



SUSTAINABILITY & TRANSPORTATION COMMITTEE

April 2, 2018

The Sustainability & Transportation Committee of the City of Mesa met in the lower level meeting room of the Council Chambers, 57 East 1st Street, on April 2, 2018 at 4:00 p.m.

COMMITTEE PRESENT

Kevin Thompson, Chairman
David Luna
Jeremy Whittaker*

COMMITTEE ABSENT

None

STAFF PRESENT

Kari Kent
Dee Ann Mickelsen
MaryGrace McNeal

(*Councilmember Whittaker participated in the meeting through the use of telephonic equipment.)

1. Items from citizens present.

Karen Contos, a Mesa resident, expressed concern with the rising temperatures and questioned whether the City was doing anything to address climate change. She noted that Phoenix and Tempe have joined the Global Covenant of Mayors for Climate and Energy and advised the organization promotes and supports combating climate change. She suggested installing solar panels on City facilities to lower greenhouse gas emissions and reduce the cost the City pays for electricity.

Committeemember Luna requested meeting with Ms. Contos to further discuss her concerns.

Roger Moore, Director of US Domestic Operations for Solar NRG, and Keith Rowley, Director of Engineering and Technology for Solar NRG, provided the Committee with a proposal and executive summary for the Mesa Arts Center Solar Project. **(See Attachment 1)**

2-a. Hear a presentation by the Historic Preservation Board and discuss Mesa's Historic Preservation Program including history of the program, past and present accomplishments, future goals, and the need for additional resources.

Dr. Laura Metcalf, Chairperson for the Historic Preservation Board (HPB), displayed a PowerPoint presentation. **(See Attachment 2)** She provided the mission, vision, and goals of the HPB.

Dr. Metcalf illustrated the accomplishments and economic impact to the City with the addition of a full-time Historic Preservation Officer. **(See Attachment 3)** She explained between 1996 and

2008 the full-time Historic Preservation Officer created a historic preservation plan and architectural guidebook, post World War II history documents and established five historic districts.

Dr. Metcalf noted that between 2014 and 2016 the City contracted a part-time Historic Preservation Professional. She pointed out that although the part-time contractor had many accomplishments, the City would increase and sustain the value to Mesa with the addition of a full-time preservation officer.

Dr. Metcalf presented two grants that were awarded to the HPB. She pointed out that as a requirement of both grants the HPB has recruited volunteers to perform survey work, setup timeframes and workflow, and created and submitted all required progress and final reports. She advised the HPB has collaborated with the Façade Improvement Program and the City's Innovation District to preserve the downtown area.

Dr. Metcalf elaborated on the new historic districts and advised the HPB works with Mesa residents to complete documents for national and local historic designation and hold meetings to explain the process and economic benefits of historic preservation.

In response to a question posed by Committeemember Luna, Planning Director John Wesley advised before the recession the Historic Preservation Office moved to the Planning Department and a full-time Historic Preservation Officer was hired. He noted that once the economy declined the full-time position was eliminated and since that time the Planning Department has been able to accomplish the minimums to keep the program going and working with the HPB. He explained that with the addition of a part-time contractor the Westside Clark project was able to be completed and assistance has been provided to residents with questions regarding maintaining historic properties.

Assistant City Manager Kari Kent advised on April 26, 2018 the Development Services Department will present budget requests to Council and ask Council to consider hiring a full-time Historic Preservation Officer that would be housed in the Planning Department.

In response to a question posed by Committeemember Whittaker, Ms. Kent advised the cost of a full-time preservation officer is approximately \$100,000, which includes benefits.

In response to a question posed by Chairman Thompson, Dr. Metcalf advised a responsibility of the full-time preservation officer would be the solicitation of grants.

Committeemember Luna commented that a full-time preservation officer is a good idea as there is an economic benefit to preserving the history of the City.

Chairman Thompson expressed a concern regarding the long-term liability to the City with the addition of a full-time employee versus hiring a consultant.

Committeemember Whittaker encouraged staff to review the goals of a full-time preservation officer and identify the metrics Council will be able to use to determine the success of hiring a full-time employee for the position.

Mr. Wesley replied to Committeemember Whittaker by stating the Planning Department is currently handling the Certificate of Appropriateness applications for residents. He pointed out part-time staff assisting residents are also processing planning cases, therefore the applications are not being handled as quickly.

In response to a question posed by Chairman Thompson, Mr. Wesley advised the previous full-time preservation officer had support staff to assist with responsibilities, however, at this time the Planning Department is only asking Council to consider hiring one full-time position.

Chairman Thompson thanked staff for the presentation.

Jennifer Duff, a Mesa resident, expressed support of a full-time Historic Preservation Officer. She advised she purchased a historic bungalow in downtown Mesa that was neglected and with the assistance of her neighbors the residence was successfully restored. She pointed out the City has one of the longest stretches of historic properties in downtown and it is critical to not lose the history of those properties. She added the historic neighborhoods are a point of pride and an economic benefit to the community. She stated historic preservation is a large undertaking, which justifies the need for a full-time position.

Christopher Bradley, a Mesa resident, advised larger, high-tech homes being built in historic areas are spoiling the character of the neighborhood. He explained a full-time Historic Preservation Officer could have informed the builder of the area's history and therefore preserve the neighborhood. He expressed concern that without a full-time Historic Preservation Officer the downtown area will turn into Mesa Riverview or Tempe Marketplace.

2-a. Hear a presentation, discuss, and provide a recommendation on the City's Water Shortage Management Plan.

Water Resources Department Director Jake West introduced Water Resources Advisor Brian Draper and Utilities Business Development Coordinator Kathy Macdonald who displayed a PowerPoint presentation. **(See Attachment 4)**

Mr. Draper advised the Drought Management Plan was last amended in 2009 and was recently revised to include a procedure should a water shortage occur in the City. He pointed out that due to the devastating effects of Hurricane Harvey, the City came close to not being able to treat water at the Brown Road and Val Vista Water Treatment Plants.

Mr. Draper provided the purpose of the plan, identified the Mesa service areas, noted the City's water sources, and highlighted the three stages of the plan. (See Pages 4 through 18 of Attachment 3)

In response to a question posed by Chairman Thompson, Mr. Draper advised the City has a very active water conservation program that constantly informs residents of ways to reduce the water demand. He added no formal action has been taken regarding the water levels at Lake Mead.

Chairman Thompson thanked staff for the presentation.

It was moved by Committeemember Luna, seconded by Chairman Thompson, that the City's Water Shortage Management Plan be forwarded to the full Council.

Chairman Thompson declared the motion carried unanimously.

3. Adjournment.

Without objection, the Sustainability and Transportation Committee Meeting adjourned at 4:53 p.m.

I hereby certify that the foregoing minutes are a true and correct copy of the minutes of the Sustainability & Transportation Committee meeting of the City of Mesa, Arizona, held on the 2nd day of April, 2018. I further certify that the meeting was duly called and held and that a quorum was present.


DEE ANN MICKELSEN, CITY CLERK

mh
(Attachments – 4)

Every hour, the sun provides enough energy to power the entire earth.



SOLAR NRG

For
Business & Government

City of Mesa:

Attached is a proposal to essentially duplicate your needs for the Mesa Arts Center Solar Project with the following exceptions:

- Cost of power to the city of Mesa for the first 5 years at 13¢ vs. previously contract proposal at 15¢
 - **Cost of power after first 5 years \$0.00 vs. 15¢ with existing contractor.**
 - Option to buy at end of 5 years for \$1,069,155 vs. \$2,560,000 existing contract lifetime cost.
 - O&M contract included for full 20 years.
-
- Option B: To cover balance of parking lot. to provide 51% of MAC power usage vs. 30% of MAC power usage with existing contract.
 - Resultant lifetime power cost 4.5¢/kWH vs. 15¢ in existing contract.

Historic Preservation Board of the City of Mesa, Arizona

MISSION

To promote, educate and support Historic Preservation efforts within the City of Mesa.

VISION

To bring forth inspiration and excellence in collaborative efforts of Historic Preservation through education, community dialogue, and relevant actions.

GOALS

- To work with and through City of Mesa staff to promote and support all Historic Preservation efforts.
- To work with an experienced, qualified, dedicated, and passionate individual to forward our mission and vision.

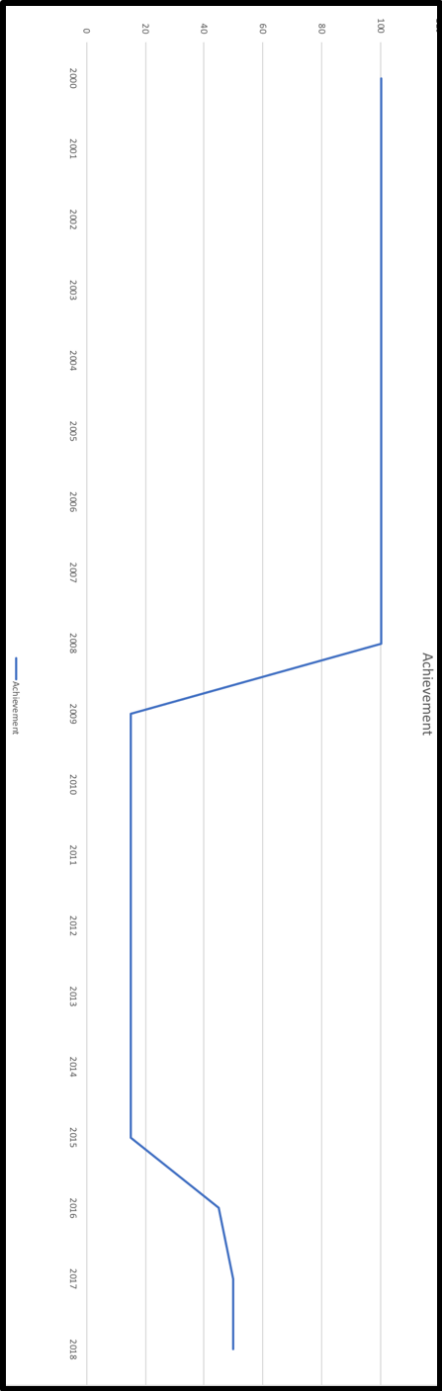
Why Historic Preservation?

Historic Preservation is important for Mesa's future:

- Economically
- Socially
- Sense of connectedness of residents



Recent Historic Preservation Timeline



We need a permanent full-time
Historic Preservation Officer

Accomplishments; What We Are Doing!

Awarded two grants totaling
\$33,334.00:

1. Inventorizing Endangered
Neon Signs



2. Preserving Historic
Downtown Mesa



Accomplishments (Con't).

- New historic districts
- Downtown
Façade improvements
- Provide historic
preservation
expertise



So Much More is Needed

- Provide expert technical, architectural, design, historical, and policy guidance
- Assist property owners with matters related to historic preservation
- Maintain the City as a Certified Local Government
- Promote Heritage Neighborhood designations

We the undersigned historic preservation residents, and personal historic district residents, are signing this petition because we would like the support of a permanent full time Historic Preservation Officer in the City of Mesa to support our district and neighborhoods.

Historic Preservation Officer Petition

Property Address	Resident Name (please print)	Resident Signature	Contact phone number or e-mail
123 N. 1st St.	John Doe	[Signature]	555-123-4567
456 E. 2nd St.	Jane Smith	[Signature]	555-987-6543
789 W. 3rd St.	Bob Johnson	[Signature]	555-234-5678
101 N. 4th St.	Alice Brown	[Signature]	555-345-6789
234 E. 5th St.	Charlie Davis	[Signature]	555-456-7890
567 W. 6th St.	Diana Evans	[Signature]	555-567-8901
890 N. 7th St.	Frank Green	[Signature]	555-678-9012
123 E. 8th St.	Grace Hill	[Signature]	555-789-0123
456 W. 9th St.	Henry King	[Signature]	555-890-1234
789 N. 10th St.	Ivy Lee	[Signature]	555-901-2345
101 E. 11th St.	Jack Miller	[Signature]	555-012-3456
234 W. 12th St.	Karen Wilson	[Signature]	555-123-4567
567 N. 13th St.	Leo Young	[Signature]	555-234-5678
890 E. 14th St.	Mia Zane	[Signature]	555-345-6789

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So Much More is Needed (Cont.)

- Educational Outreach and Community Engagement
- Oral history projects
- Grant solicitation
- Continue to review and prioritize the 70 Post-WWII neighborhoods



Benefits of Historic Preservation

- Neighborhood stability
- Reduction in code compliance issues
- Tourism
- Economic Development
- Increased property values
- Reduction in crime

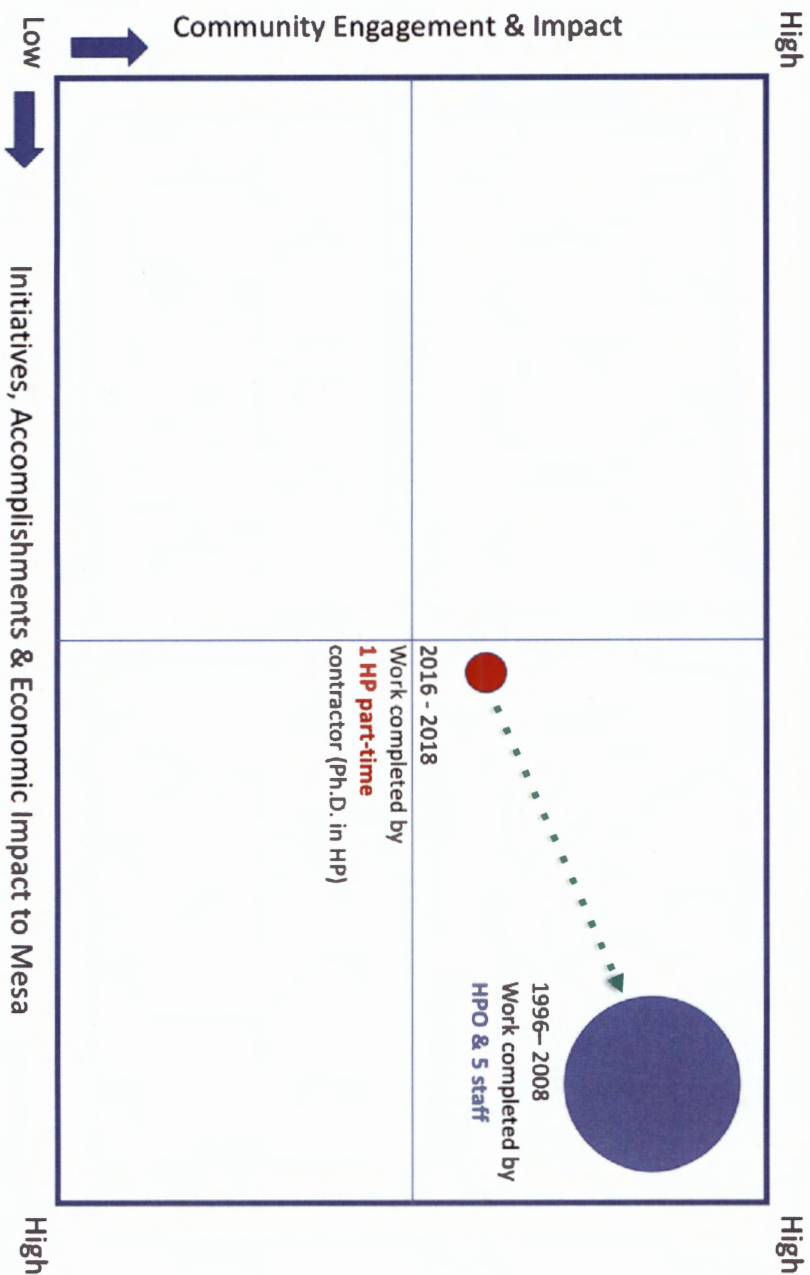


Our Request

A full-time permanent
Historic Preservation Officer

Questions/Discussion

HP Resources and Impact



We need a permanent full-time Historic Preservation Officer to increase and sustain value to Mesa

Water Shortage Management Plan

Presented by:

Jake West

Brian Draper

Kathy Macdonald



mesa•az
WATER RESOURCES

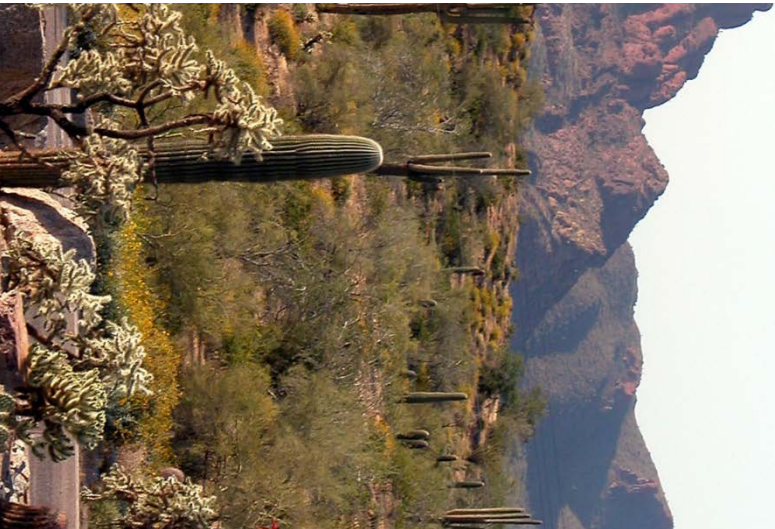
Purpose

Seeking recommendation to full Council for adoption of the Water Shortage Management Plan.

What is a water shortage?

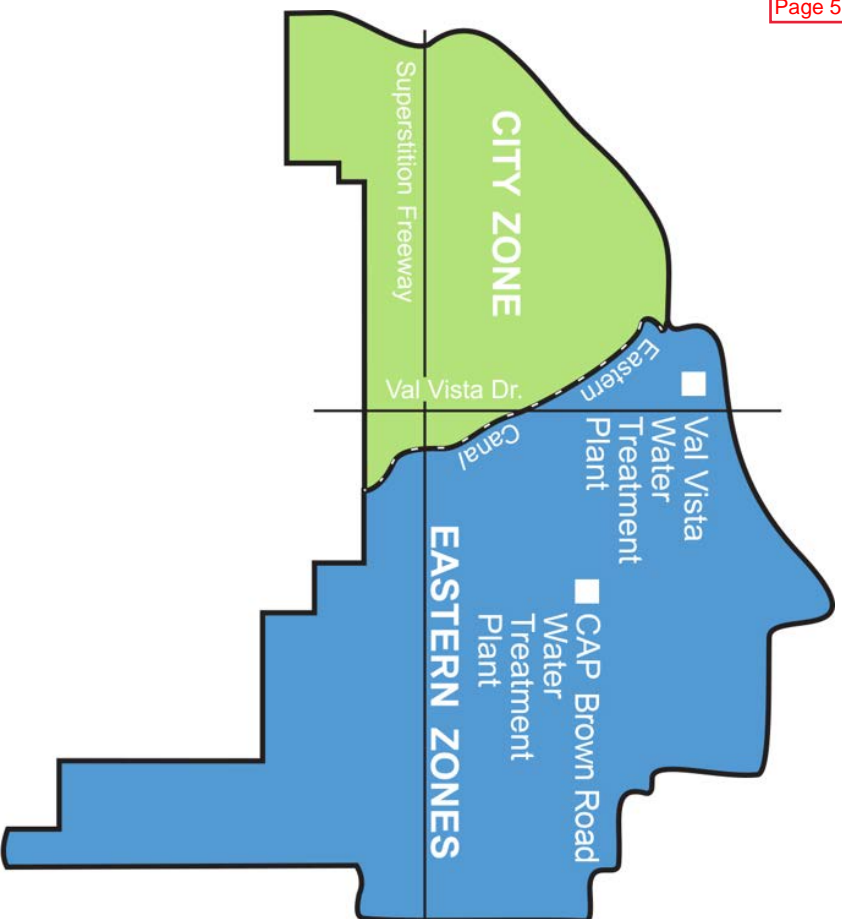
City-wide or localized water supply is reduced to a level that demand cannot be met.

- Drought
- Infrastructure failure
- Customer demand
- Regulatory actions
- Outages



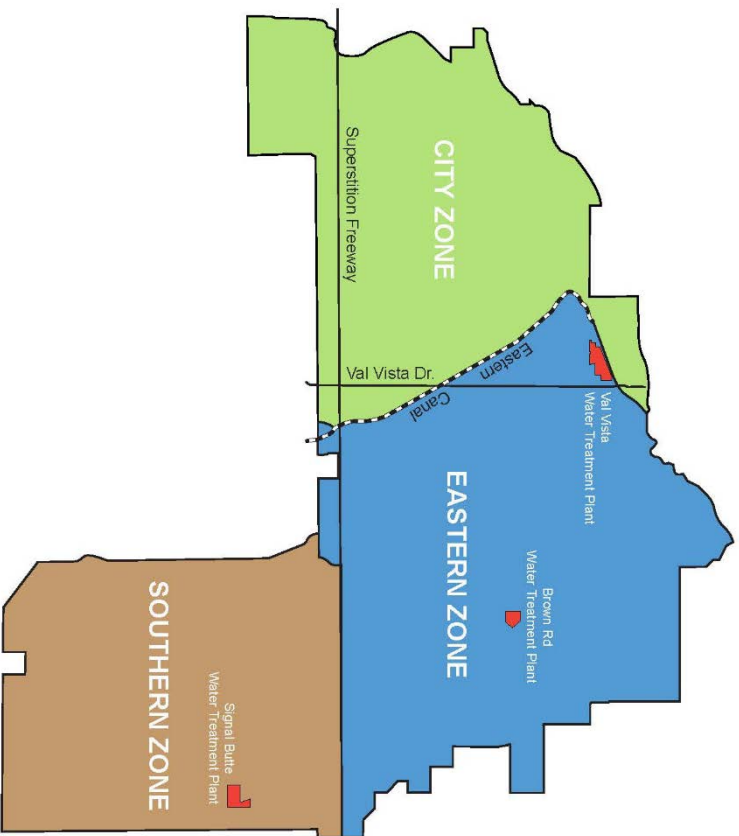
Purpose

Manage	Manage shortage conditions as they occur
Prevent	Prevent the need to implement drastic demand reduction measures
Plan	Plan for future conditions before they occur



Mesa Service Area

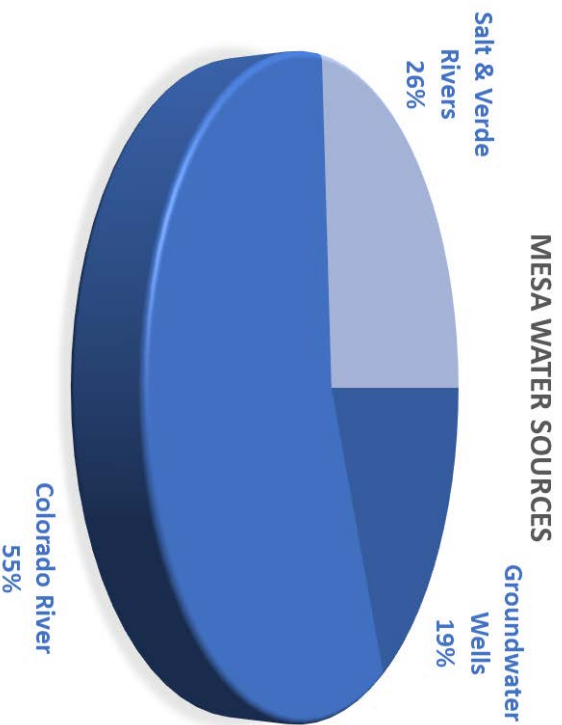
- Mesa is divided into two zones separated by the Eastern Canal: City and Eastern zones
- City Zone: Salt/Verde River water delivered through SRP (treated at Val Vista WTP)
- Eastern Zone: Colorado River water delivered through CAP (treated at Brown Road WTP)
- City and Eastern wells provide water throughout Mesa



Mesa Service Area

- May 2018 Signal Butte Water Treatment Plant will deliver first treated water into the distribution system
- Southern Zone: Colorado River water delivered through CAP

Water Supply

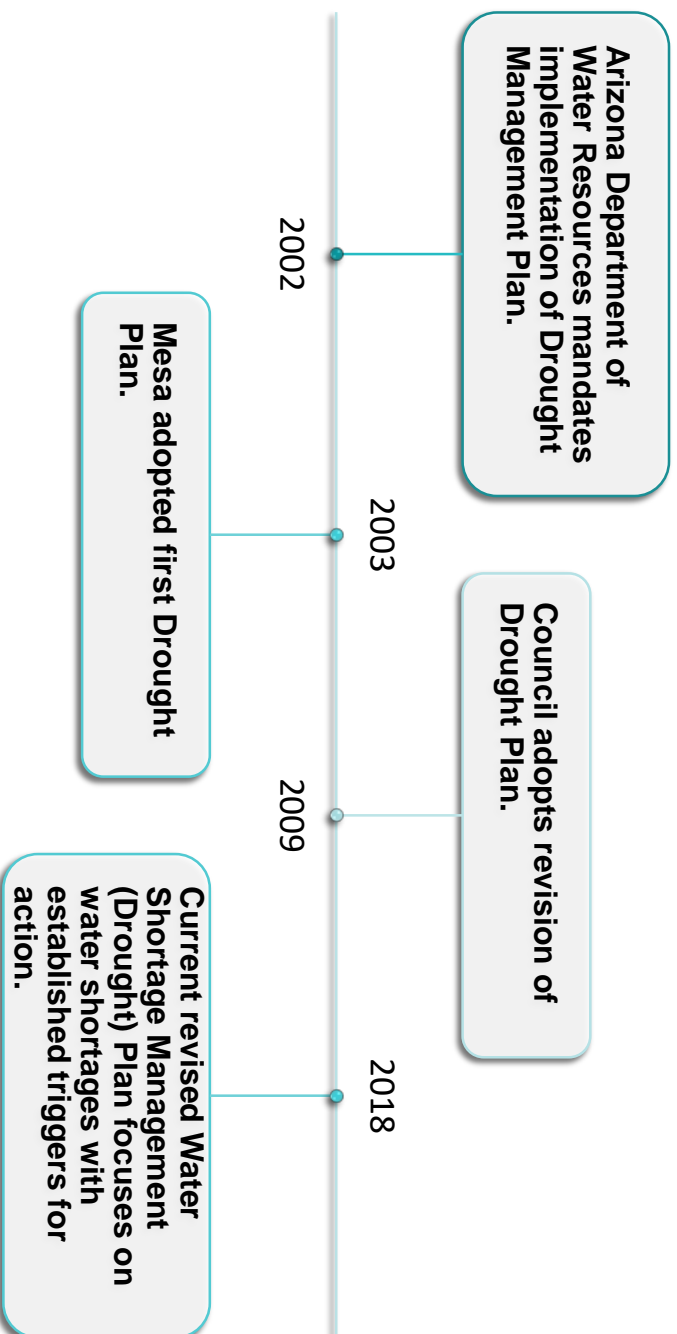


- Two sources: surface and groundwater
- Abundant groundwater credits and allowances – nearly 1 million acre-feet
- Groundwater is used during peak demand and emergencies
- The Assured Water Supply Program: framework for designating Mesa's 100-year supply for current and future demands

Shortage Planning and Preparation

Securing and managing	Securing, banking and managing a variety of different water sources
Maintaining	Maintaining water treatment capacity needed to meet customer demand
Promoting and encouraging	Promoting and encouraging voluntary water conservation since 1982

State Requirement



The Plan

1

Evaluation of shortage conditions based on current and forecasted water supply and demand, as well as the economic impact to the City.

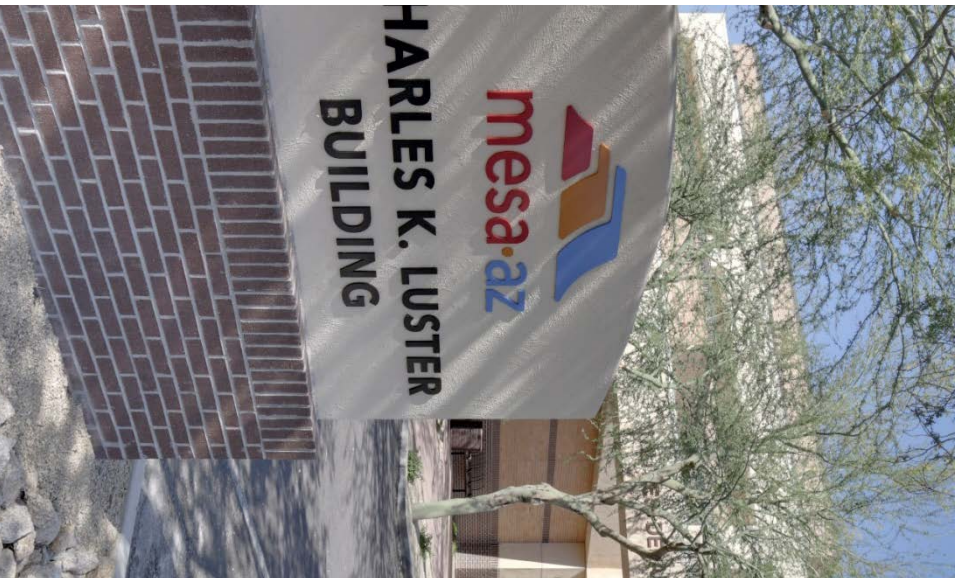
2

Cross-Departmental team

3

Four stages with increasing severity may be declared by the City Council upon recommendation of the City Manager.

Stage One – Water Watch



- Increase awareness of actual reductions in water supplies several months in advance.
- Surface water shortage that will affect the City of Mesa is predicted or occurs.
- Mesa is capable of meeting demand through remaining supplies.
- Water demand management strategies may include: internal water reductions, increased community education.

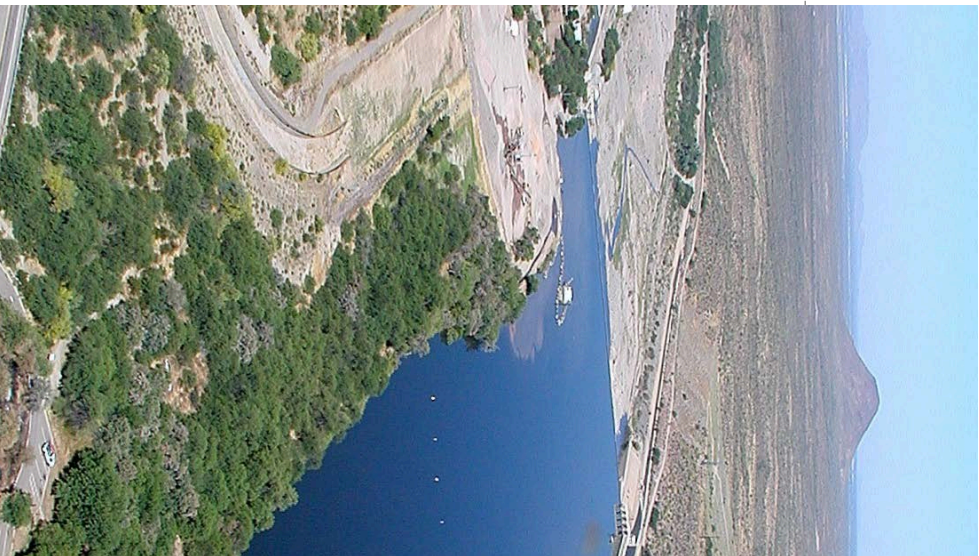
WATER SHORTAGE MANAGEMENT PLAN A-1

Stage 1- Water Watch

City is capable of providing normal water service, but prolonged water shortage conditions exist or supply reductions predicted.		
Supply Management Measures	Municipal Demand Reduction Measures	Residential, Commercial, and Industrial Demand Reduction Measures
<ul style="list-style-type: none">• Monitor available surface water supplies.• Monitor groundwater pumping capacity.• Planning to maximize use of water supplies "On" and "Off-Project."• Planning to maximize use of New Conservation Space water to maintain water levels behind Roosevelt Dam or underground storage.	<ul style="list-style-type: none">• Request employees to conserve water at home and at work.• Request City departments to identify possible reductions (1% to 5%) of water.• Initiate Public Information/Awareness campaign.• Water in the Street: Request City Inspectors and Customer Service Representatives to identify and counsel customers on water waste.	<ul style="list-style-type: none">• Promote conservation measures.• Educate customers on indoor/outdoor water saving techniques.

Description: This stage will be characterized by increased awareness and customer communication to alert the community that there may be an upcoming episode of water supply reduction. Regional water suppliers may be experiencing the effects of extended dry weather conditions and may be preparing to respond to a potential reduction in future water deliveries due to differing water portfolios. The City may not need to respond in similar fashion.

Stage Two – Water Alert



- SRP deliveries of Stored & Developed water are cut to less than or equal to 50% of supplies and/or CAP Subcontract & Lease water is cut to less than or equal to 80% of water supply.
- Mesa is capable of meeting demand through remaining supplies.
- Voluntary water demand management strategies may be implemented for all water customers.
- Goal of 5% reduction in water demand.

WATER SHORTAGE MANAGEMENT PLAN A-2

Stage 2- Water Alert

City is capable of providing normal water service, but supply reductions predicted.		
Supply Management Measures	Municipal Demand Reduction Measures	Residential, Commercial, and Industrial Demand Reduction Measures
<ul style="list-style-type: none"> • Monitor available surface water supplies. • Monitor groundwater pumping capacity. • Planning to maximize use of water supplies "On" and "Off-Project." • Planning to maximize use of New Conservation Space water to maintain water levels behind Roosevelt Dam or underground storage. • Utilize stored water credits to offset groundwater pumping. • Prepare application to Arizona Department of Water Resources for drought groundwater pumping exemption. 	<ul style="list-style-type: none"> • All municipal demand reductions measures from previous stage. • Request City departments to identify possible reductions (5% to 10%) of water. • Strengthen public information campaign initiated in Stage One. • Limit routine hydrant flushing. • Restrict turf watering/landscaping irrigation, at City facilities other than parks and right-of-way. 	<ul style="list-style-type: none"> • All demand reduction measures identified for this user category from previous stage. • Limit construction water use during peak demand. Use reclaimed water whenever possible. • Promote indoor/outdoor water audits. • Promote conservation with respect to operation and maintenance of swimming pools (i.e.: cover, leak repairs). • Water use reduction goal of 5%.

Description: This stage will be characterized by increased monitoring and evaluation activities related to the water shortage. Customer water usage and the corresponding revenue generated will be compared to normal use. The Team may recommend more specific restrictions depending on conditions.

Stage Three – Water Warning



- SRP deliveries of Stored & Developed water are cut to less than 33% and/or CAP Subcontract & Lease water is cut to less than or equal to 60% of water used in the most recent non-drought year.
- Mesa is capable of meeting demand through remaining supplies.
- Mandatory water demand management strategies may be implemented for all water customers.
- Goal of 10% reduction in water demand.

WATER SHORTAGE MANAGEMENT PLAN A-3

Stage 3- Water Warning

City is capable of providing normal water service, but supply reductions eminent.		
Supply Management Measures	Municipal Demand Reduction Measures	Residential, Commercial, and Industrial Demand Reduction Measures
<ul style="list-style-type: none"> • Monitor available surface water supplies. • Monitor groundwater pumping capacity. • Planning to maximize use of water supplies "On" and "Off-Project." • Planning to maximize use of New Conservation Space water to maintain water levels behind Roosevelt Dam or underground storage. • Utilize stored water credits to offset groundwater pumping. • Prepare and consider submitting application to Arizona Department of Water Resources for drought groundwater pumping exemption. 	<ul style="list-style-type: none"> • All municipal demand reductions measures from previous stages. • Request City departments to identify possible reductions (10% to 15%) of water. • Intensify public information campaign initiated in Stage Two. • Restrict winter grass, unless 100% effluent/reclaimed water is used. • Reduce turf watering/landscaping irrigation, at City facilities other than parks and right-of-way. 	<ul style="list-style-type: none"> • All demand reduction measures identified for this user category from previous stage. • Limit/enforce construction water use during peak demand. Use reclaimed water whenever possible. • Limit over-seeding for winter lawn. • Promote conservation with respect to operation and maintenance of swimming pools (i.e.: cover, leak repairs). • Water use reduction goal of 10%.

Description: In this stage it is anticipated that water shortage restrictions will become more severe. The Team will evaluate the need to recommend imposing mandatory water use restrictions on water use.

Stage Four – Water Emergency



- Water supply deliveries are insufficient to meet demand.
- Mandatory water demand management strategies are implemented for all water customers to ensure basic water needs for residents and businesses will be met.
- Goal of 20% reduction in water demand.

WATER SHORTAGE MANAGEMENT PLAN A-4

Stage 4- Water Emergency

City is not capable of providing normal water service.		
Supply Management Measures	Municipal Demand Reduction Measures	Residential, Commercial, and Industrial Demand Reduction Measures
<ul style="list-style-type: none"> • Maximize available surface water supplies. • Maximize groundwater pumping capacity. • Planning to maximize use of water supplies "On" and "Off-Project." • Planning to maximize use of New Conservation Space water to maintain water levels behind Roosevelt Dam or underground storage. • Utilize stored water credits to offset groundwater pumping. • Submit application to Arizona Department of Water Resources for drought groundwater pumping exemption. 	<ul style="list-style-type: none"> • All municipal demand reductions measures from previous stages. • Request City departments to identify possible reductions (20%) of water. • Intensify public information campaign initiated in Stage Three. • No turf irrigation, unless 100% effluent/reclaimed water is used. • Eliminate turf watering/landscaping irrigation, at City facilities other than parks and right-of-way. • No hydrant uses except those required for public safety. • Prohibit ornamental fountains and water features. 	<ul style="list-style-type: none"> • All demand reduction measures identified for this user category from previous stage. • Prohibit construction water use during peak demand. Use reclaimed water whenever possible. • Prohibit over-seeding for winter lawn. • Promote conservation with respect to operation and maintenance of swimming pools (i.e.: cover, leak repairs). • Water use reduction goal of 20%. • Enforce reduction of cooling towers and evaporative coolers. • Enforce limitations for new sod and other landscape installations.

Description: Conditions that lead to this stage are unlikely. During this stage the primary focus of the Team response will be to maintain the health, safety, and economic vitality of the community to the maximum extent possible.

Sample City Code: Chandler

ARTICLE V. - WATER USE REGULATIONS DURING STAGE FOUR DROUGHT

52-40. - Water use regulations.

Upon adoption by the City Council of a resolution declaring a Stage Four Drought condition and for as long as that condition exists, the following water use regulations, and such other regulations as may be adopted by resolution, shall apply to all use of potable water that is provided by the City water supply system. The City of Chandler City Council shall have the authority to declare a Stage Four Drought when the Municipal Utilities Director determines that there is a significant possibility that the City's water supplies needed to meet the following year's demand may be reduced if drought conditions are not reversed, and it is unlikely that the City will be able to deliver sufficient water to meet all demands. The public will be notified of a Stage Four Drought condition and mandatory water use regulations as further described in [Section 52-42](#).

A. Lawn, tree and shrub watering is restricted to once per week. The City Manager shall determine selected watering days for all users of City potable water.

B. All landscape watering using City potable water may only be done between the hours of 9:00 p.m.—5:00 a.m. when potable water is used as the irrigation source.

C. Use of outdoor water features using City potable water is prohibited.

D. Use of outdoor water misters is prohibited.

E. Auto/truck washing is allowed only at commercial facilities or with pail and hose with a shut off nozzle.

F. Overseeding winter grass on City parks and facilities is prohibited.

G. Other conservation measures as adopted by the City Council, needed to balance water demand with the available water supply.

(Ord. No. 3498, § 1, 12-15-03)

52-41. - Variances.

Variances to the water use regulations set forth in this Article may be granted at the discretion of the City Manager or designee. Applicants for a variance must apply in writing to the Municipal Utilities Department, and demonstrate special circumstances such as health and safety needs.

(Ord. No. 3498, § 1, 12-15-03)

52-42. - Notification.

The City of Chandler Communications & Public Affairs Department will notify the public of a Stage Four Drought condition and mandatory water use regulations using available media sources.

Questions/Discussion
