



**Cornhusker**  
**Public Power District**

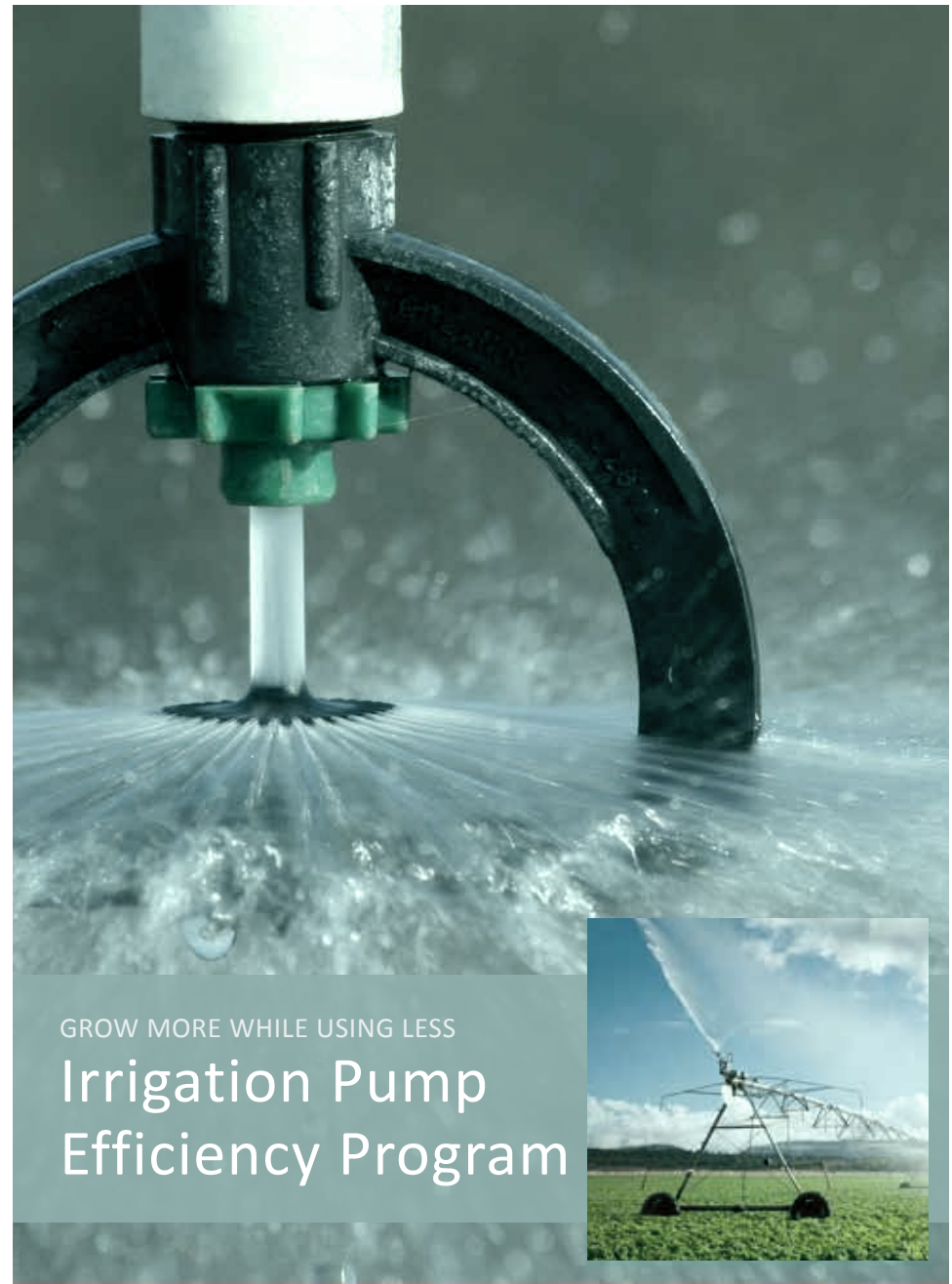
Your Touchstone Energy® Partner   
*The power of human connections*

Sponsored by Nebraska Public Power District in partnership with its Wholesale Utility Customers.

## Get EnergyWise<sup>SM</sup> Today

EnergyWise<sup>SM</sup> programs offer incentives to homeowners, businesses, and agriculture to help cover the cost of a variety of energy-efficient upgrades.

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GROW MORE WHILE USING LESS

## Irrigation Pump Efficiency Program

**ENERGYWISE<sup>SM</sup>**  
Use less. Spend less. Do more.



## Irrigation is the lifeblood of many Nebraska farms...

Unfortunately, some irrigation systems are inefficient which adds to costs. For example, 10 percent decrease in an irrigation system's efficiency, depending upon many factors, may translate to an extra several hundreds of dollars spent each year. Sometimes as much as half of the water delivered through the systems does not benefit the crop.

Many water districts have implemented, or are planning to implement, comprehensive restrictions on the amount of water that can be used for irrigation. Now, more than ever, irrigation pump efficiency needs to be investigated.

While energy prices and rainfall are beyond anyone's control, irrigation operating costs can be managed better by investing in energy efficient technologies and practices.

Many irrigators have found that making energy efficiency improvements to their irrigation systems not only saves energy and water but also can lead to improved productivity.

With the EnergyWise<sup>SM</sup> Irrigation Pump Efficiency Program, Nebraska Public Power District and participating local electric utilities are seeking to help irrigators utilize water and electric energy in the most efficient and cost-effective manner possible.

Irrigation efficiency programs may offer:\*

- Financial incentives to defray improvement costs associated with energy demand reductions to irrigation systems. (Payments vary depending on efficiency improvement.)
- Incentives that cover the cost of pump efficiency tests up to \$350.

## Questions to ask

**Q. Are there opportunities for me to improve system application efficiency or uniformity?**

A. Yes. Visit your local irrigation contractor for options.

**Q. Is my pump too old?**

A. The average life of a pump before it needs refurbishment or replacement is 18 years.

**Q. Could improving my system's efficiency reduce the amount of water I need to pump?**

A. Yes. Saving water means saving money!

**Q. Would I be able to convert my delivery system to a lower pressure?**

A. 20-25 psi pivots are not uncommon.

**Q. Should I be using an end gun booster pump for low-pressure pivots rather than designing the main pump to produce enough pressure for the end gun?**

A. Considering the limited amount of time the end gun operates, it is usually wiser to use a booster pump on low-pressure pivots.

**Q. How large are my mainlines?**

A. Larger mainlines reduce friction loss.

**Q. Could improperly using a choke valve cause my irrigation system to use tens of thousands kilowatt hours each year unnecessarily?**

A. Yes. Surprisingly, many pumps operate at 75-80 psi and use a choke valve to supply pivots designed for 40 psi.

## What you can do

- Have your irrigation pump tested by a quality irrigation pump service contractor to determine the overall pumping plant efficiency.
- Convert a high-pressure system to low-pressure.
- Rebuild or replace an inefficient pump.



For program guidelines or application, please visit with your local public power utility or go to [www.nppd.com](http://www.nppd.com) and click on EnergyWise<sup>SM</sup> Incentives.