

PURE WATER ANTELOPE VALLEY PROJECT

BORROWER: Palmdale Water District

LOCATION: Palmdale, California

TOTAL WIFIA LOAN AMOUNT: \$14.8 million

TOTAL WIFIA PROJECT COSTS: \$30 million

POPULATION SERVED BY PROJECT: 126,000 people

NUMBER OF JOBS CREATED: 47 jobs



Photo credit: Palmdale Water District

PROJECT DESCRIPTION

The Palmdale Water District's Pure Water Antelope Valley Project is an advanced water augmentation program that will provide a reliable, drought-proof water supply to customers. The district aims to divert wastewater from a local source and treat and convey the water to customers. This project will address uncertainty of future water supplies from the State Water Project, resolve near-term water shortages, and reduce reliance on the over-drafted Antelope Valley Groundwater Basin. With this WIFIA loan, the district will construct a small-scale advanced water purification demonstration facility to conduct necessary water testing. The goal of the demonstration facility is to evaluate the treatment process and test an emerging technology, called direct air capture, which is designed to transform brine into a solvent. It will capture carbon dioxide, reduce greenhouse gas emissions, and lower operation and maintenance costs. The district will use information collected at the demonstration facility to complete planning, design, and construction of the full-scale advanced water purification facility and new groundwater injection wells. This is the first loan under a master agreement that will commit a total of \$145 million in WIFIA assistance to the district for its advanced water purification program.

PROJECT BENEFITS

- Allows the district to move forward with its advanced water augmentation program.
- Informs future planning, design, and construction of the full-scale advanced water purification facility and injection wells.
- Saves the Palmdale Water District approximately \$4 million by financing with a WIFIA loan.