

Case Two

BACKGROUND.

The crop is an alfalfa/grass (brome) mixture. The producer uses a full year of oats as a cover crop, which is then sprayed down to establish the alfalfa. The pivot is on a 104 acre field. There is a mix of soils in the field – partially sandy – partially heavy.

The pivot is a half sweep, 1,600 ft long, 42 lb high pressure system, 15 to 18 years old, with an electric pump. The original cost was approximately \$30,000; wiring the electric boxes to the pivot approximately \$5,000; and electricity to the pump approximately \$3,000. There is gated pipe (flood irrigation) on one corner of the field.

ADVANTAGES.

- Better coverage
- Water gets moved to the fields where it is needed
- Less ditch maintenance
- Labor savings – approximately three hours per day savings
- Can get back on the acreage with equipment sooner after irrigating with a pivot
- Water conservation – no runoff or seepage
- When a sprinkler is installed some pipeline is also installed which saves the water lost to evaporation and seepage along the length of the ditch replaced
- The water quality in the area (creeks and river) is increasing (getting better)
- The number of fish is increasing
- The yield without sprinkler is around 2 ½ ton/acre, with the sprinkler 3 to 4 maybe even 5 tons/acre, if you count what is left in the field for the cows to harvest

DISADVANTAGES.

- Weeds can be a problem with straight alfalfa; knapweed seeds comes in with the water
- There are no dealers locally for sprinkler parts, so you have to carry some inventory for repairs
- When something breaks, you need to be there to fix it
- Seem to be fixing gear boxes and tires a lot
- Approximately \$1,500/yr pumping cost
- The ruts are a problem – this producer uses rock to fill them in
- Reliability of the electrical power can be a problem
- As more pivots go in, power-outs create a problem - what to do with the water, where does the water go when the power is down?