

# Opportunities for irrigators to save \$\$\$

A portfolio of energy-efficiency services and rebates is available to help you irrigate crops more efficiently.

In addition to saving money for energy used to operate inefficient irrigation systems, some of the eligible measures also increase irrigation uniformity and may even decrease the amount of fertilizer that is required to produce a quality crop.

Rebates are available for energy-efficient hardware improvements such as installation or replacement of pressure regulators, nozzles, sprinklers and gaskets.

Rebates also are available for National Electrical Manufacturers Association premium efficiency motors ranging from 5 horsepower to 500 horsepower.

An irrigation system analysis may identify opportunities for you to increase the efficiency of your pumping plant and irrigation delivery system.

These opportunities may include:

- Low pressure conservation for pivots and laterals;
- Reduction of friction losses in pipes;
- Rebuilding pumps and trimming pump impellers;
- Adjustable speed drives in some applications such as multiple-valved sprinkler systems and field elevation differences of 25 feet or greater.

## Scientific irrigation scheduling

Rebates also are available for Scientific Irrigation Scheduling (SIS). SIS helps you know exactly when and how much to irrigate crops through a system that monitors weather and soil moisture data. In addition to reducing energy costs for pumping water, SIS conserves water and reduces fertilizer use and run off. In determining when to irrigate, the system takes into account the specific type of crop planted in a monitored field. Energy and water savings could be more than 10 percent annually.

This measure only applies to agricultural systems where pumping capacity is above that needed to meet the normal needs of the crops. Participants have the flexibility over the contractual three-year measure life to determine the crops and fields to monitor.

*Note: Not all utilities will offer rebates for all equipment or measures described in this document*

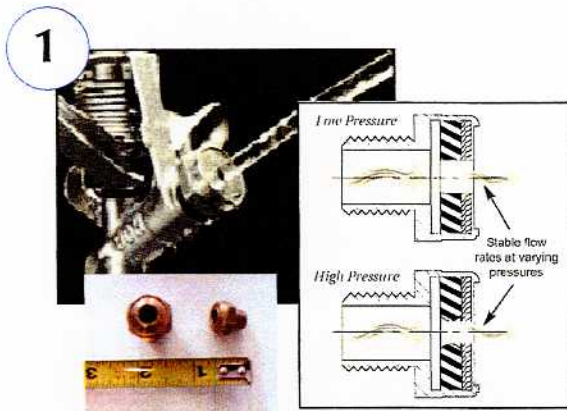


A wheel-line irrigation system can be modified to be more efficient.

# Irrigated agriculture equipment eligible for rebates

- New flow-controlling type nozzle for impact sprinklers (1);
- Rebuilt or new brass sprinkler (2);
- New rotating-type sprinkler (replacing impact sprinklers) (3);
- New gasket for wheel lines or hand lines (4);
- New low-pressure regulators with pivot sprinklers (entire pivot must be upgraded) (5);
- New multiple-configuration nozzles for low-pressure pivot sprinklers (6);
- New "gooseneck" elbow for new drop tubes (7);
- New drop tube for low-pressure pivot (8);
- New center pivot base boot gasket (9);
- New multi-trajectory sprays that replace impact sprinklers (5) (7) (8);
- New drains for wheel lines, hand lines or pivots;
- New hubs for wheel lines;
- Cut and pipe press repair of leaking hand lines, wheel lines and portable mainlines.

For more information on how you can begin to save energy and \$\$\$, contact us today.



Flow controlling nozzle for impact sprinklers (Nelson or Rainbird make these nozzles)



New brass impact sprinkler with new brass nozzle



Low pressure rotating sprinkler to replace impact sprinkler (example shown of 'wind fighter' sprinkler by Nelson)



Wheel line gasket

5



Nelson rotator or spinner

Low pressure regulator with rotating or wobbling pivot sprinkler



Senninger I-Wob

6



Multiple configuration nozzle for low pressure pivot sprinkler

7



Center pivot gooseneck elbow for new drop tubes

8



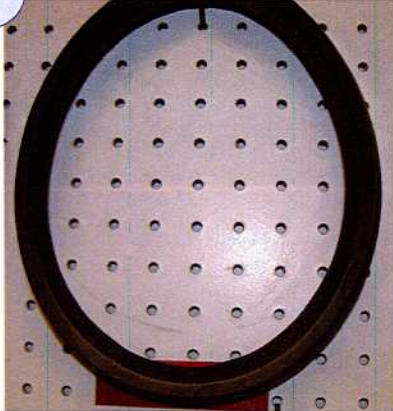
New drop tube for low-pressure pivot sprinklers attached to gooseneck

5 7 8



Completed upgrade of center pivot with gooseneck, drop tubes and low-pressure sprinkler package

9



Center pivot boot gasket