

# Century Ridge

## 2018 Irrigation Audit



### Key findings

On August 10, Water in Motion, partnering with the Vermillion River Watershed Joint Powers Organization and the City of Lakeville, conducted a Stage II Irrigation Audit to detail system efficiency. Key findings included:

- ◆ The system was reliable, but could be more efficient
- ◆ A total of 2 rain sensors were found, both of which were not functioning
- ◆ Sprinklers were observed irrigating wooded areas not meant to be irrigated throughout the site with damage to ornamental conifers
- ◆ Current controller scheduling was as follows:
  - Program A: 45 minute run time on even days, skipping Monday, with no adjustment for season
  - Program B: 60 minute run time on odd days, skipping Monday, with no adjustment for season
- ◆ Many areas were found to be saturated (over-watered)
- ◆ All sprinklers were observed to be rotor-style, but with a mix of brands and models present, resulting in stations not having matched application rates
- ◆ There was no maintenance program in place
  - The landscape contractor only makes visits to turn the system on and off and if repairs are reported



*A properly maintained and water-managed landscape irrigation system can save 33% or more than the same system not proactively managed*

### Recommendations

With the system running reliably and generally as installed, no major system reconfigurations are recommended. Instead, the below table presents management options that can be performed to increase watering efficiency and maintain the life of the system. Annual cost savings associated with implementation of management options are based on City of Lakeville utility billing rates, Century Ridge use trends, historic rain data, and audit findings (including, but not limited to, scheduling practices).

Management Option	Estimated Cost	Estimated Annual Cost Savings*
Reinstall and engage rain sensor.	\$350—\$450	\$4,125-\$5,672
Adjust irrigation schedule to reduce overwatering.	\$600—\$1,000	\$2,647-\$4,632
Rewire controller to operate valves separately.	\$350—\$450	\$275-\$550
Adjust sprinkler alignment to irrigate landscape only (eliminating watering concrete, asphalt, buildings).	\$1,700—\$2,000	\$275-\$550
Repair or replace sunken, pitched, leaking or clogged sprinklers.	\$4,455—\$5,245	\$275-\$550

*Irrigation system integrity is dependent on proactive maintenance and continual scheduling adjustment*



A broken sprinkler head can waste thousands of gallons of water per week.

\*Estimates provided by Water in Motion.