# 3 PROJECT DESCRIPTION

## 3.1 ENVIRONMENTAL SETTING

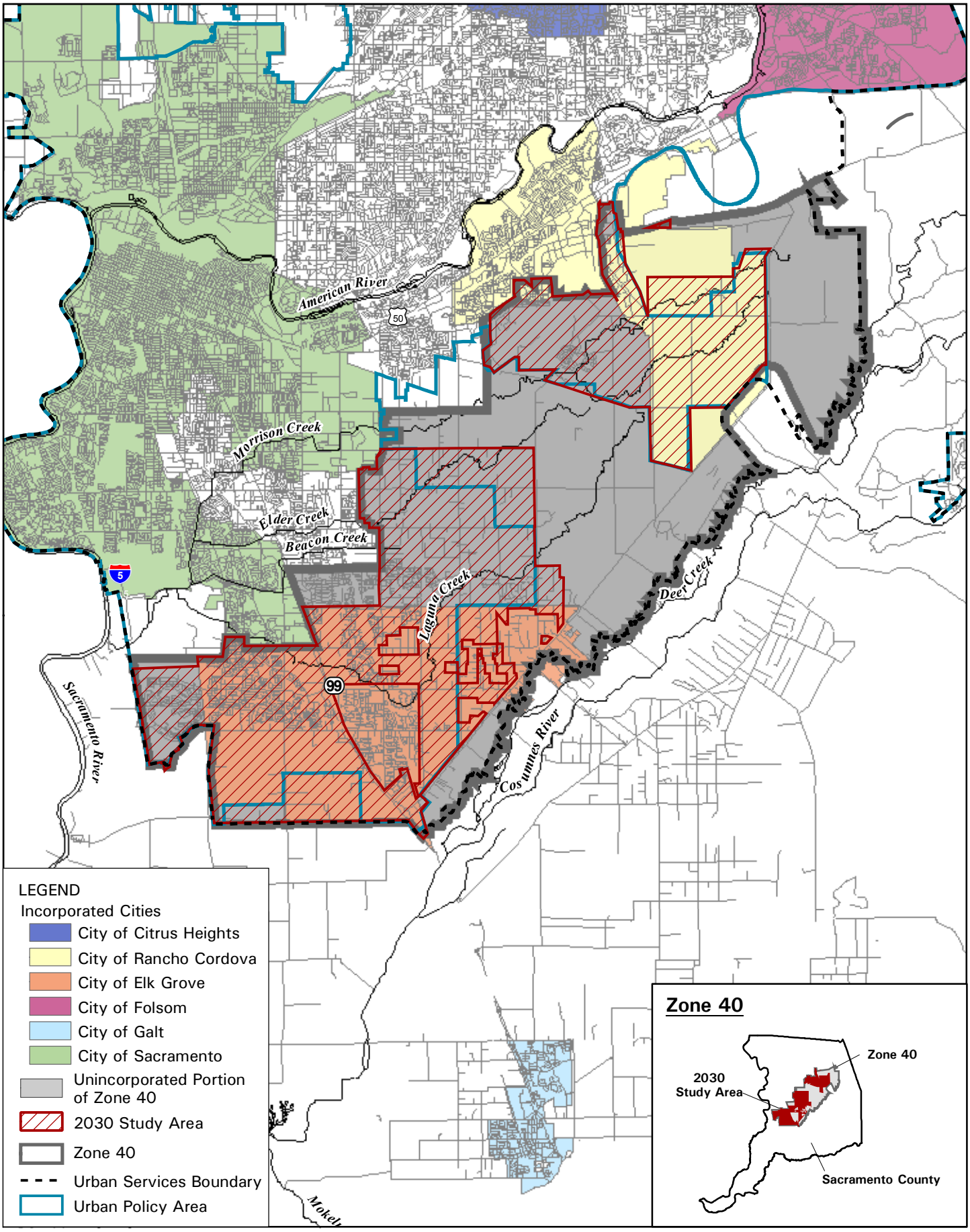
Zone 40 consists of approximately 86,000 acres of agricultural, residential, and industrial land in central Sacramento County (Exhibit 3-1) and encompasses portions of the cities of Elk Grove and Rancho Cordova (Exhibit 3-2). The 2002 Zone 40 Water Supply Master Plan (WSMP) describes the facilities and the construction financing mechanism to provide water to a portion of Zone 40, described as the 2030 Study Area (Exhibit 3-3). The 2030 Study Area encompasses approximately 46,600 acres (including portions of the cities of Elk Grove and Rancho Cordova) where substantial urbanization has occurred and is expected to continue through the year 2030 consistent with the General Plan. The Zone 40 area has historically relied on the underlying groundwater basin for agricultural, industrial, and residential water supplies. Much of Zone 40 still consists of rural land uses, including agricultural (e.g., grazing, vineyards, row crops), agricultural/residential, and conservation reserve. Urbanization has occurred primarily in the City of Elk Grove, in the Vineyard and Mather/Sunrise areas of unincorporated Sacramento County, and more recently in the incorporated area of the new City of Rancho Cordova.

## 3.2 PROJECT LOCATION

Zone 40 extends from west central Sacramento County near Interstate 5 to east central Sacramento County in the vicinity of Douglas Road and Grantline Road (Exhibit 3-3). The southeastern boundary of Zone 40 coincides with the County's Urban Services Boundary (USB), which is also the northern edge of the 100-year floodplain of Deer Creek. The USB is defined by the County's General Plan as the ultimate boundary of the urban area in the unincorporated territory of the County.

The 2030 Study Area consists of two geographically separate subareas of Zone 40 where urban water demand in the next 25 years is expected to be concentrated. Its boundaries generally coincide with the County's Urban Policy Area (UPA), defined by the General Plan as the area within which urban development and provision of infrastructure are expected to occur within the planning horizon of the County's General Plan (2024). The 2030 Study Area also includes approximately 8,400 acres in four small areas that are outside the UPA.

The County General Plan requires that a 20-year supply of land within the UPA be available to accommodate estimated growth for the unincorporated area. In a 2002 review by Sacramento County, it was determined that a 22-year supply was available at current growth rates, but that a shortfall would occur within 25 years (demand of 85,505 dwelling units, with land available for 80,592 units). With the requirement that the UPA hold a 20-year land supply, it is anticipated that within two years the UPA will need to expand as a component of updating General Plan policy. Although the revised UPA boundary is not yet known, four areas were selected for water planning purposes to be within the 2030 Study Area because they were adjacent to the UPA, identified as an active project, and/or included within the newly formed




Sources: Sacramento County 1999 and 2003, Montgomery Watson Harza 2003, US Census Bureau 2002

## Incorporated Cities in the Vicinity of the Study Area

EXHIBIT 3-2

2002 Zone 40 Water Supply Master Plan EIR

X 2T101.01 9/03

0 1 2 4 MILES

NORTH

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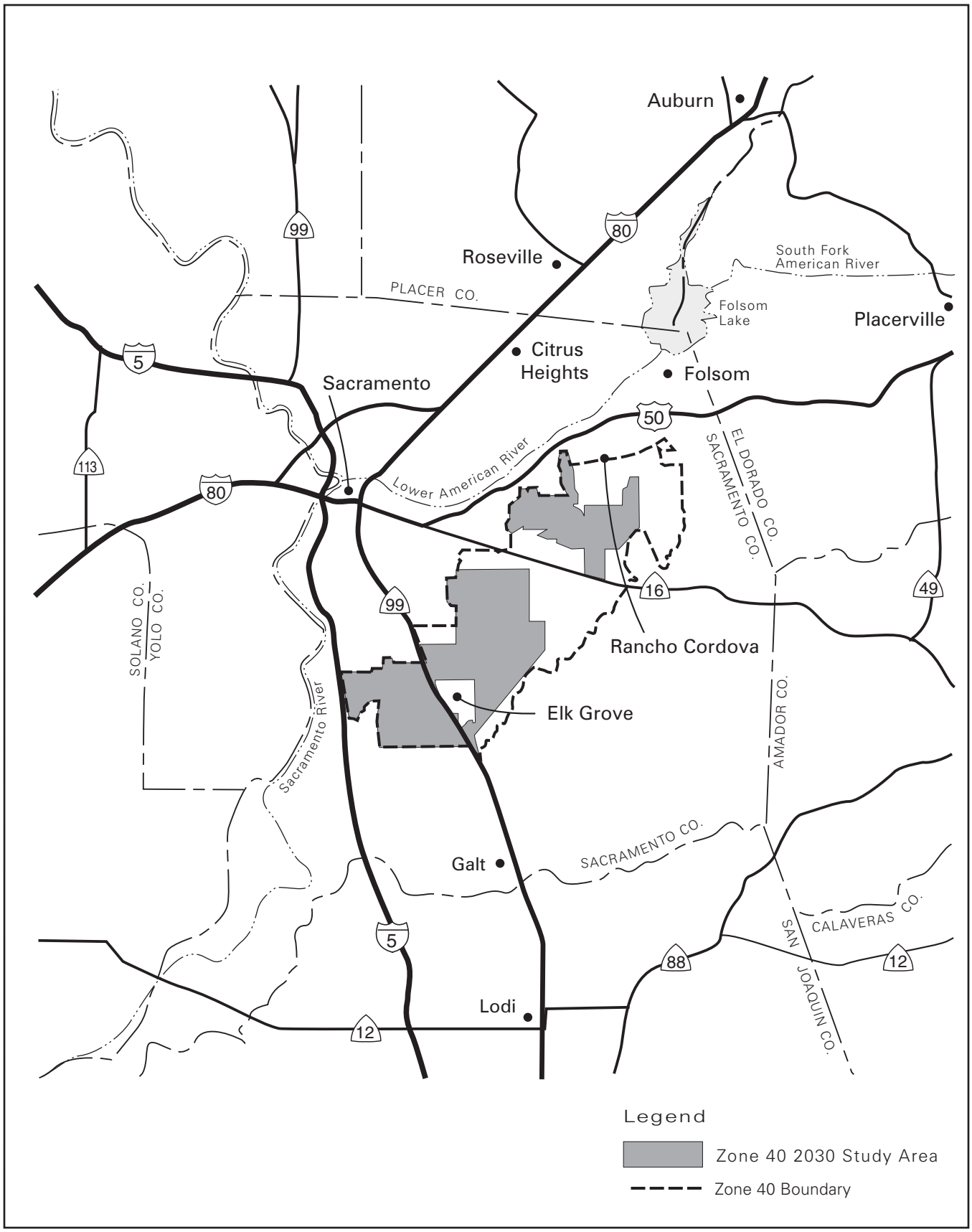


Source: EDAW 2003

## Regional Location

EXHIBIT 3-1

2002 Zone 40 Water Supply Master Plan EIR
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0 3.5 7 MILES

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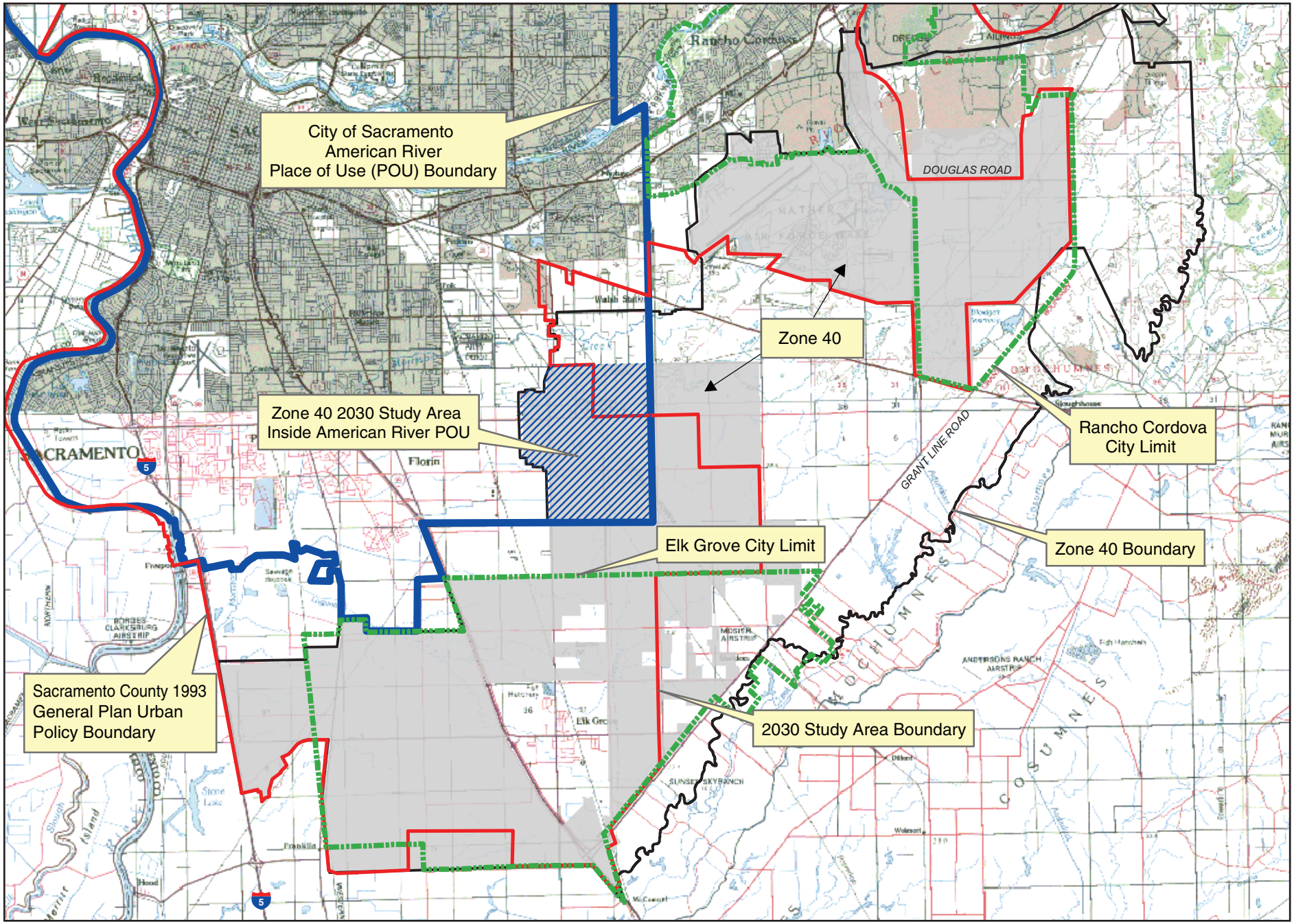



Sources: Sacramento County Water Agency and MWH 2003

## 2030 Study Area

EXHIBIT 3-3

2002 Zone 40 Water Supply Master Plan EIR
G 2T101.01 9/03

0 1.25 2.5 MILES

NORTH

EDAW

cities' boundaries. Before water service could be provided to these or other areas, they would need to be incorporated into the UPA and receive all necessary approvals for development.

The incorporated city councils (Elk Grove, Rancho Cordova) and Sacramento County Board of Supervisors have the ultimate decision regarding the nature, rate, density, and pattern of growth in the service area, and inclusion of areas outside the UPA in the 2030 Study Area is only to ensure meaningful long-term water supply planning. Approval of the 2002 Zone 40 WSMP does not guarantee or otherwise approve provision of water service outside the UPA. See Section 4.1, Land Use and Growth-inducing Impacts, for detailed discussion.

## 3.3 PROJECT BACKGROUND

### 3.3.1 HISTORY OF THE SACRAMENTO COUNTY WATER AGENCY

The Sacramento County Water Agency (SCWA) was created in 1952 by a special legislative act of the State of California (the Sacramento County Water Agency Act). SCWA's purposes include making water available for any beneficial use of lands or inhabitants and producing, storing, transmitting, and distributing groundwater. Under its authority, SCWA may cooperate, act in conjunction, and contract with the state or federal governments with respect to purchase, sale, and acquisition of water and construction and operation of facilities to supply water to users. In September 1985, the Water Agency Act was amended by the state legislature to provide SCWA with the authority to establish groundwater management zones in any area subject to groundwater overdraft conditions. SCWA is authorized to levy and collect charges for the production of water from groundwater sources within any identified groundwater management zone.

### 3.3.2 SUMMARY OF THE 1987 MASTER PLAN AND NEED FOR A MASTER PLAN UPDATE

A WSMP for Zone 40 was approved by the SCWA Board of Directors in 1987. The 1987 WSMP identified water demands, sources of water supply, groundwater availability, water quality, and facility requirements to meet projected demand. The primary objective of the 1987 WSMP was the development of a long-term plan for meeting future water needs in the developing Laguna and Vineyard areas in a way that would protect the reliability of the groundwater resources.

The 1987 WSMP described a water plan to meet 2005 maximum day water supply needs with a conjunctive use program of 20 million gallons per day (mgd) of groundwater and 80 mgd of surface water. The 1987 WSMP assumed that surface water would be obtained from the Central Valley Project (CVP) through a contract with the U.S. Bureau of Reclamation (USBR), and recommended a treatment and conveyance alternative of purchased capacity at the City of Sacramento's E.A. Fairbairn Water Treatment Plant and conveying the water ("wheeling") through city facilities to Zone 40.

The 1987 WSMP was based on a set of assumptions regarding urban development patterns, water use demand patterns, groundwater availability, and surface water availability that have

changed since adoption of that plan. The most significant changes to those assumptions resulted from a major modification of CVP contracting policy and from adoption of the 1993 Sacramento County General Plan Update, which substantially increased the area designated for urban growth in the County. Zone 40's boundaries were modified to reflect these changes, resulting in an expansion of the Zone from 17,200 acres to 86,000 acres. Assumptions of the 1987 WSMP also were made obsolete by the Sacramento WFA (described below) that included estimates of sustainable groundwater yield supported by more extensive hydrologic and hydrogeologic information for the central groundwater basin underlying Zone 40. New conditions regarding groundwater contamination and remediation efforts now underway in the county also affect water planning for Zone 40.

SCWA began revising the Zone 40 WSMP in 1995. However, completion of a revised WSMP was suspended pending completion of the Water Forum Proposal and approval of a final Water Forum Agreement (WFA).

Following approval of the WFA in April 2000, SCWA proceeded with the revision of the Zone 40 WSMP Master Plan using the WFA as its foundation. In December 2002, SCWA published the Draft 2002 WSMP, the subject of this EIR. The Draft 2002 WSMP incorporates the most recent land use and water planning information available from the County, the City of Elk Grove, the WFA, and other local planning processes.

### 3.3.3 SUMMARY OF THE WATER FORUM AGREEMENT

The Water Forum process brought together a diverse group of stakeholders that included water managers, business and agricultural leaders, environmentalists, citizen groups, and local governments to evaluate available water resources and the future water needs of the Sacramento metropolitan region. The coequal objectives of the Water Forum are (1) to provide a reliable and safe water supply for the region's economic health and planned development through the year 2030 and (2) to preserve the fishery, wildlife, recreational, and aesthetic values of the Lower American River. The first objective will be met by additional diversions of surface water, conjunctive use of surface water and groundwater, expanded water demand management programs, and use of recycled water. The second objective will be met by modifications to American River flow patterns to improve instream fish habitat, as well as implementation of the Habitat Management element of the Water Forum Agreement.

Development of a WFA to meet the coequal objectives involved substantial scientific study, environmental analysis, and consensus-building with various stakeholders. The WFA is a comprehensive document that describes how the region will meet its water needs through the implementation of seven elements that include detailed understandings among stakeholder organizations on how the region will address key issues such as groundwater management, water diversions, dry-year water supplies, water conservation, and protection of the Lower American River. The WFA also includes important provisions assuring each signatory that as it fulfills its responsibilities, it will receive specific benefits and that other signatories will also be honoring their commitments. The WFA includes purveyor-specific agreements that define the

benefits each water purveyor will receive as a stakeholder and actions each must take to receive these benefits. These assurances will be supplemented by specific actions, such as contracts, joint powers authorities, and water rights actions. The Water Forum Successor Effort was created to implement provisions contained in the WFA, maintain stakeholder relationships, provide an early warning system for potential problems, and resolve issues that might arise.

The WFA includes definitions of the long-term average annual production yield (defined as the "sustainable yield") for each of the three geographic subareas of the groundwater basin in Sacramento County: 131,000 acre-feet (af) for the North Area (north of the American River); 273,000 af for the Central Area (between the American and Cosumnes rivers); and 115,000 af for the Galt Area (south of the Cosumnes River). Any proposed water supply plan and/or project must recognize the groundwater sustainable yield specified in the WFA.

Demand management/water conservation is essential to meeting the coequal objectives of the WFA. Conservation will reduce the amount of groundwater and surface water (including water from the American River) that is needed for future growth. As a signatory to the WFA and as a USBR CVP water contractor, SCWA is committed to implementation of the Water Conservation Best Management Practices (BMPs) defined in the Water Conservation Element of the WFA. Technical studies prepared in support of the WFA indicate that implementation of the BMPs (most notably the provision for meter retrofit and conservation pricing) will result in a demand reduction factor of 25.6% relative to the 1990 baseline demand by the year 2030.

The 1999 Water Forum EIR evaluated SCWA's water supply needs in combination with other water supply needs in the region. As an outcome of the process, SCWA agreed to a series of actions and commitments related to surface water diversions, dry-year supplies, fishery flows, habitat management, water conservation and groundwater management. Based on SCWA's agreement to adhere to the requirements of the WFA, the water supplies contemplated in the Water Forum EIR were used to calculate an area of development that could be served by these supplies. The Water Forum EIR evaluated the provision of water for a 30-year planning period based on population projections. In preparation of the 2002 Zone 40 WSMP, the SCWA determined the land area of urban development that could be served by the firm water supplies negotiated under existing contracts in the WFA over a 30-year planning period. The facilities and financing mechanisms needed to provide water service this land area are identified in the 2002 Zone 40 WSMP and evaluated in this EIR.

## 3.4 PROJECT OBJECTIVES

The 2002 Zone 40 WSMP identifies the facilities and financing mechanisms needed to implement a phased water supply program to meet water needs within the 2030 Study Area. The goal of the 2002 Zone 40 WSMP is to define a conjunctive use program of groundwater, surface water, and recycled water supplies and a financing program for the construction of a new surface water diversion structure, surface water treatment plant, water conveyance pipelines, and groundwater extraction, treatment, and distribution facilities. These facilities

would be used for the production, conservation, transmission, and distribution of wholesale and retail water supplies in the 2030 Study Area.

The 2002 Zone 40 WSMP provides a flexible plan of water management options that can be implemented and modified if conditions that affect the availability and feasibility of water supply sources change in the future. Specific objectives of the tasks undertaken to accomplish that goal are described below:

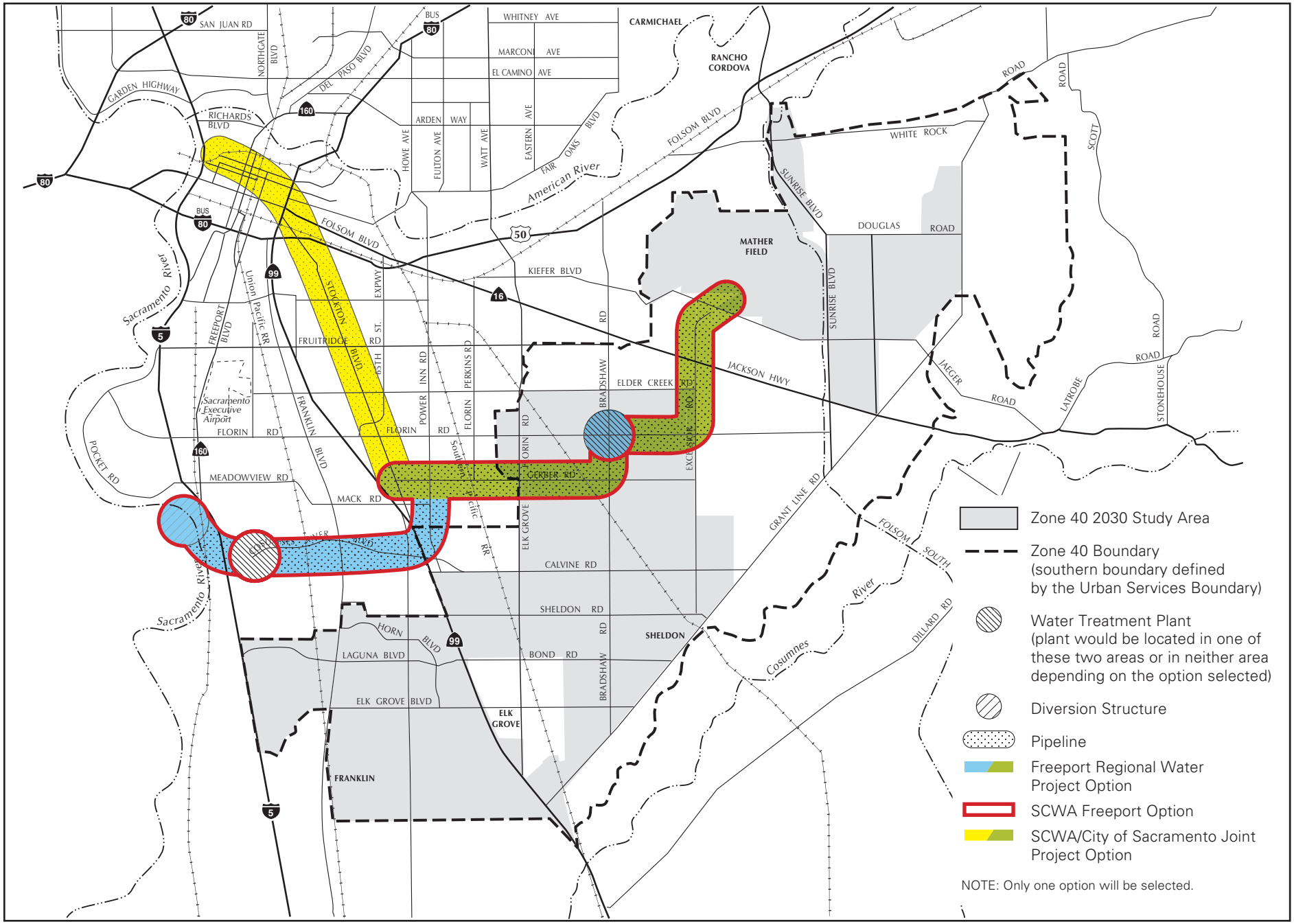
- Develop a set of water supply alternatives that include conservation, groundwater, surface water, and recycled water as the building blocks for a comprehensive water management plan.
- Evaluate the engineering, institutional, social, financial, and environmental aspects associated with implementing each of the potential water management alternatives.
- Recommend a water management plan alternative that is flexible and can be modified if situations change and new information becomes available.
- Identify an appropriate and flexible means of financing the recommended water management alternative.
- Provide a foundation on which to base future decisions regarding the acquisition, construction, operation and maintenance of facilities required for the production, conservation, transmission, distribution, and sale of water.

## 3.5 PROJECT CHARACTERISTICS

The 2002 Zone 40 WSMP is a financing plan for the construction of water supply facilities in the 2030 Study Area. Elements of the 2002 Zone 40 WSMP are summarized below. The general areas where facilities recommended in the 2002 Zone 40 WSMP would be constructed are shown in Exhibit 3-4. The 2002 Zone 40 WSMP, the subject of this EIR, is contained in this document as Appendix A. The appendix comprises the December 2002 draft and a summary of revisions made since its publication.

### 3.5.1 WATER DEMAND PROJECTIONS

2002 Zone 40 WSMP demand projections are based on the Water Forum methodology (Boyle Engineering Corporation 1995), but with updated land and water use data. Boyle Report water demand factors were adjusted to reflect water use data collected since 1995. Land use definition is based on the 2000 Land Use Survey conducted by the State Department of Water Resources. Existing water demand factors assume a 12% level of water conservation, which is a prorated adjustment of the Water Forum's 25.6% level of conservation goal for 2030. Existing demand by land use type is shown in Table 3-1 and totals approximately 25,000 acre feet per year (afy). This demand is met by approximately 20,500 afy of groundwater and 4,500 afy of surface water.




Source: EDAW 2003

# General Areas of Potential Project Disturbance

EXHIBIT 3-4

2002 Zone 40 Water Supply Master Plan EIR

G 2T101.01 10/03

APPROXIMATE SCALE 0 0.8 1.6 MILES

NORTH

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**Table 3-1**
**Zone 40 Existing Water Demands**

| Land Use Category | Year 2000[1] | | |
|---|---|---|---|
| | Unit Water Demand Factors[2,3] (AF/Acre/Year) | Land Use (Acres) | Water Demand (AF/year) |
| Rural Estates | 1.57 | 304 | 477 |
| Single Family | 3.4 | 3,387 | 11,515 |
| Multi-Family - Low Density | 4.36 | 285 | 1,242 |
| Multi-Family - High Density | 4.85 | 0 | 0 |
| Commercial | 3.24 | 254 | 821 |
| Industrial | 3.19 | 1,257 | 4,010 |
| Industrial – Unutilized | 0 | 0 | 0 |
| Public | 1.22 | 692 | 844 |
| Public Recreation | 4.08 | 400 | 1,630 |
| Mixed Land Use | 2.95 | 840 | 2,479 |
| **DEVELOPED LAND USE** | | **7,418** | **23,020** |
| Right-of-Way | 0.25 | 726 | 181 |
| **WATER USE SUBTOTAL** | | | **23,201** |
| Water System Losses | | | 1,740 |
| **ZONE 40 WATER PRODUCTION** | | | **24,941** |
| Urban and rural areas not currently being served by Zone 40 | | 5,127 | |
| Vacant | | 27,583 | |
| Agriculture | | 5,766 | |
| **TOTAL LAND AND WATER USE** | | **46,620** | **24,941** |

Notes:

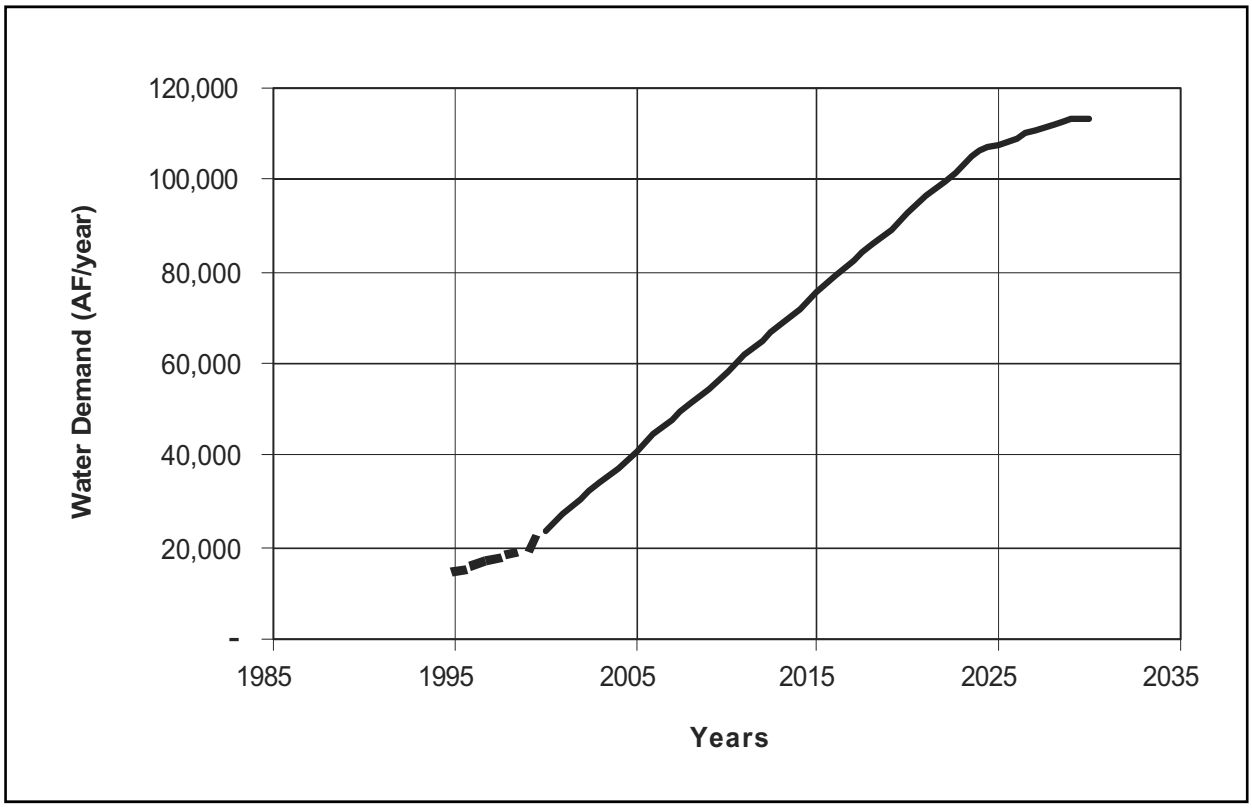
[1] Source of year 2000 land use data is the California Department of Water Resources Land Use Survey. Urban land uses reflect only areas currently being served by Zone 40.

[2] Boyle unit water demand factors have been adjusted to reflect more recent water use data.

[3] Unit water demand factors are normalized to account for hydrologic year differences and reflect a 12% level of water conservation.

Source: Sacramento County Water Agency 2002

2030 water demand projections for Zone 40 are based on the estimated demand for projected 2024 buildout of the Sacramento County General Plan plus an increment of demand calculated by a projection of expected population growth from 2024 to 2030. Average annual water demand for Zone 40 is assumed to increase linearly from the current level to 2024 buildout of the General Plan with a slightly smaller rate of increase in demand between 2024 and 2030 (Exhibit 3-5). Projected 2030 water use assumes a conservation/demand reduction factor of 25.6%, consistent with the WFA. Average annual water demand in Zone 40 is estimated to increase from an existing volume of approximately 25,000 acre feet (af) to approximately 114,000 af by 2030. Projected demand by land use type is shown in Table 3-2.




Sources: Sacramento County Water Agency and MWH 2003

Water Demand Projection over Planning Period

EXHIBIT 3-5

Water demand would be met from the Zone 40 conjunctive use program and would include tertiary treated wastewater (recycled water). The annual volume of groundwater and surface water would vary based on hydrologic conditions each year: more groundwater would be used in dry years, and more surface water would be used in wet years.

Currently, three water purveyors provide retail service in Zone 40: SCWA Zone 41 (formerly the Sacramento County Water Maintenance District), Florin Resource Conservation District/Elk Grove Water Service (FRCD/EGWS), and the California-American Water Company (Cal-Am). SCWA provides wholesale water to a portion of the FRCD/EGWS service area under the terms of the First Amended and Restated Master Water Agreement. It is planned that Cal-Am will purchase wholesale water supplies from SCWA to serve its Security Park franchise area.

**Table 3-2**
**Zone 40 Future Water Demands**

| Land Use Category | Water Forum Buildout[1] | | |
|---|---|---|---|
| | Unit Water Demand Factors[2,3] (AF/Acre/Year) | Land Use (Acres) | Water Demand (AF/year) |
| Rural Estates | 1.33 | 718 | 955 |
| Single Family | 2.89 | 14,867 | 42,966 |
| Multi-Family - Low Density | 3.7 | 1,173 | 4,340 |
| Multi-Family - High Density | 4.12 | 0 | 0 |
| Commercial | 2.75 | 1,042 | 2,866 |
| Industrial | 2.71 | 2,395 | 6,490 |
| Industrial – Unutilized | 0 | 1,463 | 0 |
| Public | 1.04 | 4,349 | 4,523 |
| Public Recreation | 3.46 | 2,865 | 9,913 |
| Mixed Land Use | 2.51 | 12,985 | 32,591 |
| **DEVELOPED LAND USE** | | **41,857** | **104,645** |
| Right-of-Way | 0.21 | 2,526 | 530 |
| **WATER USE SUBTOTAL** | | | **105,175** |
| Water System Losses | | | 7,888 |
| **WATER PRODUCTION** | | | **113,064** |
| Vacant | | 2,225 | |
| Agriculture | | 12 | |
| **TOTAL LAND AND WATER USE** | | **46,620** | **113,064** |

Notes:

[1] Source of Water Forum buildout land use data is the 1993 General Plan plus General Plan Amendments as of 2002.

[2] Boyle unit water demand factors have been adjusted to reflect more recent water use data.

[3] Unit water demand factors are normalized to account for hydrologic year differences and reflect a 25.6% level of water conservation.

Source: Sacramento County Water Agency 2002

### 3.5.2 WATER SUPPLY

Projected 2030 Zone 40 water demand would increase from approximately 25,000 afy to an estimated 114,000 afy. To meet increased demands, SCWA will rely on new and existing surface water entitlements, additional groundwater pumping, and recycled water.

#### SURFACE WATER SUPPLY

Zone 40 will provide surface water from the Sacramento and American rivers. SCWA has contracted for 22,000 afy of USBR CVP water for use in Zone 40 as authorized by Public Law 101-514, 7,000 afy of which was subcontracted to the City of Folsom. SCWA is also negotiating with the Sacramento Municipal Utility District (SMUD) and the USBR for the assignment of 30,000 afy (two 15,000 afy assignments, "SMUD 1" and "SMUD 2") of CVP water, consistent with the WFA. SCWA is also pursuing agreements for acquiring appropriative water and for using 9,300 afy of water from the City of Sacramento for use in the City's American River Place

of Use (POU). The various surface water options are listed in Table 3-3; each of the six surface water components is described briefly below.

**Table 3-3**
**Surface Water Supply Sources for Use in Zone 40**

| Component | Water Source(s) | Entitlement Amount (afy) | Estimated Long Term Average Use (afy) | Reliability |
|---|---|---|---|---|
| Appropriative Water | American and Sacramento River | Undetermined | 14,586 | Low |
| SMUD 1 Assignment | American River | 15,000 | 13,000 | Moderate |
| SMUD 2 Assignment | American River | 15,000 | 13,000 | Moderate |
| Fazio" Water (PL 101-514) | American River | 15,000 | 13,551 | Moderate |
| Other Water Supplies | American and Sacramento River | Undetermined | 0 [1] | Variable (low to moderate) |
| Purchase of Water From City for American River POU | American River | 9,300 | 9,300 | High |
| Total Surface Water | | | 63,437 | |

[1] SCWA is pursuing other water supplies through transfer agreements with the goal of securing an additional 5,200 afy. However, these supplies are not assured and are not considered firm water for purposes of this analysis.

Source: SCWA 2003

- **CVP Water Public Law 101-514 ("Fazio Water").** In April 1999, SCWA obtained a CVP water service contract pursuant to PL 101-514 that provides a permanent water supply to Zone 40 of 15,000 afy.
- **SMUD 1 Surface Water Assignment.** Under the terms of a three-party agreement (SCWA, SMUD, and the City of Sacramento [City]), the City provides water to SMUD for use at two of SMUD's cogeneration facilities (because the cogeneration facilities are located in the City's American River POU, authorization of the State Water Resources Control Board [SWRCB] is not required). SMUD, in turn, will assign 15,000 afy of its USBR CVP contract water to SCWA for M&I use; a CVP contract amendment is currently in the environmental review process.
- **SMUD 2 Surface Water Assignment.** SMUD will assign a second 15,000 afy of CVP contract water to SCWA, which will construct groundwater facilities necessary to meet SMUD's dry year water shortages of up to 10,000 afy. A CVP contract amendment is in the environmental review process.
- **Appropriative Water.** SCWA has submitted an application to the SWRCB for the appropriation of water from the American and Sacramento rivers. This water is considered intermittent water that typically would be available during the winter months of normal or wet years.
- **Other Water Supplies**. SCWA will pursue purchase and transfer agreements with other entities that currently hold surface water rights in the north Sacramento River basin.

- **Purchase of Water from City for Use in the American River POU.** The City of Sacramento will sell surface water to SCWA for use in the portion of the 2030 Study Area that lies within the City's American River POU (Exhibit 3-3).

Groundwater Supply

The groundwater underlying Zone 40 is part of a regional aquifer system that extends beyond the boundaries of Sacramento County. In Sacramento County, three groundwater subbasins—North, Central, and South—have been identified based on the hydraulic boundaries of the American, Cosumnes, and Sacramento rivers (Exhibit 3-6). Zone 40 lies entirely within the Central Sacramento County Groundwater Basin (Central Basin).

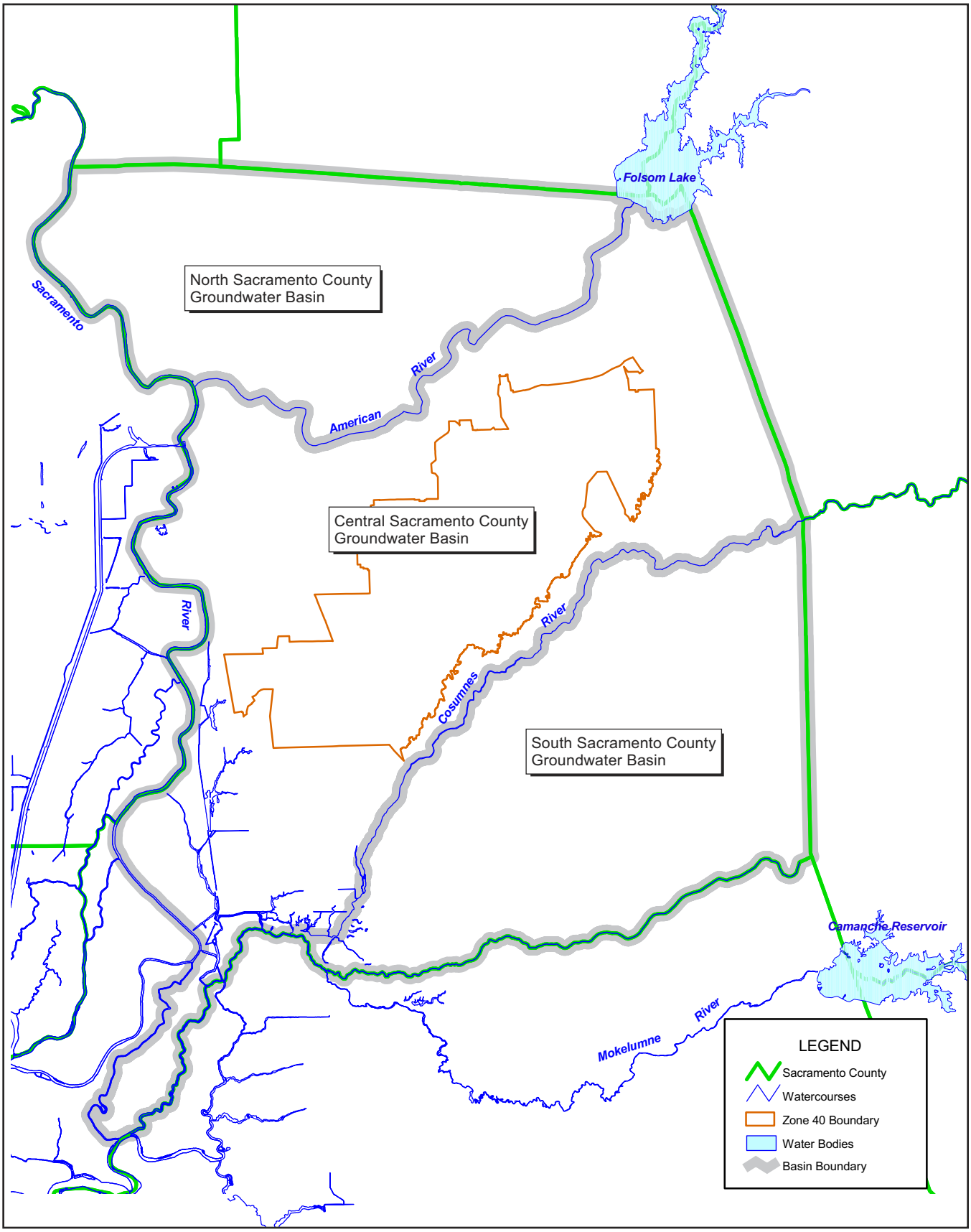
Technical studies conducted in support of the WFA provided a basis for defining the sustainable yield for each of the three Sacramento County sub-basins. Based on negotiated levels of acceptable impacts associated with operating the basins at specified extraction volumes, the WFA defines sustainable average yields of 131,000 afy for the North Area (north of the American River); 273,000 afy for the Central Area (between the American and Cosumnes rivers, including Zone 40); and 115,000 afy for the South Area (south of the Cosumnes River).

As a signatory, SCWA has agreed to recognize the groundwater sustainable yield for the Central Basin defined in the WFA. Groundwater pumping for Zone 40, in combination with other pumping in the Central Basin, must not exceed the sustainable yield of 273,000 afy on a long-term average annual basis.

SCWA's Water Forum PSA requires that groundwater be used conjunctively with surface water supplies. The difference between demand and the amount of surface water and recycled water available in a given year would be supplied by groundwater and recycled water. In critically dry years, CVP surface water supplies (PL 101-514 and SMUD surface water contracts) could be cut back up to 25%, and intermittent water would be cut back up to 100%. With firm supplies of 9,300 afy from the City of Sacramento for the portion of the 2030 Study Area in the American River Place of Use (POU) and 4,400 afy of recycled water from the Sacramento Regional County Sanitation District (see below), the dry-year groundwater demand would be approximately 69,900 afy for Zone 40.

Recycled Water

Recycled water is tertiary treated wastewater for nonpotable uses that include landscape irrigation at parks, schools, yards, and street rights-of-way. Up to 4,400 afy of recycled water would be provided to Zone 40 from the Sacramento Regional Wastewater Treatment Plant's tertiary (recycled water) facility. The estimated maximum day demand is approximately 9 mgd.




Source: WRIME 2003

## Sacramento County Groundwater Basins

EXHIBIT 3-6

2002 Zone 40 Water Supply Master Plan EIR

G 2T101.01 9/03

0 3 6 MILES

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### 3.5.3 PROPOSED FACILITIES

Existing Zone 40 water facilities include a transmission, distribution, and storage system with approximately 35 mgd of groundwater production facilities. Zone 40 has also purchased 6 mgd (expandable to 11 mgd) of nondedicated surface water capacity from the City of Sacramento's Sacramento River Water Treatment Plant. Additional facilities will be required for production, treatment, storage, and conveyance of water supplies to Zone 40 in accordance with the proposed 2002 Zone 40 WSMP.

Surface Water Facilities

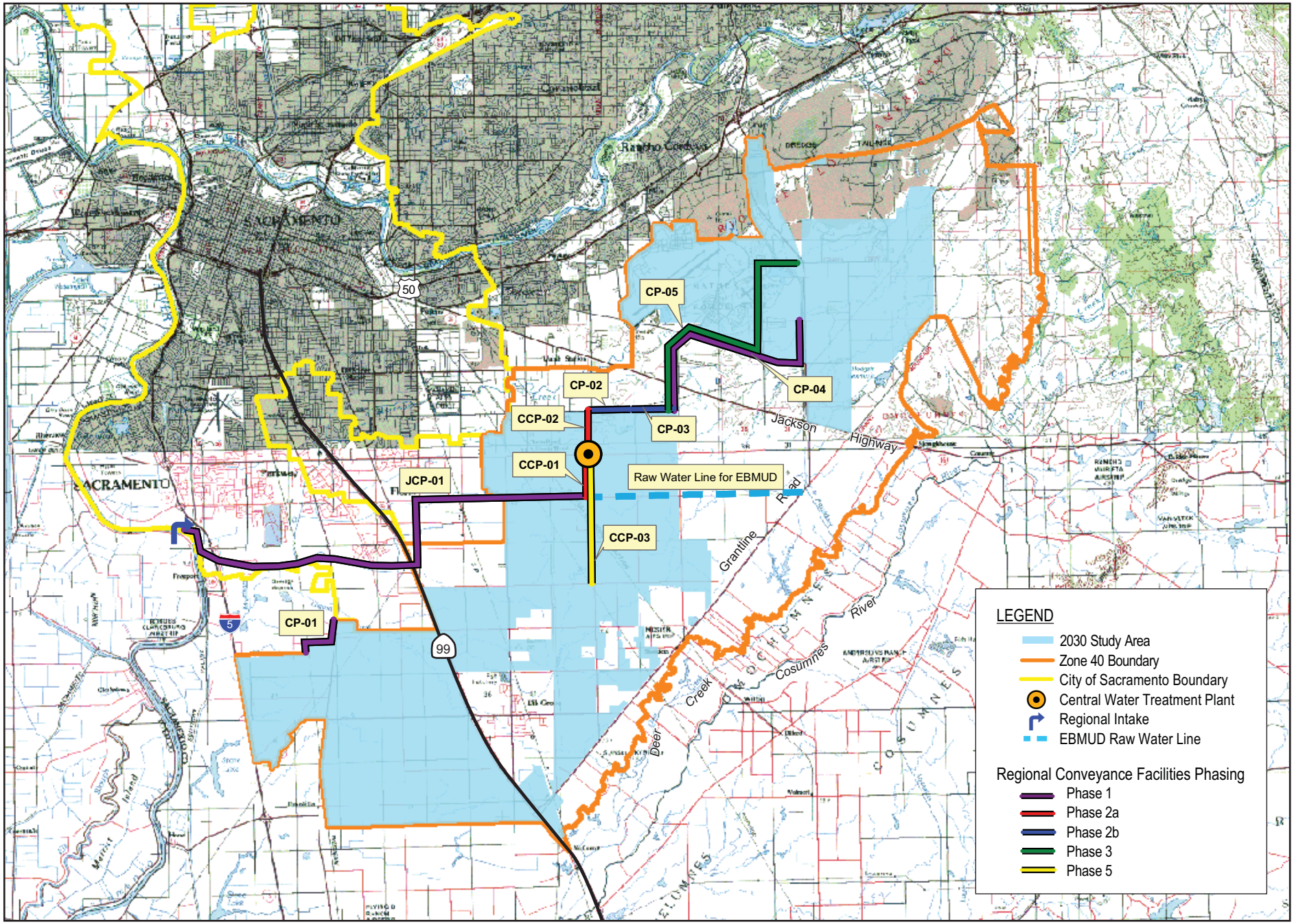
Future facilities planning in Zone 40 is based on meeting needs during three hydrologic year types: average year, wet year, and dry year. The volume of groundwater needed in any given year would depend on available surface water supplies. Three options for diversion, treatment and delivery of surface water supplies to Zone 40 are proposed in the 2002 Zone 40 WSMP:

1. Freeport Regional Water Project

The Freeport Regional Water Project is SCWA's preferred option for surface water diversion. SCWA and the East Bay Municipal Utility District (EBMUD) would jointly construct a 185-mgd diversion structure near the community of Freeport on the Sacramento River and a raw water pipeline from the diversion structure to the vicinity of Bradshaw and Florin Road. EBMUD would continue construction of a pipeline to the Folsom South Canal. SCWA would construct an 85-mgd (ultimate capacity) surface water treatment facility in the vicinity of Bradshaw and Florin roads, where Zone 40's portion of the raw water would be treated and delivered to the 2030 Study Area. Exhibit 3-7 presents a conceptual layout of these facilities. This option was evaluated in the Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Freeport Regional Water Project prepared by the Freeport Regional Water Authority (a joint powers agency of SCWA and EBMUD) and the U.S. Bureau of Reclamation (USBR) (FRWA and USBR 2003).

2. SCWA Freeport Water Treatment Plant (WTP) Project

An alternative to the Freeport Regional Water Project identified in the 2002 Zone 40 WSMP is a stand-alone surface water supply project constructed by the SCWA. SCWA would construct an 85-mgd surface water treatment facility on or near the Sacramento Regional County Sanitation District's Regional Wastewater Treatment Plant Bufferlands. A diversion structure of like capacity would be constructed near the community of Freeport on the Sacramento River. A raw water (i.e., untreated) pipeline would need to be constructed between the diversion structure and the proposed treatment facility. Treated water pipelines would be constructed to connect the proposed treatment facility to the 2030 study area at Power Inn Road and at Bruceville Road. Exhibit 3-8 illustrates a conceptual layout of these facilities. This alternative was evaluated in FRWA's Freeport Regional Water Project Draft EIR/EIS (FRWA and USBR 2003) but was not identified as the preferred option.




Sources: Sacramento County Water Agency and MWH 2003

# Freeport Regional Water Project Option

EXHIBIT 3-7

2002 Zone 40 Water Supply Master Plan EIR
G 2T101.01 9/03

0 1.25 2.5 MILES

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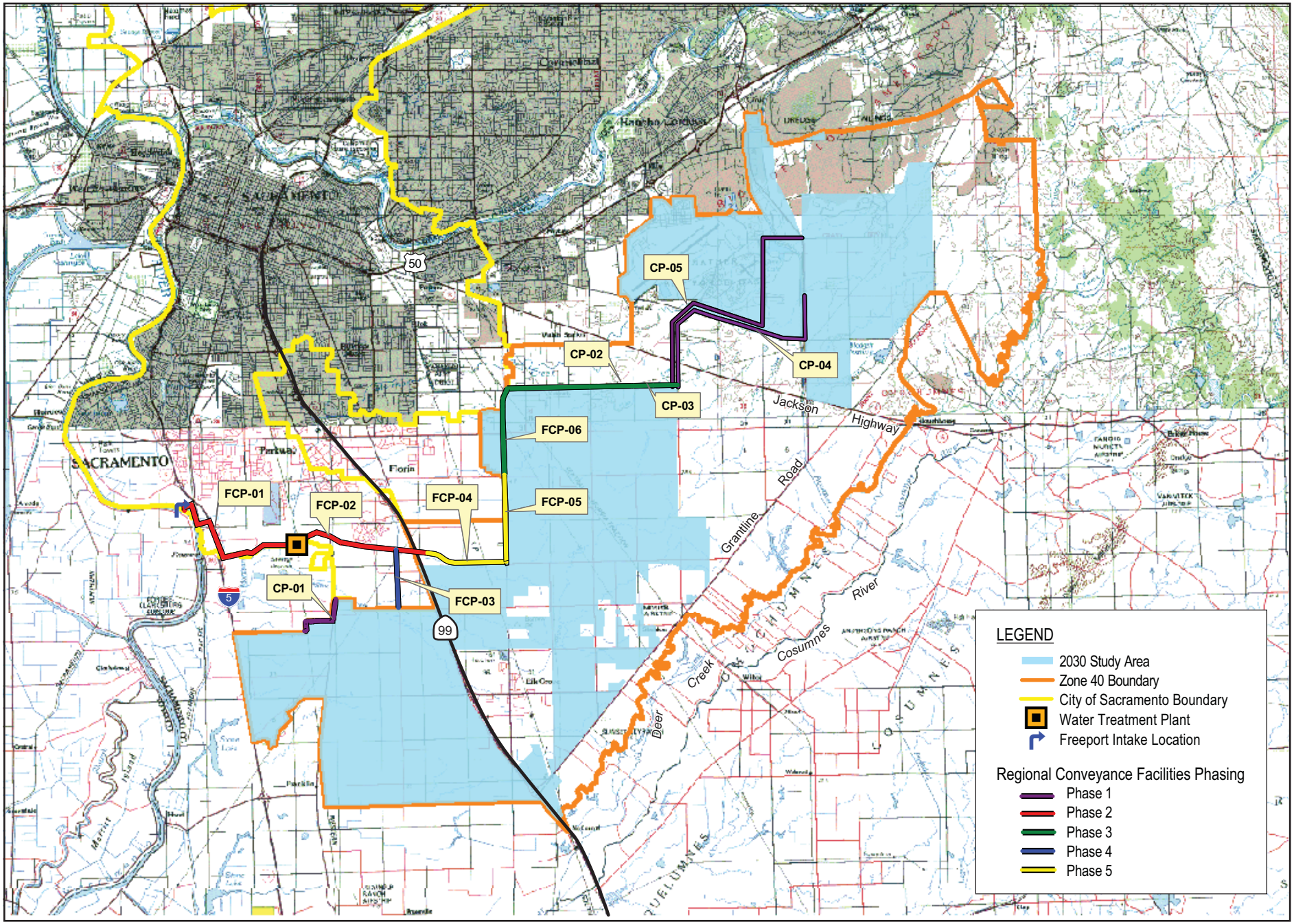


Sources: Sacramento County Water Agency and MWH 2003

# SCWA Freeport Option

EXHIBIT 3-8

2002 Zone 40 Water Supply Master Plan EIR

G 2T101.01 9/03

0 1.25 2.5 MILES

NORTH

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3. SCWA/City of Sacramento Joint Project

Under this alternative to the Freeport Regional Water Project, the SCWA would purchase 80 mgd of dedicated capacity at the City of Sacramento's Sacramento River Water Treatment Plant. A treated water pipeline would need to be constructed from the plant to the 2030 Study Area at Power Inn Road, Bruceville Road, Elder Creek Road, and Franklin Boulevard. Exhibit 3-9 presents a conceptual layout of these facilities.

The City's new water diversion facility was the subject of separate environmental review (City of Sacramento 2000) and is currently under construction. The water treatment plant is also under construction and is expected to be completed in March 2004.

Groundwater Facilities

Facilities needed to provide additional groundwater production capacity in the 2030 Study Area include wells, groundwater treatment plants, conjunctive surface water and groundwater facilities (storage and pumping), and conveyance pipelines to the distribution system. Groundwater production and treatment facilities would be located throughout the 2030 Study Area. It is assumed that treatment facilities (for iron, manganese, and possible arsenic removal) would have a maximum day capacity of approximately 10 mgd per facility.

Groundwater recharge may be considered in the future as a way of enhancing conjunctive use in the Central Basin through the use of injection wells, spreading basins in the Cosumnes River floodplain, or direct discharge into the Cosumnes River. Water for recharge could be obtained from appropriative or other surface water sources, depending on availability. Approval by the California Department of Health Services would be required prior to injection into the aquifer.

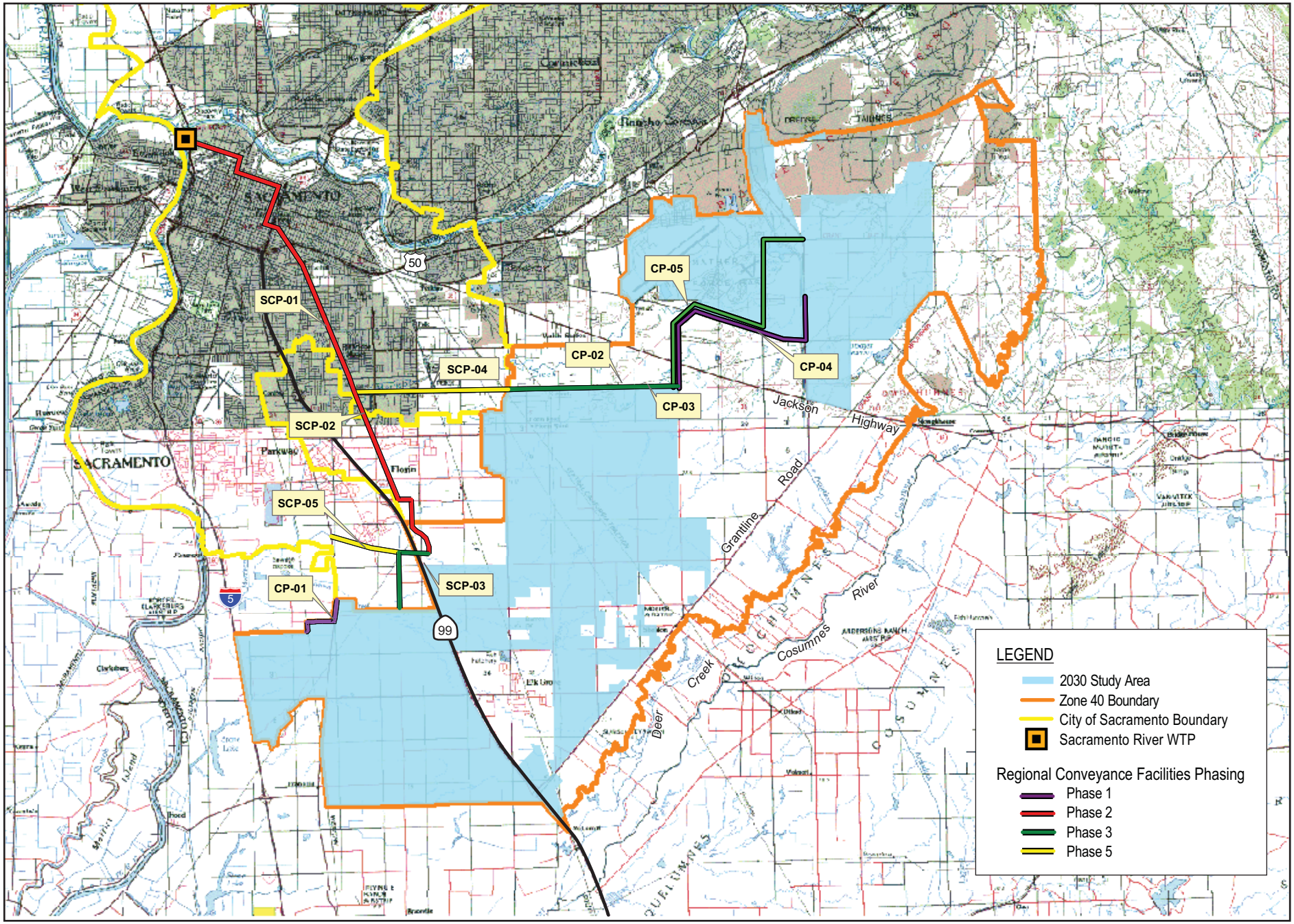
Recycled Water Facilities

The SCWA purchases recycled water from the Sacramento Regional County Sanitation District (SRCSD) for nonpotable use (landscape irrigation at parks, schools, and street rights-of-way) in Laguna West, Lakeside, and the Laguna Stone Lake portion of the 2030 study area. The 2002 Zone 40 WSMP proposes to increase these purchases and to construct storage facilities and pipelines to deliver recycled water to the East Franklin and Laguna Ridge portions of the 2030 Study Area. Maximum projected use of recycled water is 4,400 afy.

### 3.5.4 PROPOSED FINANCING PLAN

A critical element of the 2002 Zone 40 WSMP is the ability to pay for facilities as they are needed. Historically, Zone 40 has paid for water facilities using a "pay-as-you-go" system where facilities are constructed by SCWA or by a developer and reimbursed by SCWA.

SCWA generates revenue through collection of new development fees and monthly user fees. New development fees are based on equivalent dwelling unit (EDU) water demand of residential development plus acreage of developed land area for commercial development.




Sources: Sacramento County Water Agency and MWH 2003

# SCWA/City of Sacramento Joint Project Option

EXHIBIT 3-9

2002 Zone 40 Water Supply Master Plan EIR

G 2T101.01 9/03

0 1.25 2.5 MILES

NORTH

EDAW

Wholesale and retail customers pay a monthly user fee. Development fees are adjusted annually for inflation and in response to new programs or design standards that increase the total capital cost of system facilities.

Per the terms of a Recycled Water Agreement between the SRCSD and SCWA, part of the user fee collected from recycled water customers is transferred to SRCSD for funding of the tertiary treatment facilities.

Financial planning for Zone 40 facilities considers factors such as the timing of development, timing of surface water availability, and timing of the revenue stream relative to new facility needs. The short-term revenue stream generated as development occurs is inadequate to fund the construction of larger surface water projects and some long-term debt financing is required.

The phasing of water facilities is proposed to be commensurate with increased water demands. Required groundwater capacity will respond to surface water capacity and water demand. The timing of surface water projects reflects the following goals: (1) not exceed SCWA's Zone 40 sustainable groundwater yield; (2) meet needs for water supply in a timely manner; and (3) stabilize user rates and minimize development fees.

The proposed financing plan in the 2002 Zone 40 WSMP would use debt financing for timely construction of needed facilities and minimize development fees by spreading the cost over the planning period. The 2002 Zone 40 WSMP considers three Bond/Fee scenarios: (1) a two-phased increase in the Development Fee resulting in a 48% increase in fees over the next 2 years (2004 and 2005); (2) a one-time increase made in 2004; and (3) a one-time increase in 2004 plus an annual indexed increase in the user fee after 2004.

## 3.6 INTENDED USES OF THIS EIR

SCWA will use this EIR to evaluate the environmental effects, potential mitigation measures, and water management plan alternatives in the process of determining whether to approve or deny the proposed 2002 Zone 40 WSMP. The EIR is also an information document for the general public.

Other public agencies, including responsible and trustee agencies (as defined by CEQA) may use this EIR during their review of the project. SCWA is the lead agency and has primary approval authority for the project; however, responsible agencies may also have some discretion.