

STEP 7

Steps in the Irrigation Series

- 1. Understanding Irrigation Efficiency
- 2. Pumping Plant Performance
- 3. Energy Source Selection
- 4. System Performance and Efficiency
- 5. Irrigation Application Uniformity
- 6. Irrigation Scheduling
- 7. Incentives and Technical Assistance
- 8. Cumulative References



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Incentives and Technical Assistance

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Implementing the suggestions provided in the previous six steps will often require investment in equipment, controls, and monitoring. Often, improvements are cost-effective and practical without the assistance of government or utility programs, but accessing these funds can allow deeper efficiency improvement and/or reduce upfront expenditures. There are three principal sources of incentives: utility, state, and federal.

Utility – Although seemingly counterintuitive, electric utilities will often pay to reduce electrical consumption and demand. Many utilities, including investorowned, publically owned, and rural electric cooperatives, offer incentives and technical



Linear move sprinkler in corn field.

assistance. Incentives range from pump and motor retrofits, such as variable frequency drives, to water-saving enhancements for center pivots and wheel lines.

State – Programs vary by state across the western and central region. Some states offer programs designed to save water, where the energy savings would be a secondary benefit.

Federal – The U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) and Rural Development (RD) are particularly active in irrigation energy and water efficiency. Each opportunity is described in further detail.

The USDA NRCS Environmental Quality Incentive Program (EQIP) On-farm Energy Initiative offers energy audit assistance through the Agricultural Energy Management Plan program. Following an energy audit, the EQIP program can be used to cost-share irrigation improvements.

The USDA RD addresses irrigation energy through the Rural Energy for America Program (REAP). REAP offers 25% grants to agricultural producers for the purchase and installation of energy efficiency upgrades, including irrigation. Your state RD office will provide a contact for the program.

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References and Further Reading

North Carolina State University and the Department of Energy. Database of State Incentives for Renewables and Efficiency. http://www.dsireusa.org

USDA Natural Resource Conservation Service. EQIP Onfarm Energy Initiative.

USDA Rural Development. Rural Energy for America Program.

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