



LOCATION

Libya

PROJECT TYPE

Oil Produced Water

COMPLETION DATE

2011

DESIGN FLOW

Study

TREATMENT

Oil/Water Separation

Treatment Lagoons

Reverse Osmosis

PROJECT:

Zuetina Oil Produced Water Treatment

NEED

Investment in oil production infrastructure in Libya has been almost nonexistent since the 1970's. NWC, along with our partner, Norwest International, were invited in 2011 to evaluate current practices for management of oil produced water. Investment in the treatment and reuse of water in the Sahara Desert would create significant agricultural and economic opportunities while reducing the cost of oil production.

SOLUTION

The NWC/Norwest team engaged the services of the Libyan Petroleum Institute (LPI) to physically visit active oil fields in the Sahara and collect samples for laboratory analysis. The resulting data set developed by LPI represents the first and only set of information on the chemistry of oil produced water in southern Libya.

Based on the results obtained by the field investigation a water management approach involving improved oil/water separation, biological treatment of residual hydrocarbons and reverse osmosis treatment would generate revenue by recovering additional oil and producing irrigation-grade water for the local communities currently impacted by oil production.

Work on the project was originally delayed due to the onset of the Libyan Civil War, which started during the initial field study. Work resumed in 2012 and 2013 but has been further delayed by the collapse of a central government in Libya.

