

Demand Management and Water Conservation in the Regional WDCPs

Council Meeting #6

June 2010



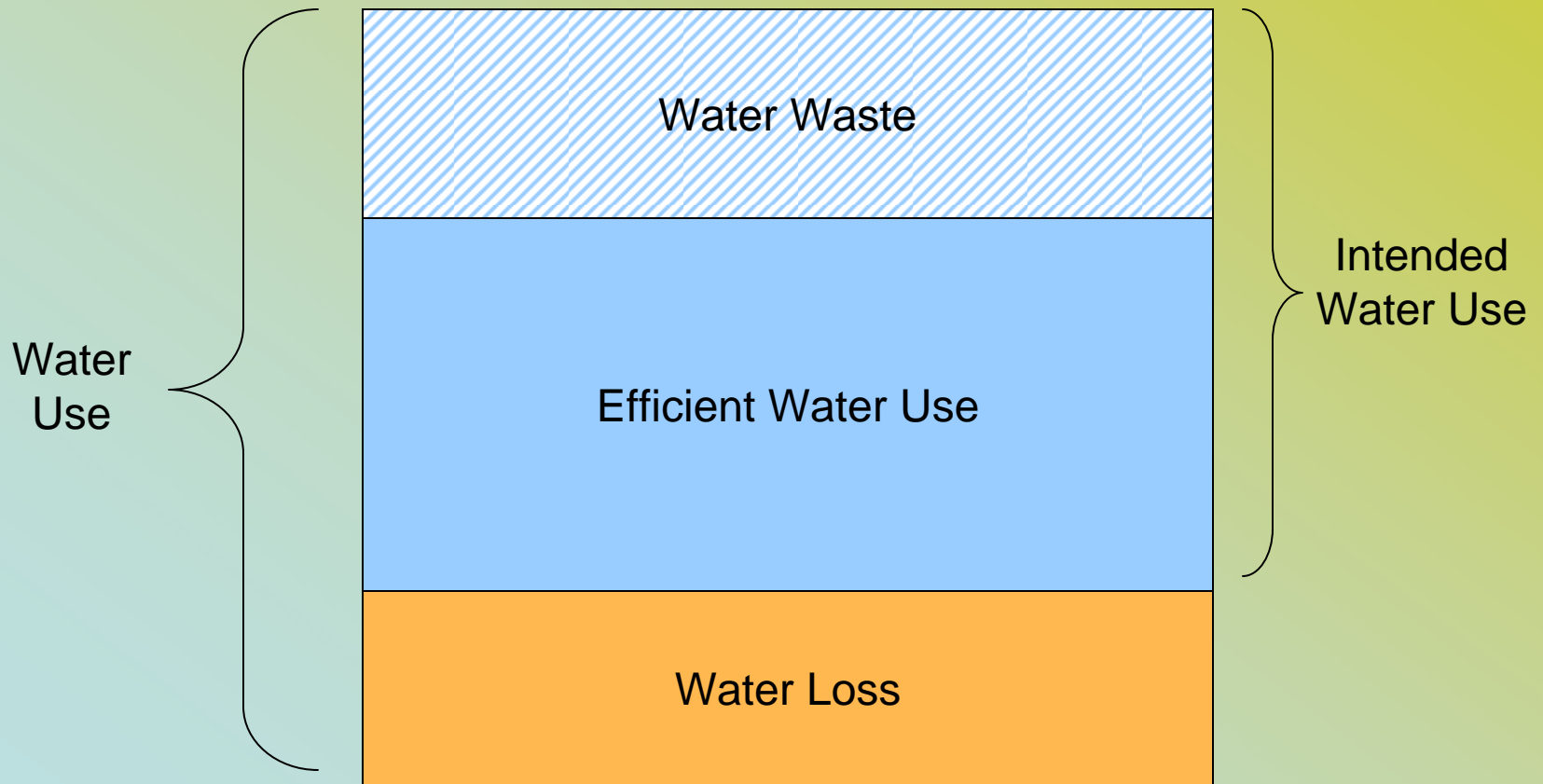


Water Conservation (WC)

Water conservation is a tool to manage demand. It is defined as the beneficial reduction in water use, water waste and water loss (SWP)

*The ultimate goal of water conservation is not to prevent water use, but to **maximize efficiency and the benefit from each gallon used.***

Maximize efficient water use






- Efficient water use is considered the minimal amount of water that is technically and economically feasible to achieve an intended function (SWP)
- Water waste is water that meets an intended use, but may not be considered efficient (WCIP)
- Water loss is water that does not make it to an point of intended use, usually due to leaks or faulty equipment (WCIP)

Water quantity management: Conservation priority

- Water conservation (WC) is demand management
- WC is identified as a priority practice (SWP Sec. 7, Policy 3)
- While WC is not expected to fully meet water needs, it is an effective and efficient practice for all water users (SWP Sec. 8, Policy 1)





What to do with a priority practice...

- DNR Board will amend rules & regs for WC requirements
 - water withdrawal permittees (those withdrawing over 100k gal/day) and
 - drinking water providers
- For Councils, demand management/WC should be part of WDCPs

Tiers of Conservation Practices: Basic Practices (in Rules)

<u>Tier ONE:</u>	Basic water conservation activities and practices that are currently required or general mandates that will certainly be included in upcoming amended rules.
<u>Tier TWO:</u>	Conservation activities and practices that will be presented as options for permittees in the upcoming amended rules.



Tiers of Conservation Practices: (not in Rules)

<u>Tier THREE:</u>	Basic water conservation practices for all water users that may not be addressed in current or upcoming amended rules.
<u>Tier FOUR:</u>	Additional water conservation practices that can be considered if a gap exists between current or future water supplies and the demands for the region.

Tier ONE

- Relevant to:
 - Non-farm water withdrawal permittees & permit applicants (& farm use in Flint River basin)
 - Drinking water providers
 - Local governments, to some extent
- Existing WC rules
- New WC mandates from Water Stewardship Act (WSA) and the State Water Management Plan (SWP)


Tier ONE(a): Existing WC Rules & Law

Non-farm water withdrawal permit applicants must submit w.c. plans	R&Regs 391-3-6 & 391-3-2
Regional conservation requirements as outlined for Flint River Basin, Coastal region and Metro District	OCGA 12-5-572, R&Regs 391-3-2, R&Regs 391-3-28
Non-landscape outdoor water use	R&Regs 391-3-30
Public car wash facilities	R&Regs 391-3-31
Water use for landscape related purposes restricted between 10am and 4pm.	OCGA 12-5-7



Tier ONE(b): Upcoming Amended WC Rules

- In compliance with WSA and SWP:
 - Non-farm water withdrawal permittees must demonstrate progress toward water efficiency
 - Non-farm water withdrawal permittees and drinking water providers must annually report information on water efficiency
 - Drinking water providers must annually submit water system audits
 - Serving 10,000+, must submit by March 2012
 - Serving 3,300-10,000 must submit by March 2013



Tier ONE(b): Upcoming Amended WC Rules (cont.)

- In compliance with WSA and SWP:
 - Local governments must adopt building codes to require, after July 1, 2012:
 - Submetering in new multi-tenant residential and mult-unit industrial/commercial buildings
 - High-efficiency toilets and fixtures in new homes
 - High-efficiency cooling towers in new construction

Flint River Basin – Ag Permit WC Requirements for New Permits (after March 1, 2006)

Capacity and Restricted Use Areas

- End gun shut-off systems
- Leak prevention and repair
- Pump shut down system in the event of malfunction
- Rain gage shut-off system for drip, traveler & solid set

Conservation Use Areas

- End gun shut-off systems
- Leak repair and maintenance



Tier TWO

- Relevant to:
 - Non-farm water withdrawal permittees & permit applicants (those withdrawing over 100k gal/day)
 - Drinking water providers
- New WC practices from WSA and SWP, will be presented as options for permittees in upcoming amended rules and regulations



Tier TWO: WC options

Options outlined in SWP, section 8 (pg 21-22)

- **OPTION 1: Compliance with goals outlined in Water Conservation Implementation Plan (WCIP)**
 - 25 conservation goals are identified in the March 2010 WCIP
 - See Synopsis for Summary of Goals
- **OPTION 2: Implementation of select WC practices**
 - Municipal water providers can choose to demonstrate implementation of 12 practices
 - Industrial water users with permits can choose to demonstrate implementation of 9 practices



Tier THREE

- Basic practices for water users, but not addressed in rules and regulations
- May already be in practice in the region, but may not be employed on a wide scale.
- Specific to the region identified through research and discussion



Tier FOUR

- “Beyond Basic” practices important for helping close the gap (if one exists)
- Important to gather more water use information and calculate impact of WC efforts on any existing or future gap.
- EPD is developing guidance to assist PCs in evaluating practices within this tier.



In Summary

- **Tier ONE practices** – mandatory through rules or law (permittees)
- **Tier TWO practices** – options addressed through rule (permittees)
- **Tier THREE practices** – optional, basic (permittees and others)
- **Tier FOUR practices** – optional, beyond basic to help “close the gap” (permittees and others)



In Summary

- Many WC goals and practices are available for consideration
- Decide which WC goals and/or practices are appropriate for their region.
- Include appropriate WC goals and/or practices in the WDCP

