



THE MODOC WATERSHED MONITOR

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A quarterly publication of the Central Modoc Resource Conservation District and the River Center

What is NECWA?

By Laura Unrue

In this day and age of acronyms everything has a nickname. The Northeastern California Water Association is no different. Termed NECWA for short, this association is made up of agricultural producers in the Upper Pit River Watershed that have banded together to address water quality. The Irrigated Lands Waiver Program often called the Ag Waiver and administered by the State Water Resources Control Board mandates that agricultural producers who irrigate in this area either join a water quality coalition or register with Central Valley Regional Water Quality Control Board (Regional Water Board) as an 'individual discharger.'

Many producers are finding that joining a coalition is more cost effective than working directly with the Regional Water Board, especially as the board is beginning to discuss the fines issued to producers who are not in compliance with the Irrigated Lands Program.

NECWA is the local water quality coalition for the Pit River Watershed. It is a part of the much larger Sacramento Valley Water Quality Coalition. Based in McArthur, the association features a volunteer board of directors comprised of local farmers and ranchers. The NECWA representatives for the Alturas/Likely/Canby areas are Dick Mackey and Chico Pedotti. The coalition conducts all water quality monitoring required by the Regional Water Board and uses membership dues to fund monitoring efforts. Membership in NECWA guarantees compliance with the Irrigated Lands Program and allows members to be represented by the coalition in all dealings with the Regional Water Board.

NECWA members receive a quarterly newsletter that provides updates on any new developments having to do with the Irrigated Lands Program. Additionally, any concerns members may have can be relayed to area representatives and presented to the NECWA Board of Directors.

Joining NECWA is simple: fill out a basic application/survey and pay a membership fee based on the number of acres you irrigate. With membership in NECWA, you are considered in compliance with the Irrigated Lands Program.

For applications or if you have any questions please contact:
Laura Unrue, Asst. Watershed Coordinator Central Modoc RCD
233-8879

Dick Mackey, NECWA Representative 233-2787

Chico Pedotti, NECWA Representative 233-4300

Ted DeBraga, NECWA President 335-2219

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Conservation Security Program in Modoc County

By Abbey Kingdon

The Natural Resources Conservation Services recently added the Conservation Security Program (CSP) to their portfolio of conservation programs. CSP is a national voluntary conservation program that supports ongoing stewardship of private agricultural lands by providing payments for maintaining and enhancing natural resources. This program identifies and rewards those farmers and ranchers who are meeting the highest standards of conservation and environmental management on their operations.

There are specific eligibility requirements that must be met to enroll. Contact the Alturas NRCS Office for more information. The address is listed at the end of this article. The NRCS recommends that producers look into the program now to get a better understanding of eligibility requirements. Early investigation will help everyone to be prepared when this program comes to Modoc County.

The CSP program has five steps:

1. CSP sign-up is offered in a priority watershed. Informational meetings will take place.
2. Producers complete a

self-assessment to determine whether they meet the basic eligibility requirements. Producers document their stewardship work, including conservation practices installed on the farm or ranch by land use. Producers prepare a benchmark inventory documenting conservation treatments undertaken.

3. Eligible producers submit their application to enroll in the program.

4. Based on the application, description of conservation activities, and a follow-up interview with NRCS personnel, NRCS will determine which program tier and enrollment category are available for the applicant. CSP has three levels, or tiers, of conservation treatment. Contracts are for five to 10 years. Each tier has eligibility and contract requirements:

- a. Tier I: Meets the lower of the standards, maximum annual payments of \$20,000
- b. Tier II: an intermediate standard, maximum annual payment of \$35,000
- c. Tier III: the highest standard of resource con-

servation, maximum annual payment of \$45,000

5. NRCS will select the categories to be funded for CSP contracts.

The first CSP sign up occurred in 2004. Last year eligible farmers and ranchers from 220 watersheds across the nation had the opportunity to enroll. The program will be offered each year on a rotational basis in as many watersheds as funding allows.

The watersheds within Modoc County have yet to come up on the priority listing, however, the NRCS anticipates that the watersheds will start entering the program. Although there currently is no open sign up, the Alturas NRCS Office encourages farmers and ranchers within Modoc County to complete the CSP Self-Assessment to better understand where they would stand if a sign up begins.

The Alturas NRCS Office has literature and personnel to assist with preparation for CSP.

Please contact the Alturas NRCS Office or visit the CSP Web site for more information:

Alturas NRCS Office

804 W. 12th St.

Alturas, CA 96101

(530) 233-4137

www.nrcs.usda.gov/programs.csp

Irrigated Lands Program Update

By Laura Unrue

Agricultural producers in the Upper Pit River Watershed deserve a big round of applause! In the past few months, these producers have made an enormous effort to comply with the Irrigated Lands Program. The result of those efforts include:

- More than 26,000 acres from the Upper Pit River Watershed enrolled in the Northeastern California Water Association
- 36 new NECWA members from the Upper Pit River Watershed
- Representation on the NECWA Board of Directors by Dick Mackey and Chico Pedotti
- A watershed-wide effort by farmers and ranchers to show that they are interested in improving water quality

Thank you staff and directors of Central Modoc RCD and Modoc County Farm Bureau, without your hard work and contributions these goals would not have been met!

River Center Fall Photo Gallery



Modoc District Fair, 2005



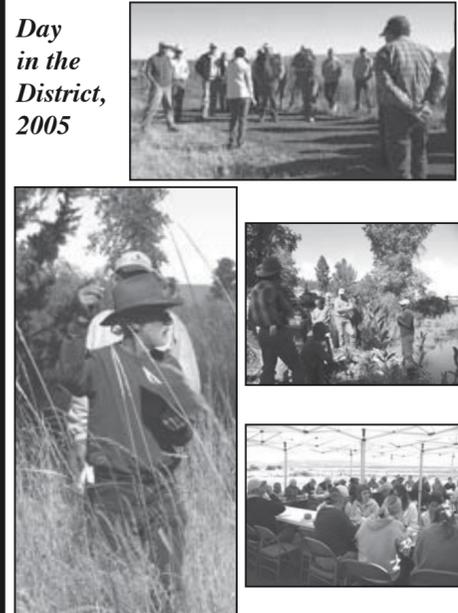
River Center Kid's Day, 2005



Night Watch, 2005



Bird Festival, 2005



Day in the District, 2005



Pit River Clean Up Day, 2005

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CMRCD Project Reports . . .



Six foot high cut banks along the Cemetery Reach prior to heavy equipment operations. August 2005.



Stacked rock wall inter-planted with willows along Cemetery Reach. September 2005.

XL Ranch Cemetery Project: local contractors, cultural representatives and Central Modoc RCD work to complete restoration project

By CMRCD Staff

The Central Modoc RCD recently completed heavy equipment operations on a small stream bank restoration project on the XL Ranch Indian Reservation. Larranaga Trucking and Eagle Peak Rock & Paving were hired to deliver and install a total of 800 tons of rock to stabilize and protect eroding riverbanks adjacent to the XL Ranch Tribal Cemetery. Labor crews from XL Ranch were hired to mechanically remove the Scotch thistle within the project area, prior to heavy equipment operations. The crew also constructed riparian fencing around the cem-

etry and along the river within the project area to better manage livestock grazing. More than 1,000 willows cuttings were planted by the crew to revegetate bare slopes and cut-banks along the river near the cemetery. Funding permitting, more willows will be planted at key areas to treat erosion problems. In an effort to allow high flows to bypass the cemetery reach, shrubby vegetation was cut and burned last winter from an overflow ditch opposite of the cemetery reach. Management of this vegetation will be an ongoing task to keep the overflow ditch clear.

Three habitat assessment sur-

veys were performed within the project area by Central Modoc RCD staff to establish pre-existing conditions. A year after the project is completed, another round of habitat assessment surveys will be performed to help determine the success of the project. Turbidity tests were performed every four hours during in-water operations to ensure that water quality was not impaired beyond acceptable limits. Cultural Representative, Irvin Brown was hired to observe the work performed around the cemetery. All areas of significant archaeological importance were not disturbed.

Central Modoc RCD nears completion of Clark Project

By CMRCD Staff

The Clark Project started on September 26. At this time about 85 percent of the work is completed. Heavy equipment contracted for this project included an excavator, scraper and front end loader. John Clark provided his back-hoe. The heavy equipment work is completed and involved bank sloping and reshaping of 1400 feet of river bank, hauling of the spoils from the bank reshaping, placement of eight loads of rock along a selected reach of stream bank, and the digging of a small pond to enhance and enlarge a small wetland area. John Clark is interested in trying to plant some fish in this pond.

Approximately two thousand willow stems were cut by the Central Modoc RCD field crew for planting along the reshaped banks. The field crew planted most of the willow stems using the water stinger; about 30 percent of the willows were placed in deep holes dug by the excavator and John Clark's backhoe. About 90 percent of the banks

have been seeded with a mixture of grass seed and mulched with oat straw. The steep slopes are covered with jute. Willow wattles were used to construct two small willow dams in the slough that runs north of the river. The purpose of these dams is to raise the water about a foot and enhance the existing wetlands. John Clark provided some cuttings of Fremont cottonwood and quaking aspen trees. These cuttings were planted in a few select areas and protected from animal grazing with small wire cages.

Work left to be completed includes layout and construction of the fence. The fence will enclose the riverbank and the wetland areas. Grazing will be restricted next year and thereafter grazing use will be managed in a way as to protect and enhance the riparian areas. A short reach of bank still needs to be seeded, mulched and covered with jute. One day of equipment work will also be needed to smooth out the spoils from the pond. The spoils are a wet, heavy clay soil

that is very hard to work with. Once this soil dries out it will be much easier to thinly spread and smooth out. Next spring the Central Modoc RCD, with help from the BLM, will assist the landowner in starting a weed control program. This is very important to this project since there are a number of weed species scattered throughout the project area.

Highlights of the project include reshaping and planting of the shear cut banks, which were 12 to 15 feet tall. This will increase the riparian zone and prevent the continual sloughing of the banks into the river. Constructing three dams enhanced wetland areas; all were less than two feet in height. This increased the shallow water areas and provided some deep water areas. An irrigation ditch returning water to the river was plugged. This water was routed through the wetland area before returning to the river. This re-routing of the water through a wetland will result in cleaner water being returned to the Pit River.



Typical cutbank conditions on the Clark property prior to restoration.



Finishing touches applied on restored streambank.

River Center and CMRCD Calendar of Events . . .

November 7, 8, 9

Nonpoint Source Pollution Conference of the State Water Resources Control Board Sacramento, Calif.

Abbey Kingdon, River Center Director, will give an oral presentation on the River Center and Laura Unrue, CMRCD Assistant Watershed Coordinator, will attend the conference.

November 11

River Center closed for Veteran's Day

November 15

3 pm: Central Modoc RCD Board of Directors meeting at the USDA Service Center

November 16

River Center Business Plan meeting and River Center Board of Directors meeting

November 18

9 am to noon: Sustainable beef production marketing workshop at the USDA Service Center Conference Room featuring the Hatfield Family of Oregon Country Beef

November 24 and 25

River Center closed for Thanksgiving Holiday

December 20

3 pm : Central Modoc RCD Board of Directors meeting at the USDA Service Center

Central Modoc RCD explores possible biodiesel crops and retail pumps in Modoc County

By Abbey Kingdon and Blair Parrott

The Central Modoc RCD is seeking funding opportunities to research oilseed crops in Modoc County for biodiesel production. They also seek funding opportunities to research or assist in the implementation of a biodiesel pump in Alturas.

Biodiesel is a vegetable-oil-based fuel that is usually made from soy or canola oil or recycled fryer oil. Biodiesel is not the same thing as raw vegetable oil. It is produced by a chemical process that removes the glycerin from the oil. This fuel type reduces emissions, is nontoxic and biodegradable. It has the highest energy balance of any transportation fuel, according to the United States Department of Agriculture.

Petroleum diesel can be blended with biodiesel, or biodiesel can be used in pure form. Either way, biodiesel can be used in any diesel engine. Biodiesel is sold in one of three blends: B2, which is two percent biodiesel and 98 percent petroleum diesel; B20, which is 20 percent biodiesel and 80 percent petroleum and B100 which is 100 percent biodiesel.

The National Biodiesel Board conducted a survey among farmers, 73 percent said they were not using biodiesel on their farm. Of those, 78 percent said it was because they did not believe it was available in their area and 81 percent said they would use it if it were available.

The Food and Agriculture Policy Research Institute at the University of Missouri has been conducting biodiesel studies too. They looked at how the production of soybeans for biodiesel helps a host of agricultural producers, from soybean farmers to livestock owners. They estimated that for every 100 million gallons of biodiesel sold; farmers will see an increase of 10 cents per bushel in the price of soybeans. Also, soy meal costs would decrease, which would lower livestock feed costs by five percent and increase soy meal exports.

Most of the retail biodiesel pumps available are in the Midwest and Hawaii, but SeSequential-Pacific recently opened a refinery in north Portland. This is the first biodiesel plant on the West Coast, according to *The Business Journal of Portland*.

Companies that blend biodiesel with petroleum diesel qualify for a federal excise tax, according to a Cascade Cattleman article, appearing in the September 2005 issue. The current bill for this tax credit passed in July 2005; it extends this incentive through 2008.

For more information on purchasing biodiesel in bulk, contact Robert at Ed Staub Energy in Alturas, at 233-2610. The price of B20 in bulk (more than 1,000 gallons) can be almost one dollar per gallon cheaper than retail prices of regular diesel. Farmers interested in growing oilseed crops (such as mustard and safflower) for the production of biodiesel, may contact Blair Parrott, Central Modoc RCD Watershed Coordinator, for more information.

- Information for this article was gathered from the September 2005 *Cascade Cattleman* (Vol. 16, No.9) article by Martha Hollida Garrett and www.biodiesel.org.

What is Biodiesel?

-information compiled from the National Biodiesel Board Web site

The term "biodiesel" has a specific, technical definition that has been agreed to through a painstaking process by members of industry and government which has received full approval by the American Society of Testing and Materials (ASTM), the premier standard setting organization for fuels and fuel additives.

That definition is used for purposes such as alternative fuel designation, Environmental Protection Agency registration, or other regulatory purposes. Nonetheless, this specific technical definition can be confusing to the general public. We have, therefore, chosen to adopt two definitions for biodiesel. The "general definition" is a simple description for the general public. The "technical definition" should be adopted for use by customers for bid specification purposes or government entities for regulatory purposes.

General Definition:

Biodiesel, n—a domestic, renewable fuel for diesel engines derived from natural oils like soybean oil, and which meets the specifications of ASTM D 6751

Technical Definition:

Biodiesel, n—a fuel comprised of mono-alkyl esters of long chain fatty acids derived from vegetable oils or animal fats, designated B100, and meeting the requirements of ASTM D 6751.

Biodiesel Blend, n—a blend of biodiesel fuel meeting ASTM D 6751 with petroleum-based diesel fuel, designated BXX, where XX represents the volume percentage of biodiesel fuel in the blend.

Water Quality Monitoring in the Pit River Watershed

By Laura Unrue

Since 2001, the Pit River Watershed Alliance (PRWA) and various Resource Conservation Districts in this area, including the Central Modoc RCD (CMRCD), have conducted extensive water quality monitoring within the Pit River Watershed. This water quality monitoring is conducted as part of the State Water Resource Control Board's Surface Water Ambient Monitoring Program (SWAMP). The PRWA and the CMRCD measure the following water quality parameters:

- **Flow:** discharge of a stream is measured in cubic feet per second using a flow meter. Flow is important to monitor because it directly indicates the amount of water moving off the watershed.

- **Temperature:** of the water and air is measured continuously using "tidbit" temperature data collectors which take readings every hour. Water temperature in particular, is very important to fish and other aquatic organisms.

- **Dissolved Oxygen:** called DO for short, indicates the amount of available oxygen in the water for fish and other organisms. DO is directly related to temperature, as colder water holds more oxygen.

- **Conductivity:** measures the ability of water to pass an electrical current. Conductivity is monitored because abrupt changes usually indicate that a pollutant is present in the water.

- **pH:** measures the alkalinity or acidity of the water. Aquatic animals need a pH between 6.5-8.0 in order to survive.

- **Turbidity:** measures the cloudiness of water. More turbid water heats up faster because the suspended particles absorb heat

and clog fish gills, which makes the water less inhabitable for aquatic animals.

- **Nutrients:** Nitrate and phosphorus levels are measured because an increased presence of these nutrients can cause algae blooms and upset the water ecosystem balance.

- **Total Suspended Solids:** called TSS for short, consist of silt and clay particles, algae, plankton and other organic debris floating in the water. High TSS can be harmful for fish and other aquatic organisms.

- **Coliforms:** are a group of bacteria (which includes *E.coli*) that can cause unpleasant water odor, cloudiness and low oxygen. High levels of coliforms can be harmful to fish and humans.

- **Total Organic Carbon:** known as TOC measures the amount of carbon dissolved in the water. High TOC levels can lead to decreased dissolved oxygen concentrations and poor habitat conditions for aquatic animals.

- **Macroinvertebrates:** Called "macros" for short, these organisms are collected and identified because certain types are very sensitive to water pollution. If there is a large amount of many different bugs, usually, water quality is pretty good.

For the past three years, the Pit River Watershed Alliance has been diligently compiling all of the data. In December 2005, all this information will be assembled into a comprehensive report outlining water quality in the Pit River. If you have any questions regarding the CMRCD Water Quality Monitoring Program please contact **CMRCD Watershed Coordinator Blair Parrott at 233-8878**.