

# City of Ashland

## Water and Wastewater Master Plans



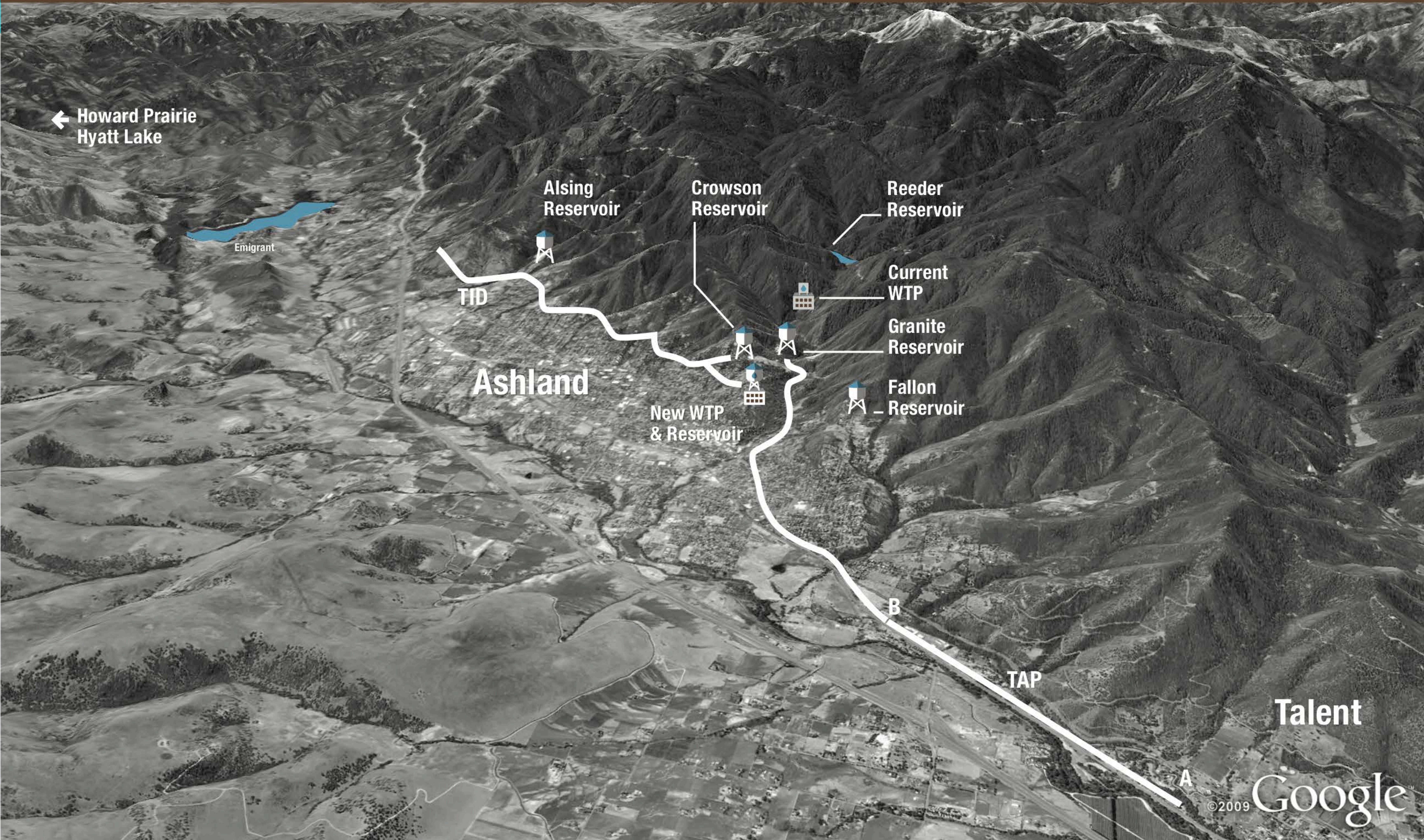
# Ashland Water Advisory Committee

- Committee Members Appointed By Mayor April 2010

- Pat Acklin
- Lesley Adams
- Alex Amarotico
- Darrell Boldt
- Kate Jackson
- Donna Mickley
- Don Morris
- Amy Patton
- Donna Rhee
- Carol Voisin
- Rich Whitley
- John Williams



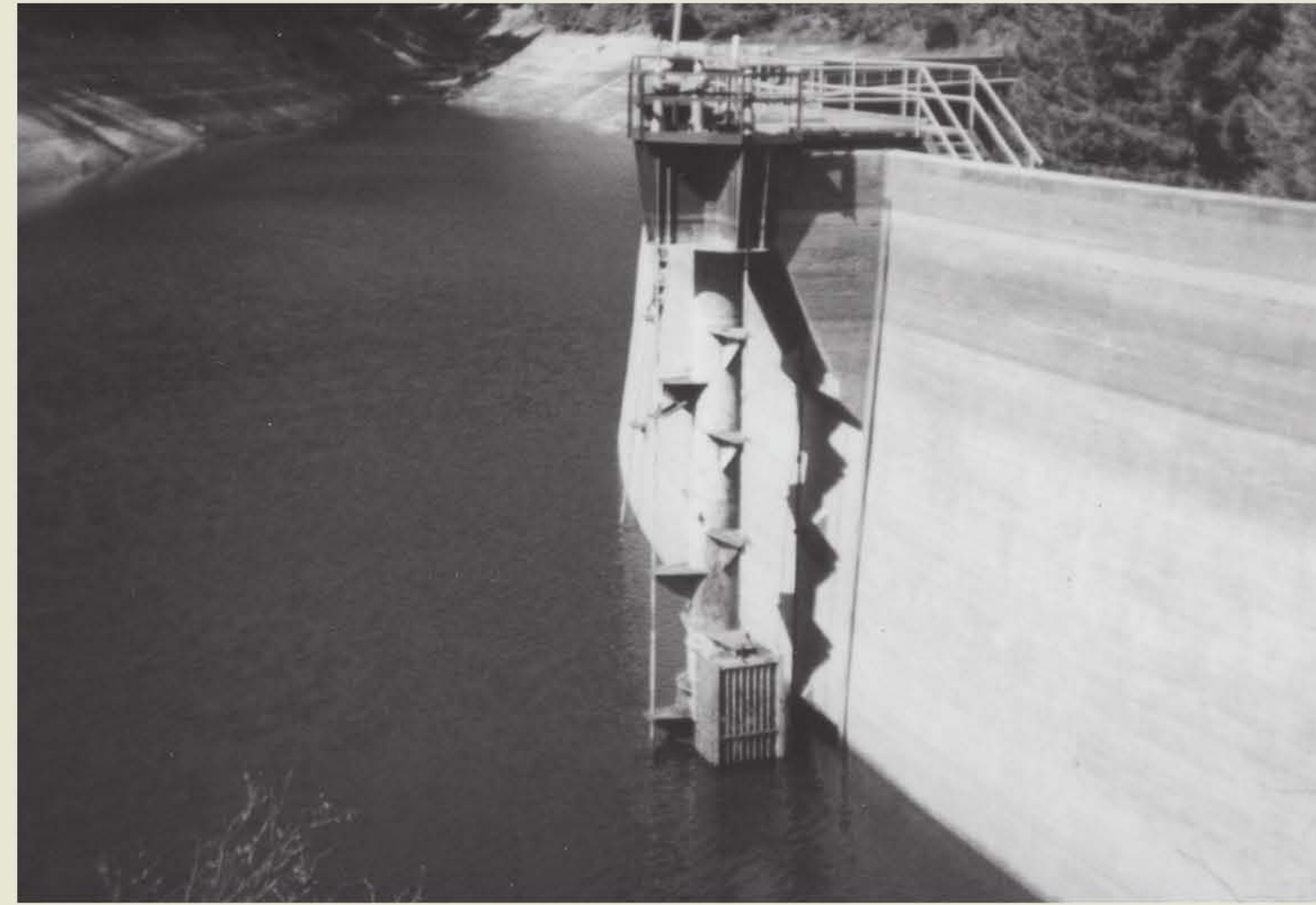
# water system snapshot



# current situation & risks



2010 East Ashland Fire



1989 Drought



1974 Ashland Creek Flood



1997 Ashland Creek Flood

Over the course of history, every major system improvement was preceded by a major natural event. The City of Ashland is vulnerable to flooding, fire and drought, and needs insurance against these risks.

- Water Treatment Plant is built just below Reeder Reservoir in the narrowest part of the Ashland Creek canyon and is vulnerable to flooding, wildfire, and earthquakes
- Water Treatment Plant was built in 1949 (rebuilt in 1995) and must be replaced by 2045
- By 2018 the current plant will not be able to treat water fast enough to meet peak summer demand
- Water storage for fire emergency is limited. Low water levels in reservoirs mean water pressure at many hydrants throughout town do not have the needed pressure for fire hoses
- Many water pipes are nearing the end of their useful life – aging infrastructure will get worse if ignored and eventually replacement costs will be more expensive
- TID is secondary water supply during summer but much of the water is lost to evaporation
- Limited water supply during peak summer demand

# water improvements snapshot



- A** Enclosed TID ditch reduces water evaporation and contaminants in Ashland Creek.
- B** Additional water storage tank for emergency fire purposes.
- C** Second water treatment plant serves as a backup.
- D** TAP extended to Ashland for emergency water access.



## \$12.0 M water treatment plant

The second WTP will act as backup (redundant), only when needed.

The current water treatment plant is vulnerable to fire, landslides and flooding.

The second WTP provides backup and minimizes investment needed for upgrades to existing WTP.



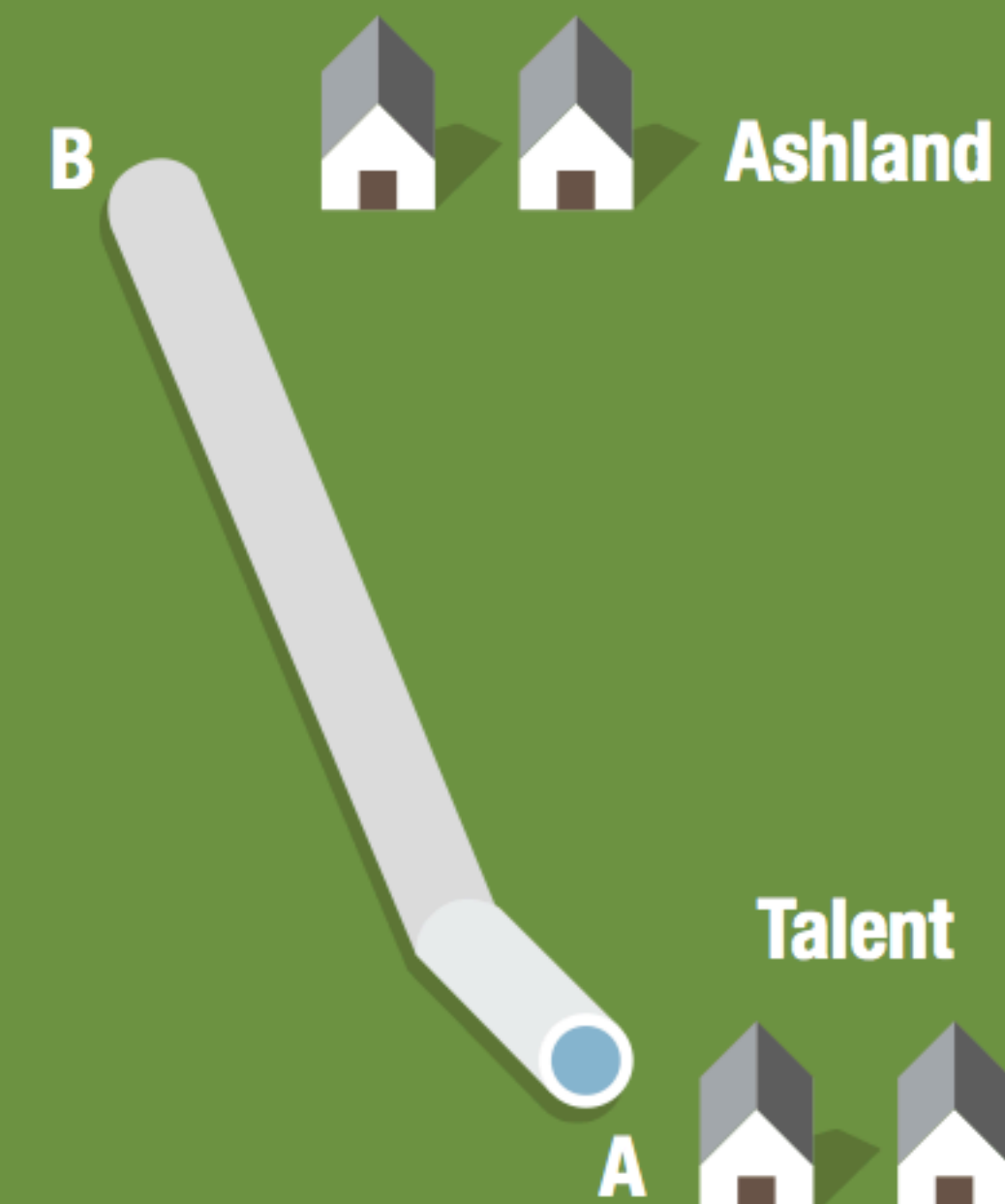
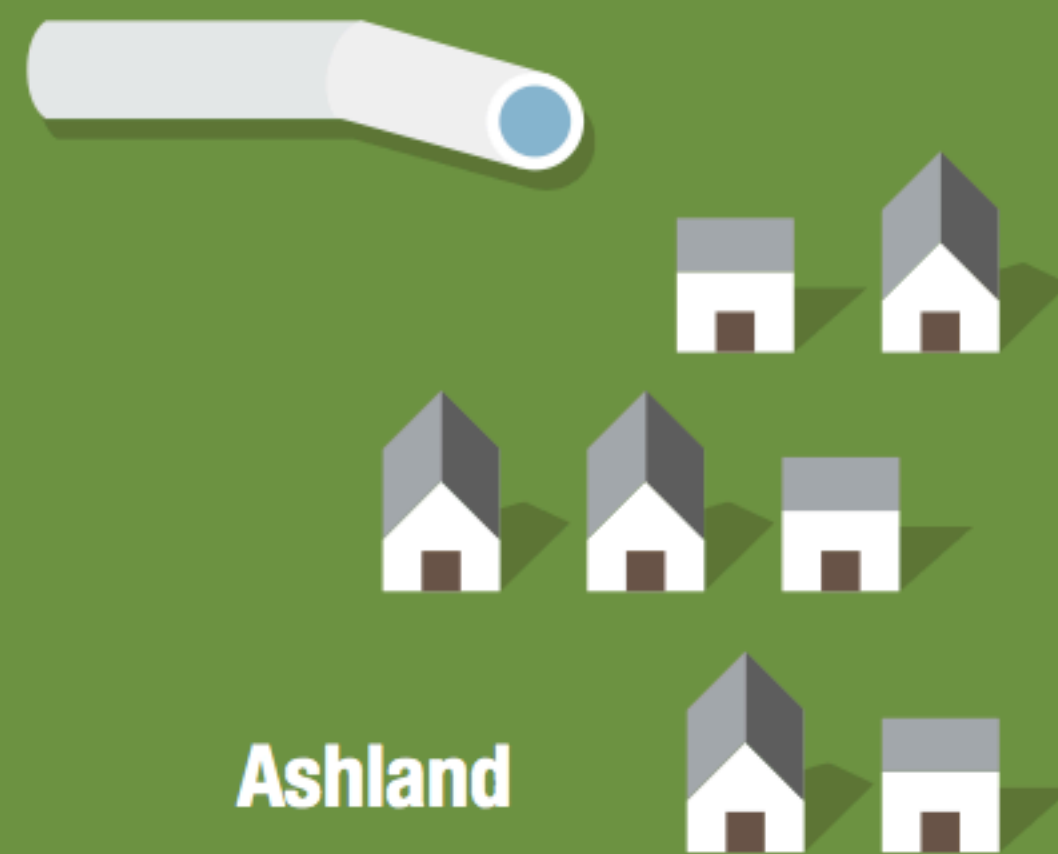
## \$8.7M new reservoir

Ashland needs a new reservoir to increase water access for fire emergencies.

← To Hyatt and  
Howard Prairie Lakes

## \$1.1M TID pipe

Piping reduces water loss due to evaporation, providing more water if needed.



## \$2.1M emergency only TAP

Extending the TAP from Talent to Ashland will make water available during times of emergency.

At the time of an emergency, the TAP can be connected to Ashland's water system.



## \$6.6M maintenance

Replacement of old pipe and maintenance of existing infrastructure are ongoing costs.

## what do we need?

# \$30.5M

Between now and 2022 the City of Ashland water fund needs \$30.5 million.

## why do we need it?

# insurance

We're insuring ourselves against the potential loss of water due to a catastrophic event, and we're making a long range investment in Ashland's infrastructure that includes:

- A redundant water treatment system
- A water reserve for fire emergencies
- Reduced water loss to evaporation
- Access to water for emergencies
- Improvements to existing water distribution

## how do we get it?

# rates

Ashland water rates will pay for improvements through increased rates over the next 10 years.



## pay it forward

We've benefitted from consistent improvements made by past generations. It's important that we invest in Ashland's future.



## treated water

Without improvements, Ashland will be unable to meet the treated water needs of the community by 2018.



## conservation

Since 1999, the community has reduced water use by 10% through conservation efforts.



## beyond 2022

If we increase conservation by 5%, we won't need to increase water supply capacity until 2038. Once we address current needs and risks, we will address water supply capacity.

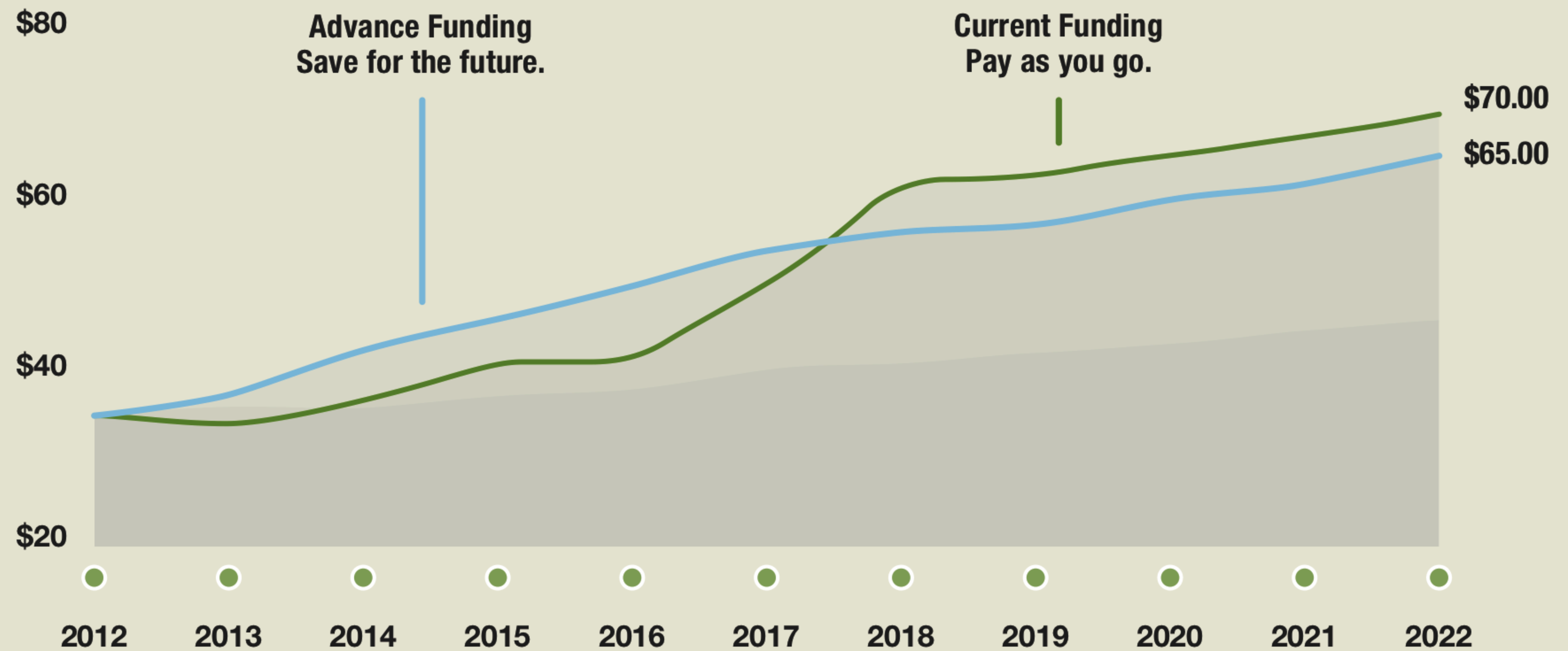
# water financing alternatives

**Advance Funding** (proposed):

If you pay **\$35** now, you may pay **\$65** by 2022\*

**Current Funding** (proposed):

If you pay **\$35** now, you may pay **\$70** by 2022\*



The average household bill is \$35.54 (based on two people, indoor use, 125 gallons each per day).

\*Assumes 3% increase in inflation.

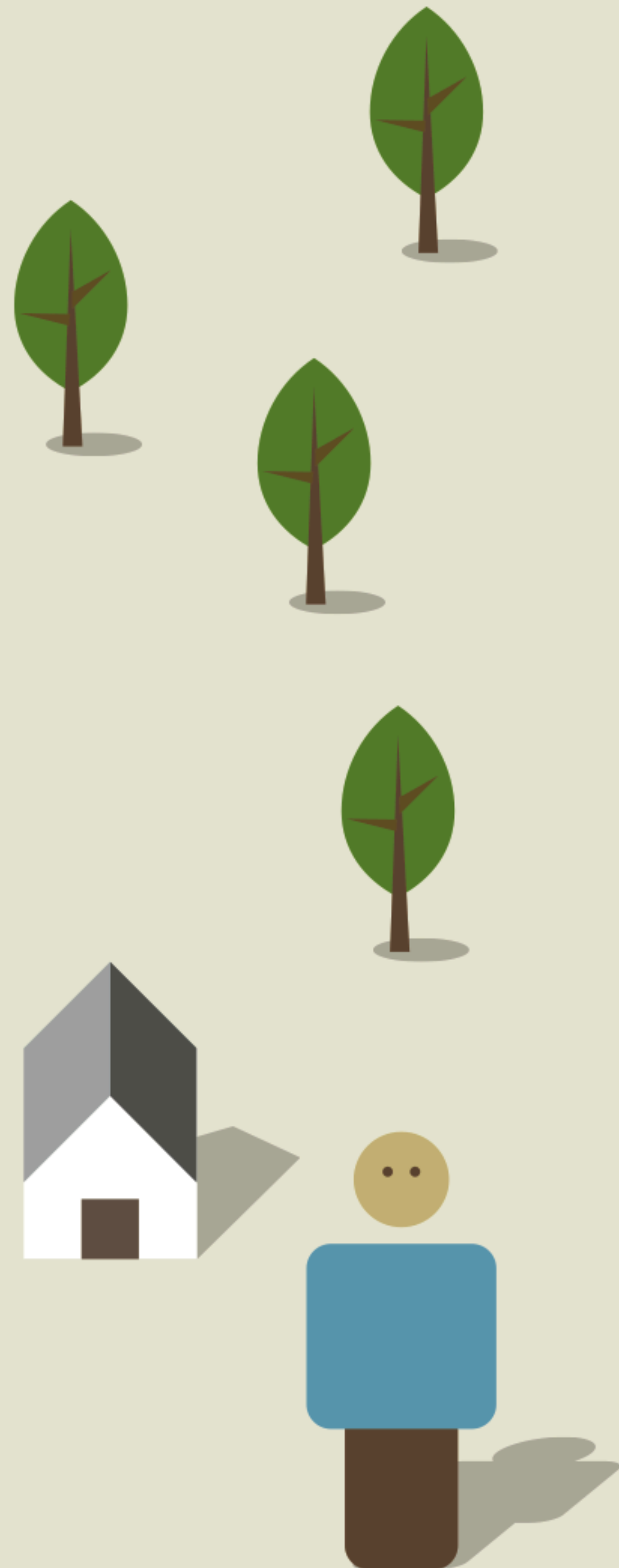
"Save for the future" rates will increase 10% each year until 2018 and then drop to 3% each year until 2022.

The actual "Save for the future" increase will be determined each year.

A drought year (when people buy/use lots of water), could result in a lower % increase.

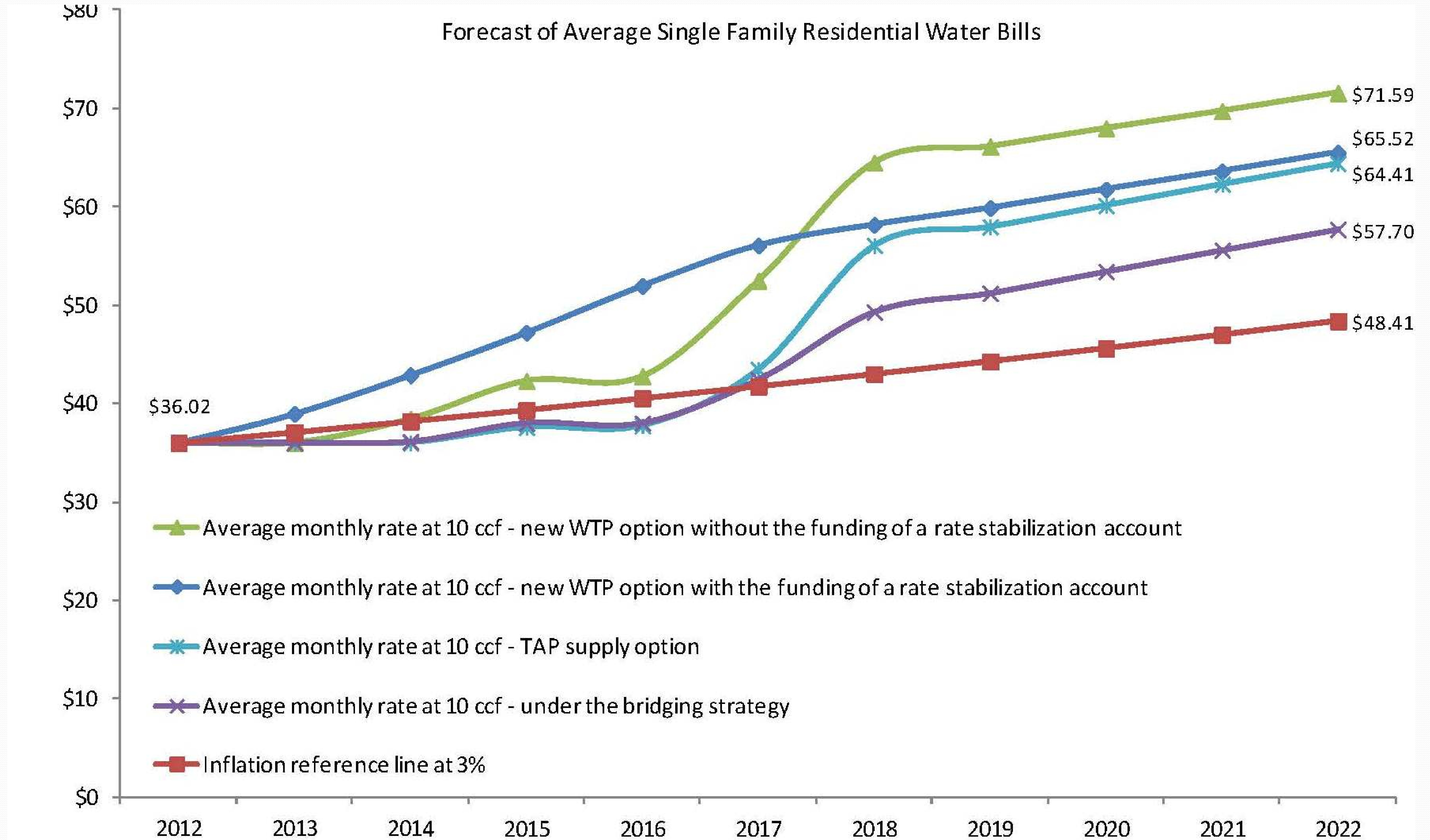
A wet year (when people don't buy/use lots of water) could result in a higher % increase.

"Pay as you go" rate increases based on when money is needed for improvements.

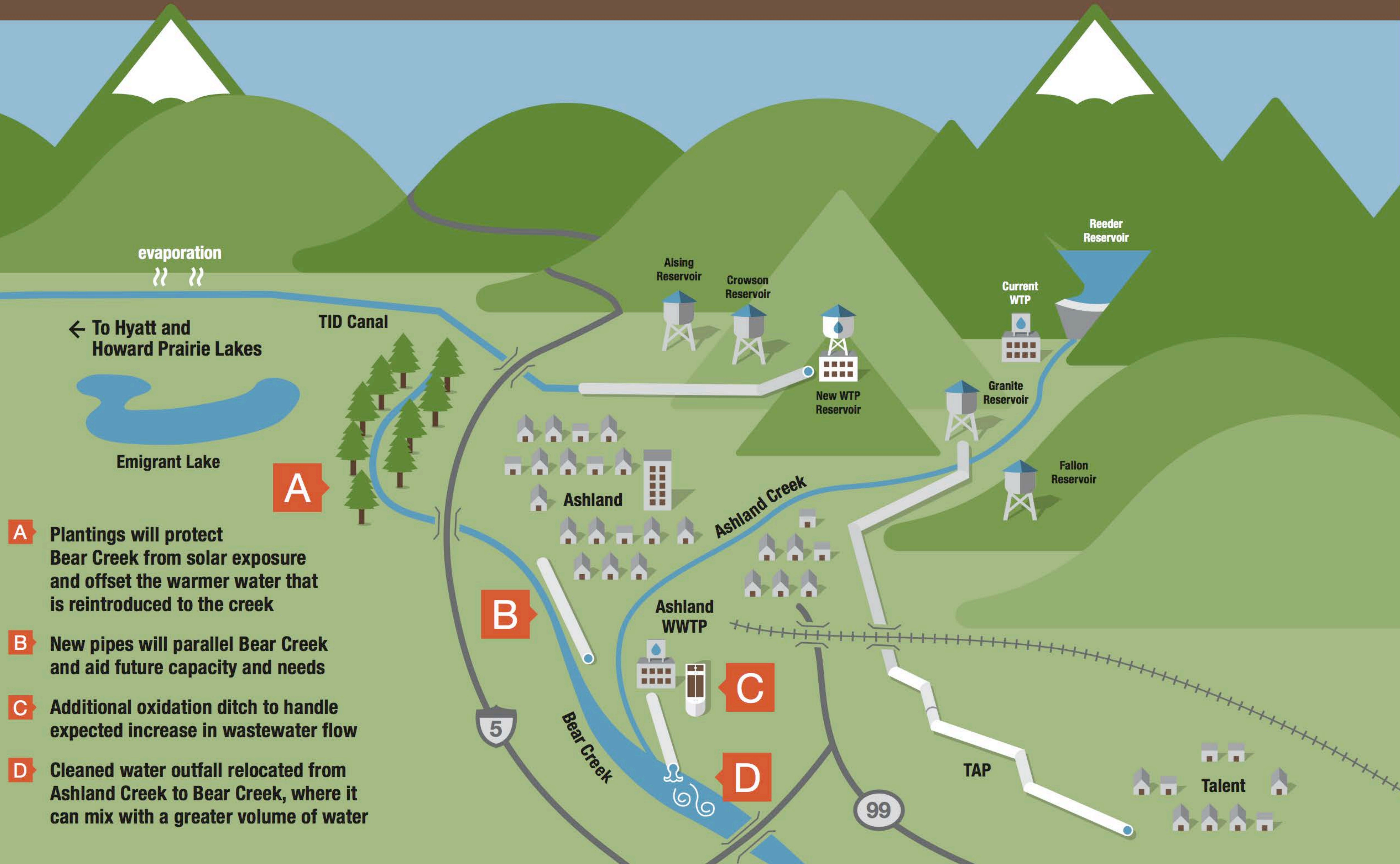




# Forecast of Single Family Water Bills



# wastewater system improvements snapshot



## what do we need?

# \$10.8M

Between now and 2022 the City of Ashland needs an estimated \$10,756,000 to fund wastewater treatment projects.

## why do we need it?

### system needs & protect public health

In order to manage wastewater and meet DEQ requirements, Ashland needs to do the following:

- increase plant capacity and manage peak flow
- relocate current cleaned water outfall from Ashland Creek to Bear Creek where it can mix with a greater volume of water
- create more shade along Bear Creek by planting more trees

## how do we get it?

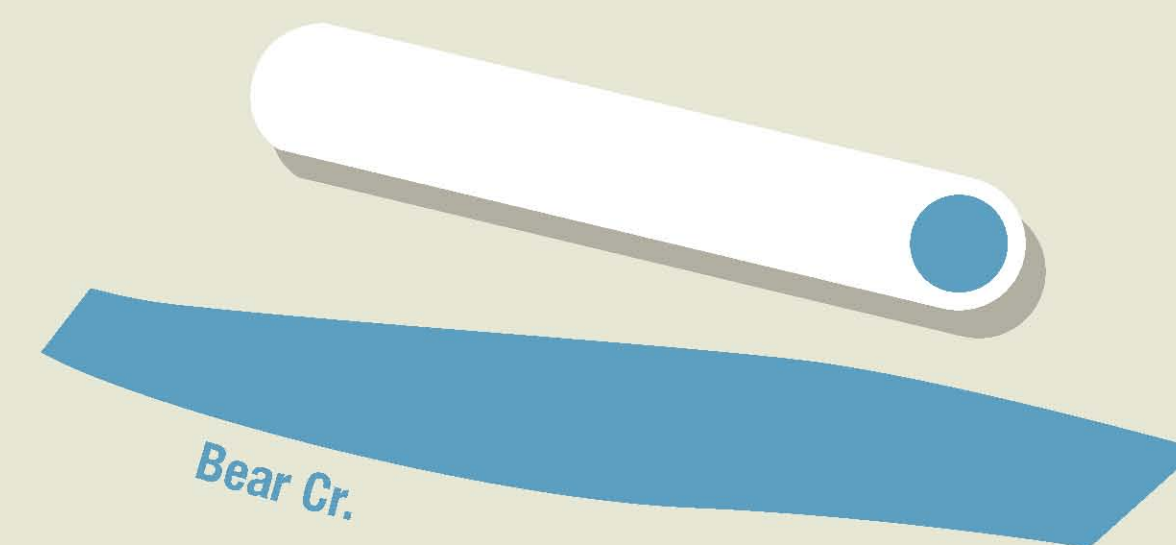
# rates

Ashland wastewater rates will pay for improvements through increased rates over the next 10 years.



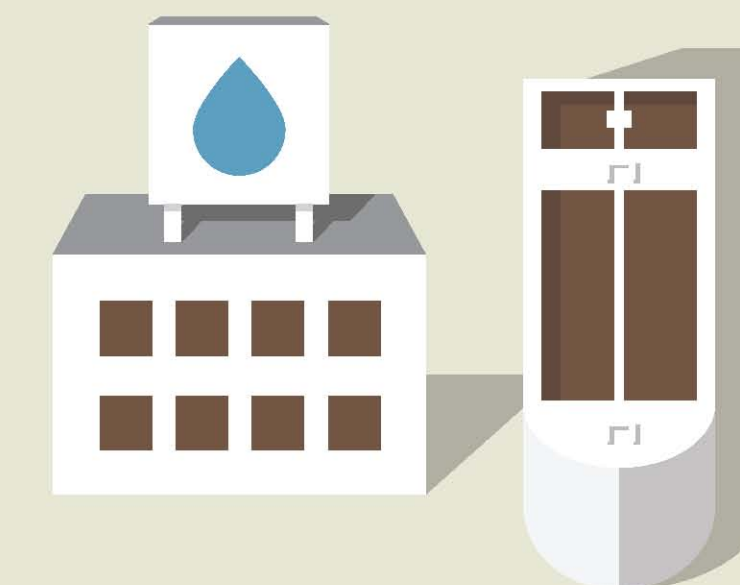
### tree plantings

Plantings will create more shade along Bear Creek to protect the water from heating due to the sun.



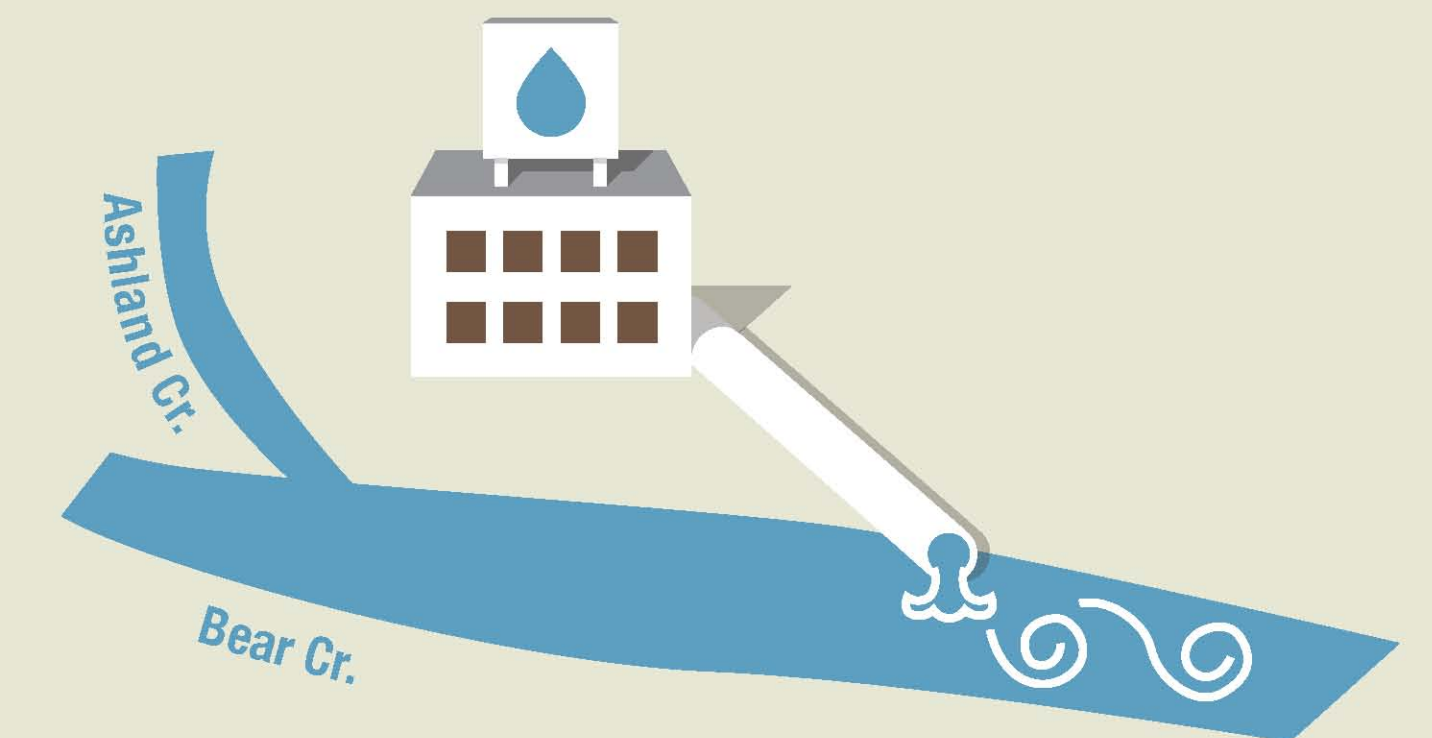
### additional pipe

New pipes with larger diameters will parallel existing sections along Bear Creek to accommodate potential capacity and peak flow.



### treatment ditch

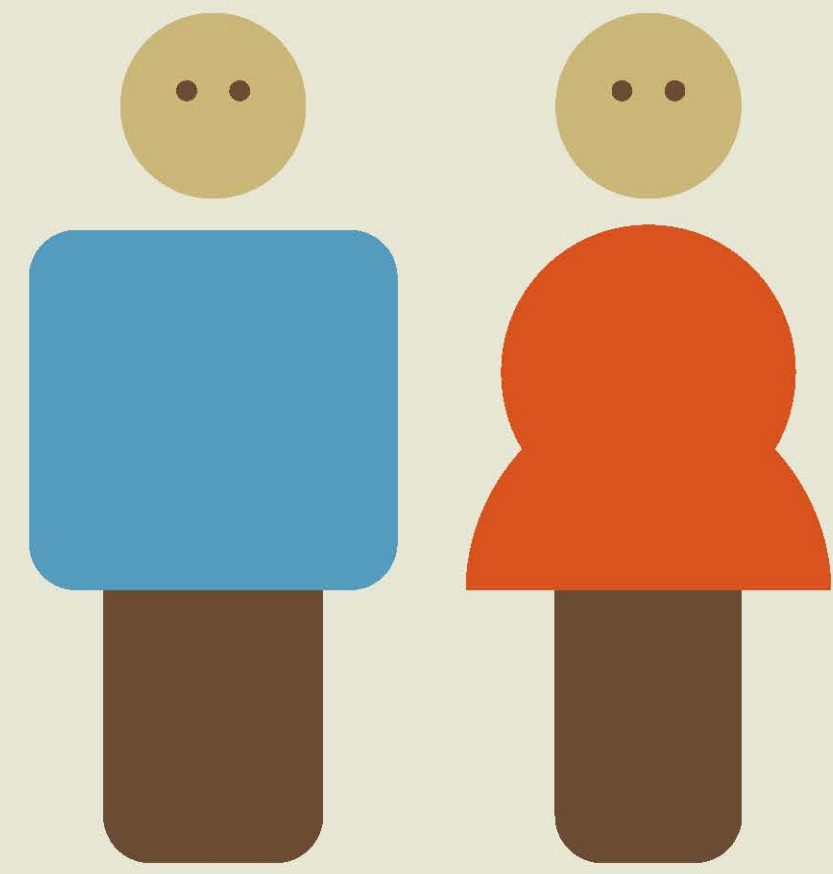
Additional oxidation ditch will handle expected increase in wastewater flow.



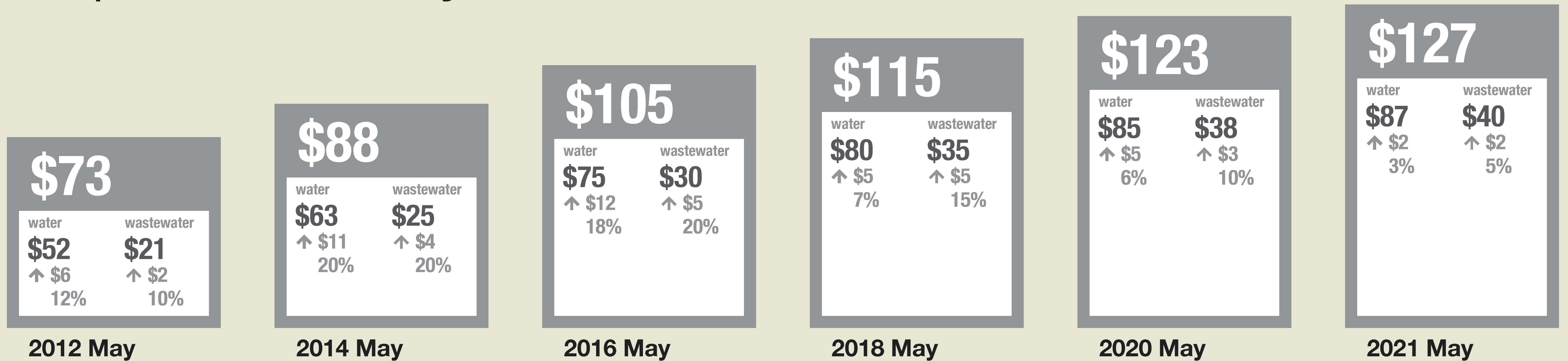
### relocated outfall

Cleaned wastewater reintroduced to larger volume of water at Bear Creek instead of Ashland Creek.

# 2 person family scenario

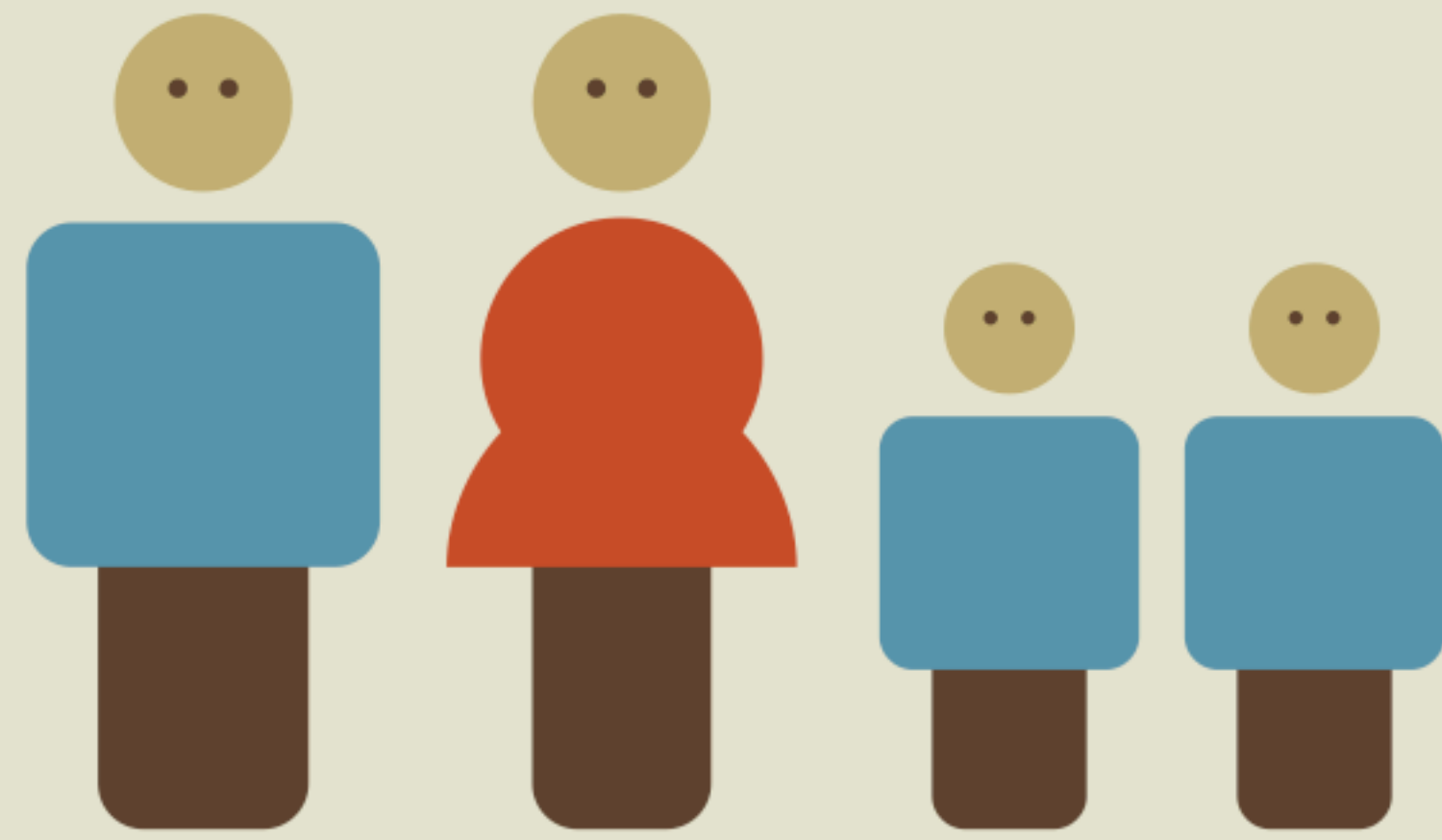


## 2 person family



Bills represent August 2011, peak summer demand.

# 4 person family scenario



4 person family



2012 May



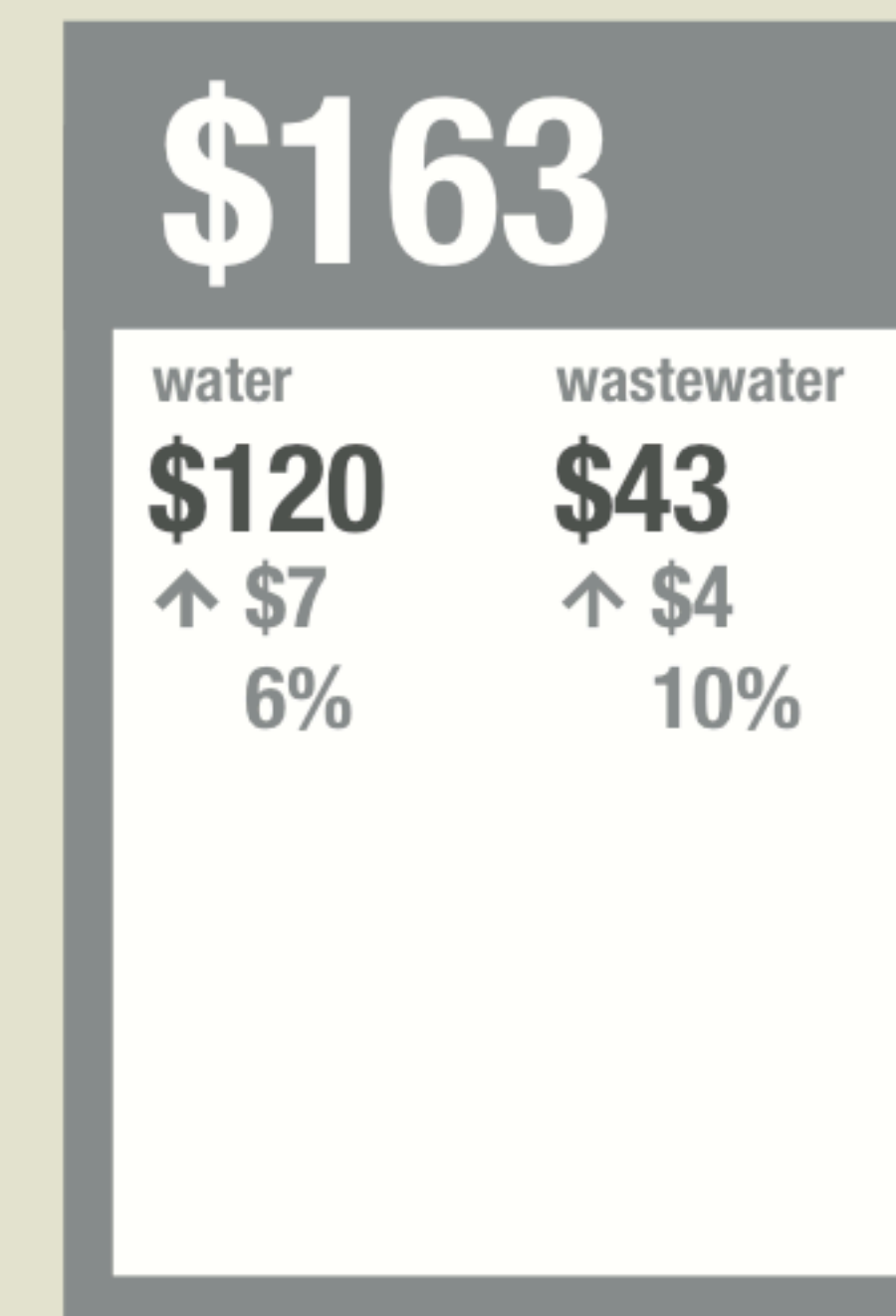
2014 May



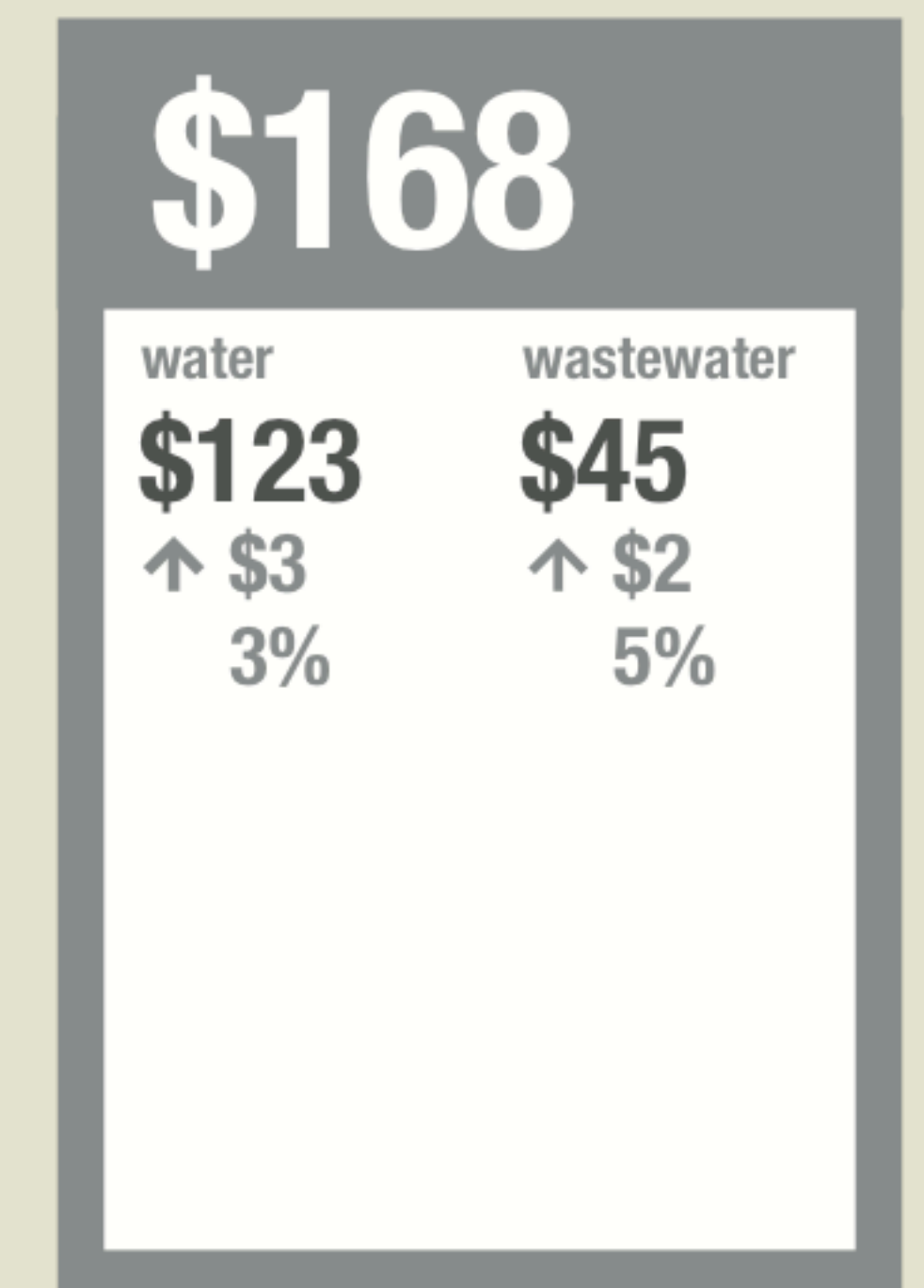
2016 May



2018 May



2020 May



2021 May

# restaurant rate scenario



## Restaurant



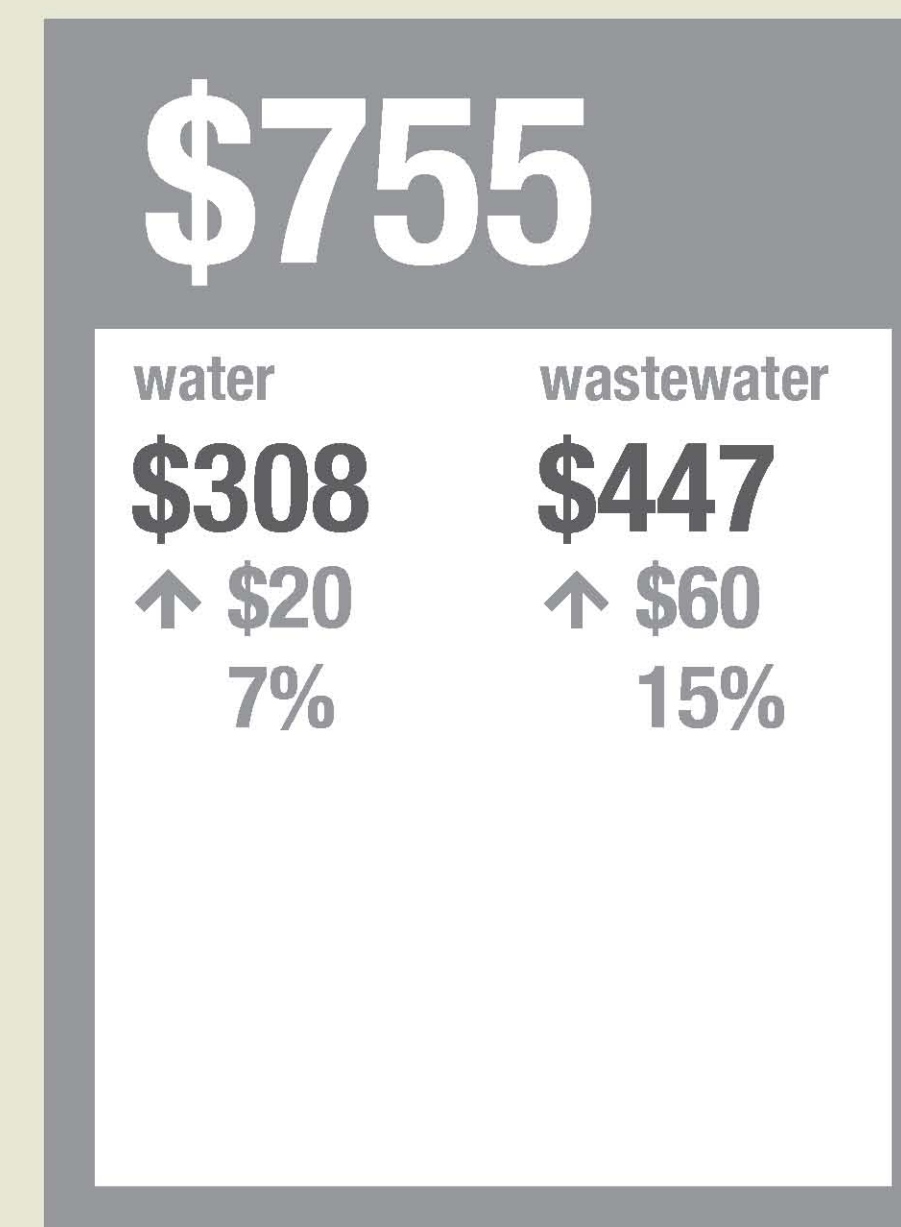
2012 May



2014 May



2016 May



2018 May



2020 May



2021 May

Bills represent August 2011, peak summer demand.

# bed & breakfast rate scenario



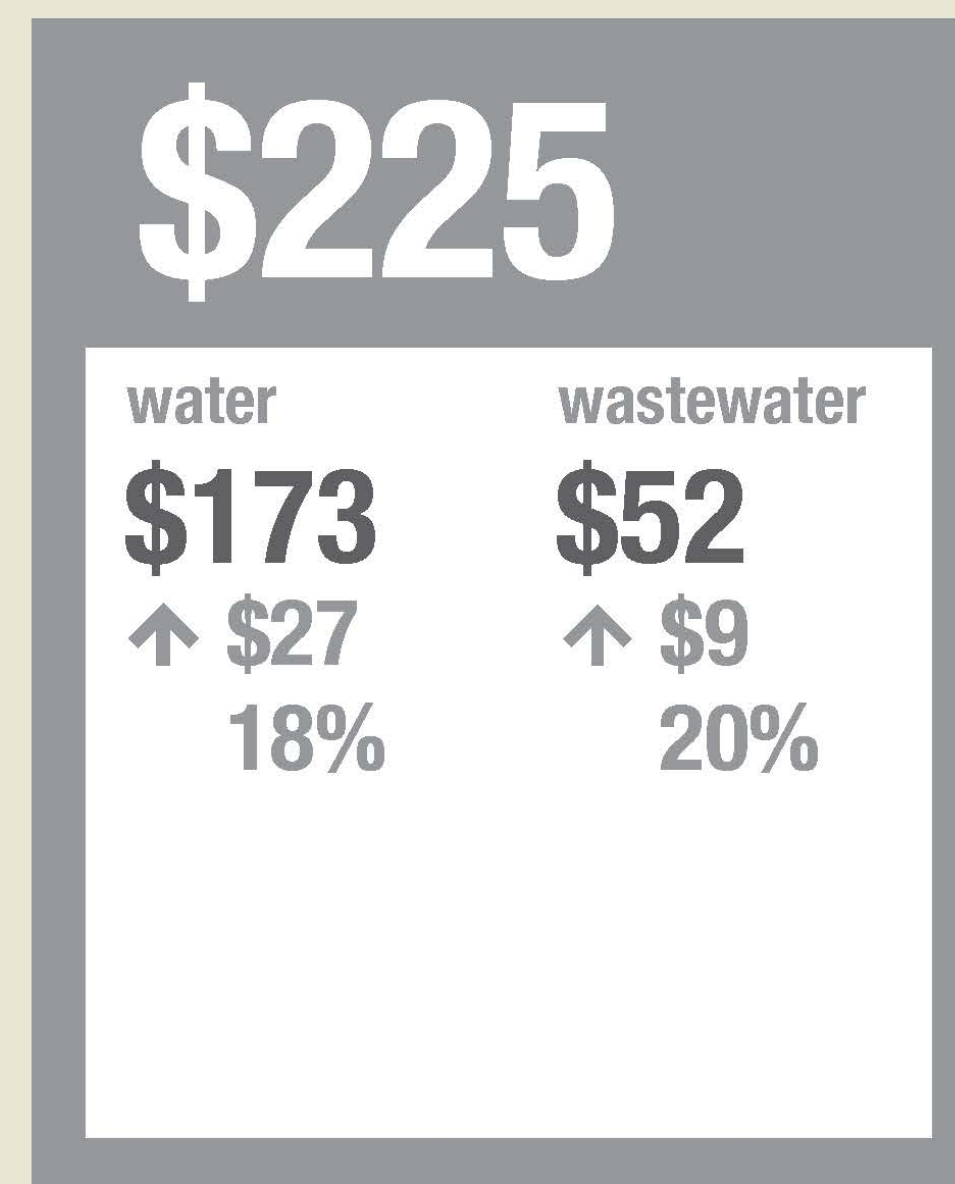
B & B



2012 May



2014 May



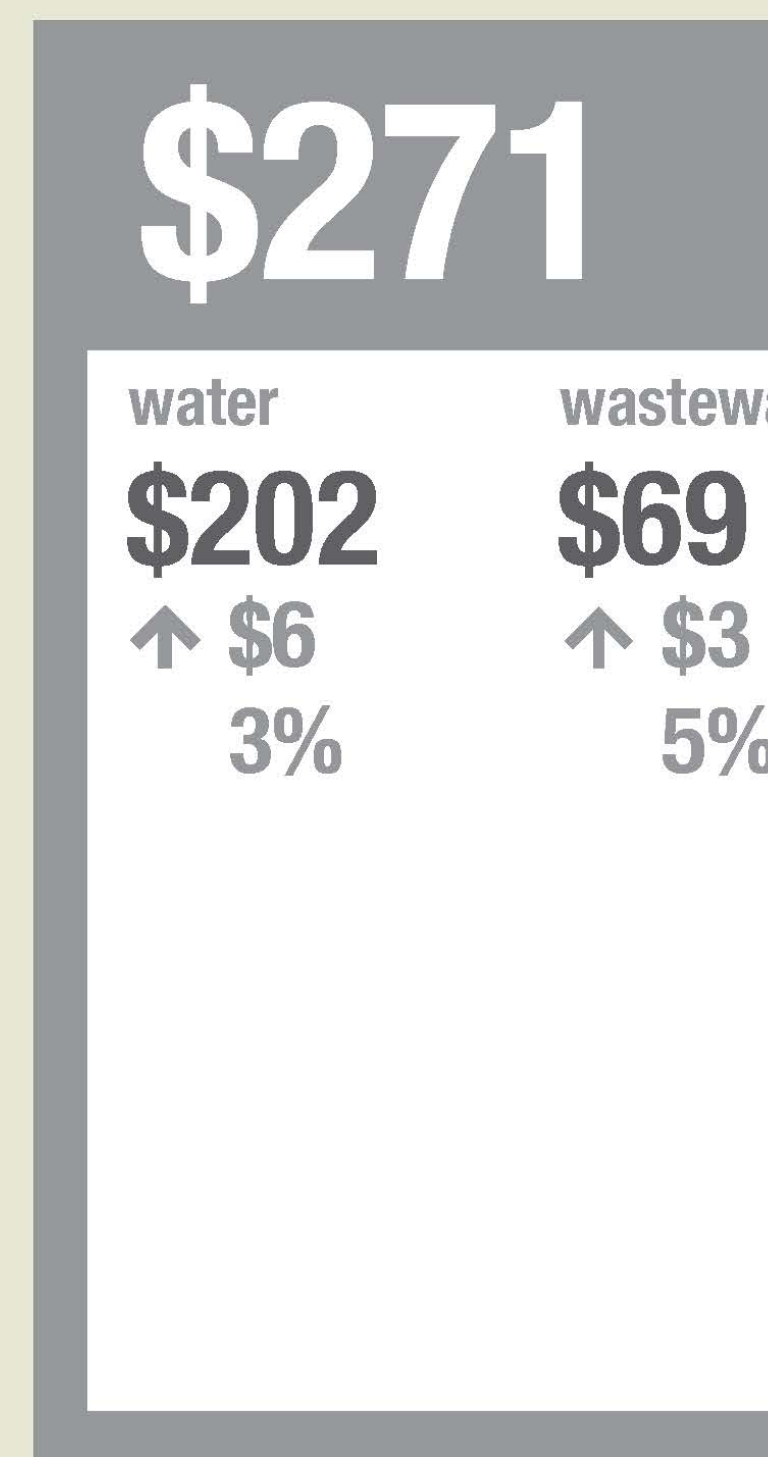
2016 May



2018 May



2020 May

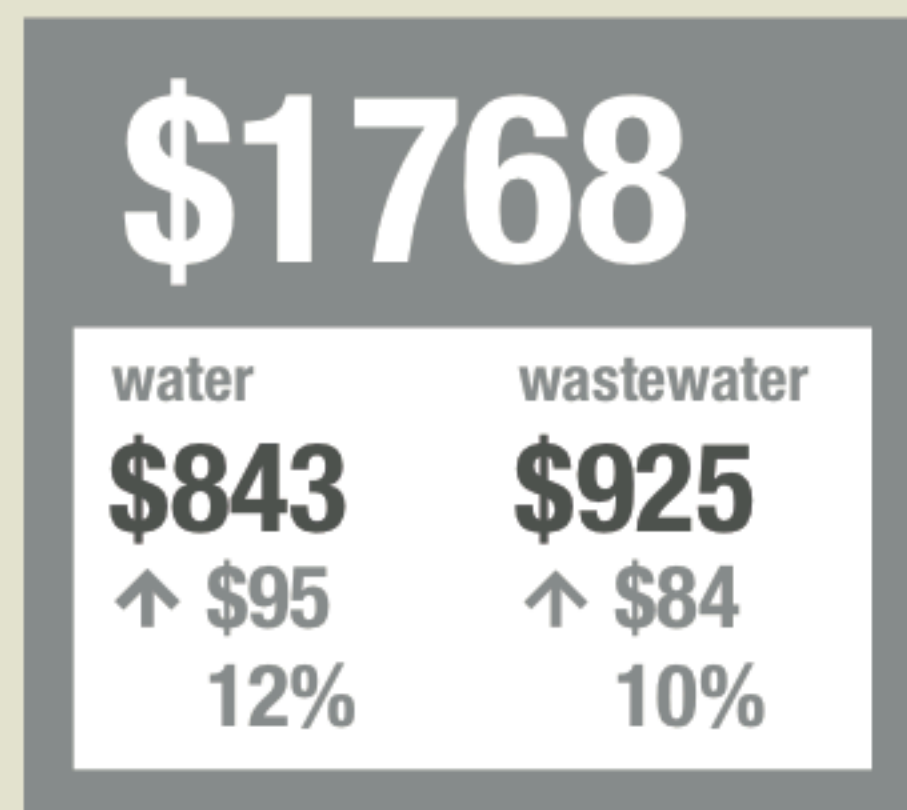


2021 May

# hotel rate scenario



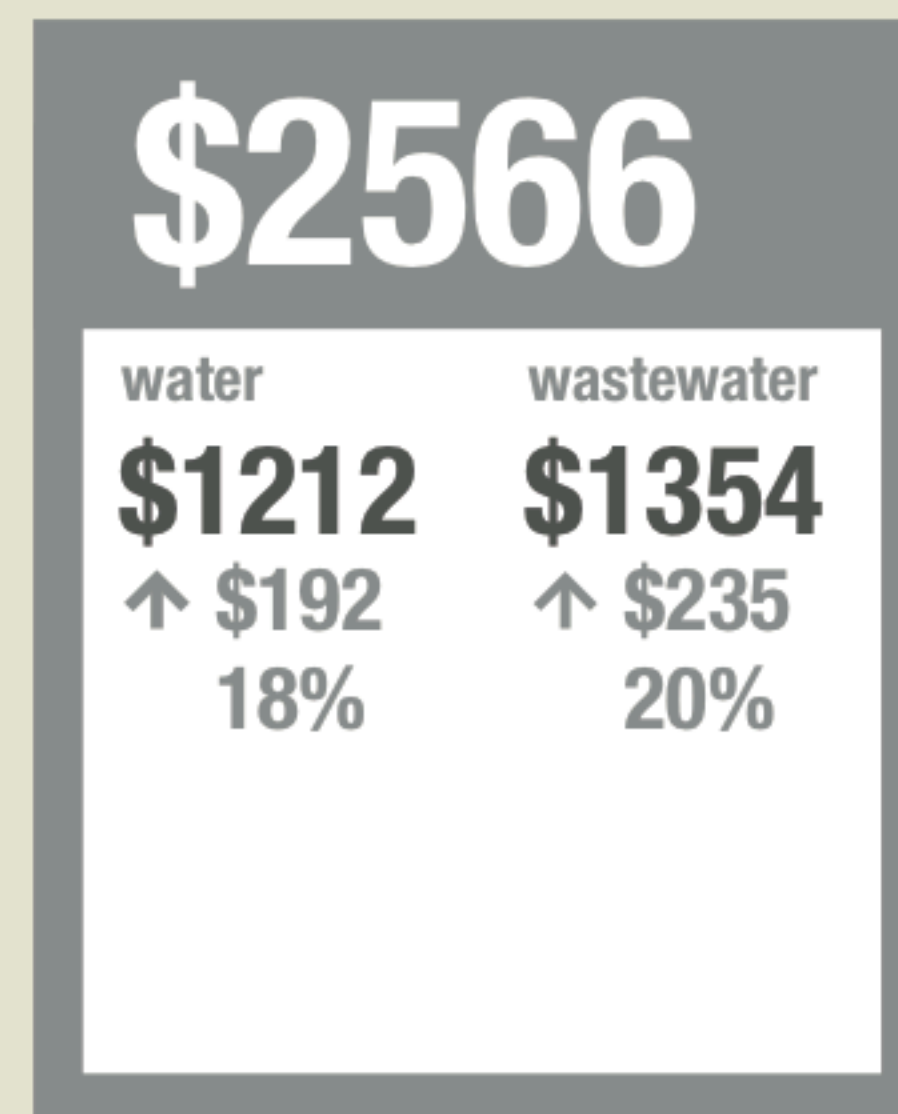
## Hotel



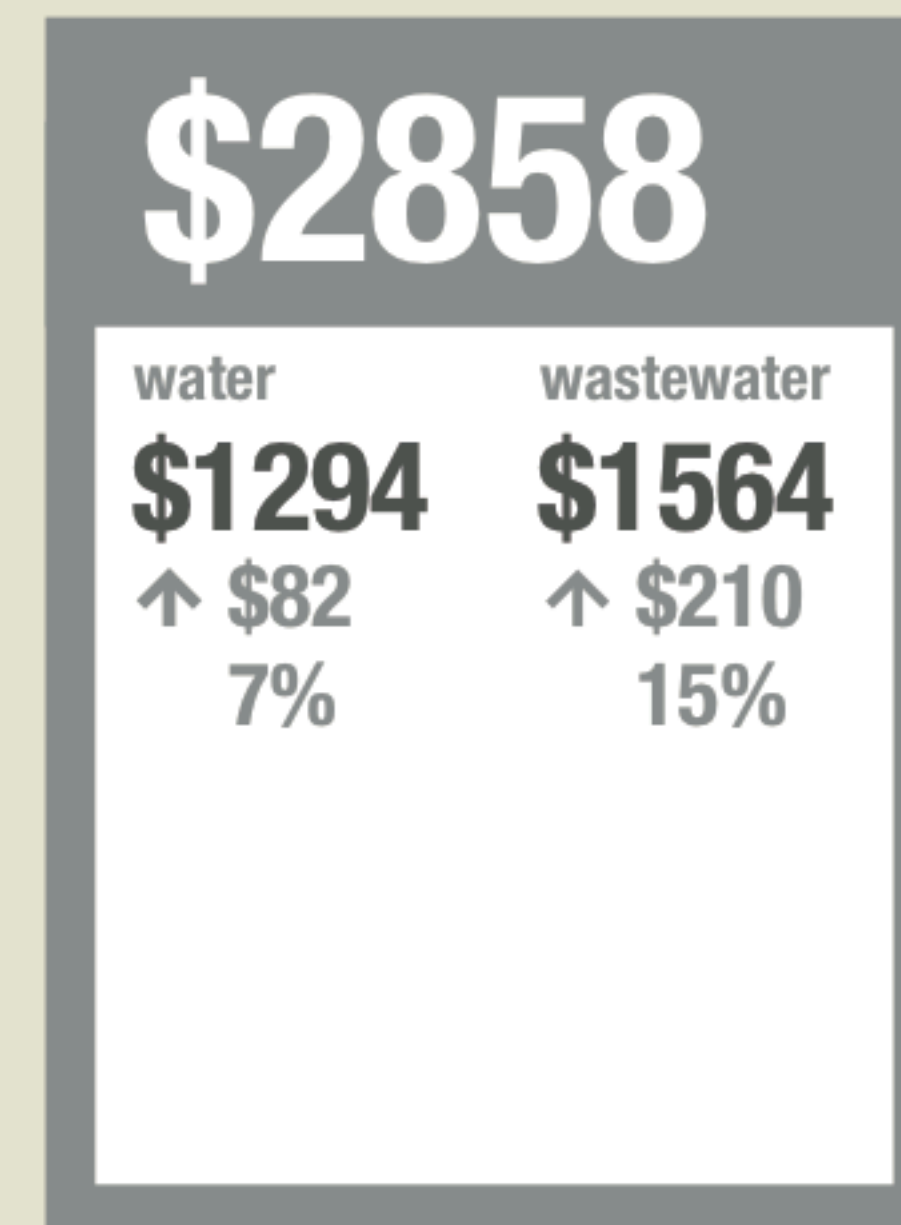
2012 May



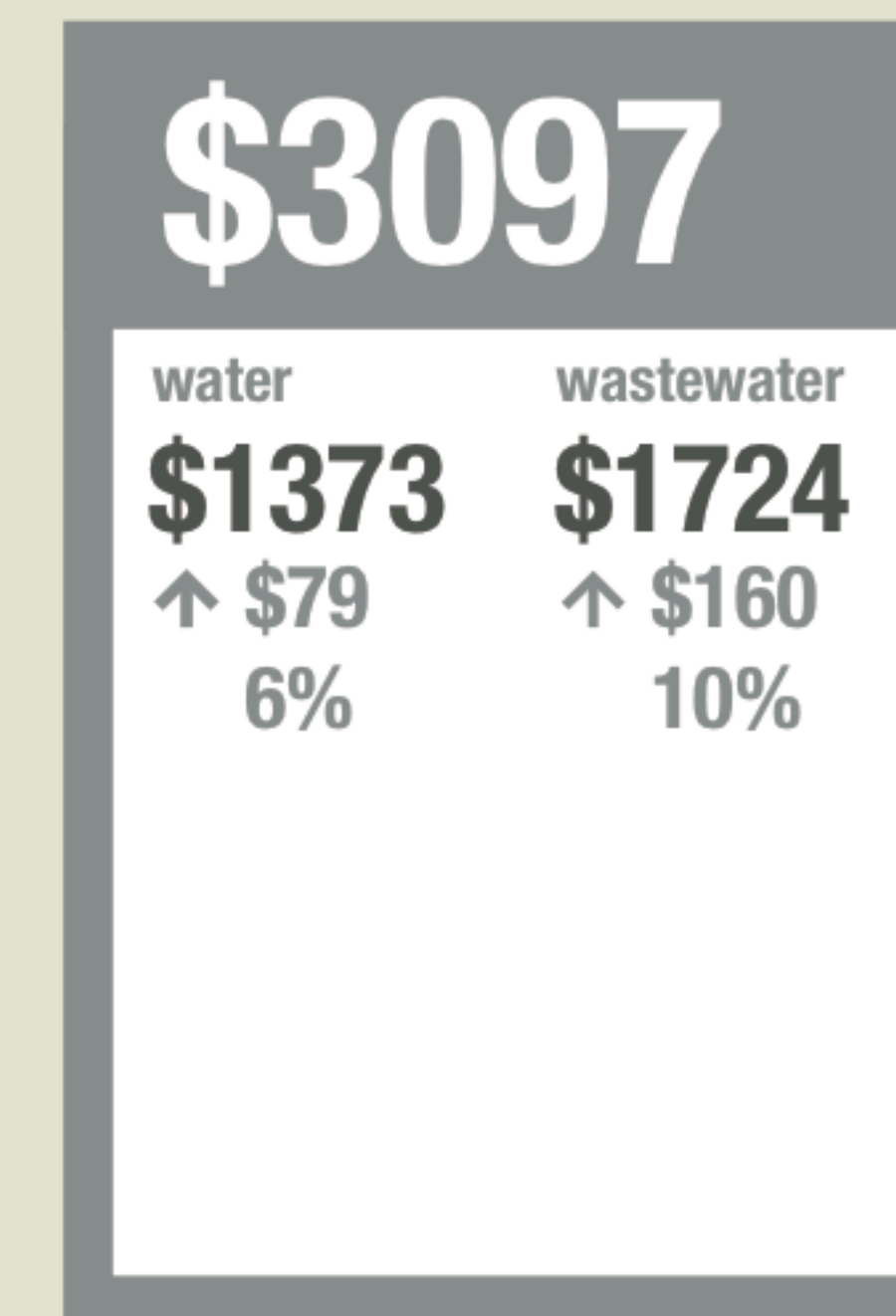
2014 May



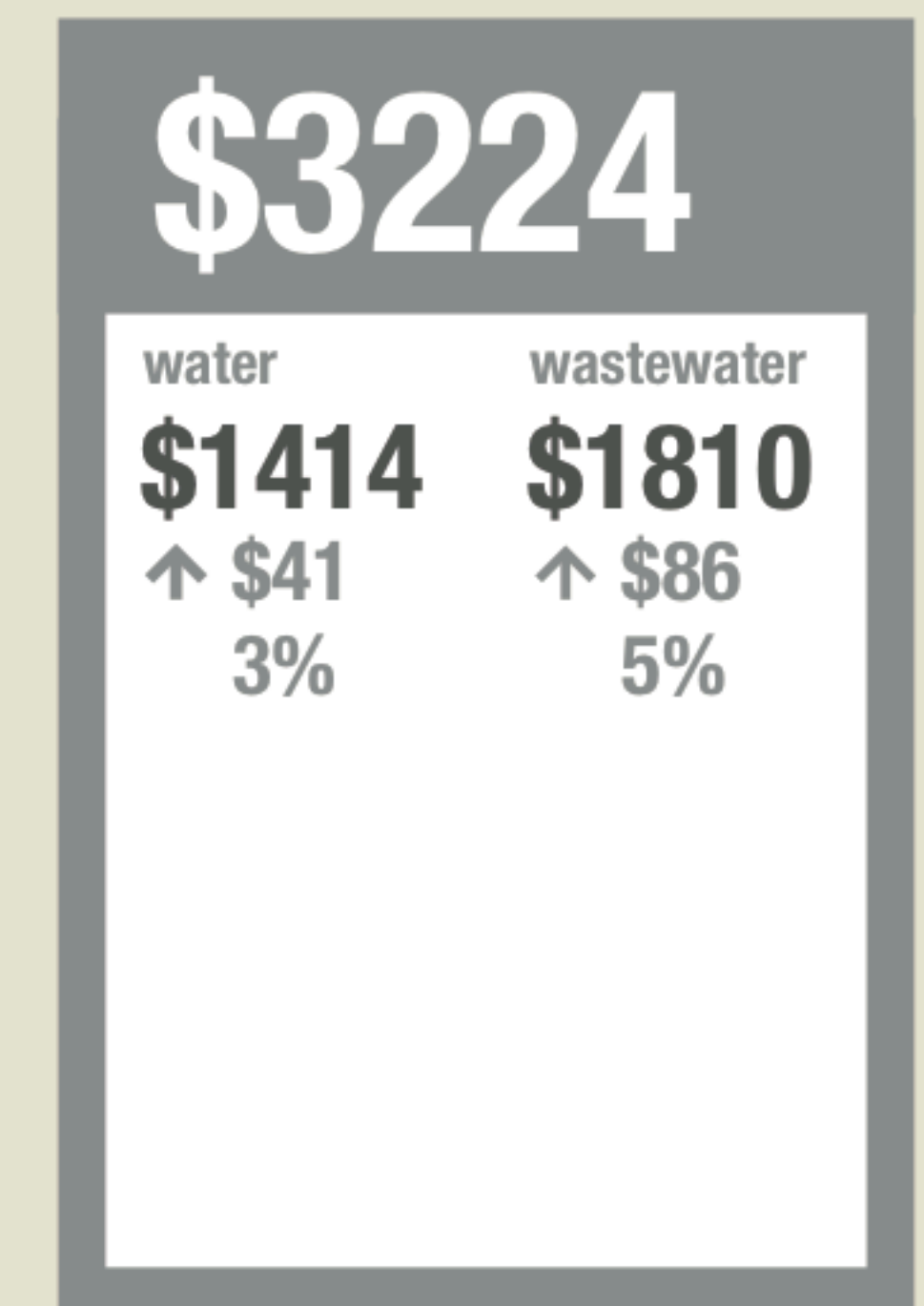
2016 May



2018 May



2020 May



2021 May



# End of Slide Show