Lower Colorado Region ARRA Projects

The Lower Colorado Region encompasses Arizona, Southern California and southern Nevada. The American Recovery and Reinvestment Act provided $200.8 million within the region for projects to recover and stabilize the economy of the United States in a short time period.

ARRA funded projects in the Lower Colorado Region constructed 103 miles of pipeline, were treated an additional 40,722 acre-feet of water per year, and conserved 56,412 acre-feet of water per year. There were two major projects: Title XVI Water Reclamation and Reuse Projects and the construction of a LEED-certified green building in Boulder City, Nevada.

Green Building

Reclamation used $19.5 million to build a 49,800 square foot building and associated site improvements in Boulder City for 200 employees. To the greatest extent possible work areas were lit with natural light and nearly all employees have a direct view to the outdoors. The building uses 30 percent less energy than a similar office building constructed to current building codes.

In addition, a 270 kW ground mounted solar farm was installed next to the building which provides approximately 480,100 kilowatt-hours of electricity annually, enough to meet the annual electrical demand of the building. Energy efficiency was achieved by use of high efficiency HVAC systems, motion sensor and dimmable lighting control systems and a thermally efficient building envelope.

Through all this work, the building met all requirements of Reclamation's Interpretation of the Guiding Principles for the Federal Leadership in High Performance and Sustainable Buildings and was awarded a Platinum certification from the U.S. Green Building Council under its Leadership in Energy and Environmental Design (LEED) program.

Construction of Groundwater Recovery Enhancement and Treatment Program, Phase 1 in Oxnard

Title XVI

The Lower Colorado Region expended $97.1 million on 20 Title XVI Water Reclamation and Reuse Projects. These projects are planned, designed, constructed, owned and operated by non-federal sponsors - uniting local communities with the federal government to provide change, growth and a future for energy efficiency, clean water and environmental stewardship in a broad range of areas.

Groundwater Recovery Enhancement and Treatment Program, Phase 1 (Oxnard, California) - $20 million

This project was combined with approximately $65 million in non-federal funding to build an Advanced Water Purification Facility. Secondary effluent from the Oxnard Wastewater Treatment Plant is pumped to the AWPF where it is treated using reverse osmosis process. The AWPF will initially produce 6.25 million gallons per day but has room for future expansion.

Included in construction was the recycled water backbone pipeline and its associated distribution laterals that convey the recycled water from the AWPF to customers throughout Oxnard and to agricultural customers east of the city. A total of 12 miles of pipeline, from 16 to 42-inches in diameter, were installed.

The infusion of federal funding accelerated the project by at least two years and allowed the production and use of recycled water much sooner. The recycled water replaces water that would otherwise be pumped from the overdrafted local aquifer or imported from the Sacramento-San Joaquin Delta region of Northern California.

Wells 21 and 22 Project, Irvine Ranch Water District (California) - $11.6 million

This project pumps and treats brackish groundwater that is then used for potable purposes. The existing wells 21 and 22 were constructed in 1992 but were never placed into production because of the brackish groundwater.

This project includes several components. Both wells were equipped with pumps and motors. A raw water line was constructed to convey the brackish groundwater to a new advanced treatment facility. A product water pipeline was constructed to deliver the treated water to the district's potable water system and a brine disposal pipeline was constructed to convey the waste brine to a sewage system.

It provides a new potable supply of about 6,300 acre-feet of water annually. The recycled water replaces water that would otherwise be imported from the Sacramento-San Joaquin Delta region of Northern California or the Colorado River.