



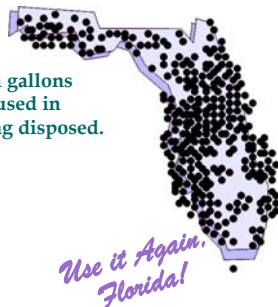

Reuse in Florida

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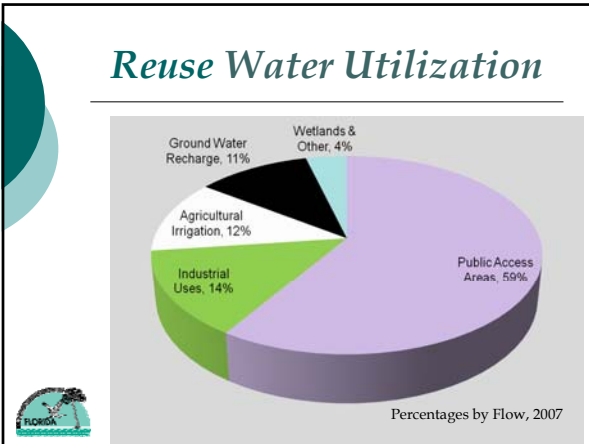
Reuse of Reclaimed Water

"Reclaimed Water" is Domestic Wastewater Treated to a Prescribed Quality that is Reused for an Appropriate Beneficial Use"



National Leader in Reuse

In 2008, over 243 billion gallons reclaimed water was reused in Florida rather than being disposed.



Reuse of Reclaimed Water and Land Application

- Consistent National Guidelines with EPA
- Types of Reuse in Florida
 - Restricted Access Reuse
 - Industrial Reuse
 - Public Access Reuse
 - Groundwater Recharge
 - Indirect Potable Reuse

Reuse Storage Tank
Spencer WWTF

Treatment Levels

Levels	Requirements
Secondary	20 mg/l CBOD and 20 mg/l TSS
Advanced	5 mg/l CBOD, 5 mg/l TSS, 3 mg/l TN, and 1 mg/l TP
Full	20 mg/l CBOD, 5 mg/l TSS, 3 mg/l TOC, 0.2 mg/l TOX, 10 mg/l TN, and Primary and Secondary Drinking Water Standards

Disinfection Requirements

Level	Requirements
Low - Level	2400 Fecal Coliform Values per 100 ml of Sample
Basic	200 Fecal Coliform Values per 100 ml of Sample
Intermediate	14 Fecal Coliform Values per 100 ml of Sample
High - Level **	25 Fecal Coliform Values per 100 ml of Sample
Full	0 Total Coliform Values per 100 ml of Sample



** 75% of all samples must be Non-Detect for Fecal Coliform**

Restricted Access Reuse

- Spray Fields
- Rapid Infiltration Basins
- Absorption Fields
- Secondary Treatment with Basic Disinfection



Industrial Reuse

- Industrial Reuse
 - Cooling Towers
 - Process Water
 - Wash Water
- Secondary Treatment with Basic Disinfection



Public Access Reuse

➤ Public Access Reuse

- Residential Lawns
- Golf Courses
- Edible Crops
- Parks/Schools



Fl. Myers Photo by Troy Thomas

➤ Secondary Treatment, with High Level Disinfection



Ground Water Recharge

➤ Class V Injection Wells and RIBs directly connected to potable aquifers

➤ Types of Class V Recharge

- Salinity Barriers
- Injection Systems

➤ Full Treatment and Disinfection

➤ 12 Month Pilot Study

➤ Multiple Barriers for Control of Pathogens & Organics



Indirect Potable Reuse

➤ Planned Augmentation Directly Into or Upstream of a Class I Surface Water

➤ Requires a Surface Water Discharge

➤ Full Treatment and Disinfection

➤ Multiple Barriers for Pathogen & Organics Control

➤ 12 Month Pilot Study



Wrap Up

- Types of Reuse
- Varying Levels of Potable Offset
- Increasing Levels of Treatment



*Use it Again,
Florida!*



Reuse in Florida

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