

**FINAL DRAFT**

# **MUNICIPAL SERVICE REVIEWS**

**EIGHT PUBLIC WATER DISTRICTS  
MADERA COUNTY**

**MADERA COUNTY  
LOCAL AGENCY FORMATION COMMISSION  
(LAFCO)**

**OCTOBER 2007**



**PREPARED BY  
URBAN AND ENVIRONMENTAL CONSULTING**



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**MADERA COUNTY LOCAL AGENCY FORMATION COMMISSION  
(LAFCO)**

**MUNICIPAL SERVICE REVIEWS  
FOR  
EIGHT PUBLIC WATER DISTRICTS, MADERA COUNTY**

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**TABLE OF CONTENTS**

**1.0 Executive Summary ..... 1**  
 Summary of Determinations and Recommendations..... 2

**2.0 Introduction ..... 21**  
 Statutory Authority of LAFCO ..... 23  
 MSR Determinations..... 24  
 Review of Agency Spheres of Influence ..... 26

**3.0 Background ..... 27**  
 Regional Setting - Madera County..... 27  
 Special Districts in California ..... 27

**4.0 Other Water Suppliers (*Not Evaluated in this Study*) ..... 33**

**5.0 Analysis, Determinations & Recommendations ..... 37**  
 5.1 Aliso Water District ..... 39  
 5.2 Chowchilla Water District ..... 49  
 5.3 Clayton Water District ..... 61  
 5.4 Gravelly Ford Water District ..... 67  
 5.5 Madera Irrigation District ..... 77  
 5.6 Madera Water District ..... 93  
 5.7 New Stone Water District ..... 103  
 5.8 Root Creek Water District ..... 109

**Figures**

Figure 1 – Seven Districts Service Areas & Recommended SOIs..... 19  
 Figure 2 –Overlap of Water District Boundaries ..... 20  
 Figure 3– Aliso Water District Boundaries - Existing..... 47  
 Figure 4– Aliso Water District Boundaries - Confirmed..... 47  
 Figure 5 – Chowchilla Water District Boundaries - Existing ..... 60  
 Figure 6 – Chowchilla Water District Boundaries - Amended..... 60  
 Figure 7 – Clayton Water District Boundaries - Existing..... 66  
 Figure 8 – Clayton Water District Boundaries - Confirmed..... 66

Figure 9 – Gravelly Ford Water District Boundaries - Confirmed ..... 75

Figure 10 – Madera Irrigation District Boundaries - Existing ..... 91

Figure 11 – Madera Irrigation District Boundaries - Amended ..... 92

Figure 12 – Madera Water District Boundaries - Existing ..... 101

Figure 13 – Madera Water District Boundaries - Confirmed ..... 101

Figure 14 – New Stone Water District Boundaries - Confirmed ..... 108

Figure 15 – Root Creek Water District Boundaries - Existing ..... 116

Figure 16 – Root Creek Water District Boundaries - Confirmed ..... 116

**Tables**

Table 1 - Madera County Population ..... 27

Table 2 - Aliso WD Statement of Income (Years 2004, 2003, 2002) ..... 41

Table 3 - Aliso WD Statement of Changes in Fund Equity (Years 2004, 2003,2002) ..... 41

Table 4 - Aliso WD Statement of Cash Flows (Years 2004, 2003, 2002) ..... 42

Table 5 – Chowchilla WD Statement of Changes in Fund Equity (Years 2005 and 2004) ..... 51

Table 6 - Chowchilla WD Statement of Changes in Fund Equity (Years 2005 and 2004) ..... 51

Table 7 - Chowchilla WD Statement of Cash Flows (Years 2005 and 2004) ..... 51

Table 8 – Gravelly Ford WD Statement of Changes in Fund Equity (Years 2005 and 2004) ..... 69

Table 9 - Gravelly Ford WD Statement of Changes in Fund Equity (Years 2005 and 2004) ..... 69

Table 10 - Gravelly Ford WD Statement of Cash Flows (Years 2005 and 2004) ..... 69

Table 11 – Madera ID Basic Financial Summary (Fiscal Year 2004 thru 2005) ..... 79

Table 12 - Madera ID Revenues, Expenses and Changes in Net Assets (Fiscal Year 2004-05) ..... 80

Table 13 - Madera ID (2006 Crop Water Charges and Tolls - March 7, 2006) ..... 84

Table 14 – Madera WD Basic Financial Summary (Fiscal Year 2004 thru 2005) ..... 95

Table 15 - Madera WD Revenues, Expenses and Changes in Net Assets (Fiscal Year 2004-05) ..... 95

Table 16 – Madera WD 2006 Water Charges ..... 96

California Environmental Quality Act (CEQA) ..... 117

Glossary ..... 119

Sources Consulted ..... 121

Appendix A - Water Supply in Madera County..... 123

Appendix B - County Service Areas ..... 131

Appendix C - County Maintenance Districts and/or Service Areas with Problems and Issues..... 139

## 1.0 EXECUTIVE SUMMARY

### INTRODUCTION

California Government Code Section 56430 requires the Madera County Local Agency Formation Commission (LAFCO) to conduct comprehensive Municipal Service Reviews (MSRs or service reviews) in conjunction with its mandatory five year review of the spheres of influence (SOI) of local government agencies in Madera County (Section 56425).

A Municipal Service Review is a comprehensive study designed to better inform LAFCO, local agencies, and the community about the provision of municipal services. Service reviews present and analyze information about the governance structures and efficiencies of service providers and may identify opportunities for greater coordination and cooperation between providers.

MSRs may be utilized by local, regional and state agencies to make informed decisions about county service providers within each agency's statutory authority and responsibilities. Agencies under review may use the determinations and recommendations presented to pursue changes to services or as a basis for updating legal boundaries. However, LAFCO is not required to initiate any changes to an SOI based on the findings of a service review.

The Municipal Service Reviews presented in this study have been prepared in accordance with the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (California Government Code Section 56000 *et. seq.*) and are part of the Madera County LAFCO's program to review the spheres of influence of all qualifying local government agencies (cities/ special districts). This report is an informational document and does not substitute for discretionary decisions that can only be made by the Commission.

In this document eight (8) public water districts are examined. Each district has been evaluated separately under its own service review. The locations of the districts are shown on Figure 1. Below is a list of the districts included in this study:

- Aliso Water District
- Chowchilla Water District
- Clayton Water District
- Gravelly Ford Water District
- Madera Irrigation District
- Madera Water District
- New Stone Water District
- Root Creek Water District

This report includes study sections for each water district. Each section provides an overview and evaluation of the agency's service boundaries, water supply, and distribution systems. At the end of each section written determinations and recommendations are presented. The Commission is required to adopt these written determinations pursuant to Government Code Section 56430. The determinations address the nine factors listed below:

1. Infrastructure needs or deficiencies.
2. Growth and population projections for the affected areas.
3. Financing constraints and opportunities.
4. Cost avoidance opportunities.
5. Opportunities for rate restructuring.
6. Opportunities for shared facilities.
7. Government structure options.
8. Evaluation of management efficiencies.
9. Local accountability and governance.

## **DETERMINATIONS AND RECOMMENDATIONS**

Below is a summary of the recommendations presented in this study for each district.

### **Aliso Water District**

#### **1. Infrastructure Needs or Deficiencies**

**Determination:** The District pursues a long-term strategy to reduce reliance on ground water. The District has existing private canals that could potentially be used as conveyance facilities if a future surface water supply is obtained. The District does not currently have its own distribution system and it has no immediate infrastructure needs or deficiencies.

#### **2. Growth and Population Projections for the Affected Area**

**Determination:** Although competition for groundwater from outside the District has the potential to adversely impact groundwater availability, there currently appears to be adequate groundwater available to serve District water users.

#### **3. Financing Constraints and Opportunities**

**Determination:** The Aliso Water District is financially autonomous and limited to funding sources allowed under State Law. No property tax revenue is collected for the District. The District's operating revenues are solely obtained from donations by landowners within the District. Historically, all donation requests are paid in full by all members. There are no apparent short or long-term fiscal constraints limiting the ability of District to carry out its primary functions.

#### **4. Cost Avoidance Opportunities**

**Determination:** The District has a well-established budget process that avoids unnecessary costs. All landowners within the District pump groundwater from on-site private wells for their sole use and all associated costs of pumping groundwater are paid for by that landowner. Management costs of the District are kept minimal.

**Determination:** The Aliso Water District collects donated funds for reimbursement of services (i.e. legal, and/or accounting) provided to the District. No fees or assessments are imposed on the extraction and replacement of groundwater pursuant to the groundwater remediation program required by law or a groundwater storage contract with the District. Funds are obtained for the District as needed through a request for donations from District members. Historically, all donation requests are paid in full by all members.



**6. Opportunities for Shared Facilities.**

**Determination:** Pursuant to the it's Groundwater Management Plan the District is receptive to coordinating its management program with other district water servers and area landowners so as to facilitate protection and enhancement of the groundwater resources within the Madera Basin and to avoid whenever possible duplicative or inconsistent groundwater management efforts.

**7. Government Structure Options, Including Advantages and Disadvantages of Consolidation or Reorganization of Service Providers**

**Determination:** It appears that the Aliso Water District is administratively stable and no change in the government structure of the District is recommended.

**8. Evaluation of Management Efficiencies.**

**Determination:** The Aliso Water District operates with a high degree of skill, ability, and personal service. The District continues to keep abreast of technology, industry specific advancements and legal issues regarding groundwater usage. The Trustees and manager interact on a regular basis with the district members.

**9. Local Accountability and Governance.**

**Determination:** The Aliso Water District limits its activities to services authorized by its principle act. The District compiles with requirements for conducting public meetings and continuously maintains outreach programs to inform and engage its members.

**Recommendations**

1. Adopt the "Written Determinations" for the Aliso Water District presented in this service review pursuant to California Government Code Section 56430.
2. Find that the District's current sphere of influence is appropriate and necessary, the District can provide well planned efficient services in this territory, and the current location of the SOI is a benefit to those that receive services and/or property owners within the area. Make no change to the Aliso Water District boundaries or the adopted sphere of influence at this time.

**Chowchilla Water District**

**1. Infrastructure Needs or Deficiencies**

**Determination:** All canals and infrastructure are in good condition and infrastructure appears adequate to provide efficient service. Depending on the location, capacity utilized is generally between 50% and 85%. Overall planning for the future infrastructure appears adequate. As demand for surface water sources increases in the future the District is positioned to use alternative water sources.

**2. Growth and Population Projections for the Affected Area**

**Determination:** The District's primary function, which is providing water for agricultural uses, is not significantly affected by population growth.

**3. Financing Constraints and Opportunities**

**Determination:** As a State-created autonomous unit of local government the Chowchilla Water District has sovereignty over its fiscal issues – subject to State Law. The District conforms to the restrictions of Proposition 13 and Proposition 218 in assessing, fees and benefit assessments. No general and special taxes are collected. Operating revenue consists primarily of electrical generation and water sales and annual assessments for both rural and city parcels within the District. The CWD receives an annual independently-conducted auditor's report which is a matter of public record. The District budgets adequate funding to make all necessary improvements.

**4. Cost Avoidance Opportunities**

**Determination:** Chowchilla Water District operates with adequate paid staff, is self-sufficient and efficient. All of the District's equipment is replaced on an as-needed basis. The District implements a form of privatization to depress staff levels and generate cost savings by using outside consultants for engineering, legal, and audit services. The District also has some operational contracts (landscaping, maintenance, janitorial, etc.) that are financially beneficial. The District appears to be well managed and no cost-avoidance opportunities have been identified.

**5. Opportunities for Rate Restructuring**

**Determination:** To maintain the District's rates for services, the Manager annually researches the cost of pumping ground water in the County. This information is used to review service charges. The District attempts to maintain its rate schedule below the cost for farmers to pump groundwater. Enterprise fees for water service within the Chowchilla Water District directly relate to the cost of producing and delivering water services. The District imposes fees and/ or rates for services that are directly related to the cost of producing and delivering such services.

**6. Opportunities for Shared Facilities**

**Determination:** The District participates in sharing facilities through system interconnections with the Madera Irrigation District. The District maintains agreements with the Madera Irrigation District that interconnect distribution systems to create infrastructure redundancies and allow water supplies to be moved among agencies in an emergency.

**7. Government Structure Options, Including Advantages and Disadvantages of Consolidation or Reorganization of Service Providers**

**Determination:** To correct discrepancies in the District's SOI it is necessary to amend the District's sphere of influence to reflect approved annexations and to allow approval of proposed annexations. Additionally, the District's SOI needs to be amended to remove it from the Clayton Water District's boundaries. With the appropriate findings, an SOI amendment can be processed at the time the MSR for CWD is accepted by the Commission. If the Commission approves the amendment, LAFCO staff would then be able to process an application for annexation of the parcels to be incorporated into the District.

**8. Evaluation of Management Efficiencies**

**Determination:** The Chowchilla Water District has a management-to-staff ratio that appears efficient. The District's record of employee turnover is reasonably stable. All applicable environmental and safety compliance measures are implemented by the District as applicable.

**9. Local Accountability and Governance**

**Determination:** The Chowchilla Water District limits its activities to services authorized by its principle act. Services are extended beyond boundaries only when lawful. The District complies with all state requirements for conducting public hearings. The Board of Directors approves and administers the all water management plans, the District budget and its staff.

**Recommendations**

The following actions are recommended:

1. Adopt required Written Determinations and accept the analysis and conclusions of the Municipal Service Review prepared for the Chowchilla Water District by taking actions A and B below:
  - A. Acting as Lead Agency under the California Environmental Quality Act make a finding pursuant to the California Environmental Quality Act (CEQA Guidelines Section 15000 et seq. and Public Resources Code Sections 21083 and 21084) that the Municipal Service Reviews presented in the Municipal Service Reviews report for the eight (8) public water districts are exempt from CEQA under Section 15306 of the State CEQA Guidelines (Categorical Exemption, Information Collection, Class 6), which provides exemption for data collection, research, experimental management, and resource evaluation activities which will not result in a serious or major disturbance to an environmental resource, and that these studies are for information gathering purposes and are part of a report leading to an action which a public agency has not yet approved, adopted, or funded.
  - B. Adopt the "Written Determinations" in LAFCO's Resolution Making Determinations for the Chowchilla Water District presented in this service review pursuant to California Government Code Section 56430; accept the analysis and conclusions of the Municipal Service Review prepared for the District and direct the Executive Officer to file the report in the public record at the Madera County LAFCO office.
2. In a separate action approve amendments to the Chowchilla Water District Sphere of Influence by taking actions A, B and C below:
  - A. Acting as Lead Agency under the California Environmental Quality Act find that pursuant Section 15061(b)(3) of the CEQA Guidelines the Project (Amendment to the Chowchilla Water District's Sphere of Influence) is covered by the general rule that CEQA applies only to Projects which have the potential for causing a significant effect on the environment, and that it has been determined with certainty that there is no possibility that the Project may have a significant effect on the environment, and accordingly the Project is not subject to CEQA.
  - B. Make the required findings in LAFCO's Resolution Making Determinations pursuant to Government Code Section 56425(e) et seq. with respect to the four specific issues required to approve a change to a sphere of influence, as presented below:

1. Present and planned land uses in the area including agricultural and open-spaced lands.

The proposed SOI amendment would not change the present agricultural land use currently operating in the affected territory. The County General Plan designation and zoning for the affected territory will not change. The proposed SOI amendment will not convert prime farmland, unique farmland, or farmland of statewide importance to non-agricultural use. No significant adverse effects will occur on continuing agricultural operations on adjacent properties.

2. The present and probable need for public facilities and services in the area.

All of the territory included in the proposed SOI amendment can either be served by the Chowchilla Water District or in the future by the Clayton Water District. Approval of the proposal SOI amendment will not bring about the need for the additional public facilities or service in the territory.

3. The present capacity of public facilities and adequacy of public services that the agency is authorized to provide.

Territory that is added to the Chowchilla Water District sphere of influence has either been annexed already or is proposed for annexation in the near future. The CWD has the ability to provide authorized services (irrigation water) to the territory to be included in its amended SOI. Madera Irrigation District and several other water districts in Madera County are exploring opportunities for groundwater banking and groundwater recharge as a means to increase dry year supplies and improve groundwater quality. The District plans to engage with the adjacent districts and to explore arrangements for cooperative studies.

4. The existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency.

There are two “communities” of social and/or economic interest affected by the proposed SOI amendment. The Madera Irrigation District is located adjacent to the CWD and the district’s SOIs “meet in the middle”. The proposed amendment to the CWDs SOI would require MID to amend its SOI boundary to remove this corresponding territory from the District’s sphere of influence territory. Officials at MID have agreed to the proposed amendments. Clayton Water District will not be affected by a change to the CWD’s SOI boundaries. This action will remove the Chowchilla Water District’s sphere of influence overlap from its coterminous boundaries.

- C. Approve amendments to the Chowchilla Water District Sphere of Influence as shown in Figure 6.

3. Direct the Executive Officer to forward adopted Resolution Making Determinations to the Merced County Local Agency Formation Commission’s Executive Officer.

## Clayton Water District

### 1. Infrastructure Needs or Deficiencies

**Determination:** The District is contacting other districts to explore the feasibility and design of groundwater recharge opportunities in the District to help maintain and augment the availability of groundwater and the District's water table.

### 2. Growth and Population Projections for the Affected Area

**Determination:** The territory within Clayton Water District is not urbanized and consists of a single-family farm. The District's attorney reports that the District is not going to grow in terms of population. The landowners within its boundary are committed to agriculture for the long term.

### 3. Financing Constraints and Opportunities

**Determination:** all funds to operate the District are contributed by its landowners. Funds needed to participate in any cooperative studies or to construct new facilities will be paid directly by the District's landowners.

### 4. Cost Avoidance Opportunities

**Determination:** There are no employees and no administrative or other expenses of the District. The only actual "out of pocket" expenses anticipated by the District could be a multi-district cooperative groundwater study, followed by the possible construction of facilities based on the study's recommendations to enhance the current groundwater conditions in the District. The implementation phase could take several years in order to achieve the desired results based on surface water availability and construction dollars approved by the District's landowners and Board.

### 5. Opportunities for Rate Restructuring

**Determination:** The District currently neither sets nor collects any rate for its water services. Future plans may require rates for implementation. Until those plans are deemed feasible and then implemented, there are no opportunities for rate restructuring.

### 6. Opportunities for Shared Facilities

**Determination:** The District does not need and would not benefit from the services of other Districts. All of the equipment, turn-out facilities and water conveyance facilities enjoyed by or used by the District in terms of having water delivered to its boundaries are already in place. There are no adjacent Districts with which to share facilities or resources.

**7. Government Structure Options, Including Advantages and Disadvantages of Consolidation or Reorganization of Service Providers**

**Determination:** The District has no neighboring agencies that could provide service to the District. There is no opportunity to expand District lands to be served, as it is finite in size. The District can utilize all of the water available to it if it can implement the groundwater plan described above, with no opportunity to share such waters with adjoining lands, due to the limited amount of water available and the water rights and diversion rights already identified with such water.

**8. Evaluation of Management Efficiencies**

**Determination:** The District is currently efficient since as it has no cost for its current operations or management. It has no paid employees. Board Members volunteer their time to study and carry out the objectives of the District, at no cost. With no current infrastructure on District lands, until infrastructure is installed and operations and insurance costs are allocated among the landowners, pro-rata, there are no current operational expenses.

**9. Local Accountability and Governance**

**Determination:** The District's attorney reports that all District landowners are involved on the Board of the District and it has 100% participation in all decisions affecting the District. The District does not conduct regular board meetings, but meets on an as-needed basis.

**Recommendations**

1. Adopt the "Written Determinations" for the Clayton Water District presented in this service review pursuant to California Government Code Section 56430.
2. Find that the District's current sphere of influence is appropriate and necessary, the District is working toward the provision of planned, efficient services in this territory, and the current location of the SOI is a benefit to those that may receive services and/or property owners within the area. Make no change to the Clayton Water District boundaries or the adopted sphere of influence at this time.
3. Reevaluate in five years to confirm productive activity or consider dissolution.

**Gravelly Ford Water District**

**1. Infrastructure Needs or Deficiencies**

**Determination:** Overall planning for the Gravelly Ford Water District infrastructure appears adequate. The District focuses mainly on the maintenance, replacement, and upgrade of their existing water facilities. The development of a ground water recharge facility was completed and placed for service in 2005. No additional infrastructure is needed at this time.

**2. Growth and Population Projections for the Affected Area**

**Determination:** Most of the District is rural and population growth in the District has increased at a very slow rate. A significant growth in population is not expected.

**3. Financing Constraints and Opportunities**

**Determination:** The Gravelly Ford Water District is financially autonomous and limited to funding sources allowed under State Law. The District's operating revenues for water services are primarily obtained from enterprise funds. Options for funding the District's water infrastructure appear to be adequate. The District does not forecast short or long-term constraints that limit the ability to provide infrastructure upgrades and improvements.

**4. Cost Avoidance Opportunities**

**Determination:** The District has been running a monthly deficient budget; however, District landowners are not ready to approve additional fee increases at this time since the District currently has no outstanding debt and a large positive net asset balance. There are no mandatory standards for determining appropriate levels of reserves (unrestricted net assets). Neither, the California Constitution, State Statutes, the State Controller, or county auditors provide standards upon which decision-makers may rely in determining levels of reserves to maintain. Agencies are encouraged to adopt policy to guide official decisions and disclose to reserve fund actions. The District is encouraged review and update policies for retention and use of reserve funds.

**5. Opportunities for Rate Restructuring**

**Determination:** The Board reviews the service charges and compares them to groundwater pumping costs and adjusts its rates as needed to obtain adequate revenue. Delivery costs must be competitive with ground water pumping costs or users will choose to pump groundwater for their irrigation needs. No additional identify opportunities to positively impact rates without decreasing service levels has been identified.

**6. Opportunities for Shared Facilities**

**Determination:** The District could use some of their facilities to convey Madera Irrigation District's water to the MID's Madera Ranch site, a portion of which is in the Gravelly Ford Water District. However, no formal discussions have started between the two districts. No additional opportunities to share facilities and resources with other districts have been identified at this time.

**7. Government Structure Options, Including Advantages and Disadvantages of Consolidation or Reorganization of Service Providers.**

**Determination:** All eligible lands are currently served by the District. Combining with an adjacent District would increase the costs to users within the District. The District is not interested in consolidation with any adjacent districts. The District participates in sharing facilities through system interconnections with the Madera Irrigation District (MID). The District participates with MID in a collaborative system to share resources. There is no duplication of services in the District.

**8. Evaluation of Management Efficiencies.**

**Determination:** The District accomplishes its operations with minimal staff, at minimum cost, and is consistently within its planned budget. The staff self manage their duties and accomplish all tasks within a timely manner. The District has ongoing training programs for staff and Trustees in their respective areas of responsibility. Privatization is used throughout the GFWD service area to provide cost savings. The District appears to operate in an efficient manner.

**9. Local Accountability and Governance.**

**Determination:** The District limits its activities to services authorized by state charter or principle act. Services are extended beyond boundaries only when lawful. The District complies with requirements for conducting public meetings. Agenda items are flexible to accommodate public participation. The District also publishes a community newsletter to inform District customers of the latest events. No incidences of Brown Act violations have been reported.

**Recommendations**

1. Adopt the “Written Determinations” for the Gravelly Ford Water District presented in this service review pursuant to California Government Code Section 56430.
2. Find that the District’s current sphere of influence is appropriate and necessary, the District can provide well planned efficient services in this territory, and the current location of the SOI is a benefit to those that receive services and/or property owners within the area. Make no change to the Gravelly Ford Water District boundaries or the adopted sphere of influence at this time.

**Madera Irrigation District**

**1. Infrastructure Needs or Deficiencies**

**Determination:** The District’s water infrastructure appears adequate to provide efficient service. The infrastructure is appropriately sized for current, seasonal, and emergency water needs. The water systems are characterized by flexibility, strategic redundancy, and alternative water sources. Overall planning for future infrastructure appears adequate. The MID engages in strategic planning for five-year horizons through capital improvement plans.

**2. Growth and Population Projections for the Affected Area**

**Determination:** The District must coordinate with general-purpose agencies in planning for future services. The District’s primary function, which is providing water for agricultural uses, is not affected by population growth. The only impact that growth would have on the District is the conversion of agricultural lands to urban uses. Such land use changes would likely reduce the need for agricultural water.



**3. Financing Constraints and Opportunities**

**Determination:** The budget information examined indicates that the District implements appropriate financing/funding practices. The District is solvent and is able to obtain necessary financing. The District also has the ability to generate additional revenue streams (i.e., from electric power generation). Necessary improvements can be financed by the District as needed.

**4. Cost Avoidance Opportunities**

**Determination:** The District appears to be well managed. Most of the District's maintenance is accomplished onsite by the District employees. As appropriate MID also uses outside consultants for engineering, legal, and financial services and has contracts for outside labor and other services. A regular maintenance program for equipment and infrastructure is carried out by the District. No additional cost-avoidance opportunities have been identified.

**5. Opportunities for Rate Restructuring**

**Determination:** The District maintains water rates as low as practical. There are few opportunities for rate restructuring. The price of water directly relates to its wholesale cost plus district overhead. Traditionally, the District has elected to keep crop water rates to the growers at a reasonably low rate. To off-set this practice the District continues to look at other measures for water sales without impacting its financial health and loss of future water supplies.

**6. Opportunities for Shared Facilities**

**Determination:** MID participates in sharing facilities through system interconnections with the Chowchilla Water District, Madera Water District and Gravelly Ford Water District. MID maintains agreements with the Madera Water District, and Gravelly Ford Water District that interconnect distribution systems to create infrastructure redundancies and allow water supplies to be moved among agencies in an emergency.

**7. Government Structure Options, Including Advantages and Disadvantages of Consolidation or Reorganization of Service Providers**

**Determination:** To correct discrepancies in the District's SOI it is necessary to amend the District's sphere of influence to remove territory from the Aliso Water District, Clayton Water District, Chowchilla Water District and all of the New Stone Water District. It is recommended that an "L" shaped area located between Aliso Water District and Gravelly Ford Water District is included in MID's amended SOI. The District has purchased this land and intends to include it in its planned "water bank" area.

**8. Evaluation of Management Efficiencies**

**Determination:** District staff is well trained and accomplishes all tasks within a timely manner. New technology is employed by MID as appropriate. Water delivery and accounting records are well maintained. The District has ongoing training programs for staff and management in their respective areas of responsibility. All applicable environmental and safety compliance measures are implemented by the district as applicable. The District appears to operate in an efficient manner.

## 9. Local Accountability and Governance

**Determination:** The MID limits its activities to services authorized by its principle act. Services are extended beyond boundaries only when lawful. The MID complies with requirements for conducting public meetings. Agenda items are flexible to accommodate public participation. The District also publishes a quarterly community newsletter to inform District customers of the latest events. No incidences of Brown Act violations have been reported. The Board of Directors approves and administers the required water management plan, the District's annual budget and its staff.

### Recommendations

The following actions are recommended:

1. Adopt required Written Determinations and accept the analysis and conclusions of the Municipal Service Review prepared for the Madera Irrigation District by taking actions A and B below:
  - A. Acting as Lead Agency under the California Environmental Quality Act make a finding pursuant to the California Environmental Quality Act (CEQA Guidelines Section 15000 et seq. and Public Resources Code Sections 21083 and 21084) that the Municipal Service Reviews presented in the Municipal Service Reviews report for the eight (8) public water districts are exempt from CEQA under Section 15306 of the State CEQA Guidelines (Categorical Exemption, Information Collection, Class 6), which provides exemption for data collection, research, experimental management, and resource evaluation activities which will not result in a serious or major disturbance to an environmental resource, and that these studies are for information gathering purposes and are part of a report leading to an action which a public agency has not yet approved, adopted, or funded.
  - B. Adopt the "Written Determinations" in LAFCO's Resolution Making Determinations for the Madera Irrigation District presented in this service review pursuant to California Government Code Section 56430; accept the analysis and conclusions of the Municipal Service Review prepared for the District and direct the Executive Officer to file the report in the public record at the Madera County LAFCO office.
2. In a separate action approve amendments to the Madera Irrigation District Sphere of Influence by taking actions A and B below:
  - C. Acting as Lead Agency under the California Environmental Quality Act find that pursuant Section 15061(b)(3) of the CEQA Guidelines the Project (amendments to the MID sphere of influence) is covered by the general rule that CEQA applies only to Projects which have the potential for causing a significant effect on the environment, and that it has been determined with certainty that there is no possibility that the Project may have a significant effect on the environment, and accordingly the Project is not subject to CEQA.
  - C. Make the required findings in LAFCO's Resolution Making Determinations pursuant to Government Code Section 56425(e) et seq. with respect to the four specific issues required to approve a change to a sphere of influence, as presented below:

1. Present and planned land uses in the area including agricultural and open-spaced lands. The proposed SOI amendment would not change the present agricultural land use currently operating in the affected territory. The County General Plan designation and zoning for the affected territory will not change. The proposed SOI amendment will not convert prime farmland, unique farmland, or farmland of statewide importance to non-agricultural use. No significant adverse effects will occur on continuing agricultural operations on adjacent properties.
2. The present and probable need for public facilities and services in the area.

All of the territory removed by the proposed SOI amendment can be served in the future by the Aliso Water District, Clayton Water District, Chowchilla Water District and New Stone Water District. Approval of the proposal SOI amendment will not bring about the need for the additional public facilities or service in the territory.

3. The present capacity of public facilities and adequacy of public services that the agency is authorized to provide.

The Madera Irrigation District will not be obligated to serve territory removed from its SOI. (Please note that the MID may pursue inclusion of the “L” shaped area located between Aliso Water District and Gravelly Ford Water District (shown as “white” on Figure 2) in the District’s sphere of influence. This territory indicates the District’s proposed “water bank” area. Accordingly, MID will not be responsible for providing an “authorized public services” other than managing this territory for water recharge).

4. The existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency.

There are several “communities” of social and/or economic interest affected by the proposed SOI amendment. These are: the Aliso Water District, Clayton Water District, Chowchilla Water District, Madera Water District and Root Creek Water District. The proposed amendment to the MID’s SOI would require the District to amend its SOI boundary to remove corresponding territory from these Districts’ sphere of influence territory. These districts will not be affected by such an action.

- C. Approve amendments to the Madera Irrigation District Sphere of Influence as shown in Figure 11.

## **Madera Water District**

### **1. Infrastructure Needs or Deficiencies**

**Determination:** The Madera Water District's infrastructure appears adequate to provide efficient service to the farms within its District. The District's infrastructure is appropriately sized for current, seasonal, and drought period water needs. The District engages in strategic planning for capital improvements through implementation of its budget and AB 3030 plan.

### **2. Growth and Population Projections for the Affected Area**

**Determination:** The District is not significantly affected by growth patterns or increases in population because it is an agricultural water service district as opposed to a municipal water provider. The District is planning for future water needs by budgeting for future irrigation wells in anticipation of tightening surface water supplies throughout the State which reduces the District's ability to purchase water as a supplement to groundwater supplies.

### **3. Financing Constraints and Opportunities**

**Determination:** The budget information examined indicates that the District implements appropriate financing/funding practices. The District is solvent and is able to obtain necessary financing. Necessary improvements can be financed by the District as needed.

### **4. Cost Avoidance Opportunities**

**Determination:** The District appears to be well managed. Most of the District's maintenance is accomplished onsite by one District employee. Madera Water District also uses outside consultants for engineering, legal, and financial services and has contracts for outside labor and other services as needed and appropriate. A regular maintenance program for equipment and infrastructure is carried out by the District in accordance with the budget. No additional cost-avoidance opportunities have been identified.

### **5. Opportunities for Rate Restructuring**

**Determination:** The District maintains water rates as low as practical. The price of water is directly related to the water supply's wholesale cost plus the cost of operating the District.

### **6. Opportunities for Shared Facilities**

**Determination:** The District works closely with MID or other districts to convey surface water available for sale through the canal system to Dry Creek where the District takes delivery of such supplies.

**7. Government Structure Options, Including Advantages and Disadvantages of Consolidation or Reorganization of Service Providers**

**Determination:** There is no duplication of services in the District. All eligible lands are currently served by the District. No government structure options, consolidation or reorganization opportunities have been identified.

**8. Evaluation of Management Efficiencies**

**Determination:** The District delivered over 8,734 acre feet of water to over 120 landowners in 2006 with only one full time employee. Most of the District's maintenance is accomplished by one onsite District employee who manages and coordinates water deliveries to landowners in the District. The District's equipment and infrastructure is repaired or replaced as needed. As appropriate, the District uses outside consultants for engineering, legal, and financial services. A regular maintenance program for equipment and infrastructure is carried out by the District. The board of directors receives no compensation or benefits for its services to the District. Madera Water District's management practices appear efficient and the District is functional and shows stability.

**9. Local Accountability and Governance**

**Determination:** The Madera Water District complies with statutory requirements for conducting public hearings. Agenda items are flexible to accommodate public participation. No incidences of Brown Act violations have been reported.

**Recommendations**

1. Adopt the "Written Determinations" for the Madera Water District presented in this service review pursuant to California Government Code Section 56430.
2. Find that the District's current sphere of influence is appropriate and necessary, the District is working toward the provision of planned, efficient services in this territory, and the current location of the SOI is a benefit to those that may receive services and/or property owners within the area. Make no change to the Madera Water District boundaries or the adopted sphere of influence at this time.

**New Stone Water District**

**1. Infrastructure Needs or Deficiencies**

**Determination:** The short-term plans for the District involve a groundwater recharge study. The long-term plans for the District involve the development of a series of ditches and basins designed to transport surface waters available to the District, to be used in groundwater recharge uses, to improve the performance of the aquifer underlying District lands. Until recently the District has been inactive, primarily because of the conversion from row crops that utilized occasional surface water availability to permanent crops that relied exclusively on pumped ground water. The prospect of groundwater recharge and the ongoing availability of surface waters at the District's turnout on the Chowchilla By-Pass have allowed the District to become active once again.

2. **Growth and Population Projections for the Affected Area**

**Determination:** The District boundaries prevent the need to expand services since growth in population in District territory is unlikely and/or unfeasible

3. **Financing Constraints and Opportunities**

**Determination:** New Stone Water District does not receive from revenue from property tax, donation or revenues from water services. All funds to operate the District are contributed, pro-rata, by its landowners.

4. **Cost Avoidance Opportunities**

**Determination:** Cost avoidance opportunities have already been taken and the District operates, currently, with no overhead. All of the landowners in the District donate their time to the operating the District. The District anticipates expending no funding other than those essential to the groundwater recharge study and its implementation, if feasible. The cost of the study will be shared by all landowners in the District and manpower to implement the plan will be donated on an “as needed and volunteer” basis.

5. **Opportunities for Rate Restructuring**

**Determination:** The District charges no rates and currently there are no opportunities for rate restructuring. However, if the plan for recharging groundwater is implemented, the District's landowners will contribute to it, pro-rata.

6. **Opportunities for Shared Facilities**

**Determination:** The District has the equipment, turn-out facilities and water conveyance facilities enjoyed by or used by the District in terms of having water delivered to its boundaries are already in place. The District is able to take spill, storm, excess, flood release or other waters available in the Chowchilla By-Pass by way of flood attenuation and flood relief for downstream areas. At this time sharing facilities or infrastructure is not necessary.

7. **Government Structure Options, Including Advantages and Disadvantages of Consolidation or Reorganization of Service Providers**

**Determination:** There is no duplication of services in the District. There are no costs or expense currently for the District and so expanding the District or combining with another district would achieve no cost savings and would only result in cost increases and inefficiencies connected with travel, size, labor, etc. Consolidation or reorganization of the District is not necessary at this time.

## 8. Evaluation of Management Efficiencies

**Determination:** All activities by the Board and actions taken by the District are completed on a volunteer basis. All of the equipment, turn-out facilities and water conveyance facilities enjoyed by or used by the District in terms of having water delivered to its boundaries are already in place. The District currently is set up to take spill, storm, excess, flood release or other waters available in the Chowchilla By-Pass by way of flood attenuation and flood relief for downstream areas.

## 9. Local Accountability and Governance

**Determination:** The District complies with statutory requirements for conducting public hearings. No incidences of Brown Act violations have been reported.

### Recommendations

1. Adopt the “Written Determinations” for the New Stone Water District presented in this service review pursuant to California Government Code Section 56430.
2. Find that the District’s current sphere of influence is appropriate and necessary, the District can provide well -planned efficient services in this territory, and the current location of the SOI is a benefit to those that receive services and/or property owners within the area. Make no change to the New Stone Water District boundaries or the adopted sphere of influence at this time.
3. Reevaluate in five years to confirm productive activity or consider dissolution.

## Root Creek Water District

### 1. Infrastructure Needs or Deficiencies

**Determination:** The Root Creek District has no facilities, infrastructure or customers. The District has indicated its willingness to provide water, wastewater, and storm drainage services to the proposed Gateway Village project. Wells, water storage, pumping and transmission facilities will be designed and constructed by the developer as part of the project, and will be dedicated to the RCWD for its ownership, operation, and maintenance upon completion.

### 2. Growth and Population Projections for the Affected Area

**Determination:** The District must coordinate with general-purpose agencies in planning for future services. The District will collaborative with agencies with land use authority and agencies with service delivery responsibility to plan for potential growth.

### 3. Financing Constraints and Opportunities

**Determination:** The Root Creek District has a limited “operating budget”. Until the proposed Gateway project is approved by Madera County the District will be “inactive” and does not receive revenue from property tax, donation or revenues from water services.

**4. Cost Avoidance Opportunities**

**Determination:** The District estimates that the planned water management programs will have almost twice the available water supply needed to arrest the local groundwater overdraft. This will provide Gateway Village with the flexibility to select the programs that are the most economical and practical to implement.

**5. Opportunities for Rate Restructuring**

**Determination:** At this time the District does not charge any rates or fees. The District's water rates and fees for service within the District will relate directly to the cost of producing and delivering water services and will be structured to reward low water consumption.

**6. Opportunities for Shared Facilities**

**Determination:** Staff and equipment might be shared by the District on a as needed basis. Historically, water districts utilize shared canals and other delivery systems when equitable.

**7. Government Structure Options, Including Advantages and Disadvantages of Consolidation or Reorganization of Service Providers**

**Determination:** No government structure options, consolidation or reorganization opportunities have been identified. Although located within the service area of CVP's Friant Unit, RCWD does not have a federal water supply contract. RCWD would have to rely on water transfers with willing sellers to obtain surface water supplies. Since Root Creek is remote from other service providers, consolidation at this time is not feasible.

**8. Evaluation of Management Efficiencies**

**Determination:** The Root Creek District has a limited "operating budget". The District does not currently provide any water services, thus the need for permanent employees is limited. The District does currently employ engineering consultants and legal council.

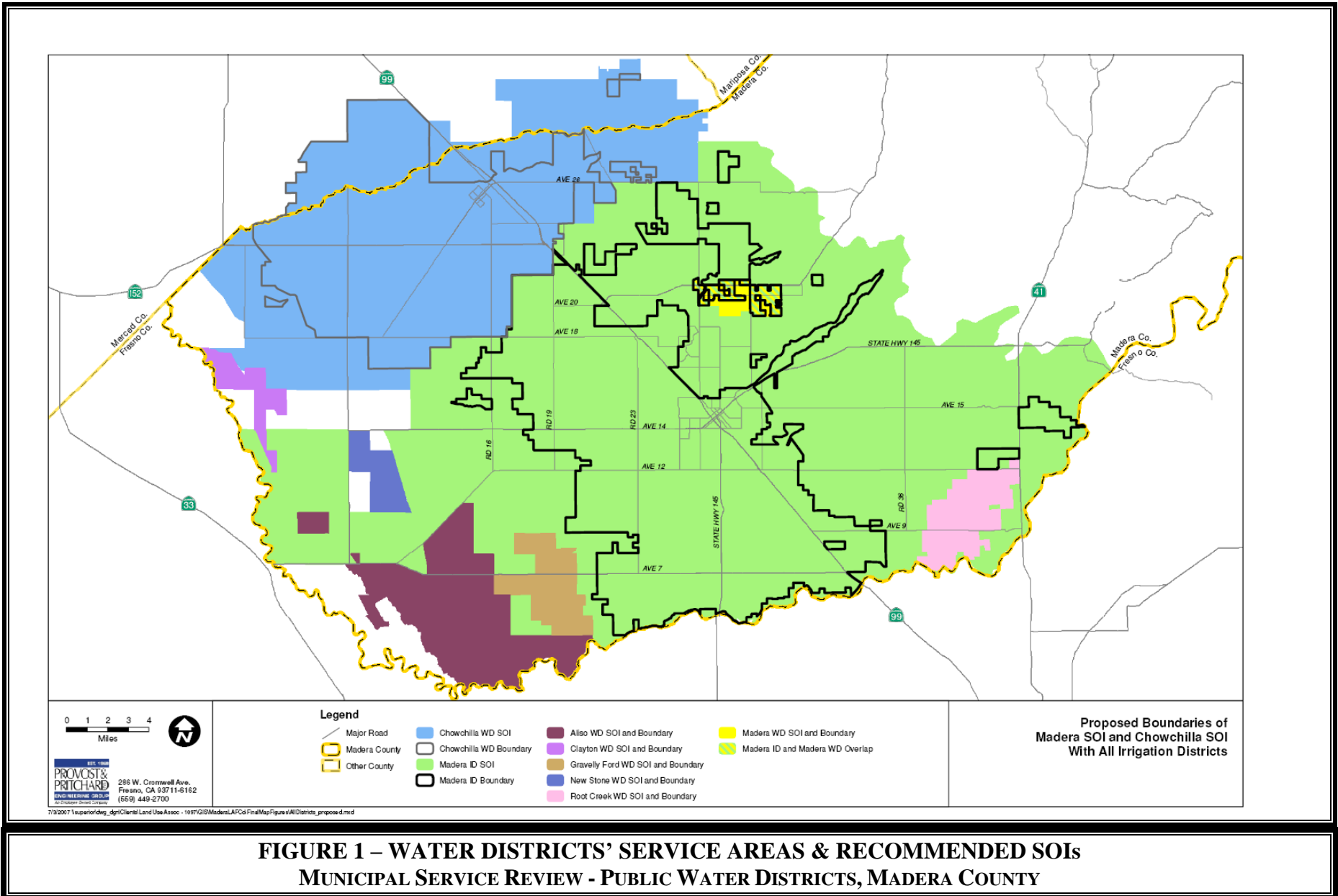
**9. Local Accountability and Governance**

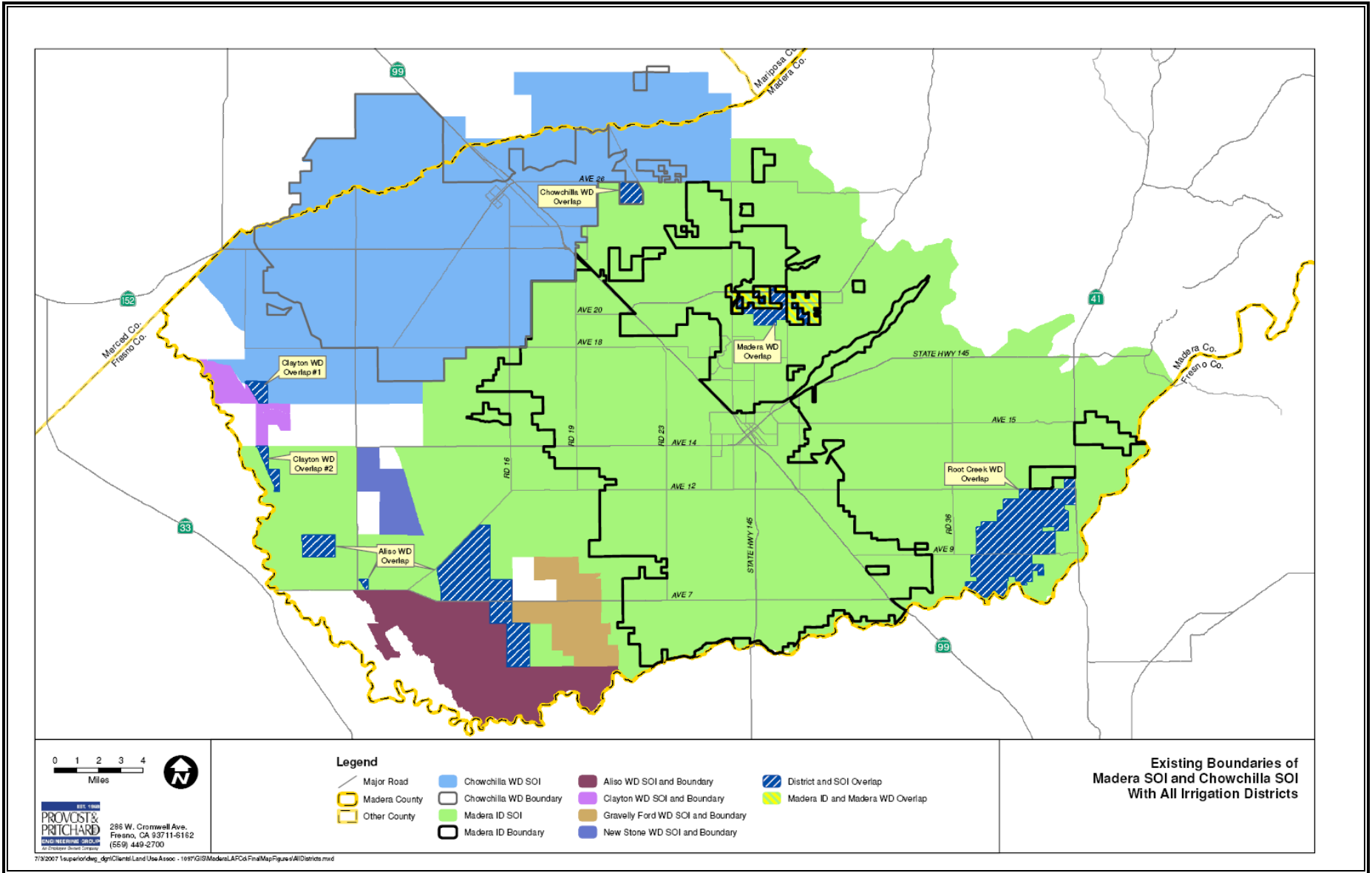
**Determination:** For all intents and purposes, the District is "inactive". District Trustees and contracted staff are available by phone and appointment. There are infrequent board meetings.

**Recommendations**

1. Adopt the "Written Determinations" for the Root Creek Water District presented in this service review pursuant to California Government Code Section 56430.
2. Find that the District's current sphere of influence is appropriate and necessary, the District can provide well planned efficient services in this territory, and the current location of the SOI is a benefit to those that receive services and/or property owners within the area. Make no change to the Root Creek Water District boundaries or the adopted sphere of influence at this time.







**FIGURE 2 –OVERLAP OF WATER DISTRICTS’ SOI BOUNDARIES  
MUNICIPAL SERVICE REVIEW - PUBLIC WATER DISTRICTS, MADERA COUNTY**

## 2.0 INTRODUCTION

The Madera County LAFCO is a state-mandated legislative agency responsible for administering the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (California Government Code Sections 56000 et. seq.). This legislation empowers LAFCO with regulatory and planning responsibilities to encourage the orderly formation and development of local agencies in a manner that preserves agricultural and open-space lands and promotes the efficient extension of governmental services. Principal duties include regulating boundary changes through annexations or detachments, approving or disapproving city incorporations, and forming, consolidating, or dissolving special districts. LAFCO is also responsible for conducting studies that address a range of service and governance issues to inform and direct regional planning goals and objectives. The Commission consists of five appointed members.

Among LAFCO's primary planning responsibilities is the designation of a sphere of influence for each city and special district under its jurisdiction. California Government Code Section 56076 defines a sphere as "a plan for the probable physical boundaries and service area of a local agency, as determined by the Commission." LAFCO establishes, amends, and updates spheres to indicate to local agencies and property owners that, at some future date, a particular area will likely require the services provided by the subject agency. The sphere designation also indicates the agency LAFCO believes to be best situated to serve the subject area. LAFCO is required to review each agency's sphere every five years.

The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (CKH Act or Act) is the statutory authority for the preparation of the Municipal Service Reviews and the periodic review (and if necessary update) of the spheres of influence of each local government entity. The major goals of LAFCO as established by the Act include:

- Promote orderly development by encouraging the logical formation and determination of boundaries and working to provide housing for families of all incomes;
- Discourage urban sprawl and preserve open-space and prime agricultural lands by guiding development in a manner that minimizes resource loss;
- Promote logical formation and boundary modifications that direct the burdens and benefits of additional growth to those local agencies best suited to provide necessary services and housing;
- Make studies and obtain and furnish information which will contribute to the logical and reasonable development of local agencies and to shape their development so as to advantageously provide for the present and future needs of each county and its communities;
- Establish priorities by assessing community services needs with available financial resources and to encourage government structures that reflect local circumstances, conditions, and financial resources;
- Determine whether new or existing agencies can feasibly provide needed services in a more efficient or accountable where necessary, reorganization with other single purpose agencies that provide related services;

## **Background Information - LAFCOs**

California experienced dramatic growth in population and economic development in the 1940s and 50s. With this growth came a demand for housing, jobs, and public services. To accommodate this demand, the state approved the formation of many new local government agencies, often with little forethought as to the ultimate governance structures in a given region. The lack of coordination and adequate planning led to a multitude of overlapping, inefficient jurisdictional and service boundaries, and the premature conversion/loss of California's agricultural and open-space lands.

Recognizing this problem, in 1959, the "Commission on Metropolitan Area Problems" was formed. The Commission's charge was to study and make recommendations on the "misuse of land resources" and the growing complexity of local governmental jurisdictions. The Commission's recommendations on local governmental reorganization were introduced in the Legislature in 1963, resulting in the creation of Local Agency Formation Commissions, or "LAFCO," operating in each county except San Francisco.

From 1963 through 1985, LAFCOs administered a complicated series of statutory laws and three enabling acts, the Knox-Nisbet Act, the Municipal Organization Act (MORGA) and the District Reorganization Act. Confusion over the application of these laws led to a reform movement that produced the first consolidated LAFCO Act, the Cortese-Knox Local Government Reorganization Act of 1985. In 1997, a new call for reform in local government resulted in the formation, by the Legislature, of the "Commission on Local Governance in the 21st Century". After many public workshops, the Commission recommended changes to the laws governing LAFCOs in its comprehensive report *Growth Within Bounds*.

These recommendations became the foundation for the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (CKH Act or Act), an act that mandates greater independence for LAFCOs and further clarifies their purpose and mission. In response to both the passage of the CKH Act and to local needs to address certain service provision issues, San Francisco LAFCO was formed in 2000. Today, there is a LAFCO in each of California's 58 counties.

**Composition** - The composition of LAFCO varies from county to county. Nearly all LAFCOs are composed of two members from the Board of Supervisors and two members from the city councils in that county. Many commissions also have two members from the independent special districts in that county. In turn, these members select a representative of the general public – an individual who is not seated on any elected body.

For each category represented on LAFCO, there is an alternate member. Alternate members may attend LAFCO meetings and participate in the discussion of items, but they only vote on items when a regular member from their category is absent. Some LAFCOs, including Los Angeles, Sacramento, Santa Clara, Kern, and San Diego, have, through special legislation, reserved a seat on the Commission for a representative from the county's major city. Each agency that is eligible to have one of its officials seated on the Commission must contribute to the LAFCO budget. The amount of this contribution is determined by statute, and varies in each county.

**Responsibilities** - LAFCOs are responsible for coordinating logical and timely changes in local governmental boundaries, conducting special studies that review ways to reorganize, simplify, and streamline governmental structure and preparing a sphere of influence for each city and special district within each county. The Commission's efforts are directed toward seeing that services are provided efficiently and economically while agricultural and open-space lands are protected. To better inform itself and the community as it seeks to exercise its charge; each LAFCO must conduct service reviews to evaluate the provision of municipal services within each county.

### **LAFCOs' Authority**

**Boundary Changes** - LAFCOs regulate, through approval or denial, the boundary changes proposed by other public agencies or individuals. LAFCOs do not have the power to initiate boundary changes on their own, except for proposals involving the dissolution or consolidation of special districts and the merging of subsidiary districts. Typical applicants might include:

- Individual home owners requesting annexation to a sewer district due to a failing septic system.
- Developers seeking annexation to cities in order to obtain urban services for new housing.
- Cities wishing to annex pockets or "islands" of unincorporated land located within their borders in order to avoid duplication of services with the county.

**Initiation of Special District Consolidations** - As of July 1, 1994, LAFCOs have the authority to initiate proposals that include the dissolution or consolidation of special districts, or the merging of an existing subsidiary district. Prior to initiating such an action, LAFCO must determine that the district's customers would benefit from the proposal through adoption of a sphere of influence or other special study.

**Out of Agency Service Agreements** - Cities and special districts are required to obtain LAFCO's approval prior to entering into contracts with private individuals or organizations to provide services outside of the agency's boundaries

**Sphere of Influence Studies** - In 1972, LAFCOs were given the power to determine spheres of influence for all local governmental agencies. A sphere of influence is a planning boundary outside of an agency's legal boundary that designates the agency's probable future boundary and service area. Factors considered in a sphere of influence review focus on the current and future land use, the current and future need and capacity for service, and any relevant communities of interest. With the passage of the CKH Act, spheres for all cities and special districts are reviewed every five years.

The purpose of the sphere of influence is to ensure the provision of efficient services while discouraging urban sprawl and the premature conversion of agricultural and open space lands by preventing overlapping jurisdictions and duplication of services. Commissions cannot tell agencies what their planning goals should be. Rather, on a regional level, LAFCOs coordinate the orderly development of a community through reconciling differences between agency plans so that the most efficient urban service arrangements are created for the benefit of area residents and property owners.

***Municipal Service Reviews*** – On January 2001, the Cortese-Knox-Hertzberg Local Government Reorganization Act became the governing law of LAFCOs. One change brought by this Act was the creation of a new LAFCO function, the Municipal Service Review. California Government Code Section 56430 states that prior to any review of a sphere of influence, the Commission is required to conduct a service review (a comprehensive evaluation of the ability of the agency to provide service within its existing jurisdiction and within its sphere). The term “municipal services” generally refers to the full range of services that a public agency provides or is authorized to provide. The definition is modified under the CKH Act, however, because LAFCO is only required to review services provided by agencies with SOIs. Therefore, general county government services, such as courts and social services, are not required to be reviewed.

The statewide requirement for service reviews is in response to the need for a more coordinated and efficient public service structure to support California’s anticipated growth. The service review provides LAFCO with a tool to comprehensively study existing and future public service conditions and to evaluate organizational options for accommodating growth, preventing urban sprawl, and ensuring that critical services are efficiently provided.

### **MSR Determinations**

As part of any service review Government Code Section 56430 requires Commissions to prepare written statements or determinations for nine categories. Determinations are not findings of fact, rather, they are “...declaratory statements that make a conclusion, based on all the information and evidence presented to the Commission.” The determinations are based on a comprehensive analysis of local agency service information. The Commission, other agencies, or the public may use these determinations to provide guidance for future decisions; however, the determinations themselves do not represent recommendations for action. Below is a brief commentary for each “determination”.

***Determination 1: Infrastructure Needs or Deficiencies*** - Refers to the adequacy of existing and planned public facilities in relation to how public services are, and will be provided. Infrastructure can be evaluated in terms of capacity, condition, availability, quality and amount with a correlation to operational, capital improvement, and/or finance plans. There may be unmet infrastructure needs due to budget constraints or other factors; however identification of efficiencies may promote public understanding and support for needed improvements.

***Determination 2: Growth and Population Projections*** - Efficient provision of public services is linked to an agency’s ability to plan for future need. For example, a water purveyor must be prepared to supply water for existing and future levels of demand and also be able to determine where future demand will occur. The municipal service review evaluates whether projections for future growth and population patterns are integrated into an agency’s planning function.

***Determination 3: Financing Constraints and Opportunities*** - To assess whether agencies are capitalizing on financing opportunities. For example, a service review could reveal that two or more water agencies that are each deficient in storage capacity and, which individually lack financial resources to construct additional facilities, may benefit from creating a joint venture to finance and construct regional storage facilities. Service reviews may also disclose innovations for contending with financing constraints, which may be of considerable value to numerous agencies.

**Determination 4: Cost Avoidance Opportunities** - The MSR may explore cost avoidance opportunities including, but not limited to: (1) eliminating duplicative services; (2) reducing high administration to operation cost ratios; (3) replacing outdated or deteriorating infrastructure and equipment; (4) reducing inventories of underutilized equipment, building, or facilities; (5) redrawing overlapping or inefficient service boundaries; (6) replacing inefficient purchasing or budgeting practices; (7) implementing economies of scale; and (8) increasing profitable outsourcing.

**Determination 5: Opportunities for Rate Restructuring** - Agency rates may be examined for: (1) rate setting methodologies; (2) conditions that could impact future rates; and (3) variances among rates, fees taxes, charges, etc., within an agency. Service reviews may identify strategies for rate restructuring, which would further the LAFCO mission of ensuring efficiency in providing public services.

**Determination 6: Opportunities for Shared Facilities** - Sharing facilities and excess system capacity decreases duplicative efforts, may lower costs, and minimizes unnecessary resource consumption. The service review inventories facilities within the study area to determine if facilities are currently being used to capacity and whether efficiencies can be achieved by accommodating the facility needs of adjacent agencies. Options for planning future shared facilities are also considered.

**Determination 7: Government Structure Options, Including Advantages and Disadvantages of Consolidation or Reorganization of Service Providers** – The MSR may study existing and future public service conditions and to evaluate organizational options for accommodating growth, preventing urban sprawl and ensuring that critical services are efficiently and cost-effectively provided. LAFCOs may examine efficiencies that could be gained through: (1) functional reorganizations within existing agencies; (2) amending or updating spheres-of-influence; (3) annexations or detachments from cities or special districts; (4) formation of new special districts; (5) special district dissolutions; (6) mergers of special districts with cities; (7) establishment of subsidiary districts; or (8) any additional reorganization options found in Govt. Code Section 56000 *et. seq.*

**Determination 8: Evaluation of Management Efficiencies** - Management efficiency refers to the effectiveness of an agency's internal organization to provide efficient, quality public services. Efficiently managed agencies consistently implement plans to improve service delivery, reduce waste, eliminate duplications of effort, contain costs, maintain qualified employees, build and maintain adequate contingency reserves, and encourage and maintain open dialogues with the public and other public and private agencies.

**Determination 9: Local Accountability and Governance** - Local accountability and governance refers to public agency decision making and operational and management processes that: (1) include an accessible and accountable elected or appointed decision making body and agency staff; (2) encourage and value public participation; (3) disclose budgets, programs, and plans; (4) solicit public input when considering rate changes, work plans and infrastructure plans; and (5) evaluate outcomes of plans, programs, and operations and disclose results to the public.

## **Review of Agency Spheres of Influence**

Since 1971, LAFCOs have been obligated to develop and adopt a sphere of influence for each city and special district within the county. The statute states that the “Commission shall develop and determine the sphere of influence of each local governmental agency within the county and enact policies designed to promote the logical and orderly development of areas within the sphere.” (Government Code Section 56425). LAFCO is prohibited from approving a boundary change that is inconsistent with the adopted sphere for the affected agencies.

As noted above, the Act requires LAFCO, to “review and update, as necessary, the adopted sphere not less than once every five years.” (Government Code Section 56425(f)). The direct relationship between MSRs and Sphere of Influence Updates is in Government Code Section 56430, which states, “In order to prepare and to update spheres of influence in accordance with Section 56425, the Commission shall conduct a service review of the municipal services provided in the county or other appropriate area designated by the commission.”

**Public Involvement** - Citizens are welcome and encouraged to attend regular LAFCO meetings and state their views during public hearings on proposals before the Commission. In addition, the meetings provide an excellent opportunity for citizens to familiarize themselves with the growth, development, and inter-jurisdictional issues facing their county. Each MSR is subject to public and agency consideration and comment prior to final consideration by Madera LAFCO. Copies of the minutes, meeting agenda, and staff reports are available by contacting the Madera County Local Agency Formation Commission office at 209 West Yosemite Avenue, Madera, CA 93637 – phone (559) 675-7821.



### 3.0 BACKGROUND

#### Regional Setting - Madera County

Madera County is located in the San Joaquin Valley approximately 20 miles north of the Fresno-Clovis Metropolitan Area. The geographic area of Madera County is 1,374,160 acres (2,147 square miles). Two cities are located in the County, Chowchilla and Madera. There are also a number of unincorporated communities including: Ahwahnee, Bass Lake, Coarsegold, Fairmead, Madera Ranchos, North Fork, Oakhurst, O'Neals, Raymond, and Rolling Hills.

Madera County is one of the fastest growing counties in California. In 2000, the US Census reported the population to be 123,109. Between 1990 and 2000, Madera County's population increased by 39.8%. California's total population growth for the same period was 13.6%. According to the State of California, Employment Development Department, Labor Market Information Division, the projected population by the year 2020 is 224,600 persons, an increase of 151% over the 1990 population of 89,300.

**Table 1  
Madera County Population**

<b>Region/ Community</b>	<b>Jan. 1, 2005 Population</b>	<b>Jan. 1, 2006 Population</b>	<b>% of Change</b>
<b>Madera County</b>	140,747	144,396	2.6
<b>City of Madera</b>	50,742	52,584	6.5
<b>City of Chowchilla</b>	16,049	17,089	3.6
<b>Balance of County</b>	73,956	74,723	1.0
<i>Source: California Department of Finance - E-1: City/County Population Estimates with Annual Percent Change - January 1, 2005 and 2006</i>			

Madera County is located in one of most productive agricultural regions in the nation. Of the estimated 250 crops grown in the Valley, more than 80 are cultivated within the County. The total value of agricultural commodities produced in Madera County exceeds \$700 million dollars annually. Madera County ranks fourteenth among California counties in overall agriculture production and twenty-third among the 4,000 counties in the United States.

#### Special Districts in California

California local government consists of counties, cities, school districts, and special districts. California has nearly 3,400 special districts each performing separate functions. Special districts are limited purpose local governments – separate from cities and counties. Within their boundaries, special districts provide focused public services such as fire protection, sewers, water supply, electricity, parks, recreation, sanitation, cemeteries, and libraries. Districts’ service areas range from a few acres to thousands of square miles crossing city and county lines. Special districts have substantially the same general powers as cities and counties (except land use control). Most districts also have the statutory power to issue bonds, and some have the power to adopt ordinances.

All districts operate under either a *principal act* or a *special act*. A *principal act* is a generic state law that applies statewide to all special districts of that type. There are about 60 principal acts. The chart below shows some of the most common principal act districts. A *special act* is a law that the Legislature tailored to the unique needs of a specific area. There are about 120 special act districts. Examples are: Kern County Water Agency, Fairfield-Suisun Sewer District, and Humboldt Bay Harbor, Recreation, and Conservation District.

Nearly 85% of California's special districts are single function districts, which provide only one service such as fire protection, mosquito abatement, or waste disposal. The remaining districts are multi-function districts providing two or more services. For example, several municipal utility districts provide fire protection and park services in addition to utility services. Fire protection districts often provide ambulance services too. County Service Areas (CSAs) can provide any service that a county can provide. A district's name does not always indicate which services it provides or is authorized to provide.

Special districts generate revenue from several sources including property taxes, special assessments, and fees. Enterprise districts run much like business enterprises and provide specific benefits to their customers. These districts are primarily funded through fees that customers pay for services. About 27% of special districts are enterprise districts and include airport, harbor, hospital, transit, waste disposal, and utility districts. In 2003-04, enterprise districts generated about \$18.3 billion in revenues.

Non-enterprise districts deliver services that provide a general benefit to entire communities. These services, such as fire protection, flood control, cemeteries, and road maintenance, do not lend themselves to fees. Non-enterprise districts rely primarily on property taxes for their revenues. In 2003-04, non-enterprise districts generated about \$10.5 billion in revenues.

Special districts are required to comply with the Brown Act, the Public Records Act, the Political Reform Act, and the Initiative, Referendum /Recall Procedures. Additionally, the state provides critical oversight to special district operations. Special districts are required to submit annual financial reports, including an annual financial audit and its adopted budget, to the State Controller. Most special districts are also subject to the authority of LAFCO.

Special districts can be classed as dependent or independent. Dependent districts are legal subdivisions of counties or cities and are governed by the county board of supervisors or the city council. Most dependent districts have been established to enable a county or city to apply a special tax to a specific area of benefit.

Independent districts are legal subdivisions of, and derive their powers from the state. Typically they are governed by independently elected local boards and have authority under state law to tax, spend, issue bonds to finance capital improvements, and establish their own administrative structures. Independent districts have been created primarily to perform public services either not feasible or not cost-effective for cities and counties to perform. The districts examined in this MSR are independent districts.

Special districts are primarily accountable to the voters who elect their boards of directors and the customers who use their services. However, although they are not functions of the state, the state also provides critical oversight to special district operations. Special districts must submit annual financial reports to the State Controller and must also follow state laws pertaining to public meetings, bonded debt, record keeping and elections.

## **Irrigation Water Districts**

Irrigation Water Districts were authorized by the Wright Act of 1887 and later by the Irrigation District Law of 1897. The area of an irrigation district may encompass any land irrigable from a common source and by the same system, including non-contiguous land, but not including land in another irrigation district without that district's consent. Although the basic purpose of the irrigation district is to furnish water for agriculture, the area of the district may include residential and business property, and, in fact, many irrigation districts now serve areas that have become predominantly urban.

An irrigation district is formed by a petition of the landowners within the proposed district to the board of supervisors of the county where most of the land is located, followed by a majority vote of the voting residents of the proposed district. The district is governed by a board of three or five directors, who may be elected by divisions or at large, and who must be freeholders in the district. Any registered voter living in the district is eligible to vote in any district election. Irrigation districts are empowered to put water, including wastewater, to any beneficial use; to provide drainage; to develop and distribute electric power; to make water allocations to crops and acreage in certain situations; to operate flood control facilities (if district is 200,000 acres or more); and to construct and operate incidental recreational facilities.

## **California Water Districts**

The formation of a California Water District (CWD) is authorized by the California Water District Code. Like irrigation districts, California Water Districts service areas that are predominantly agricultural, but some also serve urban and suburban areas. They can serve any land within an area capable of using water beneficially for irrigation, domestic, industrial, or municipal purposes, and which can be served from a common source by the same system of works. Non-contiguous parts of the district can be separated by no more than two miles. The area of the district can include land in other water districts having different purposes.

A CWD is formed by petition of landowners holding a majority of the area of the proposed district, if all lands are contiguous, or a majority of the assessed value within each non-contiguous segment, followed by a vote of landowners at an election. Voting is based on one vote per dollar of assessed value of land owned, although there are provisions for changing to resident voting (one person - one vote), and resident voting is required for bonds if 50 percent or more of the inhabited assessable area is zoned for other than agricultural use. The district forms with four to six directors, elected by division and the number can be increased after four years to seven, nine, or eleven. Directors must be landowners in assessed value-voting districts, residents and registered voters in resident-voting districts.

CWDs are empowered to produce, store, and distribute water; drain lands and reclaim water for public use; collect, treat, and dispose of sewage, waste, and stormwater upon approval of the electorate; and allocate water under certain circumstances to crops and acreage. Because of their power to contract for territory to become part of federal and state irrigation and reclamation projects, many water districts have been formed to serve water from the federal Central Valley Project and the State Water Project.

## Regulatory Framework

**Madera County Domestic/ Agricultural Water Supply Policies** - Madera County adopted “Domestic Water Supply Policies” in its 1995 General Plan. These policies influence the provision of water by special districts. These policies limit approval of new urban development only if an adequate water supply to serve the development is demonstrated based on the following guidelines for water supply:

1. Urban and suburban development should rely on community water systems.
2. Rural communities should rely on community water systems. Individual wells may be permitted in cases where no community water system exists or can be extended to the property but development will be limited to densities which can be safely developed with wells.
3. Agricultural areas should rely on public water systems where available, otherwise individual water wells are acceptable.

Development is limited in areas identified as having severe water table depression to uses that do not have high water usage or to uses served by a surface water supply. Water supplies serving new development are required to meet state water quality standards, and the County requires all new development adjacent to bodies of water used as domestic water sources to adequately mitigate potential water quality impacts on these water bodies. The County promotes efficient water use and reduced water demand by:

1. Requiring water-conserving design and equipment in new construction;
2. Encouraging water-conserving landscaping and other conservation measures;
3. Encouraging retrofitting existing development with water-conserving devices; and
4. Encouraging use of recycled or gray water for landscaping.

The County promotes the use of reclaimed wastewater to offset the demand for new water supplies, and the use of surface water for agricultural use to reduce groundwater table reductions. Additionally, County policies support opportunities for groundwater users in problem areas to convert to surface water supplies.

Madera County also adopted “Agricultural Water Supply Policies” in its 1995 General Plan, which influences the provision of water by special districts. These policies encourage water conservation by farmers. To this end, the County supports efforts to provide information on irrigation practices through the Agricultural Commissioner and U.C. Cooperative Extension. The County also supports conservation efforts of the California Farm Bureau, U.S. Soil Conservation Service, resource conservation districts, and irrigation districts. Programs for the agricultural re-use of reclaimed water are also supported. The policies require Madera County to work with local irrigation districts to preserve local water rights, and to oppose public and private sales of water rights to users outside Madera County.

*Source: Madera County General Plan Final EIR, October 1995 - Chapters: Public Facilities and Services – Policies 3.C.1-12.*

## California Department of Water Resources

The California Department of Water Resources (DWR), through its *California Water Plan* provides a framework for water managers, legislators, and the public to consider options and make decisions regarding California’s water future. The Plan, which is updated every five years, presents basic data and information on California’s water resources including water supply evaluations and assessments of agricultural, urban, and environmental water uses to quantify the gap between water supplies and uses. The Plan also identifies and evaluates existing and proposed statewide demand management and water supply augmentation programs and projects to address the State’s water needs.

## Urban Water Management Plan

In 1983, the California State Legislature required urban water suppliers to adopt *urban water management plans* (AB 797, Klehs, 1983; Water Code §10620). An *urban water supplier* is any public or privately-owned water supplier with more than 3,000 customers (Water Code §10617). State law spells out the contents of an urban water management plan (Water Code §10632), which must:

- Describe the supplier's service area, including its demographics.
- Identify existing and planned water sources, with details for groundwater.
- Describe water reliability for average, single-dry, and multiple-dry years.
- Describe opportunities for water exchanges or transfers.
- Quantify water use for specific types of users.
- Describe the supplier's water demand management measures.
- Evaluate the water demand management measures that aren't used.
- Describe the water supply projects and programs that may meet needs.

In addition, an urban water management plan must provide an urban water shortage contingency analysis, information on recycled water, and information on water quality (Water Code Sections 10632, 10633, and 10634). An important component of every urban water management plan is an assessment of water reliability service during normal, dry, and multiple-dry years (AB 1845, Cortese, 1995; Water Code Section 10635). Urban water suppliers are required to revise their urban water management plans at least every five years in years that end in "0" and "5," after consulting with the underlying cities and counties (AB 2552, Bates, 2000; Water Code Section 10621).

**Required Information (Groundwater)** - Water Code Section 10910 requires additional specific information if the water sources that will serve the proposed project includes groundwater. Amendments to the Urban Water Management Planning Act (Water Code Section 10631), effective January 1, 2002, specify that the following topics must be examined:

- Groundwater Management Plan
- Description of the Groundwater Basin
- Adjudication Status of the Groundwater Basin
- Sufficiency of Groundwater Supply
- Groundwater Pumping Projection

**Ground Water Management Plans** - Pursuant to AB3030 all water purveyors must have ground California water management plan. The purpose of Groundwater Management Plans is to describe existing groundwater management programs and to formally document a district's groundwater management responsibility to ensure that groundwater resources are sustained and protected. The following groundwater management programs are typically included in these plans:

- Groundwater supply management programs that replenish the groundwater basin, sustain the basin's water supplies, help to mitigate groundwater overdraft, and sustain storage reserves for use during dry periods.
- Groundwater monitoring programs that provide data to assist the District in evaluating and managing the groundwater basin.
- Groundwater quality management programs that identify and evaluate threats to groundwater quality and prevent or mitigate contamination associated with those threats.

(Source: Water Education Foundation <http://www.water-ed.org/watersources/default.asp>)

## **Department of Health Services (DHS)**

In California, the Department of Health Services (DHS) is responsible for regulating drinking water and for monitoring approximately 7,500 public water systems to assure the delivery of safe drinking water to all Californians. For small systems with 200 or fewer connections, the DHS' Drinking Water Field Operations Branches (DWFOB) work with county health departments, planning departments, and boards of supervisors that have primary regulatory oversight.

## **Water Supply in Madera County**

For information about water supply in Madera County, municipal water (*drinking water*), non-municipal water suppliers, and the Central Valley Project (CVP), please refer to ***Appendix A*** at the end of this report.

## 4.0 Other Water Suppliers *(Not Evaluated in this Study)*

### Introduction

There are a number of water suppliers in Madera County that are not evaluated in this study. These included municipal purveyors, county maintenance districts, and community water systems. Some of these suppliers will need a separate MSR (i.e., City of Madera), others are outside the jurisdiction of LAFCO (i.e., Columbia Canal Company). Below is a summary of other water suppliers in the County that were not evaluated in this report.

### Private Water Purveyors

**Community Water Systems** - A number of areas in Madera County are served by private community water systems. These water systems are classified as either “large” or “small” water systems, depending on the number of connections. The small community water systems have between 15 and 199 connections. Large water systems have a minimum of 200 service connections and are regulated by the State Department of Health Services, Division of Drinking Water. Under state regulations, each system is inspected annually and monitored for possible contamination and necessary system improvements. Groundwater (wells) is the primary supply of water for the large systems. The majority of small systems also use wells as the primary water source, with a small number relying on surface water and natural springs. Examples of private community water systems are listed below:

- Bass Lake Water Co – serving the Bass Lake area, including the communities of The Falls and Bass Lake County.
- Beasore Meadows Water System - serving Beasore Meadows Subdivision No. 1 located approximately 13 miles northeast of unincorporated community of Bass Lake.
- Central Camp Water Co - serving the unincorporated area known as Central Camp, and vicinity.
- Hillview Water Co – serving Hillview Estates, Sunnysdale, Goldside, Coarsegold Highlands Subdivision, Royal Oaks Estates near Oakhurst, and Sierra Lakes Tracts.
- Yosemite Spring Park Utility - limited to serving Yosemite Lakes Subdivision located about 2 miles west of State Highway 41 and 5 miles south of Coarsegold.

**Madera Valley Water Company** - Located several miles north of the city of Madera, the Madera Valley Water Company serves its 1,738 residential customers in a 1,300 acre area exclusively with groundwater drawn from wells located within the distribution system. Currently, six wells discharge into a single pressure zone with a capacity of 5,700 gpm—sufficient to meet current peak day and peak hour needs. Since the system includes no storage tanks and is connected to no other water utilities, the wells must be able to provide enough water to meet customers' peak hour needs. Originally an un-metered system, new connections since the early 1990s have been installed with water meters so customers have an accurate record of their water use.

**Columbia Canal Company** - The Columbia Canal Company is an incorporated mutual water company with the Articles of Incorporation approved on April 3, 1926. The Columbia Canal Company delivers irrigation water under rules and regulations adopted April 25, 1966 and amended May 23, 1995. The Columbia Canal Company is located in the valley trough area of the central San Joaquin Valley north of the City of Mendota and east of the City of Firebaugh. Most of the lands in the Columbia Canal Company are located adjacent to and east of the San Joaquin River in Madera County with a small area of

Columbia Canal Company lands south of the San Joaquin River in Fresno County. The Columbia Canal Company encompasses a gross service area of 16,500 acres. Water service is provided to about 15,392 gross irrigable acres with the remaining 1,108 acres used for various Columbia Canal Company facilities. The primary source of irrigation water is from surface deliveries. Additional irrigation water is provided from Columbia Canal Company and grower owned wells.

Private water purveyors were not included in this study because they are not subject to LAFCO oversight and regulations.

### **East Side Water District**

In September of 1985 Madera County submitted an application to LAFCO requesting the formation of the East Side Water District, consisting of 57,660 acres, generally located north of the San Joaquin River, portions south of Highway 145, generally east of the Santa Fe Railroad Tracks, and encompassed the following residential subdivisions: Rolling Hills, Madera ranchos, Bonadelle Ranchos - (south), Bonadelle Ranchos #10, River Road Estates and a portion of Parksdale. The area generally consists of dry irrigated agricultural lands with approximately five major subdivisions. There were also many residential areas scattered throughout this region that consisted of 5-10 acre parcels. The residential population at the time of the application was approximately 4,800 with about 1,400 single-family dwellings and there were four industrial operations within this previously proposed district.

East Side Water District not included in this study because the district was never formed due to the fact that surface water entitlements could not be secured.

Sources: <http://www.dhs.ca.gov/ps/ddwem/technical/dwp/smallwatersystemsunit.htm>,  
Madera County General Plan Final EIR, October 1995 - Chapters: Public Facilities and Services,  
[www.epa.gov/safewater/smallsys/ssinfo.htm](http://www.epa.gov/safewater/smallsys/ssinfo.htm).

### **Municipal/Domestic Water Supply**

**City of Madera Domestic Water System** - The City of Madera maintains its own domestic water system taken largely from the Madera Water Basin. Municipal users rely completely on groundwater supplies (domestic production wells). The City extracts groundwater via wells scattered throughout the City. Existing water system facilities include 13 active wells, a network of water mains with line sizes ranging from two inches to 14 inches in diameter, and an elevated storage tank with a capacity of one million gallons. Recent completion of the City's Water System Master Plan provides the City with a tool for planning water supply to the year 2020. The Water System Master Plan evaluated the existing system with focus on the following areas; 1) supply facilities and storage, 2) emergency water supply capabilities, 3) distribution system, and 4) groundwater conditions.

The groundwater basin is recharged primarily by rainfall and infiltration, storm water runoff, infiltration from irrigated ditch flows and seepage in the Fresno River bottom, and water conservation recharge to natural sloughs in the nearby agricultural area. The current long-term regional trend, including the Madera area, is of a lowering groundwater table. Before extensive pumping began in the area, groundwater in the Madera and Chowchilla area moved generally southwestward from the Sierra Nevada toward the Valley trough west of Madera. Presently, groundwater in the unconfined aquifer also moves toward local pumping depressions. Isolated cones of depression are found near areas of high pumping such as the City of Madera.



The City extracts groundwater via wells located throughout the City. Existing water system facilities include 16 active wells, a network of water mains with line sizes ranging from two inches to 14 inches in diameter, and an elevated storage tank with a capacity of one million gallons. The City's Master Plan for Water Facilities does not currently provide services to the Project site. That Plan must be amended as a part of this application process, and a program developed to provide for community water service to the property.

**City of Chowchilla Domestic Water System** - The City of Chowchilla operates its own domestic water system, operated by the Water Division of the Public Services Department. The department oversees the provision of drinking water and water for fire protection for the entire community. The Water Division operations and maintains 9 water wells and 37 miles of main distribution lines. The Water Division also manages a City-wide water conservation program that runs annually from April through October. Stormwater and treated wastewater is returned to groundwater aquifers through percolation ponds.

Municipal water purveyors were not included in this study because they are not directly subject to LAFCO oversight and regulations. Evaluation of these systems may be included in the MSR for the cities of Madera and Chowchilla.

### **County Operated Water Systems**

Madera County operates and administers small public water systems. These are operated as "maintenance districts and/or service areas". Nearly all these systems rely on groundwater. These systems provide drinking water to more than 7,000 residents and a number of commercial and public uses (i.e., schools). The Board of Supervisors acts as the Board of Directors for, and on behalf of each property owner in these districts. The Engineering Department, Special Districts Department, oversees the daily operations of County water districts. The Special Districts Department has approximately 20 employees working throughout the County to maintain approximately 30 water systems and 15 sewer systems. Districts vary in size from as few as 6 connections to nearly 1000 connections.

County administered water systems were not evaluated in this report by Commission policy, due to the stand alone, isolated nature of these County administered service providers.



## 5.0 ANALYSIS, DETERMINATIONS AND RECOMMENDATIONS

### Introduction

In this document eight (8) public water districts are examined. Each district has been evaluated separately under its own service review. The locations of the districts are shown on Figure 1. Below is a list of the districts included in this study:

- Aliso Water District
- Chowchilla Water District
- Clayton Water District
- Gravelly Ford Water District
- Madera Irrigation District
- Madera Water District
- New Stone Water District
- Root Creek Water District

The Chowchilla, Gravelly Ford Water Districts, Madera Irrigation District and Madera Water District are active special districts. The Root Creek and Aliso Water Districts have been formed for future deliveries, but at this writing have not provided water service. The Clayton and New Stone Water Districts are legally “inactive” districts.

Each district is evaluated (on alphabetically order) in separate chapters in this report. They have been grouped into one MSR document chiefly because they all provide (or intended to provide) similar services (water). Because each district is evaluated individually, the Commission will need to adopt written determinations for each individual district examined pursuant to Government Code Section 56430. The determinations address the nine factors listed below:

1. Infrastructure needs or deficiencies.
2. Growth and population projections for the affected areas.
3. Financing constraints and opportunities.
4. Cost avoidance opportunities.
5. Opportunities for rate restructuring.
6. Opportunities for shared facilities.
7. Government structure options.
8. Evaluation of management efficiencies.
9. Local accountability and governance.

These nine factors make up the structure this report, and discussions of these factors provide the principals analysis for each district. The information, determinations and recommendations presented in this study are based on the following resources.

- Answers by the districts to a questionnaire prepared by Madera LAFCO;
- Personal communications with district staff, officers and board members;
- Interviews with individuals knowledgeable about water districts in the County;
- A review of district annual Reports, district public records and boundary maps;

- A records search at the district offices, Madera County LAFCO, and the Madera County Assessors and Recorders offices;
- Information obtained from agencies such as the State Board of Equalization, State Auditor's Annual Report on Special Districts and the Water Resources Board;
- Review of documents prepared by the districts such as mandatory AB 3030 reports, allows certain defined existing local agencies to develop a groundwater management plan in groundwater, and the district's Water Management Plans (DWMP); and
- Review of pertinent literature and Internet research.

## 5.1 ALISO WATER DISTRICT

10302 Avenue 7 ½, Firebaugh, CA 93622

Contact: Roy Catina, Manager (559) 659-1483

The Aliso Water District was formed on April 18, 1978, and operates under the provisions of the California Water Code. The District boundaries encompass approximately 24,808 acres (Figure 4). The District boundary overlies the Madera Groundwater Basin (the “Basin”). The District is administered by an elected Board, independent from the Board of Supervisors. The District’s principal function is to assist growers in the protection and management of the groundwater resources within it’s boundaries in order to meet present and future water needs.

The District currently utilizes groundwater and does not have any surface water entitlements. All water use by the District’s growers comes from groundwater extractions. It is not anticipated that surface water will be available on a reliable basis in the foreseeable future. It is the specific goal of the District to monitor the Madera Basin for potential overdraft and to stabilize groundwater levels at the most beneficial levels practical. The District will take actions to enhance and preserve the long-term viability of the groundwater supply within the District’s service area with respect to both quantity and quality.

**Groundwater** - Although groundwater levels within the District vary from year to year due to hydrologic and other conditions, water users within the District have historically extracted adequate acre feet per year within the District’s boundaries. As a result of the 1986-1992 drought, the Department of Water Resources designated the Madera Basin as critically over drafted. This designation was based on: soil subsidence, increasing groundwater pumping lifts, associated costs and energy usage (Bulletin 118-8, Page 46). Bulletin 118- 80 also reported water quality degraded from land reclamation. Although the Basin is designated as critically over drafted, water level measurements taken within the District suggest that flood releases from Friant Dam in 1993 increased groundwater elevations within the District’s boundaries to acceptable levels.

The District is interested in investigating groundwater recharge and groundwater banking programs. In particular, the District wishes to explore indirect or “in lieu” recharge programs which might involve purchasing surplus surface water to minimize groundwater extractions. Although the District does not currently have its own distribution system, private canals located within the District have the potential for use as conveyance facilities for a surface water supply.

The District also intends to pursue the acquisition of new water supplies should they become available at affordable costs, and will support the development of new surface storage and water supply projects.

*(Source: Aliso Water District “Groundwater Management Plan”).*

### 2. Infrastructure Needs or Deficiencies

**Purpose:** *To evaluate infrastructure needs and deficiencies in terms of supply, capacity, condition of facilities, and service quality.*

As noted, at this time the District’s principal function is to assist growers in the protection and management of the groundwater resources within it’s boundaries in order to meet present and future water needs. Water users within the District have historically extracted adequate acre feet per year within the District’s boundaries. The District does not have its own distribution system or private canals. However,

if a surface water supply could be obtained it could be conveyed to District landowners and water users for direct or in-lieu recharge using private canals located within the District.

**Determination:** *The District pursues a long-term strategy to reduce reliance on ground water. The District has existing private canals that could potentially be used as conveyance facilities if a future surface water supply is obtained. The District does not currently have its own distribution system and it has no immediate infrastructure needs or deficiencies.*

## **2. Growth and Population Projections for the Affected Area**

**Purpose:** *To evaluate service needs based on existing and anticipated growth patterns and population projections.*

Demand on the Madera groundwater basin underlying the District is expected to increase with urban growth. As a result of the 1986-1992 drought, the District faced a temporary overdraft condition, however, water level measurements taken within the District suggest that elevations within the District's boundaries to current acceptable levels.

**Determination:** *Although competition for groundwater from outside the District has the potential to adversely impact groundwater availability, there currently appears to be adequate groundwater available to serve District water users.*

## **3. Financing Constraints and Opportunities**

**Purpose:** *To evaluate factors that affect the financing of needed improvements.*

The District Board adopts an annual budget and oversees expenditures throughout the fiscal year. The District has annual audits conducted by Blankenship & Company, Certified Public Accountants,. The audits are submitted to the County Auditor, pursuant to the Health and Safety Code. As with all special districts, the County of Madera maintains the general ledger for the Aliso Water District.

*Accounting and Investments* – The District uses the accounting system prescribed by the State Controller's Office and State Regulations governing Special Districts. The District invests funds in financial instruments with limited interest rate risk. It has the authority to fix ratios and charges for commodities and services furnished. It may also incur indebtedness and issue bonds, subject tot voter approval. The District utilizes the direct write-off method for bad debts.

*Independent Auditor's Report* – The District's accountants prepare the Independent Auditor's Reports. The audits are conducted in accordance with generally accepted standards and state law. The most recent audit reviewed (June 2006) found the District's financial records to be in good order. The tables below provide information about the District's "Financial Statements" and the "Independent Auditor's Report" for years ending December 31, 2004, 2003, and 2002 (prepared in June 2006).

**Table 2**  
**Aliso WD Statement of Income**  
**Years Ended December 31, 2004, 2003, 2002**

	<b>2004</b>	<b>2003</b>	<b>2002</b>
Operating Revenue – Voluntary contributions	-0-	\$8,582	\$7,442
Operating Expenses – Advertising	-0-	\$46	-0-
Operating Expenses – Amortization	-0-	-0-	-0-
Operating Expenses – Bank charges	-0-	-0-	\$14
Operating Expenses – Engineering	\$3,000	\$2,000	\$6,000
Operating Expenses – Legal Expenses	\$1,032	\$1,900	\$1,691
Operating Expenses – Accounting	\$500	\$575	\$500
<b>Total Operating Expenses</b>	<b>\$4,032</b>	<b>\$4,521</b>	<b>\$8,205</b>
Operating (loss) Income	(\$4032)	\$4061	(\$763)
Non-Operating Income – Interest Income	\$3	\$4	\$7
<b>Net Income (Loss)</b>	<b>(4,029)</b>	<b>\$4,065</b>	<b>(\$756)</b>

Source: Aliso Water District

**Table 3**  
**Aliso WD Statement of Changes in Fund Equity**  
**Years Ended December 31, 2004, 2003, 2002**

	<b>2004</b>	<b>2003</b>	<b>2002</b>
Balance, January 1	\$7,314	\$3,249	\$4,005
Net (loss) Income	(\$4,029)	\$4,065	(\$756)
<b>Balance, December 31</b>	<b>\$3,285</b>	<b>\$7,314</b>	<b>\$3,249</b>

Source: Aliso Water District

**Table 4**  
**Aliso WD Statement of Cash Flows**  
**Years Ended December 31, 2004, 2003, 2002**

	2004	2003	2002
Cash Flows from Operating Activities Net (loss) Income	(\$4,029)	\$4,065	(\$756)
Adjustments to reconcile net income to net cash provided by operating activities	-0-	-0-	\$453 (Increase) decrease in account receivable
Net Cash (used) Provided by Operations	(\$4,029)	\$4,065	(\$303)
Net (decrease) Increase in Cash and Cash Equivalents	(\$4,029)		
Cash and cash equivalents at start of year	\$7,314	\$3,249	\$3,552
Cash and cash at end of year	\$3,285	\$7,314	\$3,249

*Source: Aliso Water District*

The District uses best management practices in managing its financial resources. There are no apparent short or long-term fiscal constraints limiting the ability of District to carry out its primary functions.

**Determination:** *The Aliso Water District is financially autonomous and limited to funding sources allowed under State Law. No property tax revenue is collected for the District. The District's operating revenues are solely obtained from donations by landowners within the District. Historically, all donation requests are paid in full by all members. There are no apparent short or long-term fiscal constraints limiting the ability of District to carry out its primary functions.*

#### **4. Cost Avoidance Opportunities**

**Purpose:** *To identify practice or opportunities that may help eliminate unnecessary costs.*

All landowners within Aliso Water District independently pump groundwater from on-site wells for their sole use. All pumping costs, including electrical, are paid for by individual landowners. The District is operated by a voluntary manager. Additionally, the District uses outside consultants for engineering, legal, and financial services and contracts for outside labor and other services as needed.

**Determination:** *The District has a well-established budget process that avoids unnecessary costs. All landowners within the District pump groundwater from on-site private wells for their sole use and all associated costs of pumping groundwater are paid for by that landowner. Management costs of the District are kept minimal.*



## 5. Opportunities for Rate Restructuring

**Purpose:** *To identify opportunities to positively impact rates without decreasing service levels.*

Under AB 3030, the District is authorized to levy equitable water management fees or assessments for groundwater management under its GWMP based upon the amount of groundwater extracted from the Basin to pay for costs incurred by the District for groundwater management under the program. Such costs include, but are not limited to, the acquisition of replenishment water, administrative and operating costs, and costs of construction of capital facilities necessary to implement the program.

The Aliso Water District does not collect fees or impose assessments on the extraction and replacement of groundwater since all costs for running farm wells are paid by each landowner as expenses are incurred. Necessary funds are obtained for use by the District on an as needed basis through a request for donations from District members. Since the formation of the District all members have consistently paid all requests in full. Moreover, no fees or assessments authorized by AB 3030 have been collected by the District unless such fees or assessments are first authorized by an election of the District's voters. Only fees and assessments now levied by the District, or which are authorized other than by AB 3030, will be levied by the District in the absence of such an election.

**Determination:** *The Aliso Water District collects donated funds for reimbursement of services (i.e. legal, and/or accounting) provided to the District. No fees or assessments are imposed on the extraction and replacement of groundwater pursuant to the groundwater remediation program required by law or a groundwater storage contract with the District. Funds are obtained for the District as needed through a request for donations from District members. Historically, all donation requests are paid in full by all members.*

## 6. Opportunities for Shared Facilities.

**Purpose:** *To identify the opportunities for jurisdictions to share facilities and resources creating a more efficient service delivery system.*

Because the Madera Basin services water users and other public agencies outside the District's boundaries, the District may enter into joint powers agreements or memoranda of understanding with public or private entities overlying the Basin for the purpose of implementing or coordinating groundwater management activities. In particular, the District continues to look at entering into agreements with private landowners adjacent to the District. Such private agreements would benefit the District and the outside landowners by enabling both parties to accomplish more than could be accomplished by either individually. For example, an outside landowner may not individually be able to afford to participate in recharge efforts, but working in conjunction with the District the landowner is able to participate in such efforts. The District would also benefit from such agreements because the cost of any recharge efforts will be shared by more landowners than those within the District.

**Determination:** *Pursuant to the it's Groundwater Management Plan the District is receptive to coordinating its management program with other district water servers and area landowners so as to facilitate protection and enhancement of the groundwater resources within the Madera Basin and to avoid whenever possible duplicative or inconsistent groundwater management efforts.*

**7. Government Structure Options, Including Advantages and Disadvantages of Consolidation or Reorganization of Service Providers.**

**Purpose:** *To consider the advantages and disadvantages of various government structures that could provide public services.*

The District does see any benefit in consolidation. Currently the District's boundaries and SOI are coterminous. An increase of the District's SOI is not recommended since all property in the county and west of the district is included in the privately owned Columbia Canal Company, and property to the east is land served by the Madera Irrigation District or the Gravely Ford Water District. Over the years, landowners to the north and south of the District have been offered inclusion into the District, however none of these neighboring landowners are interested in participating.

**Determination:** *It appears that the Aliso Water District is administratively stable and no change in the government structure of the District is recommended.*

**8. Evaluation of Management Efficiencies.**

**Purpose:** *To evaluate the quality of public services and the agency's ability to provide services.*

The Aliso Water District annual budget and designated reserves have been adequate to meet the District's needs and are expected to do so in the future. All of the District's present files are available for review by appointment. The Aliso Water District is run primarily by the elected Trustees and a volunteer manager employed by Paramount Farm. The manager and clerical staff (who answers phones) is paid for by Paramount Farming and any associated salary time used for District business is donated to Aliso Water District.

The current manager, Roy Catina, is available to the public. The District operates with minimum staff and cost. The manager's duties are primarily, but not limited to, bookkeeping, record updating, district member inquiry, and other activities as necessary. The clerical staff forwards phone and mail inquires to the Trustees or manager for response. The Trustees, manager, and District members are kept informed of legal matters pertaining to groundwater by retained legal council paid for from the general fund.

**Determination:** *The Aliso Water District operates with a high degree of skill, ability, and personal service. The District continues to keep abreast of technology, industry specific advancements and legal issues regarding groundwater usage. The Trustees and manager interact on a regular basis with the district members.*

**9. Local Accountability and Governance.**

**Purpose:** *To evaluate the accessibility and levels of public participation associated with the agency's decision-making and management processes.*

Generally no significant issues regarding local accountability and governance were noted for the Aliso Water District. The governing board appears locally accountable and has current audits. The District is an independent special district governed by a Board of Trustees consisting of elected members. The board meets irregularly, however it utilizes the legally required means to give advance notice of all

meetings. The general manager of the District reports that all meetings are conducted in accordance with the Brown Act.

***Determination: The Aliso Water District limits its activities to services authorized by its principle act. The District complies with requirements for conducting public meetings and continuously maintains outreach programs to inform and engage its members.***

## **Review of Agency Sphere of Influence**

Madera LAFCO has the statutory authority and obligation to establish and adopt a sphere of influence for each city and special district within the county (Government Code Section 56425). A sphere of influence is a planning boundary outside of an agency's legal or "service" boundary that designates the agency's probable future boundary and service area. State law also requires LAFCO to review and update, as necessary, the adopted spheres of influence of agencies once every five years (Government Code Section 56425 (f)). Pursuant to state law, the Aliso Water District sphere of influence was reviewed in conjunction with the service review presented in this report.

The primary purpose in reviewing the District's sphere of influence (SOI) was to evaluate if this ultimate boundary is appropriate and necessary, determine if the District can feasibly provide well planned efficient services in this territory, and if the current location of the SOI (or another location) will be a benefit to residents, those that receive services and property owners within the area.

Review of the District's SOI involved detailed research, involving the following resources:

- Madera County LAFCO - official agency records.
- Madera County Recorder/ Assessor records.
- Aliso Water District AB 3030 Groundwater Management Plan
- Aliso Water District "Annual Auditor's Report
- SOI maps from the District, Assessor's office, Water Resources Board.
- Personal communications with District staff and officials.

## **Discussion and Findings**

The precise SOI boundaries for the Aliso Water District were verified during this review. The actual sphere of influence boundaries were verified using LAFCO records, with confirmation by the District (see Figure 4). The District's SOI and service boundaries (i.e., boundary of the District) are coterminous. Based on the analysis presented in the MSR for the Aliso Water District and review of its SOI, it was concluded that the boundary is appropriate and necessary, the District can provide well planned efficient services in this territory, and the current location of the SOI is a benefit to those that receive services and/or property owners within the area.

The review revealed one issue. The Madera Irrigation District SOI overlaps portions of the Aliso Water District's sphere and service area (see Figure 3). The Madera Irrigation District's SOI needs to be amended to remove it from the Aliso Water District's boundaries. With the appropriate findings, an SOI amendment can be processed at the time the MSR for MID is accepted by the Commission.

Based on the analysis presented in the MSR for the Aliso Water District and review of its SOI, it was concluded that the boundary is appropriate and necessary, the District can provide efficient services as outlined in its AB3030 in this territory, and the current location of the SOI is a benefit to those that receive services and/or property owners within the area.

**Recommendations**

1. Adopt the “Written Determinations” for the Aliso Water District presented in this service review pursuant to California Government Code Section 56430.
2. Find that the District’s current sphere of influence is appropriate and necessary, the District can provide well planned efficient services in this territory, and the current location of the SOI is a benefit to those that receive services and/or property owners within the area. Make no change to the Aliso Water District boundaries or the adopted sphere of influence at this time.

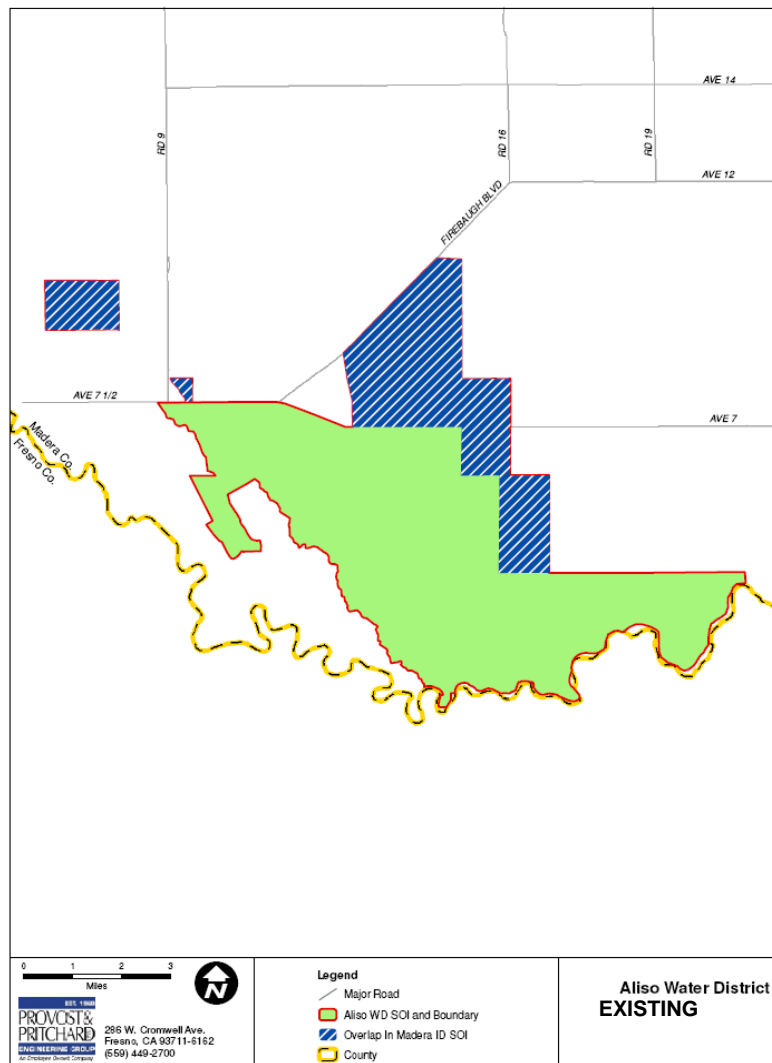


Figure 3

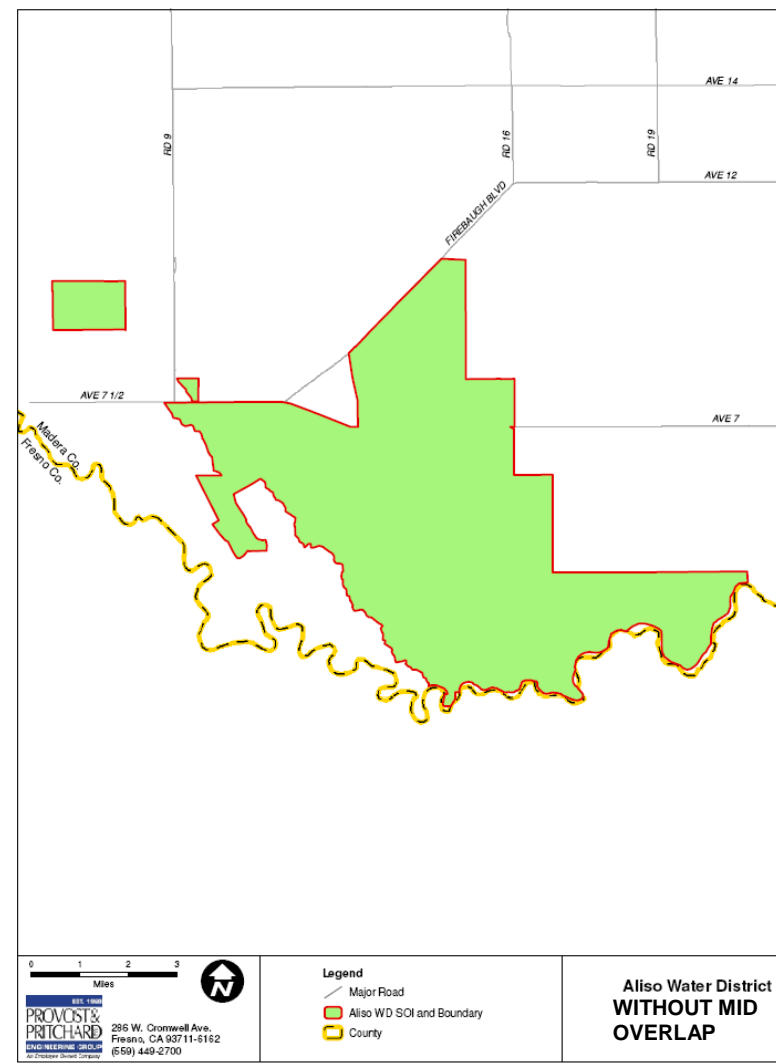


Figure 4

**FIGURES 3 and 4 – ALISO WATER DISTRICT SOI AND DISTRICT BOUNDARIES - CONFIRMED  
MUNICIPAL SERVICE REVIEW - PUBLIC WATER DISTRICTS, MADERA COUNTY**



## 5.2 CHOWCHILLA WATER DISTRICT

327 S. Chowchilla Blvd., Chowchilla, CA 93610

Mailing address: P.O. Box 905, Chowchilla, CA 93610

Contact: Doug Welch, General Manager (559) 665-3747

The Chowchilla Water District (CWD) was formed in 1949 in accordance with state law. The District was formed to manage a surface water supply entitlement intended for agricultural use. Until formation, the lands within the Chowchilla Water District boundaries had previously been a part of the Madera Irrigation District. In 1989 the Chowchilla Water District expanded through consolidation with La Branza Water District to form its current boundaries.

The Chowchilla Water District serves approximately 85,000 acres that includes territory in both Merced and Madera counties. The District's service boundaries are generally bounded by Avenue 18, Sandy Mush Road 4, and the Santa Fe Railroad Tracks. The primary land uses within the District are agriculture and open space. The District provides irrigation water to agriculture and distributes it to approximately 400 farms throughout its territory. In the future, the District may apply to LAFCO to annex about 10,000 acres of agricultural land that is currently not receiving surface water supplies. (See Figure 5).

As noted, the District boundaries encompass territory in both Merced and Madera Counties. The majority of territory is in Madera County. Pursuant to state law, negotiations have taken place between Madera and Merced LAFCOs to determine which Commission will process requests for organizational changes by the District. In accordance with state law these agencies agreed that Madera LAFCO will be responsible for process all such requests relating to the Chowchilla Water District.

**Groundwater Management Plan (GWMP)** - To prepare and administer a groundwater management plan the Chowchilla Water District and Chowchilla-Red Top Resource Conservation District formed a joint powers agency known as the CWD-Red Top RCD Joint Powers Authority. The CWD-Red Top RCD Joint Powers Authority conjunctive use program uses surplus water for recharge when it is readily available, aggressively secures water for recharge, meters groundwater extractions and utilizes other ground water control methodologies.

The Chowchilla Water District, on behalf of CWD-Red Top RCD Joint Powers Authority successfully purchases water for recharge when available, but has not been able to secure an additional water supply solely for recharge. However, with increasing price and decreasing availability of water, the District foresees formulating an even more comprehensive conjunctive use plan in the future than currently exists.

### 1. Infrastructure Needs or Deficiencies

**Purpose:** *To evaluate infrastructure needs and deficiencies in terms of supply, capacity, condition of facilities, and service quality.*

The District delivers all water allotted to its members through earth canals and concrete pipeline owned by the District. The current service capacity of the District is determined to be adequate based upon data collected from various monitored locations. The monitoring shows capacity utilized is generally between 50% and 85%. The current average supply to the District is 55,000 acre-feet of Class 1 water, 64,000 acre-feet of Class 2 water, 50,000 acre-feet of Buchanan Dam water, and 500 acre-feet of water from the LeGrand Athelone Water District.

The District continuously reviews and analyzes existing conditions to adequately prepare to meet the future needs of the area it serves. CWD has identified and uses a range of water sources to enable it to meet present demands and prepare for the future service demands in a cost effective and efficient manner. The District anticipates that an additional 25,000 acre-feet is needed to meet long-term agricultural irrigation requirements. CWD is actively involved in studies to find more water to meet the needs of agriculture in the District. As demand for surface water sources increases in the future the District is positioned to use alternative water sources.

**Determination:** *All canals and infrastructure are in good condition and infrastructure appears adequate to provide efficient service. Depending on the location, capacity utilized is generally between 50% and 85%. Overall planning for the future infrastructure appears adequate. As demand for surface water sources increases in the future the District is positioned to use alternative water sources.*

## **2. Growth and Population Projections for the Affected Area**

**Purpose:** *To evaluate service needs based on existing and anticipated growth patterns and population projections.*

The only impact population growth would have on the District is the conversion of agricultural lands to urban uses. Such land use changes would likely reduce the need for agricultural water.

**Determination:** *The District's primary function, which is providing water for agricultural uses, is not significantly affected by population growth.*

## **3. Financing Constraints and Opportunities**

**Purpose:** *To evaluate factors that affect the financing of needed improvements.*

The Board of Trustees adopts an annual budget and oversees expenditures throughout the fiscal year. The District has annual audits conducted by a certified public accountant. The audits are submitted to the County Auditor, pursuant to the Health and Safety Code. As with all districts, the County of Madera maintains the general ledger for the Chowchilla Water District. The District accounting conforms to generally accepted accounting principals.

Following is a summary of the District's budget performance over fiscal years 2004 and 2005. The District appears to be in sound financial condition and has well-established source of revenues. A negative balance is shown for fiscal year 2004 due to capital improvements. The negative balance from the capital improvements was provided for through the use of general fund monies. Relevant financial information is presented in the tables below:



**Table 5**  
**Chowchilla WD Statement of Changes in Fund Equity**  
**Years Ended December 31, 2005 and 2004**

Source	2005	2004
Revenues	\$9,195,550	\$5,576,792
Expenditures	\$8,069,660	\$6,247,319
Balance +/-	\$1,125,890	(\$670,527)

*Source: Annual Audit Madera County Auditor-Controller's Office*

**Table 6**  
**Chowchilla WD Statement of Changes in Fund Equity**  
**Years Ended December 31, 2005 and 2004**

	2005	2004
Balance, January 1	\$11,151,215	\$11,824,742
Net (loss) Income	\$1,125,890	(\$670,527)
Balance, December 31	\$12,277,105	\$11,154,215

*Source: Annual Audit Madera County Auditor-Controller's Office*

**Table 7**  
**Chowchilla WD Statement of Cash Flows**  
**Years Ended December 31, 2005 and 2004**

	2005	2004
Cash Flows from Operating Activities Net (loss) Income	\$8,285,763	\$5,349,762
Net Cash (used) Provided by Operations	\$8,069,660	\$6,247,319
Net (decrease) Increase in Cash and Cash Equivalents	\$216,103	(\$897,557)
Non-operating revenue and (expense)	\$909,787	\$227,030
Cash and cash equivalents at start of year	\$11,151,215	\$11,824,742
Cash and cash at end of year	\$12,277,105	\$11,154,215

*Source: Annual Audit Madera County Auditor-Controller's Office*

Operating revenues and expenses generally result from providing goods and services in connection with proprietary funds ongoing operations. Operating expenses for enterprise funds include the cost of sales and services, administrative expenses and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses.

### **Summary of 2005 Audit**

*Current Liabilities* - Current liabilities decreased by \$29,000. The net decrease was primarily due to:

- Reduction in amount due to the Madera-Chowchilla Water and Power Authority
- Increase in trade receivables
- Decrease in crop water deposits
- Increase in accrued wages

*Long Term Debt* - The District had no long-term debt.

*Operating Revenues* - Operating revenue consisted of water sales, annual assessments for both rural and city parcels within the District and custom work. Total operating revenues for 2005 were \$8,285,763 and \$5,349,762 in 2004. The increase of \$2,936,001 was primarily due to increased water sales and revenue from the special assessment discussed above. The District sold 115,624 acre-feet of water in 2005 compared to 58,572 acre feet in 2004.

*Operating Expenses* - Operating expenses consisted of paying for water purchases, administration, transmission and distribution, and customer accounts. The administration expenses consist of manager and office staff salaries, benefits, membership fees, legal and general office expenses. Transmission and distribution expenses consist of maintenance staff salaries, benefits and expenses associated with the maintenance of the equipment and canal system. The customer account expenses consist of the ditch tenders salaries, benefits, and supplies.

Water purchases are based upon the delivery of federal water from U.S. Bureau of Reclamation. In 2005 the District purchased 100% of its Class 1 water allocated and 100% of its Class 2 allocation. Administration expenses increased \$130,000. The principal reason was an increase in the Friant Water Users Authority fees, which were a result of an increased General Member budget to include the increased costs associated with the NRDC litigation.

In 2005, transmission and distribution expenses increased by \$319,000. The principal reason for the increase was canal repairs and improvements, and increases in fuel costs. There were also engineering costs associated with the expansion of the CWD service area, and a proposed Caltrans overpass.

Customer account expenses increased by \$24,000. This increase was a direct result of additional water availability in 2005. The additional supply increased water deliveries in 2005 by 95% compared to 2004 water deliveries. With the increase in water deliveries, related expenses of salaries and benefits increased.

*Non-Operating Revenue* - This category primarily consists of electrical generation revenue received from Madera-Chowchilla Water and Power Authority (MCWPA), and Friant Power Authority (FPA). It also includes interest income and refunds from the Bureau of Reclamation. The power generation revenue received from MCWPA was \$95,465 greater in 2005. The power generation revenue received from FPA was \$705,000 in 2005 compared to \$344,000 in 2004. Revenues increased in 2005 due to the increased

runoff from the Sierra Nevada watershed compared to 2004. Interest income increased by \$10,000. The increase was due to an increase in LAIF interest rates, from a low of 1.44% in 2005 to a high of 3.63% in 2005. A refund from the Bureau of Reclamation was \$137,335 due to recalculation of operation and maintenance expenses.

*Non-Operating Expenses* - This category consists of Madera-Chowchilla Water and Power Authority lease payments. The lease payments for the MCWPA increased by \$401,000. The principal reason for the increase was the water district's contribution to pay off the Bank of America loan in September 2005.

*Enterprise Fund* - The District has only one fund for the years ending in December 31, 2005 and 2004 which is a propriety fund type, specifically, an enterprise fund. Enterprise Funds are used to account for operations that are financed and operated in a manner similar to private business enterprises, where the intent is that cost of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges. Enterprise funds are also used when the governing body has decided that periodic determination of revenues earned, expenses incurred, or net income is appropriate for capital maintenance, public policy, management control, accountability or other purposes.

*Supplies* - Supplies consisted of irrigation pipe and are recorded at the lower of cost. Determined under the first-in, first-out method or estimated market value.

*Utility Plant* - Property, plant and equipment (including major renewals and improvements) are recorded at cost or estimated historical cost when cost is not available. Depreciation is provided over the useful lives of the assets using the straight-line method. When properties are disposed of, the related costs and accumulated depreciation are removed from the respective accounts. A profit and loss on the disposition by sale or retirement is recognized currently in net income. Maintenance and repairs which do not improve or extend the life of the respective assets are expensed currently.

*Annual Assessment* - Under the provisions of Division 13 of the Water Code of the State of California, the District levies an annual assessment upon the land within the district to provide the funds necessary for the District to meet its financial obligations. The assessments are levied on July 10 of each year and become delinquent if not paid by January 10 of the following year.

*Cash and Cash Equivalents* – The District considers all cash and cash deposits and all debt and equity securities with 90 days or less to maturity of purchase to be cash equivalents for purposes or preparing the accompanying statement of cash flows. This includes cash equivalents included in restricted assets.

The District prepares an annual budget and strives to use best management practices in managing their financial resources. There are no apparent short- or long-term fiscal constraints limiting the ability of District to carry out its primary functions.

***Determination: As a State-created autonomous unit of local government the Chowchilla Water District has sovereignty over its fiscal issues – subject to State Law. The District conforms to the restrictions of Proposition 13 and Proposition 218 in assessing, fees and benefit assessments. No general and special taxes are collected. Operating revenue consists primarily of electrical generation and water sales and annual assessments for both rural and city parcels within the District. The CWD receives an annual independently-conducted auditor's report which is a matter of public record. The District budgets adequate funding to make all necessary improvements.***

#### 4. Cost Avoidance Opportunities

**Purpose:** *To identify practice or opportunities that may help eliminate unnecessary costs.*

The Chowchilla Water District appears to be well managed. Most of the District's maintenance is accomplished onsite by the District employees. The District maintains up to 21 full-time employees. All of the District's equipment is replaced on an as-needed basis. A regular maintenance program for equipment is undertaken to avoid unnecessary repair costs. Training personnel to use and maintain the equipment is an ongoing program. Safety training also keeps the cost of Workman's Compensation Insurance at an affordable and consistent rate. No additional cost-avoidance opportunities have been identified.

**Determination:** *Chowchilla Water District operates with adequate paid staff, is self-sufficient and efficient. All of the District's equipment is replaced on an as-needed basis. The District implements a form of privatization to depress staff levels and generate cost savings by using outside consultants for engineering, legal, and audit services. The District also has some operational contracts (landscaping, maintenance, janitorial, etc.) that are financially beneficial. The District appears to be well managed and no cost-avoidance opportunities have been identified.*

#### 5. Opportunities for Rate Restructuring

**Purpose:** *To identify opportunities to positively impact rates without decreasing service levels.*

To maintain the District's rates for services, the Manager annually researches the cost of pumping ground water in the County. This information is used to review service charges. The District attempts to maintain its rate schedule below the cost for farmers to pump groundwater. Operating revenue consists of agricultural water sales, annual assessments for both rural and city parcels in the District and custom work. Total operating revenues for 2005 were \$8,285,763 and \$5,349,762 in 2004. The increase of \$2,936,001 was primarily due to increased water sales and revenue from the special assessment discussed below.

The Chowchilla Water District Board of Directors instituted a \$16 per acre Supplemental Assessment in April 29, 2005 following its approval by the landowners in an election held by the District. The funds from the Supplemental Assessment are being used to help pay fixed operating costs of the Central Valley Project that the District is responsible for each year. The money is specifically earmarked to pay for the operating costs of Buchanan Dam, Madera Canal and Delta-Mendota Canal. These costs are fixed, regardless of the water supply, and resulted in large fluctuations in the District's water rates. In addition to reducing the fluctuations, the water rate was reduced by \$10 per acre-foot in 2006. (The Madera Irrigation District (MID) charges a \$15 per acre (standby) and a \$22.65 per acre assessment and \$40 per acre-foot for surface water.)

**Determination:** *To maintain the District's rates for services, the Manager annually researches the cost of pumping ground water in the County. This information is used to review service charges. The District attempts to maintain its rate schedule below the cost for farmers to pump groundwater. Enterprise fees for water service within the Chowchilla Water District directly relate to the cost of producing and delivering water services. The District imposes fees and/ or rates for services that are directly related to the cost of producing and delivering such services.*

## 6. Opportunities for Shared Facilities

**Purpose:** *To identify the opportunities for jurisdictions to share facilities and resources creating a more efficient service delivery system.*

The District's facilities have a full range of services located onsite. Notwithstanding, the District participates in sharing facilities through system interconnections with the Madera Irrigation District (MID). The District maintains agreements with the MID that interconnect distribution systems to create infrastructure redundancies and allow water supplies to be moved among agencies in an emergency.

**Determination:** *The District participates in sharing facilities through system interconnections with the Madera Irrigation District. The District maintains agreements with the Madera Irrigation District that interconnect distribution systems to create infrastructure redundancies and allow water supplies to be moved among agencies in an emergency.*

## 7. Government Structure Options, Including Advantages and Disadvantages of Consolidation or Reorganization of Service Providers

**Purpose:** *To consider the advantages and disadvantages of various government structures that could provide public services.*

The mission of CWD is to provide water to agriculture efficiently at lowest practical cost. The District believes that consolidation with adjacent water districts should not be recommended since no cost savings or efficiency of services would be realized.

As mentioned, in order to complete and administer a groundwater management plan, the Chowchilla Water District and Chowchilla-Red Top Resource Conservation District formed a joint powers agency known as the CWD-Red Top RCD Joint Powers Authority. This collaboration assists the District in meeting the objective of the groundwater management plan to identify, formulate and implement effective groundwater, management practices in order to maintain the long-term availability of groundwater resources throughout the Chowchilla Basin.

Upon initial examination of the Chowchilla Water District and the Madera Irrigation District SOI boundaries there appeared to be an overlapping of sphere lines and perhaps district boundaries. Further research revealed that there is not an overlapping of SOI lines; however, the Chowchilla Water District's service boundaries extend into (overlap) the Madera Irrigation District's sphere of influence area. This occurred as the result of an annexation of territory to the CWD (see Figure 5).

Additionally, other approved and/or proposed annexations to the District include territory outside the agency's current SOI. Finally, the District's present SOI overlaps a portion of the Clayton Water District's sphere and service area (see Figure 2).

To alleviate the discrepancies summarized above it is necessary to amend the District's sphere of influence to reflect approved annexations and to allow approval of proposed annexations. Additionally, the District's SOI needs to be amended to remove it from the Clayton Water District's boundaries. With the appropriate findings, an SOI amendment can be processed at the time the MSR for CWD is accepted by the Commission. If the Commission approves the amendment, LAFCO staff would then be able to process an application for annexation of the parcels to be incorporated into the District.

With approval of such amendments and based on the analysis presented in the MSR for the Chowchilla Water District it may be concluded that the amended SOI boundary is appropriate and necessary, the District can provide well planned efficient services in this territory, and the amended location of the SOI is a benefit to those that receive services and/or property owners within the area (see Figure 6).

***Determination - To correct discrepancies in the District's SOI it is necessary to amend the District's sphere of influence to reflect approved annexations and to allow approval of proposed annexations. Additionally, the District's SOI needs to be amended to remove it from the Clayton Water District's boundaries. With the appropriate findings, an SOI amendment can be processed at the time the MSR for CWD is accepted by the Commission. If the Commission approves the amendment, LAFCO staff would then be able to process an application for annexation of the parcels to be incorporated into the District.***

## **8. Evaluation of Management Efficiencies**

**Purpose:** *To evaluate the quality of public services and the agency's ability to provide services.*

The District staff is well trained and accomplishes all tasks within a timely manner. New technology is employed by CWD as appropriate. The District has ongoing training programs for staff and management in their respective areas of responsibility.

***Determination: The Chowchilla Water District has a management-to-staff ratio that appears efficient. The District's record of employee turnover is reasonably stable. All applicable environmental and safety compliance measures are implemented by the District as applicable.***

## **9. Local Accountability and Governance**

**Purpose:** *To evaluate the accessibility and levels of public participation associated with the agency's decision-making and management processes.*

Operating under the rules and regulations as laid out in the California Water Districts Act, the daily activities of the District are under the direction of a seven-member Board of Directors. The Directors are elected by the landowners in the District and they serve at their discretion. The District follows the Brown Act and posts meeting notices 72 hours in advance. The public has access to the hearing facility during posted hours. CWD also distributes periodic newsletters to keep landowners informed of matter affecting the District. The Board of Directors approves and administers the all water management plans, the District budget and its staff.

***Determination: The Chowchilla Water District limits its activities to services authorized by its principle act. Services are extended beyond boundaries only when lawful. The District complies with all state requirements for conducting public hearings. The Board of Directors approves and administers the all water management plans, the District budget and its staff.***

## **Review of Agency Sphere of Influence**

Madera LAFCO has the statutory authority and obligation to establish and adopt a sphere of influence for each city and special district within the county (Government Code Section 56425). A sphere of influence is a planning boundary outside of an agency's legal or "service" boundary that designates the agency's probable future boundary and service area. State law also requires LAFCO to review and update, as necessary, the adopted spheres of influence of agencies once every five years (Government Code Section 56425 (f)). Pursuant to state law, the Chowchilla Water District sphere of influence was reviewed in conjunction with the service review presented in this report.

The primary purpose in reviewing the District's sphere of influence (SOI) was to evaluate if this ultimate boundary is appropriate and necessary, determine if the District can feasibly provide well planned efficient services in this territory, and if the current location of the SOI (or another location) will be a benefit to residents, those that receive services and property owners within the area.

Review of the District's SOI involved detailed research, involving the following resources:

- Madera County LAFCO - official agency records.
- Madera County Recorder/ Assessor records.
- Chowchilla Water District AB 3030 Groundwater Management Plan.
- Chowchilla Water District "Annual Auditor's Reports"
- SOI maps from the District, Assessor's office, Water Resources Board.
- Personal communications with District staff and officials.
- Merced County LAFCO - official agency records.

## **Discussion and Findings**

The precise SOI boundaries for the Chowchilla Water District were verified during this review (the District's SOI and service boundaries are not coterminous). Upon initial examination of the Chowchilla Water District and the Madera Irrigation District SOI boundaries there appeared to be an overlapping of sphere lines and perhaps district boundaries. Further research revealed that there is not an overlapping of SOI lines; however, the Chowchilla Water District's service boundaries extend into (overlap) the Madera Irrigation District's sphere of influence area. This occurred as the result of an annexation of territory to the CWD (see Figure 5).

Additionally, other approved and/or proposed annexations to the District include territory outside the agency's current SOI. Finally, the District's present SOI overlaps a portion of the Clayton Water District's sphere and service area (see Figure 2).

To alleviate the discrepancies summarized above it is necessary to amend the District's sphere of influence to reflect approved annexations and to allow approval of proposed annexations. Additionally, the District's SOI needs to be amended to remove it from the Clayton Water District's boundaries. An SOI amendment can be processed at a future hearing of LAFCO. If the Commission approves the amendment, LAFCO staff would then be able to process an application for annexation of the parcels to be incorporated into the District. Both districts are agreeable to this solution.

As noted, the CWD district boundaries also extend beyond its SOI in a small area within Merced County. Additionally, the District is interested in annexing more territory located adjacent to this area. This situation can be corrected by amending the CWD SOI to include all of this territory. The District would then apply to Madera LAFCO for approval of the annexations. Both districts are agreeable to this solution.

With approval of such amendments and based on the analysis presented in the MSR for the Chowchilla Water District it may be concluded that the amended SOI boundary is appropriate and necessary, the District can provide well planned efficient services in this territory, and the amended location of the SOI is a benefit to those that receive services and/or property owners within the area (see Figure 6).

### **Recommendations**

The following actions are recommended:

- 1. Adopt required Written Determinations and accept the analysis and conclusions of the Municipal Service Review prepared for the Chowchilla Water District by taking actions A and B below:**
  - A. Acting as Lead Agency under the California Environmental Quality Act make a finding pursuant to the California Environmental Quality Act (CEQA Guidelines Section 15000 et seq. and Public Resources Code Sections 21083 and 21084) that the Municipal Service Reviews presented in the Municipal Service Reviews report for the eight (8) public water districts are exempt from CEQA under Section 15306 of the State CEQA Guidelines (Categorical Exemption, Information Collection, Class 6), which provides exemption for data collection, research, experimental management, and resource evaluation activities which will not result in a serious or major disturbance to an environmental resource, and that these studies are for information gathering purposes and are part of a report leading to an action which a public agency has not yet approved, adopted, or funded.
  - B. Adopt the “Written Determinations” in LAFCO’s Resolution Making Determinations for the Chowchilla Water District presented in this service review pursuant to California Government Code Section 56430; accept the analysis and conclusions of the Municipal Service Review prepared for the District and direct the Executive Officer to file the report in the public record at the Madera County LAFCO office.
- 2. In a separate action approve amendments to the Chowchilla Water District Sphere of Influence by taking actions A, B and C below:**
  - A. Acting as Lead Agency under the California Environmental Quality Act find that pursuant Section 15061(b)(3) of the CEQA Guidelines the Project (Amendment to the Chowchilla Water District’s Sphere of Influence) is covered by the general rule that CEQA applies only to Projects which have the potential for causing a significant effect on the environment, and that it has been determined with certainty that there is no possibility that the Project may have a significant effect on the environment, and accordingly the Project is not subject to CEQA.
  - B. Government Code Section 56425(e) *et seq.* with respect to the four specific issues required to approve a change to a sphere of influence, as presented below:



**1. Present and planned land uses in the area including agricultural and open-spaced lands.**

The proposed SOI amendment would not change the present agricultural land use currently operating in the affected territory. The County General Plan designation and zoning for the affected territory will not change. The proposed SOI amendment will not convert prime farmland, unique farmland, or farmland of statewide importance to non-agricultural use. No significant adverse effects will occur on continuing agricultural operations on adjacent properties.

**2. The present and probable need for public facilities and services in the area.**

All of the territory included in the proposed SOI amendment can be served by the Chowchilla Water District. Approval of the proposal SOI amendment will not bring about the need for the additional public facilities or service in the territory.

**3. The present capacity of public facilities and adequacy of public services that the agency is authorized to provide.**

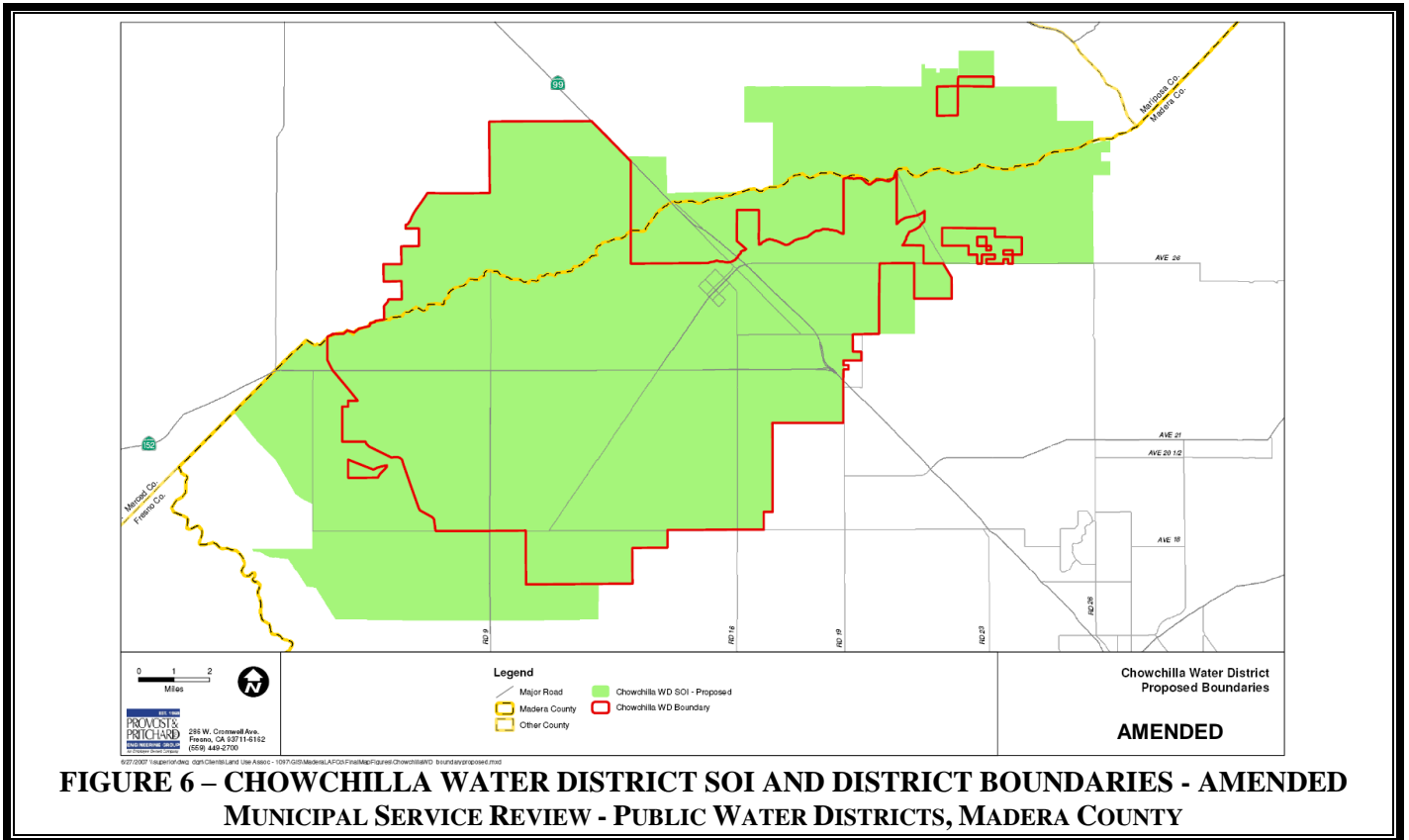
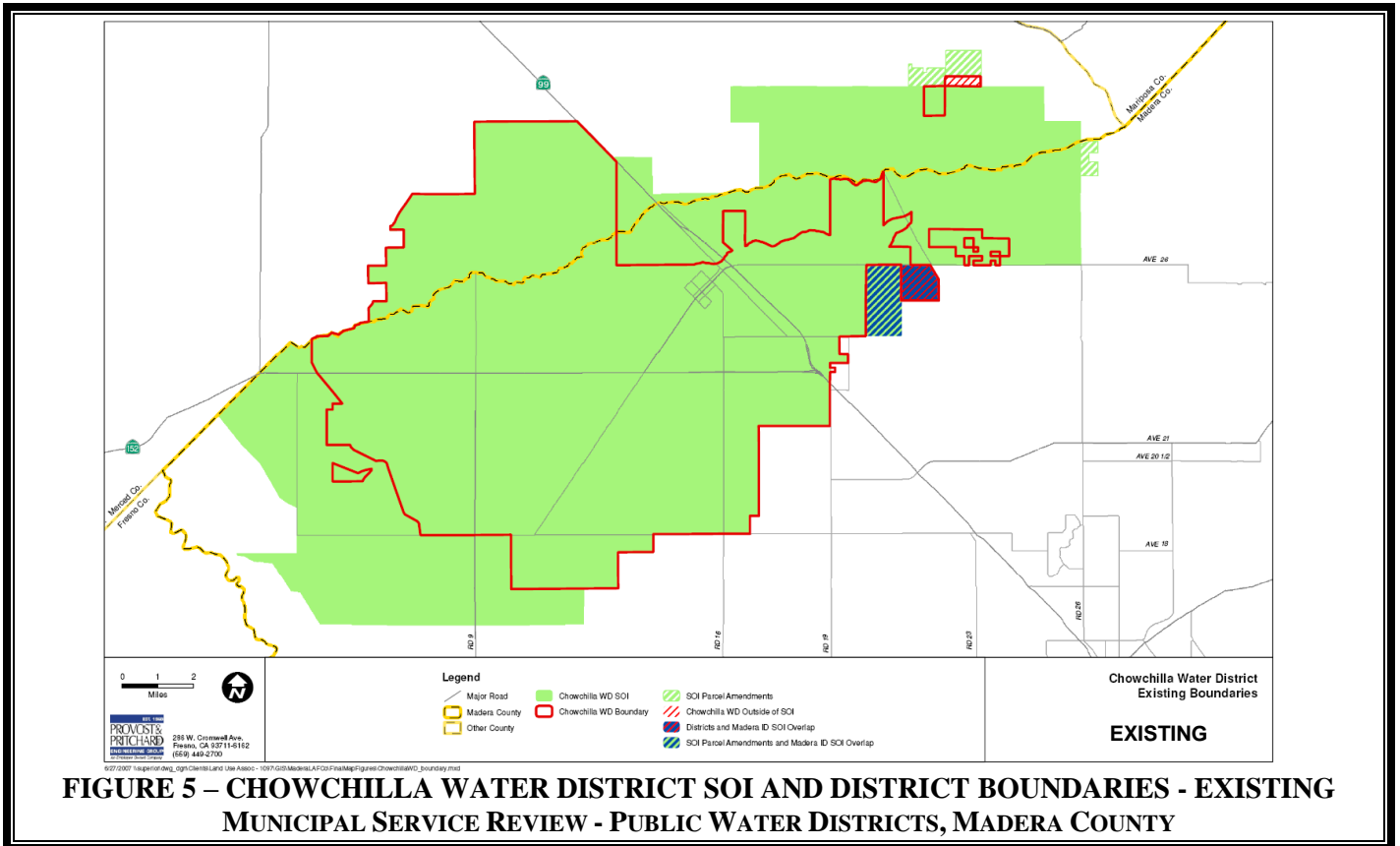
Territory that is added to the Chowchilla Water District sphere of influence has either been annexed already or is proposed for annexation in the near future. The CWD has the ability to provide authorized services (irrigation water) to the territory to be included in its amended SOI. Madera Irrigation District and several other water districts in Madera County are exploring opportunities for groundwater banking and groundwater recharge as a means to increase dry year supplies and improve groundwater quality. The District plans to engage with the adjacent districts and to explore arrangements for cooperative studies.

**4. The existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency.**

There are two “communities” of social and/or economic interest affected by the proposed SOI amendment. The Madera Irrigation District is located adjacent to the CWD and the district’s SOIs “meet in the middle”. The proposed amendment to the CWDs SOI would require MID to amend its SOI boundary to remove this corresponding territory from the District’s sphere of influence territory. Officials at MID have agreed to the proposed amendments. Clayton Water District will not be affected by a change to the CWD’s SOI boundaries. This action will remove the Chowchilla Water District’s sphere of influence overlap from its coterminous boundaries.

C. Approve amendments to the Chowchilla Water District Sphere of Influence as shown in Figure 6.

**3. Direct the Executive Officer to forward adopted Resolution Making Determinations to the Merced County Local Agency Formation Commission’s Executive Officer.**



## 5.3 CLAYTON WATER DISTRICT

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Merced, CA 95344-0067  
Connley Clayton (559) 673-6340

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The Clayton Water District was formed pursuant to Division 13 of the California Water Code in the early 1980s. The District was formed to serve irrigation water to an area consisting of approximately 1,200 acres of territory located immediately adjacent to the Madera/Fresno County boundary (San Joaquin River), east of Newcomb Avenue (Township 11 South /Range 13 East) in western Madera County. The District is a landowner-voter district that was formed to:

- Provide water to the landowner(s) in the District.
- Facilitate contracting with the United States Bureau of Reclamation for delivery of water from the San Joaquin River.
- Obtain surplus waters, if any, from the San Joaquin River and the Fresno River, for use on District lands.

The District was originally formed for the purpose of contracting with the US Bureau of Reclamation for a surface water entitlement. Sometime in the mid-1980s the District attempted to secure surface water rights to serve the landowners in the territory. When this request was denied the District became inactive. It appears that the District has been inactive for over 20 years.

According to the District's attorney (Arthur Godwin, Attorney at Law, Mason, Robbins Gnass & Browning) the District is providing groundwater for agricultural uses and distributes it to its landowners on District lands. The District also seeks to obtain seasonal flood waters from the San Joaquin River and the Fresno River, and to provide quality groundwater (from wells) to the landowners in the District. Lands within the District currently rely exclusively on groundwater for irrigation.

While groundwater supplies within the District are adequate, conditions in the surrounding areas require the District to develop ways to maintain the quality and quantity of its water supplies for District lands. The lowering of groundwater tables in Madera County, the uncertainty regarding reliable future surface water supplies as a result of the recent San Joaquin River settlement agreement, and the operation and development of the Madera Groundwater Bank are some of the events that could affect the District's water supplies.

The recent San Joaquin River Settlement agreement and enabling legislation presents both an opportunity and a liability. The District lies adjacent to the San Joaquin River and within a critical reach of the river known as "4B". This reach of the river will require significant modification to effectuate the settlement. Possible modifications include widening the San Joaquin River channel, creation of setback levees, and construction of a fish bypass around Sack Dam (operated by the San Joaquin River Exchange Contractors Water Authority). The fish bypass could potentially be located on District lands.

Madera Irrigation District and several other water districts in Madera County are exploring opportunities for groundwater banking and groundwater recharge as a means to increase dry year supplies and improve groundwater quality. Located adjacent to the San Joaquin River and the Sack Dam, the District is ideally situated to participate in these programs. The District plans to engage with the adjacent districts and to explore arrangements for cooperative studies.

**1. Infrastructure Needs or Deficiencies**

**Purpose:** *To evaluate infrastructure needs and deficiencies in terms of supply, capacity, condition of facilities, and service quality.*

The District's attorney reports that the District Board meets to discuss the groundwater and surface water needs of the lands serviced by the District. With the uncertainties: (a) surrounding the San Joaquin River settlement, (b) the availability of quality flood water in the San Joaquin and Fresno Rivers; and, (c) groundwater levels/quality/availability, the District is exploring the feasibility of cooperating with other districts for groundwater recharge of the aquifer underlying the District's lands using such waters as may become available to the District. The District is contacting other districts to explore the feasibility and design of groundwater recharge opportunities in the District to help maintain and augment the availability of groundwater and the District's water table.

**Determination:** *The District is contacting other districts to explore the feasibility and design of groundwater recharge opportunities in the District to help maintain and augment the availability of groundwater and the District's water table.*

**2. Growth and Population Projections for the Affected Area**

**Purpose:** *To evaluate service needs based on existing and anticipated growth patterns and population projections.*

The territory within Clayton Water District is not urbanized and consists of a single-family farm. The District's attorney reports that the District is not going to grow in terms of population. The landowners within its boundary are committed to agriculture for the long term.

**Determination:** *The territory within Clayton Water District is not urbanized and consists of a single-family farm. The District's attorney reports that the District is not going to grow in terms of population. The landowners within its boundary are committed to agriculture for the long term.*

**3. Financing Constraints and Opportunities**

**Purpose:** *To evaluate factors that affect the financing of needed improvements.*

The District's attorney reports that all funds to operate the District are contributed by its landowners. Funds needed to participate in any cooperative studies or to construct new facilities will be paid directly by the District's landowners.

**Determination:** *all funds to operate the District are contributed by its landowners. Funds needed to participate in any cooperative studies or to construct new facilities will be paid directly by the District's landowners.*

**4. Cost Avoidance Opportunities**

**Purpose:** *To identify practice or opportunities that may help eliminate unnecessary costs.*

The District's attorney reports that the landowners in the District donate their time to the running of the District. There are no employees and no administrative or other expenses of the District. The only actual "out of pocket" expenses anticipated by the District could be a multi-district cooperative groundwater study, followed by the possible construction of facilities based on the study's recommendations to enhance the current groundwater conditions in the District. The implementation phase could take several years in order to achieve the desired results based on surface water availability and construction dollars approved by the District's landowners and Board.

***Determination: There are no employees and no administrative or other expenses of the District. The only actual "out of pocket" expenses anticipated by the District could be a multi-district cooperative groundwater study, followed by the possible construction of facilities based on the study's recommendations to enhance the current groundwater conditions in the District. The implementation phase could take several years in order to achieve the desired results based on surface water availability and construction dollars approved by the District's landowners and Board.***

## **5. Opportunities for Rate Restructuring**

**Purpose:** *To identify opportunities to positively impact rates without decreasing service levels.*

The District's attorney reports that the District currently neither sets nor collects any rate for its water services. Future plans may require rates for implementation. Until those plans are deemed feasible and then implemented, there are no opportunities for rate restructuring.

***Determination: The District currently neither sets nor collects any rate for its water services. Future plans may require rates for implementation. Until those plans are deemed feasible and then implemented, there are no opportunities for rate restructuring.***

## **6. Opportunities for Shared Facilities**

**Purpose:** *To identify the opportunities for jurisdictions to share facilities and resources creating a more efficient service delivery system.*

The District's attorney reports that the District does not need and would not benefit from the services of other Districts. All of the equipment, turn-out facilities and water conveyance facilities enjoyed by or used by the District in terms of having water delivered to its boundaries are already in place. There are no adjacent Districts with which to share facilities or resources.

***Determination: The District does not need and would not benefit from the services of other Districts. All of the equipment, turn-out facilities and water conveyance facilities enjoyed by or used by the District in terms of having water delivered to its boundaries are already in place. There are no adjacent Districts with which to share facilities or resources.***

## **7. Government Structure Options, Including Advantages and Disadvantages of Consolidation or Reorganization of Service Providers**

**Purpose:** *To consider the advantages and disadvantages of various government structures that could provide public services.*

The District's attorney reports that the District has no neighboring agencies that could provide service to the District. There is no opportunity to expand District lands to be served, as it is finite in size. The District can utilize all of the water available to it if it can implement the groundwater plan described above, with no opportunity to share such waters with adjoining lands, due to the limited amount of water available and the water rights and diversion rights already identified with such water.

***Determination: The District has no neighboring agencies that could provide service to the District. There is no opportunity to expand District lands to be served, as it is finite in size. The District can utilize all of the water available to it if it can implement the groundwater plan described above, with no opportunity to share such waters with adjoining lands, due to the limited amount of water available and the water rights and diversion rights already identified with such water.***

## **8. Evaluation of Management Efficiencies**

**Purpose:** *To evaluate the quality of public services and the agency's ability to provide services.*

The District's attorney reports that the District is currently efficient since as it has no cost for its current operations or management. It has no paid employees. Board Members volunteer their time to study and carry out the objectives of the District, at no cost. With no current infrastructure on District lands, until infrastructure is installed and operations and insurance costs are allocated among the landowners, pro-rata, there are no current operational expenses.

***Determination: The District is currently efficient since as it has no cost for its current operations or management. It has no paid employees. Board Members volunteer their time to study and carry out the objectives of the District, at no cost. With no current infrastructure on District lands, until infrastructure is installed and operations and insurance costs are allocated among the landowners, pro-rata, there are no current operational expenses.***

## **9. Local Accountability and Governance**

**Purpose:** *To evaluate the accessibility and levels of public participation associated with the agency's decision-making and management processes.*

The District's attorney reports that all District landowners are involved on the Board of the District and it has 100% participation in all decisions affecting the District. The District does not conduct regular board meetings, but meets on an as-needed basis.

***Determination: The District's attorney reports that all District landowners are involved on the Board of the District and it has 100% participation in all decisions affecting the District. The District does not conduct regular board meetings, but meets on an as-needed basis.***

## **Review of Agency Sphere of Influence**

Madera LAFCO has the statutory authority and obligation to establish and adopt a sphere of influence for each city and special district within the county (Government Code Section 56425). A sphere of influence is a planning boundary outside of an agency's legal or "service" boundary that designates the agency's probable future boundary and service area. State law also requires LAFCO to review and update, as necessary, the adopted spheres of influence of agencies once every five years (Government Code Section 56425 (f)). Pursuant to state law, the Clayton Water District sphere of influence was reviewed in conjunction with the service review presented in this report.

The primary purpose in reviewing the District's sphere of influence (SOI) was to evaluate if this ultimate boundary is appropriate and necessary, determine if the District can feasibly provide well planned efficient services in this territory, and if the current location of the SOI (or another location) will be a benefit to residents, those that receive services and property owners within the area.

Review of the District's SOI involved detailed research, involving the following resources:

- Madera County LAFCO - official agency records.
- Madera County Recorder/ Assessor records.
- Correspondence from the District's legal counsel.
- SOI maps from the District, Assessor's office, Water Resources Board.
- Personal communications with District officials.

### **Discussion and Findings**

The precise SOI boundaries for the Clayton Water District needed to be verified because conflicting maps were acquired during the review. The actual sphere of influence boundaries were verified using LAFCO records, with confirmation by the District (see Figure 8). The District's SOI and service boundaries (i.e., boundary of the District) are coterminous.

The review revealed two basic issues. The Chowchilla Water District's present SOI and Madera Irrigation District overlaps portions of the Clayton Water District's sphere and service area (see Figure 7). The Chowchilla Water District's SOI and Madera Irrigation District's SOI need to be amended to be remove them from the Clayton Water District's boundaries. With the appropriate findings, an SOI amendment can be processed at the time the MSR for CWD and MID is accepted by the Commission.

A third issue relates to the District's assertion that it is at this time and will continue to work toward becoming an "active" district and is now and will continue to take the necessary steps to provide services to property owners located inside its service boundaries. Giving the District the benefit of the doubt, this review concluded that the Clayton Water District boundary is appropriate and necessary, the District is at this time and will continue to work toward becoming and active district that will provide planned efficient services in this territory, and the current location of the SOI is a benefit to those that will receive services within the area (see Figure 8). It is recommended that LAFCO reevaluate the Clayton Water District in five years to confirm productive activity, and if such activity is not verified consider dissolution of the district.

### **Recommendations**

1. Adopt the "Written Determinations" for the Clayton Water District presented in this service review pursuant to California Government Code Section 56430.
2. Find that the District's current sphere of influence is appropriate and necessary, the District is working toward the provision of planned, efficient services in this territory, and the current location of the SOI is a benefit to those that may receive services and/or property owners within the area. Make no change to the Clayton Water District boundaries or the adopted sphere of influence at this time.
3. Reevaluate in five years to confirm productive activity or consider dissolution.

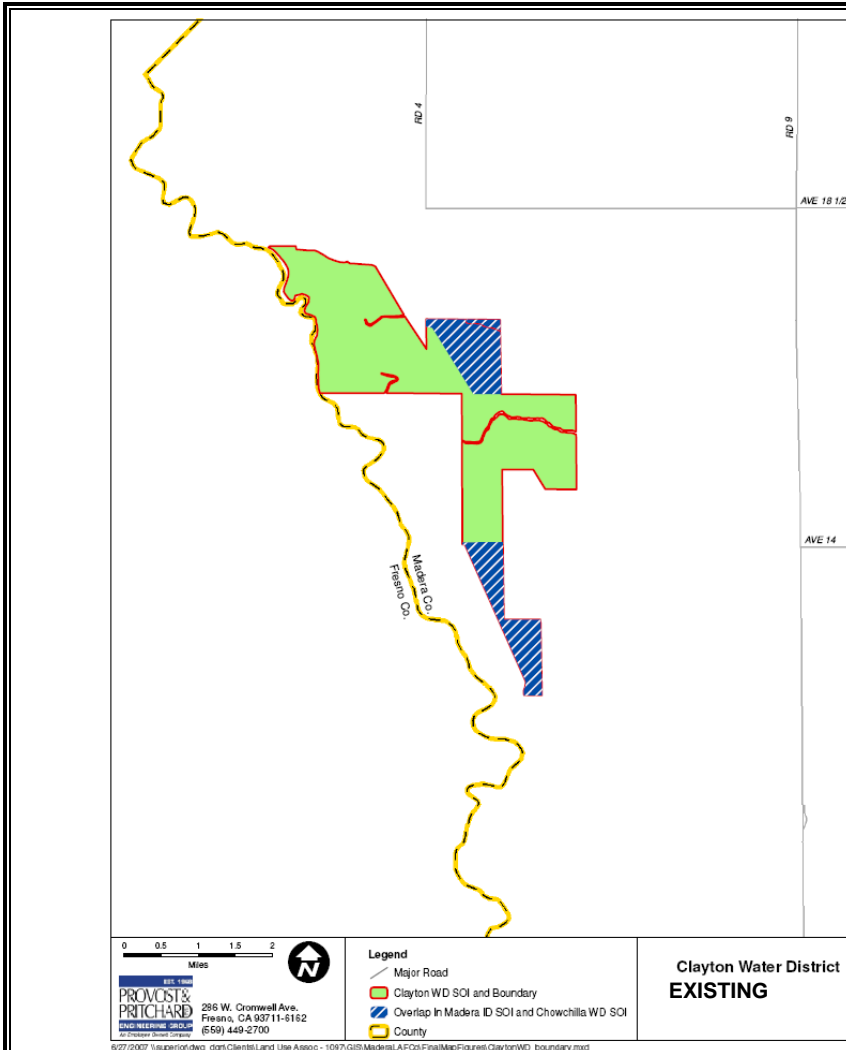


Figure 7

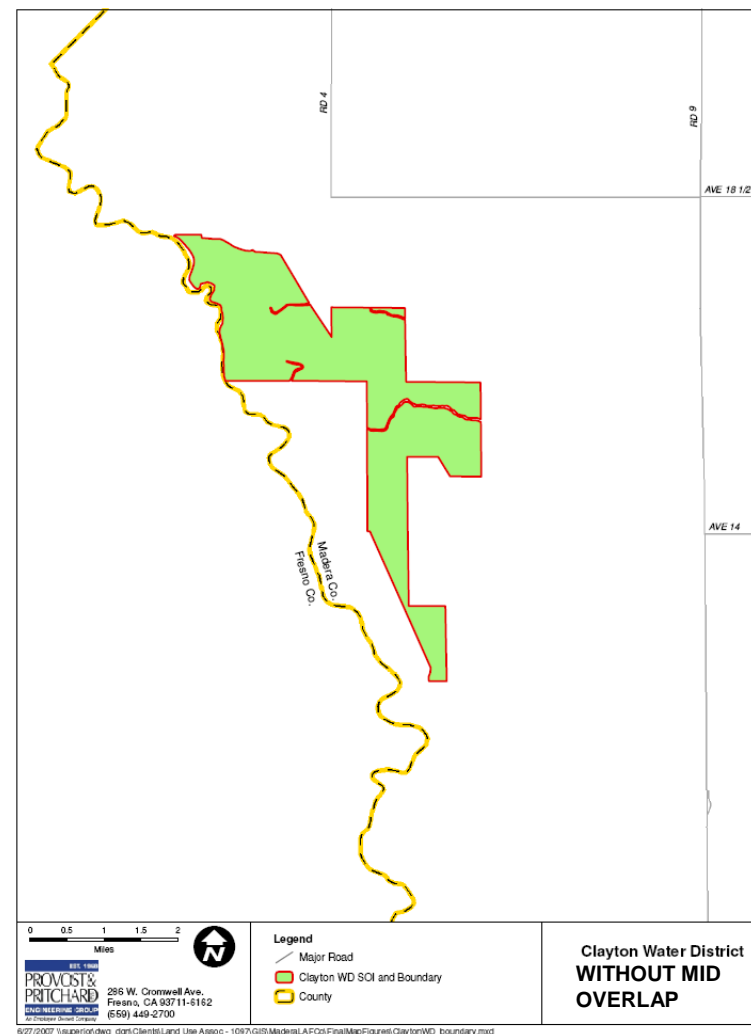


Figure 8

**FIGURE 7 and 8 – CLAYTON WATER DISTRICT SOI AND DISTRICT BOUNDARIES - CONFIRMED  
MUNICIPAL SERVICE REVIEW - PUBLIC WATER DISTRICTS, MADERA COUNTY**



## 5.4 GRAVELLY FORD WATER DISTRICT

1836 West 5th Street, Madera, CA 93637  
 Contact: Tim DaSilva (559) 674-2911

The Gravelly Ford Water District (GFWD) was formed in 1962 pursuant to the California Water Code (Section 20000 et. seq.). The District serves approximately 8,317 acres (26 farms) of unincorporated Madera County territory generally situated between Avenue 4 and Road 20. In 1981 a Class II water contract was executed with the United States Bureau of Reclamation. This contract provides the District with an allotment of 14,000 ac. ft per year.

Water is also purchased from the Madera Irrigation District (MID). In 1982 the District purchased bonds issued for the construction of a distribution system and the first water deliveries were made. A water delivery system was constructed in 1984, allowing surface water to supplement its use of groundwater and water from Cottonwood Creek. Land was purchased and a percolation pond was constructed in 2004.

The District also contracts for surface water for agricultural uses with MID and distributes it to customers throughout its territory. The District's distribution system consists primarily of the Gravelly Ford Canal, which extends from the San Joaquin River to Cottonwood Creek. The District receives only class II water. Small connecting pipelines are used to deliver water to metered turnouts. The unlined canal allows for groundwater recharge by percolation of water into the underlying sandy soils.

Gravelly Ford Water District operates under USBR requirements, which provides management parameters including policies, directives and standards, and delegations of authority. Collectively, these management parameters assign program responsibility and authority, and document Reclamation-wide methods of doing business. The United States Bureau of Reclamation has changed billing practices over the past few years and now charges for the actual amount of water used rather than the total water allotment.

### 1. Infrastructure Needs or Deficiencies

**Purpose:** *To evaluate infrastructure needs and deficiencies in terms of supply, capacity, condition of facilities, and service quality.*

District infrastructure consists of 15 miles of open canals, 5 miles of pipeline, and 3 pump stations that provide water to district canals and pipelines. The District infrastructure also includes a 20 acre percolation pond. Approximately 16,000 acre feet of water is used annually, equaling an average daily demand of about 44 acre feet. Line or pipe distribution systems utilized by the District increase distribution system flexibility and capacity, and decrease maintenance and reduce seepage.

The District's unlined sections are being considered for a future program where groundwater will be pumped into the system to augment supply. To facilitate the financing of capital improvements for on-farm irrigation systems, the District provides engineering services and pays 25 percent of any on-farm main line pipe costs (however, this does not cover side laterals or turnouts).

The District has no regulatory reservoirs at this time, and is exploring the possibility of constructing regulatory reservoirs to improve distribution system delivery flexibility: A complete pump-back system would be required to handle a reservoir and funding is not available at this time. This has been considered in the past and may be implemented in the future.

**Determination:** *Overall planning for the Gravelly Ford Water District infrastructure appears adequate. The District focuses mainly on the maintenance, replacement, and upgrade of their existing water facilities. The development of a ground water recharge facility was completed and place for service in 2005. No additional infrastructure is needed at this time.*

## **2. Growth and Population Projections for the Affected Area**

**Purpose:** *To evaluate service needs based on existing and anticipated growth patterns and population projections.*

The population in the Gravelly Ford Water District is between 50 and 75 people. The District needs to match limited surface supply with grower groundwater to meet the ongoing needs of its water users, without affecting the water tables.

**Determination:** *Most of the District is rural and population growth in the District has increased at a very slow rate. A significant growth in population is not expected.*

## **3. Financing Constraints and Opportunities**

**Purpose:** *To evaluate factors that affect the financing of needed improvements.*

The Board of Trustees adopts an annual budget and oversees expenditures throughout the fiscal year. The District has annual audits conducted by a certified public accountant. The audits are submitted to the County Auditor-Controller, pursuant to the Health and Safety Code. In reviewing the last three years of audits, the District was shown to be in conformity with “Generally Accepted Accounting Principals”.

Recently, the District implemented a new financial reporting model, as required by the provisions of Government Accounting Standard Board Statement No. 34, *Basic Financial Statements – and Management’s Discussion and Analysis – for State and Local Governments* (as of July 1, 2003). As with all Districts, the County of Madera maintains the general ledger for the District.

The accounting system of the District is based on fund accounting. A fund is a group of related accounts that is used to maintain control over resources that have been segregated for specific activities or objectives. The District uses fund accounting to ensure and demonstrate compliance with finance-related legal requirements. The financial statements of the District consist only of the funds of the District. The District has no oversight responsibility for any other governmental entity, since no other entities are considered to be controlled or dependent on the District.

The District had only one fund for calendar years 2005 and 2004, an Enterprise Fund. The Enterprise Fund is used to report any activity for which a fee is charged for goods and services. The District’s enterprise activity is based on the operations of three hydroelectric power plants.

The following tables provide a summary of the District’s actual budget performance over 2004 and 2005. Gravelly Ford Water District purchased 20 acres for a pond site in 2003 and paid for construction in 2004 (pond - \$171,127, pump - \$23,825 and controls – 15,375 totaling \$210,327)

**Table 8**  
**Gravely Ford WD Statement of Changes in Fund Equity**  
**Years Ended December 31, 2005 and 2004**

Source	2005	2004
Revenues	\$297,233	\$376,614
Expenditures	\$477,639	\$500,764
Balance +/-	(\$180,406)	(\$124,150)

*Source: Madera County Auditor-Controller's Office*

**Table 9**  
**Gravely Ford WD Statement of Changes in Fund Equity**  
**Years Ended December 31, 2005 and 2004**

	2005	2004
Balance, January 1	\$2,294,390	\$2,474,796
Net (loss) Income	(\$124,150)	(\$180,406)
Balance, December 31	\$2,170,240	\$2,294,390

*Source: Madera County Auditor-Controller's Office*

**Table 10**  
**Gravely Ford WD Statement of Cash Flows**  
**Years Ended December 31, 2005 and 2004**

	2005	2004
Cash Flows from Operating Activities Net (loss) Income	\$354,180	\$281,620
Net Cash (used) Provided by Operations	\$500,764	\$477,639
Net (decrease) Increase in Cash and Cash Equivalents	(\$146,584)	(\$196,019)
Non-operating revenue and (expense)	\$22,434	\$15,613
Cash and cash equivalents at start of year	\$2,294,390	\$2,474,796
Cash and cash at end of year	\$2,170,240	\$2,294,390

*Source: Madera County Auditor-Controller's Office*

## **Fiscal Analysis**

**Overview of the Financial Statements** - The assets of the District exceeded liabilities at the close of the most recent available calendar year by \$2,170,240 (net assets). Of this amount, \$800,146 (unrestricted net assets) could be used to meet the District's ongoing obligation to clients and creditors. The Districts' total net assets decreased by \$124,150 from calendar year 2005. This amount was mainly attributed to a reduction in property tax assessments of \$43,352. The district's cash and cash equivalent balance at December 31, 2005 was \$75,465 representing a decrease of \$39, 890.

## **Assets, Liabilities, Net Assets or Equity, and other Financial Statement Items**

**Net Assets.** Net assets may serve over time as a useful indicator of the District's financial position. During the 2005 the District's assets exceeded liabilities by \$2,170,240. The largest portion of the net assets reflects investment in capital assets. The District uses these capital assets to deliver water. Therefore, these assets are not available for future spending. Presented below is a condensed statement of the District's total assets, net of liabilities (net assets) for the calendar year 2005 compared to calendar year 2004. The statement reflects the economic resources of the District as well as its economic obligations at the end of the calendar years shown.

**Cash and Investments** - Cash includes amounts in demand deposits as well as short-term investments with a maturity date within three months of the date acquired by the District. Investments are stated at cost or amortized cost. Statutes authorize the district to invest in U.S. Treasury and registered state warrants, notes, bonds, bills, or certificates, commercial paper, repurchase agreements and other similar instruments.

Cash and cash equivalents include money market instruments and other highly liquid investments that are stated at cost which approximates market value. Such investments, which have an ordinary maturity of three months or less, are considered to be cash equivalents for purposes of the statement of cash flows.

**Capital Assets and Depreciation** - Capital assets, which include the utility plant, are reported in the business-type activities column in the government-wide financial statements. Capital assets are defined by the District as assets with an initial cost of more than \$1,000 and an estimated life in excess of one year. Such assets are recorded at historical cost or estimated historical cost if purchased or constructed. Donated capital assets are recorded at estimated fair market value at the date of donation. The cost of normal maintenance and repairs that do not add to the value of the asset or materially but extend asset lives are not capitalized.

All cash accounts are maintained in bank accounts. For purposes of classifying categories of credit risk, all deposits are classified into credit risk Category 1 which are insured or collateralized with securities held by the district or by its agent in the District's name. The bank account balances are only insured by federal Deposit Insurance up to \$100,000.

Gravelly Ford Water District has moneys on deposit with the Local Agency Investment Fund (L.A.I.F.), a special fund of the California State Treasury. The funds may be withdrawn upon one day notice. Because of their diverse nature, investments in L.A.I.F., are not categorized as to credit risk. The Gravelly Ford water District's investments in L.A.I.F., are stated at cost which approximates market.

GASB 31 requires reporting of certain investments of governmental entities at fair value. Based on information provided by L.A.I.F., the fair value of the District's investments at December 31, 2005 is \$683,677. Because the (\$1,645) difference between fair value and cost of the District's investments is immaterial, management has elected not to record the District investments at fair value and not to recognize the unrealized (loss) in these financial statements.

**Commitments and Contingencies** - The availability of water for crop irrigation could be adversely affected by any of several cases in litigation which concern releases from Friant Dam into the San Joaquin River. The financial impact of an unfavorable decision in any of these cases cannot be estimated.

**Determination:** *The Gravelly Ford Water District is financially autonomous and limited to funding sources allowed under State Law. The District's operating revenues for water services are primarily obtained from enterprise funds. Options for funding the District's water infrastructure appear to be adequate. The District does not forecast short or long-term constraints that limit the ability to provide infrastructure upgrades and improvements.*

#### **4. Cost Avoidance Opportunities**

**Purpose:** *To identify practice or opportunities that may help eliminate unnecessary costs.*

The cost of water obtained from the Bureau of Reclamation increases each year. The State has recently imposed a charge to the District based on their contract amount, not on what the District receives. The District also pays a portion of pumping costs for exchange contractors. These later two costs are recent and came after the District's \$5.00 per acre-foot standby fee increase was adopted.

The District has been running a deficient budget even after increasing water charges from \$25 to \$35 per acre foot since 2004. Water charges are now equal to or exceeding the electrical costs of pumping. Additional increases in water charges will reduce sales revenue. Proposition 218 restricts any increases in taxes and/or assessments without a two-third (2/3) vote by District landowners. The District landowners are not ready to approve additional fee increases at the time of this report and the District had no outstanding debt and approximately \$2,170,240 in net assets.

**Determination:** *The District has been running a monthly deficient budget; however, District landowners are not ready to approve additional fee increases at this time since the District currently has no outstanding debt and a large positive net asset balance. There are no mandatory standards for determining appropriate levels of reserves (unrestricted net assets). Neither, the California Constitution, State Statutes, the State Controller, or county auditors provide standards upon which decision-makers may rely in determining levels of reserves to maintain. Agencies are encouraged to adopt policy to guide official decisions and disclose to reserve fund actions. The District is encouraged review and update policies for retention and use of reserve funds.*

**5. Opportunities for Rate Restructuring**

**Purpose:** *To identify opportunities to positively impact rates without decreasing service levels.*

In certain years it has been cheaper to pump then receive District water supplies. Recent costs have balanced out and growers are receiving all of their entitlements. The District can receive surplus water in wet years for recharge; costs are based on Section 215 water rates. It has been challenging for the District to optimize supplies since total water supply each year is uncertain. If water allocation was more definite, conjunctive use could be implemented more efficiently.

All water sources have different price schedules, but the price is not set to encourage use of any one. Use is determined by economic decision, with groundwater being the most expensive, followed by surface water, and then spill waters since this source is less reliable than the other two sources. The District charges \$35 per acre-foot for water with a \$5.00 per acre standby which is competitive with groundwater pumping costs and the Madera Irrigation District which is the closest water or irrigation district to GFWD.

**Determination:** *The Board reviews the service charges and compares them to groundwater pumping costs and adjusts its rates as needed to obtain adequate revenue. Delivery costs must be competitive with ground water pumping costs or users will choose to pump groundwater for their irrigation needs. No additional identify opportunities to positively impact rates without decreasing service levels has been identified.*

**6. Opportunities for Shared Facilities**

**Purpose:** *To identify the opportunities for jurisdictions to share facilities and resources creating a more efficient service delivery system.*

The District does not need to share facilities and resources with other districts at this time. All the equipment necessary to carry out maintenance and services exist on site or are preformed under contract. GFWD currently receives spill water from MID which it pays for and obtains from either Cottonwood Creek or a Lat 6-2 MID pipeline.

**Determination:** *The District could use some of their facilities to convey Madera Irrigation District’s water to the MID’s Madera Ranch site, a portion of which is in the Gravelly Ford Water District. However, no formal discussions have started between the two districts. No additional opportunities to share facilities and resources with other districts have been identified at this time.*

**7. Government Structure Options, Including Advantages and Disadvantages of Consolidation or Reorganization of Service Providers.**

**Purpose:** *To consider the advantages and disadvantages of various government structures that could provide public services.*

Currently the District’s boundaries and SOI are coterminous. There is no duplication of services in the District. All eligible lands are currently served by the District. Combining with an adjacent District would increase the costs to users within GFWD. The District does not wish to consolidate with any adjacent districts. The District participates in sharing facilities through system interconnections with the Madera Irrigation District (MID). The GFWD participates with MID in a collaborative system to share resources.

***Determination:*** All eligible lands are currently served by the District. Combining with an adjacent District would increase the costs to users within the District. The District is not interested in consolidation with any adjacent districts. The District participates in sharing facilities through system interconnections with the Madera Irrigation District (MID). The District participates with MID in a collaborative system to share resources. There is no duplication of services in the District.

## **8. Evaluation of Management Efficiencies.**

**Purpose:** To evaluate the quality of public services and the agency's ability to provide services.

Overall, the Gravelly Ford Water District is well administered. The District accomplishes its operations with minimal staff and at minimum cost. The District has three part time employees, including a manager, secretary and ditch tender. Gravelly Ford serves 24 of the 27 landowners within the District and all services are metered. All District staff is part-time and the Board or Directors receive no benefits or compensation. The District's insurance company conducts annual field reviews of District operation and safety measure in order to keep the cost of required insurance at an affordable and consistent rate.

***Determination:*** The District accomplishes its operations with minimal staff, at minimum cost, and is consistently within its planned budget. The staff self manage their duties and accomplish all tasks within a timely manner. The District has ongoing training programs for staff and Trustees in their respective areas of responsibility. Privatization is used throughout the GFWD service area to provide cost savings. The District appears to operate in an efficient manner.

## **9. Local Accountability and Governance.**

**Purpose:** To evaluate the accessibility and levels of public participation associated with the agency's decision-making and management processes.

The District's operations are administered by a five-member Board of Directors elected by landowners and users within the District. The District follows the Brown Act and posts meeting notices 72 hours in advance on the office front door. Meetings are held at 1:30 p.m. on the second Wednesday of each month. The District sends out periodic information letters. All landowners have the name and phone numbers of the staff. The Board members generally see and talk to a majority of the users on a regular basis.

***Determination:*** The District limits its activities to services authorized by state charter or principle act. Services are extended beyond boundaries only when lawful. The District complies with requirements for conducting public meetings. Agenda items are flexible to accommodate public participation. The District also publishes a community newsletter to inform District customers of the latest events. No incidences of Brown Act violations have been reported.

## **Review of Agency Sphere of Influence**

Madera LAFCO has the statutory authority and obligation to establish and adopt a sphere of influence for each city and special district within the county (Government Code Section 56425). A sphere of influence is a planning boundary outside of an agency's legal or "service" boundary that designates the agency's probable future boundary and service area. State law also requires LAFCO to review and update, as necessary, the adopted spheres of influence of agencies once every five years (Government Code Section 56425 (f)). Pursuant to state law, the Gravelly Ford Water District sphere of influence was reviewed in conjunction with the service review presented in this report.

The primary purpose in reviewing the District's sphere of influence (SOI) was to evaluate if this ultimate boundary is appropriate and necessary, determine if the District can feasibly provide well planned efficient services in this territory, and if the current location of the SOI (or another location) will be a benefit to residents, those that receive services and property owners within the area.

Review of the District's SOI involved detailed research, involving the following resources:

- Madera County LAFCO - official agency records.
- Madera County Recorder/ Assessor records.
- Gravelly Ford Water District AB 3030 Groundwater Management Plan
- Gravelly Ford Water District "Annual Auditor's Reports"
- SOI maps from the District, Assessor's office, Water Resources Board.
- Personal communications with District staff.

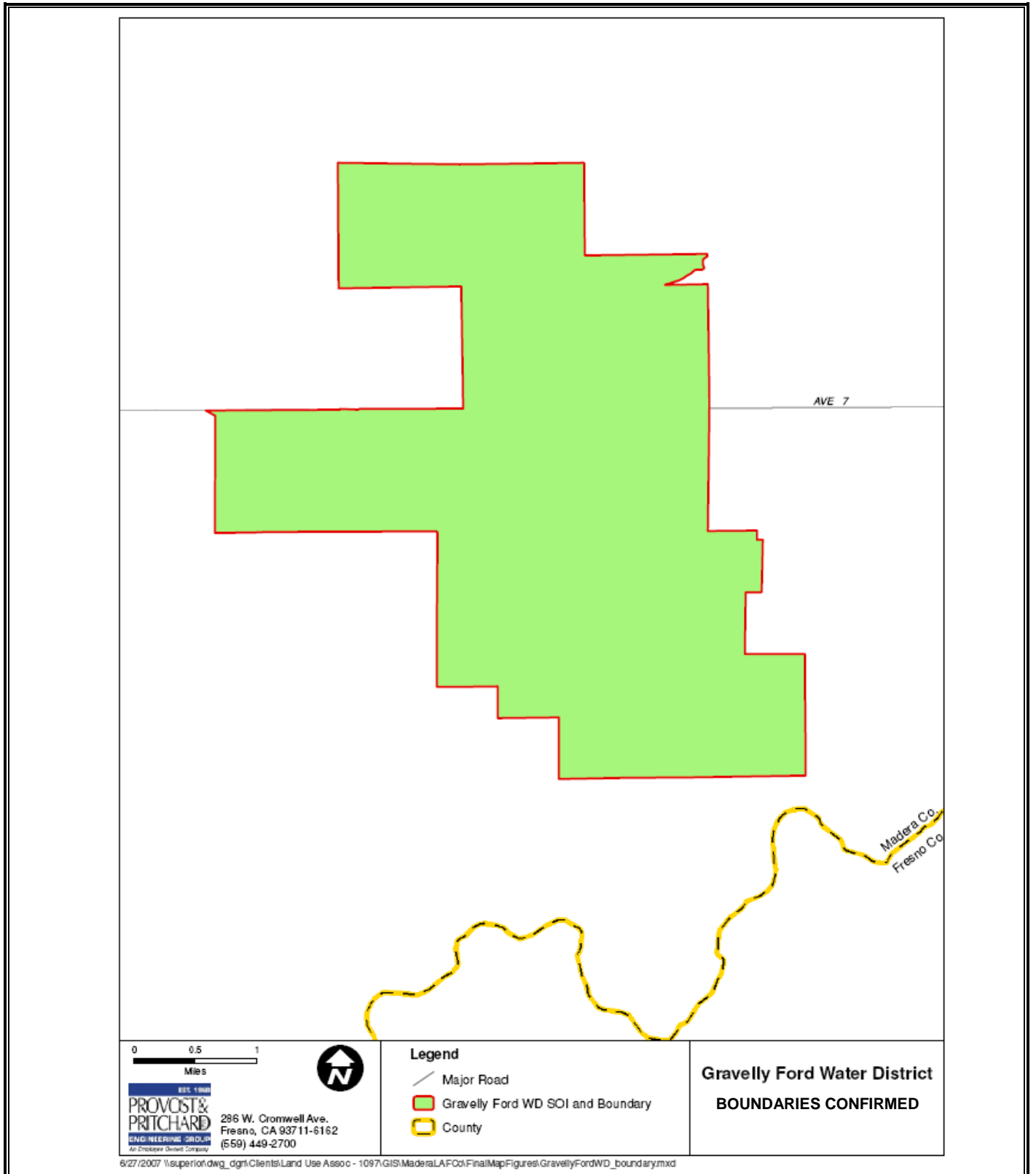
## **Discussion and Findings**

The precise SOI boundaries for the Gravelly Ford Water District were verified during this review. The actual sphere of influence boundaries were verified using LAFCO records, with confirmation by the District (see Figure 9). The District's SOI and service boundaries (i.e., boundary of the District) are coterminous. Based on the analysis presented in the MSR for the Gravelly Ford Water District and review of its SOI, it was concluded that the boundary is appropriate and necessary, the District can provide well planned efficient services in this territory, and the current location of the SOI is a benefit to those that receive services and/or property owners within the area.

## **Recommendations**

1. Adopt the "Written Determinations" for the Gravelly Ford Water District presented in this service review pursuant to California Government Code Section 56430.
2. Find that the District's current sphere of influence is appropriate and necessary, the District can provide well-planned efficient services in this territory, and the current location of the SOI is a benefit to those that receive services and/or property owners within the area. Make no change to the Gravelly Ford Water District boundaries or the adopted sphere of influence at this time.





**FIGURE 9 – GRAVELLY FORD WATER DISTRICT BOUNDARIES - CONFIRMED  
MUNICIPAL SERVICE REVIEW - PUBLIC WATER DISTRICTS, MADERA COUNTY**



## 5.5 MADERA IRRIGATION DISTRICT

12152 Road 28 ¼ , Madera, CA 93637

Contact: Larry Howard, General Manager (559) 673-3514

Madera Irrigation District was formed in 1920 and originally consisted of approximately 350,000 acres. The formation was the effort of a 40-member committee organized to bring water to the Madera area. The District purchased a site for Friant Dam and filed for water rights with the State Water Authority. This effort was not successful and the District contracted with the United States Bureau of Reclamation. This contract granted the District a guaranteed water supply of a maximum of 270,000-acre feet per year, for an area of 172,000 acres.

Since the formation of the District the boundaries have been changed a number of times. In 1950, approximately 46,000 acres were detached from the District to permit the formation of the Chowchilla Water District reducing the gross area to 112,500 acres, of which 94,500 acres was irrigable area. In 1975, the District added 15,000 acres as required by a contract with the Bureau that provided 24,800-acre feet on average from Hidden Dam. In 1983, the District joined the Mid Valley Water Authority in an effort to obtain additional water supplies for the District.

At present, the Madera Irrigation District (District) consists of approximately 130,000 acres adjacent to the San Joaquin River in Madera County. The District's water supply derives from multiple sources including water rights on the Fresno River and water service contracts for water from the Friant Division and the Hidden Unit of the Central Valley Project. In all years except above normal or wet years, the District must purchase water from other water agencies to supplement the supply to its farmers.

**Madera-Chowchilla Water & Power Authority** - The District entered into a joint powers agreement with the Chowchilla Water District to form the Madera-Chowchilla Water & Power Authority" (MCW & PA). The Authority is administered by the Board of Directors of each District. The Authority handles electrical generation projects that are to be shared between the two districts equally and the operations and maintenance of the Madera Canal. The Authority began operation of an electric plant on the Madera Canal in March 1985. The project was being financed by 1983 Revenue Bonds and contributions from each District.

### 1. Infrastructure Needs or Deficiencies

**Purpose:** *To evaluate infrastructure needs and deficiencies in terms of supply, capacity, condition of facilities, and service quality.*

The District's water and distribution system is a combination of open flow primary and secondary laterals, enclosed conduit, and natural streams. There are approximately 315 miles of open flow canals and laterals, 115 miles of pipeline, and 102 miles of natural streams used for District conveyance and distributions. The open flow ranges from 5 cfs to 340 cfs. Many of the non-piped laterals have been in use for over 100 years. With the exception of a few small pump stations, the distribution system is a gravity system. However, there are approximately 1,600 turnouts, and about one-third are equipped with grower lift pumps in order to obtain adequate on-farm flow. There are no reservoirs or regulating reservoirs located within the District.

The District receives water via the Madera Canal from Friant Dam through natural and open flow primary laterals. Fresno River water is available from both controlled release and uncontrolled flows from Hidden Dam. Water from the Madera Canal may also be released into the Fresno River. Water is diverted from the Fresno River at the District's Fanchi Diversion Weir on the east side of the District. This provides service to approximately 45,000 acres. The Fresno River is also the conveyance to direct pump dwellers, the Island Tract pumping plant service area, and riparian.

***Determination: The District's water infrastructure appears adequate to provide efficient service. The infrastructure is appropriately sized for current, seasonal, and emergency water needs. The water systems are characterized by flexibility, strategic redundancy, and alternative water sources. Overall planning for future infrastructure appears adequate. The MID engages in strategic planning for five-year horizons through capital improvement plans.***

## **2. Growth and Population Projections for the Affected Area**

**Purpose:** *To evaluate service needs based on existing and anticipated growth patterns and population projections.*

The District's primary function, which is providing water for agricultural uses, is not affected by population growth. The only impact that growth would have on the District is the conversion of agricultural lands to urban uses. Such land use changes would likely reduce the need for agricultural water.

***Determination: The District must coordinate with general-purpose agencies in planning for future services. The District's primary function, which is providing water for agricultural uses, is not affected by population growth. The only impact that growth would have on the District is the conversion of agricultural lands to urban uses. Such land use changes would likely reduce the need for agricultural water.***

## **3. Financing Constraints and Opportunities**

**Purpose:** *To evaluate factors that affect the financing of needed improvements.*

The District Board adopts an annual budget and oversees expenditures throughout the fiscal year. The District has annual audits conducted by a certified public accountant. Recent audits show that the District is in conformity with the requirements of the Governmental Accounting Standards (GASB) statement No. 34 Basic Financial Statements - and Management's Discussion and Analysis (MD&A) for State and Local Governments. The most recent audit provides an overview of the financial activities and transactions for the fiscal year 2005.

The District's financial statements include a Statement of Net Assets, Statements of Revenues, Expenses and Changes in Net Assets and a Statement of Cash Flows. Notes to the Financial Statements are provided as well. The Statement of Net Assets provides information about assets and obligations of the District at a specific time. The statement of revenues, expenses and changes in net assets provide information regarding the District's operations and maintenance during the 2004-2005 fiscal year. The statement of cash flows reports cash sources and uses from/for operating activities, capital, related financing activities, and investing activities.

The following tables provide a Financial Summary and a summary of the Revenues, Expenses and Changes in Net Assets of the District's for fiscal year 2004-2005:

**Table 11**  
**MID Basic Financial Summary**  
**Fiscal Year 2004-05**

<u>Statement of Net Assets</u>	<u>2005</u>	<u>2004</u>
<b>ASSETS</b>		
Current Assets	\$9,171,012	\$ 5,751,135
Bond Issue Costs      2	229,775	-0-
Restricted Assets	8,618,007	718,454
Deposit on Land Purchase	-0-	2,250,000
Intangible Costs, Net	8,098,333	-0-
Utility Plant - Net	36,259,758	7,599,983
Other Assets & Investments	3,110,366	2,390,695
<b>Total Assets</b>	<b><u>\$67,487,251</u></b>	<b><u>\$18,710,267</u></b>
<b>Liabilities &amp; Net Assets</b>		
Current Liabilities	\$3,934,643	\$4,288,786
Long Term Debt	49,628,100	1,952,115
<b>NET ASSETS</b>		
Invested in Utility Plant-Net	4,662,084	7,653,854
Restricted	296,728	498,143
Unrestricted	-8,965,696	-4,317,369
<b>TOTAL LIABILITIES &amp; NET ASSETS</b>	<b><u>\$67,487,251</u></b>	<b><u>\$18,710,267</u></b>

**Table 12**  
**Madera ID Revenues, Expenses and Changes in Net Assets**  
**Fiscal Year 2004-05**

	<u>2005</u>	<u>2004</u>
Operating Revenue	\$10,662,767	\$9,596,680
Operating Expenses	10,777,524	11,062,778
Operating Loss	\$ (114,757)	\$ (1,466,098)
Non-operating Revenue	\$3,054,292	\$983,804
Non-operating Expenses	<u>(1,484,393)</u>	<u>(445,340)</u>
Non-operating Gain	\$1,569,899	\$538-464
Increase (Decrease) in Net Assets	\$1,455,142	\$(927,634)
Net Assets, beginning of year	12,469,366	\$13,397,000
<b>Net Assets, end of year</b>	<b><u>\$13,924,508</u></b>	<b><u>\$12,469,366</u></b>
<b>Statement of Cash Flows</b>		
Net Cash provided by Operating Activities	\$924,862	229,570
Net Cash from Capital and Related Financing Activities	\$9,418,768	\$(2,829,448)
Net Cash from Investing Activities	\$1,023,167	\$422,871
Net Increase (Decrease) in Cash Equivalents	\$11,366,797	\$(2,177,007)
Cash and Gash Equivalents:		
Beginning of year	\$4,728,293	\$6,905,300
<b>END OF YEAR</b>	<b><u>\$16,095,090</u></b>	<b><u>\$4,728,293</u></b>

## **District Assets**

Current Assets – “Current Assets” increased by \$3,410,877. A portion of the increase was due to the establishment of a debt service stabilization fund for the water enhancement project of \$1,000,000. In addition, the remaining increase of cash and cash equivalents is due to the reimbursement of funds for the advanced deposit made by the irrigation fund in 2004 on the land purchase for the water enhancement project. The funds came from the issuance of a long term debt. The water enhancement project is for the establishment of a water banking facility for the benefit of Madera Irrigation District, its growers, and surrounding areas.

Bond Issue Costs - In 2005, the District completed the purchase of the land and improvements for the water enhancement project. Water Revenue Bonds Series 2005A and Series 2005B were issued to provide for the financing of the project. The Bond issuance costs of \$2,229,775 are included as an asset and will be amortized over a period of 30 years.

Restricted Assets - Restricted assets increased by a total of \$7,899,553. This is due primarily to the addition of \$8,104,301 for the water enhancement fund. These assets are held in trust by Wells Fargo Bank for the purpose of the interest payments paid to the bondholders as well as monthly costs associated with the Bonds. Restricted assets are those net assets with external constraints placed by creditors, trustees, etc.

Intangible Costs, net - As part of the purchase of the water enhancement project there was approximately \$8,600,000 for maps, reports, photographs, field notes, spreadsheets, and other information related to the water enhancement project. These costs were set up to be amortized over a period of five years.

Utility Plant, net of accumulated depreciation - Utility plant reflects an increase of \$28,659,775 due to the purchase of land, buildings, wells and pumps, and fencing for the water enhancement project. “Utility Plant” also reflects a decrease in 2005 for the irrigation fund by a net amount of \$485,870. Additions to the transmission and distribution system, and office equipment were made in 2005. The net difference includes both obsolete assets that were written off and the allowance for depreciation in 2005.

Other Assets and Investments - Other assets and investments increased by \$719,671 in 2005. The District is a 50% partner of the Madera Chowchilla Water and Power Authority and is also a 9.25% partner in the Friant Power Authority. Any gain (or loss) in the Power Authorities are reflected in the investment accounts.

**(Please Note:** This review revealed that the Madera County Assessor’s Office does not have the correct legal description of boundaries for MID. Accordingly, the Assessor is not able to assess all territory located inside the District’s boundaries. As a consequence, the District is not all receiving tax revenues it is entitled to receive. It would be financially beneficial to the District to correct this situation as soon as possible).

## **Liabilities and Net Assets**

Current Liabilities – “Current Liabilities” decreased by \$354,143 in 2005. The primary reason for this decrease is that the water deposits for 2005 paid by subordinate growers for the outside purchase of additional water did not occur. At the end of 2005, the Board of Directors had not made the decision to purchase additional crop water. Therefore, no deposits were received from subordinate growers in 2005. Current liabilities for the water enhancement project as well as deferred lease income which is reflected in the water enhancement fund was received in 2005 for 2006.

Long Term Debt - This account is set up to reflect the loan from the US Bureau of Reclamation for the purchase of the water distribution system. This loan will be paid in full in the year 2014. Payments of \$244,000 are made annually. Also included in long term debt is the issuance of the Series 2005A and Series 2005B bonds that were obligated to finance the water enhancement project. The bond issues total \$47,920,000 with principal payments to begin January, 2010.

Net Assets - The District's net assets reflect a net investment of \$4,662,084 in utility plant, net of related debt. Related debt is debt used to acquire those assets and is still outstanding. Restricted net assets of \$296,728 represent amounts that are restricted by external control on how they may be used. The remaining balance of unrestricted net assets of \$8,965,696 may be used to meet the District's ongoing obligations for operations and maintenance and the water enhancement project. The total net assets in 2005 were \$13,924,508 versus \$12,469,366 in 2004.

### **Statement of Revenues, Expenses and Changes in Net Assets**

Operating Revenues - Operating revenues consist of the annual assessments for both rural and city parcels that are within the District boundaries (city parcels are assessed to pay storm water control and groundwater recharge services provided by the District). It also consists of revenues collected for crop water sales and the PG&E/Soquel generation revenue. Total operating revenues for 2005 was \$10,662,767, an increase of \$1,066,087 over 2004. The increase is primarily due to increased water sales and the increase in the Soquel generation revenue. The charts below depict the change in operating revenue for the two fiscal years.

Operating Expenses - Operating expenses consist of water purchases, transmission and distribution (operations and maintenance), general and administration, and depreciation and amortization expenses. Water purchases are based on the delivery of federal water from the U.S. Bureau of Reclamation. In 2005, the District purchased 57% of Class I water and 35% Class 2 water, including any prior year carryover water resulting in a decrease of \$1,532,259 over 2004 when the District purchased 100% Class 1 and 8% Class 2 water. This also includes any Warren Act (Soquel) water that was purchased in 2005.

The District has a contract with the U.S. Bureau of Reclamation requiring annual payment for 24,000 acre feet of Hidden Dam water. The per acre foot rate is based on the cost of service rate plus tiered pricing rates that are set by the Bureau of Reclamation. Transmission and distribution (or operations and maintenance) expenses increased in 2005 by \$209,744. This was due to additional maintenance completed on old equipment owned by the District as well as a longer operational season. General and administration expenses increased in 2005 by \$545,860 due to additional legal expenses, water enhancement project expenses, membership fees and dues, and engineering studies.

Non-operating Revenue - This consisted of electric generation revenue received from Madera Chowchilla Water and Power Authority (MCWPA) and the investment in Friant Power Authority (FPA). The generation revenue received from MCWPA increased by approximately \$95,465 in 2005.

***Determination: The budget information examined indicates that the District implements appropriate financing/funding practices. The District is solvent and is able to obtain necessary financing. The District also has the ability to generate additional revenue streams (i.e., from electric power generation). Necessary improvements can be financed by the District as needed.***



#### **4. Cost Avoidance Opportunities**

**Purpose:** *To identify practice or opportunities that may help eliminate unnecessary costs.*

The Madera Irrigation District appears to be well managed. Most of the District's maintenance is accomplished onsite by the permanent employees. The District has 40 full-time employees. The District's equipment and infrastructure is repaired or replaced as needed.

As appropriate MID also uses outside consultants for engineering, legal, and financial services and has contracts for outside labor and other services including construction, large paving projects, janitorial, computer services and programming, electrical, printing and graphic design, laboratory work, property managers, etc. A regular maintenance program for equipment and infrastructure is carried out by the District. Personnel training is ongoing, and safety training keeps the cost of Workman's Compensation Insurance at an affordable and consistent rate.

*Determination: The District appears to be well managed. Most of the District's maintenance is accomplished onsite by the District employees. As appropriate MID also uses outside consultants for engineering, legal, and financial services and has contracts for outside labor and other services. A regular maintenance program for equipment and infrastructure is carried out by the District. No additional cost-avoidance opportunities have been identified.*

#### **5. Opportunities for Rate Restructuring**

**Purpose:** *To identify opportunities to positively impact rates without decreasing service levels.*

Fees for water service within the District are directly related to the cost of producing and delivering water services. The District's rates for services are based on an annual evaluation of water supply costs, the operation of the District and the cost of delivering water to the customers. This information is used to review and set service charges.

Operating revenue consists of agricultural water sales, annual assessments for both rural and city parcels in the District and custom work. Accordingly, the District imposes fees and/ or rates for services that are directly related to the cost of producing and delivering such services. The table below presents the MID's 2006 water rate schedule:

**Table 13**  
**Madera Irrigation District**  
**2006 Crop Water Charges and Tolls (March 7, 2006)**

<b><u>CROP WATER CHARGES AND TOLLS:</u></b>	<b><u>2006 Rates</u></b>
<b><u>Standby Charges:</u></b>	
Regular and Subordinate Lands with District Service	\$ 15.00 per acre
Flat Rate Parcels	\$ 15.00 per parcel
Other lands receiving water	\$ 15.00 per acre
<b><u>Basic Crop Water Tolls:</u></b>	
Cost of service water (regular)	\$40.00/af
R.R.A. 202 Full Cost Water	\$58.00/af
R.R.A. 205 Full Cost Water	\$65.00/af
Subordinate Cost of service (regular), 50% Deposit up front	\$80.00/af
Subordinate RRA 202 Full Cost	\$94.00/af
Subordinate RRA 205 Full Cost	\$101.00/af
Spill Water	\$45.00/af
<b><u>Other Water Tolls and Fees:</u></b>	
Hardship Water	\$100.00/af
Construction Water (up to 20,000 gal/day - \$150; if over 20,000 gals.)	\$300/day
District Conveyance Charge	\$20.00/af
Madera Canal Conveyance Charge	\$5.25/af
<b><u>Flat Rate Water:</u></b>	
0.01 acres thru 1.49 acres	\$245.00
1.50 acres thru 2.49 acres	\$410.00
2.50 acres thru 3.49 acres	\$575.00
3.50 acres thru 4.49 acres	\$736.00
4.50 acres thru 5.49 acres	\$898.00
5.50 acres thru 5.99 acres	\$979.00

***Determination: The District maintains water rates as low as practical. There are few opportunities for rate restructuring. The price of water directly relates to its wholesale cost plus district overhead. Traditionally, the District has elected to keep crop water rates to the growers at a reasonably low rate. To off-set this practice the District continues to look at other measures for water sales without impacting its financial health and loss of future water supplies.***

#### **6. Opportunities for Shared Facilities**

**Purpose:** *To identify the opportunities for jurisdictions to share facilities and resources creating a more efficient service delivery system.*

No new opportunities for shared facilities, shared staffing or equipment has been identified. Historically, the District has provided water to other Districts (for a fee) on an as-available basis. Also, the District allows other districts to utilize its canals and other delivery systems.

***Determination: MID participates in sharing facilities through system interconnections with the Chowchilla Water District, Madera Water District and Gravelly Ford Water District. MID maintains agreements with the Madera Water District, and Gravelly Ford Water District that interconnect distribution systems to create infrastructure redundancies and allow water supplies to be moved among agencies in an emergency.***

**7. Government Structure Options, Including Advantages and Disadvantages of Consolidation or Reorganization of Service Providers**

**Purpose:** *To consider the advantages and disadvantages of various government structures that could provide public services.*

Upon initial examination of the Madera Irrigation District and the Chowchilla Water District SOI boundaries there appeared to be an overlapping of sphere lines and perhaps district boundaries. Further research revealed that there is not an overlapping of SOI lines. The Madera Irrigation District's sphere of influence actually covers the area in question between the two districts (see Figure 2).

The above being stated, the District's SOI does overlap portions of the Aliso Water District, Clayton Water District and all of the New Stone Water District. In addition, the District's sphere and service area (district boundaries), respectively, cover or overlap the City of Madera, Madera Ranchos, and a number of smaller rural subdivisions and developments (see Figure 10). Furthermore, in July 1991 about 2,183 net acres within the Madera Water District were "subordinately annexed" into Madera Irrigation District (see discussion under Madera Water District).

It is noted that the statutes governing water and irrigation districts (principal act) provide for the overlapping of boundaries of two or more districts with permission of the districts' boards. Often this is necessary because physical and financial limitations associated with the delivery of water may require sharing facilities. The duplication of water services is not a problem in such cases between the overlapping districts by an agreement that identifies a primary district that may provide water service and a subordinate district that is limited in its activities to the shared use of facilities and/or infrastructure within the overlapping boundaries of the districts.

Where overlapping includes a city or other urbanized area, MID still collects fees for the provision of storm water control systems and groundwater recharge services. No duplication of services occurs because of this overlapping.

To alleviate the discrepancies summarized above it is necessary to amend the District's sphere of influence to remove the MID's SOI from of the Aliso Water District, Clayton Water District, Chowchilla Water District, Madera Water District and all of the Root Creek District. With the appropriate findings, an SOI amendment can be processed at the time the MSR for MID is accepted by the Commission.

Two final issues, first it is recommended that an "L" shaped area located between Aliso Water District and Gravelly Ford Water District (shown as "white" on Figure 2) is included in MID's amended SOI. The District has purchased this land and intends to include it in its planned "water bank" area. Second, as noted above it will be necessary to amend MID's SOI to correspond to the Chowchilla Water District's SOI expansion into MID territory made necessary by approved and/or proposed annexations (Figure 6).

With approval of such amendments and based on the analysis presented in the MSR for the Madera Irrigation District it may be concluded that the amended SOI boundary is appropriate and necessary, the District can provide well planned efficient services in this territory, and the amended location of the SOI is a benefit to those that receive services and/or property owners within the area.

***Determination - To correct discrepancies in the District's SOI it is necessary to amend the District's sphere of influence to remove territory from the Aliso Water District, Clayton Water District, Chowchilla Water District and all of the New Stone Water District. it is recommended that an "L" shaped area located between Aliso Water District and Gravelly Ford Water District is included in MID's amended SOI. The District has purchased this land and intends to include it in its planned "water bank" area.***

## **8. Evaluation of Management Efficiencies**

**Purpose:** *To evaluate the quality of public services and the agency's ability to provide services.*

The District appears to operate in an efficient manner. The staff is well trained and accomplishes all tasks within a timely manner. New technology is employed by MID as appropriate. Water delivery and accounting records are well maintained. The District has ongoing training programs for staff and management in their respective areas of responsibility. All applicable environmental and safety compliance measures are implemented by the district as applicable. Privatization, which depresses staff levels, often obscures the total resources of agencies; however, the MID has a management-to-staff ratio that appears efficient. The District's record of employee turnover is reasonably stable.

***Determination: District staff is well trained and accomplishes all tasks within a timely manner. New technology is employed by MID as appropriate. Water delivery and accounting records are well maintained. The District has ongoing training programs for staff and management in their respective areas of responsibility. All applicable environmental and safety compliance measures are implemented by the district as applicable. The District appears to operate in an efficient manner.***

## **9. Local Accountability and Governance**

**Purpose:** *To evaluate the accessibility and levels of public participation associated with the agency's decision-making and management processes.*

Operating under the rules and regulations as laid out in the Irrigation Districts Act, the daily activities of MID are under the direction of a five-member Board of Directors. The Directors are elected by the landowners in the District and they serve at their discretion. The Board of Directors meet the first and third Tuesday of each month. The District follows the Brown Act and posts meeting notices 72 hours in advance. The public has access to the facility during posted hours. MID also distributes periodic newsletters to keep landowners informed of matters affecting the District. The Board of Directors approves and administers the required water management plan, the District's annual budget and its staff.

***Determination: The MID limits its activities to services authorized by its principle act. Services are extended beyond boundaries only when lawful. The MID complies with requirements for conducting public meetings. Agenda items are flexible to accommodate public participation. The District also publishes a quarterly community newsletter to inform District customers of the latest events. No incidences of Brown Act violations have been reported. The Board of Directors approves and administers the required water management plan, the District's annual budget and its staff.***

## **Review of Agency Sphere of Influence**

Madera LAFCO has the statutory authority and obligation to establish and adopt a sphere of influence for each city and special district within the county (Government Code Section 56425). A sphere of influence is a planning boundary outside of an agency's legal or "service" boundary that designates the agency's probable future boundary and service area. State law also requires LAFCO to review and update, as necessary, the adopted spheres of influence of agencies once every five years (Government Code Section 56425 (f)). Pursuant to state law, the Madera Irrigation District sphere of influence was reviewed in conjunction with the service review presented in this report.

The primary purpose in reviewing the District's sphere of influence (SOI) was to evaluate if this ultimate boundary is appropriate and necessary, determine if the District can feasibly provide well planned efficient services in this territory, and if the current location of the SOI (or another location) will be a benefit to residents, those that receive services and property owners within the area.

Review of the District's SOI involved detailed research, involving the following resources:

- Madera County LAFCO - official agency records.
- Madera County Recorder/ Assessor records.
- Madera Water District AB 3030 Groundwater Management Plan.
- Madera Water District "Annual Auditor's Reports"
- SOI maps from the District, Assessor's office, Water Resources Board.
- Personal communications with District staff and officials.

## **Discussion and Findings**

The precise SOI boundaries for the Madera Irrigation District were verified during the review (the District's SOI and service boundaries are not coterminous). Upon initial examination of the Madera Irrigation District and the Chowchilla Water District SOI boundaries there appeared to be an overlapping of sphere lines and perhaps district boundaries. Further research revealed that there is not an overlapping of SOI lines. (see Figure 2).

The above being stated, the District's SOI does overlap portions of the Aliso Water District, Clayton Water District, Madera water District and all of the Root Creek Water District. In addition, the District's sphere and service area (district boundaries), respectively, cover or overlap the City of Madera, Madera Ranchos, and a number of smaller rural subdivisions and developments (see Figure 10). Furthermore, in July 1991 about 2,183 net acres within the Madera Water District were "subordinately annexed" into Madera Irrigation District (see discussion under Madera Water District).

It is noted that the statutes governing water and irrigation districts (principal act) provide for the overlapping of boundaries of two or more districts with permission of the districts' boards. Often this is necessary because physical and financial limitations associated with the delivery of water may require sharing facilities. The duplication of water services is not a problem in such cases between the overlapping districts by an agreement that identifies a primary district that may provide water service and a subordinate district that is limited in its activities to the shared use of facilities and/or infrastructure within the overlapping boundaries of the districts.

Where overlapping includes a city or other urbanized area, MID still collects fees for the provision of storm water control systems and groundwater recharge services. No duplication of services occurs because of this overlapping.

To alleviate the discrepancies summarized above it is necessary to amend the District's sphere of influence to remove the MID's SOI from of the Aliso Water District, Clayton Water District, Madera Water District and all of the Root Creek Water District. With the appropriate findings, an SOI amendment can be processed at a future LAFCO meeting. If the Commission approves the amendment, LAFCO staff would then be able to process an application for annexation of the parcels to be incorporated into the District. The districts are agreeable to this solution.

As noted, this review revealed that there is no substantial overlapping of district boundaries and/or SOIs between CWD and MID. Only a small area annexed and proposed for annexation by CWD encroaches into the MID SOI. This situation exists, in part, because MID's SOI was not amended at the time CWDs annexation was approved. This situation can be corrected by amending the SOIs of the districts in this area. Both districts are agreeable to this solution.

With approval of such amendments and based on the analysis presented in the MSR for the Madera Irrigation District it may be concluded that the amended SOI boundary is appropriate and necessary, the District can provide well planned efficient services in this territory, and the amended location of the SOI is a benefit to those that receive services and/or property owners within the area.

### **Recommendations**

The following actions are recommended:

1. **Adopt required Written Determinations and accept the analysis and conclusions of the Municipal Service Review prepared for the Madera Irrigation District by taking actions A and B below:**
  - A. Acting as Lead Agency under the California Environmental Quality Act make a finding pursuant to the California Environmental Quality Act (CEQA Guidelines Section 15000 et seq. and Public Resources Code Sections 21083 and 21084) that the Municipal Service Reviews presented in the Municipal Service Reviews report for the eight (8) public water districts are exempt from CEQA under Section 15306 of the State CEQA Guidelines (Categorical Exemption, Information Collection, Class 6), which provides exemption for data collection, research, experimental management, and resource evaluation activities which will not result in a serious or major disturbance to an environmental resource, and that these studies are for information gathering purposes and are part of a report leading to an action which a public agency has not yet approved, adopted, or funded.
  - B. Adopt the "Written Determinations" in LAFCO's Resolution Making Determinations for the Madera Irrigation District presented in this service review pursuant to California Government Code Section 56430; accept the analysis and conclusions of the Municipal Service Review prepared for the District and direct the Executive Officer to file the report in the public record at the Madera County LAFCO office.

**2. In a separate action approve amendments to the Madera Irrigation District Sphere of Influence by taking actions A, B and C below:**

- A. Acting as Lead Agency under the California Environmental Quality Act find that pursuant Section 5061(b)(3) of the CEQA Guidelines the Project (Municipal Service Reviews for Public Water Districts in Madera County) is covered by the general rule that CEQA applies only to Projects which have the potential for causing a significant effect on the environment, and that it has been determined with certainty that there is no possibility that the Project may have a significant effect on the environment, and accordingly the Project is not subject to CEQA.
- B. Make the required findings in LAFCO's Resolution Making Determinations pursuant to Government Code Section 56425(e) *et seq.* with respect to the four specific issues required to approve a change to a sphere of influence, as presented below:

**1. *Present and planned land uses in the area including agricultural and open-spaced lands.***

The proposed SOI amendment would not change the present agricultural land use currently operating in the affected territory. The County General Plan designation and zoning for the affected territory will not change. The proposed SOI amendment will not convert prime farmland, unique farmland, or farmland of statewide importance to non-agricultural use. No significant adverse effects will occur on continuing agricultural operations on adjacent properties.

**2. *The present and probable need for public facilities and services in the area.***

All of the territory removed by the proposed SOI amendment can be served in the future by the Aliso Water District, Clayton Water District, Chowchilla Water District, Madera Water District and Root Creek Water District. Approval of the proposal SOI amendment will not bring about the need for the additional public facilities or service in the territory.

**3. *The present capacity of public facilities and adequacy of public services that the agency is authorized to provide.***

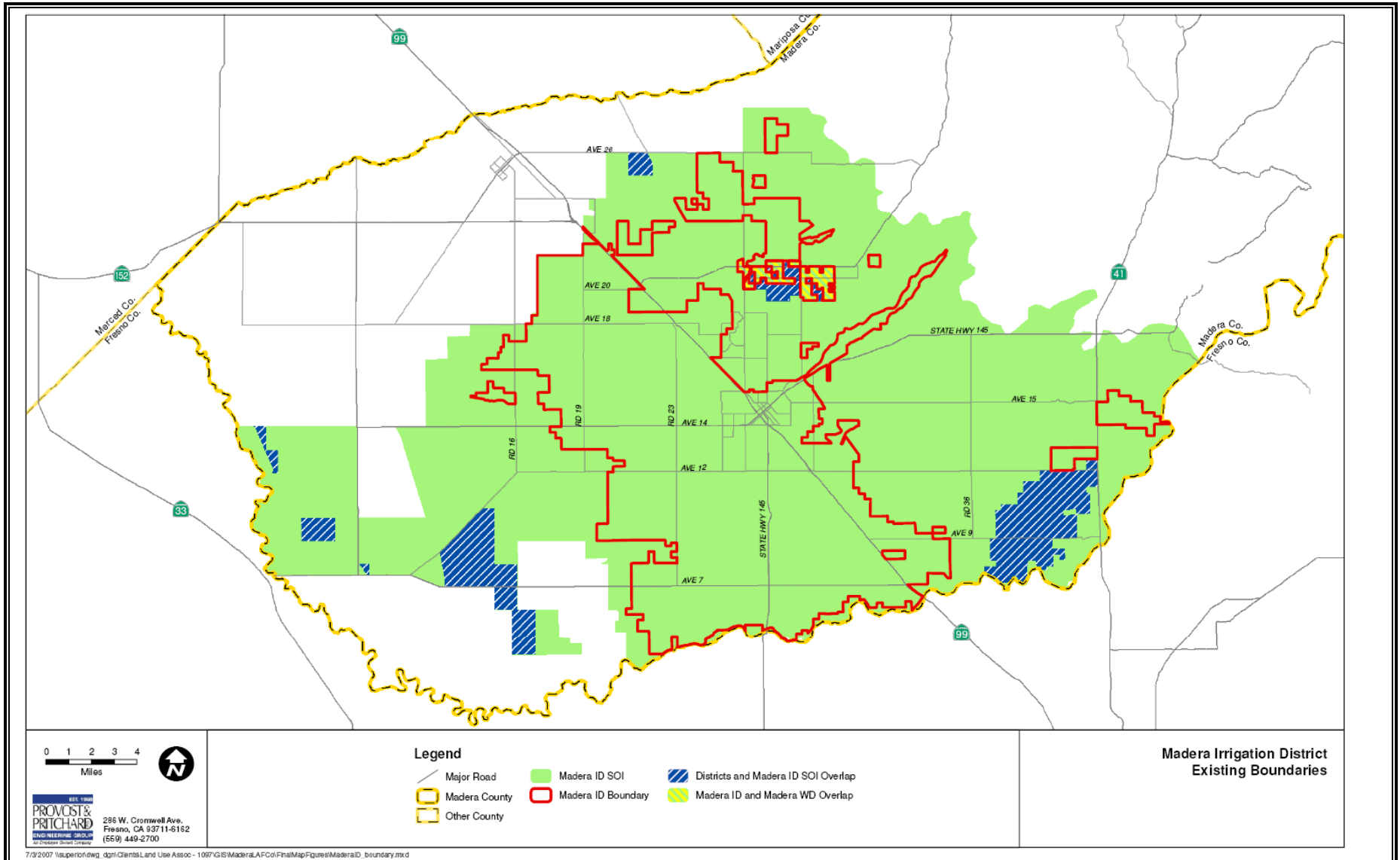
The Madera Irrigation District will not be obligated to serve territory removed from its SOI. (Please note that the MID may pursue inclusion of the "L" shaped area located between Aliso Water District and Gravelly Ford Water District (shown as "white" on Figure 2) in the District's sphere of influence. This territory indicates the District's proposed "water bank" area. Accordingly, MID will not be responsible for providing an "authorized public services" other than managing this territory for water recharge).

**4. *The existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency.***

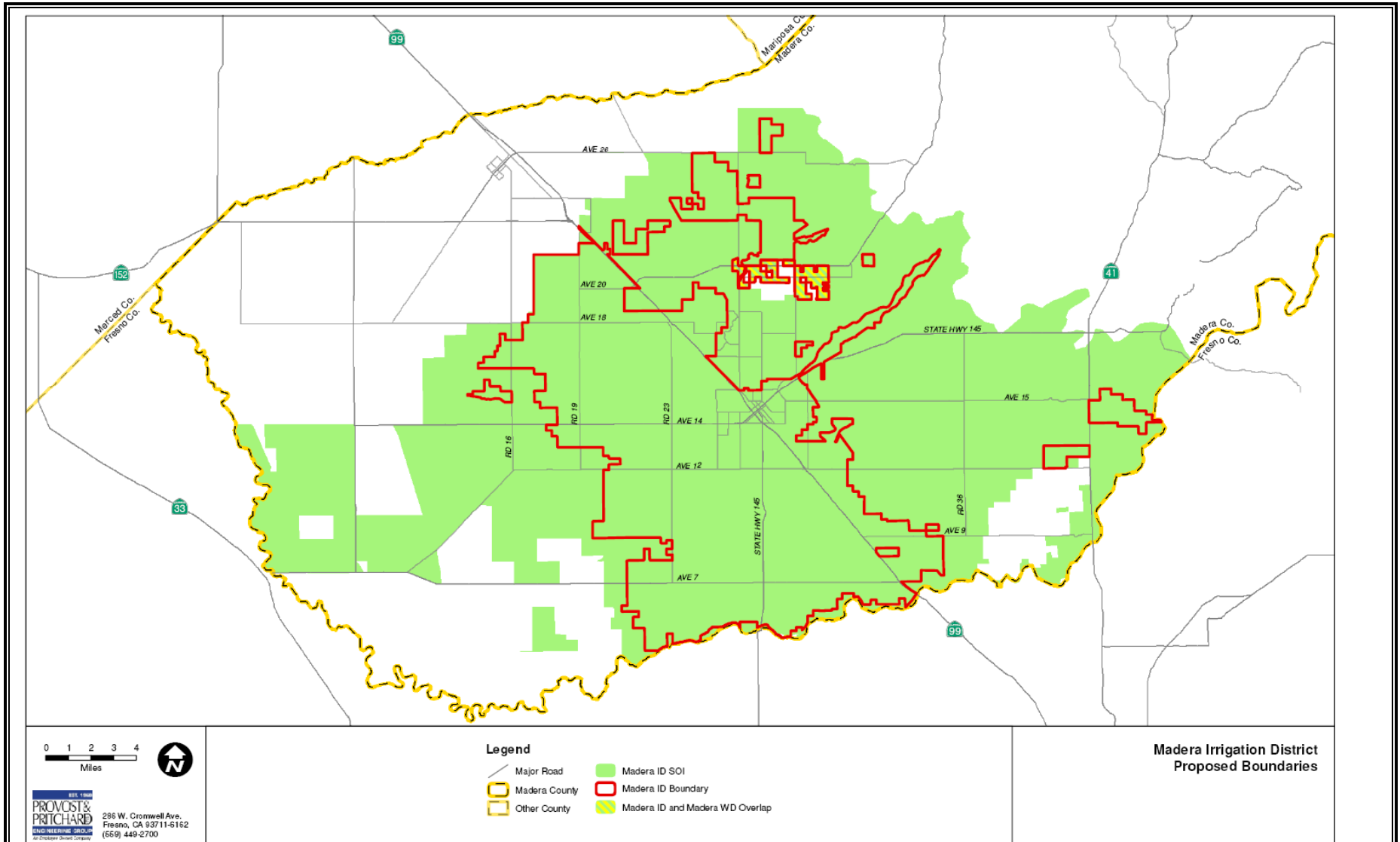
There are several “communities” of social and/or economic interest affected by the proposed SOI amendment. These are: the Aliso Water District, Clayton Water District, Chowchilla Water District, Madera Water District and Root Creek Water District. The proposed amendment to the MID’s SOI would require the District to amend its SOI boundary to remove corresponding territory from these Districts’ sphere of influence territory. These districts will not be affected by such an action.

- C. Approve amendments to the Madera Irrigation District Sphere of Influence as shown in Figure 11.





**FIGURE 10 – MADERA IRRIGATION DISTRICT AND SOI BOUNDARIES - EXISTING**  
Municipal Service Review - Public Water Districts, Madera County



**FIGURE 11 – MADERA IRRIGATION DISTRICT AND SOI BOUNDARIES - AMENDED  
MUNICIPAL SERVICE REVIEW - PUBLIC WATER DISTRICTS, MADERA COUNTY**

## 5.6 MADERA WATER DISTRICT *(formed 1987 - Irrigation Water)*

16943 Road 26, Madera, CA 93638

Contact: John Gies, General Manager (559) 674-4944

Madera Water District was formed in 1987. The District serves approximately 3,740 acres within Madera County. The service area of the District is located about three miles northeast of the City of Madera. The District encompasses a portion of the Madera Groundwater Basin. Madera Water District does not have a surface water supply. The principal goal of the District is to implement effective groundwater management through its AB 3030 Plan and where possible, to restore and maintain a high quality and dependable groundwater resource. Madera Water District owns and operates wells to meet District water demands. New wells are constructed as needed to maintain supplies when no surface water is available.

Approximately 2,183 net acres of the District were “subordinately annexed” into Madera Irrigation District in July 1991. The land annexed to the District does not have a normal water allocation from the District; however, the District can purchase surface water for this land from MID when sufficient water is available. When water is purchased from MID it is delivered via the Dry Creek Canal. In 1997 Madera Water District installed a new pumping plant on Dry Creek Canal, in addition to its existing pumping plant, to use more surface water when available. This surface water is used to supplement groundwater in meeting the crop water requirements within this District area. The District purchases as much surface water from MID each year as economically possible to conserve groundwater, even though the cost of this water can increase substantially during drought periods.

### 1. Infrastructure Needs or Deficiencies

**Purpose:** *To evaluate infrastructure needs and deficiencies in terms of supply, capacity, condition of facilities, and service quality.*

The District owns and maintains an extensive underground piped distribution system that delivers water under pressure to each field. There is no District owned canals. The distribution system is a looping, closed system, with the surface water pumping plants and the groundwater wells pumping directly into the pipeline. The District owns 16 groundwater wells and three surface water pumps. The majority of lands within the District use micro-irrigation systems to apply the water, and the remaining lands use hose-pull sprinkler systems. The District system is operated to maintain a minimum pressure of 30 psi at field turnouts, which is adequate to run the irrigation systems without the landowner having to use in-field booster pumps.

In 1996-1997, the District significantly increased the flexibility of the distribution system by installing a surface water pump station and 4½ mile conveyance pipeline. This allows additional surface water to be used within the District when available, to supplement the District wells and to provide much needed additional capacity and better pressure distribution within the system.

**Determination:** *The Madera Water District’s infrastructure appears adequate to provide efficient service to the farms within its District. The District’s infrastructure is appropriately sized for current, seasonal, and drought period water needs. The District engages in strategic planning for capital improvements through implementation of its budget and AB 3030 plan.*

## 2. Growth and Population Projections for the Affected Area

**Purpose:** *To evaluate service needs based on existing and anticipated growth patterns and population projections.*

The District is not significantly affected by growth patterns or increases in population because it is an agricultural water service district as opposed to a municipal water provider. The District is planning for future water needs by budgeting for future irrigation wells in anticipation of tightening surface water supplies throughout the State which reduces the District's ability to purchase water as a supplement to groundwater supplies.

**Determination:** *The District is not significantly affected by growth patterns or increases in population because it is an agricultural water service district as opposed to a municipal water provider. The District is planning for future water needs by budgeting for future irrigation wells in anticipation of tightening surface water supplies throughout the State which reduces the District's ability to purchase water as a supplement to groundwater supplies.*

## 3. Financing Constraints and Opportunities

**Purpose:** *To evaluate factors that affect the financing of needed improvements.*

The District Board adopts an annual budget and oversees expenditures throughout the fiscal year. Each year the District determines the volumetric water charges for water supplied to landowners for irrigation based on the budget for that year. In addition, the District's budget, when necessary, includes funds to restore the District's reserves to an acceptable figure based on current costs and anticipated needs. While the District is constrained in raising its assessments by Proposition 218, the volumetric water charges are sufficient to meet increasing expenses.

The District has annual audits conducted by a certified public accountant. The audits are submitted to the County Auditor, pursuant to the Health and Safety Code. The County of Madera maintains the general ledger for all districts, including the Madera Water District. Recent audits show that the District is in conformity with the requirements of the Governmental Accounting Standards (GASB) statement No. 34 Basic Financial Statements - and Management's Discussion and Analysis (MD&A) for State and Local Governments.

The most recent audit provides an overview of the financial activities and transactions for the fiscal year 2005. The following tables provide a Financial Summary and a summary of the Revenues, Expenses and Changes in Net Assets of the District's for fiscal year 2004-2005:

**Table 14**  
**Madera WD Basic Financial Summary**  
**Fiscal Year 2004-05**

<u>Statement of Net Assets</u>	<u>2005</u>	<u>2004</u>
<b>ASSETS</b>		
Current Assets	\$451,111	\$ 239,417
Accounts receivable	74,784	118,469
Other receivables	5,021	42,480
Investments	-0-	5,348
Prepaid insurance	6,056	5,086
Capital Assets	1,331,006	1,499,700
Other Receivables	470	470
<b>Total Assets</b>	<b><u>\$1,868,448</u></b>	<b><u>\$1,910,970</u></b>
Accounts payable	\$102,113	\$85,876
Deferred Income	145,226	145,305
Line of credit	-0-	182,500
<b>Total Liabilities</b>	<b><u>\$247,339</u></b>	<b><u>\$413,681</u></b>
<b>NET ASSETS</b>		
Invested in Utility Plant-Net	1,331,006	1,449,700
Unrestricted	290,103	-2,411
<b>TOTAL LIABILITIES &amp; NET ASSETS</b>	<b><u>\$1,868,448</u></b>	<b><u>\$1,497,289</u></b>

**Table 15**  
**Madera WD Revenues, Expenses and Changes in Net Assets**  
**Fiscal Year 2004-05**

	<u>2005</u>	<u>2004</u>
Operating Revenue	\$1,485,156	\$9,596,680
Operating Expenses	1,045,731	11,062,778
Operating Loss	\$263,052	\$ (1,466,098)
Non-operating Revenue	\$38,295	\$51,893
Non-operating Expenses	<u>(177,527)</u>	<u>(8,633)</u>
Non-operating Gain	\$(139,232)	\$43,260
Increase (Decrease) in Net Assets	\$123,820	\$(158,744)
Net Assets, beginning of year	1,497,289	\$1,656,033
<b>Net Assets, end of year</b>	<b><u>\$1,621,109</u></b>	<b><u>\$1,497,289</u></b>
<b>Statement of Cash Flows</b>		
Net Cash provided by Operating Activities	\$484,181	229,570
Net Cash from Capital and Related Financing Activities	\$445,622	\$(2,829,448)

**Determination:** *The budget information examined indicates that the District implements appropriate financing/funding practices. The District is solvent and is able to obtain necessary financing. Necessary improvements can be financed by the District as needed.*

**4. Cost Avoidance Opportunities**

**Purpose:** *To identify practice or opportunities that may help eliminate unnecessary costs.*

Most of the District’s maintenance is accomplished by one onsite District employee who manages and coordinates water deliveries to landowners in the District. The District’s system is a closed system and therefore is limited in opportunities to share equipment or pipelines with other water agencies. The District’s equipment and infrastructure is repaired or replaced as needed. As appropriate, the District uses outside consultants for engineering, legal, and financial services. A regular maintenance program for equipment and infrastructure is carried out by the District.

**Determination:** *The District appears to be well managed. Most of the District’s maintenance is accomplished onsite by one District employee. Madera Water District also uses outside consultants for engineering, legal, and financial services and has contracts for outside labor and other services as needed and appropriate. A regular maintenance program for equipment and infrastructure is carried out by the District in accordance with the budget. No additional cost-avoidance opportunities have been identified.*

**5. Opportunities for Rate Restructuring**

**Purpose:** *To identify opportunities to positively impact rates without decreasing service levels.*

The District maintains water rates as low as practical since the price of water directly relates to its wholesale cost plus district overhead. The table below presents the MWD’s 2006 water rate schedule:

**Table 16  
Madera Water District  
2006 Water Charges**

<b><u>CROP WATER CHARGES AND TOLLS:</u></b>	<b><u>2006 Rates</u></b>
<b><u>Annual Assessment Charges:</u></b>	
Regular and Subordinate Lands with District Service	\$ 235.00 per acre
<b><u>Basic Crop Water Tolls:</u></b>	
Cost of service water (well)	\$85.00/af
Cost of service water (surface)	\$126.00/af

**Determination:** *The District maintains water rates as low as practical. The price of water is directly related to the water supply’s wholesale cost plus the cost of operating the District.*

## 6. Opportunities for Shared Facilities

**Purpose:** *To identify the opportunities for jurisdictions to share facilities and resources creating a more efficient service delivery system.*

The District has a small office with one employee and no additional space is available. In addition, the District's water system is a closed system, its water is not treated because it is used for irrigation and the District is geographically separate from other agricultural area and water delivery systems. As a result, there is limited or no opportunity for the District to share its facilities with other districts or for other districts to share their facilities with MWD.

Approximately 2,183 net acres of the MWD were "subordinately annexed" into Madera Irrigation District in July 1991. The land annexed to MID does not have a normal water allocation from the District; however, the District can purchase surface water for this land from MID when sufficient water is available. When water is purchased from MID it is delivered via the Dry Creek Canal. In 1997 Madera Water District installed a new pumping plant on Dry Creek Canal, in addition to its existing pumping plant, to use more surface water when available. This surface water is used to supplement groundwater in meeting the crop water requirements within this District area. The District purchases as much surface water from MID each year as economically possible to conserve groundwater, even though the cost of this water can increase substantially during drought periods.

Unlike other special district laws that may prohibit the overlapping of district boundaries to prevent a duplication of services, the governing laws of water and irrigation districts uniquely provide for the overlapping of boundaries of two or more districts because of the physical and financial limitations associated with the delivery of water service that sometimes requires the sharing of facilities. The duplication of the provision of water services is prevented in such cases between the overlapping districts by an agreement that identifies a primary district that may provide water service and a subordinate district that is limited in its activities to the shared use of facilities and/or infrastructure within the overlapping boundaries of the districts.

**Determination:** *The District works closely with MID or other districts to convey surface water available for sale through the canal system to Dry Creek where the District takes delivery of such supplies.*

## 7. Government Structure Options, Including Advantages and Disadvantages of Consolidation or Reorganization of Service Providers

**Purpose:** *To consider the advantages and disadvantages of various government structures that could provide public services.*

There is no overlapping or duplication of irrigation water deliveries within the District. Expanding the District's service area would decrease the available water supply. Expanding the District's service area would have a detrimental effect to existing landowners and water users in the District.

**Determination:** *There is no duplication of services in the District. All eligible lands are currently served by the District. No government structure options, consolidation or reorganization opportunities have been identified.*

## 8. Evaluation of Management Efficiencies

**Purpose:** *To evaluate the quality of public services and the agency's ability to provide services.*

The District appears to operate in an efficient manner. The District delivered over 8,734 acre feet of water to over 120 landowners in 2006 with only one full time employee. Most of the District's maintenance is accomplished by one onsite District employee who manages and coordinates water deliveries to landowners in the District. The District's equipment and infrastructure is repaired or replaced as needed. As appropriate, the District uses outside consultants for engineering, legal, and financial services. A regular maintenance program for equipment and infrastructure is carried out by the District. The board of directors receives no compensation or benefits for its services to the District.

**Determination:** *The District delivered over 8,734 acre feet of water to over 120 landowners in 2006 with only one full time employee. Most of the District's maintenance is accomplished by one onsite District employee who manages and coordinates water deliveries to landowners in the District. The District's equipment and infrastructure is repaired or replaced as needed. As appropriate, the District uses outside consultants for engineering, legal, and financial services. A regular maintenance program for equipment and infrastructure is carried out by the District. The board of directors receives no compensation or benefits for its services to the District. Madera Water District's management practices appear efficient and the District is functional and shows stability.*

## 9. Local Accountability and Governance

**Purpose:** *To evaluate the accessibility and levels of public participation associated with the agency's decision-making and management processes.*

The five-member Board of Directors are elected by the landowners in the District and they serve at the land owners' discretion. Over the years the Board of Directors has held many public meeting for the landowners and water users to discuss the District's financial situation and water supplies. In addition, the District's monthly board meetings are open to the public. The District follows the Brown Act and posts meeting notices 72 hours in advance. All landowners are welcome to attend Board meetings and are given many opportunities to discuss matters before the Board. The public has access to the meeting facility during posted hours. Directors are also available on a one-to-one basis to landowners and water members farm in the District, they are familiar with landowners/grower concerns since they have those same concerns.

**Determination:** *The Madera Water District complies with statutory requirements for conducting public hearings. Agenda items are flexible to accommodate public participation. No incidences of Brown Act violations have been reported.*

### **Review of Agency Sphere of Influence**

Madera LAFCO has the statutory authority and obligation to establish and adopt a sphere of influence for each city and special district within the county (Government Code Section 56425). A sphere of influence is a planning boundary outside of an agency's legal or "service" boundary that designates the agency's probable future boundary and service area. State law also requires LAFCO to review and update, as necessary, the adopted spheres of influence of agencies once every five years (Government Code Section



56425 (f)). Pursuant to state law, the Madera Water District sphere of influence was reviewed in conjunction with the service review presented in this report.

The primary purpose in reviewing the District's sphere of influence (SOI) was to evaluate if this ultimate boundary is appropriate and necessary, determine if the District can feasibly provide well planned efficient services in this territory, and if the current location of the SOI (or another location) will be a benefit to residents, those that receive services and property owners within the area.

Review of the District's SOI involved detailed research, involving the following resources:

- Madera County LAFCO - official agency records.
- Madera County Recorder/ Assessor records.
- Madera Water District AB 3030 Groundwater Management Plan
- Madera Water District "Annual Auditor's Reports"
- SOI maps from the District, Assessor's office, Water Resources Board.
- Personal communications with District staff.

## **Discussion and Findings**

The precise SOI boundaries for the Madera Water District were verified during this review. The actual sphere of influence boundaries were verified using LAFCO records, with confirmation by the District (see Figure 13). The District's SOI and service boundaries (i.e., boundary of the District) are coterminous.

Approximately 2,183 net acres of the MWD were "subordinately annexed" into Madera Irrigation District in July 1991 (see Figures 12). The land annexed to MID does not have a normal water allocation from the District; however, the District can purchase surface water for this land from MID when sufficient water is available. When water is purchased from MID it is delivered via the Dry Creek Canal. In 1997 Madera Water District installed a new pumping plant on Dry Creek Canal, in addition to its existing pumping plant, to use more surface water when available. This surface water is used to supplement groundwater in meeting the crop water requirements within this District area. The District purchases as much surface water from MID each year as economically possible to conserve groundwater, even though the cost of this water can increase substantially during drought periods.

Unlike other special district laws that may prohibit the overlapping of district boundaries to prevent a duplication of services, the governing laws of water and irrigation districts uniquely provide for the overlapping of boundaries of two or more districts because of the physical and financial limitations associated with the delivery of water service that sometimes requires the sharing of facilities. The duplication of the provision of water services is prevented in such cases between the overlapping districts by an agreement that identifies a primary district that may provide water service and a subordinate district that is limited in its activities to the shared use of facilities and/or infrastructure within the overlapping boundaries of the districts.

Additionally, the review revealed that Madera Irrigation District SOI overlaps a portion of the Madera Water District's sphere and service area (see Figure 11). The Madera Irrigation District's SOI needs to be amended to remove it from the Madera Water District's boundaries that were not a part of the "subordinate annexation" mentioned above (see Figure 12). With the appropriate findings, an SOI amendment can be processed at the time the MSR for MID is accepted by the Commission.

Based on the analysis presented in the MSR for the Madera Water District and review of its SOI, it was concluded that the boundary is appropriate and necessary, the District can provide well planned efficient services in this territory, and the current location of the SOI is a benefit to those that receive services and/or property owners within the area (see Figure 13).

**Recommendations**

1. Adopt the “Written Determinations” for the Madera Water District presented in this service review pursuant to California Government Code Section 56430.
2. Find that the District’s current sphere of influence is appropriate and necessary, the District is working toward the provision of planned, efficient services in this territory, and the current location of the SOI is a benefit to those that may receive services and/or property owners within the area. Make no change to the Madera Water District boundaries or the adopted sphere of influence at this time.

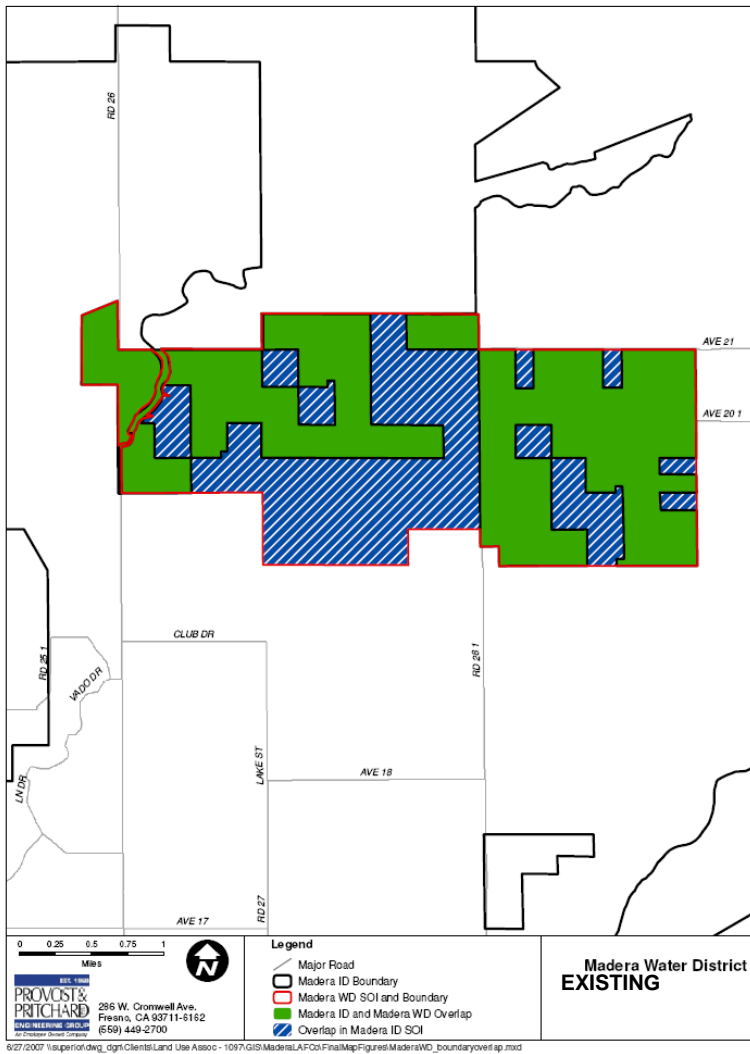


Figure 12

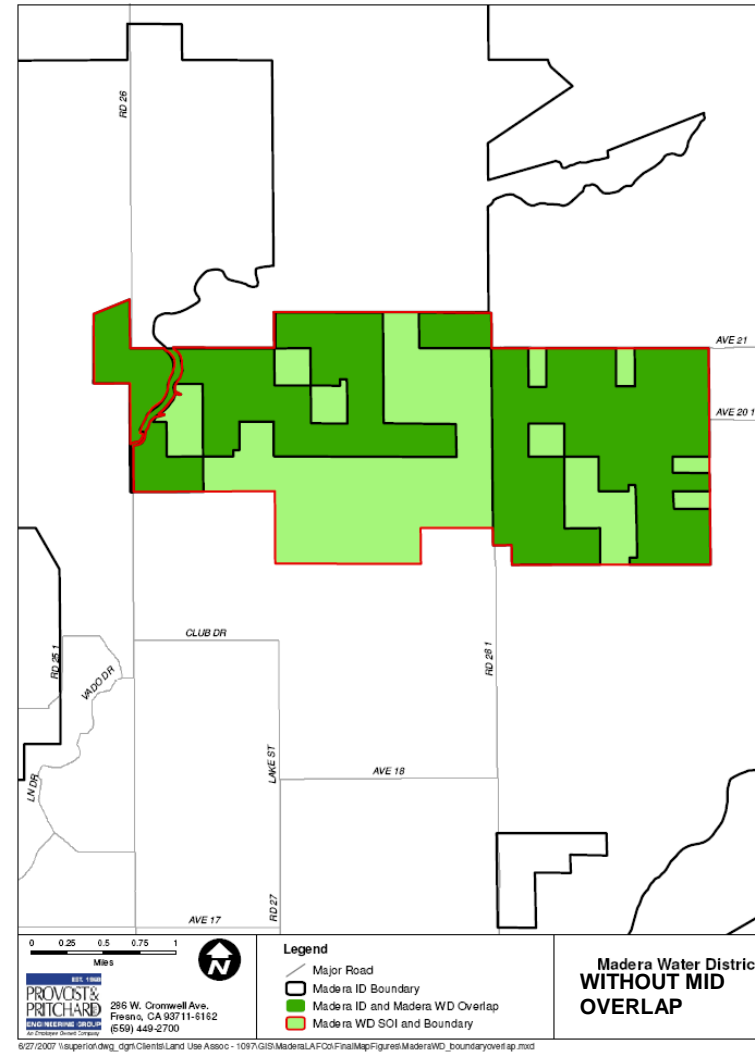


Figure 13

**FIGURE 12 and 13 – MADERA WATER DISTRICT SOI AND DISTRICT BOUNDARIES - CONFIRMED MUNICIPAL SERVICE REVIEW - PUBLIC WATER DISTRICTS, MADERA COUNTY**



## 5.7 NEW STONE WATER DISTRICT

P.O. Box 1350, Selma, CA 93662

Contact: Jeffrey Lion

The New Stone Water District was formed by the Madera County Board of Supervisors in 1983 with the adoption of Resolution No. 8327. The District comprises approximately 3,600 acres of existing agricultural land in the county, adjacent to the Chowchilla Bypass, in western Madera County. The District is a landowner-voter district that was formed to:

- Provide water to the landowner(s) in the District.
- Facilitate contracting with the United States Bureau of Reclamation for delivery of water from the Mid-Valley Canal, Division of the Central Valley Project.
- Obtain surplus waters, if any, from the Madera Irrigation District, for use on District lands.
- Appropriate surplus flows out of the San Joaquin By-Pass.

The District provides well and surface water for agricultural uses and distributes it to its landowners on District lands. The District also seeks to obtain Section 215 or uncontrolled season waters from the San Joaquin River, to obtain storm water runoff available in the Chowchilla By-Pass and to provide quality groundwater (from wells) to the landowners in the District. Territory within the District is currently served primarily by groundwater for irrigation purposes. In recent years, the District delivered surface water from its turnout in the Chowchilla By-Pass to row crops growing on farms in the District.

Recently, territory in the District has been chiefly developed to permanent crops. This change in cropping pattern has focused the District's attention to providing reliable, clean, groundwater (using groundwater extraction wells) while also seeking to replenish the aquifer beneath the district using groundwater recharge with surface waters that may be available to the District from the Chowchilla By-Pass.

With questionable groundwater supplies, lowering groundwater tables in the western part of the District and the uncertainty regarding reliable future surface water supplies as a result of the recent San Joaquin River settlement (2007 Court case now before Congress for funding) it has become increasingly important for the District to develop ways to maintain the quality and quantity of its water supplies for District lands.

With the likelihood that groundwater recharge will benefit District lands; the District is enthusiastic about initiating a short-term engineering study followed by a long-term implementation of a groundwater recharge program, pending the results of that study. Until recently the District has been inactive, primarily because of the conversion from row crops that utilized occasional surface water availability to permanent crops that relied exclusively on pumped ground water. The prospect of groundwater recharge and the ongoing availability of surface waters at the District's turnout on the Chowchilla By-Pass have allowed the District to become active once again.

### 1. Infrastructure Needs or Deficiencies

**Purpose:** *To evaluate infrastructure needs and deficiencies in terms of supply, capacity, condition of facilities, and service quality.*

The District Board meets regularly to discuss the groundwater and surface water needs of the lands serviced by the District. As a result of: (a) the San Joaquin River settlement, (b) the availability of quality storm water, flood release or Section 215 waters in the Chowchilla By-Pass; and, (c) groundwater levels/quality/availability; the District is now exploring the feasibility of doing on-site, in-District groundwater recharge of the aquifer underlying the District's lands. This will be accomplished by using such storm, surface, flood release and Section 215 waters as may become available to the District via the Chowchilla By-Pass. The District is contacting the engineering firm of Provost and Prichard to explore the feasibility and design of a series of ditches and on-site groundwater recharge basins or sites in the eastern portion of the service boundary to help maintain and augment the availability of groundwater and the District's water table.

***Determination: The short-term plans for the District involve a groundwater recharge study. The long-term plans for the District involve the development of a series of ditches and basins designed to transport surface waters available to the District, to be used in groundwater recharge uses, to improve the performance of the aquifer underlying District lands. Until recently the District has been inactive, primarily because of the conversion from row crops that utilized occasional surface water availability to permanent crops that relied exclusively on pumped ground water. The prospect of groundwater recharge and the ongoing availability of surface waters at the District's turnout on the Chowchilla By-Pass have allowed the District to become active once again.***

## **2. Growth and Population Projections for the Affected Area**

**Purpose:** *To evaluate service needs based on existing and anticipated growth patterns and population projections.*

The District is not going to expand due to growth in population. The landowners within its service boundary are committed, long term, to permanent crops-not population growth.

***Determination: The District boundaries prevent the need to expand services since growth in population in District territory is unlikely and/or unfeasible***

## **3. Financing Constraints and Opportunities**

**Purpose:** *To evaluate factors that affect the financing of needed improvements.*

The District is considering funding the previously mentioned Provost and Prichard Engineering study and then, if feasible, implementing construction of a series of ditches and basins using the District's turnout at the Chowchilla By-Pass to capture surface waters available to the District and to use those waters consistent with the groundwater recharge plan under study. All funds to operate the District are contributed, pro-rata, by its landowners.

***Determination: New Stone Water District does not receive from revenue from property tax, donation or revenues from water services. All funds to operate the District are contributed, pro-rata, by its landowners.***

## **4. Cost Avoidance Opportunities**

**Purpose:** *To identify practice or opportunities that may help eliminate unnecessary costs.*

All of the landowners in the District donate their time to operating the District. There are no employees and no administrative or other expenses. The only "out of pocket" expenses anticipated by the District will be the short-term groundwater recharge study (to be paid for, pro-rata, by District landowners), followed by the possible long-term construction of a series of ditches and basins to augment the current condition of groundwater in the District. The implementation phase could take several years in order to achieve the desired results based on surface water availability and construction dollars approved by the District's landowners and Board.

***Determination:*** *Cost avoidance opportunities have already been taken and the District operates, currently, with no overhead. All of the landowners in the District donate their time to the operating the District. The District anticipates expending no funding other than those essential to the groundwater recharge study and its implementation, if feasible. The cost of the study will be shared by all landowners in the District and manpower to implement the plan will be donated on an "as needed and volunteer" basis.*

#### **5. Opportunities for Rate Restructuring**

**Purpose:** *To identify opportunities to positively impact rates without decreasing service levels.*

The District currently neither sets nor collects any rate for its water services. Its customers, in the future, would be those within the service boundaries that benefit from the recharge plan now being studied. Until that plan is deemed feasible and then implemented, there are no opportunities for rate restructuring. The District's landowners will contribute to the plan for recharging groundwater, pro-rata, if implemented.

***Determination:*** *The District charges no rates and currently there are no opportunities for rate restructuring. However, if the plan for recharging groundwater is implemented, the District's landowners will contribute to it, pro-rata.*

#### **6. Opportunities for Shared Facilities**

**Purpose:** *To identify the opportunities for jurisdictions to share facilities and resources creating a more efficient service delivery system.*

The District does not need and would not benefit from the services of other Districts. All of the equipment, turn-out facilities and water conveyance facilities enjoyed by or used by the District in terms of having water delivered to its boundaries are already in place. The District currently is set up to take spill, storm, excess, flood release or other waters available in the Chowchilla By-Pass by way of flood attenuation and flood relief for downstream areas.

***Determination:*** *The District has the equipment, turn-out facilities and water conveyance facilities enjoyed by or used by the District in terms of having water delivered to its boundaries are already in place. The District is able to take spill, storm, excess, flood release or other waters available in the Chowchilla By-Pass by way of flood attenuation and flood relief for downstream areas. At this time sharing facilities or infrastructure is not necessary.*

**7. Government Structure Options, Including Advantages and Disadvantages of Consolidation or Reorganization of Service Providers**

**Purpose:** *To consider the advantages and disadvantages of various government structures that could provide public services.*

Consolidation or reorganization of the District is not necessary at this time. The District maintains a small, finite service area that can and will be efficiently served by the current and planned delivery program. The District can utilize all of the water available to it if it can implement the groundwater recharge plan currently under consideration, with no opportunity to share such waters with adjoining lands, due to the limited amount of water available and the water rights and diversion rights already identified with such water.

**Determination:** *There is no duplication of services in the District. There are no costs or expense currently for the District and so expanding the District or combining with another district would achieve no cost savings and would only result in cost increases and inefficiencies connected with travel, size, labor, etc. Consolidation or reorganization of the District is not necessary at this time.*

**8. Evaluation of Management Efficiencies**

**Purpose:** *To evaluate the quality of public services and the agency's ability to provide services.*

The District is currently has no costs for its current operations or management. It has no paid employees. Board Members volunteer their time to study and carry out the objectives of the District, at no cost. All of the equipment, turn-out facilities and water conveyance facilities enjoyed by or used by the District in terms of having water delivered to its boundaries are already in place. The District currently is set up to take spill, storm, excess, flood release or other waters available in the Chowchilla By-Pass by way of flood attenuation and flood relief for downstream areas.

**Determination:** *All activities by the Board and actions taken by the District are completed on a volunteer basis. All of the equipment, turn-out facilities and water conveyance facilities enjoyed by or used by the District in terms of having water delivered to its boundaries are already in place. The District currently is set up to take spill, storm, excess, flood release or other waters available in the Chowchilla By-Pass by way of flood attenuation and flood relief for downstream areas.*

**9. Local Accountability and Governance**

**Purpose:** *To evaluate the accessibility and levels of public participation associated with the agency's decision-making and management processes.*

All District landowners are involved on the Board of the District and it has 100% participation in all decisions affecting the District. Actions are generally by unanimous written consent with signed waivers. The District does not conduct regular board meetings, but meets on an as-needed basis.

**Determination:** *The District complies with statutory requirements for conducting public hearings. No incidences of Brown Act violations have been reported.*



## **Review of Agency Sphere of Influence**

Madera LAFCO has the statutory authority and obligation to establish and adopt a sphere of influence for each city and special district within the county (Government Code Section 56425). A sphere of influence is a planning boundary outside of an agency's legal or "service" boundary that designates the agency's probable future boundary and service area. State law also requires LAFCO to review and update, as necessary, the adopted spheres of influence of agencies once every five years (Government Code Section 56425 (f)). Pursuant to state law, the New Stone Water District sphere of influence was reviewed in conjunction with the service review presented in this report.

The primary purpose in reviewing the District's sphere of influence (SOI) was to evaluate if this ultimate boundary is appropriate and necessary, determine if the District can feasibly provide well planned efficient services in this territory, and if the current location of the SOI (or another location) will be a benefit to residents, those that receive services and property owners within the area.

Review of the District's SOI involved detailed research, involving the following resources:

- Madera County LAFCO - official agency records.
- Madera County Recorder/ Assessor records.
- Correspondence from the District's legal counsel.
- SOI maps from the District, Assessor's office, Water Resources Board.
- Personal communications with District staff.

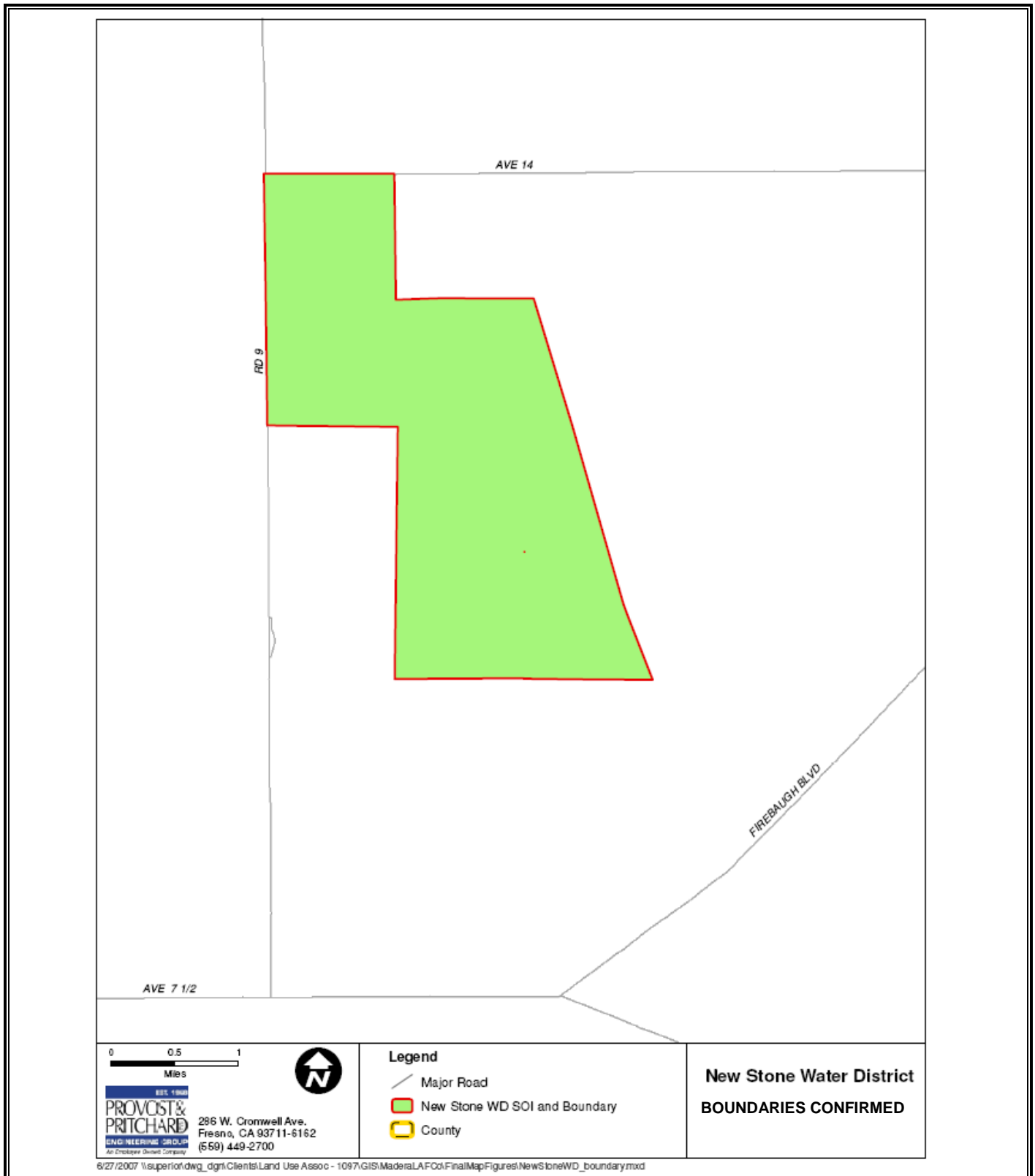
## **Discussion and Findings**

The precise SOI boundaries for the New Stone Water District were verified during the review. The actual sphere of influence boundaries were verified using LAFCO records, with confirmation by the District (see Figure 14). The District's SOI and service boundaries (i.e., boundary of the District) are coterminous.

A remaining issue relates to the District's assertion that it is at this time and will continue to work toward becoming an "active" district and is now and will continue to take the necessary steps to provide services to property owners located inside its service boundaries. Giving the District the benefit of the doubt, this review concluded that the New Stone Water District boundary is appropriate and necessary, the District is at this time and will continue to work toward becoming an active district that will provide planned efficient services in this territory, and the current location of the SOI is a benefit to those that will receive services within the area (see Figure 14). It is recommended that LAFCO reevaluate the New Stone Water District in five years to confirm productive activity, and if such activity is not verified consider dissolution of the district.

## **Recommendations**

1. Adopt the "Written Determinations" for the New Stone Water District presented in this service review pursuant to California Government Code Section 56430.
2. Find that the District's current sphere of influence is appropriate and necessary, the District can provide well -planned efficient services in this territory, and the current location of the SOI is a benefit to those that receive services and/or property owners within the area. Make no change to the New Stone Water District boundaries or the adopted sphere of influence at this time.
3. Reevaluate in five years to confirm productive activity or consider dissolution.



**FIGURE 14 – NEW STONE WATER SOI AND DISTRICT BOUNDARIES - CONFIRMED  
MUNICIPAL SERVICE REVIEW - PUBLIC WATER DISTRICTS, MADERA COUNTY**

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## 5.8 ROOT CREEK WATER DISTRICT

P.O. Box 3347, Pinedale, CA 93650  
Contact: Jim Provost (559) 437-2624

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Formed in 1996, the Root Creek Water District (“RCWD”) is a California Water District that covers approximately 9,200 acres of existing agricultural land in Madera County, generally located west of Highway 41 and north of the San Joaquin River. The District was formed to serve the Rio Mesa area and specifically the proposed Castle & Cooke 2,400-acre "Village of Gateway" development. Once water entitlements to serve the area are actively supplying surface water the proposed development can be considered for approval by the Madera County Board of Supervisors, until then the District is “inactive”.

The Village of Gateway development envisions 6,400 residences, commercial centers, parks, schools, and other urban uses. The Village of Gateway was planned to cover only 25% of the ultimate District boundaries as visualized. The site is bordered on the south by Avenue 9 and on the east by State Route 41. The site is 11 miles from the City of Madera and is approximately one mile north of the San Joaquin River, which marks the county line between Fresno and Madera Counties as well as the City of Fresno's corporate and sphere of influence boundaries.

The District has worked with other public agencies to obtain enough surface water entitlements to serve the proposed development. The proposed project will require an estimated average-annual demand of 6,374 acre feet that will be met with the following water supplies:

- Local groundwater pumping
- Reclaimed wastewater (approximately 30% of water supplies will be recycled)
- Surplus and flood water purchased from Madera Irrigation District through a sale and conveyance agreement. Long-term water availability from the contract is estimated to average 7,335 acre-feet/year.
- Water purchased from Westside Mutual Water Company through a contract that can provide a firm supply of 7,000 acre-feet/year. The aforementioned water supplies provide, on average, considerably more water than will be necessary to meet water demands. This will provide the project with the flexibility to choose among water sources in some years. Village of Gateway will also practice intentional and in-lieu groundwater recharge to arrest the local groundwater overdraft.

Root Creek Water District does not have a permanent surface water supply, and consequently has relied almost exclusively on groundwater. As noted, The District was originally formed to secure surface water supplies. Some efforts have been made toward this goal, as discussed below, but no surface water deliveries have yet been made to the District. In addition, no District facilities presently exist to receive, store, and deliver surface water within its serve area.

In 1999, RCWD signed an agreement with the Friant Water Users Authority (FWUA), Madera Irrigation District (MID), and Chowchilla Irrigation District (CID) to help RCWD purchase surplus waters from the San Joaquin River. The agreement stated that when Friant Contractors do not request delivery of all available San Joaquin River floodwater, the FWUA, MID and CWD will use their best efforts to assist RCWD to obtain those unused flood flows either through USBR Section 215 water purchases, temporary Class II contracts, water transfers, or other means at the lowest prevailing rate.

These waters are intended to be used for intentional or in-lieu groundwater recharge, and for anticipated future municipal uses. No water has yet been delivered to RCWD from this agreement, partly due to a lack of conveyance facilities in RCWD, and partly because anticipated municipal developments are still being planned.

Some lands in the southern portion of the District do have the right, by virtue of being riparian or by holding contracts, to divert and use San Joaquin River water. These are private water rights and none of these rights are held by RCWD. A total of about 2,000 acres in RCWD have these rights and the landowners have been diverting San Joaquin River water. According to their agreements, these lands can use water as long as it is considered a reasonable beneficial use. None of these lands are located within Gateway Village.

Water for municipal and industrial use at Gateway Village will be supplied initially by groundwater wells. These wells may be supplemented by a surface water treatment plant to meet peak demands, if required. The Average Day Demand of the project at build-out will be 3,953 GPM and the Maximum Day Demand will be 9,294 GPM. Meeting the Average Day Demand will require approximately seven wells of the average anticipated yield. However, meeting Maximum Day demand entirely by groundwater sources would require approximately 15 wells if the average anticipated yield is borne out during construction.

The new production wells will be constructed approximately one-half mile apart from one another, and while more than seven sites have been identified, it may not be possible to find 15 suitable well sites within RCWD and in close proximity to the project. Should the average well yield be better than anticipated, fewer wells would be needed. However, it is likely that the groundwater supplies available will fall short of Maximum Day Demand at build-out, and a Surface Water Treatment plant of some size will be required to supplement well capacity during peak months.

Assuming the anticipated average well capacity is correct, and that between seven and 10 average-capacity wells will be constructed, the surface water treatment plant's capacity would need to supply between 3,300 and 5,100 GPM, or between 4.7 and 7.3 MGD. Final determination of the necessity for and the capacity of the Surface Water Treatment Plant will have to await completion of the proposed wells as the project develops.

**Madera Irrigation Water Supply** - RCWD has the option to purchase other water supplies from Madera Irrigation District (MID). These water supplies are made possible by RCWD's agreement with MID, entered into on March 13, 2002. These water sources include the following: (1) flood flow releases from Friant Dam that are not used by Friant Contractors, (2) water transfers from sources outside of Madera County, (3) water transfers from Central Valley Project (CVP) contract (includes both service and exchange) holders, (4) water transfers from sources within Madera County, and (5) purchase of San Joaquin River water from MID and Chowchilla Water District (additional water supplies may be purchased for other supplemental sources only after seeking to purchase water from MID and CWD).

Based upon historical precipitation trends and records, these supplies are estimated to amount to 7,335 acre-feet of water annually. RCWD has purchased an option to secure the first right to purchase the first 10,000 AF of surplus water from MID.

Since the aforementioned water supplies are associated with flood flow conditions at Friant Dam, or dependant on water transfer contracts that are currently not in place, the overall reliability (frequency of occurrence) of these supplies is less than the water supply made available by RCWD's agreement with Westside. Even though the flood flows have a low probability of occurrence and are unlikely to be available during average, single-, and multiple-dry years, over the term of the agreement with MID these water sources will be available to augment other water supplies, and augment overall water balance.

These water supplies will be used, when available, to positively benefit the 5-year rolling average water balance. Gateway Village will take advantage of these flows, whenever practical, for direct groundwater recharge, in-lieu groundwater recharge, turf irrigation and in place of groundwater pumping.

**Westside Mutual Water District Water Supply** - Root Creek Water District (RCWD) has entered into an agreement with Westside Mutual Water Company (Westside) to provide RCWD with a firm water supply. Under the agreement, Westside would bank water in the North-Kern Storage Water District (North Kern) and deliver the water to Gateway Village through a multi-party exchange agreement. The initial term of the contract is 25 years, and RCWD will have the option to renew for an additional 25 years. The anticipated water demand of 6,374 acre-feet per year can be met entirely from the agreement with (Westside), which will provide a firm water supply of 7,000 acre-feet/year.

## **1. Infrastructure Needs or Deficiencies**

**Purpose:** *To evaluate infrastructure needs and deficiencies in terms of supply, capacity, condition of facilities, and service quality.*

The lands within RCWD rely primarily on groundwater for irrigation water. The District does not own or operate any wells or water distribution facilities. RCWD does not currently have the facilities required to produce or distribute potable water or collect and treat wastewater or storm drainage. However, it has the authority under State law to assume those responsibilities and to construct or acquire the necessary infrastructure. The District has indicated its willingness to provide water, wastewater, and storm drainage services to Gateway Village. Wells, water storage, pumping and transmission facilities will be designed and constructed by the developer as part of the project, and will be dedicated to the RCWD for its ownership, operation, and maintenance upon completion.

**Determination:** *The Root Creek District has no facilities, infrastructure or customers. The District has indicated its willingness to provide water, wastewater, and storm drainage services to the proposed Gateway Village project. Wells, water storage, pumping and transmission facilities will be designed and constructed by the developer as part of the project, and will be dedicated to the RCWD for its ownership, operation, and maintenance upon completion.*

## **2. Growth and Population Projections for the Affected Area**

**Purpose:** *To evaluate service needs based on existing and anticipated growth patterns and population projections.*

Should the District succeed in securing surface water entitlements and the proposed "Village of Gateway" development project is approved by the Madera County Board of Supervisors approximately 6,400 residences would ultimately be served at build-out. Nearly the entire Gateway Village lies within Root Creek Water District (RCWD), which will be the potable water purveyor and will provide wastewater collection and treatment services for Gateway Village.

***Determination: The District must coordinate with general-purpose agencies in planning for future services. The District will collaborative with agencies with land use authority and agencies with service delivery responsibility to plan for potential growth.***

### **3. Financing Constraints and Opportunities**

**Purpose:** *To evaluate factors that affect the financing of needed improvements.*

Once in operation the District will establish a fee schedule and enterprise fund in accordance with all applicable laws. The RCWD will be financially autonomous and limited to funding sources allowed under State Law. The Board of Trustees will adopt an annual budget and oversee expenditures throughout the fiscal year. The District will have annual audits conducted by a certified public accountant. The District will submit all audits to the County Auditor.

***Determination: The Root Creek District has a limited “operating budget”. Until the proposed Gateway project is approved by Madera County the District will be “inactive” and does not receive revenue from property tax, donation or revenues from water services.***

### **4. Cost Avoidance Opportunities**

**Purpose:** *To identify practice or opportunities that may help eliminate unnecessary costs.*

Even though the Gateway Village project will only cover about 15% of the District the proposed project would be committed to correcting the overdraft for the entire Root Creek Water District (estimated to be 3,400 acre-feet annually). Groundwater recharge will generally be higher in wetter years, with higher levels of groundwater pumping in dryer years. Due to this normal variation in supply availability, the project will balance groundwater supplies on a rolling 5-year average. Various recharge facilities will be constructed and programs will be implemented. The in-lieu recharge facilities will be constructed in the initial phase of the project, and the direct recharge facilities will be constructed in Phase 2.

***Determination: The District estimates that the planned water management programs will have almost twice the available water supply needed to arrest the local groundwater overdraft. This will provide Gateway Village with the flexibility to select the programs that are the most economical and practical to implement.***

### **5. Opportunities for Rate Restructuring**

**Purpose:** *To identify opportunities to positively impact rates without decreasing service levels.*

Rates for water service within the RCWD will be related to the cost of producing and delivering water services. The RCWD may impose fees or rates for services provided that are reasonably related to the cost of producing and delivering services. The District will make rate decisions based on external costs and infrastructure maintenance and/or replacement.

***Determination: At this time the District does not charge any rates or fees. The District’s water rates and fees for service within the District will relate directly to the cost of producing and delivering water services and will be structured to reward low water consumption.***

## 6. Opportunities for Shared Facilities

**Purpose:** *To identify the opportunities for jurisdictions to share facilities and resources creating a more efficient service delivery system.*

The RCWD was formed for the purpose of obtaining surface water supplies and promoting conjunctive use. While the sharing of facilities may assist the District in its goal to serve the proposed new development, at present no planned for shared facilities was identified. The District does not own any facilities for the delivery of water at this time.

**Determination:** *Staff and equipment might be shared by the District on a as needed basis. Historically, water districts utilize shared canals and other delivery systems when equitable.*

## 7. Government Structure Options, Including Advantages and Disadvantages of Consolidation or Reorganization of Service Providers

**Purpose:** *To consider the advantages and disadvantages of various government structures that could provide public services.*

The District is a landowner-voter district that was formed to not only provide water but also other community services such as wastewater, garbage collection, fire and police protection, parks/recreation, street lighting, mosquito abatement, etc. Landowner-voter districts are very unique in the personal service they provide to its communities. Since Root Creek is remote from other service providers, the District believes that consolidation should not be recommended.

**Determination:** *No government structure options, consolidation or reorganization opportunities have been identified. Although located within the service area of CVP's Friant Unit, RCWD does not have a federal water supply contract. RCWD would have to rely on water transfers with willing sellers to obtain surface water supplies. Since Root Creek is remote from other service providers, consolidation at this time is not feasible.*

## 8. Evaluation of Management Efficiencies

**Purpose:** *To evaluate the quality of public services and the agency's ability to provide services.*

The District has a governing board and limited managing staff, but no employees. The District consists mainly of Trustees at this point and appears to operate in an efficient manner and with a high degree of skill, ability, and personal service from limited resources.

**Determination:** *The Root Creek District has a limited "operating budget". The District does not currently provide any water services, thus the need for permanent employees is limited. The District does currently employ engineering consultants and legal council.*

## 9. Local Accountability and Governance

**Purpose:** *To evaluate the accessibility and levels of public participation associated with the agency's decision-making and management processes.*

It appears that Root Creek Water District is currently preparing to provide services as authorized by state charter or principle act. The District has prepared the *Gateway Village Infrastructure Master Plan and Water Supply Assessment* (2006) to evaluate the ability of the Root Creek Water District to meet water supply demands associated with the proposed land use changes for the proposed Gateway Village project. District Trustees and contracted staff are available by phone and appointment. As discussed, the District conducts infrequent public meetings.

***Determination: For all intents and purposes, the District is “inactive”. District Trustees and contracted staff are available by phone and appointment. There are infrequent board meetings.***

### **Review of Agency Sphere of Influence**

Madera LAFCO has the statutory authority and obligation to establish and adopt a sphere of influence for each city and special district within the county (Government Code Section 56425). A sphere of influence is a planning boundary outside of an agency’s legal or “service” boundary that designates the agency’s probable future boundary and service area. State law also requires LAFCO to review and update, as necessary, the adopted spheres of influence of agencies once every five years (Government Code Section 56425 (f)). Pursuant to state law, the Root Creek Water District sphere of influence was reviewed in conjunction with the service review presented in this report.

The primary purpose in reviewing the District’s sphere of influence (SOI) was to evaluate if this ultimate boundary is appropriate and necessary, determine if the District can feasibly provide well planned efficient services in this territory, and if the current location of the SOI (or another location) will be a benefit to residents, those that receive services and property owners within the area.

Review of the District’s SOI involved detailed research, involving the following resources:

- Madera County LAFCO - official agency records.
- Madera County Recorder/ Assessor records.
- Correspondence from the District’s legal counsel.
- SOI maps from the District, Assessor’s office, Water Resources Board.
- Personal communications with District staff.

### **Discussion and Findings**

The precise SOI boundaries for the Root Creek Water District were verified during the review. The actual sphere of influence boundaries were verified using LAFCO records, with confirmation by the District (see Figure 16). The District’s SOI and service boundaries (i.e., boundary of the District) are coterminous.

The review revealed one issue. The Madera Irrigation District’s present SOI overlaps all of the Root Creek Water District’s sphere and service area (see Figure 15). The Madera Irrigation District’s SOI needs to be amended to remove it from the Root Creek Water District’s boundaries. Both agencies are agreeable to this solution.

Based on the analysis presented in the MSR for the Root Creek Water District and review of its SOI, it was concluded that the boundary is appropriate and necessary, the District can provide well planned efficient services in this territory, and the current location of the SOI is a benefit to those that receive services and/or property owners within the area (see Figure 16).



**Recommendations**

1. Adopt the “Written Determinations” for the Root Creek Water District presented in this service review pursuant to California Government Code Section 56430.
2. Find that the District’s current sphere of influence is appropriate and necessary, the District can provide well planned efficient services in this territory, and the current location of the SOI is a benefit to those that receive services and/or property owners within the area. Make no change to the Root Creek Water District boundaries or the adopted sphere of influence at this time.

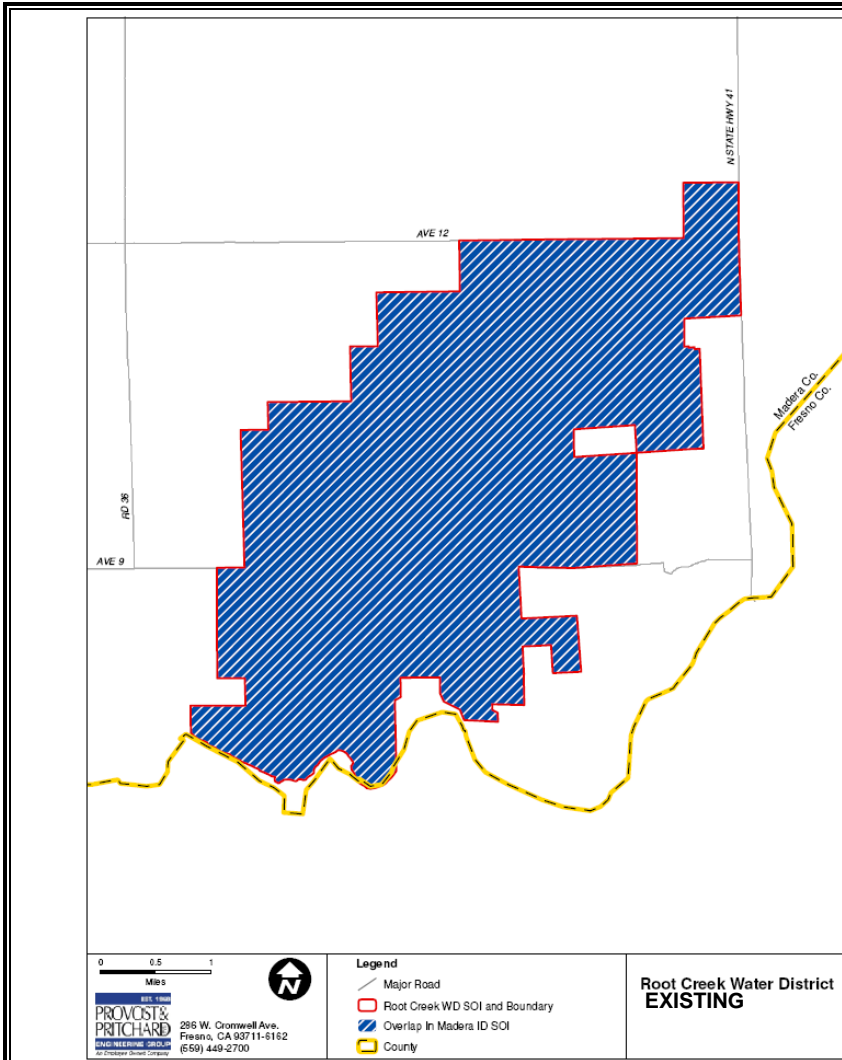


Figure 15

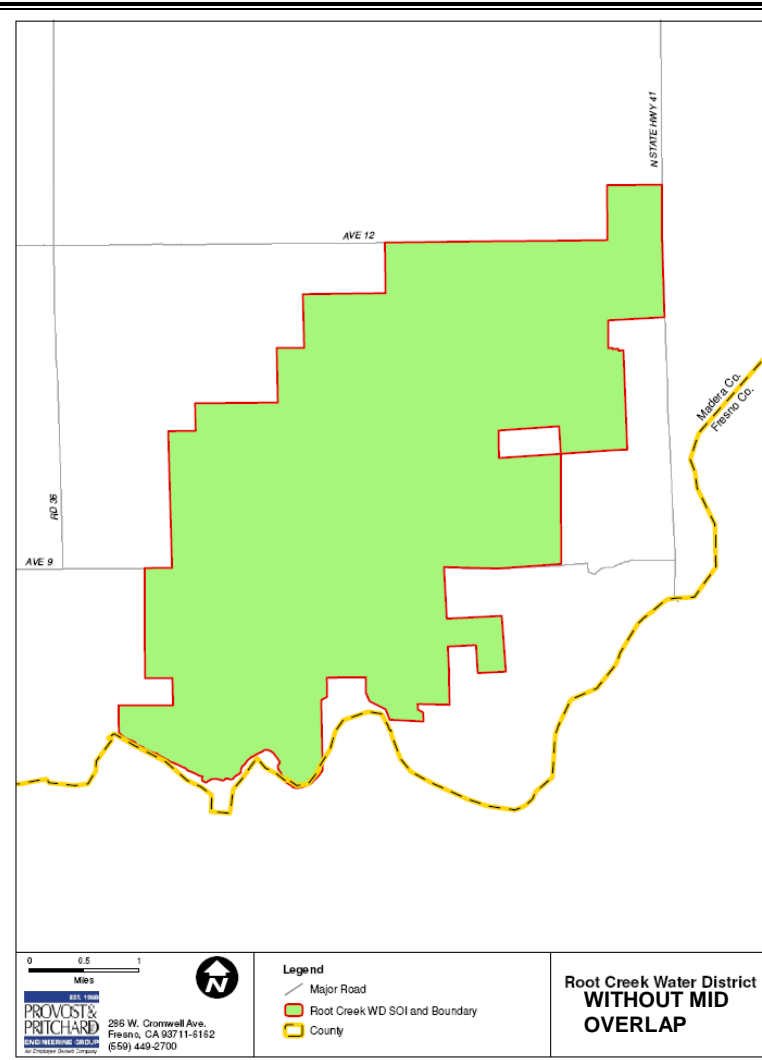


Figure 16

**FIGURE 15 and 16 – ROOT CREEK WATER SOI AND DISTRICT BOUNDARIES - CONFIRMED  
MUNICIPAL SERVICE REVIEW - PUBLIC WATER DISTRICTS, MADERA COUNTY**

## **CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)**

The Madera County Local Agency Formation Commission is “Lead Agency” pursuant to State CEQA Guidelines and is responsible for making an appropriate finding concerning the service reviews (“activity”) presented in this report under this statute.

It is recommended that the Commission determine that as a study of local government, a municipal service review is exempt from CEQA under Section 15306 of the State CEQA Guidelines (Categorical Exemption, Information Collection, Class 6), which provides exemption for data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource. The Municipal Service Reviews (MSR) for eight (8) public water districts in Madera County report was prepared strictly for information gathering purposes, as part of a study leading to an action which LAFCO has not yet approved, adopted, or funded (*Authority cited: Section 21083, Public Resources Code; Reference: Section 21084, Public Resources Code*).

Following consideration of the information in this report, including the findings and recommendations and adoption of the required written determinations, the Commission may direct the Executive Offer to file a Notice of Exemption with the Madera County Clerk.



## **GLOSSARY**

**Acre-foot** - One acre-foot equals 325,851 gallons, enough to flood a football field one foot deep. The average California household uses between one-half and one acre-foot per year for indoor and outdoor purposes.

**Bureau of Reclamation:** Federal government agency, part of the Interior Department, which oversees the Central Valley Project and 180 other federal water projects in 17 Western states.

**California Water Plan** - provides a framework for water managers, legislators, and the public to consider options and make decisions regarding California's water future. The Plan, which is updated every five years, presents basic data and information on California's water resources including water supply evaluations and assessments of agricultural, urban, and environmental water uses to quantify the gap between water supplies and uses. The Plan also identifies and evaluates existing and proposed statewide demand management and water supply augmentation programs and projects to address the State's water needs.

**Central Valley Project Improvement Act (CVPIA):** 1992 law by Rep. George Miller of California, aimed at reforming the CVP's operations and reducing its impact on fish and wildlife habitat. Instituted pricing reforms and restricted contracts to 25 years in length.

**Environmental Water Account (EWA):** Federal-state joint agency that buys water from contractors in the CVP and SWP at market rates to use for restoring fish and wildlife habitat in the San Francisco Bay-Delta.

**"Full cost" price:** Water rate calculated by the Bureau of Reclamation each year for each CVP contractor. Includes full operation and maintenance charges, payments towards capital costs, and interest on these costs calculated from 1982.

**Groundwater** - Groundwater is beneath the surface and can be collected with wells or flows naturally to the surface via seepage or springs. California's enormous groundwater reservoirs are estimated to hold about 20 times the amount of water stored behind all the dams in the state. Groundwater exists in water-bearing formations called aquifers.

**Reclamation Reform Act (RRA):** 1982 law intended to limit the amount of federally subsidized water that any one farm could receive. Applied not only to the CVP, but to all federal water projects in the West.

**Replacement cost:** The estimated price, according to studies by the Bureau of Reclamation and the California Department of Water Resources, of irrigation water from a new dam on the San Joaquin River. This price, which is used to calculate our top subsidy estimate, is a significant underestimate — the real cost could be twice as much.

**State Water Project:** Large, state-run project that provides water for agricultural and urban users in California. The State Water Project parallels the CVP in some areas but charges much higher prices for its water.

**Surface Water** - Surface water refers to water that remains on the earth's surface, in rivers, streams, lakes, reservoirs or oceans.

**Water district:** A water user organization — water district, irrigation district or private mutual water company — that contracts with the Bureau of Reclamation for Central Valley Project water.



## **SOURCES CONSULTED**

### **Information Provided by the Districts**

AB 3030 Groundwater Management Plan – County of Madera, January 2002  
AB 3030 Groundwater Management Plan – Aliso Water District  
AB 3030 Groundwater Management Plan – Chowchilla Water District, 1997  
AB 3030 Groundwater Management Plan – Gravelly Ford Water District

Financial Statements – Years End Dec 31, 2005 and 2004 - Chowchilla Water District  
Basic Financial Statements – Years End Dec 31, 2005 and 2004 - Gravelly Ford Water District  
Financial Statements – Years End Dec 31, 2004, 2003 and 2002 - Aliso Water District

LAFCO Questionnaire and accompanying correspondence submitted by the districts.

### **Personal Communications**

Mr. Provost, Provost and Prichard Engineering – RE: Root Creek Water District (July/August, 2006)  
Mr. Roy Catina – RE: Aliso WD (July/August, 2006)  
Mr. Dave Herb – Madera LAFCO Executive Officer (Summer, 2006)  
Mr. Douglas Welsh – RE: Chowchilla Water District (July/August, 2006)  
Mr. Don Roberts - RE: Gravelly Ford Water District (July/August, 2006)

### **Printed Resources**

2002 California 305(b) Report on Water Quality, State Water Resources Control Board  
California's Groundwater Update 2003 Bulletin 118-03,

California Department of Water Resources Programmatic Record of Decision, California Bay-Delta Program, August 28, 2000.

San Joaquin River Management Program Advisory Council Strategic Plan, State Water Resources Control Board, Regional Water Quality Control Boards, November 15, 2001

U.S. Bureau of Reclamation Water Quality Control Plan, Regional Water Quality Control Board  
Watershed Management Initiative Chapter, Regional Water Quality Control Board

Madera County General Plan

2000 Census Information, Fresno Council of Governments.

California Department of Finance, Demographic Research Unit, California State Census Data Center.

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**APPENDIX A**  
**WATER SUPPLY IN MADERA COUNTY**

**Water Supply in Madera County (*San Joaquin Basin*)** - Madera County is located in the San Joaquin River Basin, which includes the northern portion of the San Joaquin Valley. The basin is bordered on the east by the Sierra Nevada and on the west by the coastal mountains of the Diablo Range. It extends from the southern boundaries of the Sacramento – San Joaquin Delta to include all of the San Joaquin River drainage area to the northern edge of the San Joaquin River in Madera. The region extends south from just below the northeastern corner of Sacramento County and east to include the southern third of El Dorado County, almost all of Amador County, all of Calaveras, Mariposa, Madera, Merced, Stanislaus, and Tuolumne counties, and the western slope of Alpine County.

The valley portion of the San Joaquin River region consists primarily of highly productive farmland and the rapidly growing urban areas of Stockton, Tracy, Modesto, Manteca, Merced and Madera. Agriculture is the major economic and land use activity in the San Joaquin River region. The primary sources of surface water in the region are the rivers that drain from the western slope of the Sierra Nevada. These include the San Joaquin River and its major tributaries, the Merced, Tuolumne, Stanislaus, Calaveras, Mokelumne, and Cosumnes rivers. Most of these rivers drain large areas of high-elevation watersheds that supply snowmelt runoff during the late spring and early summer. Other tributaries to the San Joaquin River include the Chowchilla and Fresno rivers, which originate in the Sierra Nevada foothills where most of the runoff results directly from rainfall.

Many surface water supply systems in the Sierra Nevada streams and rivers follow a similar pattern of use. Often a series of small reservoirs in the mountain valleys will gather and store snowmelt runoff. This water is used to generate electricity as it is released downstream. Some diversions occur for consumptive use in local communities, but most flows are recaptured in larger reservoirs in the foothills and along the eastern edge of the valley. Most of these larger reservoirs were built primarily for flood control. However, many of them also store water for urban and agricultural purposes, and make downstream releases for fish and environmental needs. Irrigation canals and municipal pipelines divert much of the water from these reservoirs.

Many of the small communities in the Sierra Nevada foothills receive most of their water from local surface supplies. The extensive network of canals and ditches constructed in the 1850s for hydraulic mining forms the basis of many of the conveyance systems. In addition to surface water, many of these foothill and mountain communities pump groundwater from hard rock wells and old mines to augment their supplies, especially during droughts.

Groundwater supplies in the foothills are limited, but this is the primary source of water for individual residents who are not connected to municipal water systems. On the valley floor, many agricultural and municipal users receive their water supply from large irrigation districts, such as the Modesto, Merced, Oakdale, South San Joaquin and Turlock Irrigation Districts. Most of this region's imported surface water supplies are delivered by the federal Central Valley Project, which average about 1.9 million acre-feet per year. In addition, Oak Flat Water District receives about 4,500 acre-feet per year from the State Water Project.

Most of the surface water in the upper San Joaquin River is stored and diverted at Friant Dam, and is then conveyed north through the Madera Canal and south through the Friant-Kern Canal. Average annual diversions from the San Joaquin River through the Friant-Kern and Madera Canals total about 1.5 million

acre-feet per year. Releases from Friant Dam to the San Joaquin River are generally limited to those required to satisfy downstream water rights, above Gravelly Ford, and for flood control.

In the vicinity of Gravelly Ford, a high amount of subsurface percolation into the groundwater basin occurs because the river bed is primarily sand and gravel. As a result of the operation of Friant Dam, there are seldom any surface flows in the middle reaches of the San Joaquin River until it is joined by the Merced River and other major downstream tributaries. Agricultural and municipal return flows into the river also contribute to the surface flow of the lower San Joaquin River. The tributaries of the San Joaquin River provide the region with high-quality water that constitutes most of the surface water supplies for local uses. Much of this water is regulated by reservoirs and used on the east side of the San Joaquin Valley.

Historically, the surface water originating from Sierra Nevada rivers has proven to be a dependable supply of high quality water, but it meets only half of the region's total water requirements. Imported surface water and groundwater-pumping make up the difference. Groundwater pumping is a major source of water supply for the San Joaquin River region, and it continues to increase in response to the growing urban and agricultural demands. Over the long-term, groundwater extraction cannot continue to meet all of the current and projected water demands without causing negative impacts on the groundwater basins. The primary impact is groundwater overdraft, a condition where the average long-term amount of water pumped out of the basin exceeds the amount of water recharged or naturally replenished into the groundwater basin.

*(Source: California Water Plan Update 2005, Chapter 7 San Joaquin River Hydrologic Region).*

**Madera Sub Basin** - The Madera sub basin consists of lands overlying the alluvium in Madera County. The sub basin is bounded on the south by the San Joaquin River, on the west by the eastern boundary of the Columbia Canal Service area, on the north by the south boundary of the Chowchilla Sub basin, and on the east by the crystalline bedrock of the Sierra Nevada foothills. Major streams in the area include the San Joaquin and Fresno Rivers. Average annual precipitation is 11 inches throughout the majority of the sub basin and 15 inches in the foothills of the Sierra Nevada range.

**Distribution** - Public agencies and private water developers have built nearly 1,400 reservoirs in California to capture seasonal runoff, protect against floods and allocate water supplies throughout the year. These reservoirs hold about 42 million acre-feet of water when full.

Most of the state's rainfall occurs from December through April, but the greatest demand for water is during the dry summer months. The reservoirs capture a large portion of runoff from the Sierra snow pack, which is the state's largest reservoir of fresh water. In addition to water supply, many of the reservoirs also must provide downstream flood protection. Consequently, large volumes of runoff pass through the dams in order to reserve storage capacity for flood control. Once the flood season passes, the remaining runoff is stored in the reservoirs for later use.

Before 1900, water development in California was principally undertaken by individuals and private companies. As the population and economic activity of the state grew, cities, irrigation districts, public utilities and large municipal agencies took on the responsibility for developing water supplies for their jurisdictions. Over time, large distribution networks were developed to pipe treated surface and groundwater to homes, businesses, parks, schools and other facilities.

About 30 percent of California's total annual water supply comes from groundwater in normal years, and up to 60 percent in drought years. Local communities' usage may be different; many areas rely exclusively on groundwater while others use only surface water supplies. Contrary to popular opinion, groundwater does not exist in underground lakes. Groundwater fills pores (spaces) between sand, gravel, silt and clay in water-bearing formations known as aquifers.

**Conjunctive Use** - Conjunctive use is the coordinated management of surface water and groundwater supplies to maximize the yield of the overall water resource. An active form of conjunctive use utilizes artificial recharge, where surface water is intentionally percolated or injected into aquifers for later use. A passive method is to simply rely on surface water in wet years and use groundwater in dry years. More than 65 water agencies in the state operate groundwater recharge programs. The success of many of these programs, however, depends on purchasing available surface water from other users.

Conjunctive use is becoming a key part of the state's overall water management strategy in terms of coping with a growing population. Conjunctive use is becoming a key part of the state's overall water management strategy in terms of coping with a growing population. In southern California basins, about 21.5 million acre-feet of additional conjunctive use potential is available, according to the Association of Ground Water Agencies. The amount represents enough water to fill Diamond Valley Lake, the region's largest reservoir, 26 times over.

Today, substantial water development projects have occurred in every region of the state, from the Bay Area to Los Angeles to the burgeoning Inland Empire. Thus, residential, commercial and municipal users are drawing more of their supply from a mixture of imported and locally developed sources.

From the earliest days of U.S. history, finding and maintaining a clean water supply for drinking and other uses has been a high priority. Today, significant technological developments in monitoring, assessing and treating water ensure a drinking water supply of high quality for most people. Because of water's long history, life-supporting properties and future use, it needs to be protected from pollutants - whether natural or manmade. Ensuring a supply that sustains life for future generations has become part of the social contract.

Where a community's water comes from depends largely on the foresight and planning of its founders and the historic use of local lands and water sources. Some communities, such as Sacramento, claimed water rights early in their history in order to assure themselves an adequate supply far into the future. Other communities do not have access to adequate supplies of good quality local water to meet their needs. Some of these communities import water, sometimes over great distances, from state or federal water projects.

**Municipal Water (*Drinking Water*)** - Many cities rely on local water projects for all or a portion of their supplies. These projects typically were built and are operated by local public water districts, county water departments, city water departments or other special districts. Nearly 600 special purpose local agencies in California provide water to their areas through local development projects and imported supplies. A number of local agencies may also operate flood control and wastewater treatment facilities in addition to providing drinking water. Local water agencies usually are formed by a vote of the community, operate as public organizations, are governed by elected directors and fund their projects through bond issues.

In some communities, water is provided by private companies. Approximately 6 million Californians are served by these investor-owned utilities, which are regulated by the California Public Utilities Commission. The PUC monitors operations and service, sets water rates, and enforces water quality standards set by state and federal regulators. Groundwater is a major source - if not the only source - of *drinking water* for many communities within the vast Central Valley stretching from San Joaquin County to Kern County. The region also relies on water from the State Water Project, Central Valley Project and other locally financed water projects. In the small rural foothill communities above the valley floor, many homes are supplied by individual wells.

Drinking water supplies are heavily regulated. The treatment of groundwater varies from community to community, and even from well to well within a city depending on contaminants in the water. The water may be treated as it is pumped from the ground to remove certain contaminants or it may be chlorinated if there is concern of bacterial or parasitic infection.

The driving force behind the development of drinking water standards and regulations is the protection of public health. Many laws have been adopted concerning water quality standards, beginning with the Interstate Quarantine Act of 1893, which sought to control the introduction of communicable diseases from other countries.

The first federal drinking water standard, adopted in 1914, was limited to bacteriological quality of water and not physical and chemical requirements. By 1925, cities were using filtration, chlorination or both and had little difficulty complying with the coliform standard. Eventually, limits were established for lead, copper, zinc and excessive soluble mineral substances. In 1941, an advisory committee of federal agency representatives, scientific associations and at-large members was formed to revise drinking water regulations. In 1942, the committee agreed on significant initiatives such as required bacteriological examinations in water distribution systems and maximum concentrations for lead, fluoride, arsenic and selenium. Twenty years later, the U.S. Public Health Service developed drinking water standards that were used by California.

During the following decades, federal water pollution control efforts focused on physical, biological, chemical and industrial waste. Passed by Congress in 1974, the Safe Drinking Water Act (SDWA) regulates drinking water quality in the United States. Under the SDWA, the U.S. Environmental protection Agency (EPA) can delegate implementation of drinking water regulations to states that have developed programs at least as stringent as the federal one. Such states, including California, have primary enforcement responsibility for administering their own programs.

Under the SDWA, public water systems are required to conduct testing on a regular basis. Monthly monitoring for microbial contaminants is required for both surface water and groundwater systems, while organic chemical monitoring must be conducted annually by surface systems and every three years by groundwater systems.

Contaminants fall into several categories: those that occur naturally, such as arsenic and uranium, those that are manmade, such as solvents or pesticides; and those that derive primarily from the materials used in supplying water, most notably disinfection byproducts (DBPs). The byproducts emerge from the treatment process when chlorine reacts with naturally occurring organic compounds found in the water supply. Public health experts note the possible risks from DBPs are limited compared to inadequate disinfection of drinking water.

The EPA established pollutant-specific minimum testing schedules for public water systems. If a problem is detected, there are immediate retesting requirements that go into effect and strict instructions for how the system informs the public about the problem. Until the system can reliably demonstrate that it is free of problems, the retesting is continued.

**Irrigation Water** - The majority of farms using Central Valley Project water get it through a water district, irrigation district or mutual water company. Calculating subsidies at the district level is simple because the Bureau of Reclamation publishes each district's CVP water use records annually. California's Central Valley Basin includes two major watersheds--the Sacramento River on the north and the San Joaquin River on the south--plus the Tulare Lake Basin. The combined watersheds extend nearly 500 miles from northwest to southeast and range from about 60 to 100 miles wide. Madera County is located in the San Joaquin River area.

The basin is surrounded by mountains, except for a gap in its western edge, at the Carquinez Straits. The valley floor occupies about one-third of the basin; the other two-thirds is mountainous. The Cascade Range and Sierra Nevada Mountains, on the north and the east, rise to about 14,000 feet, and the Coast Range, on the west, rises to 8,000 feet. The San Joaquin River runs northward and most of its tributaries generally run east and west. These two river systems join at the Sacramento-San Joaquin Delta and flow through Suisun Bay and Carquinez Straits, into San Francisco Bay, and out the Golden Gate to the Pacific Ocean.

**Central Valley Project (CVP)** - The Central Valley Project, one of the Nation's major water conservation developments, extends from the Cascade Range in the north to the semi-arid but fertile plains along the Kern River in the south. Initial features of the project were built primarily to protect the Central Valley from water shortages and floods, but the CVP also improves Sacramento River navigation, supplies domestic and industrial water, generates electric power, conserves fish and wildlife, creates opportunities for recreation, and enhances water quality.

The CVP serves farms, homes, and industry in California's Central Valley as well as major urban centers in the San Francisco Bay Area; it is also the primary source of water for much of California's wetlands. In addition to delivering water for farms, homes, factories, and the environment, the CVP produces electric power and provides flood protection, recreation, and water quality benefits. The Central Valley Project facilities include reservoirs on the Trinity, Sacramento, American, Stanislaus, and San Joaquin Rivers. The CVP also serves water from the Friant Dam on the San Joaquin River to CVP contractors located near the Madera and Friant-Kern canals.

Irrigation and municipal water is delivered from main canals in accordance with long-term contracts negotiated with water irrigation districts and other local purveyors. Distribution of water from the main canals to the individual users is the responsibility of the local districts. Irrigation distribution systems use lateral canals and pipelines to convey water from the main canals to individual farms.

**The Friant Division** - The Friant Division is a centerpiece of the original Central Valley Project plan. It irrigates more than a million acres along the valley's east side between Arvin and Chowchilla through the Friant-Kern and Madera canals with San Joaquin River water diverted at Friant Dam.

Friant Dam and Millerton Lake, 16 miles northeast of downtown Fresno, provide the water that supplies the Friant-Kern and Madera canals. The 319-foot-high straight concrete gravity-type dam was completed in 1944. The lake is fairly small. Reservoir capacity is 520,500 acre-feet (although 135,000 acre-feet of that amount is "dead storage," below the canals' intakes and not available for irrigation use). The region served from Friant Dam and Millerton Lake originally had limited surface water supplies or none at all.

The Friant-Kern Canal flows 152 miles between Friant Dam and the Kern River in Bakersfield. The canal serves a highly productive farming region and communities along the valley's east side as far as Arvin in Kern County. The canal's initial capacity is 5,300 cubic feet per second and gradually diminishes. The Madera Canal stretches northwesterly 36 miles, from Friant to Ash Slough near Chowchilla. Its initial capacity is 1,275 cubic feet per second.

The Friant system is made possible by a unique water exchange that was a centerpiece of the Central Valley Project's original plan. Under normal conditions, 840,000 acre-feet of Northern California water is delivered to Mendota Pool through the Delta-Mendota Canal for use by four west side agencies with historic San Joaquin River water rights. As a result, a maximum of 800,000 acre-feet of water may be diverted for the firm Friant supply known as Class 1 water. Class 2 water develops after Class 1 demands have been met. While the Class 2 contract limits are 1,400,000 acre-feet, the range varies from zero to the full 1,400,000 and averages approximately 600,000 acre-feet annually.

There are 28 long-term Friant Division water service contractors. They include 23 agricultural water providers and five municipal and industrial contractors. Another eight agencies have Cross Valley Canal water exchange contracts capable of importing more than 128,000 acre-feet of additional water annually into the Friant service area from Northern California.

**Need for CVP Water Supplies** - The average annual rainfall in California ranges from 5 inches in the southern end to more than 30 inches in the northern end of the Central Valley, with more than three-fourths of the rainfall coming in a 5-month period from December through April. This condition produces seasonal floods and droughts with heavy winter and spring runoffs, leaving a shortage of water in the summer and autumn when it is most needed for irrigation. Because maturing crops need water at a time of year when natural stream flow is lowest, many farmers resorted to irrigating by pumping from wells. As irrigated agriculture expanded, the water pumped from the ground greatly exceeded the natural recharge by rainfall and stream flows.

Thus, hundreds of thousands of acres developed for irrigation in the southern part of the valley burdened a rapidly diminishing supply with an increasing demand for water. In addition, diverting stream flows to irrigation and lowering ground-water levels by pumping further reduced the low summer flows of the rivers. As a result, salt water from San Francisco Bay began encroaching upon crop lands in the Sacramento-San Joaquin Delta, endangering another large producing area as well as inhibiting industrial development.

*(Source: <http://www.ewg.org/reports/watersubsidies/part5.php>)*

Construction of the initial units of the Central Valley Project began in October 1937 with the Contra Costa Canal. The entire canal was completed in 1948. First delivery of water was made on August 16, 1940. A contract for the construction of Shasta Dam, keystone of the Central Valley Project, was awarded July 6, 1938; work was started in 1938 and was essentially complete in 1945. Storage of water began in January 1944, and the first power was delivered in June 1944. The Corps completed Folsom Dam in 1956, turning over operation and maintenance to Reclamation after completion.

The Congress integrated more Corps projects into CVP during the 1960s and 1970s. The Corps continued to operate and maintain several dams in the Central Valley. The Corps often found itself holding surplus water at the dams. As a result, Reclamation drew up contracts for releasing the surplus water for irrigation because the Corps specialized in flood control, not irrigation water supply.

### **Non-Municipal Water Suppliers in Madera County**

There are two distinct types of water consumers in Madera County: irrigation (agricultural) and domestic (municipal). Water users in Western Madera County rely upon both surface water and groundwater. Municipal and domestic uses depend on groundwater wells with delivery systems permitted and regulated by state and local governmental agencies. Surface water and groundwater are used conjunctively for agricultural irrigation. Surface water is delivered to the agricultural community by water and irrigation districts. Deliveries are controlled by contracts with the federal government and the state.

The delivery of surface water in Madera County is managed primarily by irrigation districts, while groundwater wells for municipal use are regulated and permitted by local governments. Four irrigation districts manage surface water delivered to agricultural users in the County. The main surface water suppliers in the county are the Madera Irrigation District (MID) and Chowchilla Water District (CWD).





**APPENDIX B**  
**COUNTY SERVICE AREAS**

**County Operated Water Systems** – Madera County operates and administers small public water systems. These are operated as “maintenance districts and/or service areas”. Nearly all these systems rely on groundwater. Cumulatively, these systems provide drinking water to more than 7,000 residents and a number of commercial and public uses (i.e., schools).

The Board of Supervisors acts as the Board of Directors for, and on behalf of each property owner in these districts. The Engineering Department, Special Districts Division, oversees the daily operations of County water districts. The Special Districts Division has approximately 20 employees working throughout the County to maintain approximately 30 water systems and 15 sewer systems.

Districts vary in size from as few as 6 connections to nearly 1000 connections. The cost of running each system, including a reserve for planned and unplanned repair expenses, as well as any needed capital improvement project(s), is considered in establishing rates for residents receiving the service. The number of connections, age, condition of the system, and the demands placed upon it are all factors that affect rates. The Board of Supervisors reviews and approves the Assessments and Service Charges for each district as required under MCC Section 13.89.010(B).

Billings are prepared by the County Auditor’s Office and are linked to the number of water and/or sewer units allocated to each parcel in a district, as defined by County Ordinances. These units are also used to measure existing capacity and plan for future needs. Most parcels used for residential purposes are allocated 1.0 sewer and/or water unit per single-family dwelling. Parcels used for commercial purposes may be required to have, or to obtain additional units to support different activities and levels of development. Water and/or sewer units may be transferred between parcels within a particular district with the approval of the Board of Supervisors.

Annual reports to the Madera County Environmental Health Department or the California Department of Health Services may be required depending on the size of the district. Water service districts are also required to file an annual Consumer Confidence Report. This report is written to educate consumers about the source(s) and quality of their water, and is distributed to all property owners served by the district. The Madera County Engineering Department routinely monitors for contaminants in drinking water according to Federal and State laws. Following is a listing and brief description of county maintenance districts and service areas located throughout Madera County that provides water services:

**(Please Note:** These maintenance districts and/or service areas were not evaluated in this report by Commission policy, due to the stand alone, isolated nature of these County administered service providers. This policy being noted, the County reports various problems and issues with a number of these maintenance districts and/or service areas, both financial and physical. Accordingly, the County may wish to consider the potential benefits of reorganization and/or consolidation of some of these entities. County maintenance districts and/or service areas with problems and issues are identified in Appendix C below).

**Maintenance District 1, Hidden Lakes** - The district is located in the area of Millerton Lake on its North Western shoreline. There are approximately 208 lots with 46 existing homes receiving water. Water is supplied from Millerton Lake, which is fed from snow melt and stream runoff from the San Joaquin River Watershed. The water is received through an underwater intake structure and treated by filtration and disinfection before being distributed to the customers. The water system consists of a 60 gallon per minute surface water treatment plant built in 1986. Two pumps in the lake supply the plant with raw water and two pumps at the plant supply a 135,000-gallon storage tank with treated water. It is then distributed by gravity flow to the district. The distribution system is steel pipe. The water system is chlorinated to maintain disinfection.

**Maintenance District 5, Mountain Ranches** - Maintenance District 5, Mountain Ranches, is located northeast of Hensley Lake on Road 400. The district will provide water service to approximately 50 homes when final build out is complete. About 23 homes are currently served. Water is supplied from two deep wells drawing from rock fractures approximately 600 to 800 feet below the surface. The wells, with a combined production of approximately 25 gallons per minute, supply a 20,000-gallon storage tank. From there, the system utilizes a gravity fed distribution system to supply the district. Water from the wells is chlorinated to maintain disinfection prior to distribution.

**Maintenance District 6, Lake Shore** - Maintenance District 6, Lake Shore, is located on the north shore of Bass Lake on Road 274. The district will provide water service to approximately 50 homes when final build out is complete. About 45 homes are currently served. Water for the district is supplied from two deep wells drawing from rock fractures approximately 450 feet below the surface. The wells, with a combined production of about 46 gallons per minute, supply three storage tanks with a combined capacity of 105,000 gallons. From there, the system utilizes a gravity fed distribution system to supply the district. This water system is not chlorinated and is not recommended for drinking. The water may be used for bathing, washing dishes, washing clothes, and watering the yard at no risk. If the property is a rental or is rented occasionally, please make sure your tenants receive a copy of this notice.

**Maintenance District 7, Marina View** - Maintenance District 7, Marina View, is located on the north shore of Bass Lake on Road 274. The district will provide water service to approximately 92 homes when final build out is complete. About 76 homes are currently served. Water for the district is supplied from two deep wells drawing from rock fractures approximately 200 to 550 feet below the surface. The wells, with a combined production of about 57 gallons per minute, supply two storage tanks with a combined capacity of 95,000 gallons. From there, the system utilizes a gravity fed distribution system to supply the district. This water system is not chlorinated and is not recommended for drinking. The water may be used for bathing, washing dishes, washing clothes, and watering the yard at no risk. If the property is a rental or is rented occasionally, please make sure your tenants receive a copy of this notice.

**Maintenance District 8a, North Fork** - Maintenance District 8A, North Fork, is located in the town of North Fork. The district will provide water service to approximately 200 homes, apartments and businesses when final build out is complete. About 155 are currently served by the water system. Water for the district is supplied from one deep well drawing from rock fractures approximately 520 feet below the surface. The well produces about 240 gallons per minute and supplies a 200,000 gallon storage tank. From there, the system utilizes a gravity fed distribution system to supply the district. There is one other well within the district for future use. The system is fairly new, with PVC distribution system piping. This water system is not chlorinated.

**Maintenance District 10a, Madera Ranchos** - Maintenance District 10A, Madera Ranchos, is located in the area of Avenue 12 and Road 36 in Madera County. The district provides water service to over 900 active connections, including approximately 41 businesses. In addition, there are about 95 remaining standby connections. Water is supplied by three of the five available wells from an aquifer approximately 400 feet below the surface. The combined production of the wells in use is approximately 2100 gallons per minute. The system was taken over by Madera County in 1996. Since that time, two new wells have been drilled and chlorination of the system is required only if the Fernwood well is pressed into use during peak summer-use periods. Otherwise it is not chlorinated. The distribution system is steel, asbestos cement and plastic pipe. All recently installed piping is PVC.

**Maintenance District 19a, Parkwood** - Maintenance District 19A, Parkwood, is located in the area of Avenue 13 and State Highway 145 in Madera County, southeast of the City of Madera. The district provides water service to its residents. The water system serves 259 residential connections, and 4 commercial connections using 28.6 EDUs. Water is supplied by three deep wells drawing from an aquifer approximately 224 to 425 feet underground. The system provides a combined production of about 1,840 gallons per minute. The water is fed into a pressurized system and distributed via asbestos cement pipe to residents. The system is not chlorinated.

**Maintenance District 19b, Parkwood** - Maintenance District 19B, Parkwood, is located in the area of Avenue 12 and State Highway 145 in Madera County, southeast of the City of Madera. The district provides water service to its residents as an extension of the MD-19A water system. Water is supplied by three deep wells drawing from an aquifer approximately 224 to 425 feet underground. The system provides a combined production of about 1,840 gallons per minute. The water is fed into a pressurized system and distributed via asbestos cement pipe to residents. The system is not chlorinated.

**Maintenance District 24, Teaford Meadows** - Maintenance District 24, Teaford Meadows, is located west of the community of North Fork in Madera County and provides water service to its residents. This district will serve approximately 72 homes at final build out and currently provides service to about 62 homes. Water is supplied from three deep wells, drawing from rock fractures approximately 240 to 640 feet below the surface. The wells, with a combined production of approximately 37 gallons per minute, supply a 125,000 gallon storage tank. From there, the system utilizes a gravity fed distribution system consisting of asbestos cement pipe to supply the district. This water system is not chlorinated.

**Maintenance District 28, Ripperdan** - Maintenance District 28, Ripperdan, is located south of the City of Madera on State Highway 145 and Avenue 7 in Madera County. The district provides water service to 16 homes. In addition, water service is provided under contract to 1 home outside the district. Water is supplied by one deep well drawing from an aquifer approximately 470 to 520 feet underground. The well produces an estimated 150 gallons per minute. The water enters a pressurized distribution system constructed from asbestos cement pipe. This water system is not chlorinated.

**Maintenance District 33, Fairmead** - Maintenance District 33, Fairmead, is located southeast of the City of Chowchilla near State Highways 99 and 152 in Madera County. The district provides water service to 167 homes and Fairmead School. In addition, there are about 70 vacant parcels yet to be added to the system. Water is supplied from two deep wells drawing from an aquifer approximately 390 to 390 feet underground. The combined production from both wells is estimated at 600 gallons per minute.

The water enters a pressurized system and is distributed to customers via asbestos cement pipe. The system has an auxiliary engine to run the main 500 GPM well. To maintain disinfection, water received from the well is chlorinated before distribution.

**Maintenance District 36, Eastin Arcola** - Maintenance District 36, Eastin Arcola, is located in the area of Avenue 8 and Road 29 ½, southeast of the City of Madera in Madera County. The district provides water service to 16 homes within the district. In addition, water service is provided under contract to 3 homes outside the district, as well as to Eastin Arcola Elementary School. Two lots within the district are not yet connected. Water is supplied by one deep well drawing from an aquifer approximately 400 feet underground. The well produces an estimated 340 gallons per minute. The water enters a pressurized distribution system constructed from asbestos cement pipe. The school also has a well that can be utilized by manually opening a valve to the distribution system. Usually this well is used to supply the school's irrigation needs, while the district's well supplies their drinking water. This water system is not chlorinated.

**Maintenance District 37 La Vina** - Maintenance District 37, La Vina, is located in Madera County southeast of the City of Madera on Avenue 9 and Road 24. The district provides water service to a store, as well as to both single and multifamily dwellings, serving approximately 172 families. In addition, there are 2 vacant parcels yet to be added to the system. Water is supplied from two deep wells drawing from an aquifer approximately 297 to 393 feet underground. The combined production from both wells is estimated at 665 gallons per minute. The water enters a pressurized system and is distributed to customers via asbestos cement pipe. The system is not chlorinated.

**Maintenance District 40a, Sunset Ridge** - Maintenance District 40A, Sunset Ridge, is located in the area of Meadow Ridge Road and State Highway 41 in Madera County southwest of Coarsegold. This district currently provides water service to 26 homes, and will serve 31 at full build out. Water is supplied from three deep wells drawing from rock fractures approximately 520 feet below the earth's surface. The wells, with a combined production of approximately 112 gallons per minute, supply two storage tanks with a combined capacity of 12,000 gallons. The distribution system consists of two inch PVC pipe. Water from the wells is stored in the tanks before being distributed to customers. The water from this system is not chlorinated.

**Maintenance District 42, Still Meadow** - Maintenance District 42, Still Meadow, is located in the area of Still Meadow Drive and Road 426 in the community of Oakhurst in Madera County. This district currently provides water service to 34 homes, and will serve 37 at full build out. Water is supplied from two deep wells drawing from rock fractures approximately 400 to 430 feet below the earth's surface. The wells, with a combined production of approximately 55 gallons per minute, supply two storage tanks with a combined capacity of 50,000 gallons. Although there is a small pump and pressure tank to supply one home near the tanks, the rest of the distribution system is gravity fed through plastic pipe. This water system is not chlorinated.

**Maintenance District 43, Miami Creek Knolls** - Maintenance District 43, Miami Creek Knolls, is located in Madera County, northwest of Oakhurst in the area of State Highway 49 and Lauri Lane. This district currently provides water service to 27 homes. Water is supplied from four deep wells drawing from rock fractures approximately 200 to 400 feet below the earth's surface. The wells, with a combined production of approximately 15 gallons per minute, supply a 13,000 gallon storage tank. The district has also arranged for the purchase of a supplemental supply of water on an automatic, as-needed basis from Maintenance District 60, Dillon Estates. Boost pumps and pressure tanks are used to supply the district. The distribution system is 1½ and 2 inch ABS, poly and steel pipe. The Miami Creek system is chlorinated.

**Maintenance District 46, Ahwahnee** - Maintenance District 46, Ahwahnee, is located in Madera County northwest of Oakhurst near State Highway 49 and Harmony Lane. The district will provide water service to a residential development consisting of 105 homes at build out, plus an additional 5 commercial units. There are about 94 homes and commercial units currently in use. The water system consists of six deep wells drawing from rock fractures approximately 900 to 1160 feet below the earth's surface. The wells produce about 184 gallons per minute. The system consists of two boost pump stations used to supply two storage tanks designated MCC and ACC. The storage tanks have a combined capacity of 185,000 gallons. From there, water is distributed via gravity flow through plastic pipe. This water system is chlorinated to maintain disinfection.

**Maintenance District 58, Sierra Highlands** - Maintenance District 58, Sierra Highlands, is located near Road 223 and Sierra Highlands Drive in Madera County between Oakhurst and North Fork. The district will eventually provide water service to about 32 homes and currently serves 25. The water system consists of one deep well drawing from rock fractures approximately 380 feet below the earth's surface. The well produces about 86 gallons per minute to supply a 60,000 gallon storage tank. Water is distributed to the lower part of the system via gravity flow through plastic pipe. A boost pump and pressure tank is used to supply the upper part of the system, also through plastic pipe. Should additional water be required during periods of high demand, another existing well is available. This water system is not chlorinated.

**Maintenance District 60a, Dillion Estates** - Maintenance District 60, Dillon Estates, is located south of Ahwahnee on State Highway 49 and Sunrise Drive in Madera County. The district will eventually provide water service to about 38 homes and currently serves 37. The water system consists of two deep wells drawing from rock fractures approximately 140 to 900 feet below the earth's surface. The wells produce about 105 gallons per minute to supply a 64,000 gallon storage tank and pressure system. This system also sells excess water to MD-43, Miami Creek Knolls, on an as-needed basis. The distribution system is plastic pipe. This water system is not chlorinated.

**Maintenance District 63a, Coarsegold South** - Maintenance District 63A, Coarsegold South (also known as Meadow Springs), is located off State Highway 41 south of Coarsegold. The district will provide water service to a residential development consisting of 101 lots at build out. Approximately 43 residences are currently connected. The water system consists of two deep wells drawing from rock fractures approximately 525 to 1200 feet below the earth's surface. Untreated water exceeds the secondary maximum contaminant levels for iron and manganese. A plant built to remove iron and manganese can process only 200 gallons per minute, although the wells can produce in excess of that amount. The wells supply two storage tanks, each with a capacity of 135,000 gallons. Water is distributed to customers through three pressurized zones. This system is not chlorinated.

**Maintenance District 73a, Quartz Mountain** - Maintenance District 73A, Quartz Mountain, is located southeast of Coarsegold near State Highway 41 and Road 417 in Madera County. The district will eventually provide water service to about 139 homes and currently serves 120. The water system consists of four deep wells drawing from rock fractures approximately 400 to 875 feet deep. The wells produce about 170 gallons per minute to supply a 125,000 gallon storage tank. Manganese, a secondary standard contaminant, occurs at a level that exceeds the maximum contaminant level. A sequestering agent is added to hold the naturally-occurring iron and manganese in suspension. The distribution system is gravity fed through plastic pipes. This is a metered system and the water is not chlorinated.

**Maintenance District 85, Valeta** - Maintenance District 85, Valeta, is located in Madera County, southwest of Chowchilla near Robertson and Avenue 13½. The district will eventually provide water service to about 20 homes and currently serves 19. The water system consists of one deep well drawing from an aquifer approximately 200 feet below the earth's surface. The well produces about 160 gallons per minute into a pressure system. The distribution system consists of plastic pipe that was installed by the homeowners. This system is not chlorinated.

**Maintenance District 95a, Ranchos West** - Maintenance District 95, Ranchos West, is located in Madera County, near Avenue 12½ and Road 35. It currently provides water service to 26 of the 29 homes it will serve at full build out. Water for the district is supplied from one deep well drawing from an aquifer approximately 550 feet below the earth's surface. The well produces about 200 gallons per minute and supplies a 140,000 gallon storage tank. Boost pumps are used to supply a pressure system, which distributes water to customers through plastic pipe. This water system is not chlorinated.

**Service Area 1, Indian Lakes** - Service Area 1, Indian Lakes, is located southeast of Coarsegold near State Highway 41 and Road 417 in Madera County. The district will eventually provide water service to about 520 homes and currently serves 457. The water system consists of six deep wells, of which 5 are in use, drawing from rock fractures approximately 300 to 1100 feet below the earth's surface. The wells produce about 900 gallons per minute to supply an iron and manganese removal plant. The treated water is stored in a 750,000 gallon tank prior to distribution. Water is distributed through cement-lined, steel pipes utilizing boost pumps to pressurize the system. During emergencies, there is a generator backup to operate the pressure system and three wells. This water system is both metered and chlorinated.

**Service Area 2b, Bass Lake (Wishon Cove Area)** - Service Area 2B, Wishon Cove, is located in Madera County on the south shore of Bass Lake on Road 222. The district provides water service to about 26 homes and the PSEA Campground. Only 3 lots remain vacant at this time. Water is supplied to the water treatment plant by two submersible pumps drawing water from Bass Lake. The treatment plant produces 100 gallons per minute. The filtered and treated water is moved to a 60,000 gallon storage tank before being distributed to our customers via a plastic and steel pipe distribution system. The water system is chlorinated.

**Service Area 2c, Bass Lake (Molly Cabin Area)** - Service Area 2C, Bass Lake, is located in Madera County on the south shore of Bass Lake on Road 222 near the dam. The district provides water service to about 6 cabins. A seventh cabin was demolished some time ago. That lot remains vacant at this time. The water system also serves SA-2B, Wishon Cove. Water is supplied to the water treatment plant by two submersible pumps drawing water from Bass Lake. The treatment plant produces 100 gallons per minute. The filtered and treated water is moved to a 60,000 gallon storage tank before being distributed to our customers via a plastic and steel pipe distribution system. The gravity fed distribution system for SA-2C consists of a two inch steel pipe running cross country from SA-2B, through USFS campgrounds, to the property where the six cabins are located. We do not maintain the system within the complex containing the cabins. The water system is chlorinated.

**Service Area 3, Parksdale** - Service Area 3, Parksdale, is located in the area of Road 28½ and Avenue 13½. The district provides water service to its residents. There are approximately 510 active residential and commercial connections with 46 remaining standby connections. The water system has two deep wells drawing from an aquifer about 216 to 480 feet below ground. The wells produce an estimated 1,900 gallons per minute, which supplies a pressurized system. Water is distributed through asbestos cement pipe. One well is powered by a generator during power outages. The water is not chlorinated.

**Service Area 14, Chuk Chansi** - Service Area 14, Chuk-Chansi, is located in Madera County near Road 28½ and Avenue 18. It provides water service to 31 homes. Water is supplied by one deep well drawing from an aquifer about 390 feet below ground. The well currently produces about 31 gallons per minute and supplies a 48,000 gallon storage tank. Boost pumps are used to supply a pressurized system. Water is distributed through asbestos cement pipe. This water system is not chlorinated.

**Service Area 16, Sumner Hill** - Service Area 16, Sumner Hill, is located in Madera County on Killarney Drive, near State Highway 41 and Road 204, northwest of the Fresno County Line. It provides water service to 34 of a potential 49 homes. Water for the service area is supplied by the San Joaquin River, which is fed by water released by the Friant Dam. The source of this water is snow melt and stream runoff. The system consists of two submersible pumps in the river that supply two parallel surface water treatment plants. The plants are capable of a combined production of 180 gallons per minute. Water is then stored in two storage tanks with a combined capacity of 160,000 gallons. Boost pumps supply a pressurized distribution system utilizing plastic pipe. The water is chlorinated to maintain disinfection.

**Service Area 19, Rolling Hills** - Service Area 19, Rolling Hills, is located in the area of State Highway 41 and Avenue 10½ in Madera County, just north of the Fresno County line. The district provides water service to over 327 active residential and commercial connections. In addition, there are about 33 remaining standby connections. Water is supplied from a well drawing from an aquifer approximately 240 to 700 feet below the earth's surface. This well produces about 400 gallons per minute. In the summer months, during periods of peak usage, a second well belonging to the S & J Ranch is added to the system, increasing the production by an additional 450 gallons per minute. The water is distributed via a pressurized system utilizing asbestos cement pipe. This system is chlorinated.

(Source: <http://www.smartvoter.org/gtg/ca/state/overview/districts.html>).





**APPENDIX C**  
**COUNTY MAINTENANCE DISTRICTS AND/OR SERVICE AREAS WITH PROBLEMS AND ISSUES**



*(LAFCO Staff to Insert)*