2011 Annual Report

Environmental Quality Incentives Program (EQIP)

Colorado River Salinity Control Program

This report contains fiscal year activity for the state of Colorado from the time period of October 2010 to September 2011.

Who We Are

NRCS provides technical and financial assistance to help agricultural producers and others care for the land. NRCS has six mission goals that include high quality, productive soils; clean and abundant water; healthy plant and animal communities; clean air; an adequate energy supply; and working farms and ranchlands.

Vision

Productive Lands - Healthy Environment

Mission

Helping People Help the Land

"Salinity is both a soil health and water quality concern in the Western United States. Therefore, reduced salinity in the Colorado River helps to improve agricultural productivity and water efficiency."

Salinity Program Manager

USDA NRCS
United States Department of Agriculture
Natural Resources Conservation Service
Helping People Help the Land

www.co.nrcs.usda.gov

Fiscal Year 2011 Colorado River Salinity Control Program
Statewide Activities

Number of Contracts Approved	134
Dollar Amount Approved	$6 Million
Acres under Contract	5,288

Overview

The Colorado River is the primary source of domestic water supply for some 27 million people in the seven Colorado River Basin states.

It also provides irrigation water for more than 3.5 million acres of farmland within the basin and hundreds of thousands more acres outside the basin.

Near its headwaters in the Rocky Mountains, the salinity concentration of the Colorado River is typically 50 parts per million acre-feet of water or less.

About one half of the salinity in the river comes from natural sources and the other half comes from human uses of the water and activities near the river.

The quality of water in the Colorado River is critical to the economics of small communities and large cities in both the U.S. and Mexico.

The Program

The Colorado River Basin Salinity Program reduces salinity by preventing salts from dissolving and mixing with the River's flow.

Irrigation improvements and vegetation management reduce water available to transport salts vertically, laterally, and on the soil surface.

A long term, interstate and interagency public/private partnership effort is being carried out to reduce the amount of salts in the River and its associated impacts in the Basin.

The Basin states formed the Colorado River Basin Salinity Control Forum in 1973 to develop these standards including numeric salinity criteria and a basin-wide plan of implementation for salinity control.

Title II of the 1974 Colorado River Basin Control Act created the Colorado River Basin Salinity Control Program and directed the U.S. Department of Agriculture and the U.S. Department of the Interior to manage the River's salinity, including salinity contributed from public lands.

The law directed that preference be given to those projects which are the most cost-effective, that is, obtaining the greatest reduction in salinity concentration per dollar spent.

The Assistance

NRCS provides financial cost-share assistance to agricultural producers who voluntarily implement land management and irrigation practices that reduce salt loading.

Participants are provided incentive payments but are required to contribute at least 25 percent of the cost of the measures installed to reduce salt loading.

NRCS also provides technical assistance to producers to plan, design, and install more efficient water use and reduce the movement of salt from saline shale deposits that underlie the soil throughout the Colorado.

For More Information

Visit our web site at www.co.nrcs.usda.gov.

NRCS Conservation Program Success Story

Getting Salinity Under Control

2012 will witness one of the most significant milestones in the history of the Colorado River Basin Salinity Control-.Act which was established in 1974.

As a result of high salinity levels, the Act was passed out of concern for the economic dangers to users of the Colorado River water, including Arizona, California, Colorado, Nevada, New Mexico, Utah, Wyoming and Mexico.

High levels of salinity in water can reduce crop yields, limit the choice of crops that can be grown, and at higher concentrations over long periods, can kill trees and make the land unsuitable for agricultural purposes.
Salinity increases the "hardness" of water, which can mean more soap and detergents have to be used or water softeners installed and maintained. This can also cause scaling in pipes and heaters.

In industry, high levels of dissolved salts can cause corrosion, scale, and poor steam quality and increase the need for chemicals for water treatment.

The passing of the Act provided the authorization for numerous salinity control projects in Colorado, Wyoming, Utah, and Nevada as well as planning studies in Arizona, California, New Mexico and Wyoming. Colorado's projects include the Grand Valley, Lower Gunnison, McElmo, Mancos Valley, Silt, Deberque and Whitewater Units.

After a strong partnership and collaboration between NRCS, private landowners, the Bureau of Reclamation, Colorado's State Conservation Board, and numerous local Conservation Districts, 2012 will see the official closing of the NRCS portion of the Grand Valley Salinity Control Project.

To date, NRCS's' financial and technical assistance has been used to install irrigation improvements, treating nearly 41,000 of the 47,600 acres in irrigated agricultural production. Improvements include the installation of pipelines and lining of irrigation ditches and small laterals, as well as improvements to the delivery method and timing of irrigation water.
A 2010 survey of all irrigation systems in the Valley showed that 94% of all fields have some form of improved irrigation system which includes some 3,800 acres being treated without federal assistance.

As a result, not only has the Grand Valley Salinity Project reduced salt loading into the River by 147,344 tons per year (111% of the goal), per a USGA Scientific Investigations Report (2007-5288), the trend in salt loading below the Grand Valley Unit indicates a downward trend of 322,200 tons per year from 1986-2003.