

USBR PODCAST 2009-04

“WATER CONSERVATION”

Run Time=9:08

Welcome to the Bureau of Reclamation Great Plains Region Podcast:

(music stinger)

(SFX: turning on water tap)

It's a simple thing we do time after time without a second thought. But the management of water is what makes civilized life possible.

In fact, water makes life possible...period. It makes up one quarter of your bones, two-thirds of your body weight and all but seventeen percent of your blood volume.

The only water that we will ever have on Earth is what's here right now. 97 percent of it is in the world's oceans, two percent is stored as fresh water in glaciers, ice caps and snow. That leaves just one percent to supply drinking water, grow food and sustain all the people on the planet.

When the Reclamation Act was passed in 1902, the USBR's original challenge was to promote the settlement of the American West by providing the infrastructure for the irrigation of family farms. In addition to transforming vast tracts of near-desert into some of the most productive agricultural and urban centers in the world, Reclamation projects provided recreation, fish and wildlife habitat, power generation and flood control.

Fast-forward a century, and the primary role of Reclamation has transformed along with the landscape. Resource management through the more efficient use of water is now a key component of the Bureau's strategy:

(PHILLIPS CUT01)

“WE REALIZE THAT IT'S MORE DIFFICULT NOW TO BUILD A NEW, UH, LARGE PROJECTS. ENVIRONMENTALLY THEY CAN PRESENT PROBLEMS. BECAUSE OF THAT WE REALIZE NOW THAT IT'S, UH, PRUDENT TO MAKE BETTER USE OF THE RESOURCES WE HAVE.”

That's Mark Phillips, Reclamation's Water Conservation Field Services Program Coordinator for the Great Plains Region:

(PHILLIPS CUT02)

“THE PROGRAM IS...IMPLEMENTED IN RESPONSE TO A LEGISLATIVE REQUIREMENT UNDER THE RECLAMATION REFORM ACT OF 1982. AND BECAUSE OF THAT ACT...THE TARGETED PARTICIPANTS OF THIS PROGRAM ARE FEDERAL WATER CONTRACTORS...IRRIGATION DISTRICTS, URBAN WATER DISTRICTS...THE GOAL THERE IS TRYING TO GET THE DISTRICTS INTO PREPARING CONSERVATION MANAGEMENT PLANS AND FOR RECLAMATION TO PROVIDE ASSISTANCE AND ENCOURAGEMENT IN THE PREPARATION OF THOSE PLANS.”

Phillips says meeting the challenge of improving the efficiency of water use and management throughout the western states requires effective partnership with a number of other interested parties:

(PHILLIPS CUT03)

RECLAMATION...REALIZES WE HAVE A RESPONSIBILITY TO ENCOURAGE WATER CONSERVATION THROUGHOUT OUR WATERSHEDS THAT INVOLVE OUR FEDERAL PROJECTS, SO WE TRY TO ESTABLISH MAYBE SOME RELATIONSHIPS WITH LOCAL WATER ENTITIES, STATE AGENCIES, UNIVERSITIES, INDIAN TRIBES AND WHATNOT.”

Clinton Powell is a civil engineer in charge of the Water Conservation Program at Reclamation’s Nebraska-Kansas Area Office. He says that finding the right balance to serve the requirements of a variety of water users is an important step in the conservation process:

(POWELL CUT01)

“I THINK THAT’S ACCOMPLISHED BY TAKING EACH INDIVIDUAL GROUP AND LOOKING AT THEIR NEEDS AND SPECIFIC WANTS AS THEY RELATE TO OUR FINITE WATER RESOURCES AND WORKING THROUGH, YOU KNOW, HOW WE CAN PROVIDE EACH OF THOSE THINGS. NOW EACH OF RECLAMATION’S PROJECTS HAS CERTAIN USE AUTHORIZATIONS THAT WERE GIVEN US BY CONGRESS, SO SOME OF OUR RESERVOIRS AND PROJECTS ARE FOCUSED ON FLOOD CONTROL, ARE FOCUSED ON MUNICIPAL AND INDUSTRIAL WATER SUPPLIES. SOME ARE FOCUSED SOLELY ON AGRICULTURE. SO I THINK BALANCING ALL THOSE THINGS WITHIN OUR CONGRESSIONAL AUTHORIZATION IS WHAT WE’RE SHOOTING TO DO.”

Developing and implementing a comprehensive water conservation plan is an opportunity for every water user to identify water management problems, evaluate the options and plan for improvements. That includes the private sector and agriculture. However, Powell says there are special challenges to achieving those goals:

(POWELL CUT02)

“I THINK THERE’S REAL VALUE IN SEEING FURTHER PRIVATE ENTERPRISE INVOLVEMENT IN WATER CONSERVATION. ONE OF THE THINGS, THOUGH, THAT I THINK YOU STRUGGLE WITH AS YOU MOVE IN THAT DIRECTION IS THAT THERE IS THE INHERENTLY PUBLIC NATURE OF ATTEMPTING TO CONSERVE ANYTHING. IF THERE’S NOT A STRONG ECONOMIC BENEFIT TO SAVING THE WATER THEN YOU DON’T REALLY SEE A WHOLE LOT OF SAVINGS. THAT’S ONE OF THINGS WE REALLY STRUGGLE WITH IN THE WATER CONSERVATION FIELD SERVICES PROGRAM IS HOW TO CONVINCE FARMERS, WHO ARE DRIVEN BY ECONOMICS AS MUCH AS ANY OTHER BUSINESS, TO GO OUT AND SAVE WATER IF THEIR NOT SEEING A HUGE IMMEDIATE SAVINGS TO THEIR POCKETBOOK.”

Powell says dwindling supplies and increased demand are prompting growers to find ways to make the best use of their share of water resources:

(POWELL CUT03)

“ONE OF THE WAYS THAT N-K-O, NEBRASKA-KANSAS AREA OFFICE HAS SPENT MONEY ON WITH THE WATER CONSERVATION PROGRAM THROUGH THE EXTENSION SERVICE IS A PROGRAM CALLED LIMITED IRRIGATION STRATEGIES THAT WE’VE BEEN WORKING ON WITH THE UNIVERSITY OF NEBRASKA-LINCOLN. AND ONE OF THE THINGS THAT’S COME OUT OF THAT IS THAT WE’VE SHOWN THAT IN CERTAIN AREAS HERE IN THE UPPER-MIDWEST, FARMERS CAN GROW 97-PERCENT OF THE TOTAL YIELDS THAT THEY’VE BEEN GROWING HISTORICALLY WITH ABOUT 72 PERCENT OF THE WATER THAT THEY’VE BEEN PUTTING ON HISTORICALLY. SO REALLY IT’S ALL ABOUT GOING OUT AND TEACHING FARMERS HOW TO USE THE FINITE RESOURCES THEY HAVE AND TEACHING THEM HOW TO USE THAT MORE EFFICIENTLY.”

Conservation measures can improve the reliability of existing water supplies by reducing the demands on infrastructure and postpone the need for construction of new facilities. Getting more water to where it is needed – and keeping it away from where it isn't needed—reduces soil erosion and drainage problems.

Homeowners can play an important role in reducing their water usage in a number of painless ways such as not running the tap while brushing teeth or using low flow toilets and shower heads. Other techniques include checking your monthly water bill to make sure that an unseen leak isn't wasting water. Another way to gauge waste may get a few strange looks from the neighbors, but it's worth the savings you may gain when watering your lawn...as Clinton discovered when he purchased his first house:

(POWELL CUT 04)

ONE OF THE THINGS THAT I DID WHEN I FIRST GOT THERE...AND THE STORY THAT MY WIFE LIKES TO TALK ABOUT IS THE TIME I MADE HER LOOK THE NEW LUNATIC ON THE BLOCK WAS I, YOU KNOW, WENT OUT AND PUT PLASTIC CUPS IN THE YARD AND THEN LET THE IRRIGATION SYSTEM RUN THROUGH A COMPLETE CYCLE, AND THEN WENT OUT AND MEASURED HOW MUCH WATER WAS IN EACH OF THOSE CUPS. ONE OF THE THINGS I FOUND WAS THAT, YOU KNOW, MY STANDARD SETUP FOR MY SYSTEM WAS OVER-IRRIGATING THE LAWN BY ABOUT THIRTY PERCENT. AND THAT THIRTY PERCENT MIGHT NOT SOUND LIKE A LOT, BUT YOU KNOW THAT ACCOUNTS FOR ABOUT AN ACRE-INCH OF WATER, PER YEAR, AND IF YOU LOOK AT THAT KIND OF WATER USE ACROSS MY TOTAL NEIGHBORHOOD...YOU KNOW, MY BLOCK ALONE WOULD OVER-IRRIGATE THEIR LAWNS ENOUGH TO SERVE THE WATER NEEDS OF A FAMILY OF FOUR FOR ABOUT A WHOLE YEAR”

As the agency created to design and build many of this nation's water projects, and as the largest water wholesaler in the country, water conservation is one of the Bureau of Reclamation's top priorities. Reclamation has undertaken a series of conservation initiatives designed to stretch our water supply to meet additional needs. As Mark Phillips explains, with the help of users throughout the West, more efficient water use by everyone, including listeners of this podcast, will help meet much of the increasing demand:

(PHILLIPS CUT 04)

THE PUBLIC CAN ALSO PROBABLY CHECK...IF THEY'RE IN AN URBAN AREA...CHECK WITH...IF THERE'S A LOCAL WATER CONSERVATION COORDINATOR WITH THE CITY, AND THAT PERSON MAY BE ABLE TO PROVIDE A LOT MORE ADDITIONAL INFORMATION. REGARDING THE FIELD SERVICES PROGRAM...THE GREAT PLAINS REGION DOES HAVE AN INTERNET

SITE...THERE'S SOME LINKS ON THERE TO A WATER CONSERVATION PAGE WHERE WE SUPPLY SOME ADDITIONAL INFORMATION ON HOW TO PREPARE A WATER MANAGEMENT PLAN FOR AN IRRIGATION DISTRICT AND ALSO THERE'S INFORMATION ON THAT PAGE REGARDING WHERE THE RECLAMATION WATER CONSERVATION COORDINATORS ARE LOCATED AND WHO THEY ARE AND A TELEPHONE NUMBER THEY CAN CALL.

For the latest information and updates, be sure to visit the Bureau of Reclamation Great Plains Region on the web at [w-w-w-dot-u-s-b-r-dot-gov forward slash g-p](http://www.usbr.gov/gp) and follow the links to the Water Conservation Field Services Program Page.

This Podcast was produced by Belongie Entertainment Enterprises for the U-S Bureau of Reclamation Great Plains Region office of Public Affairs.

SOUNDER

Reclamation...Managing Water in the West.