



Irrigation and the How to's

Presented by
Macon Henry



Who am I and what I do.



• Superintendent at Powell Golf Club

- Roughly 150 acres of irrigated ground
- Miles of under ground pipe
- Nearly 1400 sprinkler heads
- Two 60 hp pumping stations
- 2800-gallon stored water tanks
- And one pond
- Have one employee who just irrigates.

What Is irrigation?

- Irrigation is the artificial process of applying controlled amounts of water to land to assist in the production of crops, but also to grow plants, lawns and recreational areas.

Quick history of irrigation

- The earliest archeological evidence of irrigation in farming dates to about 6000 B.C
- The earliest traces of irrigation in the United States go back as far as 1200 BC in the desert and plains of modern-day Arizona, Colorado, and New Mexico.
- Can be said that irrigation is the corner stone to civilized society.

Essential parts of an irrigation system



Source



Pump



Filters



Timer, clock,
control box



Valves



Heads

Source

- Any body of fresh water
 - Lake, river, streams, well, canal/ irrigation ditch.
 - canal or ditch water is most prevalent source in the Big Horn basin.
- Powell golf Clubs source is a lateral of the Frannie canal
- To find your source talk with your irrigation district.

Pumps

- Mechanical device that brings water to and maintains a set pressure.
- PGC uses a horizontally mounted 8-inch centrifugal pump. Driven by a 60 hp electric motor supplied by 480v. It is controlled by a variable frequency drive.
- 1400 gpm at 120psi.

Control boxes/ Clocks

- Maintain time
 - Once you know system and head psi and gpm you establish application rate.
- turn on/off valves.
 - Most are digital
 - Adjustable
- May also have pump relay.

Valves

- Mechanical means to turn on off water for specific area or “zone”
- At PGC we use globe valves also known as scrubber valves we also have valve in head sprinklers.
 - Uses equal or opposing pressure to actuate or obstruct.
- Verity of shapes and sizes.

Heads

- Delivery method
 - The way water is applied evenly over a desired area.
- Different types
 - Impact
 - Rotary/ gear driven
 - Flood
 - Fixed spray
- At PGC we shoot for 35 ft spray to cover 70 ft radius.

In summary

Q and A



contact

- Macon Henry, Powell Golf Club
 - mhgolf28@gmail.com
 - 406-208-7040
- Triple L supply
 - (307) 527-5715
- Pawnee Irrigation
 - (307) 754-3003

Thank you
