of Madera	8	8-14	Second Paragraph Under Section 8.5. The second sentence in this paragraph reads as follows... "The RWMG will generally not support projects that have remaining adverse impacts after mitigation." That sentence should be stricken, as it doesn't reflect the realities of CEQA, where it is extremely common for Significant and Unavoidable impacts to be identified for all types of projects, even after mitigation.	Updated. Sentence deleted.
83	City of Madera	8	8-14	Third Paragraph Under Section 8.5. The RWMG should consider adding Climate Change to the list of topics to be addressed, since that topic is already required to be a focus point for the IRWMP and is a required topic of discussion in most CEQA documents.	Updated. Climate change added to topics addressed in CEQA.

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**Chapter 9 – Plan Performance and Monitoring**

	<b>Comment Received By</b>	<b>Chapter</b>	<b>Section/Page</b>	<b>Comments</b>	<b>Draft Response</b>
84	Madera County	9	9-16	Page number is incorrect, should be 9-1. Or another possibility could be that I'm missing pages from this Chapter. Please let me know.	Page numbers have been corrected
85	Steve Haze, Yosemite Sequoia RC & DC	9	9-18	Should a brief description Southern Sierra Critical Zone Observatory be added? <a href="http://criticalzone.org/sierra/">http://criticalzone.org/sierra/</a>	Updated as suggested.
86	Steve Haze, Yosemite Sequoia RC & DC	9	9-18	Should a brief description of the system schematic on 3.7 be added?	Figure 3-4: Hydrologic Diagram referenced in Section 9 – Plan Performance and Monitoring to illustrate the major hydrologic features, most of which are actively monitored.
87	Steve Haze, Yosemite Sequoia RC & DC	9	9-20	Should there be discussion of trend analysis and its qualitative and quantitative effect on water resources?	Discussions added to the Data Management chapter on the importance of trend analysis

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**Chapter 10 – Data Management**

	<b>Comment Received By</b>	<b>Chapter</b>	<b>Section/Page</b>	<b>Comments</b>	<b>Draft Response</b>
88	Steve Haze, Yosemite Sequoia RC & DC	10	10-7	Should GeoTracker be added? <a href="http://geotracker.waterboards.ca.gov/">http://geotracker.waterboards.ca.gov/</a>	Geotracker added to list of Other Data Sources
89	Steve Haze, Yosemite Sequoia RC & DC	10	10-7	Should CDEC – California Data Exchange Center be added? <a href="http://cdec.water.ca.gov/">http://cdec.water.ca.gov/</a>	CDEC added to list of Other Data Sources
90	Steve Haze, Yosemite Sequoia RC & DC	10	10-7	Should CA Water Plan be added? <a href="http://www.waterplan.water.ca.gov/">http://www.waterplan.water.ca.gov/</a>	California Water Plan added to list of Other Data Sources

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**Chapter 11 – Financing**

	<b>Comment Received By</b>	<b>Chapter</b>	<b>Section/Page</b>	<b>Comments</b>	<b>Draft Response</b>
91	Jeannie Habben, Administrative Assistant Madera RWMG	11	11-1	Page 11-1 Penultimate word on the page "due" should be "dues"	Comment addressed
92	Jeannie Habben, Administrative Assistant Madera RWMG	11	11-2	Page 11-2 – Native American Tribal Funding The last sentence of the paragraph – "The Chukchansi Tribe also offers grants to certain public agencies and non-profit organizations in Madera County through a settlement program known as a Community Grant Program"	Comment addressed
93	Jeannie Habben, Administrative Assistant Madera RWMG	11	11-6	Page 11-6 Proposition 84. ... Prop 84-funded Implementation Grants is expected to begin in mid-2015.	Comment addressed

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**Chapter 13 – Relation to Local Land Use & Water Planning**

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
94	Jeannie Habben, Administrative Assistant Madera RWMG	13	13-1	Page 13-1 Introduction 1 <sup>st</sup> paragraph – penultimate sentence – “managers” should be “managers”	Comment addressed
95	Madera County	13	13-2	<b>Page 13-2, Table 13.1 – Land Use Planning Documents</b> This table needs to be revised. See attachment from the Planning Department.	Table has been revised based on comments from Madera County to more accurately show the County Plans and their adoption dates
96	Madera Irrigation District	13	13-3	On Page 13-3, Chowchilla Irrigation District should be changed to Chowchilla Water District.	Updated
97	Madera Irrigation District	13	13-3	On Page 13-3, can you send me a copy of the Municipal Service Review for the Eight Public Water Districts Document October 2007?	Copy sent to MID. Report was prepared by LAFCO. Table modified to show that the report was prepared by LAFCO.
98	Madera Irrigation District	13	13-4	On Page 13-4, remove “in progress” on Table 13.5 Agricultural Water Management Plan. We are officially on the Federal Register now (attached email).	Updated. ‘In Progress’ removed.
99	Gravelly Ford Water District	13	13-4	Page 13-4 Table 13-4 GFWD Plan adopted April 13, 1998. Table 13-5 Agricultural Water Management Plan (2008 Criteria), December 2012	Tables updated as suggested.
100	Madera County	13	13-11	<b>Page 13-11, Table 13.7 – Water Management Attributes Employed by Local Planning Agencies</b> This table should be revisited so that County Staff understands what the prior County Engineer may have discussed with Provost & Pritchard. This will take a quick phone call for clarification.	P&P called interim City Engineer Christina Knudsen 8-21-14 and brought her up-to-date on the purpose of the table, how the checkmarks were determined and that the RWMG was affording an opportunity to review and comment on the table and including offering different interpretations for placement of check-marks; at that time, no changes were offered by the prior County Engineer. Ms. Knudsen indicated that explanation was helpful, and she had no further comments.

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**Comments and Draft Responses**  
**Chapter 13 – Relation to Local Land Use & Water Planning**

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
101	City of Madera	13	13-20	<p>Page 13-20. Bullet points describing primary characteristics of land use and planning documents. The City of Madera does not support the description as it is presented. The discussion of primary characteristics of land use and planning documents is painted with an overly broad brush as it relates to the City of Madera's General Plan, which was comprehensively updated in 2009.</p> <p>Where Table 13.7 illustrates that the City of Madera General Plan employs all water management attributes which are applicable to a local government in the San Joaquin Valley, the bullet points here suggest both cities fail to acknowledge the regional issues and their relationship to those issues. The City of Madera believes that this description is not supported by the City's General Plan and accompanying EIR, which together demonstrate that an evaluation of regional issues occurred, and that solutions in the form of general plan policies, were identified. Both the evaluation and the policies are presented within the context of what the City has control over, or can influence.</p> <p>The City will be happy to work with the preparers to refine these bullet points to reflect a more accurate description of primary characteristics prior to the completion of the Final IRWMP.</p>	<p>The text was modified to remove statements that City of Chowchilla and Madera General Plans do not address regional groundwater overdraft issues, impacts to irrigation facilities as a result of development, and increases in storm water releases into existing flood control facilities.</p> <p>Text was added to say that the Cities' General Plans do address regional groundwater and policies which are intended to enhance the sustainability of their water supplies.</p>

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**Comments and Draft Responses**  
**Chapter 14 – Stakeholder Involvement**

	<b>Comment Received By</b>	<b>Chapter</b>	<b>Section/Page</b>	<b>Comments</b>	<b>Draft Response</b>
102	Jeannie Habben, Administrative Assistant Madera RWMG	14	14-2	Page 14-2 Meetings In 2012 and in 2013, the RWMG received a grant from the Department of Water Resources for meeting facilitation services from the Center of Collaborative Policy.	Comment addressed.
103	Jeannie Habben, Administrative Assistant Madera RWMG	14	14-2	Page 14-2 Printed Material – Appendix 1 – add new brochure	Updated brochure added to Appendix I
104	Jeannie Habben, Administrative Assistant Madera RWMG	14	14-4	Page 14-4 – Columbia Resource Conservation District – “the outreach coordinator” has never attended a meeting with Columbia RCD	Columbia Resource Conservation District removed from list of agencies that attended presentations from RWMG
105	Jeannie Habben, Administrative Assistant Madera RWMG	14	14-5	Page 14-5 last paragraph Add to range of interests – cultural interests	Cultural interests added to range of interests in the RWMG
106	Jeannie Habben, Administrative Assistant Madera RWMG	14	14-6	Page 14-6 Last sentence of the second paragraph Add school districts to the list of groups contacted	School districts added to list of stakeholders contacted to encourage participation in the RWMG

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**Chapter 15 – Coordination and Integration**

	<b>Comment Received By</b>	<b>Chapter</b>	<b>Section/Page</b>	<b>Comments</b>	<b>Draft Response</b>
107	Steve Haze, Yosemite Sequoia RC & DC	15	15-1	Coordination: Resource Identification and pooling	'Resource Identification and Pooling' added to the list of Coordination goals.
108	Jeannie Habben, Administrative Assistant Madera RWMG	15	15-1	Page 15-1 – Introduction The first paragraph/second sentence – remove the word "we"	Comment addressed
109	Jeannie Habben, Administrative Assistant Madera RWMG	15	15-3	Page 15 – 3 Number 3/ last sentence The RWMG is a separate entity from each member, but all members are integrated through the Regional Water Management Group – What does this mean? It does not make sense...	Updated to say just say that "All members are integrated through the Regional Water Management Group".
110	Jeannie Habben, Administrative Assistant Madera RWMG	15	15-5	Page 15-5 First Paragraph – last sentence – In the past the RWMG has prepared a PowerPoint Presentation that documented major accomplishments for the RWMG, and <u>this</u> served as their annual report <u>as well as a brochure – each year.</u>	Edits made as suggested.
111	Jeannie Habben, Administrative Assistant Madera RWMG	15	15-5	15-5 Neighboring IRWMs Line one and line two – "IRWM Regions" – in a different font	Comment addressed
112	Jeannie Habben, Administrative Assistant Madera RWMG	15	15-6	Page 15-6 Paragraph at the end of the page 2 spots – "IRWM Regions" – in a different font	Comment addressed
113	Jeannie Habben, Administrative Assistant Madera RWMG	15	15-7	Page 15-7 Number 6 Second line 12 IRWM Regions – extra space between n and the s	Comment addressed

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**Chapter 15 – Coordination and Integration**

	<b>Comment Received By</b>	<b>Chapter</b>	<b>Section/Page</b>	<b>Comments</b>	<b>Draft Response</b>
114	Jeannie Habben, Administrative Assistant Madera RWMG	15	15-8	Page 15-8 First paragraph – last line Sierra Nevada Water Workgroup – should be – Sierra Water Work Group Last paragraph – second sentence – <u>IRWM Regions</u> are separated – add the s to Regions	Comments addressed
115	Jeannie Habben, Administrative Assistant Madera RWMG	15	15-9	Page 15-9 Yosemite-Mariposa IRWM Regional boundaries are the exact borders of Mariposa County. (just like Madera)	Updated using suggested text.
116	Chowchilla Water District	15	15-10	15-10. Coordination and Integration with Federal Agencies. We need the USBR and any other Federal Agency involved in the Restoration Program to regularly coordinate with us on whether it working or not. If not, this is a huge source of water that could really help Madera County.	The following text was added to the end of the chapter. "The signatories to the San Joaquin River Restoration Settlement hope to coordinate and communicate more with the USBR on their monitoring of the Restoration Project. This would include updates on the success of the program, evaluation on how efficiently the environmental flows are being used, and progress toward meeting the goal of a 1:1 return of lost water supplies to the water contractors."

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**Comments and Draft Responses**  
**Chapter 16- Climate Change**

	<b>Comment Received By</b>	<b>Chapter</b>	<b>Section/Page</b>	<b>Comments</b>	<b>Draft Response</b>
117	Steve Haze, Yosemite Sequoia RC & DC	16	16-1	Language regarding net yield as expressed in run-off measurements? KREW study indicates less run-off up to 30% - (local research and observations)	The article "Snowmelt Runoff and Water Yield along Elevation and Temperature Gradients in California's Southern Sierra Nevada" published in August 2012 in the Journal of the American Water Resources Association will be referenced in the chapter, and described as a source of local research on potential climate change impacts.
118	Jeannie Habben, Administrative Assistant Madera RWMG	16	16-4 / 16-6	Page 16 -6 (see attached letters) Number 1.b – that 90 percent of water in the region is used by agriculture is still in question. I have heard so many figures that it is difficult to know the truth anymore – but what I have heard at many of the meetings that I have been to is that when the percentage of water is stated for agriculture, that also includes "environmental" water because it is all thrown together as water on the land – not industrial or urban homes, etc. Also what is now being said is that half of the agricultural water goes to environmental concerns – the last figures I have seen were 42% Environmental and 46% Agricultural, 11% urban, and 1 % industrial – in the Central Valley. Environmental is things like the SJ R Restoration. I have had conversations with the restoration group and they respond to this by saying that even though the water is environmental, it is being released down the river so it is acting as actual recharge for the farmers – thusly putting it back on agriculture. It just bothers me to see such large numbers thrown around stating that Agriculture is taking all of our water – because it gets misconstrued – also they may be using it, but we all benefit by the food, etc. it provides. (See attached letters – going back and forth with my farmers and the groundwater issue)	Some data is provided, but without emphasis on it since it can cause conflict and be divisive. Urban interests claim most of the water is used by agriculture, but agriculture claims that urban areas would not exist, or be very small, without the agricultural industry. A large percentage of the waters is also used for a third purpose: environmental flows. Text was added to state that a significant amount (precise amount is not known) of water is released for environmental flows including water for the San Joaquin River Restoration, in-stream flows, wildlife refuge water and other environmental flows. The reference to 90% of water being used by agriculture was removed.
119	Gravelly Ford Water District	16	16-5	Page 16-5 Ash Slough, Berenda Slough, Berenda Creek and Dry Creek are more significant during flood flows than either Little Dry Creek or Root Creek.	Ash Slough, Berenda Slough, Berenda Creek and Dry Creek added to the list of primary water features.
120	Gravelly Ford Water District	16	16-7	Page 16-7 2.d - The flood control parameters on Hidden severely restrict any realistic carryover. The Corps has been most judicious in adhering to their criteria here.	Comment added as suggested to emphasize the difficulty in storing water from year-to-year behind Hidden Dam.
121	Crowchilla Water District	16	16-7	16-7 – Paragraph 1f. Last sentence "these flows have one of the highest priorities for surface water .... I would like to add, ... "but the loss to the historical users has been devastating."	Updated as suggested.

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**Chapter 16- Climate Change**

	<b>Comment Received By</b>	<b>Chapter</b>	<b>Section/Page</b>	<b>Comments</b>	<b>Draft Response</b>
122	Jeannie Habben, Administrative Assistant Madera RWMG	16	16-8	Page 16-8 2f Arundo should be Arundo donax	Updated
123	Gravelly Ford Water District	16	16-8	Page 16-8 2.e - The SJR Restoration will compound the surface water supply availability during below "normal" water years putting more pressure on groundwater demand.	Sentence added as suggested.
124	Steve Haze, Yosemite Sequoia RC & DC	16	16-14	Table 16.1: Recommend adding KREW potential stream run-off separate from Climate Change Tool Kit referenced	The Climate Change Tool Kit was kept in the table as a separate reference.
125	Steve Haze, Yosemite Sequoia RC & DC	16	16-15	Bales' narrative – extent and cost associated?	Much of the forested watershed could benefit from forest thinning. Expenses associated with forest thinning can vary from low hundreds of dollars to a thousand or more dollars per acre for "first entry" (to achieve sustainability). "Second entry" costs would be those related to long term maintenance. Expenses would be dependent on a variety of site-specific conditions, including: how much thinning is needed, the appropriate method of thinning and maintenance to be used, whether follow-up work is needed, access conditions, topography of the area being cleared, equipment/worker mobilization, what types of trees and undergrowth are in the grove already, and current health and size of the trees being removed. Frequency would be on a case-by-case basis depending on the growth characteristics of the grove.  Expenses could conceivably be offset by revenues potentially derived from/for the thinning project; that is, considerations for values of usable timber/lumber, biomass energy generated, or contributions from headwater protection agencies, or others .

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**Comments and Draft Responses**  
**Chapter 17 - References**

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
126	Steve Haze, Yosemite Sequoia RC & DC	17	17-3	Add Todd Engineering to reference list	The March 2002 report by Todd Engineers entitled "Draft Technical Memorandum – Groundwater Conditions in Eastern Madera County" has been reviewed and mentioned in the IRWMP as a useful reference on foothill and mountain hydrogeology.

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127	Steve Haze, Yosemite Sequoia RC & DC	App C	Appendix C	Table implies flat trend for average applied water over time?	The table shows about a 5% increase in agricultural demand over the past 10 years. This is the best available information including data from the Department of Water Resources and Madera County Agriculture Commissioner's Office.
128	City of Madera	APP F	Appendix F	Appendix F - Project List. Please add the "City of Madera/MID Schmidt Creek Recharge and Flood Control Project" to the project List.	Project added to list.
129	Madera County	App F	Appendix F	Appendix F, Madera Regional Water Management Group Project List – July 2014 Item No. 39, Brockman Park needs to be removed. This recharge basin project has been determined to be infeasible due to a biological study that deemed the area as wetlands.	Project has been removed from the project list

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130	Jeannie Habben, Administrative Assistant Madera RWMG	GEN		Local Cost Share Funding Penultimate sentence in the first paragraph – “required const share” should be “required cost share”	Comment addressed
131	Chowchilla Water District	GEN		The San Joaquin River Restoration Program is a major loss to our historical water supplies. It should be reviewed and monitored so that if it is not going to work that the surface water can be returned to Madera County users.	Under Section 3.7 – Water Demands for Environmental Needs the following was added: “The RWMG supports the development of efficiency standards for River Restoration Flows to help ensure that they are used as effectively as possible, benefits to aquatic species are maximized, and impacts to water contractors are minimized.”
132	Chowchilla Water District	GEN		Environmental uses are currently not required to show efficiency. They should be required to be as efficient as other users. If the water taken is not doing the task, then it should be returned to the historical users.	Under Section 3.7 – Water Demands for Environmental Needs the following was added: “The RWMG supports the development of efficiency standards for River Restoration Flows to help ensure that they are used as effectively as possible, benefits to aquatic species are maximized, and impacts to water contractors are minimized.”
133	Sally Rowden, Madera County Citizen	GEN		Do any of these projects as proposed on the “Project List” support the Bonadelle Ranchos area in recharge/sustainability of water? If not, I would like to add a project to the list to create a basin or possible basins in the Bonadelle Ranchos for groundwater recharge. My assumption from reviewing the list is that a Feasibility Study would be required.	A Recharge Project in Bonadelle Ranchos was added to the project list.

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134 Karen Petryna, Madera County Citizen	GEN		<p>The first two projects, 1 and 2, have misspellings in their Project Names. The third project with the misspelled Project Name, Root Creek Detention Facility, appears to have been removed.</p> <p>I assume Project Number 20, Create an Assessment District for Madera Ranchos, is intended to address the issues I raised facing residents that border the MD10A Water System, i.e., that they need to be added in.</p> <p>I still see no projects to address secondly, the leaking water system itself or thirdly, the planned 1 million gallon storage tank, both of which Ken Vang spoke of at numerous community meetings.</p> <p>In addition, I am reminded of a fourth project Ken spoke about which I understand Provost &amp; Pritchard may have submitted a grant application for-- connection of Valley Teen Ranch to the MD10A Water System and installation of an additional drinking water well--at the Valley Teen Ranch Property.</p> <p>Not only do I hope that the RWMG will also add this fourth project for MD10A, but I also urge Provost &amp; Pritchard and Madera County to give serious consideration to installing the new drinking water well upgradient of MD10A in order to <i>maximize the chances to achieve the best possible results</i>, particularly in light of the fact that the Ranch's current well is contaminated with arsenic.</p> <p>Again, regardless of whether SEMCU, Madera County or some other agency be associated with the above-described projects, it is my understanding that it is imperative that any and all conceivable projects for the Region be listed with the current draft Plan. To that end, please let me know if I can assist the Group to complete Project Description Forms, or whatever is necessary.</p>	<p>Misspellings fixed in the project list as suggested.</p> <p>The following projects have been added to the project list with SEMCU as the implementing agency:</p> <ol style="list-style-type: none"> <li>1. Repair leaking water system in Madera Ranchos</li> <li>2. Install 1-million gallon storage tank in MD 10A</li> <li>3. Connect Valley Teen Ranch to the MD10A Water System and install new well on a portion of the Valley Teen Ranch parcel, which would then be granted to MD 10A. A grant application for the project has already been submitted to the State Revolving Fund and it is expected to be funded.</li> </ol>

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135	Karen Petryna, Madera County Citizen	GEN		<p>In review of the 2014 Plan Project List for the Madera RWM Group to attach to our Regional Plan, I noticed a few misspellings (cells highlighted in yellow in the attached) as well as some critical omissions for the Madera Ranchos MD10A Water System. Namely, there is no mention of any projects to repair, upgrade or expand the water system that serves approximately 4,500 people in the Ranchos.</p> <p>It is my understanding from the former Madera County Engineer, Ken Vang, that the MD10A Water System has an approximate 25% leak rate. It may be much higher. Regardless, records show the system is comprised largely of undersized, lead and asbestos-containing piping. Steve Norman, the Special Districts Manager, should have full details and I copy him here.</p> <p>As I'm sure anyone can imagine and Steve can verify, a very leaky water system in an area with high concentrations of septic tanks, such as MD10A's, only exacerbates the issue of groundwater contamination-- <i>which is something MD10A already contends with.</i></p> <p>Furthermore, residents surrounding the MD10A Water System that are not connected to it are also at high risk, not only of contaminated groundwater but also having their wells run dry--as many have. And a project to connect those residents within the sphere of influence of the water system is greatly needed.</p> <p>Despite the need for recharge basins and flood control, there is no higher domestic need than that for clean, available water.</p> <p>As we discussed at the last SEMCU meeting, it is imperative that any and all potential projects for the Region be included in the project list since there are no future plans to update the Regional Plan further. It was also my understanding that SEMCU had already proposed the above-described projects as well as a project for a one million gallon water tank for MD10A. Therefore, I strongly urge the Group to include some kind of projects or projects to repair, upgrade and expand the MD10A Water System, to include a water storage tank, whether the implementation agency is listed as SEMCU or not.</p>	See response to other comment from Karen Petryna
136	South-East Madera County United	GEN		<p>Add the following projects to the project list:</p> <ol style="list-style-type: none"> <li>1. MD10A Water Tank and Valley Teen Ranch Consolidation</li> <li>2. Root Creek Off-Stream Storage</li> <li>3. Madera Ranchos Water Fixture Retrofit</li> <li>4. Madera Ranchos Water Meters</li> </ol>	Projects added to the project list

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137	Jeannie Habben, Administrative Assistant Madera RWMG	ES		<p>Page ES – 2; Page ES-9; Page 2-4; Page 2-7; Page 14-6, and Page 14-7            There are 3 steps to becoming a member to the RWMG –</p> <ol style="list-style-type: none"> <li>1. A signed Resolution by the Board of the new members group</li> <li>2. A signed MOU between the group and the RWMG</li> <li>3. Agreed upon dues payment</li> </ol> <p>This means that not just anyone can join the RWMG – you must have a legal board – so this must be a 501c3 or the like to be able to create and sign a Resolution.</p>	<p>Updated in all areas to include the three requirements. In Chapter 2 – Governance, language added to state that a member must have a governing body.</p>
138	Gravelly Ford Water District	ES		<p>Page ES-1 2nd sentence : 17 public, private            2-1 Definition RWMG - RWMG has 16 members            2-3 Breadth of Membership - RWMG consists of 17</p>	<p>Updated. Correct number of members is 17.</p>
139	Jeannie Habben, Administrative Assistant Madera RWMG	2; 9; 11; 13		<p>Section 2.13 – IRWMP Updates , also page 2-11, twice on Page 9-20, Page 11-5 and page 13-8            “the RWMG plans to periodically prepare an annual report” (twice)            You can't prepare a “periodic annual report” that is two different things – how about “the RWMG plans to periodically prepare a report” - remove “annual”</p>	<p>Comment addressed as suggested.</p>
140	Madera Irrigation District	3	3-35	<p>In general, do all of the plan statistics and data get updated annually? I wondered when I saw Table 3.5 on Page 3-35, because the years listed are 2003, 2011, 2013. Were the gap years not available or intentionally omitted?</p>	<p>The cropping data you reference from 2003, 2011, 2013 was not collected by the Regional Water Management Group, but rather the County and DWR. The IRWMP is updated as needed and future updates will likely be every 5 to 10 years. The IRWMP relies largely on data already collected and documented by other agencies. Most individual agencies update and maintain their own statistics annually.</p>