

Did You Know ?

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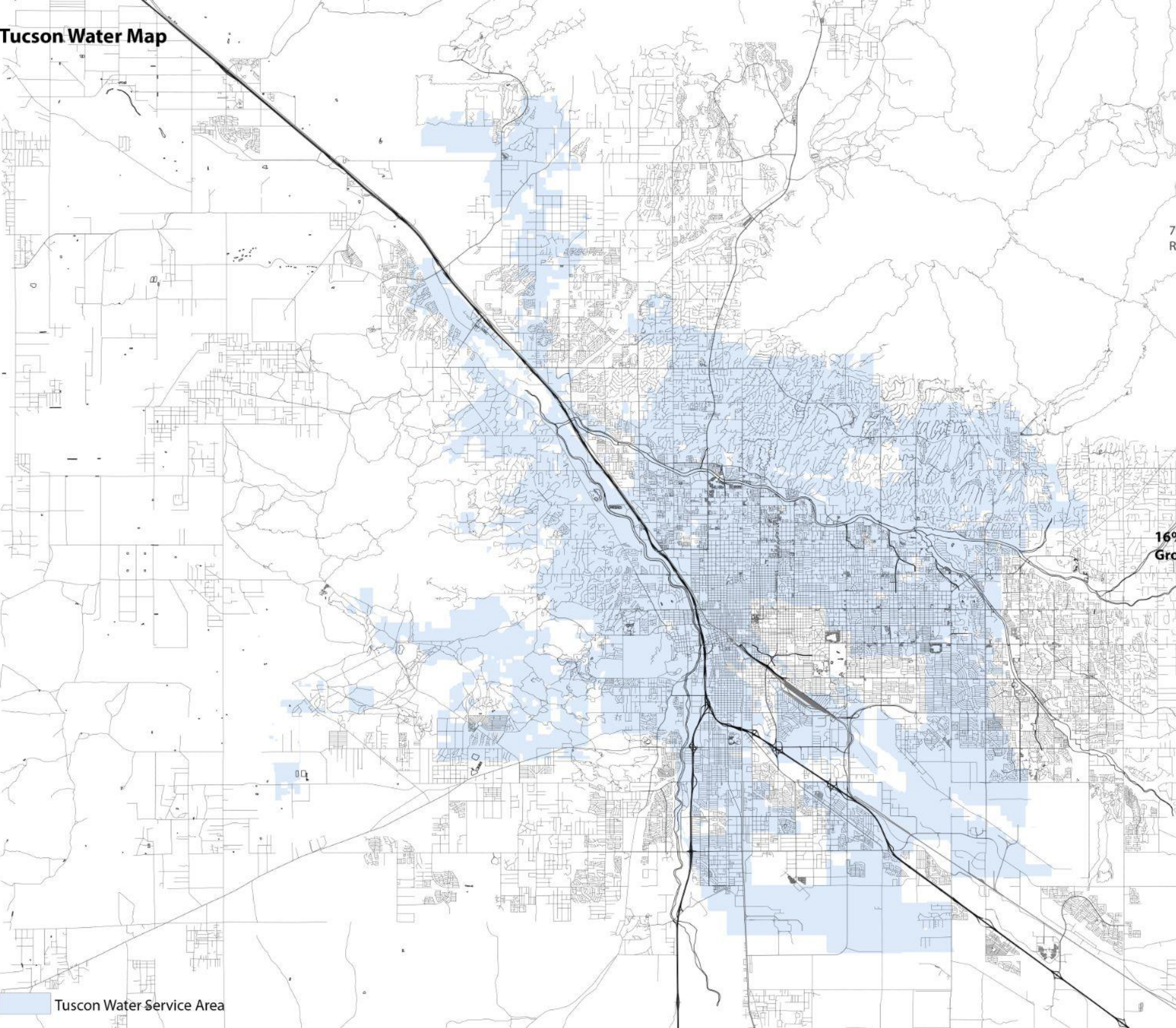
**“ WE ARE SORRY
FOR THE
INCONVENIENCE.
WE RAN OUT
OF WATER ! ”**

Current Condition

Due to historic drought, climate change, and over-allocation, conditions on the Colorado River are worsening. Despite seeing almost average winter snowpack levels this year, projections for the inflow into Lake Powell may be closer to 50% of normal. This would compound negatively upon last year's 32% of normal inflow, the second-worst unregulated inflow into Lake Powell on record.

This is due to the warming temperatures, drier soils, and reduced precipitation caused by climate change. That means Powell is only at 24% capacity with nature replenishing less than the amount of water supposed to be released downriver to Lake Mead. What is happening at Lake Powell will then trigger declines in Lake Mead, leaving Arizona, California, and Nevada with less Colorado River water for the foreseeable future.

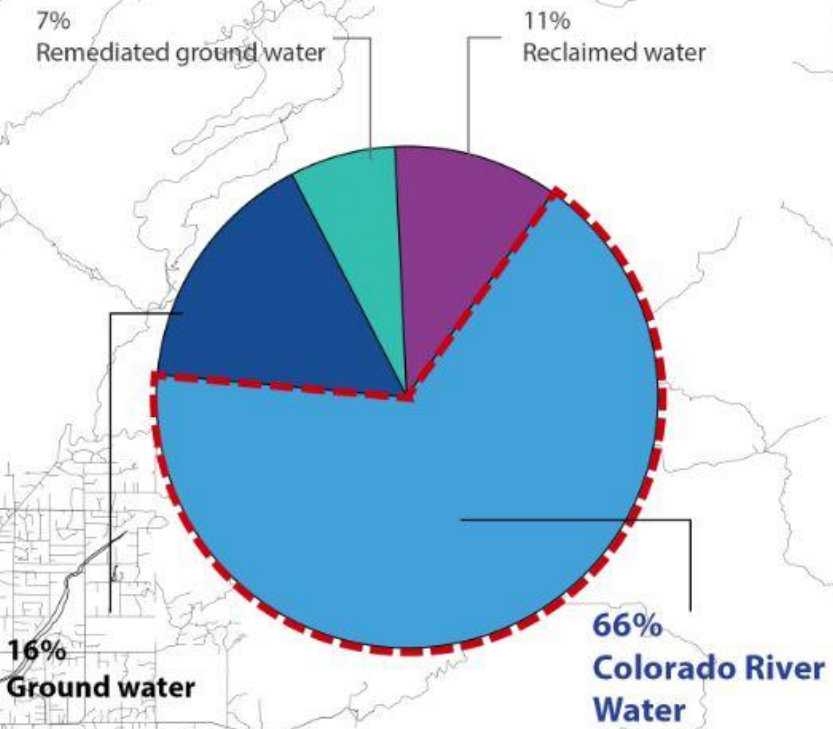
Tucson Water Map



Tucson Water Service Area

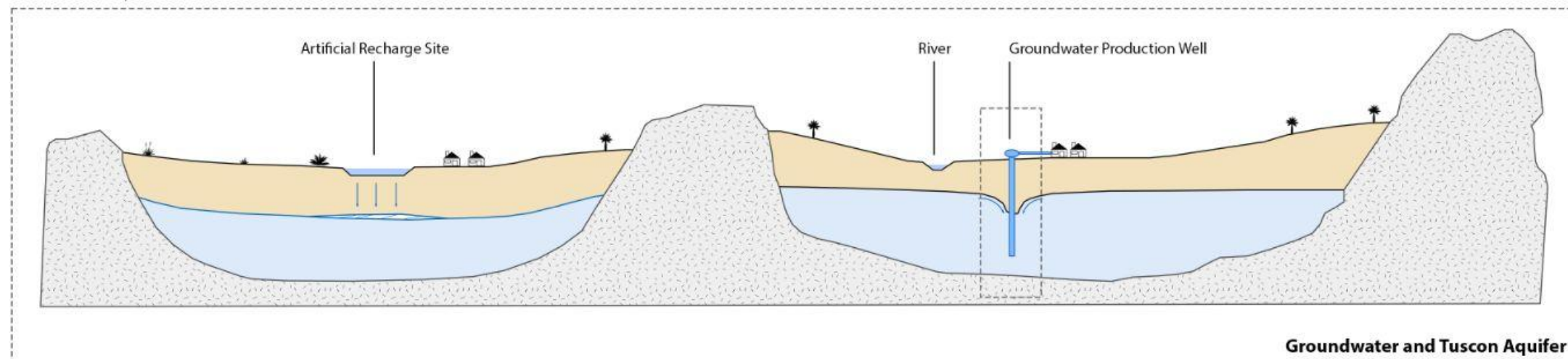
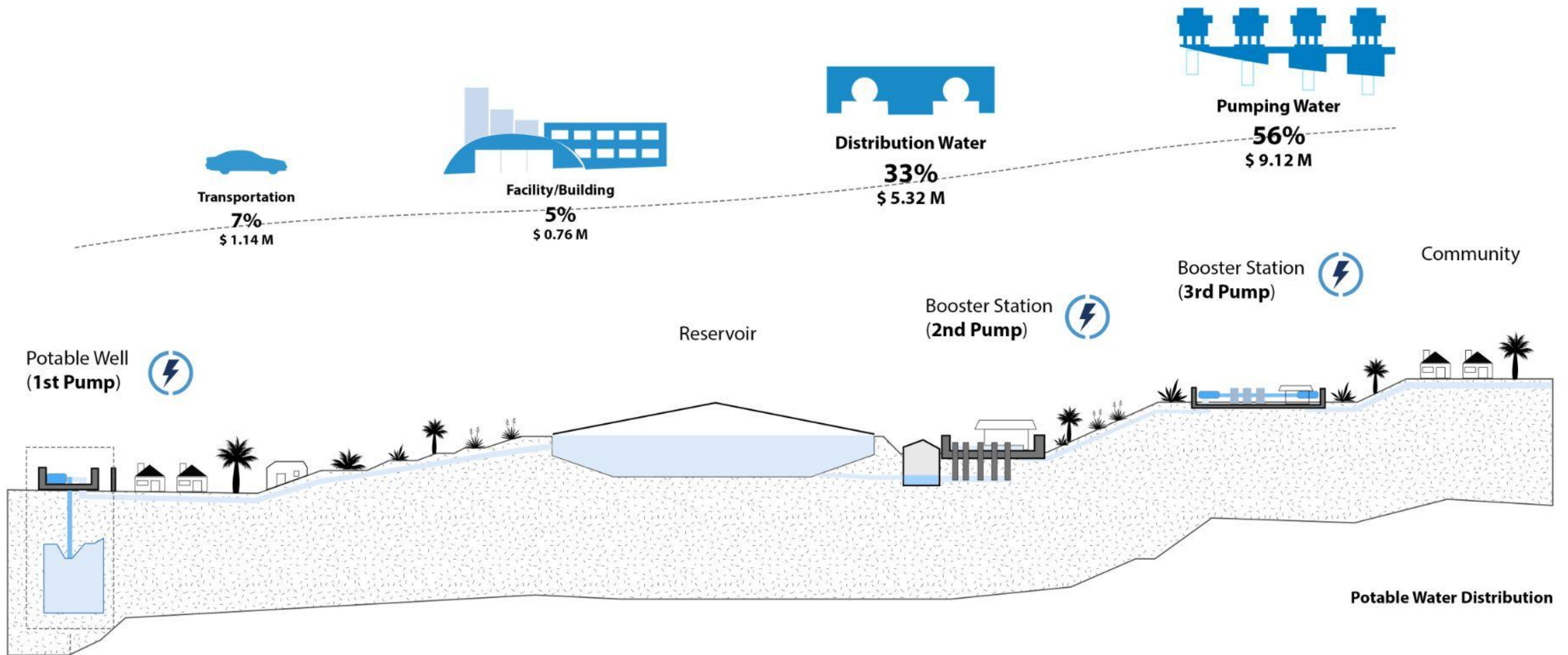
Water Production By type (2021)

Total Annual water production
Tucson, Arizona



Tucson Water serves about 722,000 people in the Tucson area. The water supply comes from approximately 200 groundwater wells located in and around the Tucson metropolitan area. Tucson Water is recharging Colorado River water into the aquifer, where it blends with local groundwater. As water is recovered from the aquifer through well pumpage, the blend that gets delivered to customers will contain a higher signature of Colorado River water than native groundwater.

Tucson Water's system contains approximately 398 square miles of water service areas that are located in and around the Tucson metropolitan area, 4,619 miles of pipes, and 145 booster stations that are dedicated to pumping drinking water.



How Water is Distributed and Monitored:

- Water may be pumped from wells directly into the distribution system or into large transmission lines for delivery elsewhere in the community.
- During the night, or when customer demand is lower, water is pumped to reservoirs for storage for later use.
- The water is chlorinated at the wells and monitored in reservoirs and at other sites in the distribution system. If necessary, additional chlorine can be added at many of these sites.

What if... ?

LET THE TUCSON WATER FLOW IT DOWNHILL

It can be realized with a smaller scale

waste water facility for local community.

Recycling Black water as Potable as well...

Reducing energy for extra pumping...

Reduce expense on water conservation...

South Pantano area, Tucson, Arizona

Suburban Ranch Zone (SR) – This zone provides for very low density, large lot, single-family, residential development and suburban ranch uses.

John F. Rauscher Reservoir:

To the south and west of the property are single-family residential uses zoned R-1. To the north and northwest are commercial uses zoned C-1 and C-2. To the east is City of Tucson-owned property, which is partially vacant, undeveloped land, but has a municipal center with library, City Police department, and City vehicle refueling facility. Primary vehicular access to the project site is from Harrison Road through an existing gate.

How?

water treatment technology like

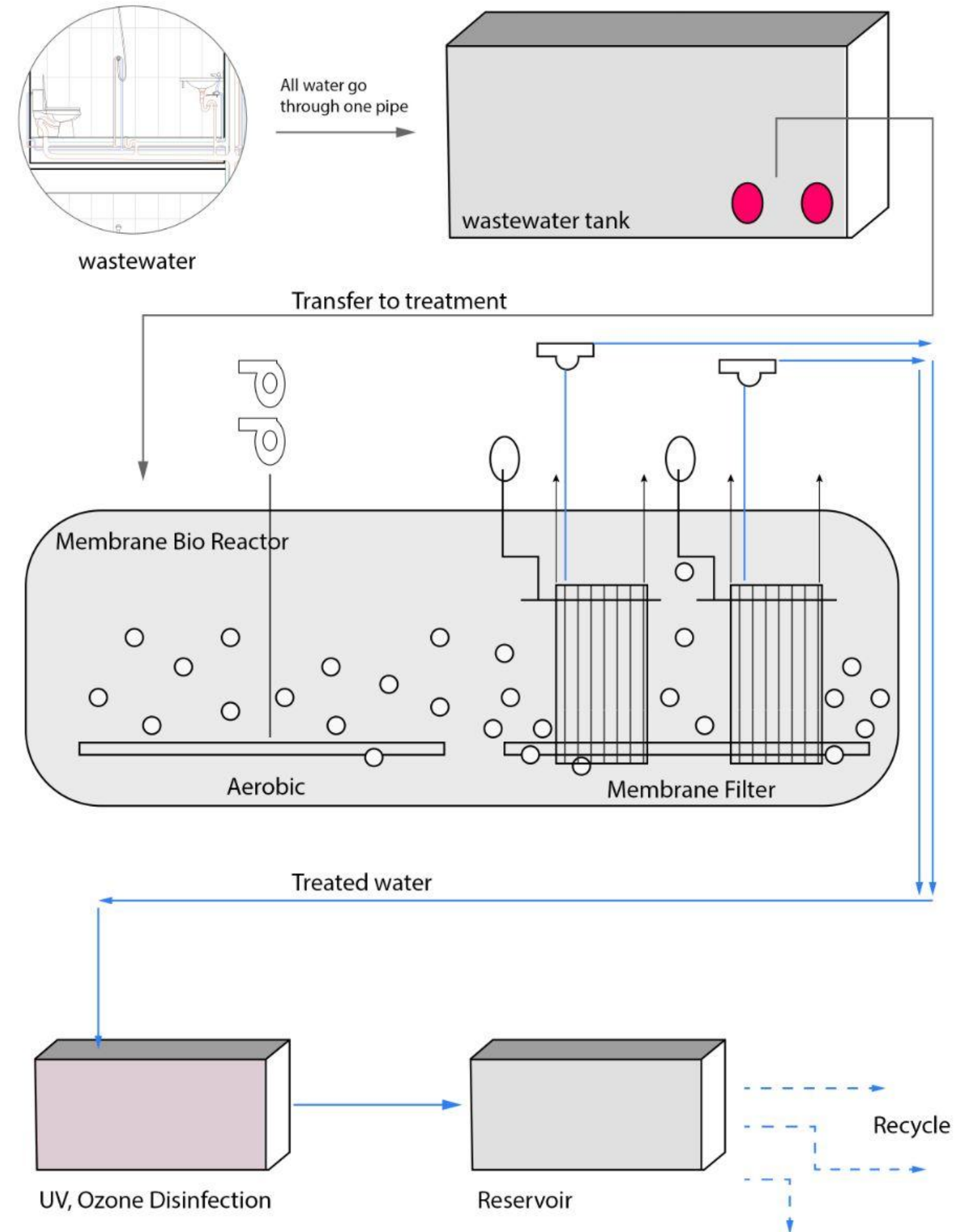
MEMBRANE BIO REACTOR OZONE DISINFECTION

can process all black water and grey water

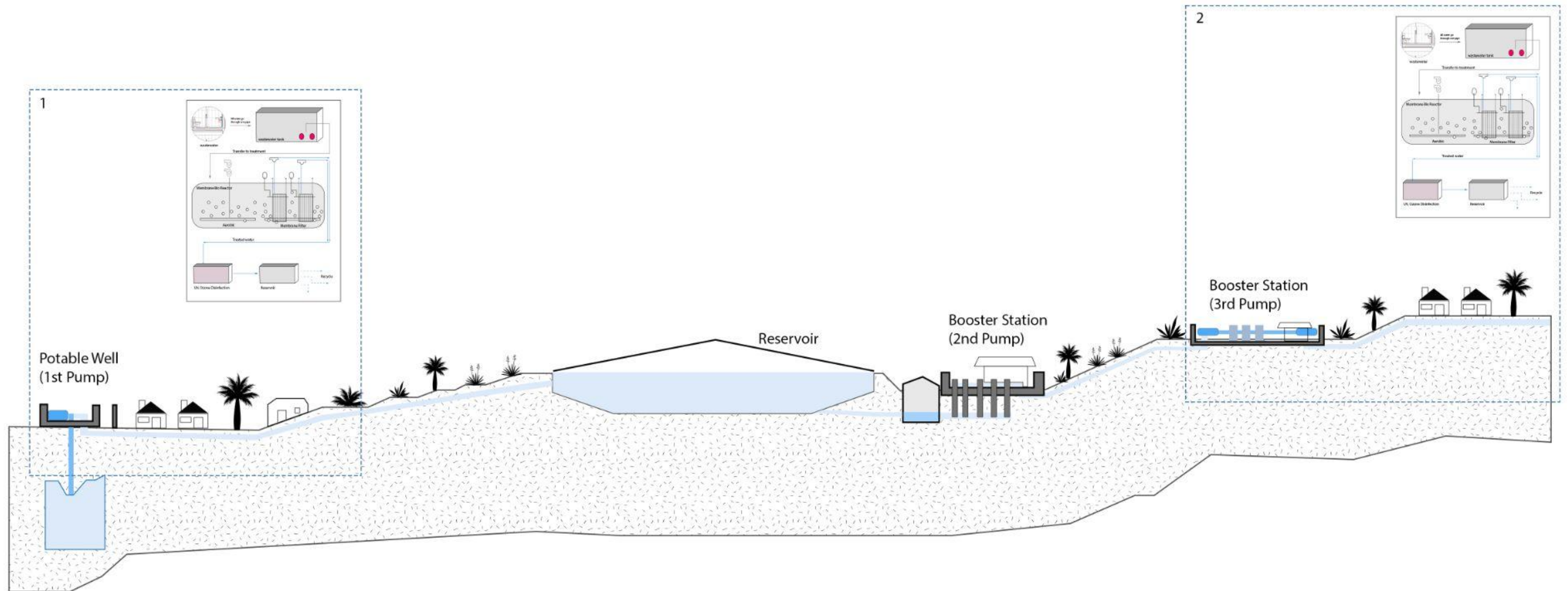
to provide clean water .

**balancing energy efficiency with aspects
of sustainability...**

lowered overall energy consumption...



What if...?



Proposal:

- Combine small wastewater treatment into spot near community
- Place them in downhill and uphill of the community
- Collect all black water and grey water, process and recharge clean water back.
- Reduce extracting groundwater and Colorado River resource
- Reduce pumping energy and money, reuse every type of water

