



# Freeport Regional Water Project Sacramento County, California

**CLIENT:**  
Freeport Regional Water Authority

**PROJECT VALUE:**  
\$300 million

**PROJECT DURATION:**  
2006 – 2010

**SERVICES PROVIDED:**  
Program and construction management



Recognizing a common need to meet and improve their current and future demand for water supplies more reliably, the Sacramento County Water Agency (SCWA) and the East Bay Municipal Utility District (EBMUD) agreed to pursue the joint development of a regional water supply project. This \$300 million project is known as the Freeport Regional Water Project (FRWP).

After serving as program manager for planning and design, Parsons is now the construction manager for the FRWP. We are responsible for the management of nearly all of the internal and external affairs of our Freeport Regional Water Authority (FRWA) customer. We are providing full-service construction management and startup services, environmental mitigation, and permit compliance.

Parsons has provided every staff member and has handled every administrative function the FRWA needs to execute the project. In addition, we have also been responsible for the following tasks:

- Serve as FRWA's public outreach department and liaise with the external agencies involved.
- Responsible for all communications with neighbors, neighborhood councils, elected officials, and regulators for the short-term and permanent impacts of the project on the public.



*Workers align H-pile to support cofferdam in Sacramento River*

- Developed mitigation programs during construction and helped design landscaping that is providing temporary screening of construction sites from existing homes.
- Negotiated an agreement with the Sacramento City Council regarding restrictions on working hours in order to minimize disturbance to occupants of adjacent homes.



*Certified welder joins two pieces of pipe before insertion into tunnel*



*Sacramento's landmark water tank adjacent to intake site*

The new water intake facility and pumping plant—located on the Sacramento River upstream of Freeport—will pump diverted water through the new pipelines to other FRWP facilities. Eight vertical turbine pumps with 2,000-hp electric induction motors will have the capacity to pump up to 185 mgd of water. The facility includes the following components:

- In-river intake fish screen
- Sheet-piled, in-river transition structure
- Electrical substation
- Surge control facility

Parsons is overseeing six contractors building the 185-mgd-capacity intake pump station and 17 miles of large-diameter pipeline. The 84-inch-diameter pipeline runs from the water intake facility to the intersection of Gerber and Vineyard Roads in central Sacramento County where the pipeline splits into two branches. For efficiency and oversight, construction of the pipeline is being completed in four segments:

• **SEGMENT 1**

**LOCATION:** I-5 east to Hwy 99 in Sacramento County  
**TIME FRAME:** August 2007 – March 2009

• **SEGMENT 2**

**LOCATION:** Hwy 99 east to Gerber/Vineyard Road intersection in Sacramento County  
**TIME FRAME:** July 2007 – July 2009

• **SEGMENT 3**

**LOCATION:** Gerber/Vineyard Road intersection east to Folsom South Canal  
**TIME FRAME:** September 2007– April 2009

• **SEGMENT 4**

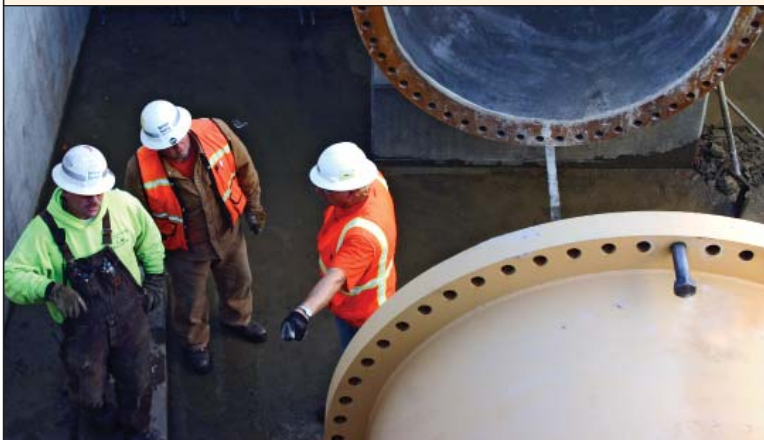
**LOCATION:** Gerber/Vineyard Road intersection north to SCWA's new surface water treatment plant on Florin Road  
**TIME FRAME:** October 2007 – March 2009

- Compressed air system
- Sediment collection and settling basin system
- Utilities

Construction of the water intake facility began in January 2007. The project remains on schedule, and 75% of construction is complete. The facility and its surrounding structures will be completed in November 2009.

Parsons overcame the environmental challenges impeding the project by applying sound scientific approaches to resolve all technical problems. The project incorporates numerous safeguards within its design to prevent irreversible damage to numerous wetlands and environmentally sensitive areas.

When operational in 2010, the FRWP—a national model of regional partnerships that develop new water resources—will provide drought relief, allow for continued economic growth, and supply water to more than 1.3 million customers. In addition, the project will provide SCWA with up to 85 mgd of water for domestic use for its customers in central Sacramento County in order to supplement groundwater supplies. EBMUD will use up to 100 mgd of water during dry years only (estimated at 3 in 10 years) as a supplemental water source to complement existing conservation programs.



*Workers in vault are preparing to install 84-inch valve in pipeline*



*One of several boom cranes operating at intake site*