



**Chino Basin Desalter Authority
Chino I Expansion and Chino II Desalter Project
SAWPA Grant Contract Number 502-15-68
February 2006 Progress Report**

The Project

The Project, commonly known as the Chino I Expansion/Chino II Desalter Project, primarily consists of construction of the facilities necessary to expand the Chino I Desalter by 5 MGD and construction of a new 10 MGD Chino II Desalter. The Chino I Desalter Expansion Project began in June 2002 and is estimated to continue through March 2006. The Chino II Desalter Project began in June 2002 and is estimated to continue through March 2006. The progress of each of the facilities is described below.

CHINO I DESALTER EXPANSION FACILITIES

Well Drilling

These facilities include the construction of three wells (Extraction Well Nos. I-13, I-14, and I-15) and one monitoring well (Monitoring Well No. I-MW-1). The construction contract was awarded to Bakersfield Well and Pump Company. These facilities are completed.

Well Equipping

These facilities include equipping the three extraction wells described in the Well Drilling Section. The construction contract was awarded to Pascal and Ludwig Constructors. These facilities are completed.

Raw Water Pipeline

These facilities include the raw water pipeline from the new extraction wells to the existing raw water pipeline. The construction contract was awarded to Norstar Plumbing and Engineering Company, Incorporated. These facilities are completed.

Onsite Improvements (excluding Ion Exchange)

These facilities include onsite improvements at the Chino I Desalter site including bypass piping, sodium hypochlorite station, volatile organic compound (VOC) treatment system, and expansion of product water pump stations. The construction contract was awarded to Coons Construction. These facilities are completed.

Ion Exchange Treatment Facilities

These facilities include ion exchange treatment facilities at both the Chino I Desalter and the Chino II Desalter. The construction contract was awarded to Brutoco Engineering and Construction. These facilities are completed.

Archibald Product Water Pipeline

These facilities include a product water pipeline from the Chino I Desalter to the City of Ontario

service connection. The pipeline is located in Cloverdale Road and Archibald Avenue. The construction contract was awarded to Genesis Construction. These facilities are completed.

Archibald Product Water Pump Station

These facilities include a product water pump station to deliver water to the City of Ontario service connection. The pump station is located at approximately the Riverside/San Bernardino County Line and Archibald Avenue. The construction contract was awarded to Socal Pacific Construction Corporation. These facilities are completed.

Chino Hills Product Water Pipeline

These facilities include a product water pipeline in Soquel Canyon Parkway for the connection to the City of Chino Hills water system. The construction contract was awarded to Norstar Plumbing and Engineering Company, Incorporated. These facilities are completed.

Chino Hills Pump Station

These facilities include the construction of a pump station in Soquel Canyon Parkway in the City of Chino Hills. This station will lift water into the City of Chino Hills water system. The construction contract was awarded to SCW Contracting Corporation. These facilities are completed.

Chino I Storm Drain and SARI Meter Facilities

These facilities include the construction of a storm drain within the plant, connecting to the existing City of Chino Storm Drain, air gap structure and replacement of the SARI flow meter system. The construction contract was awarded to Ecology Construction. These facilities are completed.

City of Chino Turnout

These facilities include connection to the City of Chino water system from the existing Chino Basin Desalter Authority product water pipeline in Kimball Avenue. The construction of the facility is being performed by Ecology Construction as a construction change order. These facilities are in the construction phase and are approximately 75 percent complete. Progress on these facilities this month included completing the above ground and underground piping, control panel, and electrical work, thereby completing an additional 15 percent of the construction from 60 to 75 percent.

CHINO II DESALTER FACILITIES

Well Drilling Package No. 1

These facilities include the construction of two extraction wells (Well Nos. II-6 and II-7) and two monitoring wells (Monitoring Well Nos. II-MW-1 and II-MW-2). The construction contract was awarded to Bakersfield Well and Pump Company. These facilities are completed.

Well Drilling Package No. 2

These facilities include the construction of three extraction wells (Well Nos. II-1, II-8 and II-9a). The construction contract was awarded to Layne Christensen Company. These facilities are completed.

Well Drilling Package No. 3

These facilities include the construction of three extraction wells (Well Nos. II-2, II-3 and II-4). The construction contract was awarded to Bakersfield Well and Pump Company. These facilities are completed.

Well Equipping Package No. 1

These facilities include equipping four extraction wells (Well Nos. II-6, II-7, II-8, and II-9a). The construction contract was awarded to Pascal and Ludwig Constructors. These facilities are in the construction phase and are approximately 85 percent complete. Progress on these facilities this month included installation of the pumps and electrical work, thereby completing an additional ten percent of the construction from 75 to 85 percent.

Well Equipping Package No. 2

These facilities include equipping four extraction wells (Well Nos. II-1, II-2, II-3 and II-4). The construction contract was awarded to Pascal and Ludwig Constructors. These facilities are in the construction phase and are approximately 97 percent complete. Progresses on these facilities this month included paving, punch list work and continued disinfection of wells, thereby completing an additional three percent of the construction from 94 to 97 percent.

Raw Water Pipeline Phase 1

These facilities include the raw water pipeline east of the Interstate 15 Freeway from the new extraction wells to the Chino II Desalter site. The construction contract was awarded to Norstar Plumbing and Engineering Company, Incorporated. These facilities are completed.

Raw Water Pipeline Phase 2

These facilities include the raw water pipeline crossing the Interstate 15 Freeway and the Pump-to-Waste Pipeline from Wells II-6, II-7, and II-8 to the Storm Drain connection located in Park

Center Drive. The construction contract was awarded to SJ&B Group Inc. These facilities are completed.

Raw Water Pipeline Phase 3

These facilities include the raw water pipeline west of the Interstate 15 Freeway from the new extraction wells to the Interstate 15 Freeway. The construction contract was awarded to Choctaw Construction. These facilities are completed.

Onsite Improvements (excluding Ion Exchange)

These facilities include onsite improvements at the Chino II Desalter site including all new facilities excluding the ion exchange treatment facility. The construction contract was awarded to Brutoco Engineering and Construction. These facilities are in the construction phase and are approximately 100 percent complete. These facilities are substantially complete, and are awaiting final commissioning.

Ion Exchange Treatment Facilities

These facilities include ion exchange treatment facilities at both the Chino I Desalter and the Chino II Desalter. The construction contract was awarded to Brutoco Engineering and Construction. These facilities are in the construction phase and are approximately 100 percent complete. These facilities are substantially complete, and are awaiting final commissioning.

SARWC Product Water Pipeline

These facilities include the product water pipeline in Bellegrave Avenue for the connection to the Santa Ana River Water Company water system. These facilities are completed.

Ontario Product Water Pipeline

These facilities include the product water pipeline in Milliken Avenue for connection to the City of Ontario water system. The construction contract was awarded to A. W. Davies. These facilities are in the construction phase and are approximately 98 percent complete. Progress on these facilities this month included searching for leak in pipeline, thereby completing an additional three percent of construction from 95 to 98 percent.

Ontario Pump Station

These facilities include the construction of a pump station on Jurupa Street in the City of Ontario. This station will lift water into the City of Ontario water system. The construction contract was awarded to W. M. Lyles. These facilities are in the construction phase and are approximately 99 percent complete. These facilities are substantially complete, and are awaiting water source for final testing.

Brine Line

These facilities include brine pipeline from the Chino II Desalter site to the Santa Ana River Interceptor (SARI) system. The construction contract was awarded to Norstar Plumbing and Engineering Company, Incorporated. These facilities are completed.

O&M Manuals and As-Builts

The O&M Manuals and As-Builts for all projects are anticipated to be complete by June 2006.

Attachments

- Project Schedule
- Cash Flow Projection
- Construction Progress Pictures

Chino I Expansion and Chino II Desalters Project
 Schedule Projection
 February 2006

	<u>Contractor</u>	<u>Design Completion</u>	<u>Bid Opening</u>	<u>Start Construction</u>	<u>% Completed</u>	<u>Construction Completion Date</u>
<u>Chino I Desalter Expansion Facilities</u>						
Well Drilling	Bakersfield	Completed	Completed	Completed	100	Completed
Well Equipping	Pascal & Ludwig	Completed	Completed	Completed	100	Completed
Raw Water Pipeline	Norstar	Completed	Completed	Completed	100	Completed
Onsite Improvements (excluding Ion Exchange)	Coons	Completed	Completed	Completed	100	Completed
Ion Exchange Treatment Facilities	BEC	Completed	Completed	Completed	100	Completed
Archibald Product Water Pipeline	Genesis	Completed	Completed	Completed	100	Completed
Archibald Product Water Pump Station	SoCal Pacific	Completed	Completed	Completed	100	Completed
Chino Hills Product Water Pipeline	Norstar	Completed	Completed	Completed	100	Completed
Chino Hills Pump Station	SCW	Completed	Completed	Completed	100	Completed
Chino I Storm Drain and SARI Meter Facilities	Ecology	Completed	Completed	Completed	100	Completed
City of Chino Turnout	Ecology	Completed	Completed	Completed	75	Mar. 2006
<u>Chino II Desalter Facilities</u>						
Well Drilling Package No. 1 (Well II-6 & 7)	Bakersfield	Completed	Completed	Completed	100	Completed
Well Drilling Package No. 2 (Well II-1, 8, & 9a)	Layne	Completed	Completed	Completed	100	Completed
Well Drilling Package No. 3 (Well II-2, 3, & 4)	Bakersfield	Completed	Completed	Completed	100	Completed
Well Equipping Package No. 1 (Well II-6, 7, 8 & 9a)	Pascal & Ludwig	Completed	Completed	Completed	85	Mar. 2006
Well Equipping Package No. 2 (Well II-1, 2, 3, & 4)	Pascal & Ludwig	Completed	Completed	Completed	97	Mar. 2006
Raw Water Pipeline Phase 1	Norstar	Completed	Completed	Completed	100	Completed
Raw Water Pipeline Phase 2	SJ&B	Completed	Completed	Completed	100	Completed
Raw Water Pipeline Phase 3	Choctaw	Completed	Completed	Completed	100	Completed
Onsite Improvements (excluding Ion Exchange)	BEC	Completed	Completed	Completed	100	Completed
Ion Exchange Treatment Facilities	BEC	Completed	Completed	Completed	100	Completed
SARWC Product Water Pipeline	E.J. Meyer Co	Completed	Completed	Completed	100	Completed
Ontario Product Water Pipeline	A. W. Davies	Completed	Completed	Completed	98	Mar. 2006
Ontario Pump Station	W.M. Lyles Co.	Completed	Completed	Completed	99	Mar. 2006
Brine Line	Norstar	Completed	Completed	Completed	100	Completed
Overall Project Completion						Mar. 2006

Chino I Expansion and Chino II Desalters Project

Cash Flow Projection

January 2006

		Chino I 29%	Chino II 71%	Total
		\$ 25,900,857.00	\$ 63,412,443.00	\$ 89,313,300.00
	<u>Date</u>			<u>Projected Cost</u>
\$	74,824,493.83 Costs To Date	\$ 21,699,103.21	\$ 53,125,390.62	\$ 74,824,493.83
	Feb. 2006	\$ 1,400,584.60	\$ 3,429,017.46	\$ 4,829,602.06
	Mar. 2006	\$ 1,400,584.60	\$ 3,429,017.46	\$ 4,829,602.06
	Apr. 2006	\$ 1,400,584.60	\$ 3,429,017.46	\$ 4,829,602.06
		\$ 25,900,857.00	\$ 63,412,443.00	\$ 89,313,300.00

Work Performed for Invoiced Costs

Description	Cost
Inland Empire Utilities Agency for project management of the Chino I Desalter Expansion & Chino II Desalter	\$ 14,623.13
Inland Empire Utilities Agency for construction management of Chino I & II Desalter	\$ 4,773.77
RBF for Engineering Services, Construction Management, and Inspection for Chino I Desalter Expansion & Chino II Desalter	\$ 394,783.44
Camp, Dresser, & Mckee for Engineering Services for Chino I Desalter Expansion & Chino II Desalter	\$ 18,885.85
Jurupa Community Services District for Chino II Desalter water meter fees & service	\$ 85.20
Strategic Connections for SCE Project Management Services	\$ 812.50
Stradling, Yocca, Carlson, & Rauth for Legal Services for Chino I Desalter Expansion & Chino II Desalter	\$ 20,922.63
Brutoco Engineering for the Construction of the Chino II Desalter Onsite Improvements	\$ 43,130.57
Brutoco Engineering for the Construction of the Chino I Desalter Ion Exchange Treatment System	\$ 20,504.44
Brutoco Engineering for the Construction of the Chino II Desalter Ion Exchange Treatment System	\$ 61,104.44
Pascal & Ludwig for Chino I Desalter Well Equipping (Wells I-13,14,& 15)	\$ 32,393.72
Socal Pacific for the Construction of the Archibald Pump Station	\$ 279,421.22
Socal Pacific Retention Reduction to Five Percent	\$ 44,530.49
Genesis for the Construction of the Archibald Pipeline	\$ 694,756.17
Albert W. Davies for the Construction of the Ontario Product Water Pipeline	\$ 529,311.61
Pascal & Ludwig for Chino II Desalter Well Equipping (Wells II-6,7,8,&9a)	\$ 210,986.65
Pascal & Ludwig for Chino II Desalter Well Equipping (Wells II-1,2,3,&4)	\$ 1,302,476.80
Hinz Automation for Systems Integration Services for Chino I Desalter Expansion & Chino II Desalter	\$ 42,375.10
E.S. Babcock for Chino I Desalter Expansion and Chino II Desalter Water Quality Testing	\$ 910.00
Ninyo & Moore for Soils Testing Services for Chino I Desalter Expansion & Chino II Desalter	\$ 9,970.31
Koury Engineering for Soils Testing Services for the Chino I Desalter Expansion & Chino II Desalter	\$ 748.00
Total Invoices paid for the month =	\$ 3,727,506.04

Chino I Desalter: Chino Turnout DL02111



Chino II Desalter: Well Equipping DL02213



Well Testing for Well II-4

Chino II Desalter: Well Equipping DL02213



Well II-2 Screens on Air Vacuum and Air Release Valve



Well II-2 Air Vent Turn-Down Pipe