

## Recommended Ordinances to Extend Limited Water Supplies

Zach Renstrom | City Council Meetings | September 2021

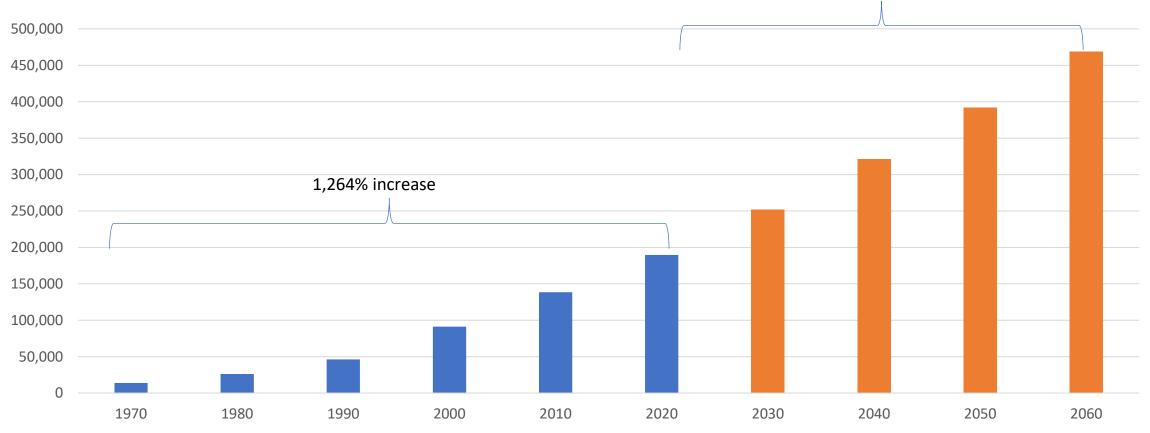
## Water Supply

Washington County's major population centers are 100% dependent on the Virgin River basin, which is closed to further appropriations.



#### **Population Growth**

147% increase (baseline scenario)





Source: U.S. Census Bureau, Kem C. Gardner Policy Institute





#### Water Conservation

- Washington County has decreased its water use by more than 30% since 2000
- First county to meet the statewide water conservation goal
- More than \$70 million invested in recent conservation efforts

#### District Recommendations

- Time-of-day watering ordinance
- Water waste ordinance
- Water efficiency standards for all new construction



Water Efficiency Standards

- Ongoing collaboration with all our municipal partners to ensure standards are consistent throughout the county
- Standards would apply to all new construction, including all homeowner association areas and those served by secondary irrigation water

## Residential Standards

Applies to all new residential construction, including single and multi-family housing

Two options:

Traditional Conservation

WaterSense Certified

#### Residential Standards: Traditional

- Indoor requirements
  - Hot water recirculation system
  - WaterSense labeled fixtures
  - Energy Star appliances
  - Multi-family housing individually metered with the capability of tracking/reporting unit specific use



#### **ENERGY STAR**



## **Residential Standards: Traditional**

- Outdoor requirements
  - Limit irrigated landscape area to 2,500 square feet, lawn to 750 square feet
    - Pools, spas and other water features count toward 750 square feet unless covered
  - Install landscape specific meters at each property
  - Use a minimum number of approved water-efficient trees and shrubs; irrigate with a drip system
  - Install water-smart irrigation controllers
  - Avoid lawn on park strips, slopes greater than 25% and areas less than 8 ft wide
  - Require pool covers
  - Secure city verification

## **Residential Standards: Traditional Cost**

Conservation Measure	Average Cost	Anticipated Water Savings (per gallon/year/home)
Hot water recirculation system	\$550	10,600
WaterSense toilet	\$0	1,900
WaterSense faucet	\$0	3,700
WaterSense showerhead	\$0	2,800
Energy Star dishwasher	\$100	400
Landscape modifications (separate meter, smart controller and more efficient landscape on 10,000 sq ft lot)	\$3,250	28,700
Pool cover	\$10,000	10,000

#### **Residential Standards: Traditional Concept**



#### Examples



10,300 sf lot



9,040 sf lot



#### Large Lot Examples



18,500 sq ft lot



18,700 sq ft lot



## **Residential Standards: Certified**

- Allows for greater flexibility
- Certification by approved verifier
- Additional costs

#### **Residential Standards: Certified Concept**



22,000 sq ft lot



#### **Examples Requiring Certification**



10,900 sq ft lot



18,200 sq ft lot



## Commercial, Institutional and Industrial Standards

- Indoor requirements
  - Hot water recirculation system
  - WaterSense labeled fixtures
  - Energy Star appliances
  - Submeter all units
  - Recycle pumps at carwash facilities

# Commercial, Institutional and Industrial Standards

- Outdoor requirements
  - Lawn prohibited unless a waiver is granted demonstrating a functional purpose
  - Install landscape specific meters at each property
  - Use only approved water-efficient trees and shrubs; irrigate via drip system
  - Install water-smart irrigation controllers
  - Enforce water budget and require use of secondary irrigation at golf courses
  - Prohibit decorative water features
  - Limit commercial misting systems for use from May August
  - Secure city verification



#### Feedback, Q&A

wcwcd.org info@wcwcd.org

