ADDRESSING WATER SHORTAGES
DROUGHTS AND OTHER EMERGENCIES

Recommended Revisions to
Chapter 47, Article VII

June 12, 2012

BACKGROUND

• State of Texas requirements
• Current Ordinance enacted August 2001
• Drought of 2011
  – Stage 1 declared June 17, 2011
    • Based on lack of rainfall and stress on delivery system
  – Stage 2 declared August 15, 2011
    • Based on combined reservoir storage
  – Stage 2 and 1 rescinded January 11, 2012
    • Based on replenishment of storage and repaired condition of delivery system
Objectives

- Improve stages as management framework
- Clarify criteria for stages
- Establish measurable goals for reductions within each Stage
  - Decrease system peaking due to irrigation restrictions
  - Establish rationing to reduce use across all customer types
- Clarify steps to declare, progress and rescind stages
- Clarify violations, enforcement and affirmative defenses

Stages and Conditions
Recommended Provisions

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
<th>Stage 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ABNORMAL</strong></td>
<td><strong>SEVERE</strong></td>
<td><strong>EXTREME</strong></td>
<td><strong>EXCEPTIONAL</strong></td>
</tr>
<tr>
<td>Goal of 5% Overall Reduction</td>
<td>Goal of 10% Overall Reduction</td>
<td>Goal of 20% Overall Reduction</td>
<td>Goal of 35% Overall Reduction</td>
</tr>
<tr>
<td>Voluntary Restrictions</td>
<td>Mandatory Restrictions</td>
<td>Mandatory Restrictions</td>
<td>Rationing</td>
</tr>
</tbody>
</table>
Criteria for Stages
Recommended Provisions

Stage 1
- Rainfall that is lower than average
- Temperatures that are higher or lower than normal
- Other circumstances

Stage 2
- 24 months or less surface water supply
- Demand in excess of 80% of available treatment capacity
- Loss of 20% of treatment capacity
- Water pressures less than 45 psi

Stage 3
- 18 months or less surface water supply
- Demand in excess of 85% of available treatment capacity
- Loss of 25% of treatment capacity
- Water pressures less than 40 psi

Stage 4
- 12 months or less surface water supply
- Demand in excess of 90% of available treatment capacity
- Water pressure less than 35 psi

Measures by Stage
Recommended Provisions

Stage 1
- Inspect for leaks and repair
- Inspect irrigation system for leaks and overspray
- Set watering schedule to twice per week
- Voluntary

Stage 2
- Limit watering to twice per week from 8 pm to 5 am
- Single Family Residential Odd Numbers − Wed. & Sat.
- Even Numbers − Thur. & Sun.
- All Others Tues. & Fri.
- Mandatory

Stage 3
- NO OUTDOOR USE ALLOWED, except
- Non-residential customers may use water to continue production and protect inventory of primary business products
- Mandatory

Stage 4
- NO OUTDOOR USE ALLOWED
- Residential use limited to 6,000 gallons per house or apartment unit
- Non-residential users must reduce usage by 25% of baseline usage
- Mandatory
Variance
Recommended Provisions

- Variances only granted for:
  - Cannot comply for technical reasons or
  - Achievement of reduction through alternative methods
- Variance must be applied for
- Variance does not justify a previous violation
- Variances expire at end of water shortage period and do not renew

Enforcement and Penalties
Recommended Provisions

- Stage 2 Violations
  - $100 to $2,000 fine per occurrence/day
- Stage 3 Violations
  - $500 to $2,000 fine per occurrence/day
  - 3 violations in 30-days may result in service turn off*
- Stage 4 Violations and Incentives
  - $1,000 to $2,000 fine per occurrence/day
  - 3 violations in 30-days may result in service turn off*
  - 20% surcharge for 10% overuse
  - 10% incentive for more than 20% reduction in use

*Reconnection requires payment of fines, charges and acceptance of higher per gallon rate for 12 months
Moving Forward

- **6/8** – draft Ordinance posted to website
  
  Linked from City’s main web page and directly linked at:
  
  http://pweapps.houstontx.gov/Chapter47

- **6/12** – presentation to Transportation, Technology and Infrastructure Committee

- **6/18** – presentation to SN Alliance

- **6/21** – (net) end of public input period

- **6/27** – (net) Council consideration

Summary of Improvements

- Consistency of definitions

- Progressive response stages

- Strengthened enforcement tools

- Established priority for reduction in use
  - Outdoor Use is first (non-essential)
  - Indoor/production uses not impacted until Stage 4

- Better provides for contract customer reductions at Stage 3
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