

CITY OF TUCSON WATER DEPARTMENT
 DROUGHT PREPAREDNESS AND RESPONSE PLAN

TABLE 3.1

STAGE 1

Trigger: Either one or both of the following: a severe and sustained drought on the Colorado River Watershed or any declaration of drought status above normal by the ADMTC will trigger a Stage 1 drought response.

Theme: Continuation of baseline conservation program (all stages--Appendix B). Public notification and education on drought issues for customers and a requirement that City Departments initiate plans to review (audit) all large scale uses of water to maintain and/or increase efficiency. Self-administered water audits at all non-residential facilities are voluntary during this stage, with incentives offered during later stages for conducting and implementing conservation measures.

| | |
|-------------------------------|--|
| City of Tucson | <ul style="list-style-type: none"> • Require City departments to monitor their own water use through self-audits and identify conservation potential outside of existing water-efficient practices. • Tucson Water continues or accelerates ongoing operations such as well drilling and well maintenance and other system maintenance programs to reduce system losses (meter replacement, leak detection). |
| Residential Customers | <ul style="list-style-type: none"> • Continue baseline conservation program (Appendix B). • Public notification through local media and/or water bill inserts. • Implement an education program designed to specifically address the drought situation and need for voluntary water reductions. |
| Multi-Family Customers | <ul style="list-style-type: none"> • Implement Stage 1 measures for residential customers and may include: • Conduct voluntary self-audits and develop water budgets for possible exemptions from mandatory restrictions in Stage 2. |
| Commercial Customers | <ul style="list-style-type: none"> • Implement Stage 1 measures for multi-family customers and may include: • Encourage customers to implement business-specific voluntary measures (Examples: encourage restaurants to serve water only upon request or ask plant nurseries to promote the sale of low-water-use vegetation). |

CITY OF TUCSON WATER DEPARTMENT
DROUGHT PREPAREDNESS AND RESPONSE PLAN

| | |
|------------------------------|---|
| Industrial Customers | <ul style="list-style-type: none">• Implement Stage 1 measures for commercial customers. |
| Reclaimed Water Users | <ul style="list-style-type: none">• Continue customer education on efficient-water-use especially related to drought conditions.• Voluntary self-audits and developing water budgets to potentially gain exemptions from mandatory reductions in advanced drought response stages.• Tucson Water staff prepares a methodology to monitor wastewater treatment plant flows and calculate reclaimed water customer reductions for later drought stages if approved water budgets are not implemented. |

CITY OF TUCSON WATER DEPARTMENT
 DROUGHT PREPAREDNESS AND RESPONSE PLAN

TABLE 3.2

STAGE 2

Trigger: A declaration by the Secretary of the Interior of a shortage on the Colorado River will result in a reduction in Central Arizona Project supply to excess uses, agricultural and other non-municipal users and will trigger a Stage 2 drought response level. If ADWR has declared a drought response stage above normal for the Santa Cruz Watershed, local system indicators may also trigger progression to Stage 2 drought response. In addition, local system indicators will be used to determine the level of initial or continuing response actions needed for this stage.

Theme: Continues all Stage 1 measures. Voluntary reductions by Tucson Water residential and multi-family customers. Implementation of water savings/efficiencies identified during Stage 1 for City Departments. Adds a requirement for self-audits and conservation plans for commercial/industrial customers with a volume usage at/or exceeding 325 Ccf monthly.

| | |
|-------------------------------|--|
| City of Tucson | <ul style="list-style-type: none"> • City Departments budget and required to implement water-saving and efficiency practices identified in Stage 1 audits. • Prohibit public fountains and other non-essential uses within City operations. • Tucson Water continues system operation, maintenance, and well drilling activities initiated during Stage 1 and expedites if warranted. |
| Residential Customers | <ul style="list-style-type: none"> • Continue baseline conservation program (Appendix B). • Encourage implementation of voluntary irrigation schedule based on suggested schedule. • Encourage voluntary reductions of all uses and discontinue use of decorative fountains. |
| Multi-Family Customers | <ul style="list-style-type: none"> • Continue Stage 1 measures, implement Stage 2 measures for residential customers, and may include: • Initiate irrigation restrictions with exemptions for sites that have developed water budgets meeting efficiency standards established by Tucson Water. |

CITY OF TUCSON WATER DEPARTMENT
DROUGHT PREPAREDNESS AND RESPONSE PLAN

| | |
|------------------------------|--|
| Commercial Customers | <ul style="list-style-type: none"> • Continue Stage 1 measures, implement Stage 2 measures for multi-family customers, and may include: • Require commercial facilities with monthly demand at/or exceeding 325 Ccf to conduct a self-audit and develop a conservation plan. |
| Industrial Customers | <ul style="list-style-type: none"> • Continue Stage 1 measures; implement Stage 2 measures for commercial customers. |
| Reclaimed Water Users | <ul style="list-style-type: none"> • Continue Stage 1 measures. • Prepare customers for potential reductions if wastewater flow reductions occur and if an approved water budget is not implemented. • Potable water will not provide backup supplies to the reclaimed water distribution system. |

CITY OF TUCSON WATER DEPARTMENT
 DROUGHT PREPAREDNESS AND RESPONSE PLAN

TABLE 3.3.
STAGE 3

Trigger: Continuing shortages on the Colorado River resulting in reductions in CAP deliveries to municipal subcontractors, including the City, will trigger a Stage 3 drought response level. Local system indicators, in combination with an ADWR declared drought in the Santa Cruz Watershed, may also trigger a Stage 3 drought response. Local system indicators will be used to determine the implementation of specific drought response actions during this stage.

Theme: Addition of mandatory customer reductions as conditions warrant. Response actions from Stages 1 and 2 will continue. In addition a drought surcharge may be implemented in Stage 3 if determined necessary to recover additional operating costs including increased public education and enforcement efforts due to drought conditions. A drought surcharge will be developed, based on an annual (October) evaluation of need, as part of Tucson Water’s rate process subject to the same review and approvals as other rates and charges. In cases of severe, prolonged drought, the Mayor and Council may consider implementing a temporary moratorium on new water connections or require implementation of an "offset" program that would reduce water use in one area in order for water use to occur in another (see Glossary). Construction water use will be limited and only on approval by the Water Director.

| | |
|-------------------------------------|--|
| <p>City of Tucson</p> | <ul style="list-style-type: none"> • Continue Stage 1 and 2 measures. • Prohibit washing down of paved areas with exception of public/animal health and safety issues (e.g.: Reid Park Zoo, Fire and Police, emergency vehicles). |
| <p>Residential Customers</p> | <ul style="list-style-type: none"> • Continue Stage 1 and 2 measures and may include: • Restrict vehicle washing except at commercial facilities with reuse features. • Intensify water waste monitoring and enforcement. The City Manager may request or direct assistance from other City staff to monitor and cite repeat violators. Or additional staff will be hired or appointed for enforcement. • Implement watering restrictions with recommended schedule for watering two times per week included on Tucson Water website and in public information materials. • Implement interior retrofit on resale of property requirements. |

CITY OF TUCSON WATER DEPARTMENT
DROUGHT PREPAREDNESS AND RESPONSE PLAN

| | |
|--------------------------------------|--|
| <p>Multi-Family Customers</p> | <ul style="list-style-type: none"> • Continue Stage 1 and 2 measures and Stage 3 residential measures and may also include: • Intensify water waste monitoring and enforcement. • Implement watering restrictions. • Prohibit operation of public fountains. • Prohibit fall overseeding of turf areas unless irrigated with reclaimed water. • Implement interior retrofit on resale of property requirements for pre-1991 construction. • Implement landscape retrofit on resale of property requirements if warranted. |
| <p>Commercial Customers</p> | <ul style="list-style-type: none"> • Implement all Stage 1 and 2 measures and Stage 3 multi-family measures and may include implementing conservation plan recommendations developed in Stage 2: • Implement twice a week watering restrictions (Water use linked to some commercial customer’s products, e.g. nurseries, can apply for exemption.) • Implement mandatory retrofit on resale of property requirements for interior and exterior uses. • Prohibit operation of fountains at commercial and industrial sites. • Prohibit fall overseeding of turf unless reclaimed water is used. • Restrict washing of sidewalks, driveways, parking lots or any other paved surface. |
| <p>Industrial Customers</p> | <p>Implement all Stage 1 and 2 measures and all measures for commercial customers and may include implementing conservation plan recommendations developed in Stage 2.</p> |
| <p>Reclaimed Water Users</p> | <ul style="list-style-type: none"> • Implement all Stage 1 and 2 measures and may include: • Require irrigation restrictions, with potential exemptions for sites that have conducted audits, upgraded systems to meet minimum efficiency standards, and irrigate with budget-based irrigation schedules. • Require signage for facilities that implement budgets stating they are in compliance with current drought restrictions. |

CITY OF TUCSON WATER DEPARTMENT
DROUGHT PREPAREDNESS AND RESPONSE PLAN

- | | |
|--|--|
| | <ul style="list-style-type: none">• Potable water will not provide backup supplies to the reclaimed water distribution system. |
|--|--|

CITY OF TUCSON WATER DEPARTMENT
 DROUGHT PREPAREDNESS AND RESPONSE PLAN

TABLE 3.4
STAGE 4

Trigger: Additional reductions to CAP municipal deliveries, inadequate AWBA firming credits to offset the CAP delivery reductions, deteriorating local system indicators, or a failure to significantly reduce water demand in Stage 3 could trigger a Stage 4 drought response.

Theme: Eliminate all non-essential uses. Continuation of drought surcharge if implemented in Stage 3. In cases of severe, prolonged drought, the Mayor and Council may consider implementing a temporary moratorium on new water connections or require implementation of an "offset" program that would reduce water use in one area in order for water use to occur in another (see Glossary). Construction water use will be limited and only on approval by the Water Director.

| | |
|------------------------------|--|
| <p>City of Tucson</p> | <ul style="list-style-type: none"> • Continue all Stage 1, 2, and 3 measures and implement appropriate provisions from the City’s Emergency Water Conservation Ordinance (No. 8461) including but not limited to: • No operation of large-scale water-cooled systems below 2 cycles of concentration. • No outdoor irrigation (or implementation of further reduced watering schedule at the discretion of City Manager and Mayor and Council) • No washing of paved areas with any pressurized water source except in the case of meeting health and safety issues. • No use of any water-based play apparatus connected to a pressurized water source. • No restaurants and other food service establishments will serve water to their customers unless water is specifically requested by customers. • No operation of outdoor misting systems to cool public areas. • No filling of new swimming pools, fountains, spas, or other exterior water features, including no draining and refilling of existing exterior water features. • No washing of autos, trucks, trailers, and other types of mobile equipment except at facilities equipped with wash water recirculation systems, and for vehicles requiring frequent washing to protect public health, safety, and welfare. |
|------------------------------|--|

CITY OF TUCSON WATER DEPARTMENT
DROUGHT PREPAREDNESS AND RESPONSE PLAN

| | |
|-------------------------------|--|
| Residential Customers | <ul style="list-style-type: none"> • Continue Stage 1, 2, and 3 measures and implement appropriate provisions from the City’s Emergency Water Conservation Ordinance (No. 8461) including but not limited to: • No outdoor irrigation, or establish an irrigation schedule (discretion of City Manager and Mayor and Council). • No washing of paved areas with any pressurized water source except in the case of meeting health and safety issues. • No use of water-based play apparatus. • No filling of new swimming pools, fountains, spas, or other exterior water features. Existing pools may be topped off to maintain water level but may not be refilled if drained. • No washing of autos, trucks, types of mobile equipment except at facilities with wash water re-circulating systems. |
| Multi-Family Customers | <ul style="list-style-type: none"> • Continue Stage 1, 2, and 3 measures and include Stage 4 measures listed for residential customers. |
| Commercial Customers | <ul style="list-style-type: none"> • Continue Stage 1, 2, and 3 measures and include Stage 4 measures for multi-family customers. • No operation of large-scale water-cooled systems below 2 cycles of concentration. • No restaurants and other food service establishments will serve water to their customers unless specifically requested by customers. • No operation of outdoor misting systems to cool public areas. |
| Industrial Customers | <ul style="list-style-type: none"> • Continue Stage 1, 2, and 3 measures in addition to appropriate provisions under Stage 4 for Commercial Customers. |
| Reclaimed Water Users | <ul style="list-style-type: none"> • Continue Stage 1, 2, and 3 measures. |