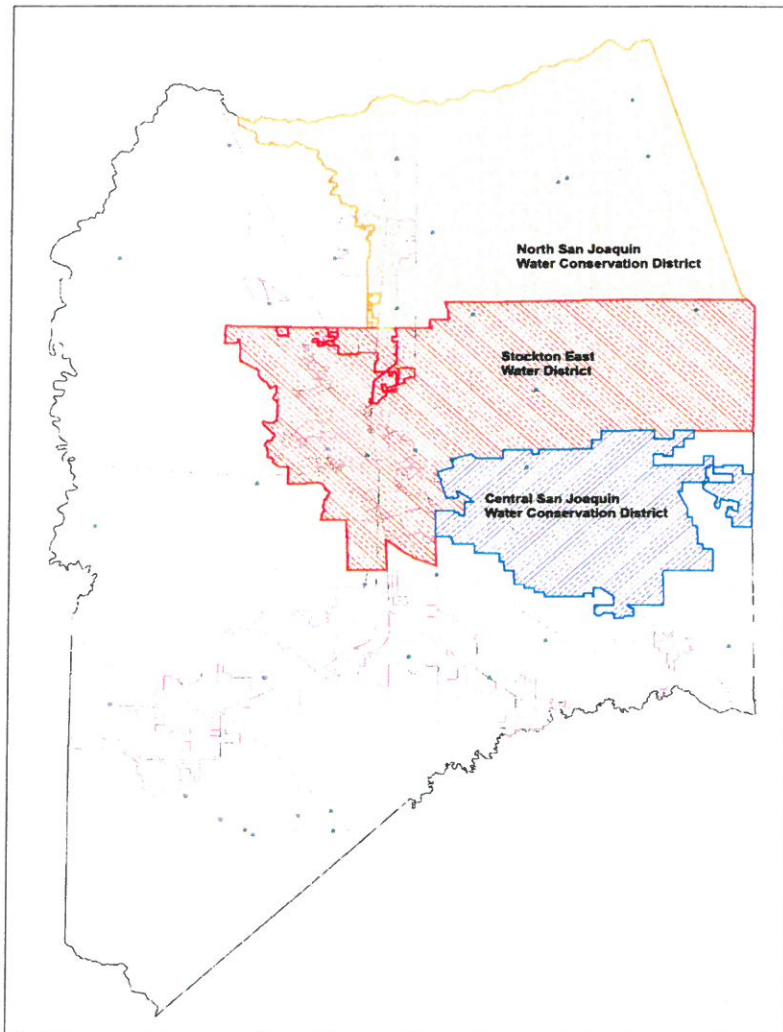


WATER CONSERVATION DISTRICTS OF SAN JOAQUIN COUNTY

Municipal Service Review and Sphere of Influence Plans



SAN JOAQUIN LOCAL AGENCY FORMATION COMMISSION
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EXECUTIVE SUMMARY

One of the key responsibilities of a Local Agency Formation Commission (LAFCo) is to determine the sphere of influence of local governmental agencies. A sphere of influence (SOI) designates the probable physical boundary and service area of a local agency. The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (CKH Act) requires the LAFCo to prepare a service review prior to or concurrent with an update of an SOI. The service review evaluates existing and future service conditions and reviews the advantages and disadvantages of various governmental service structure options in the form of written determinations. A service review provides information upon which LAFCo can base its action on an SOI.

This Service Review and Sphere of Influence Plan have been prepared for the water conservation districts in San Joaquin County. They include *North San Joaquin Water Conservation District* (North San Joaquin), *Stockton East Water District* (Stockton East), and *Central San Joaquin Water Conservation District* (Central) (collectively "Districts"). All three of the Districts are included together because of the similarity of the services provided and the geographic relationship of the Districts. Two of the Districts (Stockton East and Central) have filed competing applications for annexation of additional territory involving the same land to their respective Districts. The Service Review and Sphere Update must be considered prior to or concurrently with these annexation requests.

In accordance with the CKH Act, the service review addresses six categories for which LAFCo must render written determinations pursuant to California Government Code §56430:

- Growth and Population Projections
- The Location and Characteristics of Any Disadvantaged Unincorporated Communities within or Contiguous to the Sphere of Influence
- Present and Planned Capacity of Public Facilities and Adequacy of Public Services including Infrastructure Needs and Deficiencies
- Financial Ability of Agencies to Provide Services
- Status of, and Opportunities for, Shared Facilities
- Accountability for Community Service Needs, Including Governmental Structure, and Operational Efficiencies

In addition, LAFCo must make four separate determinations with regard to the sphere of influence boundaries:

- Present and Planned Land Uses
- Present and Probable Need for Public Facilities and Services
- Present Capacity of Public Facilities and Adequacy of Public Services
- Social and Economic Communities of Interest

Determinations Regarding Sphere of Influence Plans

The sphere plan proposes that North San Joaquin's SOI be reduced in the overlapping area with Woodbridge Irrigation District (WID) located in the southwestern part of the District. Approximately half of the parcels in this area are being served irrigation water by WID and all parcels are within North San Joaquin for water conservation purposes. Some WID facilities are located within this area and WID indicates it can provide water service when requested by the landowner.

The sphere plan does not propose any changes to the existing SOI for Stockton East as its sphere is coterminous with the District. As land annexes to the City of Stockton the annexed territories automatically annex to Stockton East pursuant to existing statute. In these instances Stockton East's sphere is amended upon annexation to include the newly annexed territory.

Central's existing SOI is larger than the District's service boundaries. Both Stockton East and Central have submitted competing applications to annex the territories in Central's sphere but not within its District as well as the area identified as Area A in Figure 5. According to discussions held with the Eastern Water Alliance, the area south of Main Street and Copperopolis Road (Area A) was to be served by and included in Central. In addition, Duck Creek North Fork is utilized by Central to supply water to the District and is located in the territory. Central has indicated its willingness to provide service to this area. Central's SOI should be expanded to include Area A. All properties in the eastern part of the County should be included within a water conservation district to allow comprehensive planning and finding solutions for the groundwater overdraft of the ESJ Basin.

1. Present and Planned Land Uses

Over seventy-five percent of the present land use is agriculture. The urban areas of the Districts cover most of the City of Lodi (North San Joaquin), and the entire City of Stockton (Stockton East). Planned land uses will result in increased urbanization surrounding the existing cities and will result in less demand for surface agricultural water. However, increased urbanization will result in increased domestic water use which will impact the provision of water by Stockton East. The need to improve and protect the groundwater basin will still be an important mission for all the Districts.

The sphere of influence for Stockton East will expand as urbanization occurs within the City of Stockton since all annexations automatically become part the District. North San Joaquin's SOI will not expand since this district has been recently expanded and presently abuts directly to Stockton East on the south and the County Line to the north and east. The SOI should be reduced in the area that overlaps with Woodbridge Irrigation District. Both Stockton East and Central presently have requested expansion of their territories to serve additional agricultural uses.

2. Present and Probable Need for Public Facilities and Services

None of the Districts can directly serve the needs of all property owners within their boundaries desiring service with a physical water service connection. In addition, none of the Districts have sufficient surface water to provide to all lands within their boundaries and there is a need for improvement and expansion of the distribution systems in all three Districts. Furthermore, the entire groundwater basin is significantly overdrafted and additional surface water sources and strategies for water conservation are needed. Also, many of the Districts' existing contracts are not firm commitments of water. Therefore, the potential exists that there are inadequate surface water resources to serve the probable needs of the Districts.

Coordinated planning strategies are necessary such as those outlined in the Eastern San Joaquin Groundwater Basin Groundwater Management Plan (2004) and the Eastern San Joaquin Integrated Regional Water Management Plan (2007). In this most recent plan, fifty-three specific actions are listed. All of the actions fall into one of the following categories: Monitoring; Improved Basin Characterization; Continued Long-Term Planning; Groundwater Protection; Construction and Implementation; Governance; Financing; and Public Participation/Community Outreach. Implementation of these strategies is critical to meet the future needs of the Districts.

3. Present Capacity of Public Facilities and Adequacy of Public Services

Existing public facilities and services are not adequate for serving the needs of all property owners of the Districts with a physical surface water service connection. Additional funding opportunities would allow for further expansion of facilities, but the ability of the Districts to raise additional revenue is limited. Capital funding for distribution systems is dependent upon approval and funding from outside governmental agencies and/or voter approved financing.

4. Social and Economic Communities of Interest

The Districts' boundaries are primarily based on natural topography and as such are not related to any social or economic communities of interest.

Service Review Determinations

An explanation of the specific operational and management aspects of each service provider considered in each of these topic areas is provided below. Based on the information contained in the Service Review, the determinations listed by topic covered in this Service Review are as follows:

1. Growth and Population Projections

The growth projections for the Districts show that their population will reach 684,294 people by the end of the 30-year planning horizon. This is slightly more than a 61 percent increase in population and will represent more than 46 percent of the entire County population by the year 2042. These projections are based on a 1.5 percent annual growth rate for the Districts. Provision of services to agricultural users may actually decrease as a result of urban growth. However, this growth will not necessarily result in an increase in water demand, as the majority of the land within the three Districts is currently developed either for agricultural or urban use. Because the water demand for agricultural and urban uses are essentially equal, overall population growth is not as important as compared to the Districts' ability to secure long term water supplies.

2. The Location and Characteristics of Any Disadvantaged Unincorporated Communities Within or Contiguous to the Sphere of Influence

Although there could be an endless array of communities which meets the definition contained in California Government Code §56033.5, none of the districts provide sewer, municipal and industrial water, nor structural fire protection directly to residential uses.

3. Present and Planned Capacity of Public Facilities and Adequacy of Public Service Including Infrastructure Needs and Deficiencies

The Eastern San Joaquin County Groundwater Basin is overdrafted by approximately 200,000 acre feet per year (af/yr). Additional surface water sources are needed to restore equilibrium within the basin. Continued depletion of the groundwater could result in saline intrusion into the basin and the permanent destruction of a portion of the basin. The *Eastern San Joaquin Groundwater Basin Groundwater Management Plan* (2004) and the *Eastern San Joaquin Integrated Regional Water Management Plan* (2007) outline various strategies to address concerns regarding the groundwater decline in San Joaquin County and discuss options for obtaining additional surface supplies.

North San Joaquin has the potential water right to approximately 20,000 af/yr. Stockton East has the right to use 67,115 af/yr of Calaveras River water through New Hogan Reservoir and up to 75,000 a/f of interim supply of Stanislaus River water through New Melones Reservoir. Central has the right to 49,000 a/f of firm supply and up to 31,000 a/f of interim supply of Stanislaus River water through New Melones Reservoir.

Additional water supplies and strategies for water conservation are needed. Not all properties in the eastern portion of the County are within a water conservation district and therefore are not contributing to the stewardship of the basin. Central's SOI boundary should be expanded to include these properties.

4. Financial Ability of Agencies to Provide Services

The Districts' financial capabilities vary significantly with Stockton East's budget being nearly twenty times larger than the other Districts. Stockton East, however, serves an urbanized area and receives more property tax revenues and utility user fees from a greater amount of users. It is difficult to assess the economic vitality of Central due to the many pending lawsuits. The result of litigation could have a profound effect on the District's finances. The District has historically dipped into its reserves to meet expenses. Central has paid Stockton East for court ordered interim wheeling charges for 2010 and 2011. The Courts have yet to determine actual wheeling rates for 2010, 2011, and 2012. Both Stockton East and Central are in litigation with the US Bureau of Reclamation (USBR) over the breach of its New Melones' contract for failure to allocate full contract entitlements. A monetary settlement will be determined in September 2012. North San Joaquin does not have a sufficient revenue stream to build infrastructure needed to utilize its water right to 20,000 af/yr and continues to be under threat of losing its water rights. In 2010 the District voters failed to pass Measure C which would have amended a previous measure allowing the District the right to adopt a groundwater charge in the future which would have provided some revenue to build or upgrade its facilities. Without the groundwater pump charge the District's only source of revenue is property taxes. North San Joaquin has secured 100% of the fund for the Tracy Lake Groundwater Recharge Project. \$300,000 is provided by an USBR grant and the balance financed through the formation of an improvement district and the issuance and sale of two series of Improvement District warrants. Payment of the principal and interest on the warrants will be secured by an annual capital assessment to be levied on all 1,310 acres of land within the Improvement District. After the project is operational, an annual operation and maintenance assessment will also be assessed every year until the project is retired with the landowners paying 56% of those annual costs subject to an annual cost true-up. The project will divert up to 4,000 af/yr from the Mokelumne River into South Tracy Lake for irrigation purposes thereby conserving groundwater.

The ability of all the Districts to raise additional revenue is limited because compliance with Proposition 218 is required for any new or increased fees and assessments.

5. Status of, and Opportunities for, Shared Facilities

The sharing of resources has been primarily through the coordination of planning efforts and the joint advocacy for locally supported groundwater banking and conjunctive water use projects. The Districts have, through the Eastern Water Alliance, coordinated their planning and financing efforts to implement projects designed to enhance the Basin and have implemented a groundwater management plan. Furthermore, the Northeast San Joaquin County GBA has provided an opportunity for the Districts to work collectively to seek additional water supplies for eastern San Joaquin County. Shared capital facilities have historically been limited to wheeling agreements between Stockton East and Central. Although these wheeling agreements were terminated by effective January 1, 2009, Stockton East is required to continue wheeling water through its conveyance facilities for Central under Water Code §1810. Litigation over Central's payment for's wheeling services is ongoing. There are opportunities for additional shared facilities among the Districts including: wheeling Mokelumne River water from North San Joaquin to Stockton East for treatment, recharge and/or consumptive use, and conveyance of surplus Mokelumne and Calaveras River water to Central.

6. Accountability for Community Service Needs, Including Governmental Structure and Operational Efficiencies

Each district has indicated their compliance with applicable regulations and rules governing their operations. The Boards of Directors of the respective agencies meet regularly and they are accountable to their members. Central has had a vacancy on its Board of Directors for a significant period of time. Stockton East appears to be a stronger district financially and operationally and therefore able to more effectively carry out its objectives. Consolidation oftentimes results in increased operational efficiencies for local agencies, however, it appears that the financial health and in the case of water districts, the right to firm sources of water supply, are deterrents to consolidation . Inclusion of all properties within the spheres of influence of the Districts would be beneficial to allow for comprehensive planning and to provide for a solution of the groundwater overdraft.

Water Conservation Districts of San Joaquin County

Sphere of Influence Plans And Service Reviews

I. Introduction

After World War II, California experienced dramatic growth in population and economic development. With this boom 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, Governor Edmund G. Brown, Sr. appointed the Commission on Metropolitan Area Problems. 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."

The San Joaquin Local Agency Formation Commission (LAFCo) was formed as a countywide agency to discourage urban sprawl and encourage the orderly formation and development of local governmental agencies. LAFCo is 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; LAFCo must conduct service reviews to evaluate the provision of municipal services within the county.

LAFCo regulates through approval, denial, conditions and modifications, boundary changes proposed by public agencies or individuals. It regulates the extension of public service outside their boundaries and approves or denies applications for the provision of new or different functions or class of services. LAFCo is required to initiate updates to spheres of influence and may initiate proposals involving dissolution or consolidation of special districts, mergers, establishment of subsidiary districts, formation of a new district or districts, and any reorganization that includes such actions.

The San Joaquin LAFCo Commission consists of five regular members: two members from the San Joaquin County Board of Supervisors, two city council members; and one public member who are appointed by the other members of the Commission. There is one alternate member in each category.

A. Municipal Service Reviews

Municipal service reviews (MSR) were added to LAFCo's mandate with the passage of the Cortese Knox Hertzberg Local Government Reorganization Act of 2000 (CKH Act). A service review is a comprehensive study designed to better inform LAFCo, local agencies, and the community about the

provision of municipal services. Service reviews attempt to capture and analyze information about the governance structures and efficiencies of service providers, and to identify opportunities for greater coordination and cooperation between providers. The service review is a prerequisite to a sphere of influence (SOI) determination and may also lead a LAFCo to take other actions under its authority.

The MSR requirement was established by the Legislature after the release of two studies recommending that LAFCo's conduct reviews of local agencies. The first study was completed by the "Little Hoover Commission" which focused on the need for oversight and consolidation of special districts, whereas the second study was completed by the "Commission on Local Governance for the 21st Century" which focused on the need for regional planning to ensure adequate and efficient local government services to serve the growing population of California.

In 2000, the Little Hoover Commission's report, *Special Districts: Relics of the Past or Resources for the Future?*, focused on governance and financial problems among independent special districts and barriers to LAFCo's pursuit to facilitate change when necessary. The report notes "the underlying patchwork of special district governments has become unnecessarily redundant, inefficient and unaccountable"¹. It raised concerns about a lack of visibility and accountability among some independent special districts. The report called on the legislature to increase the oversight of special districts by requiring LAFCOs to identify service duplication and to study reorganization alternatives when service duplications are identified, when a district appears insolvent, when district reserves are excessive, when rate inequities surfaces, when a district's mission changes, when a new city incorporates, and when service levels are unsatisfactory. The report recommended that the State strengthen the independence and funding of LAFCOs, require districts to report to their respective LAFCo, and require LAFCOs to study service duplications.

A second report, *Growth Within Bounds: Planning California Governance for the 21st Century* was also completed in 2000. It explored how local government is organized and operates, and established a vision of how the state will grow by "making better use of the often invisible LAFCOs in each county"². This report, in addition to addressing California's growth and loss of open space, suggested that LAFCOs cannot achieve their purpose without a comprehensive knowledge of the services available within the county, their efficiencies, future needs, and expansion capacity of each service provider. The report concluded that LAFCOs should be required to conduct such reviews. These recommendations were made a part of the CKH Act.

The CKH Act requires LAFCO to review and update SOIs not less than every five years and to review municipal services before updating SOIs. LAFCo has prepared this service review in compliance with the CKH Act which requires preparation of a service review for all cities and special districts that provide municipal services to county residents. In 2007 the Commission adopted *Policies and Procedures for Spheres of Influence, Service Reviews and Annexations*. The MSR has been prepared in accordance with these policies.

The focal point of the service review process lies with the preparation of written statements of determination regarding the agency's ability to provide services. The determinations are declaratory statements that arrive at a conclusion based on all of the information and evidence presented. LAFCo must make written determinations on the following six categories:

Determination 1: Growth and population projections for the affected area

¹ Little Hoover Commission, 2000, pg 12

² Growth Within Bounds, 2000, pg ES1

The need for, and patterns of, service provision should be determined by existing and anticipated growth patterns and population projections. This analysis will be used to determine whether the sphere boundaries reflect expected growth boundaries.

Determination 2: The Location and characteristics of Any Disadvantaged Unincorporated Communities Within or Contiguous to the Sphere of Influence

Refers to the needs and deficiencies related to sewers, water, and structural fire protection for unincorporated inhabited territory (12 or more registered voters) that is composed of no less than 10 dwelling units adjacent or in close proximity to one another with a median household income of 80% or less than the statewide median household income (\$48,704 for 2010).

Determination 3: Present and planned capacity of public facilities and adequacy of public services, including infrastructure needs or deficiencies

Refers to the status of existing and planned public facilities and its relationship to the quality and levels of service that are, can, and need to be provided. Infrastructure needs and deficiencies can be evaluated in terms of supply, capacity, condition of facilities, and service quality with correlations to operational, capital improvement, and finance plans.

Determination 4: Financing ability of agencies to provide services

A community's public service needs should be viewed in light of the resources available to fund the services. The service review needs to evaluate factors that affect the financing of necessary improvements and whether agencies are capitalizing on financing opportunities and collaborative strategies to deal with financial constraints.

Determination 5: Status of, and opportunities for, shared facilities

The service review should identify opportunities for agencies to share facilities and resources creating a more efficient service delivery system. The service review needs to inventory facilities within the study area to determine if facilities are currently being utilized to capacity and whether efficiencies can be achieved by accommodating the facility needs of adjacent agencies. Options for planning for future shared facilities and services will also be considered

Determination 6: Accountability for community service needs, including governmental structure and operational efficiencies

The service review must consider the advantages and disadvantages of various governmental structures that could provide public services. LAFCo encourages local districts to use service reviews to determine whether initiation of proceedings for changes of organization and reorganization, including spheres of influence, would be in order and in the best interest of the agency and the community it serves. Operational efficiency refers to the quality of public services and the agency's ability to provide services. The service review evaluates operational efficiency by analyzing the agency's functional operation, and practices as well as the agency's ability to meet current and future service demands. Service reviews do not require LAFCo to initiate changes based on service review findings, but only to make determinations regarding the provision of public services. LAFCo, local agencies and the public may subsequently use the determinations to analyze prospective changes of organization or reorganization or to establish or amend spheres of influence.

B. Spheres of Influence

In conjunction with the requirement to conduct a service review, the CKH Act requires LAFCo to review and update, as necessary, SOIs for each local agency within LAFCo's jurisdiction. A SOI is considered to be a planning tool that is designed to provide guidance in reviewing proposals, promoting the efficient and effective provision of municipal services, and preventing duplication of service responsibility. LAFCo is responsible for determining that an agency is reasonably capable of providing needed resources and basic infrastructure to serve areas within the agency's boundaries and sphere. The SOI is the area that LAFCo expects development might reasonably be expected to occur and need services or, in case of districts, where services will be provided within a 5-10 and 30 year time frame.

The adoption of a SOI is perhaps the most important planning function given to LAFCo by the State Legislature. Spheres of influence are described by the CKH Act as an important tool for "planning and shaping the logical and orderly development and coordination of local governmental agencies so as to advantageously provide for the present and future needs of the county and its communities"³. Spheres of influence serve a similar function in LAFCo determinations as general plans do for cities and counties. The SOI boundary and written determinations adopted by LAFCo should guide the provision of services for areas within the SOI.

In establishing a sphere boundary, LAFCo must consider four factors and make written determinations with respect to each of the following:

- Present and planned land uses in the area
- Present and probable need for public facilities and services
- Present capacity of public facilities, and adequacy of public services
- Existence of any social or economic communities of interest in the area

The service review will provide LAFCo with a clear indication of whether an agency has the services available to support a sphere boundary.

C. Municipal Service Review Process

The finalization of the MSR report is a two-step process. Because LAFCo policy encourages the involvement of agencies, the public, and other stakeholders in development of the service review report, a draft MSR is presented at a meeting/workshop with the Commission to provide an opportunity for soliciting comments from the public and LAFCo Commissioners prior to finalizing the document. The final draft report is then made available during a noticed 21-day comment period prior to final consideration by the Commission at a public hearing.

D. Special Districts

Water conservation districts are special districts. A special district is a separate local government that delivers public services to a specific area. They are established by the residents of an area to provide some service not provided by a county or city. In California, there are 58 counties, 481 cities and over 3,361 special districts, exclusive of school districts⁴. Special districts provide focused services. Special districts are governed by a board of directors and have defined boundaries in which it provides services and facilities.

³ Government Code §56425

⁴ *What's So Special About Special Districts? A Citizen's Guide to Special Districts in California (3rd Edition), 2005*

Special districts must have a statutory authority in order to be established. This authority can take the form of a generic statute which applies to all special districts of that type or may be formed by a special act tailored to the unique needs of a specific area. Special districts were first established in California to meet the needs of farmers in the San Joaquin Valley. Due to an inconsistent water supply and the widely varying prices, farmers in Stanislaus County organized the Turlock Irrigation District under the Wright Act of 1887. This legislation allowed residents to form a public entity for water delivery and finance its operation through bond sales, making it possible to intensify and diversify their agricultural activities. Since that time, new water districts shifted away from rural, agricultural lands, towards urban communities in need of water. Special districts became a popular means to meet demand for other public services because special districts were flexible and provided desired services quickly and efficiently. Today, special districts provide a very large range of services.

Special districts are either independent or dependent districts. Independent districts have their own separate boards of directors elected by the districts' own voters or appointed by the County Board of Supervisors. Independent districts also include districts where the appointed boards of directors serve for fixed terms. Dependent districts are governed by other, existing bodies (either a city council or a county board of supervisors). In San Joaquin County, there are 105 independent special districts and 45 dependent special districts.

Although there are numerous advantages to special districts (tailored services, linking cost to benefits, and responsiveness), there are some potential disadvantages. Special districts may provide the same services that cities and counties provide which may result in competition and conflict and perhaps inefficiency.

Special districts can hinder regional planning by having numerous districts thereby making it difficult to organize (e.g., the numerous water, sewer, and fire districts in one region). Lastly, numerous districts can make it harder for citizens to obtain information. Because of these and other concerns, the State Legislature has empowered LAFCo to undertake countywide regulatory authority for special districts. This authority is outlined in the Cortese Knox Hertzberg Local Government Reorganization Act of 2000.⁵

E. Water Conservation Districts in San Joaquin County

1. Background

Groundwater has been used for agriculture in the Central Valley since 1850. In the early years, the state of the groundwater basin was in hydrologic equilibrium (Williamson, et. al., 1989). Under equilibrium, the groundwater flowed from the natural recharge areas along the perimeter of the valley towards the low areas along the San Joaquin River. The groundwater gradients within San Joaquin County were similar to the topographic gradient.

Beginning in the 1850's the development of groundwater for agriculture expanded rapidly. Within the Central Valley, irrigated agriculture has grown from less than 1 million acres around the turn of the century, to an estimated 7 to 8 million acres at present (Eastern San Joaquin Groundwater Basin Groundwater Management Plan, September, 2004). In 1980, the California Department of Water Resources (DWR) declared the Eastern San Joaquin Groundwater Basin (ESJ Basin) "critically overdrafted," indicating that the current rate of groundwater pumping exceeds the rate of recharge and is not sustainable. According to the San Joaquin County Water Management Plan, the ESJ Basin is overdrafted by 200,000 acre feet per year (af/yr) on average. Within eastern San Joaquin County (the

⁵ *California Government Code §56036*

portion of San Joaquin County overlying the Eastern San Joaquin and Cosumnes Sub-Basins) an estimated 800,000 af/yr of groundwater was being extracted by 1993 (Eastern San Joaquin Groundwater Basin Groundwater Management Plan, September, 2004). Long-term groundwater overdraft has lowered the groundwater table and has induced the intrusion of highly saline groundwater into the ESJ Basin from the west. Without mitigation, such intrusion will degrade portions of the ESJ Basin, rendering the groundwater unusable for municipal supply and irrigation.

All three Districts were formed for the purpose of distributing water from the American River which was planned to come to all of Eastern San Joaquin County through the Folsom South Canal. As a result of political determination the Canal was never completed south of Sacramento County.

Failure to address water supply and management needs in eastern San Joaquin County will ultimately result in severe economic disruptions. Agriculture in San Joaquin County is valued at over \$2 billion and can ill afford threats to its water supply. Individual agencies in eastern San Joaquin County have long grappled with declining groundwater levels and unreliable supplemental water supplies. In an effort to exert political and financial influence to mitigate the conditions of overdraft, a regional consensus approach to water resources planning and conjunctive water management has been developed. One such example is the formation of the Northeastern San Joaquin County Groundwater Banking Authority (Northeastern San Joaquin GBA), established in 2001. This organization includes ten agencies including North San Joaquin, Stockton East, and Central. The goal of the organization is to develop locally supported conjunctive use projects that improve water supply reliability in San Joaquin County and provide benefits to project participants as a whole. The Northeastern San Joaquin GBA is the regional water management group responsible for the development and implementation of the Eastern San Joaquin Integrated Water Management Plan.

The Eastern Water Alliance (Alliance) is another organization that was formed by a Joint Exercise of Powers Agreement in 2003 between North San Joaquin, Stockton East, and Central. The purpose of the Alliance is to provide a vehicle for its members to cooperate in the planning, financing, operation, and implementation of projects for the long-term recovery, stabilization, and enhancement for the ESJ Basin.

Other related state requirements also addressed the need to consider groundwater including the passage of AB 3030 in 1992. This legislation provided a systematic way of formulating groundwater management plans and a means to implement those plans through fees and assessments. AB 3030 also encourages coordination between local entities through joint power authorities or memorandums of understanding. In 2002, SB 1932 further emphasized the need for groundwater management in California. This legislation requires AB 3030 groundwater management plans to contain specific plan components in order to receive state funding for water projects. The components of a groundwater management plan include such topics as: control of saline water intrusion, regulation of contaminated groundwater, elimination of groundwater overdraft, replenishment of groundwater, groundwater monitoring, operation of a conjunctive water management system, financing, and establishing basin management objectives.

2. North San Joaquin Water Conservation District

North San Joaquin was organized in 1948 under the provisions of the Water Conservation District Act of 1931. The District includes approximately 155,070 acres east of the City of Lodi. Approximately 4,740 acres are within the Lodi city limits and 5,600 acres are within Lodi's sphere of influence. North San Joaquin straddles the Mokelumne River and is consequently located in both the Cosumnes and the Eastern San Joaquin Sub-Basins (DWR, Bulletin 118).

In 1996, North San Joaquin adopted a groundwater management plan pursuant to AB 3030 to address declining groundwater levels, degradation of groundwater quality, and securing reliable surface water supplies. Actions in its AB 3030 Plan include the continued effort to seek a more reliable supplemental water supply from the Mokelumne River and other sources, promotion of more efficient water application methods, participation in regional groundwater management efforts, and the maximum use of surface water supplies through the development of groundwater recharge facilities.

On December 2, 1948, North San Joaquin filed Application 12842 to appropriate water from the Mokelumne River. Competing applications were filed by the East Bay Municipal Utility District (EBMUD) on June 16, 1949. On July 3, 1956, the California State Engineer (predecessor to the State Water Resources Control Board) issued Decision 858 (D-858) granting EBMUD's applications priority over North San Joaquin's. Permit 10477 was issued to North San Joaquin for interim water based on EBMUD's unused entitlements and future demands. Under its permit, North San Joaquin can only divert from December 1 to July 1 of the succeeding year. Through an agreement between both parties, EBMUD stores up to 20,000 af/yr in the wettest years for delivery to North San Joaquin during the irrigation season.

North San Joaquin's permit initially required the District to complete construction and put the water to beneficial use by December 1, 1960 and December 1, 1970 respectively. Since its permit was issued, North San Joaquin has requested and received four extensions of time from the State Water Resources Control Board (SWRCB) to complete the project. The most recent extension was granted in 2008 and gave North San Joaquin until December 31, 2010 to complete construction and application of the water to beneficial use. Prior to the December 31st deadline, and in accordance with the SWRCB's Order WR-2008-0016, in March 2009, North San Joaquin requested a 15-year extension of time, to December 31, 2025. This request is currently pending.

North San Joaquin received a \$462,500 CALFED grant and has participated in the Farmington Groundwater Recharge and Seasonal Habitat Study to demonstrate its ability to utilize its full appropriation. In 2007 and 2008, property owners within North San Joaquin approved a groundwater charge to levy up to \$5/acre to further the District's recharge efforts. However, North San Joaquin's ability to impose the groundwater charge was repealed by initiative (Measure V). Measure V was passed by the voters in November 2007 and prevents North San Joaquin from imposing or collecting a groundwater charge until the District submits the matter to the voters. In June 2010, the District attempted to repeal that portion of Measure V which prevents North San Joaquin from imposing a groundwater charge, but was unsuccessful. North San Joaquin continues to explore other funding options that remain available, in order to develop the revenue needed to put its water right to full use.

In September 2011 the District was awarded a \$300,000 grant from the Bureau of Reclamation for the Tracy Lake Groundwater Recharge Project. This project will divert water from the Mokelumne River into South Tracy Lake and is projected to divert up to 4,000 acre-feet per year when river water is available. The surface water will be used by the landowners to irrigate crops thereby conserving groundwater. The project will also result in surface water recharge to the over-drafted basin. The District has secured 100% of the funding for the \$936,000 estimated total cost of the project. \$300,000 is provided by the USBR grant and the balance of \$636,000 is being financed through the formation of Improvement District No. 1 (Tracy Lake Improvement District) and the issuance and sale of two series of Improvement District No. 1 warrants. Payment of the principal and interest on both series of warrants are secured by an annual capital assessment to be levied on all 1,310 acres of land within the Improvement District. After the project is operational, an annual operation and maintenance assessment will also be assessed every year until the project is retired. In addition to paying the annual capital and annual operation and maintenance assessments, the landowners will pay an annual per-acre-foot water charge.

There is the potential to divert up to an additional 4,000 acre-feet per year from the project should additional lands request surface water and be willing to pay their share of the capital and annual operation and maintenance costs. North San Joaquin will be amending its petition to the SWRCB to add the Tracy Lake Project as a new point of diversion and to demonstrate that the District is making progress to putting its allotted water supply to beneficial use.

At the regional level, North San Joaquin has participated as a member agency of the East San Joaquin Parties Water Authority (ESJPWA), the Eastern Water Alliance, the Northeastern San Joaquin County GBA and the Association of California Water Agencies.

3. Stockton East Water District

Stockton East, as currently structured, was formed in 1948 under the Water Conservation District Act of 1931. Stockton East was originally organized as the Stockton and East San Joaquin Water Conservation District, an independent political subdivision responsible for acquiring a supplemental water supply and assisting in the development of practices of water use that would promote the required balance between surface water and groundwater.

From 1948 to 1963, Stockton East's efforts were in planning, evaluation of groundwater conditions, and determining requirements of supplemental water. As a result of Stockton East's planning efforts, and with intensive efforts on the part of Stockton East and other local agencies, New Hogan Dam was constructed in 1964. Stockton East's first supply of supplemental surface water was contracted for with the United States Bureau of Reclamation (USBR) in 1964 and a final agreement was reached in 1970 guaranteeing 56.7% of New Hogan Reservoir's yield to the District.

Prior to 1963 Stockton East's basic financial structure rested upon a tax on land. In 1963, the Governor of California signed a bill that established groundwater use fees and surface water charges that could be levied by Stockton East. The additional revenues were used by Stockton East to contract for New Hogan water. Stockton East began registering wells within their boundaries. Check dams were built on the Calaveras River, as well as on Mormon and Mosher Sloughs, for control of surface irrigation water and to promote groundwater recharge. Stockton East became actively involved in the pursuit of projects to mitigate declining groundwater levels and to prevent the further intrusion of saline groundwater.

In 1971, the legislature adopted a special law expanding Stockton East's boundaries to include the entire Stockton urban area, and establishing other provisions governing the District. Stockton East therefore became governed by this special legislation (a "special act district") that is supplemented by the Water Conservation District laws.

Stockton East began plans for a 30 million gallon per day treatment plant to serve the urban area. In 1975, a \$25 million bond issue was passed by a Stockton East-wide election to fund the Water Treatment Plant. The plant was completed in 1977 and went on line in 1978 to reduce the groundwater pumping depression under the urban area and the effects of saline intrusion on urban wells near the Delta. In 1979, the Independent Benefit Commission concluded that the treatment plant was a benefit to the planning areas. Stockton East began to assess 14,000 additional agricultural acres. The total area within Stockton East is approximately 143,000 acres, of which 47,600 acres (approximately 33%) are within the City of Stockton.

Stockton East has actively sought supplemental surface water from the American River via the Folsom South Canal and New Melones Reservoir, however, due to environmental concerns construction of Auburn Dam on the American River and the Folsom South Canal projects were never completed. These same interests also forced EBMUD to build a costly alternative to their right to American River water

diverted into the Folsom South Canal. This Freeport Regional Water Project (Freeport Project) was completed in February 2011. San Joaquin County continues to pursue a permit for a portion of the American River flows. Conveying these flows into San Joaquin County could occur by wheeling the water through the Freeport Project or by completion of the Folsom South Canal.

Stockton East contracted with USBR in 1983 for 75,000 af/yr of water from New Melones Reservoir. Also in 1983 Stockton East expanded surface water irrigation with the construction of the 12,000 gallons per minute Potter Creek Pump Facility. In 1991, the Water Treatment Plant's capacity was increased to accommodate the growing demand from the Stockton urban areas. Construction on the New Melones Conveyance System was completed in 1993. The USBR provided no water to Stockton East in 1993 and 1994. In 1995, Stockton East began receiving New Melones water, but supplies were unpredictable and often less than the contracted amount because of discretionary releases by the USBR under the Central Valley Project Improvement Act (CVP) and water quality objectives on the San Joaquin River.

Both Stockton East and Central filed actions to force USBR to deliver the appropriated water. The first lawsuits were initiated in 1993. In 2009, a federal appeals court ruled that the USBR had breached its contract with Stockton East and Central and in June 2012 a trial has been set to determine what the federal government owed for failing to deliver enough water from the New Melones Reservoir. Under current USBR operation of New Melones, Stockton East and Central are provided up to 150,000 a/f of water from New Melones annually. Water allocations are based on March- September water forecast plus February end of month storage in New Melones. Pursuant to the Districts' water service contracts, USBR makes water available first to Central. After Central has committed to the available allocation, water is then made available to Stockton East. Stockton East has a right to use any and all water not used by Central.

In 1995, Stockton East adopted an AB 3030 Groundwater Management Plan. The goal of the Plan is to continue past efforts to seek supplemental surface water supplies for conjunctive use, to protect existing supplies, and to further pressure USBR to meet the contracted delivery amounts for New Melones water.

Stockton East completed the Farmington Groundwater Recharge and Seasonal Habitat Study (Farmington Study) in conjunction with the United States Army Corps of Engineers and other local agencies in 2001. The Farmington Study identified areas suitable for recharge and seasonal habitat development, evaluated recharge techniques, conducted pilot recharge tests, developed a final report and recharge guide, and developed an implementation strategy for the phased Farmington Program.

In 2003, the district completed the Pilot Phase of the Farmington Program which identified 60 acres of recharge ponds and fields adjacent to the Stockton East Water Treatment Plant. In 2003 Stockton East began the Demonstration Phase consisting of investigation and construction of up to 1,200 acres of recharge ponds and fields. To date, over 10 sites have been investigated and two sites have moved forward to a demonstration study. In 2006, construction began on another 30-acre recharge site at the drinking water treatment plant. The district estimates a recharge rate of 0.5 feet per day for this site. Also, in 2003, Stockton East applied for a Proposition 13 Groundwater Recharge Storage Construction Grant for the Peters Pipeline portion of the Farmington Program. The proposed project consists of a six mile long 60-inch diameter pipeline, which will distribute irrigation and recharge water as well as water to the Stockton East Water Treatment Plant.

At the regional level, Stockton East has participated as a member agency of the Eastern Water Alliance and the Northeast San Joaquin GBA.

4. Central San Joaquin Water Conservation District

Central was formed in 1959 under provisions of the Water Conservation District Act of 1931. Central includes approximately 66,796 acres, of which 670 acres are within the sphere of influence for the City of Stockton. The District was formed for the purpose of obtaining water from the then planned Folsom South Canal with water diverted from the American River. Although a service water contract was executed by Central and US Bureau of Reclamation (USBR), supplemental surface water was not made available.

In the late 1970's, the New Melones project was authorized and Central was named an area of priority in need of service from the Stanislaus River. In 1981, and after significant efforts by Central, a decision was made by the Secretary of the Interior to include Central in the service area for New Melones and to give the District a priority water service agreement. In 1983, the District entered into a contract with USBR for water service from the New Melones Project on the Stanislaus River. The contract amount calls for 49,000 a/f of firm supply and up to an additional 31,000 a/f on an interim basis to the District. The terms of the contract establish a priority for water deliveries over an interim contract executed between USBR and Stockton East.

In 1993, Central issued certificates of participation and constructed an internal distribution system at a cost in excess of \$7 million dollars. Facilities included check structures and conveyance channels for the delivery of water to Central areas. Natural stream beds were utilized, creating possible delivery to a significant portion of the District. Since construction of the internal distribution systems by Central, individual farmers have been encouraged to install and operate irrigation facilities for diversion of available surface water. The District has also sponsored a surface water incentive program to increase diversion of available surface water. In 1993, Central established a groundwater extraction fee for all groundwater pumped within the District. Annual fees have been imposed for each year since July 1, 1993, and are pledged to pay the debt service for the Certificates of Participation.

Central has historically used a portion of Stockton East's New Melones Conveyance System to convey its New Melones water pursuant to two wheeling agreements entered into between the Districts in 1990 and 1991. The contracts and the cost to wheel water have been the subject of much controversy and litigation. Effective January 1, 2009, Stockton East threatened to terminate wheeling Central's surface water supplies due to non-payment and proposed that the two districts consolidate. By the fall of 2009 consolidation discussions had broken down and Central demanded the wheeling of its water pursuant to Water Code §1810. In November 2009, Stockton East informed Central it would not wheel water for Central in 2010 and Central reminded Stockton East of its statutory obligation to wheel water. In response, Stockton East calculated fair compensation to wheel to be \$41.50 per acre feet (a/f) but was willing to wheel water for the discounted rate of \$21.15 per a/f. In February 2010, Central filed a complaint challenging the \$21.15 per a/f wheeling rate and for injunctive relief to enjoin Stockton East from withholding wheeling services from Central during 2010. The wheeling rate paid to Stockton East was set at an interim rate of \$5.00 acre foot for the 2010 and 2011 water seasons. A court hearing is underway to review and determine the actual wheeling charge for the 2010, 2011 and 2012 irrigation season. Litigation over Central's payment for Stockton East's wheeling services is ongoing.

Since 1995 Central has purchased and made available for sale to district landowners available surface water. Due to Central's efforts, District landowner demands for surface water have increased from approximately 10,000 a/f to in excess of 45,000 a/f per year. Diversion of such quantities of surface water has resulted in raising the groundwater aquifer an average of over 12 feet in the area underlying the District.

At the regional level Central has participated as a member agency of the Eastern Water Alliance and the Northeast San Joaquin GBA.

II. Sphere of Influence Plans

A. Spheres of Influence

1. North San Joaquin Water Conservation District

North San Joaquin's sphere of influence was initially adopted by the Commission on January 20, 1984. The boundary of the sphere was coterminous with the District's boundaries at that time. Subsequent to this initial adoption, several reorganizations have occurred which have resulted in concurrent amendments to the District's sphere boundary. The last and, by far, the most significant amendment occurred on July 16, 2004 when approximately 100,000 acres were added to its 54,000 acre district boundary. This latest annexation was done to provide representation in this area to address the groundwater overdraft and to aid the District's efforts to obtain State and Federal grants to develop programs to correct the groundwater overdraft within its current boundary, as well as the annexation area. The existing sphere of influence boundary is depicted on Figure 1.

2. Stockton East Water District

Stockton East's sphere of influence was initially adopted by the Commission on March 18, 1983. The boundary of the sphere was coterminous with the District's boundary at that time. The most recent and most significant amendment occurred on August 20, 2004 when approximately 27,000 acres were added to the existing 116,000 acre boundary. Like North San Joaquin, Stockton East's annexation was done to provide representation in this area to address the groundwater overdraft and to aid the District's efforts to obtain State and Federal grants to develop programs to correct the groundwater overdraft within its current boundary, as well as the annexation area. The existing sphere of influence boundary is depicted on Figure 2. Stockton East has an application pending before LAFCo to amend its sphere of influence and annex an additional 15,000 acres into its boundaries.

3. Central San Joaquin Water Conservation District

Central's sphere of influence was adopted by the Commission on March 18, 1983. Several minor amendments to its sphere of influence have been made concurrently with detachment and annexation requests. The District's existing boundaries contain approximately 66,795 acres which is slightly less than the sphere area. Unlike North San Joaquin and Stockton East, Central has not requested any substantial changes to its sphere of influence since it was initially established. However, the Eastern Water Alliance Joint Powers Agreement identified 15,000 acres that could be annexed to Central's territory to cover areas not currently served in eastern San Joaquin County. The existing sphere of influence boundary is depicted on Figure 3. Central also has an application pending before LAFCo to amend its sphere of influence and annex an additional 15,000 acres into its boundaries.

Figure 2: Stockton East Water District and Sphere of Influence

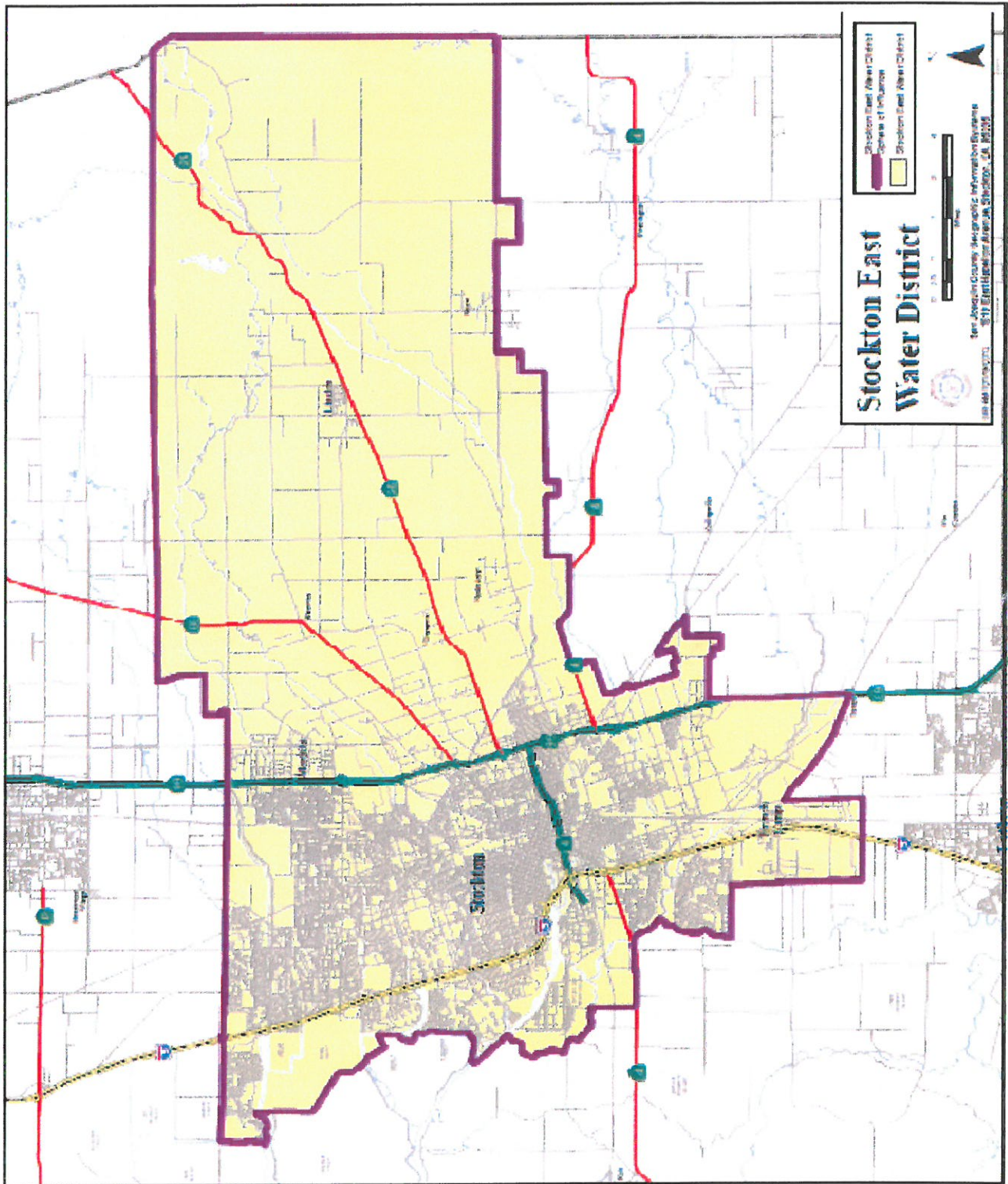
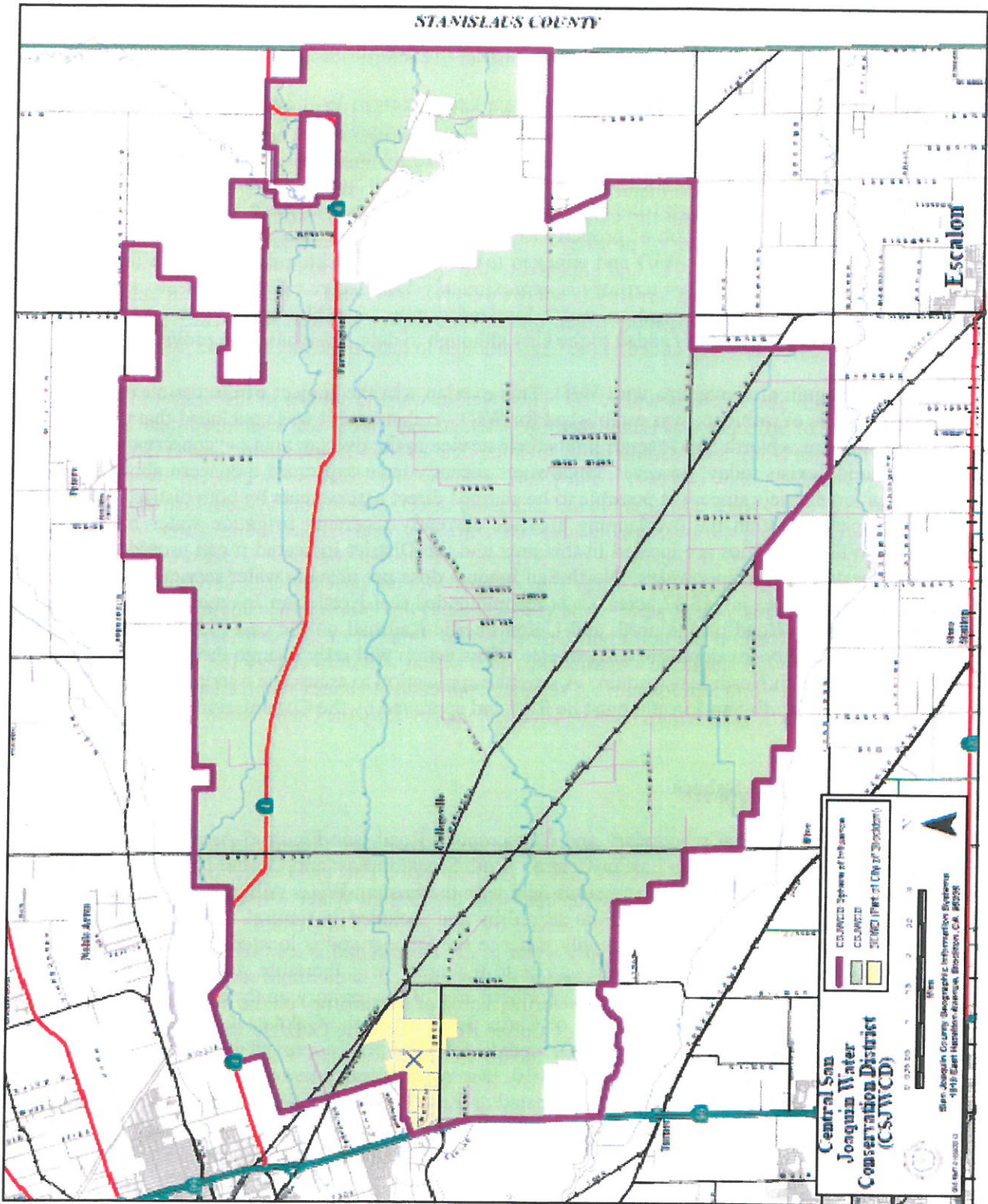


Figure 3: Central San Joaquin Water Conservation District and Sphere of Influence



B. Overlapping Boundaries

Woodbridge Irrigation District's (WID) sphere of influence and boundaries overlap with both Stockton East and North San Joaquin's spheres of influence as depicted on Figure 4. Historically, WID merged with the Woodbridge Water Users Conservation District to become one district.

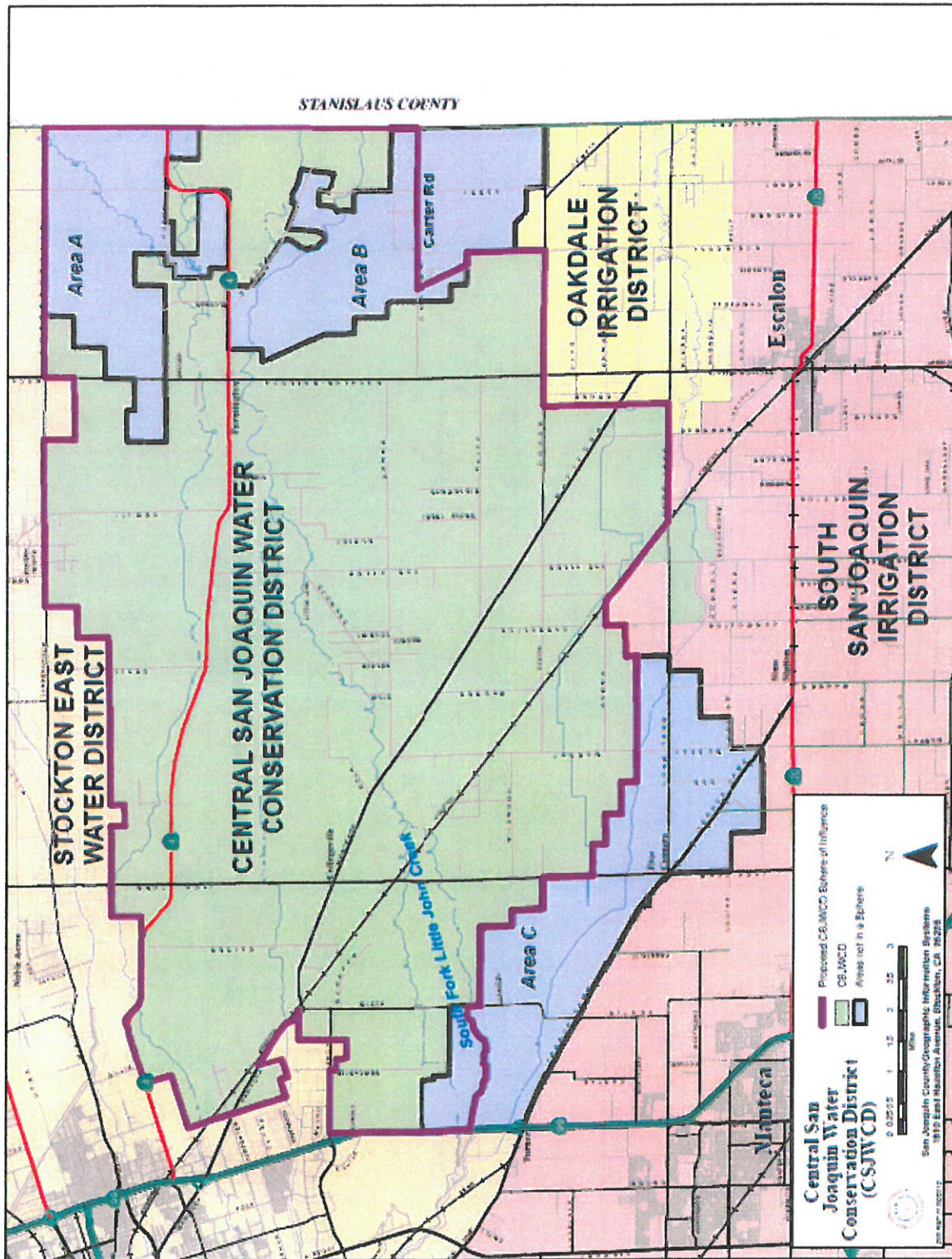
Stockton East's boundary was established by State Legislation in 1971 and included all lands within the City of Stockton and within the Metropolitan Stockton Planning Area. The State legislation recognized that the boundary includes territory that is within county maintenance areas and within an irrigation district but found it necessary to include such lands to solve the "grave and urgent water problems of the Stockton Metropolitan Area and the existing Stockton East Water District." The State legislation also requires the automatic inclusion of property to Stockton East upon annexation to the City of Stockton. Properties that are served by WID and annexed to the City of Stockton do not detach from WID. The overlapping WID/Stockton East territory is approximately 5,064 acres. The City of Stockton encourages WID to potentially supply irrigation water for landscaping in public spaces (i.e., parks, landscaped medians, etc.) for new territory added to the City although to date, none has been provided.

North San Joaquin also overlaps with WID. This overlap was the subject of discussion in January 1984 when the sphere of influence was established for WID. At that time it was concluded that the overlap was acceptable because North San Joaquin limits their service in the overlap area to "conservation" only. The same situation exists today; however, landowners recently have expressed a concern about being within two irrigation districts since it is possible to be charged direct assessments by both districts. At least half of the properties within the overlapping area are currently receiving irrigation water from WID. In addition, WID's facilities are located in this area and the District indicated it can provide water service when requested by the landowners. North San Joaquin does not provide water services to this area. The total overlapping area is 745.37 acres. It is recommended that North San Joaquin's SOI be modified to follow Armstrong Road on the north and Union Pacific Railroad on the east (see Figure 6) in order to avoid any possibility for duplicate assessments. This action will only change the SOI boundary and the properties remain in North San Joaquin. A separate application to annex the overlapping territory to WID and detach from North San Joaquin must be filed and approved by the Commission.

C. Areas not in a Sphere

The area north of Central's boundary and Copperopolis Road (see Figure 5-Area A) is not within the sphere of influence of Stockton East or Central. Both Stockton East and Central have filed an application to annex Area A. According to discussions held with the Eastern Water Alliance, the area south of Main Street and Copperopolis Road was to be served by and included in Central. In addition, Duck Creek North Fork is utilized by Central to supply water to the District and is located in the territory. Central has indicated its willingness to provide service to this area. It is therefore recommended that Central's SOI be expanded to include Area A. The northern area of the territory on the map designated as Area B is within Central's SOI. The area south of Carter Road up to the Oakdale Irrigation District (OID) is within the OID's SOI. A MSR and SOI update for OID was approved by Stanislaus LAFCo (the principle county for the District) in August 2010. It is recommended that Central's SOI boundary remain as is in Area B. The majority of land designated as Area C is within SSJID's SOI. SSJID submitted a sphere plan in January 2012 and is requesting to have this area remain within their District. The northernmost area of Area C is currently within Central's SOI and it is recommended that this area remain in the Central's SOI.

Figure 5: Areas Not in a Sphere (Area A)



D. Determinations

This section includes the four determinations required by State law for the spheres of influence. The sphere plan proposes that North San Joaquin's SOI be reduced in the overlapping area located in the southeastern part of the District. Approximately half of the parcels in this area are being served irrigation water by Woodbridge Irrigation District (WID) and all parcels are within North San Joaquin for water conservation purposes. Some WID facilities are located within this area and WID indicates it can provide water service when requested by the landowner. Figure 6 shows the proposed sphere for North San Joaquin.

The sphere plan does not propose any changes to the existing SOI for Stockton East as its sphere is coterminous with the District. As land annexes to the City of Stockton the annexed territories automatically annex to Stockton East pursuant to existing statute. In these instances Stockton East's sphere is amended upon annexation to include the newly annexed territory. The district and SOI boundary was shown in Figure 2.

The sphere plan for Central proposes the addition of the area north of the District and Copperopolis Road shown as Area A in Figure 5. Both Stockton East and Central have submitted competing applications to annex this territory. According to discussions held with the Eastern Water Alliance, the area south of Main Street and Copperopolis Road was to be served by and included in Central. In addition, Duck Creek North Fork is utilized by Central to supply water to the District and is located in the territory. Central has indicated its willingness to provide service to this area. All properties in the eastern part of the County should be included within a water conservation district to allow comprehensive planning and finding solutions for the groundwater overdraft of the ESJ Basin.

The following are the factors and determinations for the sphere of influence plans:

1. Present and Planned Land Uses

Over seventy-five percent of the present land use is agriculture. The urban areas of the Districts cover most of the city of Lodi (North San Joaquin), and the entire City of Stockton (Stockton East). Planned land uses will result in increased urbanization surrounding the existing cities and will result in less demand for surface agricultural water. However, increased urbanization will result in increased domestic water use which will impact the provision of water by Stockton East. The need to improve and protect the groundwater basin will still be an important mission for all the Districts.

The sphere of influence for Stockton East will expand as urbanization occurs within the City of Stockton since all annexations automatically become part the District. North San Joaquin's will likely stay essentially the same since this District has been recently expanded and presently abuts directly to Stockton East on the south and the County line to the north and east. The SOI should be reduced in the area that overlaps with Woodbridge Irrigation District. Both Stockton East and Central presently have requested expansion of their territories to serve additional agricultural uses.

Figure 6: Proposed SOI for North San Joaquin Water Conservation District

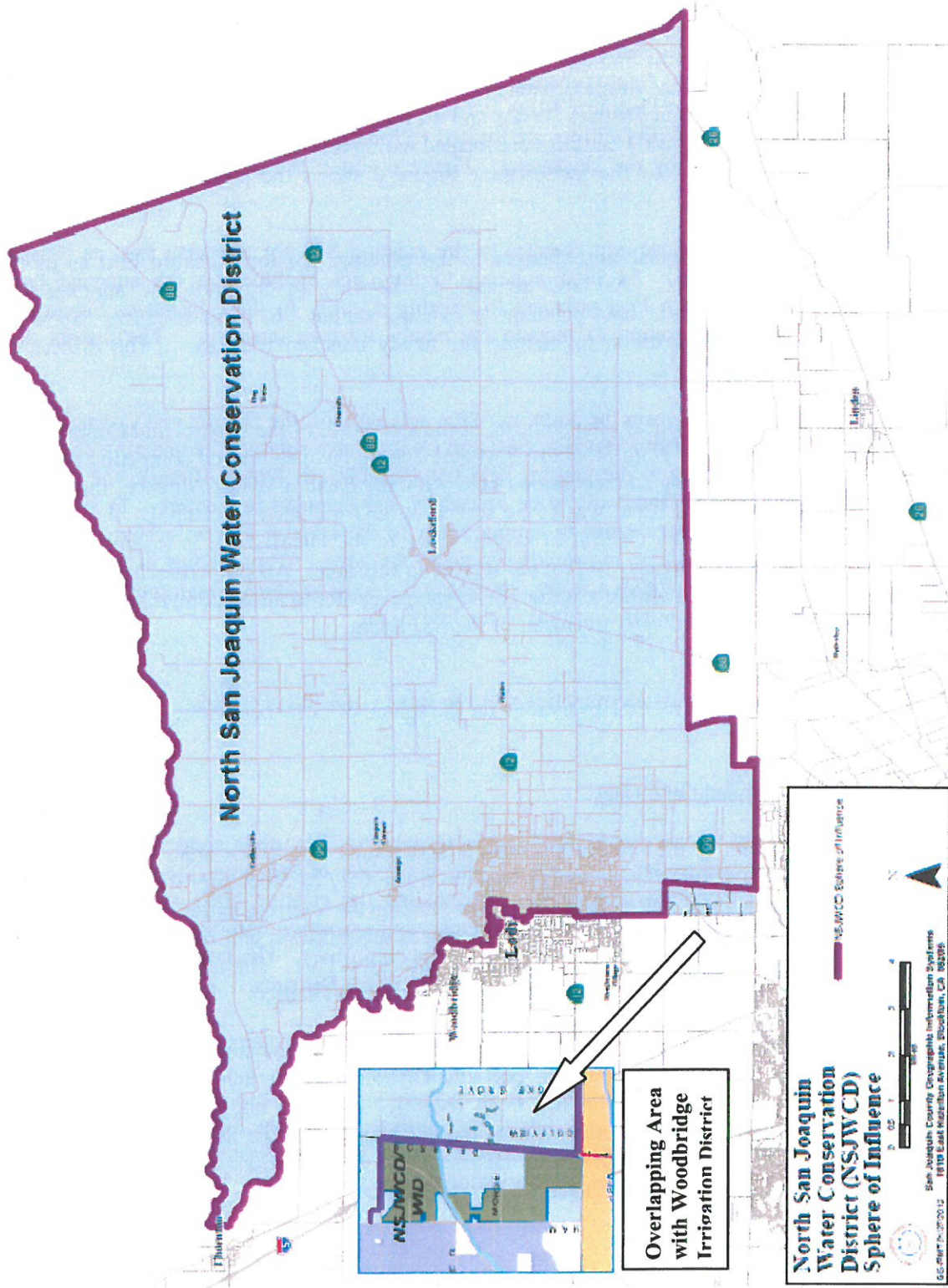
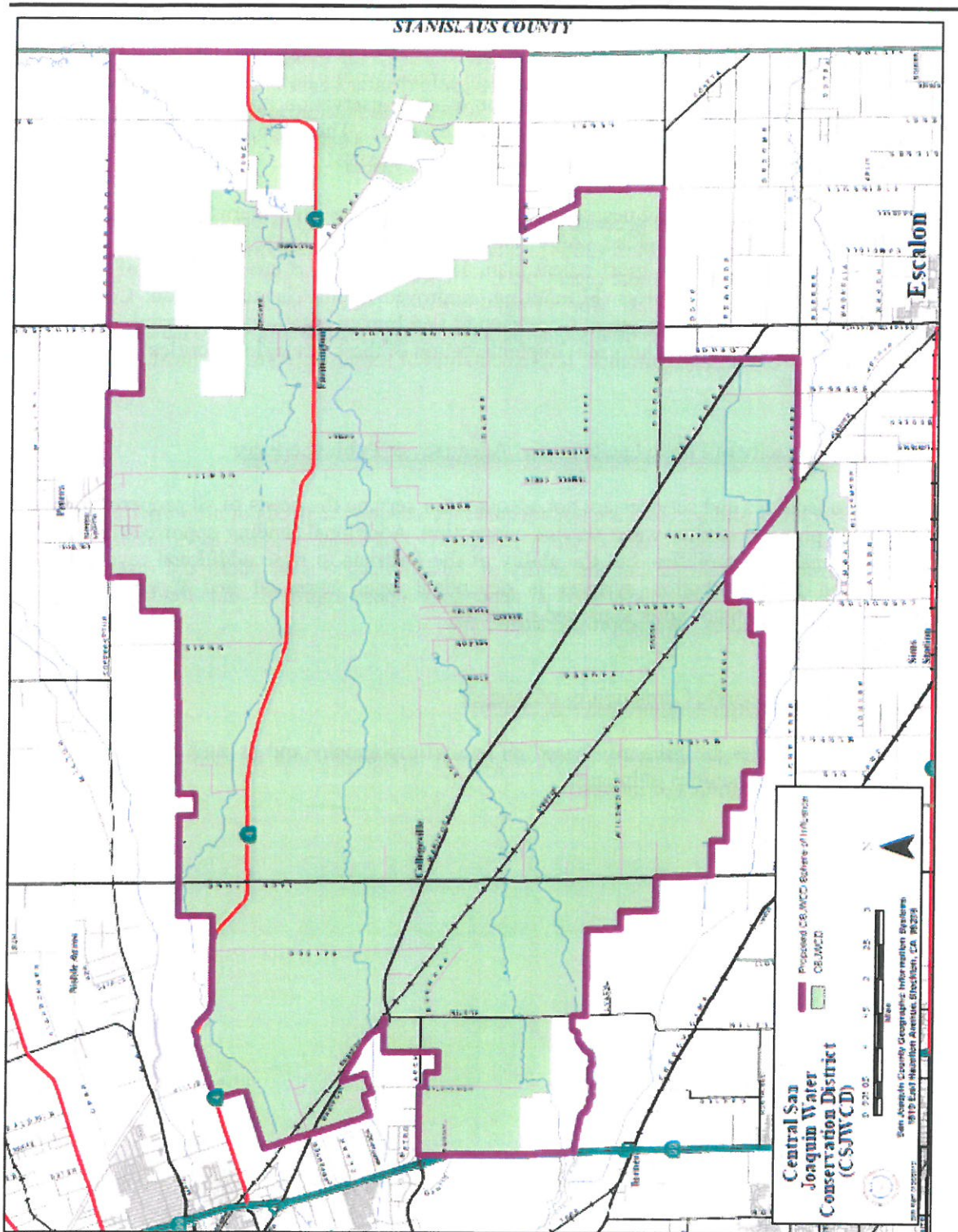


Figure 7: Proposed SOI for Central San Joaquin Water Conservation District



2. Present and Probable Need for Public Facilities and Services

None of the Districts can serve the needs of all property owners within their boundaries desiring service with a physical water service connection. In addition, none of the Districts have sufficient water to provide to all lands within their boundaries and there is a need for expanded and improved distribution systems in all three Districts. Furthermore, the entire groundwater basin is significantly overdrafted and additional surface water sources and strategies for water conservation are needed. Also, many of the Districts' existing contracts are not firm commitments of water. Therefore, the potential exists that there are inadequate resources to serve the probable needs of the Districts.

Coordinated planning strategies are necessary, such as those outlined in Eastern San Joaquin Groundwater Basin Groundwater Management Plan (2004) and the Eastern San Joaquin Integrated Regional Water Management Plan (2007). In this most recent plan, 53 specific actions are listed. All of the actions fall into one of the following categories: Monitoring; Improved Basin Characterization; Continued Long-Term Planning; Groundwater Protection; Construction and Implementation; Governance; Financing; and Public Participation/Community Outreach. Implementation of these strategies is critical to meet the future needs of the Districts.

3. Present Capacity of Public Facilities and Adequacy of Public Services

Existing public facilities and services are not adequate for serving the needs of all property owners of the Districts with a physical surface water service connection. Additional funding opportunities would allow for further expansion of facilities, but the ability of the Districts to raise additional revenue is limited. Capital funding for distribution systems is dependent upon approval and funding from outside governmental agencies and/or voter approved financing.

4. Social and Economic Communities of Interest

The Districts' boundaries are primarily based on natural topography and as such are not related to any social or economic communities of interest.

III. Service Reviews

A. Growth and Population Projections

This section identifies future growth projections for the study area including the Spheres of Influence of the Districts. A discussion of the existing and future infrastructure to meet future demands is included in Section B.

1. Population and Demographics

San Joaquin County's population totals over 640,844, and ranks the fifteenth largest in the State. Since 2000, the County has experienced accelerated population growth because of many relocating their homes from the Bay Area to the Central Valley. The attraction of affordable housing, combined with the higher wages of the Bay Area created such a movement that San Joaquin County placed as the third fastest growing county within the State. However, San Joaquin County's growth has change considerably since 2007 as a result of changing economic conditions related to mortgage interest rates, availability of mortgages, and the general decline of the present housing market.

San Joaquin County has an estimated 215,561 households with an average size of 3.12 people per dwelling. Seventy-five percent of these households are families while the remaining 25 percent are non-family households that largely consist of people living alone. The median income for a household is \$50,011.

In 2010, the labor force totaled 298,551 with a 16.3 percent unemployment rate. The unemployment rate has recently lowered to 15.7 percent. Much of the County's unemployment rate is due to seasonal variation in the agricultural industry, other food processing industries, and more recently to the slowdown in residential construction activity. The services/leisure and hospital industry had captured most of the labor force. Other important areas of employment include the transportation-warehouse-utility industry and government sector.

The San Joaquin County Agricultural Commissioner's office reported that the County's agricultural production for 2010 was slightly less than \$2 billion. This represents a decrease of over 2% from last year's production of over \$2 billion. Agricultural production includes milk, grapes, walnuts, cherries, almonds, tomatoes, cattle and calves, hay, apples and silage corn.

Total school enrollment (K-12) for the County is estimated at 136,216. Seventy one percent of people 25 years and older have a high school diploma and 10 percent have a bachelor's degree or higher. This compares with 80 percent of the people 25 years and older with a high school diploma and 30 percent with a bachelor's degree or higher for California as a whole.

Table 1-1
County Population

Year	Population	Annual Growth (percent)
1970	291,073	
1980	347,342	1.8%
1990	480,628	3.3%
2000	563,598	1.7%
2010	685,806	2.16%

The Water Conservation Districts have various types of users. They include agricultural surface irrigation users, agricultural groundwater irrigation users, domestic users, municipal and industrial (M&I) surface water users, and M&I groundwater users. Not all of the Districts provide service to all types of users. The following identifies uses by District and type:

Table 1-2
Water Conservation Districts Water Users 2008

	North San Joaquin	Stockton East	Central
Agricultural Surface Irrigation	100	293	60
Agricultural Groundwater Irrigation	2,000 ¹	1,603	711
Domestic Water	3,500	5,166	700
Municipal and Industrial Surface and Groundwater		4	
Municipal and Industrial Groundwater	6	65	

¹ In addition, North San Joaquin estimates 6,000 well owners within the District

2. Water Conservation Districts Population

The above information provides an overview of the population and demographic characteristics for the County as a whole. The conservation districts themselves occupy approximately 39% of the County. For the most part, the land uses within the Districts are agricultural, although Stockton East includes all of the area within the City of Stockton and within the City's planning area. Similarly, North San Joaquin includes approximately half of the urban area of the City of Lodi. As a result there is a great disparity of population among the various districts. Table 1-3 provides current population estimates for each of the Districts.

Table 1-3
Estimated 2010 Population of Districts

District	2010 Estimated Population
North San Joaquin	59,614
Stockton East	361,065
Central	4,264
Total	424,943

The population residing within the Districts represents over 56% of the total population of the County.

3. Growth Projections

Population growth for water conservation districts is a less important factor than for other agencies or for cities. Since water conservation districts primarily provide water to agricultural users and implement programs to facilitate the recharge of the groundwater table, population growth can actually decrease the need for service. With the exception of Stockton East, which includes all of the City of Stockton, and North San Joaquin, which includes a portion of the City of Lodi, district boundaries are reduced as the various cities within the County expand through the annexation process. Limited urban growth can occur outside of cities which can, in turn, impact the need for services. However, in San Joaquin County growth is directed to urban areas, thereby limiting the impact of growth within two of the three districts. The conversion of grazing land to crops (i.e., orchards, vineyards, etc.) can increase the demand for increased water unrelated to population growth. Therefore it is difficult to gage increased need for services through the use of population projections alone. However, the statistics are important to understand the magnitude of urban growth within the County and the pressure that will be place on the conversion of agricultural land to urban uses.

Growth projections for San Joaquin County are made by the San Joaquin Council of Governments (SJCOG). SJCOG provides population projections for each of the seven cities and the unincorporated county to the year 2030. The growth for the County as a whole is projected at approximately 2.4 percent per year. The unincorporated county area is projected to grow at a slightly slower rate of approximately 1.5 percent annually. Since the time frame for this service review extends to the year 2041, growth projections have been extrapolated from the SJCOG data and methodology.

Table 1-4
Estimated Population* Projections 2012-2042

	2010	2020	2030	2042
North San Joaquin	59,614	69,184	80,291	95,997
Stockton East	361,065	419,030	486,302	581,431
Central	4,264	4,948	5,742	6,866
Total	424,943	493,162	572,335	684,294

*Population is an estimate as of 2010 Census blocks to not perfectly align with the irrigation district boundaries.

DETERMINATION

The growth projections for the Districts show that their population will reach 684,294 people by the end of the 30-year planning horizon. This is slightly more than a 61 percent increase in population and will represent more than 46 percent of the entire County's population by the year 2042. These projections are based on a 1.5 percent annual growth rate for the Districts. Provision of services to agricultural users may actually decrease as a result of urban growth. However, this growth will not necessarily result in an increase in water demand, as the majority of the land within the three Districts is currently developed either for agricultural or urban use. Because the water demand for agricultural and urban uses are essentially equal, overall, population growth is not as important as compared to the Districts' ability to secure long term water supplies.

B. The Location and Characteristics of Any Disadvantaged Unincorporated Communities Within or Contiguous to the Sphere of Influence

With the passage of SB244, which became effective January 1, 2012, LAFCOs are now required to consider the location and characteristics of any disadvantaged unincorporated communities within or contiguous to the sphere of influence of cities or special districts. The definition of a disadvantage unincorporated community is an inhabited territory (12 or more registered voters) that is composed of no less than 10 dwelling units adjacent or in close proximity to one another with a median household income of 80% or less than the statewide median household income (48,704 for 2010). LAFCOs have the discretion to modify this definition. In an effort to comply with this provision, Figure 8 has been developed which identifies all census tracts below 80% of the State median household income in unincorporated areas within and adjacent to the district boundaries. With the present definition there is an endless array of potential communities which could meet the stated definition. The legislation, however, is directed to needs and deficiencies related to sewer, municipal and industrial water, and structural fire protection. None of the three districts provide these services directly nor do they influence public policy related to the provision of these services. As such, this discussion and map satisfies the requirement of identifying any disadvantaged unincorporated communities and determining the MSR will have no impact on the affected communities.

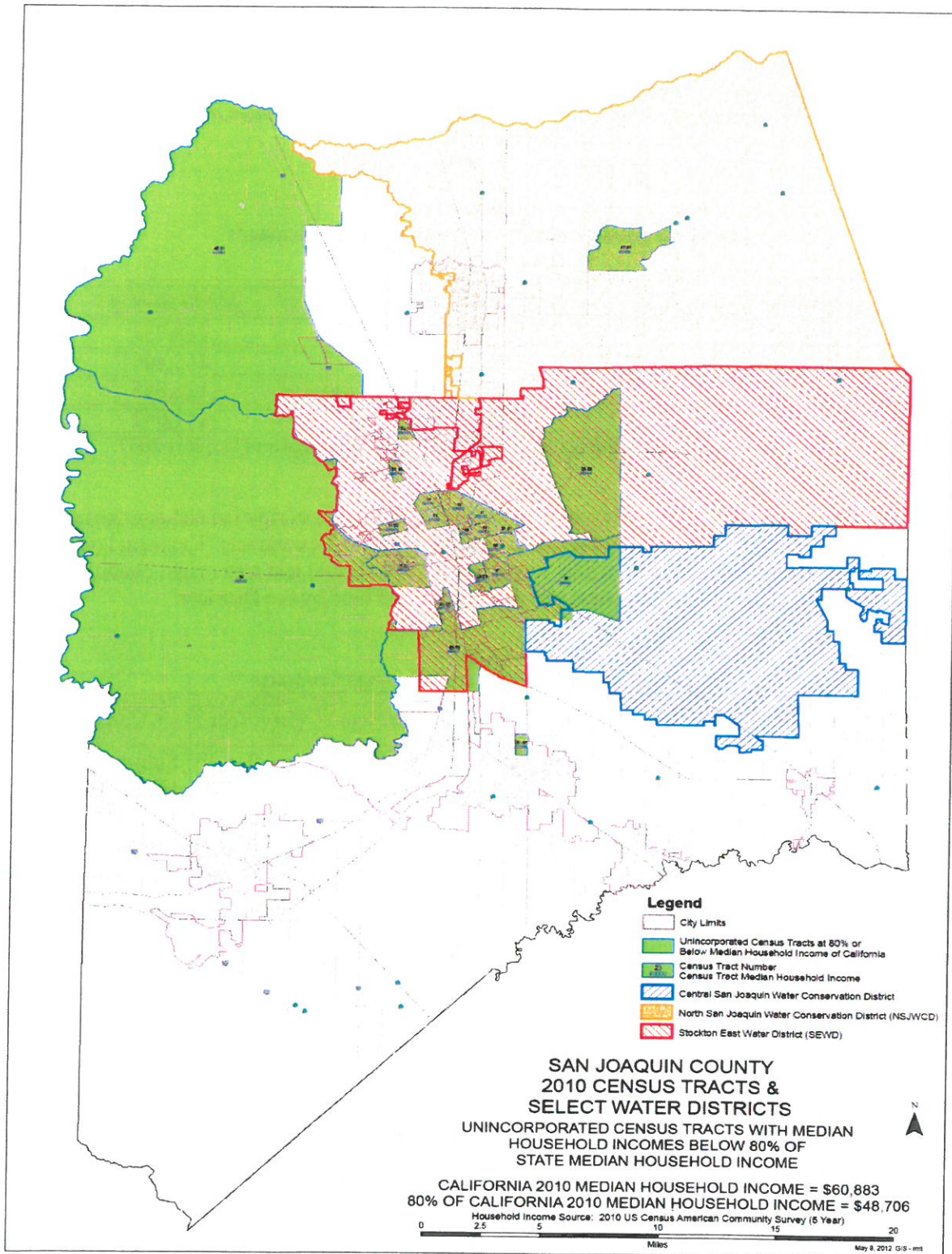
C. Present and Planned Capacity of Public Facilities and Adequacy of Public Services Including Infrastructure Needs and Deficiencies

This section evaluates infrastructure needs and deficiencies for services provided by the three water conservation districts. Infrastructure needs and deficiencies refer to the status of existing and planned infrastructure and its relationship to the quality and levels of service that are, can, and need to be provided. Water conservation districts and irrigation districts provide an array of services. However, a common objective is the preservation of the groundwater basin. The provision of surface water to agricultural users helps minimize groundwater pumping. Likewise, injection of water directly into the groundwater basin or through infiltration also improves the groundwater basin and provides a source of water in dry years. An evaluation of infrastructure needs and deficiencies must take into consideration both facilities which transport water but also accessibility to a dependable water supply. Prior to this assessment it is important to understand the overall needs of the County.

Two planning documents provide useful information regarding the assessment of future demand for urban water and agricultural water. These documents include the *Eastern San Joaquin Groundwater Basin Groundwater Management Plan* (September 2004) and the *Eastern San Joaquin Integrated Regional Water Management Plan* (July 2007). These documents use a 2030 planning horizon for their projections which closely approximates the time frame for this service review. The overall findings of these documents are that unless there is a change in how the groundwater is used or managed, levels will continue to decline and storage will continue to be reduced. Further complicating the situation is the lateral inflow of saline water from the west, which could render parts of the aquifer unusable.

According to these documents, increases in urban water demands will largely be offset by the development of agricultural lands for urban use. However, the changes in differing water quality need and demand patterns will further stress the ability of urban purveyors to meet the area's water needs. Based on the development of each city's sphere of influence, total urban demand for water will increase from 82,600 af/yr (1996) to 241,100 af/yr in the year 2030. This is an increase in demand of 146,000 af/yr. Agricultural water demand for non-urban and non-riparian vegetative areas in San Joaquin County in 1996 was approximately 1,522,000 af/yr with an estimate of 954,000 af/yr for Eastern San Joaquin

Figure 8: Census Tracts Below 80% of the State Median Household Income in Unincorporated Areas



County. Assuming that agricultural land outside the urban spheres of influence will remain in production and that agricultural land within the urban spheres of influence be developed by the 2030 planning horizon, a decrease in agricultural demand within the city's spheres of influence is estimated to be 132,000 af. With this decrease, the projected agricultural demand in 2030 is estimated to be 1,390,000 af per year. The decrease of 132,000 af of agricultural water use is not significantly different from the increase in urban water use of 146,000 af because the usage rates for agricultural water are similar to urban water use. The following is the estimated and projected agricultural water demands for each district:

Table 1-5
Estimated and Projected Agricultural Water Demands
(in acre feet per year)

District	2005 Estimated	2030 Projected
North San Joaquin	152,853	148,738
Stockton East	206,217	165,449
Central	140,289	126,855
Total	499,359	441,042

Source: Eastern San Joaquin Integrated Regional Water Management Plan, July 2007.

Water supplies in San Joaquin County are subject to a complex system of riparian and appropriative rights and are further complicated by numerous agreements and water service contracts. The actual quantity of water delivered varies significantly from year to year due to contractual and water right conditions. The following table summarizes the major water rights and contracts held by the Districts:

Table 1-6
Summary of Current Water Rights and Contracts

	Source	Wet Year	Dry Year	Comments
North San Joaquin	Mokelumne/Camanche	20,000	0	Subject to EBMUD's supply and future requirements
Stockton East	Calaveras/New Hogan	40,115 27,000	<40,115 <27,000	Firm dry Unused portion of CCWD
	Stanislaus/New Melones	75,000	<75,000	Interim, subject to other users requirements and availability
Central	Stanislaus/New Melones	80,000	<80,000	49,000 firm 31,000 interim

Note: New Hogan reservoir has an estimated yield of 84,100 af/yr. Stockton East's contract with the USBR is for 56.5% of the yield, and Calaveras County Water District (CCWD) has rights to the remaining 43.5 percent. The estimated yield of 84,100 is further reduced by 13,000 af/yr for prior riparian rights. SEWD has a contractual right to use any and all of the unused portion of CCWD's water rights. CCWD is currently using approximately 3,000 af/yr. Source: Eastern San Joaquin Integrated Regional Water Management Plan (July, 2007).

1. North San Joaquin Water Conservation District

On December 2, 1948, North San Joaquin filed Application 12842 to appropriate water from the Mokelumne River. Competing applications were filed by the EBMUD on June 16, 1949. On July 3, 1956, the California State Engineer (predecessor to the State Water Resources Control Board) issued D-858 granting EBMUD's applications priority over North San Joaquin's. Permit 10477 was issued to North San Joaquin for interim water based on EBMUD's unused entitlements and future demands. Under its permit, North San Joaquin can only divert from December 1 to July 1 of the succeeding year. Through an agreement between both parties, EBMUD stores up to 20,000 af/yr in the wettest years for delivery to North San Joaquin during the irrigation season. North San Joaquin's permit initially required the District to complete construction and put the water to beneficial use by December 1, 1960 and December 1, 1970 respectively. Since its permit was issued, North San Joaquin has requested and received four extensions of time from the SWRCB to complete the project. The most recent extension was granted in 2008 and gave North San Joaquin until December 31, 2010 to complete construction and application of the water to beneficial use. Prior to the December 31st deadline, and in accordance with the SWRCB's Order WR-2008-0016, in March 2009, North San Joaquin requested a 15-year extension of time, to December 31, 2025. This request is currently pending.

North San Joaquin received a \$462,500 CALFED grant and has participated in the Farmington Groundwater Recharge and Seasonal Habitat Study to demonstrate its ability to utilize its full appropriation. In 2007 and 2008, property owners within North San Joaquin approved a groundwater charge to levy up to \$5/acre to further the District's recharge efforts. However, North San Joaquin's ability to impose the groundwater charge was repealed by initiative (Measure V). Measure V was passed by the voters in November 2007 and prevents North San Joaquin from imposing or collecting a groundwater charge until the District submits the matter to the voters. In June 2010, the District attempted to repeal that portion of Measure V which prevents North San Joaquin from imposing a groundwater charge, but was unsuccessful. North San Joaquin continues to explore other funding options that remain available, in order to develop the revenue needed to put its water right to full use.

Presently, within the ESJ Basin, 800,000 af/yr are currently taken from the Basin and only 600,000 af/yr are naturally recharged during an average year. This causes a 200,000 af/yr overdraft. The current average annual overdraft is 50,000 af/yr for the District. It is greater in dry years and less in wet years and will increase in the future. By definition the historical hydrology is divided into five classifications: wet (30%), above normal (20%), below normal (20%), dry (15%) and critically dry (15%). Approximately 50,000 af/yr would be required annually to offset the average overdraft by that amount, but surface water is not currently available every year. The District uses only 3,000 af/yr and must increase its allocation to 20,000 af/yr and acquire another 80,000 af/yr for use during wet years, just to cope with the overdraft caused by existing land use. If additional sources of water are not found, the State could proceed with an "adjudication" of the ESJ Basin. Adjudication means limiting groundwater pumping to natural recharge. This could result in all pumpers being restricted to approximately 75% of what is now pumped today and it would prohibit any future development that would need more than 75% of the current groundwater use for a specific location.

North San Joaquin facilities consist of three intake facilities along the Mokelumne River and a series of conveyance structures to provide surface water supply to the south and north of the River. Since the drought conditions of the early 1990's, many surface water users converted to groundwater pumping. This has resulted in a decrease of consumption to about 3,000 af/yr. Access the Freeport Project and exchange American River water for approved Mokelumne River water would greatly increase the District's ability to serve additional areas and could result in a more dependable supply of water. Funding for additional improvements is being considered by the District, but specific projects are unknown at this time. The

District is implementing the Tracy Lake Groundwater Recharge Project, which is being financed with a combination of grant funds and the formation of the District's first improvement district (Improvement District No. 1, the Tracy Lake Improvement District), the issuance of ten-year improvement district warrants, and the levying of annual assessments on the lands to be benefited by the project. The District is focused on improving the existing diversion and conveyance facilities so that more lands within the District can be served with surface water and use less groundwater. The District is investigating possible sources of funding to finance such improvements. The District is in the process of identifying needed improvements and additional lands within the District that could be irrigated from existing or extended conveyance facilities.

The City of Lodi has recently (March 2011) began construction of a \$36.5 million water treatment plant in order to treat 6,000 acre feet of water from Woodbridge Irrigation District.

2. Stockton East Water District

Stockton East's primary source of water is from New Hogan Dam. The construction of the dam was the result of intensive efforts by Stockton East and other local agencies. New Hogan Dam was constructed in 1964. Stockton East is guaranteed 56.5% of New Hogan's yield. Stockton East is entitled to use the unused portion of Calaveras County Water District's (CCWD) contractual entitlement. Prior to 1963, Stockton East built check dams on the Calaveras River as well as on Mormon and Mosher Sloughs to control surface irrigation water and to promote groundwater recharge.

Stockton East has actively sought supplemental surface water from the American River via the Folsom South Canal and the New Melones Reservoir. Efforts to obtain the American River supply have been thwarted by the Environmental Defense Fund (EDF), EBMUD litigation, and the Freeport Project litigation. The District and Central contracted with the USBR in 1983 for 75,000 and 80,000 af of water respectively from New Melones Reservoir. After notification of water availability in 1989, Stockton East designed, constructed, and financed the New Melones Conveyance System at a cost in excess of \$65 million. Central has historically used a portion of Stockton East's New Melones Conveyance System to convey its New Melones water pursuant to two wheeling agreements entered into between the Districts (January 31, 1990 and August 29, 1991). Stockton East terminated these wheeling agreements with Central effective January 1, 2009. Thereafter, Central demanded the wheeling of its water pursuant to Water Code §1810. Stockton East continues to wheel water through its facilities for Center as required by §1810. Litigation over Central's payment for Stockton East's wheeling services is ongoing.

In 1983, the District expanded surface water irrigation with the construction of the 12,000 gallons per minute Potter Creek Pump Facility.

Unlike North San Joaquin and Central, Stockton East also provides wholesale surface water to three contractors within the City of Stockton, who further serve their municipal and industrial (M&I) customers. Water is provided to Stockton East's agricultural customers through diversions in Mosher Slough, the Calaveras River, Mormon Slough, Potter Creek, the channels and natural waterways of the New Melones Conveyance System, and Bellota or Peters Pipeline. Non-potable water service is provided to nearly the entire District. Stockton East does not serve those areas served by WID and it is cost prohibitive to serve all agricultural demands with surface water. Stockton East bills for water costs during the irrigation season to the individual customer annually based on either water meter readings or the crop and acres being irrigated. Stockton East provides potable water service to the California Water Service, the City of Stockton, and the Lincoln Village and Colonial Heights service areas of San Joaquin County within the City of Stockton. Water is provided to municipal/industrial customers through

diversions on the Calaveras River at Bellota into the Bellota pipeline, and through the New Melones Conveyance System. The following provides an estimate of the amount of surface water and ground water applied to agricultural uses and delivered to M&I customers annually, as well as predicted future use.

Table 1-7
Stockton East Water District Applied Water Usage
(in acre feet annually)

Water Usage-1993 through 2006	Minimum	Maximum	Average	Future (2038)
Ag Surface Water	18,601	36,781	24,698	35,000
Ag Ground Water	106,696	123,768	113,655	105,000
M & I Surface Water	36,159	50,229	44,096	60,000
M & I Ground Water	23,746	42,903	30,746	35,000
Total	185,201	253,681	213,195	235,000

In addition to the provision of surface water for agricultural and domestic use, Stockton East provides surface water for direct and in-lieu recharge of the critically overdrafted basin below the district. A method of conducting direct recharge is by flooding fields with surface water and allowing it to percolate into the underlying basin. The in-lieu recharge is a program of converting groundwater pumpers into surface water users, thereby preserving groundwater supply.

Stockton East owns, maintains, and operates a drinking water treatment plant to provide treated surface water to its urban contactors (UC). The UCs are the California Water Service Company, the City of Stockton, and the Lincoln Village and Colonial Heights service areas of San Joaquin County. Stockton East provides treated drinking water that the UCs can then retail to their M & I customers. The M & I customers own, maintain, and operate their individual transmission, storage, and distribution systems.

The City of Stockton has just completed the Delta Water Supply Project which will draw water from San Joaquin River. The initial phase will allow 30 million gallons per day (MGD) of water to be treated and delivered, therefore meeting approximately one-third of Stockton's water needs. At final build-out (estimated in 2050), the water treatment plant will have the capacity to treat up to 160 mgd.

3. Central San Joaquin Water Conservation District

Surface water to be provided to Central was initially proposed under the Folsom South Canal Project of the USBR. Central sought a surface supply from this source for many years. Efforts to obtain this American River supply has been opposed for many years by the EDF and other environmental interests within Sacramento County specifically the Save the American River Coalition. The demise of the USBR Auburn Dam Project effectively terminated completion of the Folsom South Canal Project. However, efforts are on-going by the Eastern San Joaquin County Water Conservation Districts to receive American River water through the Freeport Project.

Due to the problems with Auburn Dam and Folsom South Canal, Central turned its attention to the New Melones Project of the USBR Central Valley Project. Significant and extensive efforts were made by Central to obtain a water supply from the New Melones Project. As a consequence of these efforts by the District, Central was named an area of priority in need of service from the Stanislaus River. In 1981, these efforts were rewarded with a finding by the Secretary of the Interior that Central was an area to receive a priority supply of water from the New Melones Project.

In 1983, these efforts were further rewarded with a water supply contract for 49,000 a/f of firm yield and up to an additional 31,000 af/yr on an interim basis. Under this contract, Central is to receive water before other interim contractors. In order to convey this supply, Central entered into various conveyance contracts with Stockton East. Upon entry into these water delivery contracts, Central issued \$7 million dollars in certificates of participation in order to construct an internal distribution system to distribute water conveyed through the Stockton East system. In 1993, Central established a groundwater extraction fee pursuant to California Water Code Section 75500 et seq. to pay for debt service created as a result of the Certificates of Participation. The groundwater extraction fee has been levied by Central each year since 1993.

Central constructed an internal distribution system in existing District stream beds, namely Duck Creek, Littlejohn's Creek, Temple Creek, and Mariposa Drain. A canal connecting Littlejohn's Creek to Temple Creek and Mariposa Drain was constructed and three (3) pumping facilities were built to divert and distribute District water.

Beginning in 1996, water was conveyed pursuant to the agreements with Stockton East and was distributed by the internal distribution system of Central. Each year since 1996, Central has delivered surface water through this system for use by District area farmers. Application of surface water is made primarily through natural streambeds and channels that are located in the central part of the District; the area of the most significant overdraft. By 2008, the District had built up water deliveries and delivered as much as 42,000 af/yr of surface supply. In order to build up deliveries, Central has established a Capital Improvement Program giving water credits to users who install permanent diversion facilities to land previously irrigated from groundwater supply.

Although the ESJ Basin continues to be in an overdrafted condition, the application of surface water by Central and the reduction of groundwater pumping within Central's boundaries has produced an average increase of approximately 12 feet of groundwater aquifer underlying the district.

Because of topography, not all areas are served within the district. The District's operational plan is one of supplemental surface water supply and it is not intended to serve all areas within the District. Nevertheless, the benefits of supplemental surface water apply to all areas within the District as it allows re-charging of the common groundwater aquifer available to all District customers.

DETERMINATION

The Eastern San Joaquin County Groundwater Basin is overdrafted by approximately 200,000 af/yr. Additional surface water sources are needed to achieve equilibrium within the Basin. Continued depletion of the groundwater could result in saline intrusion into the basin and the permanent destruction of a portion of the basin. The *Eastern San Joaquin Groundwater Basin Groundwater Management Plan* (2004) and the *Eastern San Joaquin Integrated Regional Water Management Plan* (2007) outline various strategies to address concerns regarding the groundwater decline in San Joaquin County and discuss options for obtaining additional surface water supplies.

North San Joaquin has the potential water right to approximately 20,000 af/yr. Stockton East has the right to approximately 67,115 af/yr of Calaveras River water through the New Hogan Reservoir and up to 75,000 a/f of interim supply of Stanislaus River water through the New Melones Reservoir. Central has water rights to 49,000 a/f of firm supplies and up to 31,000 a/f of interim supply through New Melones Reservoir.

Additional water supplies and strategies for water conservation are needed. Not all properties in the eastern portion of the County are within a water conservation district and therefore are not contributing to the stewardship of the Basin. Central's SOI boundary should be expanded to include these properties.

D. Financial Ability of Agencies to Provide Services

The financial ability of the Districts to provide services is affected by the available financial resources and the management practices of the District. This section discusses the revenue sources available and financial constraints faced by the Districts and the financial ability of the agencies to provide services.

1. North San Joaquin Water Conservation District

In 2008 the District anticipated annual revenues totaling more than \$1M and prepared a 10-year budget plan that included expenditures of about \$800,000 each year on new projects and power costs. The District had anticipated receiving revenues from property taxes, acreage charges, the County Drain Fund, and approximately \$820,000 for Groundwater Charges.

In 2007 the District placed a groundwater "pump charge" on well owners. The District implemented the charge in response to threats from the State Water Resources Control Board to revoke the District's water right to the Mokelumne River because it had been unable to raise revenues to make improvements to its infrastructure to put the allotted 20,000 a/f water to beneficial use. The legality of the pump charge was challenged but the courts eventually ruled that the District properly followed Proposition 218 requirements in implementing the charge. In 2008 however, voters approved Measure V which prevented collection of the 2009-2010 pump charge and in 2010 the voters failed to pass Measure C which would have amended Measure V and allowed the District the right to adopt a groundwater charge in the future. Without the groundwater pump charge the District has limited financial resources.

In September 2011 the District was awarded a \$300,000 grant from the Bureau of Reclamation for the Tracy Lake Groundwater Recharge Project. This project will divert water from the Mokelumne River into South Tracy Lake and is projected to divert up to 4,000 acre-feet per year when river water is available. The surface water will be used by the landowners to irrigate crops thereby conserving groundwater. The project will also result in surface water recharge to the over-drafted basin. The District has secured 100% of the funding for the \$936,000 estimated total cost of the project. \$300,000 is provided by the USBR grant and the balance of \$636,000 is being financed through the formation of Improvement District No. 1 (Tracy Lake Improvement District) and the issuance and sale of two series of Improvement District No. 1 warrants. Payment of the principal and interest on both series of warrants are secured by an annual capital assessment to be levied on all 1,310 acres of land within the Improvement District. The \$400,000 first series of ten \$40,000 warrants with a 4.0% interest rate has been issued and sold. One warrant will be retired each year over a ten-year period with the first warrant to be retired on July 1, 2013. After the project is operational, an annual operation and maintenance assessment will also be assessed every year until the project is retired with the landowners paying 65% of those annual costs subject to an annual cost true-up. Annual costs will vary depending primarily upon how much water is pumped from the Mokelumne River (i.e., electric costs). For the first year of operation the landowners will pay a water charge of \$2 per acre-foot in addition to paying the annual capital and annual operation and maintenance assessments. After the first year, North San Joaquin's Board of Directors will review the District's total water system operating costs and determine whether to adjust the water charge. There is the potential to divert up to an additional 4,000 acre-feet per year from the project should additional

lands request surface water and be willing to pay their share of the capital and annual operation and maintenance costs. This first use of an improvement district to finance a new surface water irrigation and groundwater recharge project to organize the agricultural lands benefited by a project can act as a model for additional projects within North San Joaquin.

Currently, the only firm source of revenue is the District's share of property taxes, approximately \$240,000 per year. The District's main expenses during the last two fiscal years were attorney fees to defend the legality of implementing a pump charge within the District. At the end of fiscal year 2010-2011 the District had a remaining balance of \$116,232 in its operating budget and zero in reserves.

Property Taxes in North San Joaquin and WID Overlapping Area

The recommended sphere boundary for North San Joaquin would exclude 77 parcels (745.37 acres) from the district sphere boundary. The sphere plan recommends that the overlapping area detach from North San Joaquin and annex to WID as it provides irrigation water to more than half of the landowners and its facilities are located in within the vicinity. The estimated financial impact to North San Joaquin with the detachment of the overlapping area is the loss of property tax revenue in the amount of approximately \$740 per year.

2. Stockton East Water District

SEWD's annual budget totals approximately \$19.2 million dollars divided into numerous funds including but not limited to agricultural, treatment plant, groundwater, and water treatment. The District's major revenues are from property taxes, agricultural surface water rates, agricultural and domestic groundwater charges, M&I monthly payments, and M&I groundwater assessments. Emergency reserves are maintained for major equipment replacement and for a source of funding in the event of a drought. At the end of 2010-2011 fiscal year, the District maintained approximately \$11.1 million in reserves. Additional future costs may be imposed for habitat compliance and other potential regulatory requirements. The District is limited by its Special Authorizing Legislation in its ability to raise surface water delivery rates, groundwater assessments, and domestic charges. Additional options are available for generating revenue, but they must comply with the cap imposed by the legislature in Stockton East's special legislation and the requirements of Proposition 218 for any new or increased charges or assessments, as applicable.

3. Central San Joaquin Water Conservation District

The main sources of revenue for Central San Joaquin are water charges and property taxes. Land uses within Central San Joaquin are mainly agriculture land with some rural residential uses. Revenue from property taxes is limited as a result of Proposition 13 and results in approximately \$35,000 per year according to the San Joaquin County Auditor's Office for fiscal year 2010-2011. As a result of the limited real property tax, the District requested legislative modification of the Water Code to allow an annual acre assessment. This was passed in 1983 and the District has made an annual acre assessment for each succeeding year. The revenue from the acre assessment is approximately \$175,000, according to the Auditor's Office for fiscal year 2010-2011. Other sources of revenue are the groundwater extraction fees established in 1993 (approximately \$630,000 annually) and revenue produced from surface water sales (approximately \$500,000 annually) for a total of \$1,340,000 annual revenue from all sources.

Central's operation and maintenance costs are approximately \$200,000 per year. The District's annual debt service, in the approximate amount of \$500,000 is for repayment of certificates of participation for the loan to construct an internal District conveyance system. There are no other projects that are subject to District debt service. The cost of surface water from the Bureau of Reclamation has varied over the years but is currently in the amount of \$15.80 per acre foot. District purchases vary each year depending upon water availability and rainfall. The last three years water purchases have averaged 27,000-30,000 acre feet or \$426,000 to \$474,000 annually. During the last four fiscal years expenses exceeded the revenues received, consequently the District dipped into its reserves to meet its expenses. In fiscal year 2007-2008 the District's reserve account totaled \$885,075 and three years later at the end of fiscal year 2010-2011 the reserves was \$665,743.

The wheeling rate⁶ paid to Stockton East was set at an interim amount of \$5.00 per acre foot for the 2010 and 2011 water seasons. A trial is underway to review and determine the actual wheeling charge for the 2010, 2011, and 2012 irrigation season. At 27,000 to 30,000 acre feet of water usage per year and assuming the Court would eventually rule that this rate is appropriate, the wheeling costs range from \$135,000 to \$150,000 per year. If the Court were to approve a higher wheeling rate, the annual costs could be substantially greater. With only a limited reserve, the District may not be able to pay without a significant rate increase and complying with the requirements of Proposition 218.

In the early 1990's Stockton East Water District sued the Bureau of Reclamation for breach of their contract and taking their water rights when Congress passed the Central Valley Project Improvement Act. Stockton East is also a party to the action. A trial to determine damages for the United States Bureau of Reclamation is scheduled to begin September 2012. A court decision will follow sometime thereafter.

It is difficult at this point in time to fully assess the economic vitality of Central. Several cases involving litigation are pending which could substantially change the economic picture for the District. The City of Stockton, California Water Service Company and Stockton East are seeking damages in excess of \$5,000,000 for unpaid amounts under a contract to pay for the construction of conveyance facilities that delivers water to the District. In addition, the wheeling rates for 2010, 2011, and 2012 has not yet been established by the courts. The Court only determined that Central shall pay Stockton East \$5.00 per acre foot until the actual wheeling rate is established. If these cases do not end favorably for Central, a severe economic consequence could occur since Central's reserve account was only \$665,743 at the end of fiscal year 2010-11. On the other hand, if Central is successful in its litigation efforts against the United States Bureau of Reclamation and the federal government authorizes payment, then Central's economic picture could improve. However, the courts have not yet taken any action. At this time, it is simply too speculative to conclude that Central's finances will improve or decline in the future. For the last four years Central has dipped into its reserves to meet expenses.

The recommended sphere plan for Central San Joaquin is to include the northeast area that is currently not within a water conservation district (see Figure 5, Area A). Annexation of the parcels will not result in additional property tax revenues for the District but the parcels will be subject to all existing fees, charges, and assessments.

DETERMINATION

The Districts' financial capabilities vary significantly with Stockton East's budget being nearly twenty times larger than the other Districts. Stockton East, however, serves an urbanized area and receives more

⁶ The wheeling rate is the cost to provide water to the District using the Stockton East's New Melones Conveyance System.

property tax revenues and utility user fees from a greater amount of users. It is difficult to assess the economic vitality of Central due to the many pending lawsuits. The result of litigation could have a profound effect on the District's finances. The District has historically dipped into its reserves to meet expenses. Central has paid Stockton East for court ordered interim wheeling charges for 2010 and 2011. The Courts have yet to determine actual wheeling rates for 2010, 2011, and 2012. Both Stockton East and Central are in litigation with the US Bureau of Reclamation (USBR) over the breach of its New Melones' contract for failure to allocate full contract entitlements. A monetary settlement will be determined in September 2012. North San Joaquin does not have a sufficient revenue stream to build infrastructure needed to utilize its water right to 20,000 af/yr and continues to be under threat of losing its water rights. In 2010 the District voters failed to pass Measure C which would have amended a previous measure allowing the District the right to adopt a groundwater charge in the future which would have provided some revenue to build or upgrade its facilities. Without the groundwater pump charge the District's only source of revenue is property taxes. North San Joaquin has secured 100% of the funding for the Tracy Lake Groundwater Recharge Project. \$300,000 is provided by an USBR grant and the balance financed through the formation of an improvement district and the issuance and sale of two series of Improvement District warrants. Payment of the principal and interest on the warrants will be secured by an annual capital assessment to be levied on all 1,310 acres of land within the Improvement District. After the project is operational, an annual operation and maintenance assessment will also be assessed every year until the project is retired with the landowners paying 65% of those annual costs subject to an annual cost true-up. The project will divert up to 4,000 af/yr from the Mokelumne River into South Tracy Lake for irrigation purposes thereby conserving groundwater.

The ability of all the Districts to raise additional revenue is limited because compliance with Proposition 218 is required for any new or increased fees and assessments.

E. Status of, and Opportunities for, Shared Facilities

This chapter is a review of the current use of shared facilities by the three water conservation districts and the opportunity of sharing additional facilities and resources.

1. Current and Future Potential Shared Facilities

There are several joint powers agreements among the three water conservation districts. The Eastern Water Alliance was formed in 2003 and includes North San Joaquin, Central, and Stockton East. The purpose of the Alliance is to provide a vehicle for its members to cooperate in the planning, financing, operation, and implementation of projects for the long term recovery, stabilization, and enhancement of the ESJ Basin and implementation of a groundwater management plan for the ESJ Basin. The goal and intent of the Alliance is one of voluntary cooperation among its members in order to improve the condition of the ESJ Basin for the collective benefit of all.

The three districts also belong to the Northeast San Joaquin County GBA which was organized in 2001 to provide a consensus-based forum for local, State, and federal water interests to work cooperatively with one voice to study, investigate, plan, and develop locally supported groundwater banking and conjunctive use projects in northeastern San Joaquin County. The plan, completed in 2002, outlined specific groundwater recharge options into a conjunctive water management system with the capability of recharging up to 300,000 af/yr. Projects in the plan included the Freeport Interconnect Project, the Farmington Groundwater Recharge and Seasonal Habitat Project, the City of Stockton Delta Diversion Project, and direct groundwater recharge through well injection and seasonal field flooding. Potential new

water supplies may come from surplus flows on the American River, Mokelumne River, Calaveras River, Little Johns Creek, Stanislaus River, and the Delta. The Northeastern San Joaquin County GBA is in current discussions with EBMUD on the development of the San Joaquin County Freeport Element which is a proposed interconnecting pipeline project which could take advantage of American River Water.

Stockton East has numerous agreements with other agencies including: the USBR and Calaveras County Water District for water supplies at New Hogan Dam; California Water Service Company, City of Stockton, and San Joaquin County for drinking water; and USBR for water supply at New Melones Dam; and OID and SSJID for a 1/3 ownership in Goodwin Dam. There are no joint capital facilities. Stockton East and Central entered into two wheeling agreements in 1990 and 1991 by which Stockton East agreed to wheel Central's contractual water from New Melones Reservoir through a portion of the New Melones Conveyance System. Stockton East terminated the wheeling agreements effective, January 1, 2009. Thereafter, Central demanded the wheeling of its water pursuant to Water Code §1810. Stockton East continues to wheel water through its facilities for Central as required by §1810. Litigation over Central's payment for Stockton East's wheeling services is ongoing.

DETERMINATION

The sharing of resources has been primarily through the coordination of planning efforts and the joint advocacy for locally supported groundwater banking and conjunctive water use projects. The Districts have, through the Eastern Water Alliance, coordinated their planning and financing efforts to implement projects designed to enhance the ESJ Basin and have implemented a groundwater management plan. Furthermore, the Northeast San Joaquin County GBA has provided an opportunity for the Districts to work collectively to seek additional water supplies for eastern San Joaquin County. Shared capital facilities have historically been limited to the wheeling agreements between Stockton East and Central. Although these wheeling agreements were terminated effective January 1, 2009, Stockton East is required to continue wheeling water through its conveyance facilities for Central under Water Code §1810. Litigation over Central's payment for Stockton East's wheeling services is ongoing. There are opportunities for additional shared facilities among the Districts including: wheeling Mokelumne River water from North San Joaquin to Stockton East for treatment, recharge and/or consumptive use, and conveyance of surplus Mokelumne and Calaveras River water to Central.

F. Accountability for Community Service Needs, Including Governmental Structure and Operational Efficiencies

All three Districts are subject to a full array of permits and regulatory requirements from both Federal and State Agencies including the US Army Corps of Engineers, US National Marine Fisheries Services, SWRCB, California Department of Fish and Game, California Department of Public Health, California Central Valley Regional Water Quality Control Board, California Reclamation Board, and San Joaquin County. Applicable standards are available to assure quality water is delivered and that improvements are made to the infrastructure of the respective districts.

One of the Alliance's goals was to encourage the inclusion of all land not currently within the boundaries of the three water conservation districts through annexation to allow for a comprehensive plan and solution for the groundwater overdraft. North San Joaquin and Stockton East completed their annexations in 2004 and 2005 respectively. An application has been received from both Stockton East and Central to annex lands adjacent to Central. The requested annexation involves approximately 21,000 acres. Two of the areas are currently within Central's SOI but not annexed to the District. A substantial portion of the

annexation request is within the sphere of influence of SSJID. None of the land is located in the sphere of influence of Stockton East.

Consolidation Efforts

Consolidation of two or more of the Districts oftentimes results in operational efficiencies for local agencies, however, it appears that the financial health and in the case of water districts, the rights to firm sources of water supply, are deterrents to consolidation. At the present time there is no consensus among the several Districts for such an organizational structure. Each District has its own separate water right contracts and provides services in different geographic areas. Some parts of the Districts, due to topography, will never benefit from access to surface water but will benefit from improvements to the groundwater basin and should be included in a water conservation district.

In 2007 and 2008 the Board of Directors for both Stockton East and Central met in an effort to consolidate the two districts. In 2008 the Districts entered into a Memorandum of Understanding regarding proceeding with consolidation, and in 2009 worked with the legislature to draft a bill to assist with that process. That bill, AB 1172, which specified the powers of the Eastern San Joaquin County Water District on and after the date which the San Joaquin Local Agency Formation Commission approves the consolidation of the Stockton East Water District and the Central San Joaquin Water Conservation District, was approved by the Governor on October 11, 2009. In late 2009 Central indicated that it was rethinking its position on consolidation. This occurred at approximately the same time that the United States Court of Appeals issued its ruling holding that the United States had breached its contracts with Stockton East and Central, and directing the parties back to the trial court for a trial on the amount of damages owing to the contractors. It is unclear what impact, if any, this decision had on Central's reconsideration of consolidation. However, negotiations between the Districts broke down, and Stockton East refused to enter into another wheeling agreement to Central for water delivery in 2010. Stockton East has no interest in consolidation of the Districts at this time.

Stockton East has not considered consolidation with North San Joaquin. There appears to be two serious issues facing North San Joaquin at this time. The first is fiscal insolvency, which is a potential. More importantly, however, is the possibility that North San Joaquin will lose its only surface water right. In 2006 the State Water Resources Control Board (SWRCB) denied North San Joaquin's petition for extension of its water right because the District had not used it. North San Joaquin petitioned for reconsideration of the denial and, after a hearing, the State adopted order WR 08-0016 on March 18, 2008, extending the District's water right through December 31, 2010. In March of 2009 North San Joaquin petitioned for an additional extension of time to December 31, 2025 to complete construction work and/or beneficial use of water. North San Joaquin has secured 100% funding for the Tracy Lake Groundwater Recharge Project through a grant and the formation of its first improvement district. North San Joaquin will be amending its petition to the SWRCB to add the Tracy Lake Project as a new point of diversion and to demonstrate that the District is making progress to put its allotted water supply to beneficial use.

DETERMINATION

Each District has indicated their compliance with applicable regulations and rules governing their operations. The Boards of Directors of the respective agencies meet regularly and they are accountable to their members. Central has had a vacancy on its Board of Directors for a significant period of time. Stockton East appears to be a stronger district financially and operationally and therefore able to more

effectively carry out its objectives. Consolidation often times results in increased operational efficiencies for local agencies, however, it appears that the financial health and in the case of water districts, the right to firm sources of water supply, are deterrents to consolidation. Inclusion of all properties within the sphere of influence of the Districts would be beneficial to allow for comprehensive planning and to provide for a solution of the groundwater overdraft.

IV. References

A. Documents

Eastern San Joaquin County Groundwater Banking Authority, September, 2004,
Eastern San Joaquin Groundwater Basin–Groundwater Management Plan.

Northeastern San Joaquin County Groundwater Banking Authority, July 2007,
Eastern San Joaquin Integrated Regional Water Management Plan.