

CASTLE ROCK WATER

AQUIFER STORAGE AND RECOVERY PROGRAM UPDATE

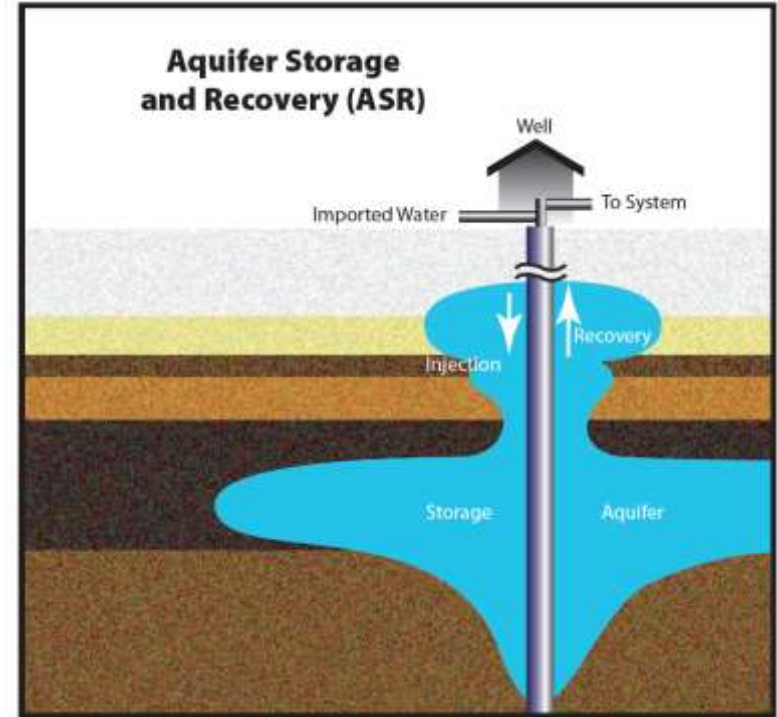
JULY 7, 2020



AQUIFER STORAGE AND RECOVERY UPDATE

BACKGROUND

- Aquifer Storage and Recovery (ASR)
 - Store water in aquifers
 - Recover the water with pumping when needed
- Started 2008
- Store without Evaporative losses (18% annually)
- \$2,500 to \$3,000 per acre-foot
- Water going in must meet drinking water standards
- Reduces cost of pumping the wells
- Energy recovery opportunities



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PROGRAM STATUS

- Local Location Options
 - Near renewable water sources PCWPF & WISE
 - Favorable wells
- US Environmental Protection Agency (EPA) ASR Permit
 - Started in 2017
 - Draft permit expected Summer 2020
- 2016 Intergovernmental Agreement with Dominion

Existing Well Location



Location Under Construction

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BUDGET & SCHEDULE

Budget

- Two existing wells in Meadows just east of Prairie Hawk
 - \$600,000
- Two new wells at Ray Waterman Treatment Plant
 - \$1,230,300
- Adequate budget available for these items

Schedule

- Fall 2020 complete EPA permit requirements
- Start operating Meadows Wells end of 2020
- Spring 2021 Ray Waterman ASR online begin pilot testing



Well CR - 223

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RECOMMENDATIONS

- Important long-term storage option
 - 4 additional wells planned
 - Total long-term cost = \$2.1 M
 - Total long-term storage = 1,300 Acre Feet/ year
- Pursue additional opportunities in Lost Creek Basin
- Support regional efforts
- Support innovations and new technologies
- **Questions?**



Well CR-233 at Sunset



THANK YOU