

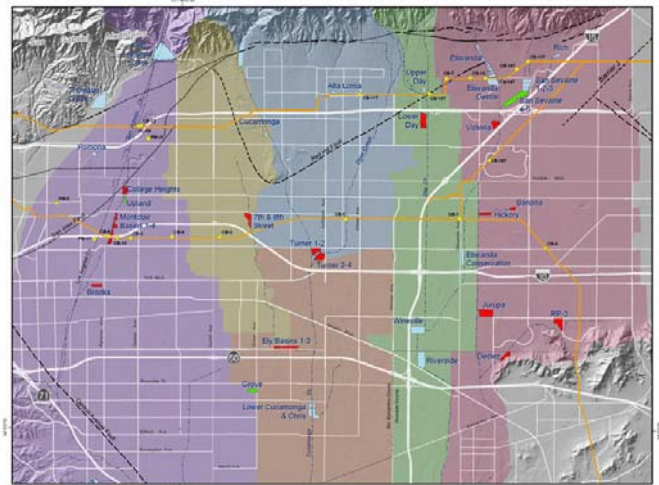
NOVEMBER 2007

PHASE II CHINO BASIN FACILITIES IMPROVEMENT PROGRAM

Program Description

The Chino Basin Facilities Improvement Program (CBFIP) is a joint effort of the Chino Basin Watermaster (CBWM), the Chino Basin Water Conservation District (CBWCD), the Inland Empire Utilities Agency (IEUA), and the San Bernardino County Flood Control Department (SBCFCD). This Program, winner of The American Society of Civil Engineers (ASCE) project award, will increase the annual recharge of storm, imported, and recycled water to the Chino groundwater basin and reduce long-term maintenance costs. Phase II of the CBFIP comprises:

- Construction of new monitoring wells and lysimeters to monitor recharge operations
- Upgrading the capacity of MWD turnout CB-14 on the Rialto Feeder
- Construction of a new turnout on the Rialto Feeder (CB-20) to provide imported water to 8th Street Basin
- Improvements to conservation berms at four storm water retention basins to increase recharge of storm water
- Improvements to the SCADA system to improve operation of the recharge facilities
- Development of equipment for cleaning the basins without dewatering and drying basins.



All Phase II improvements, with the exception of the Phase 2A work, are currently in the design stage. Construction of the Phase 2A monitoring wells and lysimeters is nearing completion.

Key Highlights:

- Improvements will capture an additional 2,000 AF of storm water annually for recharge to the Chino Groundwater Basin.
- Improvements will result in lower maintenance costs for the berms.

Project Purpose:

The purpose of the project is to expand the storm, recycled and imported water recharge capacity, which increases annually the overall replenishment of the Chino Basin.

Project Participants:

- Inland Empire Utilities Agency (Contracting Agency)
- Chino Basin Watermaster
- California State Department of Water Resources

Project Team:

- Design: Kennedy/Jenks Consultants, Wildermuth Environmental, Inc.
- Project Management: IEUA
- Construction Management: IEUA
- Construction Inspection: Wildermuth Environmental, Inc.

Phase 2A - Monitoring Wells and Lysimeters

(Budget \$1,726,000)

Phase 2A work includes six monitoring wells and four lysimeters. The monitoring wells were installed at RP-3 Basin, Declez Basin, Eight Street Basin (2), and Brooks Basin (2). Lysimeters were installed at RP-3 Basin, Declez Basin, Eight Street Basin, and Brooks Basin.

- Wildermuth Environmental, Inc. provided design and construction inspection for this phase
- Construction Completion: Completed
- Data Report/As-Builts: September 30, 2007



Lysimeters at 8th Street Basin

Phases 2B, 2C, 2D and 2F (Bid Packages A and C)

Phases 2B, 2C, 2D, and 2F comprise SCADA Improvements, a new MWD Turnout (CB-20), expansion of MWD Turnout CB-14, and the relocation of the CB-14 existing pipeline. Construction of these facilities will be by three Bid Packages, A and C. Package A includes 1) procurement of the high performance butterfly valves to be installed on the Rialto Feeder outlets at MWD turnouts CB-14 and the CB-20, and 2) installation of the shutoff valve man-holes and shutoff valves. The budget for Package A is \$250,000 including the pre-purchase of the valves (\$107,000). Package C includes the remainder of the work under these Phases, including the relocation of the CB-14 discharge structure. The budget for Package C is \$6,623,000.

- *Completion of Valve Procurement (Package A): January 14, 2007*
- *Completion of Valve Installation (Package A): February 10, 2008*
- *Construction Completion for Package A: April 1, 2008*
- *Design Completion for Package C: January 7, 2007*
- *Construction Completion for Package C: December 31, 2008*

(Budget \$6,873,000)



Turnout Construction

Phase 2E (Bid Package B)

Bid Package B comprises berm improvements at Hickory Basin, Eight Street Basin, Declez Basin and San Sevaine Basin. The work will include heightening and hardening of existing berms, construction of conservation berms at San Sevaine Basin, and the addition of spillway sections as part of the berm work.

- *Design Completion Date for Package B: December 31, 2007*
- *Construction Completion Date: December 31, 2008*

(Budget \$1,851,000)



Declez Basin

Phase 2G - Wet Basin Wet Cleaning Machine Development

Phase 2G involves development of equipment to clean basins without removing them from operation. To maintain recharge capacity, each basin must be cleaned at two-year to five-year intervals. Current cleaning practices necessitate dewatering and drying the basin so that earth moving equipment can enter the basin to remove accumulated silt. This practice reduces the quantity of water that can be recharged at that basin. It was determined during initial studies that more economic methods for wet basin cleaning were available than development of sole-purpose equipment. This phase includes an initial study only.

- *The initial study is complete.*

(Budget \$50,000)



Cleaning Operations—Hickory Basin

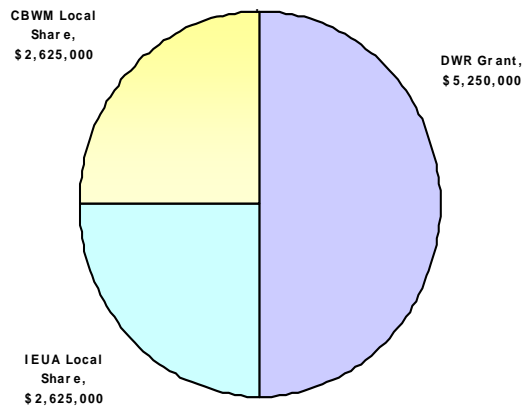
Phase II CBFIP Active Projects Scheduled Completion Dates

Phase II Activity	Design	Bid and Award	Construction
Bid Package A	Nov-07	Nov-07	Mar-08
Bid Package B	Jan-08	Mar-08	Dec-08
Bid Package C	Jan-08	Mar-08	Dec-08

Project Financing

■ DWR Grant	\$5.2500 Million
■ IEUA Local Share	\$2.625 Million
■ CBWM Local Share	<u>\$2.625 Million</u>
■ Total Project	\$10.500 Million

Project Summary



Phase II Activity	Cost To Date	Budget
Phase 2A	\$1,700,400	\$1,726,000
Bid Package A	\$160,000	\$250,000
Bid Package B	\$105,000	1,851,000
Bid Package C	\$670,000	\$6,623,000
Phase G	\$0	\$50,000
Total Phase II	\$2,635,400	10,500,000