

SECTION 6.0 EAST CONTRA COSTA IRRIGATION DISTRICT WATER SERVICE

6.1 Overview

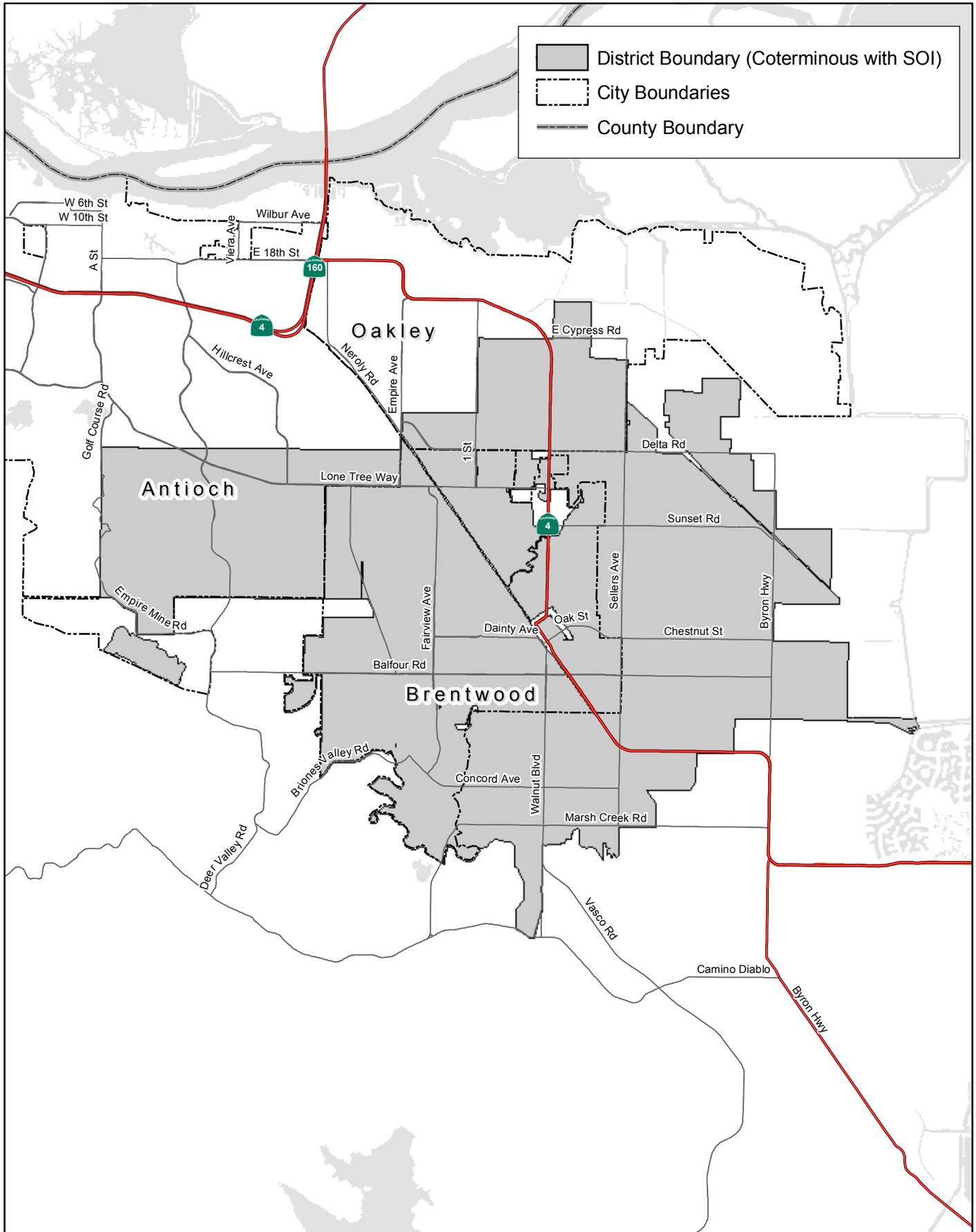
The East Contra Costa Irrigation District (ECCID) is an independent special district established in 1926 under the Irrigation District Law (California Water Code §20500 et seq.). The District's boundaries encompass approximately 40 square miles and include the City of Brentwood, the unincorporated community of Knightsen, portions of the Cities of Oakley and Antioch, and some unincorporated area south of Antioch and east of Brentwood. ECCID's sphere of influence (SOI) is coterminous with its boundaries.

The District supplies irrigation water for agricultural, landscape and recreational use as well as raw water for treatment and delivery to urban areas. ECCID has a 1912 appropriative right to divert water from Indian Slough on Old River, and therefore has infrastructure and delivery costs but no water supply costs. A map of the District's boundary and current SOI are shown in *Figure 6.1* and the District's profile for water service is shown in *Table 6.1*.

Table 6.1
East Contra Costa Irrigation District
Water Service Information

Service Area / Financial Summary	
District Office	626 First Street Brentwood, CA 94513 (925) 634-5951
Service Area:	~40 square miles
Population:	75,419 (Year 2007) / 105,267 (Year 2030) Average Annual Growth Rate = 1.7%
Operating Budget (CY 2007): Aggregate of General Fund, Capital Projects Fund, Equipment and Vehicle Fund	Revenues / Expenditures: \$4,309,000 / \$4,191,486 Net Equity at December 31, 2006: \$26,680,111
Water Service Data	
Services	Agricultural irrigation, Non-agricultural water service, drainage
Number of Service Accounts	Agricultural: 230 Non-agricultural Water: 10
Canals/Pipeline	18 miles of canals / 60 miles of pipeline
Volume of Water Delivered in 2006:	Agricultural: 18,300 af / Non-agricultural Water: 2,800 af CCWD: 3,000 af / Brentwood: 5,585 af

East Contra Costa Irrigation District and Sphere of Influence



District Boundary (Coterminous with SOI)
 City Boundaries
 County Boundary

Map created 10/2/2007
 by Contra Costa County Community Development, GIS Group
 651 Pine Street, 4th Floor North Wing, Martinez, CA 94553-0095
 37:59:48.455N 122:06:35.384W

This map was created by the Contra Costa County Community Development Department with data from the Contra Costa County GIS Program. Some base data, primarily City Limits, is derived from the CA State Board of Equalization's tax rate areas. While obligated to use this data the County assumes no responsibility for its accuracy. This map contains copyrighted information and may not be altered. It may be reproduced in its current state if the source is cited. Users of this map agree to read and accept the County of Contra Costa disclaimer of liability for geographic information.



6.2 Growth and Population Projections

ECCID serves an area that includes the City of Brentwood, the unincorporated community of Knightsen, portions of the Cities of Oakley and Antioch, and some unincorporated area south of Antioch and east of Brentwood. The current estimated population for this service area is 75,419. The population is expected to reach 105,267 by 2030 with an average annual growth rate of 1.7 percent.

A significant portion of the District’s service area has urban uses; this is where future growth is expected to occur. The eastern portion of the District lies outside the County’s Urban Limit Line (ULL) approved in November 2006. Per the County’s ULL map, the land is designated for agriculture, open space, wetlands, parks and other non-urban uses. The southeast portion of the District is within the area designated as Agricultural Core.

The District provides raw water for irrigation use on agricultural lands, landscapes, and recreational properties such as golf courses. In addition, the District has entered into agreements with the Contra Costa Water District and City of Brentwood to sell surplus irrigation water that is then treated for domestic use. Given the continued agricultural uses, current level of urbanization and expected growth within the District’s boundaries, there will be an increased need for the services provided by the District in the future.

6.3 Infrastructure Needs and Deficiencies

ECCID has a 1912 appropriative right to divert water from the Indian Slough on Old River. The District’s water system infrastructure includes wells, pump stations and a conveyance system of canals, ditches, and pipelines. *Table 6.2* summarizes the existing water system facilities:

Table 6.2
ECCID Water System Overview

Facility	Quantity
Canals/Pipeline	18.485 miles of canals / 60 miles of pipeline
Pump Stations	22
Wells	10 wells

6.3.1 Water Supply and Demand

Water Supply

The District maintains a 1912 appropriative right to the Indian Slough on Old River. This right predates the Water Commission Act of 1913 and there is no requirement to obtain permission to

exercise the right from any governmental authority. However, pre-1914 appropriative rights holders are required to file statements of water diversion and use with the State Water Resources Control Board (SWRCB) (California Water Code §5100). Furthermore, the water rights holders may not waste water or unreasonably affect public trust resources. Pre-1914 rights holders may change the purpose of use, place of use, or points of diversion without the approval of the SWRCB. Because of these laws, the District's water right is not subject to delivery reductions during water shortages including regulatory-restricted and drought years. As a further assurance of reliability, a 1981 contract between the District, State of California, and the Department of Water Resources assures that water of a certain quantity and quality will be available for reasonable and beneficial uses on lands within the District. The contract requires that the State not operate the State Water Project so as to cause the water surface elevation at the District's Pumping Plant No. 1 to fall below the specified level during the period from April 1st through October 31st each year. In addition, the contract sets the peak diversion rate at 250 cubic feet per second.

Water Demand

The timing and level of water demands vary by the type of use. For agricultural uses, the amount of water supplied is conditional on the weather and length of the irrigation season. The beginning and ending of the agricultural irrigation season is established each year by the District Board. The District generally will begin operations of the Main Canal pumping plants when sufficient demand for water service has been expressed by District customers. During the agricultural irrigation season, the District may schedule reasonable shut-down periods in response to reductions in demand, for emergency situations, or for maintenance or repair purposes.

Service for non-agricultural uses (landscape irrigation, recreational area irrigation, and construction water) is provided year-round.

The primary purpose of the District is to provide agricultural irrigation water to properties within the District. The District has a policy such that when the demand for water deliveries exceeds the capability of the District's system, the District will prorate water according to the limits of the system. This has not occurred in at least the past twelve years.

Per the adopted rules and regulations of the District, water users are responsible to reduce surface runoff to a minimum and to prevent excessive irrigation applications. Water must be applied in such a way that prevents the unreasonable application of water to depths greater than the root zone or soil absorption capacity in order to minimize contributions to the shallow groundwater basin and discharge into District laterals and natural wasteway channels.

Water storage is not permitted; water delivered must be used continuously until the irrigation is completed. District customers may not resell the water.

ECCID has agreements with the Contra Costa Water District (CCWD) and the City of Brentwood to make surplus irrigation water available each year as follows:

- In 1999, the City of Brentwood and ECCID entered into an agreement in which ECCID agreed to make available and reserve for the ultimate use of the City a maximum of 14,800 acre-feet of firm water rights each calendar year. The untreated water is made available for conveyance to the City at 1) the District’s Dredge Cut on Indian Slough; 2) at the intake to the Contra Costa Canal at Rock Slough; and 3) at the intake to the Los Vaqueros Project on Old River. The City is responsible for conveyance and water treatment. The water may only be used by the City and its retail customers within the City boundary or ECCID boundary.

In addition, the agreement states that the City and ECCID agree to cooperate in a joint effort to optimize the management and utilization of the Brentwood area groundwater basin, and the agencies further agree to cooperate in a joint effort to preserve the agricultural lands within and surrounding the City limits.

- In 2000, CCWD and ECCID entered into an agreement whereby CCWD may purchase up to 8,200 acre-feet per year (AF/Yr) surplus irrigation water to be used for Municipal and Industrial purposes within the area that overlaps between the two agencies. This area has an estimated current demand of 6,000 AF/Yr. The agreement also includes an option for up to 4,000 AF/Yr of groundwater (by exchange) when the Central Valley Project (CVP) is in a shortage condition. The exchange water may be used anywhere in CCWD’s service area. CCWD is responsible for conveyance and treatment.

The District’s water deliveries are summarized in *Table 6.3* below:

Table 6.3
ECCID Water Deliveries
(AF/Yr)

	2005 actual	2006 actual	2007 estimated	2008 projected	2009 projected
Ag Uses	19,000	18,300	23,500	18,500	18,000
Non-Ag Uses	3,000	2,800	3,500	3,200	3,400
CCWD	5,101	3,000	7,000	5,000	6,000
Brentwood	5,501	5,585	8,000	7,000	8,000
Total	32,602	29,685	42,000	33,700	35,400

Source: ECCID

6.3.2 Water System Infrastructure

The District diverts water from the Indian Slough on Old River. Water is conveyed through the Main Canal that extends from the Indian Slough intake area northwest of Discovery Bay to approximately 8,000 feet west of Walnut Boulevard in Brentwood. A total of seven pump stations are located along the canal. A grid of canals, pipelines, and ditches runs throughout the District. Deliveries to approximately 50 percent of the agricultural accounts are measured. The District has an ongoing program to add measuring devices to all customers eventually.

For non-agricultural accounts, the District provides a single delivery point to each customer. The customer is responsible to install, operate, and maintain water conveyance facilities to the property to be irrigated. All non-agricultural accounts must be metered.

The District's drainage system includes ditches for surface drainage, a subsurface drainage system, and pumps. Surface discharge points to the District's system are authorized by the District. The District has policies in place limiting the water that may be returned to the District's system and requiring water users to implement adequate safeguards to prevent against trash, silt, herbicides, pesticides, fertilizers, etc. from entering the system. This may include capturing excessive surface applications in sumps and reusing the water through return pumping. The District retains the right to conduct periodic testing of wastewater discharged into the District's system at the expense of the discharger.

The original irrigation and drainage system was built in 1911. The District provides regular maintenance activities such as pipeline and structural repairs, canal cleaning, and pest control for squirrels and weeds. The District does not have a long-range Capital Improvements Plan or a system master plan; however the District identifies capital projects in its annual budget in order to maintain the system and ensure reliability. The projects are funded through the District's Capital Projects Fund. The capital projects identified in the 2007 budget include the following:

- Improvements to wells, pumps, Main Canal bridge, gates and meters: \$700,000
- New administrative building: \$700,000
- Supervisory Control and Data Acquisition (SCADA) System Update: \$75,000

In 2006, the District installed three new pumps and motors, replaced the electrical distribution panels in six Main Canal pump stations, and completed \$700,000 in rehabilitation or replacement of existing, deteriorating, or inadequate pipelines.

At December 31, 2006, the District had the following capital assets:

- Land \$40,962
- Canals, Ditches & Pipelines \$9,270,775

▪ General Equipment	\$450,758
▪ Office Equipment	\$101,439
▪ Automotive Equipment	\$476,994
▪ Office Building and Improvements	\$31,211
▪ Maintenance Building	\$1,285,623
▪ Electric System & Upgrade	\$1,520,643
▪ Pipelines – Developers	\$15,861,942
<i>(Constructed by developers and donated to the District)</i>	
▪ Total Capital Assets	\$29,040,347

No infrastructure issues were noted during this review. The District has a 1912 appropriative water right that is not subject to water delivery limitations. The District is not required to obtain permission from any governmental authority to exercise its right. The District has adequate water supplies to serve its customers, and policies are in place to allocate water in the event of a supply reduction due to system capacity. Customers are aware that the capacity of the District’s system can be overreached by demand or outages and there may be a delay in water deliveries up to or exceeding five days. The District makes water available to CCWD and the City of Brentwood at the point of diversion and is not responsible for pumping or conveyance to their respective systems. The City and CCWD are responsible for water treatment.

6.4 Financing Constraints and Opportunities

ECCID’s primary sources of revenue are property taxes and water sales, and the major expenses are administrative, maintenance, and operations. Because the District has a 1912 appropriative water right and pumps groundwater, the District has no water purchase costs. The District receives a portion of the one-percent property tax. The District uses three funds to budget for its operations, capital and equipment needs: the General Fund, the Capital Projects Fund, and the Equipment and Vehicle Fund. Each fund is described as follows:

- **General Fund:** Provides the financing for the general, on-going operations of the District, including operations, maintenance, and administrative activities. Revenues in the fund are derived primarily from in-district water sales, property taxes, charges for private work and development related services, and miscellaneous other revenues. The District’s objective is to have an operating reserve that is approximately equal to the annual General Fund expenditures budget to protect against variations in annual revenues.
- **Capital Projects Fund:** Provides financing for major replacements and improvements in the District’s facilities. Revenues are derived primarily from property related income

such as rents and property sales, from developer and annexation or buy-in fees, and from inter-agency water sales (CCWD and City of Brentwood).

- **Equipment and Vehicle Fund:** Provides the funding for the replacement and addition of vehicles and operation, maintenance and office equipment to the District’s inventory. Revenues are generally derived from interest income and sale of surplus equipment and supplies.

Beginning in 2007, ECCID is establishing three Funded Reserves in addition to the operational reserves discussed above. These funds are intended to ensure the continued operations and solvency of the District in the event of catastrophe or unexpected loss of revenue. The target balances are as follows: \$8 million for the Capital Projects Reserve; \$700,000 for the Rate Stabilization Reserve; and \$500,000 for the Vehicle and Equipment Reserve. The District anticipates that the operating and funded reserves will total over \$14 million by 2016.

For the year ended December 31, 2006, the revenue from water sales for agricultural use comprised 17 percent of the District’s revenues, while water sales for non-agricultural use (including sales to CCWD and Brentwood) comprised 8 percent. Property taxes comprise 56 percent of revenues. *Table 6.4* summarizes the District’s finances:

Table 6.4
ECCID
Financial Summary

	CY 2004 Actual	CY 2005 Actual	CY 2006 Actual	CY 2007 Budgeted
Water Sales – District	\$748,792	\$731,233	\$643,975	\$679,000
Water Sales – CCWD/Brentwood	\$356,587	\$370,746	\$320,736	\$360,000
Standby Charges	\$132,787	\$127,524	\$94,835	\$90,000
Fee Property/ROW Sales	\$371,936	\$364,159		\$175,000
Other Operating Revenues	\$104,409	\$120,849	\$317,581	\$595,000
Operating Expenses	\$2,573,172	\$2,926,982	\$2,924,088	\$2,346,486
Property Tax Revenue	\$1,305,731	\$1,538,647	\$2,176,071	\$2,704,000
Other Non-operating Revenues / (Expenses)	\$770,528	\$537,612	\$337,851	
Contributed Capital	\$1,568,000	\$690,000	\$2,390,000	
Change in Equity	\$2,160,079	\$1,553,788	\$3,356,961	
Total Equity - Beginning	\$19,609,283	\$21,769,362	\$23,323,150	\$26,680,111
Total Equity - Ending	\$21,769,362	\$23,323,150	\$26,680,111	

The District had cash reserves of \$ 3.4 million at December 31, 2006.

The 1981 contract between the District, State of California, and the Department of Water Resources assures that water of a certain quantity and quality will be available for reasonable and beneficial uses on lands within the District. Per the terms of the contract, the District is required to pay semi-annual payments to the State based on gross area of the District. The annual amount is currently \$24,413.

Where beneficial to the District, ECCID sells excess land and rights of way in developing areas. As shown in *Table 6.4* above, this has been a significant source of revenue in prior years.

As of December 31, 2006 the District had no long-term debt and there was no expected need for future additional debt.

ECCID prepares a ten year budget projection as part of the annual budgeting process. Budget projections for 2016 anticipate that the District will have a year end reserve of \$14 million. The District has the financial resources and fee structures in place to provide for infrastructure needs and improvements and to continue to maintain adequate service levels for the future.

The District has set relatively high reserve targets for the General and Capital Projects funds, given that it has no water purchase costs and no debt. Given the financial needs of the District and its obligations, the District should ensure that its reserve levels are prudent, and that its financial resources are providing benefit to the property owners and rate payers.

6.5 Cost Avoidance Opportunities

The District avoids costs by setting the irrigation season dates to coincide with sufficient demand. In addition, the District schedules system maintenance and repairs outside the irrigation season.

The District is using cost control measures particularly with respect to power costs for pumps and wells. In 2004, the District began purchasing electric power from the Western Area Power Administration through their power marketing program.¹ The power costs for the Main Canal Power have averaged about \$88,000 since 2003, compared to \$365,000 in 1995, the last year the District relied primarily on PG&E service.

6.6 Opportunities for Rate Restructuring

ECCID's rates for service are set annually by resolution of the Board of Directors. The rates factor in anticipated demand and costs to provide service; the rates of other service providers are

¹ The Western Area Power Administration is one of four power marketing administrations within the US Department of Energy. Western markets and delivers reliable, cost-based hydroelectric power from Federal dams in 11 western states.

considered to ensure the District’s rates are somewhat consistent. The water rate history is shown in *Table 6.5*.

Table 6.5
ECCID
Water Rate History

	2004	2005	2006	2007
Agricultural Irrigation Service				
Irrigated Area:				
5 acres or more	\$20/af	\$20/af	\$19/af	\$19/af
Between 1 and 5 acres	\$30/af	\$30/af	\$28.50/af	\$28.50/af
1 acre of less	\$100/year	\$100/year	\$100/year	\$100/year
Landscape/Recreation Service	\$100/af	\$105/af	\$105/af	\$105/af
Construction Water:				
Measured/Metered	\$200/af	\$210/af	\$210/af	\$210/af
Water Truck/ Unmeasured	\$160/day	\$170/day	\$170/day	\$170/day

Water service provided during periods outside the regular agricultural season is charged a rate of twice the basic water service charges. Water service provided to customers for use outside the District boundaries is charged a surcharge at a rate twice the basic water charge plus the special surcharge for water service outside the regular agricultural irrigation season. ECCID is not providing service to any accounts outside District boundaries.

The rates for water sold to CCWD and the City of Brentwood are set per the terms of each agreement. For CCWD and Brentwood, the price is currently \$28.78/af. The rate is adjusted at five-year intervals by an amount equal to one-half of the change in the Engineering News Record Construction Cost Index for the prior five year period. The rate was adjusted in 2003 and will be adjusted again in 2008. ECCID also has an agreement with CCWD which allows CCWD to purchase up to 4,000 AF/Yr of additional groundwater when the CVP is in a shortage condition. Water purchased under this agreement is sold at \$57.56/af, or twice the normal rate.

ECCID requires that properties annexing into the District pay a buy-in charge to share in the cost of the infrastructure. The current rate is \$570 per serviceable acre; this rate has not changed since 2004.

6.7 Opportunities for Shared Facilities

ECCID shares facilities by providing rights to surplus water to CCWD and the City of Brentwood. The District also provides irrigation water for landscape, recreation, and construction uses. In the areas where the District’s boundaries overlap those of agencies providing retail water service, ECCID’s service offsets demand for potable water used for irrigation.

There is an opportunity for the District to share facilities related to conservation programs for both agricultural and landscape customers. Because of the District's water right and financial structure, there is little or no incentive to encourage demand reductions. Beyond its rules regarding how water may be used, the District is not currently providing any conservation programs for its customers. The District is financially strong and has stable sources of revenue through property taxes and water sales. Given the critical water conditions within California and the issues in the Delta, the District should be encouraged to use its financial resources to partner with other agencies providing conservation programs that would benefit regional water supplies.

For example, the Contra Costa Resource Conservation District (CCRCD), a non-regulatory agency, works with growers, ranchers, individuals, and public agencies to carry out voluntary, cooperative conservation programs. Resource Conservation Districts do not charge for most services and are usually dependent on grant funding for programs. The CCRCD implemented the Irrigated Agricultural Lands Program funded by a grant from the CALFED Bay Delta Authority from 2005-2007. The program integrated water conservation, agricultural tail water and runoff management, and wildlife friendly agriculture. Through a grant from the California Department of Conservation, the CCRCD has been working with growers in eastern Contra Costa County to address regulations from the Central Valley Regional Water Quality Control Board regarding waste discharge requirements from irrigated lands. The program integrates agricultural tail water runoff management, irrigation water management, and improved wildlife habitat.

Similarly, landscape irrigation technology is rapidly progressing and water agencies are offering incentives and programs for controllers, nozzles and other equipment.

The District should explore opportunities to financially support programs such as those offered by the CCRCD and to partner with CCWD and Brentwood on landscape conservation programs.

ECCID's canal system provides an almost uninterrupted right of way connecting all parts of the community which it serves. In 1995, Brentwood, East Bay Recreation and Parks District, and local developers funded a feasibility study to evaluate the opportunity and constraints of using the District's rights of way along the canals for trails. Pending the outcome of the study, there may be an opportunity in the future for the District's property to be shared as a recreational resource.

6.8 Evaluation of Management Efficiencies

ECCID is managed by a General Manager under the direction and oversight of an elected Board of Directors. The District has approximately 16 paid staff, providing maintenance, operations, development coordination, and administrative services. In 1997 the District adopted its *Rules*

and Regulations Governing Water Service and District Facilities, which provides policy and guidance for staff. The Rules were last amended in February 2002. As noted above in *Section 6.4*, the District adopts an annual budget with ten years of projections to guide District decisions and determine priorities.

6.9 Government Structure Options

ECCID holds a 1912 appropriative water right that provides a significant water supply for eastern Contra Costa County. Water that is diverted under this right must be used for beneficial purposes within the District's boundaries. As an irrigation district, the District's primary purpose is to serve the irrigation needs of agricultural properties. Two government structure options were identified:

Maintain the status quo: In fulfillment of its primary purpose, the District has a system of canals, ditches, and pipelines to deliver both surface water and groundwater to agricultural properties. Due to urbanization and demand the District also provides irrigation water for landscape and recreation uses, which serves as a cost-effective alternative to water that could be purchased from other agencies such as the Cities of Brentwood and Antioch, CCWD or DWD. The District is providing adequate service, maintains its infrastructure, and is financially sound. The benefits of this option are continuation of service and economies that benefit water service providers that serve potable demand.

Consolidate with the Byron-Bethany Irrigation District: The Byron-Bethany Irrigation District's (BBID) northern boundary is contiguous to the southeastern boundary of ECCID. BBID lies within Contra Costa, Alameda, and San Joaquin Counties, with the majority of its service area in San Joaquin County. The two districts are providing similar service for both agricultural and urban lands. The benefits of this option are potential economies of scale and cost reductions related to election costs and board expenses. The disadvantages of this option may include increased operational costs and decreased efficiency. Agricultural water service is provided when requested by the property owners, with deliveries starting and ending on the days and times requested; this requires planning for water system capacity on a daily basis and an operations staff that knows the properties, system, and crops along with the service needs of the non-agricultural accounts. Additional study would be required to determine any impacts to water rights, the costs, and level of benefit for this option.

6.10 Local Accountability and Governance

ECCID is governed by a locally elected Board of Directors, elected by the voters within each of the five divisions. The last contested election was in 2006. The governance is summarized in *Table 6.6*.

Table 6.6
East Contra Costa Irrigation District Governance

Date Formed:	1926		
Statutory Authorization:	Irrigation District Law (California Water Code §20500)		
Board Meetings:	District Office, 2 nd Tuesday of each Month		
Member	Title	Term Expires	Compensation*
Randall B. Enos	Director, Division 1	December 2010	\$65/mtg
Mark S. Dwelley	President, Division 2	December 2008	\$100/mtg
Glenn Stonebarger	Vice President, Division 3	December 2008	\$80/mtg
Kenneth W. Smith	Director, Division 4	December 2010	\$65/mtg
Frank Maggiore	Director, Division 5	December 2008	\$65/mtg

* Directors also receive medical and vision benefits

District meetings are open to the public. Meeting notices, agendas, and supporting documentation are posted at least 72 hours in advance at the District office. The District does not have a website.

6.11 Sphere of Influence Recommendations

The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 requires that LAFCO review and update the sphere of influence (SOI) for each of the special districts and cities within the county.²

As noted by the District, ECCID’s first priority is to provide agricultural water service. ECCID maintains a 1912 appropriative right to divert water from the Indian Slough on Old River. The District also has 10 groundwater wells. The District is providing irrigation water service for agricultural, landscape, recreation and construction uses, as well as drainage services. The District’s SOI is coterminous with its boundaries. The southeastern boundary is contiguous with the boundary of the Byron-Bethany Irrigation District (BBID). ECCID is currently providing water to the Roddy Ranch Golf Course in Antioch.

Four ~~Three~~ potential options are identified for the ECCID SOI:

- **Retain the existing SOI:** If LAFCO determines that the existing government structure is appropriate, then the existing SOI should be retained.
- **Expand the SOI to include potential new direct agricultural service areas:** In the recent past, the District has had discussions with property owners in three areas adjacent to the current district boundary regarding future direct agricultural or recreation and

² State of California Government Code Section 56425 et seq.

landscape service. These areas consist of the Dutra Ranch to the south, the Ceres Ranch to the northeast, and the Ginocchio Ranch to the west. The District has indicated that it has facilities available to serve these areas and expects to have sufficient water supply from its existing sources to provide that service. Serving these areas would be consistent with the District's stated purpose of providing agricultural water service.

- **Expand the SOI to include Roddy Ranch urban development:** If LAFCO determines it would benefit the region to have ECCID's water supply available within that area in the future, then expanding the District's SOI would be an option. The Roddy Ranch urban area lies within the boundaries of the Contra Costa Water District. Under the Water Sales Agreement between CCWD and ECCID, CCWD is entitled to purchase up to 8,200 acre feet of water from ECCID annually for use within the area that overlaps between the two agencies. The Roddy Ranch Reorganization Area is not within the overlap area. Based on current demand and growth within the current overlap area, CCWD is able to fully utilize its 8,200 acre-feet annual entitlement. However, if ECCID should make additional surplus irrigation water available for municipal and industrial purposes in the future, it would be in the interest of all CCWD customers to expand the area in which ECCID supplies could be used because of the high reliability of the supply. However, according to ECCID, CCWD has indicated that it will not need additional ECCID water for the Roddy Ranch urban area development.
- **Reduce the SOI:** If LAFCO determines that ECCID should serve less area and the services currently provided could be met more efficiently and cost-effectively by another agency, then reducing the District's SOI would be appropriate.

As discussed in *Section 6.9*, further study would be needed to determine the merits of consolidating ECCID and the Byron-Bethany Irrigation District, including which district would be the successor agency. The San Joaquin LAFCO is the principal LAFCO for BBID, and the Municipal Service Review for BBID has not been completed. Without the analysis of BBID's MSR, expanding ECCID's SOI to include BBID within Contra Costa County is not considered a viable alternative at this time.

SOI Recommendation

It is recommended that LAFCO retain ECCID's existing sphere of influence. The District has a reliable source of water supply, maintains its infrastructure, and has the resources to support additional infrastructure when needed. ECCID's primary purpose is to provide agricultural water service. However, expansion of ECCID's SOI to include additional agricultural lands would require further environmental analysis under CEQA. This is an option the District may pursue, and this MSR would serve as one of the resources for that analysis. Although expanding

the District’s SOI to include the Roddy Ranch urban development area is an option, CCWD does not anticipate needing this source of water supply to serve this area.

The analysis of SOI issues is included in *Table 6.7* below.

**Table 6.7
East Contra Costa Irrigation District SOI Issue Analysis**

Issue	Comments
SOI Update Recommendation	Retain existing SOI
Services authorized to provide	Irrigation water for agricultural, landscape, recreation and construction uses; untreated water for treatment and delivery for urban uses; agricultural land drainage
Existing and Planned Land Uses and Policies	The District has no land use authority. County and city plans include land uses and population growth that will need increased irrigation water services and untreated water supplies. A significant portion of the District’s service area has urban uses, and this is where future growth is expected to occur. The eastern portion of the District lies outside the County’s Urban Limit Line (ULL) approved in November 2006. The contract between Brentwood and ECCID requires that the two agencies cooperate in a joint effort to preserve agricultural lands within and surrounding the City’s boundary. County and city policies support the provision of adequate water service for residents and agricultural lands.
Potential effects on agricultural and open space lands	ECCID’s primary purpose is to serve agricultural irrigation needs. Therefore, the District’s services support the continued use of lands for agricultural purposes. No Williamson Act contracts would be affected.
Opportunity for Infill Development rather than SOI expansion	None. The District has no land use authority and has no control over the location of infill development.
Projected Growth in the Affected Area	Population is expected to increase by 17% over the next 23 years. There will be an increased need for irrigation and raw water services.
Services to be Provided to any areas added to the SOI	No areas would be added to the SOI
Service Capacity and Adequacy	The District is financially stable and has the capacity to continue to provide services within its boundaries. The District maintains a 1912 appropriative right to divert water at Indian Slough on Old River. This right is not subject to volume limitations imposed for regulatory purposes; however there are capacity limitations for the Main Canal. When considering service area expansion, the District evaluates the adequacy of the Main Canal to convey sufficient volume to serve the additional area without impacting existing customers. Landscape and recreation irrigation customers are responsible to install, operate, and maintain water conveyance facilities from the point of delivery to the property to be irrigated.

**Table 6.7
East Contra Costa Irrigation District SOI Issue Analysis**

Issue	Comments
Location of Facilities, Infrastructure and Natural Features like rivers and ridgelines	The District provides services within the eastern portion of Contra Costa County. The District offices are located in Brentwood. The District's diverts water into the Main Canal at Indian Slough on Old River. The Main Canal extends westward, with a grid of canals, ditches and pipelines serving the area.
Effects on Other Agencies	The District includes territory in the cities of Brentwood, Antioch, and Oakley, and unincorporated area. The District's southeastern boundary is contiguous with the northern boundary of the Byron-Bethany Irrigation District. The District's boundary is consistent with areas that benefit from the services provided and it does not conflict with the SOI of other agencies.
Potential for Consolidations or other Reorganizations when Boundaries Divide communities	The District's boundaries include a portion of incorporated areas within Antioch and Oakley, and there is some overlap with the boundaries of the Contra Costa Water District and with Diablo Water District. ECCID water must be used for beneficial purposes within the District's boundaries; therefore there are limitations on where the water is provided within these cities. The analysis included two government structure options: maintaining status quo and a reorganization with the Byron-Bethany Irrigation District. Reorganization would require further analysis.
Social or economic communities of interest in the area	The District was formed in 1926 to serve portions of eastern Contra Costa County. The District receives a portion of the 1% property tax. In addition, the City of Brentwood and Contra Costa Water District purchase surplus irrigation water from ECCID. Therefore, property owners within the area and ratepayers for Brentwood and CCWD have an economic interest in receiving services from this investment.
Willingness to serve	The District wishes to continue to provide services within its boundary and immediately adjacent agricultural lands.

6.12 Determinations

6.12.1 Growth and Population

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

ECCID serves an area that includes the City of Brentwood, the unincorporated community of Knightsen, portions of the Cities of Oakley and Antioch, and some unincorporated area south of Antioch and east of Brentwood. The current estimated population for this service area is 75,419.

The population is expected to reach 87,962 by 2030 with an average annual growth rate of 0.7 percent.

The District provides raw water for irrigation use on agricultural lands and landscapes such as golf courses. In addition, the District has entered into agreements with the Contra Costa Water District and City of Brentwood to sell surplus irrigation water that is then treated for Municipal and Industrial use. Given the continued agricultural uses, current level of urbanization and expected growth within the District's boundaries, there will be an increased need for the services provided by the District in the future.

6.12.2 Infrastructure Needs or Deficiencies

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

ECCID has a 1912 appropriative right to divert water from the Indian Slough on Old River. There is no requirement to obtain permission to exercise the right from any governmental authority, and this water right is not subject to delivery reductions during water shortages including regulatory-restricted and drought years. Per the terms of a 1981 contract with the State and the Department of Water Resources, pumping may not exceed 250 cubic feet per second. The District also has wells that produce groundwater. The ability to serve additional area is limited by the capacity of the infrastructure to deliver the water; however, the District has the resources to support additional infrastructure.

The District's water system infrastructure includes wells, pump stations and a conveyance system of canals, ditches, and pipelines. Water is conveyed through the Main Canal for delivery to agricultural accounts. For non-agricultural accounts, the District provides a single delivery point to each customer and the customer is responsible to install, operate, and maintain water conveyance facilities to the property to be irrigated.

The District is providing adequate, reliable service. Infrastructure needs or deficiencies are addressed through the District's operations, maintenance and capital improvement plans. The District provides ongoing maintenance of its system and, to the extent possible, constructs its capital improvement projects outside the agricultural irrigation season.

6.12.3 Financing Constraints and Opportunities

Purpose: To evaluate a jurisdiction's capacity to finance needed improvements and services.

ECCID's primary sources of revenue are property taxes and water sales; the major expenses are administrative, maintenance, and operations. Because the District has a 1912 appropriative water right and pumps groundwater, the District has no water purchase costs. The District

receives a portion of the one-percent property tax. The District is financially stable with significant reserves and no long term debt.

6.12.4 Cost Avoidance Opportunities

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

ECCID avoids costs by setting the irrigation season dates to coincide with sufficient demand. In addition, the District schedules system maintenance and repairs outside the irrigation season. In addition, the District is using cost control measures particularly with respect to power costs for pumps and wells by purchasing electric power from the Western Area Power Administration through their power marketing program.

6.12.5 Opportunities for Rate Restructuring

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

ECCID updates its rates annually, based on the projected cost to provide service. The District considers the rates of other agencies in the region providing similar service to ensure there is some market relationship in order to control demand.

The water rates for the contracts with CCWD and the City of Brentwood are set per the terms of each contract. The rates for CCWD and Brentwood adjust every five years.

6.12.6 Opportunities for Shared Facilities

Purpose: To evaluate the opportunities for a jurisdiction to share facilities and resources to develop more efficient service delivery systems.

ECCID shares facilities by providing rights to surplus water to CCWD and the City of Brentwood. The District also provides irrigation water for landscape, recreation, and construction uses, offsetting demand for potable water that would have to be supplied by another agency.

There is an opportunity to share facilities through conservation programs for both agricultural and landscape customers. Given the critical water conditions within California and the issues in the Delta, the District should explore opportunities to use its financial resources to support the Contra Costa Resource Conservation District's programs and to partner with CCWD and Brentwood on landscape conservation programs.

6.12.7 Evaluation of Management Efficiencies

Purpose: To evaluate management efficiencies of the jurisdiction.

ECCID is managed by a General Manager who operates under the direction and oversight of an elected Board of Directors. The District's *Rules and Regulations Governing Water Service and District Facilities* provides policy and guidance for staff.

6.12.8 Government Structure Options

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

ECCID holds the 1912 appropriative water right that provides a significant water supply for eastern Contra Costa County. Water that is diverted under this right must be used for beneficial purposes within the District's boundaries. As an irrigation district, the District's primary purpose is to serve the irrigation needs of agricultural properties. Two government structure options were identified:

Maintain the status quo: The District is providing adequate service, maintains its infrastructure, and is financially sound. The benefits of this option are continuation of service and economies, which benefit water service providers that serve potable demand.

Consolidate with the Byron-Bethany Irrigation District: The Byron-Bethany Irrigation District's (BBID) northern boundary is contiguous to the southeastern boundary of ECCID. The two districts are providing similar service for both agricultural and urban lands. The benefits of this option are potential economies of scale and cost reductions related to election costs and board expenses. The disadvantages of this option include potential increased operational costs and loss of efficiency. Additional study would be required to determine any impacts to water rights, the costs, and level of benefit for this option.

6.12.9 Local Accountability and Governance

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

ECCID is governed by a five-member Board of Directors, elected by the voters within each division. The District meets monthly at the District offices in Brentwood; meeting notices, agendas, and staff reports are posted 72 hours in advance at the District office. Meetings are open to the public.

The District does not have a website. The District should pursue establishing a website to provide information regarding the District's purpose, services, financial condition, and governance along with information on resources that would assist its customers in managing water use more efficiently.