Potable Water Element

Goals, Objectives, and Policies
Approved August 12, 1991 • Amended April 24, 2017
POTABLE WATER GOALS, OBJECTIVES AND POLICIES

GOAL 1

To provide efficient and effective potable water service in a manner which enhances the public health, safety, and welfare; is consistent with the desired urban form; and minimizes public costs.

Objective 1.1 The City shall establish wellhead protection areas consistent with the DEP 500 foot radial setback and continue coordination with Orange County and SJRWMD on future wellhead protection areas.

(Amended February 7, 2000, Effective March 9, 2000, Doc. No. 32636)

Policy 1.1.1 The City shall prohibit potentially high risk land uses from the established cones of influence.

Policy 1.1.2 OUC shall periodically monitor and inspect its potable water wells to ensure they are in good repair and are not acting as conduits to potentially contaminated water.

(Amended April 24, 2017, Effective May 25, 2017; Doc. No. 1704241203)

Policy 1.1.3 The City shall not approve any new development classified as a large quantity generator by the Resource Conservation and Recovery Act or land uses prohibited in Conservation Policy 1.3.1 within the established cones of depression as an interim measure until such time that an Aquifer Protection and Wellhead Protection ordinance is adopted unless adequate leak protection and spill containment up to 150% of the stored volume is guaranteed.

Objective 1.2 In addition to the significant reduction in per household demand already achieved since 2004, the City shall reduce total per household potable water demand by an additional 3 percent between 2017 and 2020, and an additional 4 percent by 2040, from a baseline in 2017 of 79,000 gallons per household per year.


Policy 1.2.1 In order to conserve potable water supplies throughout the planning period, the City Landscaping Code and its water conservation requirements shall apply.

The City shall continue to improve conservation rates by periodically updating the Building Code and Land Development Code to incorporate advances in water conservation practices.


Supplement 18
Policy 1.2.2  OUC shall conduct water audits for commercial and residential customers to reduce and eliminate leaks and inefficient use.

Policy 1.2.3  The City shall reduce the use of potable water for irrigation purposes throughout the planning period by adopting and enforcing regulations that require property owners in the reclaimed water service area to connect to the reclaimed water network where feasible. When determining reclaimed water feasibility the availability of reclaimed water and the net reduction in potable water use shall be considered (when potable water saved is greater than potable water flushing for water quality).
  

Policy 1.2.4  The City shall reduce the use of potable water for irrigation purposes by maintaining regulations throughout the planning period that require the use of native vegetation or other drought resistant species in new development.
  
  (Amended January 22, 2007, Effective April 9, 2007, Doc. No. 0701221004)

Policy 1.2.5  OUC will continue to require the metering of all water to ensure accountability of water use.

Policy 1.2.6  The City Planning Division and the Public Works Department shall be responsible for coordinating with the OUC to identify and implement proposals to pursue new water conservation opportunities.
  

Policy 1.2.7  The City shall permit future growth and development only within designated service areas where existing public facilities have sufficient capacity, or public/private financial commitments have been made, to support the projected service demands and to discourage urban sprawl. Improvements needed to address projected deficiencies shall be included in the Capital Improvements Element prior to development approval.
  
  (Amended January 22, 2007, Effective April 9, 2007, Doc. No. 0701221004)

Policy 1.2.8  Reserved.
  

Policy 1.2.9  OUC shall promote water conservation through multi-media outreach activities and supporting educational efforts including television and radio advertising, website information and other outreach initiatives.
  

Policy 1.2.10 OUC shall conduct landscape irrigation audits for high-volume users.
  
Policy 1.2.11  OUC shall maintain inverted block water rates and may increase such rates over time if necessary.


Objective 1.3  The City shall cooperate in implementing the Central Florida Water Initiative Regional Water Supply Plan through regular OUC/Water Management District coordination and jurisdictional authority, throughout the planning period and through adoption of the City’s Water Supply Facilities Work Plan. The City shall adopt and maintain the Water Supply Facilities Work Plan for at least a 10-year planning period. The Water Supply Facilities Work Plan, dated April 24, 2017 is herein adopted, by reference. The Water Supply Facilities Work Plan provides data and analysis necessary to support the goals, objectives and policies in this element. A 10-year schedule of water supply projects needed to meet demand in the Plan is provided in Figure PW-3. Supporting data and analysis may be attached as appendices to the Water Supply Facilities Work Plan, and updated from time to time, without the necessity of an amendment to the Growth Management Plan.


Policy 1.3.1  The City shall, through the mandated operating procedures of the Orlando Utilities Commission, and through adoption of the City’s Water Supply Facilities Work Plan, cooperate in implementing the State’s Water Supply Plan and the regional Central Florida Water Initiative Regional Water Supply Plan.


Policy 1.3.2  The City shall update its Water Supply Facilities Work Plan within eighteen months after the adoption of the Central Florida Water Initiative Regional Water Supply Plan, pursuant to the adoption schedule of the South Florida Water Management District, the St. Johns Water Management District and the Southwest Florida Water Management District.


Policy 1.3.3  The Water Supply Facilities Work Plan shall incorporate projected demand from all properties located within City limits, including those served by the Orlando Utilities Commission, Orange County Utilities Department, the Taft Water Association and the Winter Park Utilities Department. In addition, the Plan shall address each utility’s water supply projects that are needed to accommodate the projected demand.

**Objective 1.4**  
The City shall continue efforts to expand its wastewater reuse service areas.

**Policy 1.4.1**  
The City shall develop the re-use of wastewater and/or reclaimed water wherever it is economically and environmentally feasible.  
(*Amended February 7, 2000, Effective March 9, 2000, Doc. No. 32636*)

**Policy 1.4.2**  
The City shall coordinate extension of the reclaimed water system into residential developments where feasible.  
(*Amended February 7, 2000, Effective March 9, 2000, Doc. No. 32636*)

**Policy 1.4.3**  
The City shall implement the reclaimed water capital projects described in the 10-year Water Supply Facilities Work Plan and the Capital Improvements Element.  
(*Amended January 22, 2007, Effective April 9, 2007, Doc. No. 0701221004*)

**Policy 1.4.4**  
Within the Wekiva Overlay, as identified in Figure WW-28, the City shall require new development proposals that meet the thresholds for designation as a Development of Regional Impact to evaluate the feasibility of extending reclaimed water lines to serve the property.  
(*Amended December 15, 2008, Effective March 10, 2009, Doc. No. 0812151104*)

**Objective 1.5**  
The City shall annually evaluate the potable water infrastructure to maximize its use.

**Policy 1.5.1**  
OUC shall replace water production and distribution facilities based on improved efficiency, quality or reliability.

**Policy 1.5.2**  
The City shall use the following Levels of Service in its evaluation of future potable water infrastructure service:

<table>
<thead>
<tr>
<th>Land Use</th>
<th>LOS Without Reclaimed Water</th>
<th>LOS With Reclaimed Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-Family</td>
<td>325 g/du/d</td>
<td>160 g/du/d</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>200 g/du/d</td>
<td>200 g/du/d</td>
</tr>
<tr>
<td>Office</td>
<td>0.15 g/sqft/d</td>
<td>0.15 g/sqft/d</td>
</tr>
<tr>
<td>Commercial</td>
<td>0.13 g/sqft/d</td>
<td>0.13 g/sqft/d</td>
</tr>
<tr>
<td>Hotel</td>
<td>187 g/rm/d</td>
<td>187 g/rm/d</td>
</tr>
<tr>
<td>Industrial</td>
<td>0.22 g/sqft/d</td>
<td>0.22 g/sqft/d</td>
</tr>
<tr>
<td>Government</td>
<td>0.15 g/sqft/d</td>
<td>0.15 g/sqft/d</td>
</tr>
<tr>
<td>Hospital</td>
<td>0.22 g/sqft/d</td>
<td>0.22 g/sqft/d</td>
</tr>
</tbody>
</table>

**Design Flow**  
| Average Day | 50 psi |
| Peak Day    | 40 psi |
| Peak Day plus Fire | 25 psi |

These LOS shall be based on the average day demand.  
(*Amended January 30, 2006, Effective March 2, 2006, Doc. No. 060130908*)
Policy 1.5.3 The City shall coordinate with OUC to ensure that adequate quantities of water are available to meet the demands for fire protection.  
(Amended January 22, 2007, Effective April 9, 2007, Doc. No. 0701221004)

Policy 1.5.4 The Orlando Utilities Commission shall provide water service pursuant to the provisions of the Amended and Restated Orlando Utilities Commission/Orange County Water Service Territorial Agreement.  

Policy 1.5.5 The City shall coordinate with OUC to adjust potable water level of service standards over time to account for per-unit demand reductions caused by conservation measures and the increased availability of reclaimed water.  
(Amended January 22, 2007, Effective April 9, 2007, Doc. No. 0701221004)

Objective 1.6 All potable water delivered by OUC within the City Limits shall meet the State’s primary drinking water standards.

Policy 1.6.1 OUC shall periodically analyze water quality to ensure compliance with water quality criteria set forth in the Florida Safe Drinking Water Act.  
(Amended February 7, 2000, Effective March 9, 2000, Doc. No. 32636)

Objective 1.7 The City shall integrate land use and water resource planning to ensure that a sufficient supply of potable water is available at the time of development.  
(Amended January 22, 2007, Effective April 9, 2007, Doc. No. 0701221004)

Policy 1.7.1 The City shall coordinate with the SJRWMD and the SFWMD when considering GMP amendments that may increase demand for potable water.  
(Amended January 22, 2007, Effective April 9, 2007, Doc. No. 0701221004)

Policy 1.7.2 The City shall coordinate with SJRWMD and the SFWMD when considering new DRIs or DRI amendments that may increase demand for potable water.  
(Amended January 22, 2007, Effective April 9, 2007, Doc. No. 0701221004)

Objective 1.8 The City shall work with local and regional organizations to identify and, where feasible, implement alternative water supply projects.  
(Amended January 22, 2007, Effective April 9, 2007, Doc. No. 0701221004)

Policy 1.8.1 In order to conserve potable water supplies throughout the planning period, the City shall maintain Landscaping Code regulations that require water reduction devices in new development and decrease use of potable water supplies for non-potable water uses.

The City shall continue to improve conservation rates by periodically updating the Building Code and Land Development Code to incorporate advances in water conservation practices.  
Policy 1.8.2 The City shall coordinate with OUC to implement feasible alternative water supply projects as identified in the Central Florida Water Initiative (CFWI) Regional Water Supply Plan and the City’s Water Supply Facilities Work Plan.  

Policy 1.8.3 Within 18 months of approval of a revised regional water supply plan, the City shall select alternative water supply projects that may be implemented and incorporate those projects into Figure PW-3: Water Supply Facilities Work Plan, and Figure CI-14: the Capital Improvements Fund Schedule, as applicable.  
### Figure PW-3
**Ten-Year Schedule of Water Supply Projects 2017-2027**

<table>
<thead>
<tr>
<th>Utility Serving Entity’s Jurisdiction</th>
<th>Future Program or Program Providing Water to Jurisdiction</th>
<th>Purpose of Project</th>
<th>Funding Sources</th>
<th>OUC Year Total 2017-2027 Costs ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orlando Utilities Commission (OUC)</td>
<td>St Johns River/Taylor Creek Reservoir Water Supply Project</td>
<td>OUC’s portion of a regional alternative water supply project withdrawing water from the St. Johns River and Taylor Creek Reservoir. The project will provide up to 50 mgd to multiple project partners.</td>
<td>OUC</td>
<td>38,931,000</td>
</tr>
<tr>
<td>OUC</td>
<td>Eastern Regional Reclaimed Water Distribution System</td>
<td>The City’s ERRWDS project provides reclaimed water to OUC’s service area. OUC partnered with the City to pay for a significant portion of this system. The project is nearly complete with the exception of the Lake Nona storage and repump station.</td>
<td>OUC</td>
<td>1,718,000</td>
</tr>
<tr>
<td>OUC</td>
<td>Orlando Utilities Commission Project Renew</td>
<td>OUC’s portion of a regional reuse project to provide reclaimed water from the City’s Iron Bridge facility to areas west of OUC’s service area to offset adverse impacts from OUC’s pumping.</td>
<td>OUC</td>
<td>27,525,000</td>
</tr>
<tr>
<td>OUC</td>
<td>Water Plant Modification and Equipment</td>
<td>Replace obsolete equipment and modify plants.</td>
<td>OUC</td>
<td>2,813,000</td>
</tr>
<tr>
<td>OUC</td>
<td>Plant Network Hardware/Software/Security</td>
<td>Plant hardware/software/security upgrades.</td>
<td>OUC</td>
<td>3,050,000</td>
</tr>
<tr>
<td>OUC</td>
<td>Well &amp; High Service Pump &amp; VFD Upgrades</td>
<td>Replace, refurbish, improve well and high service pumps due to age and condition.</td>
<td>OUC</td>
<td>3,001,000</td>
</tr>
<tr>
<td>OUC</td>
<td>Southeast Plant Expansion Ground Storage</td>
<td>Increase onsite water storage to allow for increased fire demands.</td>
<td>OUC</td>
<td>2,647,000</td>
</tr>
</tbody>
</table>
### Figure PW-3:
Ten Year Schedule of Water Supply Projects Continued...

| Utility Serving Entity's Jurisdiction | Future Program or Program Providing Water to Jurisdiction | Purpose of Project | Funding Sources | OUC 10 Year Total Costs ($)
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>OUC</td>
<td>Southeast Water Treatment Plant HSP</td>
<td>Increase pumping capacity and redundancy.</td>
<td>OUC</td>
<td>175,000</td>
</tr>
<tr>
<td>OUC</td>
<td>Skylake WTP 7.5 MGD Well</td>
<td>Improve well redundancy.</td>
<td>OUC</td>
<td>1,530,000</td>
</tr>
<tr>
<td>OUC</td>
<td>System Reliability Emergency Generator</td>
<td>Increase emergency power capabilities at water plants without emergency generators.</td>
<td>OUC</td>
<td>5,234,000</td>
</tr>
<tr>
<td>OUC</td>
<td>Granular Activated Carbon Treatment</td>
<td>Improve water quality to reduce the need for flushing.</td>
<td>OUC</td>
<td>3,200,000</td>
</tr>
<tr>
<td>OUC</td>
<td>Chlorine Conversion</td>
<td>Eliminate the risks associated with gas chlorine.</td>
<td>OUC</td>
<td>5,936,000</td>
</tr>
<tr>
<td>OUC</td>
<td>Ozone Generator Replacement Program</td>
<td>Replacement of the ozone generators nearing life expectancy and/or having serviceability issues.</td>
<td>OUC</td>
<td>37,408,000</td>
</tr>
<tr>
<td>OUC</td>
<td>Transmission &amp; Distribution Renewal &amp; Replacement</td>
<td>Transmission and distribution facilities to be renewed or replaced.</td>
<td>OUC</td>
<td>60,055,000</td>
</tr>
<tr>
<td>OUC</td>
<td>Inter-Agency Projects</td>
<td>Required projects that are scheduled to coincide with FDOT, Orange County, or the City of Orlando's Infrastructure improvements.</td>
<td>OUC</td>
<td>27,487,000</td>
</tr>
<tr>
<td>OUC</td>
<td>Other Transmission and Distribution Projects</td>
<td>Other pipelines and extensions, main installations to close loops to improve water quality or pressure, OUC up-sizing of developer pipes, etc.</td>
<td>OUC</td>
<td>15,480,000</td>
</tr>
<tr>
<td>OUC</td>
<td>Donated Water Transmission &amp; Distribution</td>
<td>Water transmission and distribution facilities for new customers constructed and donated to OUC.</td>
<td>OUC</td>
<td>16,500,000</td>
</tr>
<tr>
<td>OUC</td>
<td>Constructed Water Transmission &amp; Distribution</td>
<td>OUC provided water mains, hydrants, services, and meters for new development.</td>
<td>OUC</td>
<td>4,405,000</td>
</tr>
</tbody>
</table>

(Amended April 24, 2017, Effective May 25, 2017, Doc. No. 1704241203)