Florida's Future Water Availability and Needs – 2020 and Beyond

Manatee County's Outlook

Presented on Panel Discussion at 2012 Water School
April 26,2012



Three Questions of Water Supply

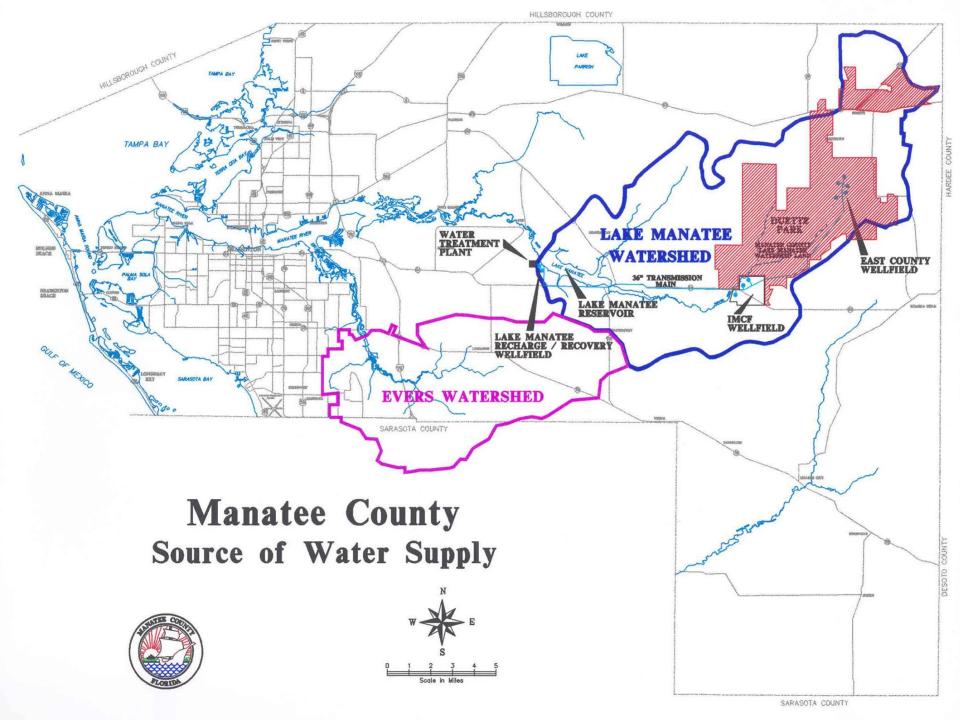
- Sufficient (high) Quantity?
- Sufficient (high) Quality?
- Sufficient (low) Cost?



Current Systems Description

- Manatee County Utilities Department
 - Lake Manatee Reservoir 34.9 MGD
 - East County Wellfield 15.986 MGD
 - Mosaic Wellfield 1.96 MGD
 - Current total 52.846 MGD
- City of Bradenton Public Works and Utilities Department
 - Evers Reservoir 6.95 MGD
 - Well 0.23 MGD
 - Current total 7.18 MGD





Manatee County Water Plant





Current and Projected Demand

- Manatee County 52.846 Supply
 - 2011 37 MGD Demand
 - 2020 47.5 MGD Projected Demand
 - 2030 49 MGD Projected Demand
 - 2035 53.6 MGD Projected Demand



General Status

- Generally, within Manatee County the potable water supply is sufficient through 2020
- Based on current population projections, supply will likely be good through 2030
- Eventually new supplies will be needed



Future Supply Options

- Stretch current supply
 - Conservation
 - Use of reclaimed water
- New Brackish RO Facility North County (3-6 MGD)
 - Permitted through groundwater credits earned by use of reclaimed water instead of groundwater
- Local Sources for Possible Regional Development
 - Flatford Swamp 5-10 MGD
 - Desalination 5-20 MGD



Future Supply Options (cont.)

- Possible Regional Sources for Regional Development
 - Dona Bay (5 20 MGD)
 - Shell Creek (12 20 MGD)
 - Desalination (40 55 MGD)
 - Myakka River Basin (10 MGD)
 - Little Manatee River Basin (5 10 MGD)
 - Additional Development of Peace River (40 80 MGD)
 - Babcock Ranch(10 20 MGD)



New Supply Options Exist

- Developing New Supplies so that there is Sufficient Quantities of Sufficient Quality Will Increase Water Costs
 - "Cheap" water is no longer available
- Stretching Current Supplies through Water Conservation and Reclaimed Offsets is Much Cheaper than Developing New Supplies



The "Value" of Water (1)

"Immediate access to clean drinking water and working sewer systems are things that, while once considered **luxuries for Americans, now are** thought of as basic services. When something is labeled as a basic service, that means that it is expected to be provided as a given..... which leads to the expectation that it will be cheap."



Jason Mumm, Water & Wastes Digest, April 2012

The "Value" of Water (2)

- Avg. Water & Sewer Bill in US \$720/yr
 - \$1.97 per day per home
 - Less for instant, on-demand water and sewer service for a day than on one cup of coffee from a popular coffee shop



The "Value" of Water (3)

Dirt cheap?

- A ton of dirt, w/out delivery charge, costs about \$20
- A ton of water, which is 238 gallons, costs between \$1 and \$2 and is delivered to your faucet every time you turn it on.



Summary

- Current water supply status is good
- New supplies eventually will be needed
- Local and Regional options have been identified
- New supplies will have greater costs
- Important to stretch current supplies through conservation and reuse
- Perceived value of water may be obstacle to new supply development





