

ENERGYWISE

Use less. Spend less. Do more.

IRRIGATION EFFICIENCY SYSTEM INFORMATION FORM

This form has been prepared to aid in the evaluation of irrigation system efficiency improvements. Though not intended to be all-inclusive, this document outlines the majority of the information necessary to complete a full Energy Audit or Assessment for the application. If the requested information is not readily known or accessible, please note. In some cases, engineering calculations may be substituted. If not, contact will be made to obtain the necessary data.

Existing System

Name _____

Acct/Meter No. _____

Address _____

city, state, zip _____

Phone _____ Cell Ph. _____

email _____

Land

Description of farm ground that will be impacted by the project:

Total acres farmed: _____

Total irrigated acres: _____

Total non-irrigated acres: _____

Description of terrain and soil type: _____

Drawing of layout--show irrigated & non irrigated and by which system(s):

Well

Owner's Name: _____

Location:

Township, range and section numbers: _____

Nebraska Department of Natural Resources Well Registration Number: _____

Original installation year: _____

Static water level in feet: _____

Pumping (Dynamic) water level in feet: _____

Most recent reconditioning year, if applicable: _____

Pump

Date of installation: _____

Manufacturer: _____

Installer: _____

Date of last reconditioning & description of work done, if applicable: _____

Number of stages (bowl/impeller sets, if deep well turbine pump): _____

Pump diameter: _____

Operating Pressure (psi) at the wellhead: _____

Flowrate (gpm) at the wellhead: _____

Drive Source

(circle one)

Horsepower size of the engine or motor: _____ fuel type: diesel, natural gas, propane, elec.

Age of engine or motor: _____ fuel usage (gallons/hour) _____

Identify any recent overhaul or repairs: _____

Name of the public power district: _____

*****Provide documentation of energy use and attach to this form:**

Total quantity of energy used for at least the last irrigation season (3 year history preferred).

Must include a supplier's name, type of fuel and the total number of units of fuel for each fuel type.

Delivery System

***If more than one delivery system is currently used, include information on each system:

- 1) Type of system (gated pipe, ditch/siphon tube, tow line, center pivot, etc.): _____
--Is water pumped through underground pipe before reaching the starting point of application?
_____YES _____NO
--If so, what type of pipe (pvc, steel, etc.)? _____
--What diameter in inches: _____
--How long of a distance in feet: _____
- 2) Type of system (gated pipe, ditch/siphon tube, tow line, center pivot, etc.): _____
--Is water pumped through underground pipe before reaching the starting point of application?
_____YES _____NO
--If so, what type of pipe (pvc, steel, etc.)? _____
--What diameter in inches: _____
--How long of a distance in feet: _____
- 3) Type of system (gated pipe, ditch/siphon tube, tow line, center pivot, etc.): _____
--Is water pumped through underground pipe before reaching the starting point of application?
_____YES _____NO
--If so, what type of pipe (pvc, steel, etc.)? _____
--What diameter in inches: _____
--How long of a distance in feet: _____

Volume of Water Applied

Provide volume of water applied for at least the last irrigation season (3 year history preferred).

State this in gallons, acre-inches, or total hours of pumping:

2008	_____
2007	_____
2006	_____

Proposed System

Land

Description of farm ground that will be impacted by the project:

Total acres farmed: _____

Total irrigated acres: _____

Total non-irrigated acres: _____

Description of terrain and soil type: _____

Drawing of layout--show irrigated & non irrigated and by which system(s):



Modifications to land that must occur to realize energy savings (installing pivot bridges, dirt work, etc.):

Cost: _____ Modification: _____

Cost: _____ Modification: _____

Cost: _____ Modification: _____

Well

Will existing well be used? _____YES _____NO

Is any well rehabilitation proposed? _____YES _____NO

if yes, describe: _____

if yes, cost: _____

Will new well be drilled: _____YES _____NO

if yes, cost: _____

Pump

Will existing pump be used? _____YES _____NO

Is any pump refurbishment proposed? _____YES _____NO

if yes, cost: _____

Will new pump be installed? _____YES _____NO

if yes, cost: _____

--If refurbishment or new pump:

Manufacturer: _____

Installer: _____

Description of work to be done, if applicable: _____

Number of stages (bowl/impeller sets, if deep well turbine pump): _____

Pump diameter: _____

Operating Pressure (psi) at the wellhead: _____

Flowrate (gpm) at the wellhead: _____

Drive Source

Is a new drive source intended? _____YES _____NO

--if yes: _____New or _____Reconditioned

fuel type: diesel, natural gas, propane, elec. (circle one)

If the drive source is an electric motor, Name of the public power district: _____

--Horsepower size of the engine or motor: _____

--Cost of proposed repairs or replacement: _____

Delivery System

***If more than one delivery system is to be used, include information on each system:

- 1) Type of system (gated pipe, ditch/siphon tube, tow line, center pivot, etc.): _____
--Is water pumped through underground pipe before reaching the starting point of application?
_____YES _____NO
--If so, what type of pipe (pvc, steel, etc.)? _____
--What diameter in inches: _____
--How long of a distance in feet: _____
--Number of pivot towers or booster pumps, if appropriate: _____
--Cost of any proposed repairs or replacement: _____

- 2) Type of system (gated pipe, ditch/siphon tube, tow line, center pivot, etc.): _____
--Is water pumped through underground pipe before reaching the starting point of application?
_____YES _____NO
--If so, what type of pipe (pvc, steel, etc.)? _____
--What diameter in inches: _____
--How long of a distance in feet: _____
--Number of pivot towers or booster pumps, if appropriate: _____
--Cost of any proposed repairs or replacement: _____

- 3) Type of system (gated pipe, ditch/siphon tube, tow line, center pivot, etc.): _____
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_____YES _____NO
--If so, what type of pipe (pvc, steel, etc.)? _____
--What diameter in inches: _____
--How long of a distance in feet: _____
--Number of pivot towers or booster pumps, if appropriate: _____
--Cost of any proposed repairs or replacement: _____