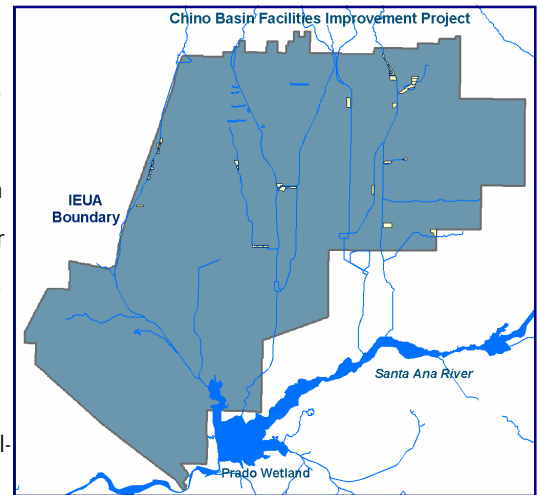


# AUGUST 2004 CHINO BASIN FACILITIES IMPROVEMENT PROJECT SUMMARY

## Program Description

The Chino Basin Facilities Improvement Program (CBFIP), 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) is well underway with six of eight bid packages being constructed. IEUA was selected as the "Contracting Agency", established financing for the CBFIP through grants from the Santa Ana Watershed Project Authority (SAWPA) under Proposition 13 in June 1999. The CBFIP is a system comprised of activation of two Metropolitan Water District turnouts from the Rialto Pipeline and construction of a new turnout on the Etiwanda Intertie; modifications to several flood control channels conveying imported water, storm water and recycled water; and five rubber dams and three drop inlets diversion structures in the flood control channels to divert the water to the 18 groundwater recharge sites. The 18 sites have 42 recharge basins varying from 1 to 5 basins at the respective sites. The groundwater recharge sites, when fully developed will have a total annual recharge capacity of 120,000 to 170,000 ac. ft.; 20,000 to 25,000 of storm water; 80,000 to 120,000 ac. ft. of imported water; and 20,000 to 25,000 ac. ft. of recycled water.

The construction of the CBFIP will be in eight phases, with different contractors, totaling \$38,700,000. Construction is projected for completion in March 2005.



## Bid Package No. 1 (Budget \$8,250,000)

### Project Purpose:

*The purpose of the project is to provide storm water and imported water recharge facilities improvements required to increase groundwater recharge in the Chino Basin and to implement the Recharge Master Plan and Optimum Basin Management Program (OBMP)*

### Project Participant:

- Inland Empire Utilities Agency (Lead, Contracting Agency)
  - Chino Basin Watermaster
  - San Bernardino County Flood Control District
  - Chino Basin Water Conservation District
  - SAWPA
- Design and Construction Management Team:
- Tettermier & Associates (Design Consultant)
  - Black & Veatch/IEUA (Program & Construction Management)
  - URS/Twining-Govil-Ryan (Geotechnical Consultant)

Bid Package No. 1 includes six basins: Banana Basin, College Heights Basins, Lower Day Basin, RP-3 Basins, Turner Basin No. 1, Turner Basins No. 2, 3, & 4

- **The IEUA Board of Directors accepted as complete Bid Package No. 1, May 12, 2004.**

## Bid Package No. 2 (Budget \$7,060,000)

Bid Package No. 2 includes three basins: Declaz Basin, Ely Basins 1, 2, & 3, and 8<sup>th</sup> Street Basins; four rubber dams: College Heights (San Antonio Channel), Lower day Basin (Day Creek Channel), RP-3 Basins (Declaz Channel), Turner Basin No. 1 (Cucamonga Channel); and three drop inlets: Brooks Basin (San Antonio Channel), Turner Basins 2, 3, & 4 (Deer Creek Channel), and Victoria Basin (Etiwanda Channel).

### Basins status

- Declaz Basin – **COMPLETE**
- Ely Basins 1, 2, & 3 – **COMPLETE**
- 8<sup>th</sup> Street Basins – **COMPLETE**

### Rubber Dam status

- The four rubber dams are installed in the channels and have been manually air tested—**COMPLETE**.

### Drop Inlets

- The three drop inlets— **COMPLETE**

### Monitoring Wells at Brooks Basin – **COMPLETE**

- Monitoring Wells at Brooks Basin
- **The IEUA Board of Directors accepted as complete Bid Package No. 2, August 18, 2004**

## Bid Package No. 3 (Budget \$3,570,000)

- Construction began January 5, 2004. Bid was \$2,889,477. Estimated claims to date due to changes in alignment, weather and other delays = \$325,000
- Bid Package No. 3 includes the construction of 11,000 linear feet of 36' diameter pipeline in Jurupa Avenue from the Jurupa Basin at Mulberry Avenue to Beech Avenue at the RP-3 Basins.

- 10,000 lineal feet has been installed from RP-3 site westward along Jurupa Avenue. The project is 93% complete.
- The construction period is 367 calendar days.
- Substantially complete Date: September 10, 2004



College Heights Rubber Dam inflated

**Bid Package No. 4 (Budget \$2,250,000)**

- Bid package No.4 consists of constructing (1) a canal and 100 linear feet of 48" pipe to convey water to (2) the Jurupa Pump Station and (3) 400 lineal feet of 36" diameter cement mortar lined & coated (CML & C) steel pipe force main for delivering water to the 36" Jurupa Pipeline (BP No. 3).
- The Jurupa Basin Pump Station was bid November 20, 2003 and was awarded December 3, 2003. The "notice to proceed" was issued at preconstruction meeting held February 19, 2004. Construction started on February 20, 2004. The invert and third pour of the walls of the wet well are complete. Work on the canal from the Jurupa turnout to the pump station is underway; estimate work is 75% complete.
- SBCFCD has committed to constructing a section of the San Sevaine concrete channel with a drop inlet and pipeline to deliver stormwater, imported water, and recycled water to Jurupa Basin that will be pumped to the RP-3 Basins and the Declaz Basin. The drop inlet is schedule for completion January 2006. The remainder of the San Sevaine Channel between Valley Boulevard to the Jurupa Basin drop inlet will be an open channel until funds are available to complete channel lining.
- The construction period is 218 calendar days.
- Substantially complete date: November 4, 2004



Jurupa Pump Station

**Bid Package No. 5 (Budget \$3,860,000)**

- Bid Package No. 5 includes the SCADA system consisting of radio controls to monitor and govern water levels in all the basins, control the drop inlets and rubber dams. Four monitoring sites will be established at the CBWM, CBWCD and SBCFCD offices with the master controls located at RWRP-1. The SBCFCD offices will have a satellite control station.
- DenBoer began construction at the RP-3 site on March 18, 2004. The contractor has laid the cable at sites and is beginning to install the appurtenances for all locations.
- The construction period is 242 calendar days. Estimate work is 65% complete.
- Substantially complete date: December 8, 2004



Lower Day Basin

**Bid Package No. 6 (Budget \$1,450,000)**

- Bid Package No. 6 includes the MWD CB Turnouts No. 11TB, 15T and a new connection on the Etiwanda Intertie @ Station 211 + 47.
- The Bid for redevelopment of the two existing MWD turnouts and development of a new turnout from the Etiwanda Intertie @ location 211+47 was awarded February 4, 2004 to Griffith Construction, Inc. The letter of Notification to Proceed was issue on March 19, 2004.
- IEUA pre-purchased butterfly and sleeve valves to expedite the project. The valves have been installed at each of the three MWD locations.
- Eilar & Associates is completing the acoustical survey for noise level investigation of sleeve valves.
- The construction period is 193 calendar days. Estimate work is 84% complete.
- Substantially complete date: September 22, 2004



Montclair Basin Trenching for SCADA

## Bid Package No. 7 (Budget \$3,020,000)

- Bid Package No. 7 consists of RP-3 mitigation project, Hickory Basin manifold and pump station, discharge pipeline and appurtenances to Banana Basin, improvements to Victoria Basin and SCADA module.
- Bid Package No. 7, was advertise on June 11, 2004 for bid on July 7, 2004. Four bids were received and opened. The winning bid was at \$2,743,000. The award of contract was on July 21, 2004.

Bidder	Base Bid	Alternates	Total Bid
1. Brutoco Engineering & Construction, Inc.	\$2,743,000	\$134,000	\$2,877,000
2. Banshee Construction, Inc.	\$3,200,000	\$126,000	\$3,326,000
3. Reyes Construction, Inc.	\$3,537,764	\$160,000	\$3,697,764
4. DenBoer Engineering & Cosntruction, Inc.	\$3,613,000	\$199,000	\$3,812,000

- The construction period is 150 calendar days.
- Substantially complete date: December 2, 2004

## Bid Package No. 8

- Bid Package No. 8 has been deleted. Projects formally considered under this bid package will be handled under change orders or through contacts let by the City of Upland for development of the Upland Basin, including the Upland Basin 48" pipeline.

## Equipment Purchase

- Due to increased construction costs the equipment considered for purchase will be limited to:

### Equipment to be Purchased

1. Portable Pumps, 2 ea.	\$100,000
2. Pickup, 1 ea.	\$30,000
3. Safety grates for gate opening	\$7,500
Subtotal	\$137,000

- The equipment pre-purchased for various bid packages included:

### Pre-purchased Equipment

1. Rubber Dams, 5 ea.	\$885,479
2. Sleeve valves 3 each and butterfly valves 3 each	\$264,941
Subtotal	\$1,150,420
Total—Recommended Projects & Equipment	\$1,287,420

## Cost Savings Achieved

### RP-3 Site

- Dispatch Trucking has removed the 250,000 cubic yards of stock piled dirt from RP-3 site Cell No. 2. The hauling was completed in August 9, 2004. The saving from this is \$1,500,000 (\$6.00/cu.yd. X 250,000 cu.yd.)
- Clay materials washed into the Victoria Basin during the December 25, 2003 flooding has transported to the RP-3 Mitigation Site and placed the material to seal the bottom of the wetlands portion of the site. Estimated savings by not purchasing Bentine clay is \$75,0000.

### Victoria Basin

- Dispatch Trucking has excavated the 100,000 cubic yards. of soil from the floor of the Victoria Basin which will ultimately save \$855,000 (\$8.55/cu.yd. X 100,000 cu.yd.)

## DWR Grant for Future Recharge Improvements

- IEUA (and Watermaster) are in the process of executing a grant agreement with DWR (Prop. 13 Funding) for additional recharge improvements. The estimated DWR grant amount is \$5.5 million.

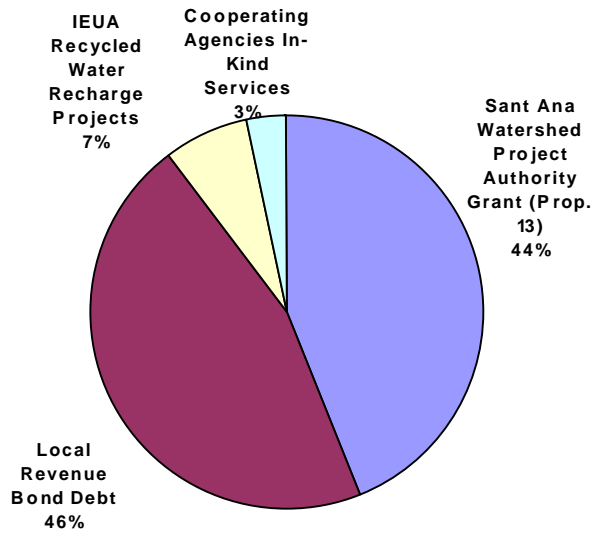
## CBFIP Active Projects Construction Schedule

ID	Project Name	2004												2005									
		Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
1	Bid Package No. 1	389 days																					
2	Bid Package No. 2	320 days																					
3	Bid Package No. 3													367 days									
4	Bid Package No. 4													218 days									
5	Bid Package No. 5													242 days									
6	Bid Package No. 6													193 days									
7	Bid Package No. 7													150 days									

### Project Financing

- Santa Ana Watershed Authority Grant (Prop. 13) \$19 Million
- Local revenue bond debt \$19.7 Million
- Cooperating Agencies in-kind Services \$1.5 Million
- Future DWR Grant \$5.5 Million

### Project Summary



Construction Phase	Estimated Cost	Budget
Bid Package No. 1	\$8,250,000	\$8,600,000
Bid Package No. 2	\$7,020,000	\$7,700,000
Bid Package No. 3	\$3,570,000	\$3,200,000
Bid Package No. 4	\$2,250,000	\$2,300,000
Bid Package No. 5	\$3,860,000	\$4,000,000
Bid Package No. 6	\$1,450,000	\$1,900,000
Bid Package No. 7	\$3,020,000	\$4,300,000
Non-Construction Cost*	\$8,994,000	\$8,994,000
<b>Total Budget**</b>	<b>\$38,414,000</b>	<b>\$38,700,000</b>
Expenditure To Date	(\$26,651,000)	

\*includes equipment purchases, engineering administration, and cooperative contribution from other agencies.  
 \*\*does not include \$5.5 million DWR grant.

### Projected vs. Actual Costs

