Border Environment Cooperation Commission
Imperial Irrigation District
Water Conservation Improvement Project

General Criteria

1. **Project Type**

The project falls under the Border Environment Cooperation Commission (BECC) priority area of water conservation. The proposed project consists of repairing deteriorated existing lined canals.

2. **Project Location**

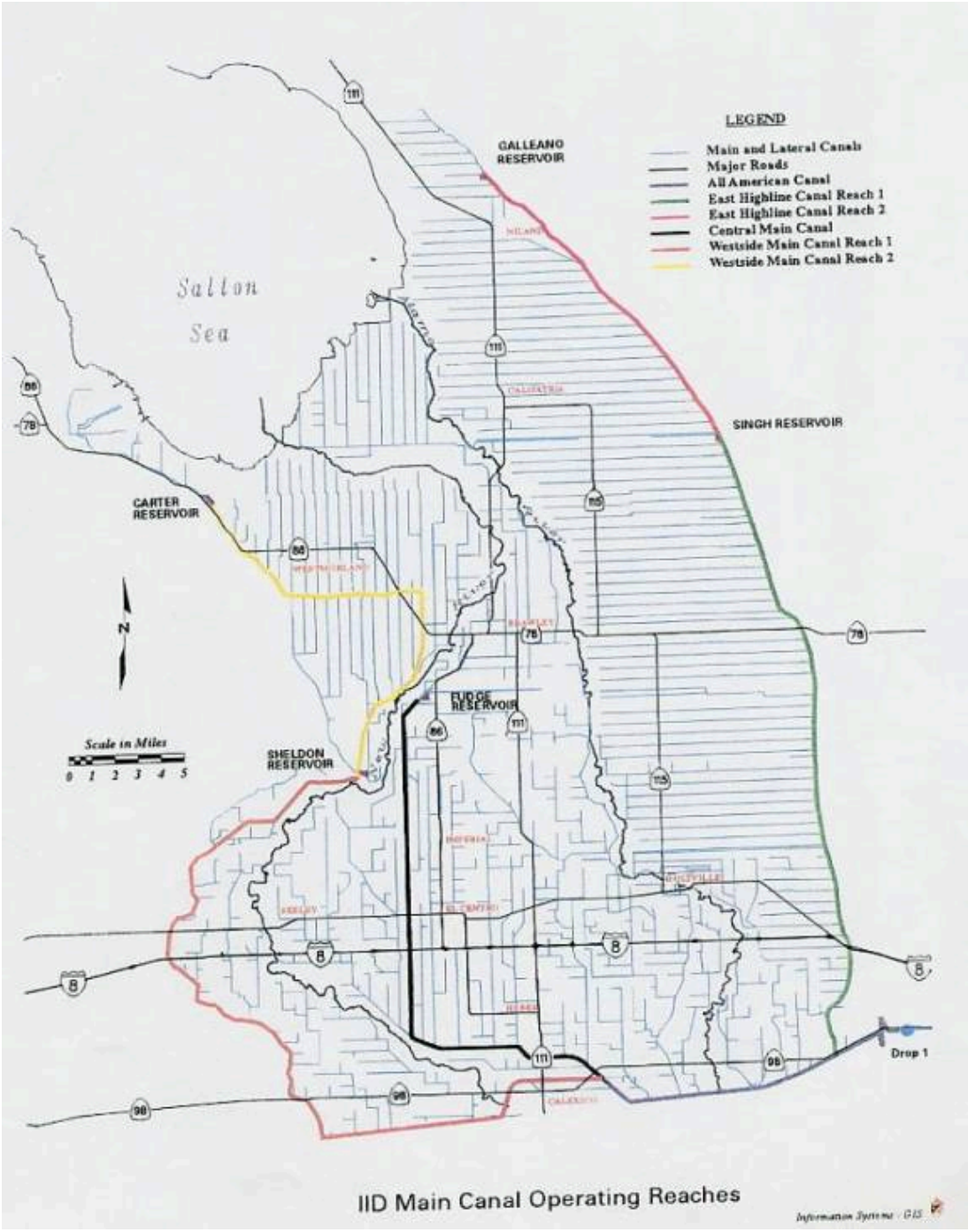
The Imperial Irrigation District (IID) is a community-owned utility that provides irrigation water and electric power to the lower southeaster portion of California's desert. The IID was formed in 1911, under a state charter, to acquire properties of the bankrupt California Development Company, which had been diverting water to the Imperial Valley via the Alamo Canal since 1901. By 1922, the IID had acquired 13 mutual water companies that developed and operated the distribution canals. In 1928, the Boulder Canyon Project Act authorized the construction of the Imperial Dam and the All-American Canal and in 1942 the Canal became the only water source for Imperial Valley. The All-American Canal has been utilized by the Imperial Valley for delivery of water since 1942. The canal is approximately 82 miles in length and delivers water from the Imperial Dam on the Colorado River west to the agricultural fields and cities of Imperial Valley.

The IID is governed by a five member Board of Directors. Each member is elected, by qualified electors, from a separate geographical division of the District to serve a four year term. The critical functions of the IID are defines as 1) the diversion and delivery of Colorado River Water; 2) operation and maintenance of the drainage canals and facilities; and 3) generation and distribution of electricity.

The IID, its partners in conservation and member farms have invested $613 million dollars over the last 50 years to improve water use efficiency. Water conservation measures have included concrete lining of canals and laterals, construction of reservoirs and interceptor canals, implementing canal seepage recovery programs and additional irrigation management measures. Since 1988, the IID has entered into water conservation and transfer agreements with the Metropolitan Water District of Southern California and the San Diego County Water Authority.

Approximately 3.1 million acre-feet of Colorado River water is diverted via the American Canal by the IID. The water is delivered to nine cities and 500,000 acres of agricultural land in Imperial Valley. The District maintains an extensive drainage system with ten reservoirs and total capacity exceeding 3,300 acre-feet of water.

The following map presents the location of the area served by the IID:



3. Project Description and Work Tasks

The IID seeks to certify a water conservation project valued at $5,000,000 dollars. The IID maintains over 1,100 miles of concrete lined canals, many of which were constructed over 40 years ago. The project consists of rehabilitating 23.25 miles of existing lined canals that have developed cracks. In many locations the seepage rate in the areas of damaged concrete lining has been observed to be greater than the original unlined canals. Replacement of the concrete at these locations will not only alleviate the seepage but will minimize erosion along the canal banks. The proposed project will be completed in a time frame of 3 years, starting in 2004 and concluding in 2006.

4. Conformance with International Treaties and Agreements

The International Boundary and Water Commission (IBWC) is an independent bi-national public organization that ensures implementation of the 1944 Water Treaty between the United States and Mexico related to water and boundary issues. The projects do not violate the allocation of water rights. The IID will continue to meet all state surface water diversions from the Colorado River in accordance with the agreements in place and the restrictions of the Treaty.

Human Health and Environmental

1. Human Health and Environmental Need

The proposed projects address one of the most pressing problems facing the Colorado River, i.e., water shortages due to drought over the past years and an increasing demand due to population growth in California, Nevada, and Arizona. Water conservation reduces the impact of drought conditions and makes available additional water resources that would otherwise be lost to meet both domestic and agriculture demands. This is especially important in light of the federally imposed water conservation on California's water use. The project addresses the critical water shortages by reducing water losses through canal rehabilitation.

The proposed project will allow water savings of 2,835 acre-feet per year in a period of 35 years. Taking into account the 35 years of water savings, and the total cost of the project, each acre-foot of water saved costs $50.50.

2. Environmental Assessment

A Categorical Exclusion was granted to the IID under the California Environmental Quality Act (CEQA) on April 2003. A categorical exclusion applies to the project since the improvements will be performed on already impacted areas.

The project will provide a benefit to the environment by saving water that would otherwise seep through the ground. No impacts are anticipated due to implementation of the project.

3. Compliance with Environmental and Cultural Resource Laws and Regulations

The State of California has granted the appropriate environmental permits for the project. The project will not have any impacts to cultural, historical, or archaeological resources in the area.

Technical Feasibility

1. Appropriate Technology

The Canal Improvement Project consists of canals selected based on evaluations of a combination of their existing conditions, maintenance needs, and operational constraints.

Since the project consists of repairing cracks along the lined canals, no alternatives were considered. However, the no action alternative is not feasible if the goal of the project is to conserve water by preventing infiltration to the subsurface through the canal cracks.

Detailed plans and specifications are being developed for the projects to be rehabilitated under the water conservation project.

The following table presents the schedule for repairs:

Task Name	Duration	Start	End	Actual Cost	Canal Section	Miles
Orchid Lateral	10 days	Mon 2/9/04	Fri 2/20/04	$387,000	Delivery 6B to 8	1.75
Oxalis Lateral	5 days	Mon 3/1/04	Fri 3/5/04	$114,000	Delivery 6 to 7	0.50
Osage Lateral	5 days	Mon 4/12/04	Fri 4/16/04	$170,000	Delivery 7 to 8	0.75
Narcissus Lateral	5 days	Mon 5/3/04	Fri 5/7/04	$114,000	Delivery 9 to 10	0.50
Nutmeg Lateral	5 days	Mon 6/21/04	Fri 6/25/04	$232,000	Crossover to Delivery 10B	1.00
"C" Lateral	5 days	Mon 7/19/04	Fri 7/23/04	$114,000	Delivery 13 to 15	0.50
Eucalyptus Canal	5 days	Mon 8/23/04	Fri 8/27/04	$62,000	Gate 46 to 45C	0.25
North Date Canal	5 days	Mon 11/1/04	Fri 11/5/04	$62,000	Aten Road to U/S 1/4 mi.	0.25
Alder Lateral 5	5 days	Mon 12/6/04	Fri 12/10/04	$128,000	1/2 mi. S. of McCabe Road	0.75
Elder Later 2	5 days	Mon 12/13/04	Fri 12/17/04	$52,000	1 mi. W. of Forrester Road	0.25
2004 Totals	55 days	Fri 1/2/04	Fri 12/31/04	$1,435,000		6.50

Task Name	Duration	Start	End	Actual Cost	Canal Section	Miles
2005						

"D" Lateral	5 days	Mon 2/14/05	Fri 2/18/05	$114,000	Delivery 18 to Weist Road	0.50
"I" Lateral	5 days	Mon 3/7/05	Fri 3/11/05	$114,000	Delivery 40 to 42	0.50
"N" Lateral	5 days	Mon 4/11/05	Fri 4/15/05	$288,000	Delivery 22 to 29	1.25
"N" Lateral	5 days	Mon 4/18/05	Fri 4/22/05	$57,000	Delivery 31 to 32	0.25
"Z" Lateral	10 days	Mon 5/23/05	Fri 6/3/05	$412,000	Heading to Delivery 7	1.75
Trifolium 12 Lateral	10 days	Mon 6/13/05	Fri 6/24/05	$114,000	Delivery 124 to Highway 86	0.50
Acacia Lateral 4	5 days	Mon 7/18/05	Fri 7/22/05	$128,000	Delivery 34 to 36	0.75
Pear Main Canal	5 days	Mon 11/7/05	Fri 11/11/05	$52,000	E. of Miller Road	0.60
Pear Lateral 9	5 days	Mon 11/14/05	Fri 11/18/05	$41,000	1000 W. of Westside Road	0.40
South Alamo Lateral 12	5 days	Mon 12/5/05	Fri 12/9/05	$114,000	Heading to 1st Check	0.50
Fern Canal	5 days	Mon 12/12/05	Fri 12/16/05	$232,000	On Vaughn Road	1.00
2005 Totals	260 days	Mon 1/3/05	Fri 12/30/05	$1,666,000		8.00

Task Name	Duration	Start	End	Actual Cost	Canal Section	Miles
2006						
Trifoilum Ext. Lateral 7	10 days	Mon 2/13/06	Fri 2/24/06	$340,000	Delivery 74 to Spill	1.5
Orita Lateral	5 days	Mon 3/20/06	Fri 3/24/06	$114,000	Delivery 23 to 25	0.5
Nettle Lateral	5 days	Mon 4/3/06	Fri 4/7/06	$232,000	Delivery 6 to 8	1
"E" Lateral	10 days	Mon 5/8/06	Fri 5/19/06	$340,000	Heading to Delivery 7	1.5
Trifoilum 13 Lateral	5 days	Mon 6/19/06	Fri 6/23/06	$114,000	Delivery 248 N.	0.5
Osage Lateral	5 days	Mon 7/10/06	Fri 7/14/06	232000	Delivery 7 to Butters Road, (1.00 mi.)	1
Malva Lateral 1	5 days	Mon 8/7/06	Fri 8/11/06	232000	N/A, (1.00 mi.)	1
East Highline Lateral 2	5 days	Mon 11/6/06	Fri 11/10/06	62000	Heading to 1/4 mi. D/S, (.25 mi.)	0.3
East Highline Lateral 13A	5 days	Mon 11/13/06	Fri 11/17/06	26000	Heading to 100 yds. D/S, (.25 mi.)	0.3
East Highline Lateral 1B	5 days	Mon 11/27/06	Fri 12/1/06	$114,000		0.5
Pear 9th Street Ditch	5 days	Mon 12/4/06	Fri 12/8/06	114000	Gate 30A to end, (.50 mi.)	0.5
2006 Totals	245 days	Mon 1/2/06	Fri 12/8/06	$1,920,000		8.5

2. Operation and Maintenance Plan

The IID main canals are operated through the Water Control Center (WCC), located at the IID headquarters in Imperial, California. Each Wednesday WCC staff prepares a master water order for the upcoming week (Monday through Sunday) and submits the order to the Bureau of Reclamation (BOR). The master order is based on the IID Watermaster's judgement and historical deliveries. The master order can be, and typically is, modified according to trends in water orders, weather conditions and other factors. Master schedule modifications require four days of advance notice to the BOR.

Three decentralized divisions operate the lateral canal distribution system. Divisions receive water orders from growers, consolidate the orders and submit them to the WCC daily at noon for development of the next day's operating plan. Because total available flow for the upcoming operational day is fixed according to the modified master schedule, demand for water and available supply typically do not match. If demand exceeds supply, orders are carried over to a future operating day, usually no more than two days beyond when the water is desired. By shifting water orders forward and backward this way, daily demand for water is matched to the available supply from the Colorado River. Storage levels in main canal regulating reservoirs are also adjusted to help balance supply and demand discrepancies.

Despite the intent to balance each day's supply with demand, a number of operational factors can cause differences between actual supply and demand within the system. Influential factors include variances between water orders and actual demand due to farmers reducing or shutting off delivery early, changes in canal losses from day to day; measurement of operator error in distributing flows, and other factors. Drawing water from or putting water into main canal regulating storage reservoirs accommodates mismatches between actual demand and supply. The extent to which water deliveries are made both reliably and flexibly while minimizing operational spillage depends primarily on the volume of regulating storage available in the system and the ability to move flow changes smoothly through the canals to the reservoirs.

The IID's main canal system is segmented into six operating reaches defined by the location of the regulating reservoirs. The reservoirs absorb flow mismatches from the main canal reach upstream and allow delivery of scheduled flows into the next reach downstream. The six operating reaches, along with their associated regulating reservoirs, are listed below:

a. All-American Canal, Drop 1 to Central Main Canal Check, pool upstream of the check serves as a small regulating reservoir;
b. East Highline Canal Reach 1, Singh Reservoir;
c. East Highline Canal Reach 2, Galleano Reservoir;
d. Central Main Canal, Fudge Reservoir;
e. Westside Main Canal Reach 1, Sheldon Reservoir;
f. Westside Main Canal Reach 2, Carter Reservoir.

The operational procedures described above constitute an upstream canal control process, where scheduled water deliveries are released into canals and routed from upstream to downstream according to the operations schedule. The objective at flow control locations, such as main canal and lateral headings, is to maintain scheduled deliveries. Between flow control locations, the objective is to use check structures to maintain a targeted water level.

3. Compliance with Applicable Design Standards and Regulations

A Registered Professional Engineer in the State of California will complete the design of the project. The project will be designed according to standard engineering practices.

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Financial Feasibility and Project Management

1. Financial Feasibility

Brown and Caldwell was contracted to perform a financial feasibility analysis on the IID. The results of the evaluation are presented below:

The District provided seven Fiscal Years of excerpts from financial statements for this evaluation beginning with the fiscal year that ended on December 31, 1996. Evaluation of the financial statements is summarized in the following sections – revenues and expenditures, and fund balances. The evaluation includes the pro forma projection of cash flows for Fiscal Years 2003 – 2007. Tables that summarize cash flows for Fiscal Years 1996 – 2007 are part of the financial analysis. Ending balances for Water Fund cash accounts and audited accounts are part of the financial analysis. The financial analysis is part of the project binder and is available for review.

The total cost of the proposed project is $5,012,000 and will be financed by the NADB Water Conservation Investment Fund (WCIF) and a contribution by the IID. The following table presents the financial structure for the project.

Funding Source	*Amount ($)*	*Percent of Total*
NADB – WCIF	*2,506,000*	*50%*
Imperial Irrigation District	*2,506,000*	*50%*
TOTAL	*5,012,000*	*100%*

Revenues and Expenditures

For the year ending December 31, 2002, the District had total revenue from water operations of about $50,649,000, from the sources shown in Table 1. Historical and projected revenue for Fiscal Years ending December 31, 1996 though 2007 are shown in Figure 1 (see page 11.)

Table 1. Year 2002 Revenue Sources

Revenue Source	*Amount ($)*	*Percent of Total*
Water Sales	*44,628,680*	*88%*
Water Availability	*2,023,543*	*4%*
Use of All-American Canal	*3,996,700*	*8%*

For the year ending December 31, 2002, the District had total expenditures on water operations of about $49,844,000, from the items shown in Table 2. Historical and

projected expenditures for Fiscal Years ending December 31, 1996 though 2007 are shown in Figure 2 (see page 11.)

Table 2. Year 2002 Expenditures

Expenditure Item	*Amount ($)*	*Percent of Total*
O&M American Canal	*3,559,144*	*7%*
O&M Irrigation System	*36,147,576*	*73%*
Administrative	*5,893,134*	*12%*
Interdepartmental Power Sales	*1,459,505*	*3%*
Interest expense	*2,784,328*	*6%*

Fund Balances

The District provided two different summaries of ending balances for Water Fund accounts. A summary of cash accounts listed five operating accounts and nine other accounts. A summary of audited water accounts listed five separate accounts, which includes both operating and other accounts. Ending balances for water cash accounts and audited accounts are shown in the financial analysis.

During Fiscal Years ending December 31, 1996 though 2002, the ending balance for Water Fund operations cash accounts normally ranged from about $8.5 million to $13.0 million. In 2000, the ending fund balance was about negative $6.2 million. The large negative balance in that year was attributable to a transfer to reserves related to water rights. These expenses were reimbursed the following year.

Beginning in 1990 and continuing through 1994, according to the terms of a transfer agreement between the District and the MWD, the District received $23 million for mitigation. The amount was then split into two separate accounts - one for pipe lining and one as a mitigation reserve. Throughout the years, the District has borrowed from these accounts for operation expenses thus reflecting an unrestricted reserve that may be used to supplement the Water Fund operations cash account balances.

The District intends to fund the canal lining project cash contribution of $2.5 million from its Water Fund operations cash accounts. The projected ending balances for the District's operations cash accounts should remain above $14 million during construction of the project and the following three years.

Figure 1. Historical and Projected Revenue

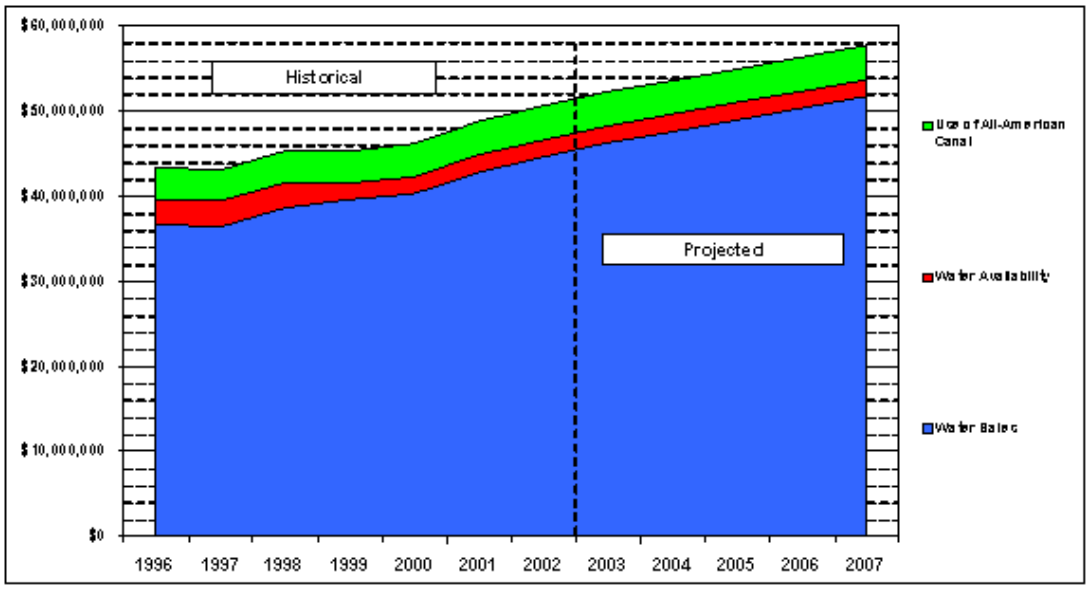
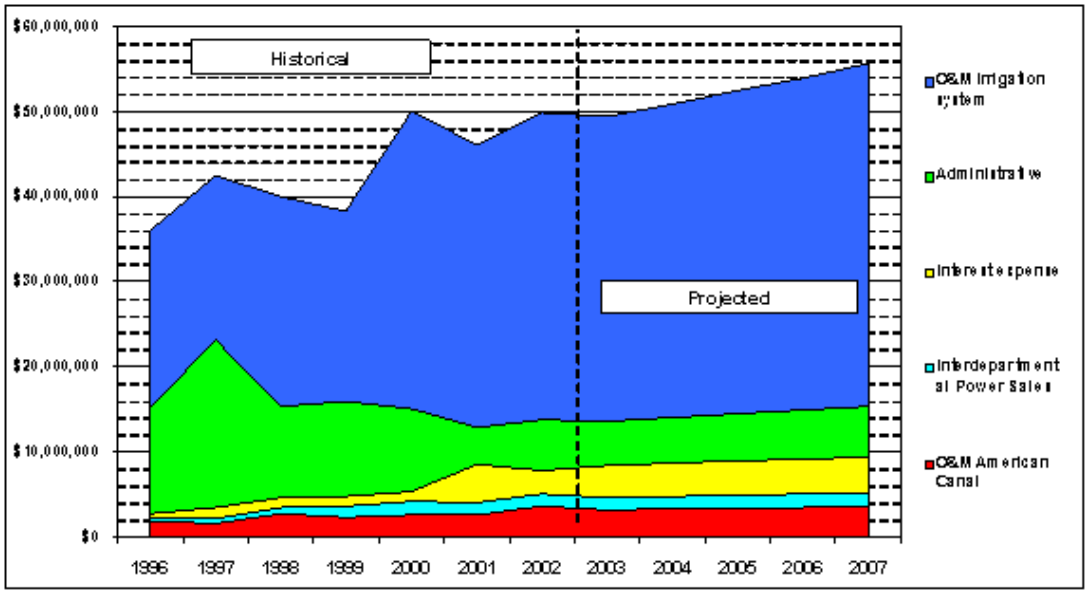


Figure 2. Historical and Projected Expenditures



Based on the evaluation performed by Brown and Caldwell, the IDD has the capability of providing funds in addition to the Water Conservation Investment Fund to complete the proposed water conservation project.

2. User Fees

The user fees charged by the IID for water use are $16 dollars per acre-foot for the first 6 acre-feet of water per each acre of land. If the users require between 6 and 8 acre-feet of

water per acre of land, the cost per acre-foot of water is $32 dollars. If the user requires water in excess of 8 acre-feet per acre of land, the charge per acre-foot is $64 dollars.

3. Project Management

The project will be managed by the IID staff.

Public Participation

1. Comprehensive Public Participation Plan

Initial contacts with the sponsor in early July led to the Yuma County Water Association and project steering committee to the submittal and approval of the project's public participation plan on July 31, 2003. The following elements are proposed in the plan to comply with BECC requirements.

2. Steering Committee

The steering committee members are Kelly Hughes and Mike Britain, Board Members of the Yuma County Water Users' Association; Larry Suciu, Attorney for the Association; Harold Maxwell, of the Yuma Farm Bureau; Roger Gingrich, City of Yuma Public Works; Terre Allen, Gowan Company; Barry Bequette, University of Arizona Cooperative Extension; Ken Rosevear, Yuma County Chamber of Commerce; Kurt Nolte, Arizona Western College Agricultural Director; Joyce Lobeck of the Yuma Daily Sun newspaper. The steering committee formation meeting was held on July 31, 2003.

3. Local Organizations

Presentations are scheduled before the Yuma County Water User's Association Board, the Natural Resources Conservation Service, the US Bureau of Reclamation, and the Cities of Somerton and Yuma.

4. Public Information

The Preliminary Engineering Report and draft Project Certification Document for the project have been available thirty days prior to the first BECC public meeting. The documents have been available during and after regular business hours (24-hours per day) at the Yuma County Water Users' Association Offices, in Somerton, Arizona. Fact sheets that include basic information on the project such as, technical, environmental, financial and public participation components of the project have been developed to be made available to local organizations and been available at the Yuma County Water Users' Association.

5. Public Meetings

Public meetings have been scheduled for August 25 and 28, 2003 at the Yuma County Water Users Association office in Somerton, Arizona.

Sustainable Development

1. Definition and Principles

The project complies with BECC's definition of Sustainable Development: "*Conservation oriented social and economic development that emphasizes the protection and sustainable use of resources, while addressing both current and future needs, and present and future impacts of human actions.*" *The project will positively impact the area and sustainable life of the area's residents through the conservation of water which is becoming a scarce resource and critical for sustainability of life and economic growth. Through elimination of water loss through seepage, the project provides a positive impact on the overall environment by conserving and effectively using a limited water supply resource. Local residents will benefit from better agricultural yields within a sustainable development framework and from a better quality of life within a mature conservation scheme, being careful not to compromise water and soil resources for the future, considering that modernization and technical improvements within the District's operational system provide a net positive effect. The required public review process ensures that residents in the influence areas of the project participate in the development process fully aware that the decisions they make will focus on the sustainable management of environmental resources to achieve a better environmental and socio-economic improvement in their community.*

2. Institutional and Human Capacity Building

The Water Security, Clean Drinking Water, Coastal and Beach Protection Act (Water Code Section 79500 et seq.) authorizes the California Department of Water Resources (DWR) to provide grants for canal lining and related projects necessary to reduce Colorado River water use pursuant to the California Colorado River Water Use Plan adopted by the Colorado River Board of California. The objective of the grants is to invest in projects that further the ability of all Californians to live within California's basic apportionment of 4.4 million acre-feet per year of Colorado River water pursuant to the Colorado River Water Use Plan.

The Agricultural Water Conservation Program of the Safe Drinking Water, Clean Water, Watershed Protection and Flood Protection Act (Water Code Section 79157 et seq.) authorizes the California Department of Water Resources (DWR) to make loans to local public agencies and incorporated mutual water companies to finance feasible, cost effective agricultural water conservation projects or programs to improve water use efficiency. Up to $5 million is available for each capital outlay project. A total of $9 million is available for projects during this funding cycle.

Eligible projects may include, but are not limited to:

- *Lining or piping of ditches*
- *Automating canal structures*
- *Improvements to water distribution system controls*
- *Tailwater or spill recovery systems*
- *Major improvements or replacement of leaking distribution systems*
- *Purchasing and installing water measurement devices*
- *Capital improvements for on-farm irrigation*

The Department of Water Resources, with other State and federal agencies, local water and irrigation districts, resource conservation districts, educational and research institutions, growers, consultants, and others, is finding cost-effective ways to manage irrigation drainage water efficiently without harming agricultural production. The goal is to reduce drainage water at the source - the farm - while maintaining a salt balance in the root zone sufficient to maintain productivity. This is being done partly by on-farm demonstration and study projects where state-of-the-art irrigation and drainage management practices are used. As a result, more growers and local agencies are improving their irrigation and drainage management practices to control the drainage problem.

Over the past 50 years, the Imperial Irrigation District (IID), its conservation partners and member farms have invested $613 million (1996 dollars) to improve water use efficiency. Water conservation measures have included concrete lining of canals and laterals, construction of reservoirs and interceptor canals, implementing canal seepage recovery programs and additional irrigation management measures.

In December 1988, the IID and the MWD entered into a water conservation agreement that allowed MWD to invest in water conservation measures in the Imperial Valley in exchange for use of the conserved water. This historic water conservation and transfer agreement between the IID and MWD has been praised as a model of cooperation between agriculture and urban centers in stretching California's limited water resources.

MWD financed the construction, operation and maintenance of the selected projects at a total project cost of $233 million (1988 dollars). The program included structural and nonstructural conservation measures that can be grouped into seven categories: Canal concrete lining, regulatory reservoirs, 12-hour deliveries, non-leak gates, system automation, lateral interceptors and on-farm irrigation water management. These conservation projects in Imperial Valley will save approximately 106,000 acre-feet of water annually. This water is now available to MWD.

California's "4.4 Plan" is an ongoing effort to reduce California's use of Colorado River water to 4.4 million acre-feet per year. The plan is so named because California is only entitled to take 4.4 million acre-feet of water from the river each year, but regularly exceeds its allocation by about 20 percent.

As a result of California exceeding this current allotment, the Imperial Irrigation District and the San Diego County Water Authority approved in 1998 a water transfer agreement for the long-term transfer of 200,000 acre-feet of conserved water from the Imperial Valley to San Diego.

The Imperial Irrigation District (IID) and the San Diego County Water Authority (SDCWA) have approved an agreement for the long-term transfer of conserved water from the Imperial Valley to the San Diego region. Under this approved agreement, IID and its agricultural customers would conserve water and sell it to the SDCWA for at least 45 years. Either agency may extend the contract for another 30 years beyond the initial term.

Deliveries in the first year of the contract would total 20,000 acre-feet and increase annually in 20,000 acre-foot increments until they reach a maximum of 200,000 acre-feet. The two agencies may agree to transfer an additional 100,000 acre-feet per year after year ten. This water transfer agreement encompasses voluntary conservation by Imperial Valley

farmers and expressly prohibits land fallowing (retirement of farmland) to produce water for transfer. Should there ever be a water shortage along the Colorado River, the IID and the SDCWA would share declared shortages proportionately.

The SDCWA would pay an amount for the water that equals the cost of conserving the water plus an incentive to encourage participation by Imperial Valley farmers. The water's price reflects considerable effort by the IID and the SDCWA to confirm the cost of on-farm conservation measures, including systems to capture and reuse water and lining earthen irrigation canals. IID expects to invest $295 million from the SDCWA in water conservation programs through the year 2011.

The NADB WCIF will complement, with grant funds, the capital investments required by the District for the rehabilitation of 23.25 miles of canals. The use of WCIF grant funds allows the District to fully finance and improve its infrastructure in order to reduce water conveyance losses.

The projects will be managed by the District and will be constructed and operated in conformance with Federal, State and NADB requirements. The process for the development of the projects has followed a planning and public participation process that developed alternatives and associated costs, solicited public input, established priorities based on input of the stakeholders and proceeded according to the priorities established in the planning process.

3. Conformance with Applicable Local and Regional Conservation and Development Plans

The project is in conformance with the California water Plan Update 2003, which recommends agricultural water conservation through the improvement of Irrigation District's water management practices.

The project is also in conformance with local conservation efforts already developed by the District and served communities. Conservation of water is stressed and penalties are assessed for the overuse of water. The municipalities served by the District have their own water conservation plans. The IID regulations and plan are:

i. Imperial Irrigation District 2002 Agricultural Water Management Plan, approved by the District's Board of Directors in 2002.

ii. Rules and Regulations Governing the Distribution and Use of Water, approved by the District's Board of Directors in 1987.

4. Natural Resources Conservation

The proposed project was developed in order to reduce seepage water losses in 23.25 miles with the replacement and/or rehabilitation of existing lined canals, with some sections up to 40 years old. The District consists of 477,920 acres of irrigated area. The IID has a "present perfected right to 2.6 million acre-feet of water annually. In times of shortage, present perfected rights must be satisfied first.

The IID diverts and distributes water from the Colorado River to nine cities, and provides water to 6,174 agricultural users. The District consists of 230 miles of main canals, 1,438 miles of canals and laterals, and 1,406 miles of drainage ditches in the Imperial Valley.

According to the "Main and lateral Canal Concrete Lining Verification Summary Report", elaborated by Conservation Verification Consultants for the Imperial Irrigation District, under the Water Conservation Agreement between the IID and the Metropolitan Water District of Southern California; the implementation of the project will allow an estimated water savings of 2,823 acre-feet/year. The expected water savings per mile of lined canal is 121.41 acre-fee/year, as result of the reduction of seepage in the improved areas.

Besides water conservation, the District through its Biological Control Section produces a special variety of fish (Triploid Grass Carp) to control hydrilla, the aquatic weed which is the number one aquatic weed problem in the world today because its ability to grow up to 10 inches a day during the peak growing season and the lack of effective techniques to control it. The dense, tangled mats of hydrilla can totally clog and restrict irrigation and drainage channels.

5. Community Development.

Water conservation projects will enable farmers to maintain current agricultural production, while transferring conserved supplies to SDCWA. Imperial Valley farmers produce more than $1 billion annually in agricultural products from almost 480,000 cultivated acres.

This project not only helps California to live within its water allocation, but also benefits the economy in the Imperial Valley while providing a more reliable water supply for San Diego.

Documents available related to the Imperial Irrigation District Water Conservation Improvement Project :

- *Financial Analysis*
- *Baseline Conditions report*
- *Categorical Exclusion*
- *Public participation report*
- *Conceptual design*