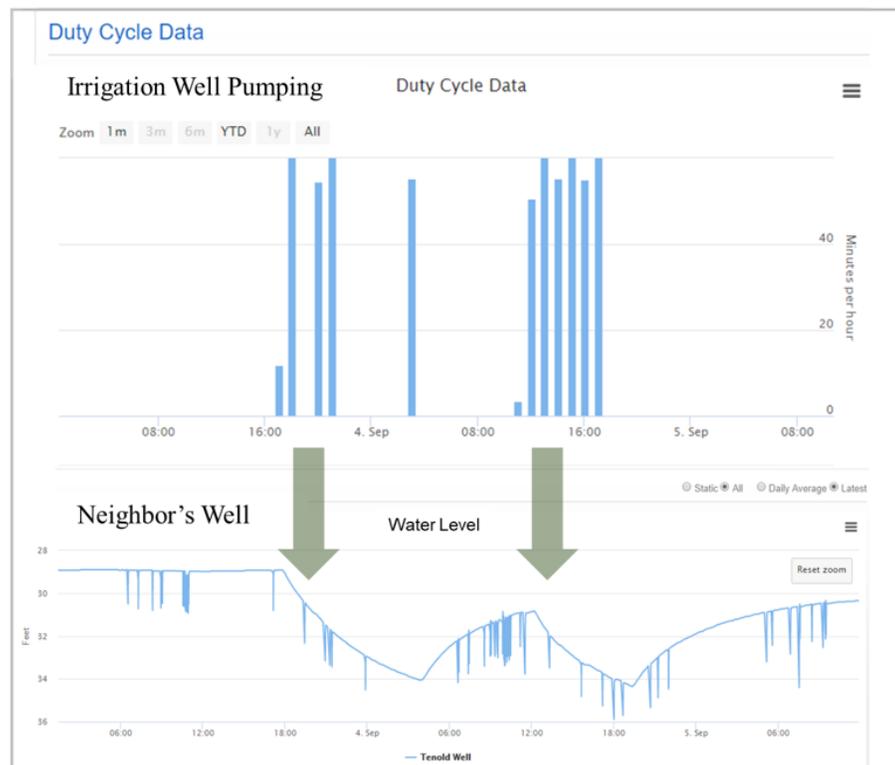


Irrigation Drawdown Quantified, Actively Managed

Farmer alerted to pumping impact, adjusts operations to meet permit requirements and ensure resilience of shared resource



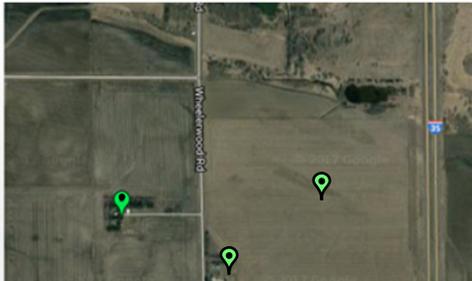
During the renewal of Farmer Lupkes' high-capacity well permit, the Iowa Department of Natural Resources was concerned about impact on residential wells. It required him to actively manage irrigation impact - track irrigation wells levels and receive an alert when a nearby monitored residential well approached its action level. If that happened, the farmer had to shut down the irrigation pump until water levels recovered.

Wellntel systems installed on the irrigation well and two domestic wells provided the real-time water-level monitoring needed to make this active management possible - quickly and cost-effectively. Not only did Farmer Lupkes get the insight and alerts needed to operate within his permit but his neighbor gained peace of mind and a greater understanding of their shared resource.



Irrigation Monitoring and Compliance Network

In order to satisfy the state monitoring requirement of his high-cap well permit, Farmer Lupkes was required to actively manage groundwater levels to ensure that permitted draw down limits on nearby wells were honored. To satisfy this requirement, he installed WellIntel systems on his irrigation well, the farm residential well, and the well of a close neighbor. These systems provide both timed and pump-induced measurements. Data collected from these systems quantified the drawdown experienced at the three locations in near real-time.



Network Design

3-well network sponsored by the farmer

- (1) High capacity irrigation well (+500 gallons per minute)
- (2) residential wells

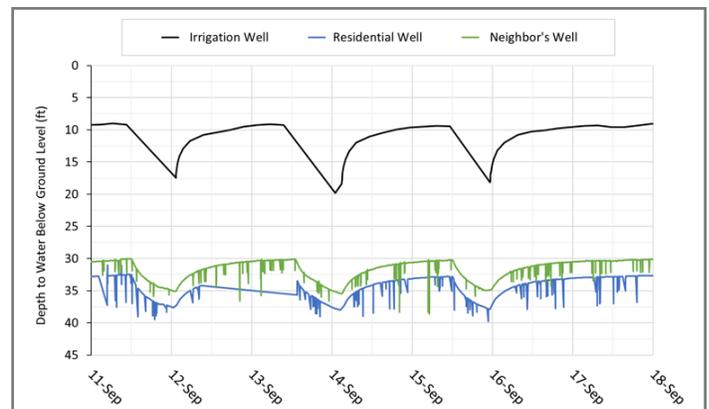
Equipment

- (3) WellIntel +Pump Kits, with solar power and standard telemetry

Impact

With WellIntel's cloud-based system, Farmer Lupkes watches in near real-time the cumulative impacts of pumping at all three locations and actively manages his operations to meet the permit requirements.

With WellIntel dashboards, both Farmer Lupkes and his neighbor can view pumping impact, be alerted to operational concerns, and have science-based discussions on resource management.



To learn more, contact WellIntel at 844-WELLH20 (844-935-5426)
or email us at info@wellintel.com