



Wild Wings County Service Area

Water Supply Update

July 7, 2021



**Luhdorff &
Scalmanini**
Consulting Engineers

Topics

- 1. Summary of water shortage issues**
- 2. Plan for changing Pumps**
- 3. Considerations for replacement well**



Photo of Sierra Nevada's April 2021

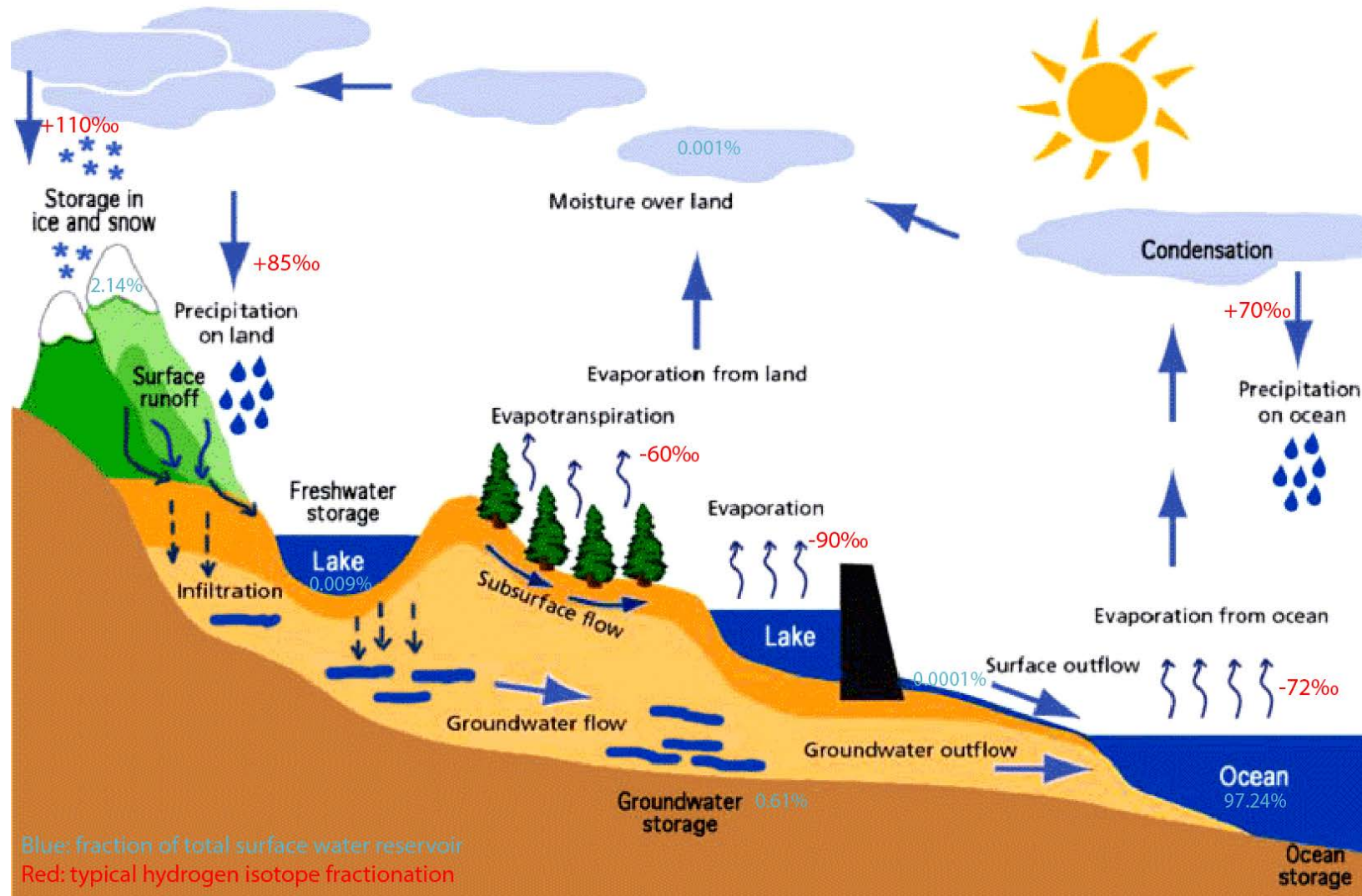


Lake Tahoe

Dismal snow-pack



Hydrologic Cycle



Map of Wild Wings Water System

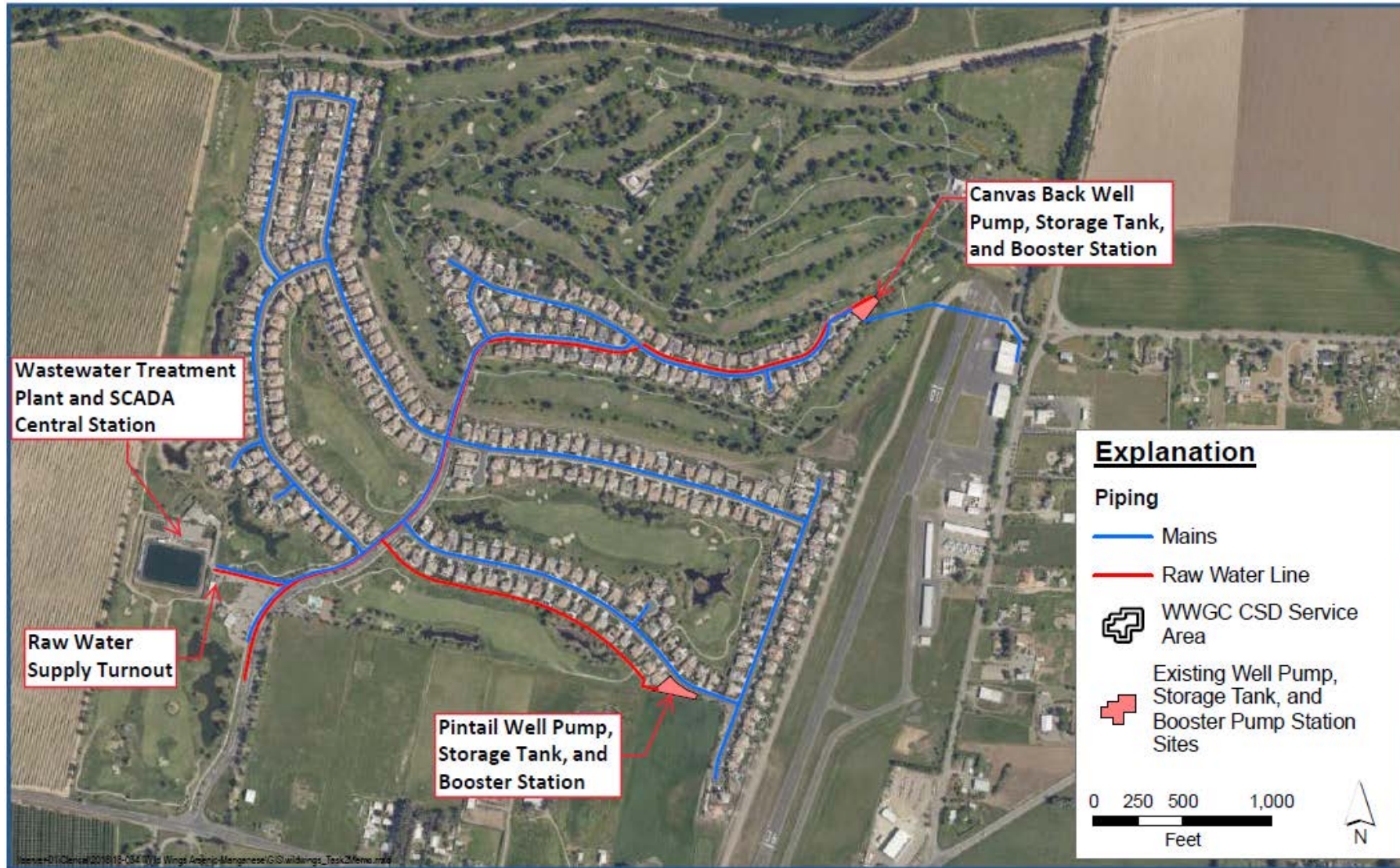
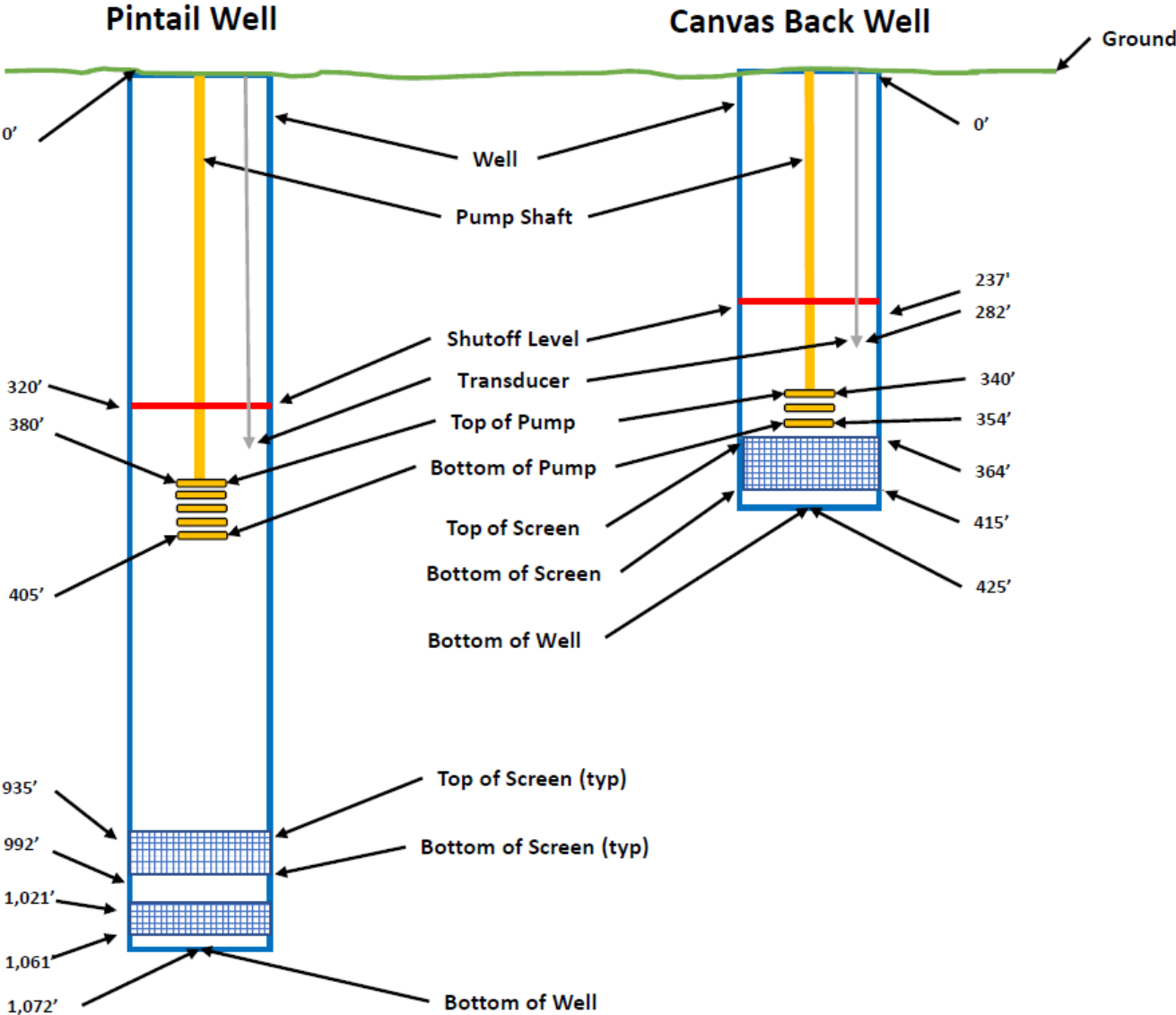
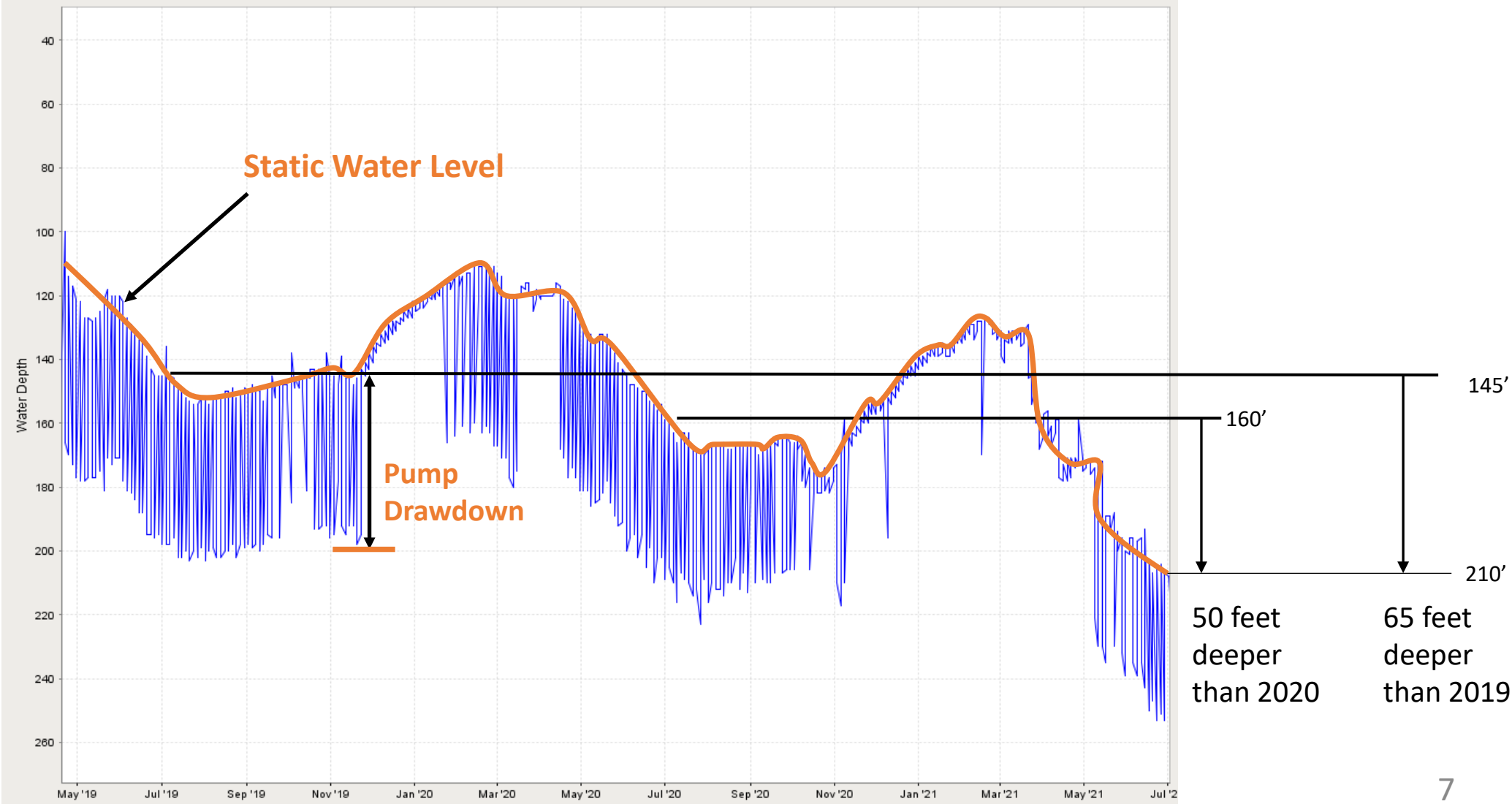


Illustration of Wild Wings Wells



Canvas Back Depth to Water

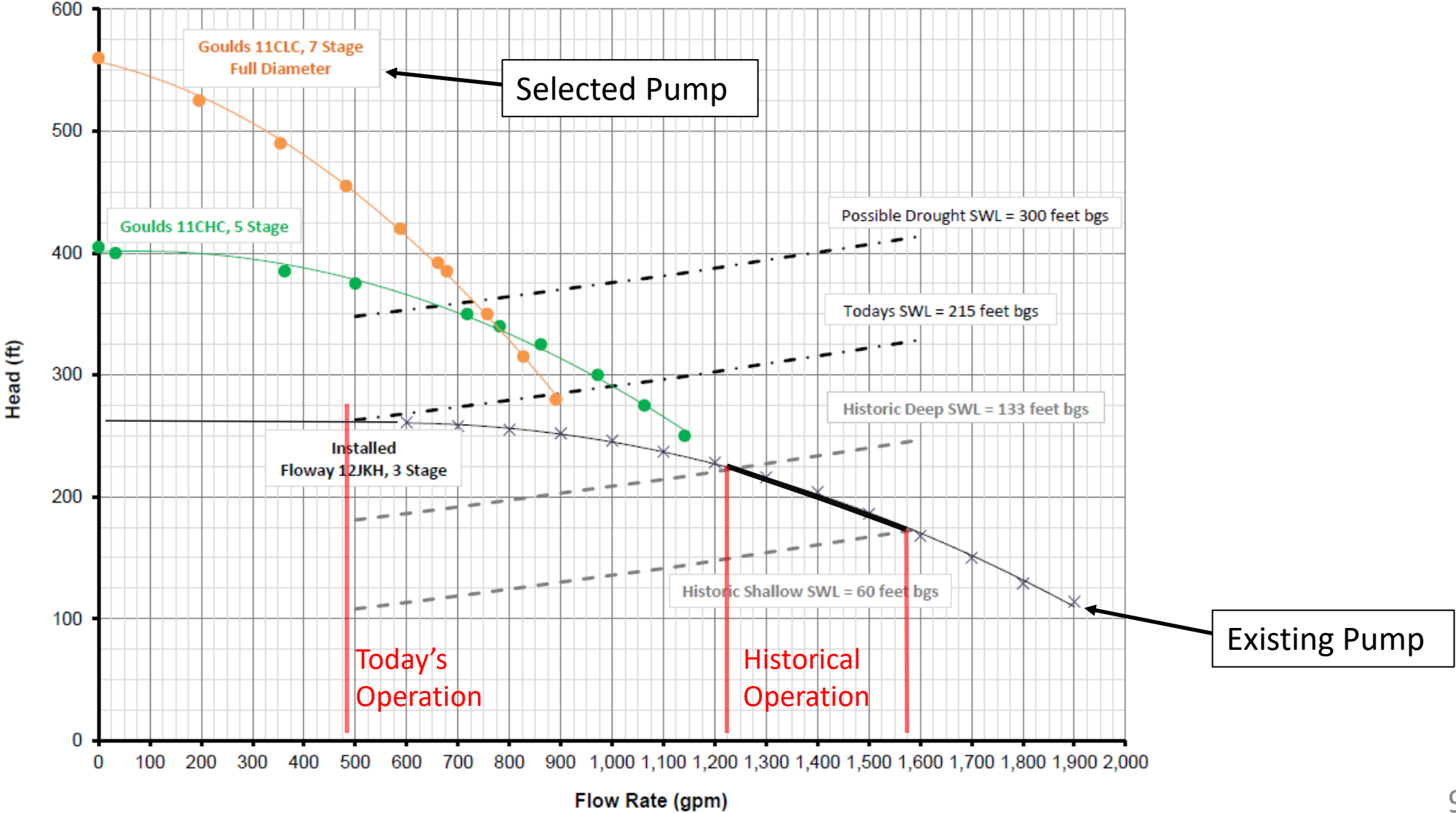


Canvas Back Water Supply

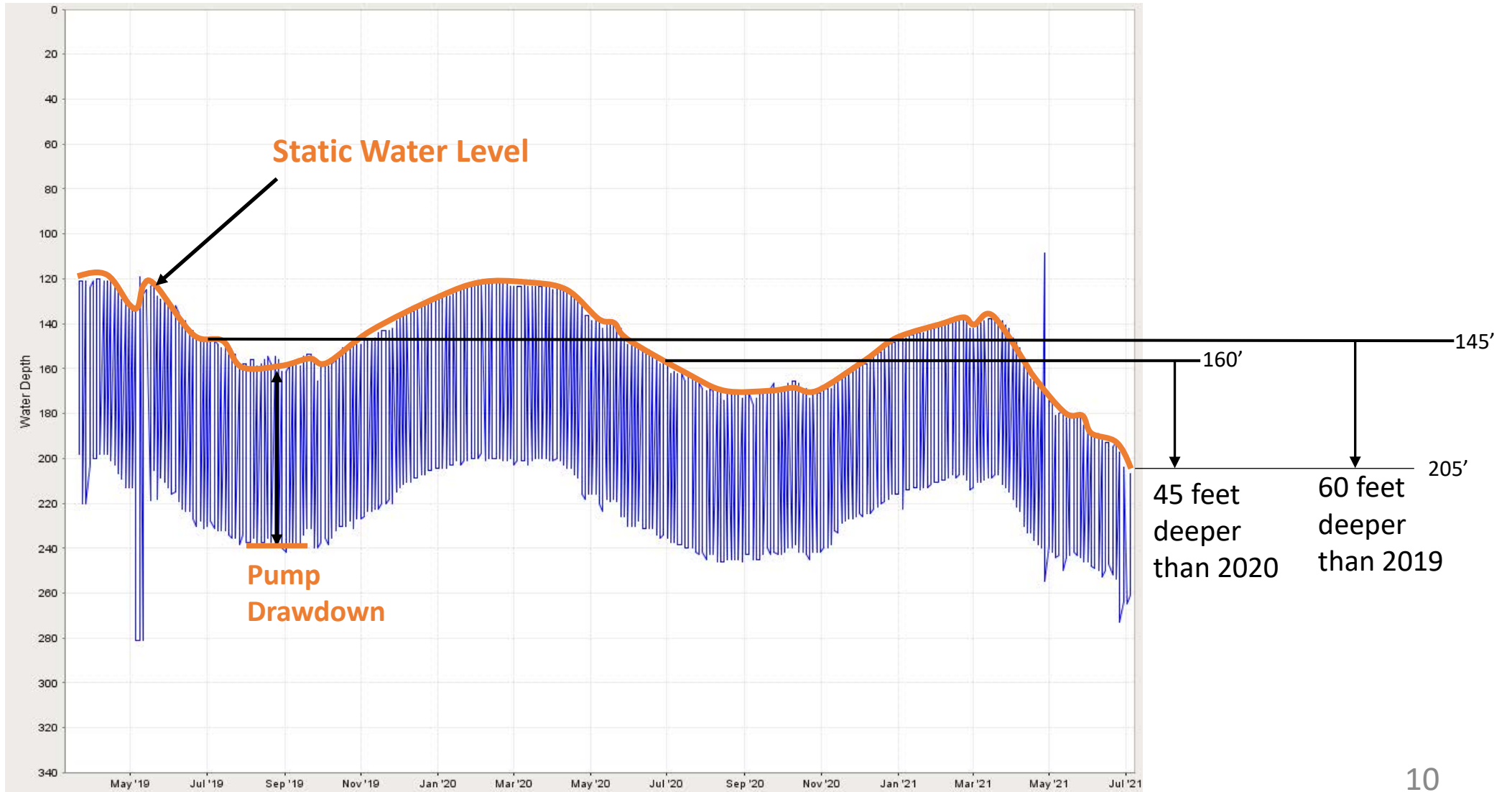
1. Canvas Back is used for irrigation supply and is a backup for Pintail for the Potable Water System.
2. Water Levels are lowest ever for this time of year
 - Typical Spring/Fall levels are 120 feet – 160 feet deep
 - Current level is 210 feet deep as of July 1, 2021
 - Levels are falling about 1-2 ft per day
3. The existing pump cannot supply water at these deeper levels.
4. A new pump was selected to increase water supply from the well. Limited pumps were available due to increased demand and supply chain impacts.



Canvas Back New Pump



Pintail Depth to Water

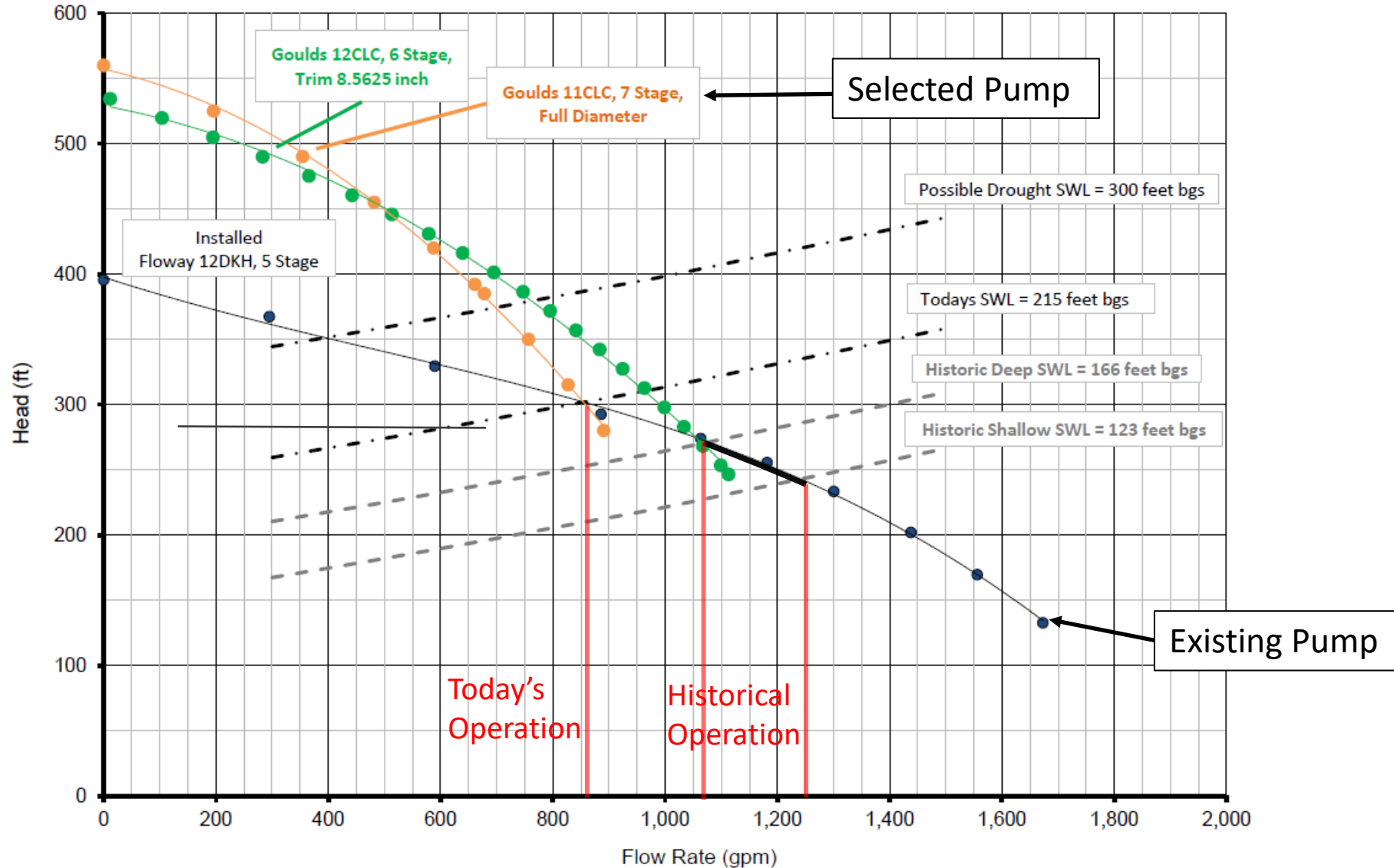


Pintail Water Supply

1. Pintail is the primary well for the Potable Water System.
2. Water Levels are lowest ever for this time of year
 - Typical Spring/Fall levels are 120 feet – 160 feet deep
 - Current level is 205 feet deep as of July 1, 2021
 - Levels are falling about 0.5-1.5 ft per day
3. The existing pump will not meet the minimum Potable Water demand if water levels continue dropping.
4. A new pump was selected to increase water supply from the well. Limited pumps were available due to increased demand and supply chain impacts.



Pintail New Pump



Plan for Changing Pumps

1. Canvas Back

- New pump is expected to be installed by next week.
- Pump will make about 700-900 gpm in current conditions.
- A deeper replacement well is being considered, if levels continue declining

2. Pintail

- New pump may be available within 2 weeks.
- Lower pump from 380 to 500 ft.
- Pump will make about 650-850 gpm in current conditions.

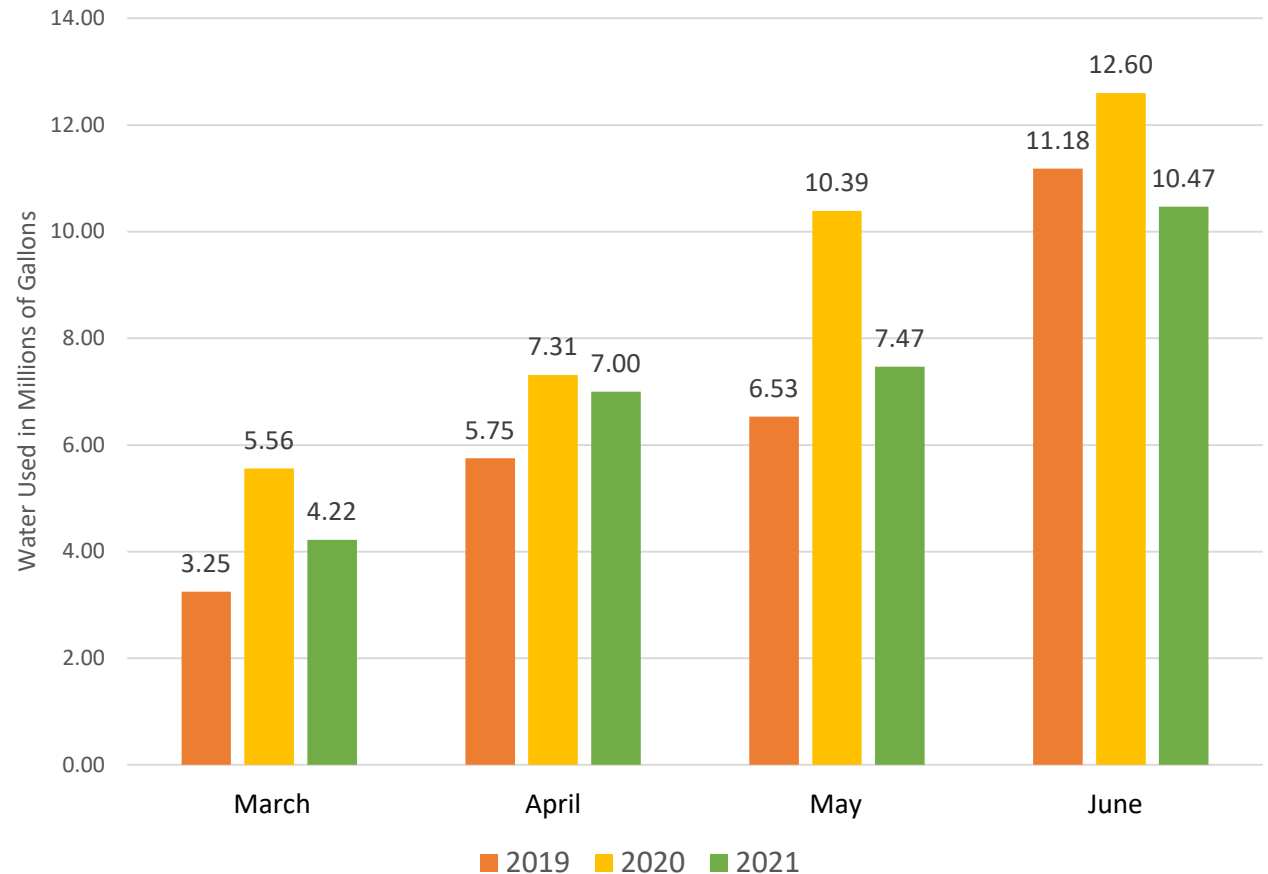


What you can do to help

Conserving water to reduce peak use will help ensure the wells can meet the water demands through the summer.

Nearly 50% of water use in the summer is for outdoor landscaping.

Wildwings Water Usage



Considerations for Replacement Well (Canvas Back)

- Site Constraints
- Hydrogeology
- Cost
- Schedule

