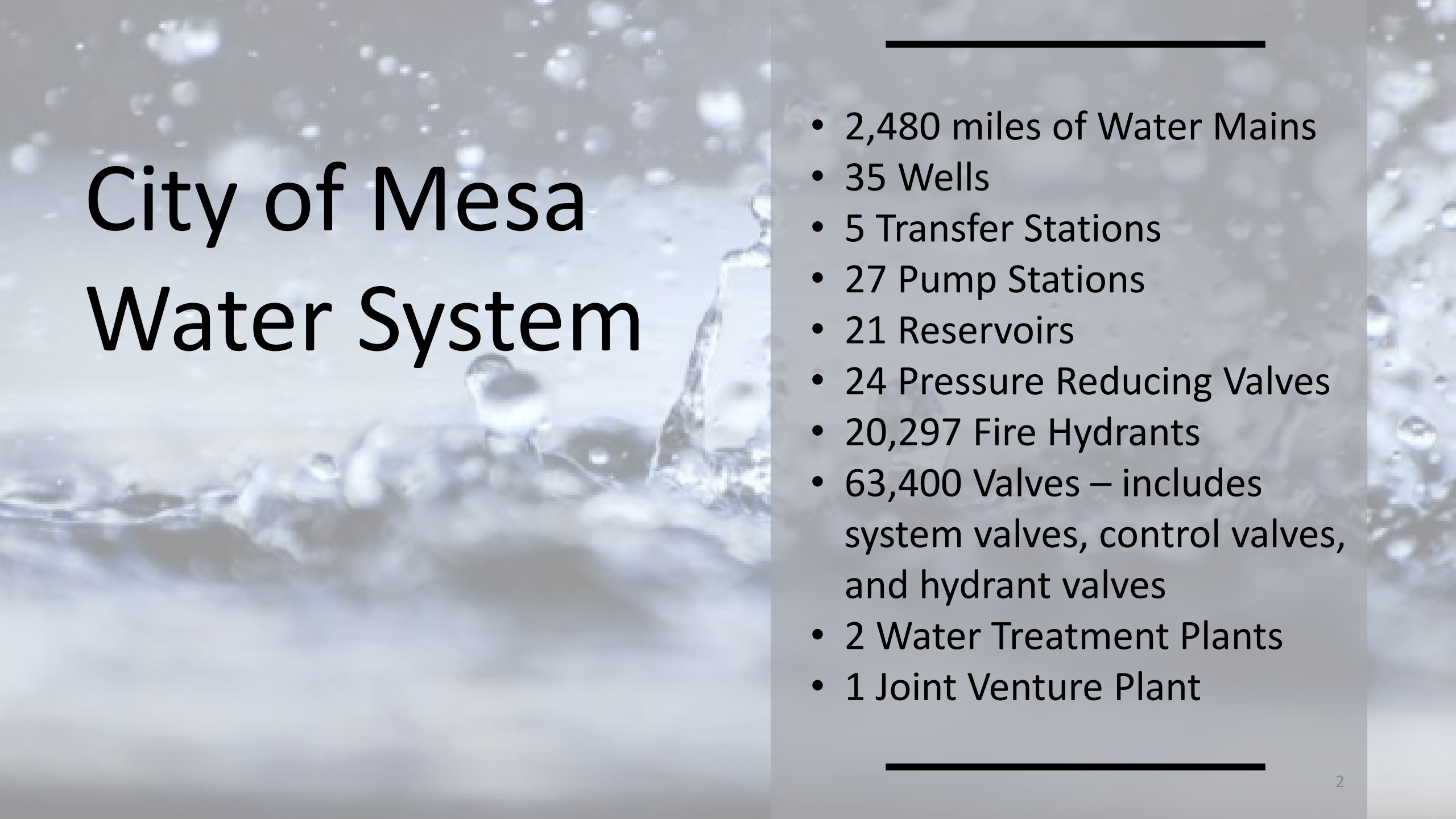




Water Resources
Operational Overview and Budget Discussion
April 15, 2021





City of Mesa Water System

-
- 2,480 miles of Water Mains
 - 35 Wells
 - 5 Transfer Stations
 - 27 Pump Stations
 - 21 Reservoirs
 - 24 Pressure Reducing Valves
 - 20,297 Fire Hydrants
 - 63,400 Valves – includes system valves, control valves, and hydrant valves
 - 2 Water Treatment Plants
 - 1 Joint Venture Plant
-

Measuring Success: Water

Fire Hydrant Maintenance

- Target: 4.2% per month
- Average: 6% per month

% of Reclaimed Water to Beneficial Reuse

- Target: 100% per month
 - Average: 75.6% per month
-





Hydrant Replacement Contract

- **Annual Cost: \$250,000**
- Currently 360 outstanding workorders for hydrant replacements
 - Collectively comprises 21,000 hours of backlog (out of service hours)
- 3rd party contract to replace 25 complex hydrants
 - Reduce backlog by 10,000 hours
- Ensures hydrants are ready for service when needed by Emergency Responders
- Reduce liability to City of Mesa



Water Commodity Forecast

Source	FY21/22		FY22/23		FY23/24		FY24/25	
CAP Tier 0	\$	9,842	\$	10,678	\$	11,821	\$	12,667
CAP Tier 1*	\$	10,750	\$	11,894	\$	13,176	\$	14,183
SRP	\$	1,636	\$	1,669	\$	1,702	\$	1,736
GRIC	\$	531	\$	531	\$	671	\$	732
Total Tier 0	\$	12,009	\$	12,878	\$	14,194	\$	15,135
Total Tier 1*	\$	12,917	\$	14,094	\$	15,549	\$	16,651

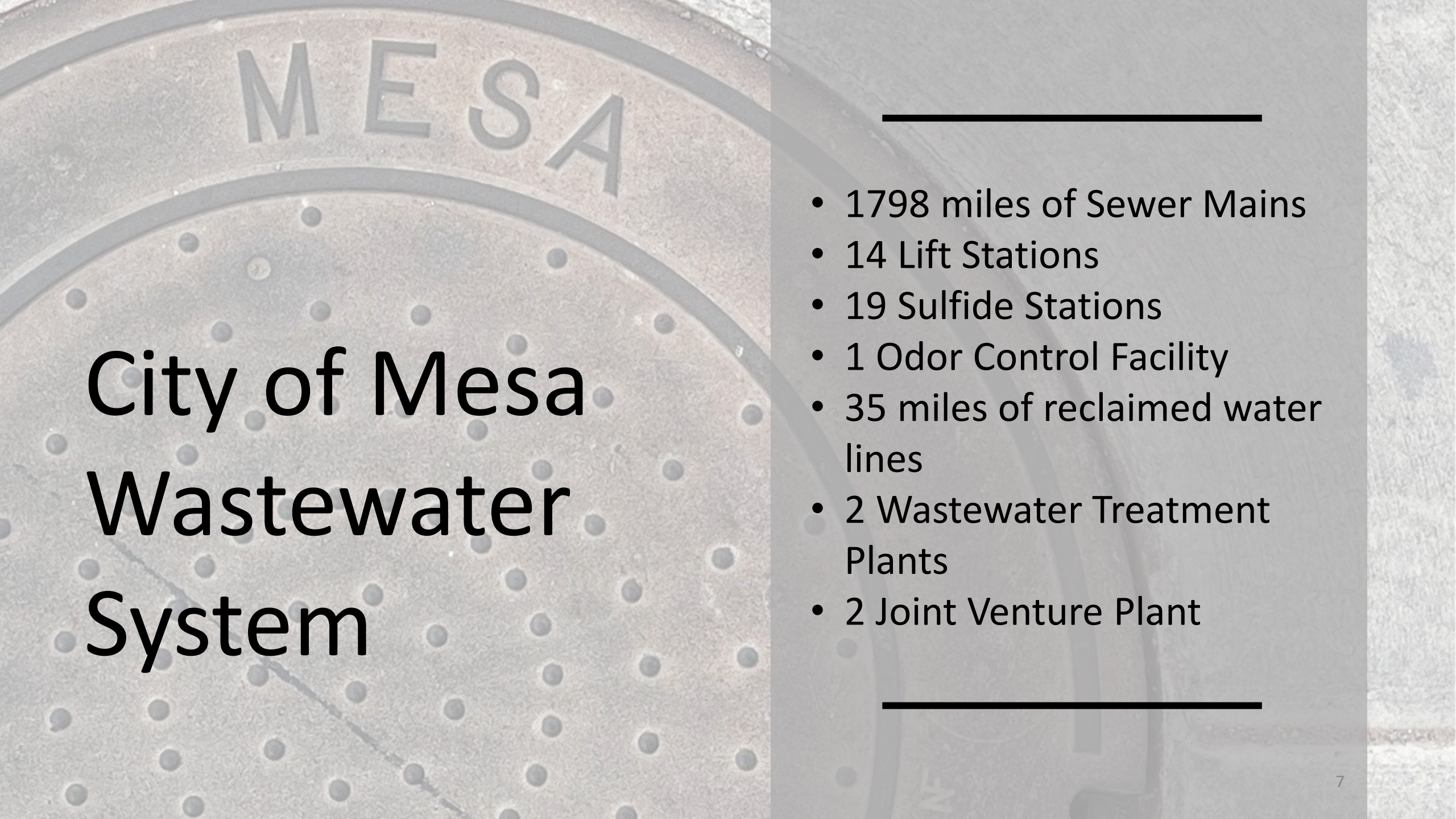
Dollars in thousands

*CAP Shortage

Joint Venture, Chemicals, Electricity: Water

	FY20/21	FY21/22	Variance
Val Vista WTP Obligation	\$7,000	\$7,700	\$700
Water Chemicals	\$2,420	\$2,135	-\$285
Water Electric	\$4,969	\$4,740	-\$229
Total	\$14,389	\$14,575	\$186

Dollars in thousands



City of Mesa Wastewater System

-
- 1798 miles of Sewer Mains
 - 14 Lift Stations
 - 19 Sulfide Stations
 - 1 Odor Control Facility
 - 35 miles of reclaimed water lines
 - 2 Wastewater Treatment Plants
 - 2 Joint Venture Plant
-

Measuring Success: Wastewater

of Sanitary Sewer Overflows (SSO's)

- Target: 2.0 per Quarter
 - Average: 1.0 per Quarter
-



Greenfield Water Reclamation Plant (GWRP Joint Venture)

2 FTE – Water Resources Operator II

- **Ongoing Cost: \$175,672**
 - Position Costs
 - Mesa Cost Share \$73,776(42%)
- **One-time Cost: \$3,000**
 - Computer and Minor Equipment
 - Mesa Cost Share \$1,260 (42%)
- This large, complex, end of the line treatment plant is now the 3rd largest wastewater treatment facility in the State of Arizona
- Two additional positions are needed to adequately support the effective operations of the newly expanded plant 24/7



Greenfield WRP Joint Venture

- **Major Maintenance**
- **One-time Cost: \$1,080,000**
 - Rebuild Thickening Centrifuge Scroll – \$80,000
 - Refurb Primary Clarifier Main Gearbox – \$500,000
 - Refurb Secondary Clarifier #2 Main Gearbox Drive – \$250,000
 - Refurb Primary Clarifiers #1 and #2 Sludge & Scum Pumps - \$130,000
 - Chemical Feed Piping System Parts - \$60,000
 - Equipment Storage Area - \$60,000
- Mesa Cost Share: \$453,600 (42%)
- Reduce the risk of personnel injury, equipment failure and increase critical site operational reliability



Joint Venture, Chemicals, Electricity: Wastewater

	FY20/21	FY21/22	Variance
Greenfield WRP - Mesa Share*	\$3,943	\$3,664	-\$279
SROG (91st Ave WRP) Obligation	\$7,000	\$7,140	\$140
Wastewater Chemicals	\$3,293	\$3,395	\$102
Wastewater Electric	\$3,911	\$3,803	-\$108
Total	\$18,147	\$18,002	-\$145

Dollars in thousands

*Estimated GWRP Mesa Share. Actuals to be 42% of approved GWRP Joint Venture Budget

Questions?

