

ASR and Florida Water
Resources in 2020
Charles Pattison, AICP
Executive Director



1000 Friends of Florida
www.1000friendsofflorida.org

Mission Statement

1000 Friends of Florida promotes healthy urban and natural places by wise management of growth and change. We educate, advocate, negotiate and, when necessary, litigate to protect our high quality of life. We help citizens have the technical knowledge and access needed to ensure that public and private decisions lead to livable communities.

Growth Management and Water

- 90% of Florida's consumption from groundwater
- more groundwater withdrawn/used in Florida than any state east of Mississippi River
- Water concurrency – looking at one end of the pipe only
- Impacts to natural resources – competition from ag and development
- 10 year linkages to capital improvement plans

Land Use Planning in Florida

- Population estimates used to designate sufficient land uses on future land use maps
- 67 counties and more than 400 municipal governments with exclusive land use power
- Cumulative growth allowances for these plans by 2020 have population range of 27 million to almost 90 million

Population Growth

- 16 Million now; 22 Million by 2020 (3rd largest in nation, passing NY)
- More than 300,000 new residents every year - about 850 people net/day
- Continue pattern of 80% of population within 20 miles of the coast
- Fresh water use increase from 7.2 bgd (1995) to 9.1 bgd by 2020 – 26% increase

Water Concurrency

- Only considered a PERMIT function
- Must provide a financially feasible level of service at the time of development impact
- New requirement taking effect within the next two years requires linkage between regional water supply plans and 10 year local plans for water supply

Florida Water Coalition (FWC)

Non-profit, non-partisan organization made up of leading environmental, public health and public interest organizations in Florida, formed in 2002 to deliver persistent, result-oriented advocacy and educational outreach on three major themes.

FWC Themes

- (1) water must be clean and safe
- (2) waters and submerged lands must not be privatized or misused
- (3) water management must protect natural resources

Florida Water Coalition (FWC)

Members

- Audubon of Florida
- 1000 Friends of Florida
- Clean Water Network
- Earthjustice
- Florida Conservation Alliance Institute
- Florida Wildlife Federation
- Florida PIRG
- Legal Environmental Assistance Foundation (LEAF)
- Defenders of Wildlife

FWC Policy Issues

- water is a public resource (above and below surface)
- best role for WMDs: resource protection not water supply development
- new role for Governor & Cabinet: review of major permits
- water supply as the primary responsibility of local governments

FWC Policy Issues (continued)

- supply must factor in reuse, conservation and smart growth
- beyond MFLs/functional protection for lakes, rivers, springs and estuaries
- Water Reservations – fish and wildlife
- strong standards for surface and groundwater protection (beyond potable)

FWC Points of Emphasis

- Limit guarantees of water for new growth (sustainable limits)
- Prohibit state subsidies for new growth
- Uniform water management district taxing authority
- Prioritize and invest in protecting and restoring water sources over new supplies

ASR Issues of Concern

- Most common concern – proceed with caution into unknown hydrogeologic areas
- Demonstration that surface storage options fully considered first
- Maximize storage capabilities of natural features first, like sloughs, wetlands and swamps

Water Quality

- less than 100 primary drinking water standards in effect
- toxicity testing does not account for 75% of top-volume chemicals in commercial use

Related Water Quality Issues

CDC reports 87% increase between 2000-2002 in disease outbreaks associated with groundwater

for same period, 29% increase in Florida from public water supply systems using groundwater

Related Water Quality Issues

injected water (stormwater,
agricultural runoff and reclaimed)
have issues with microbial
contaminants, heavy metals,
nutrients, pharmaceuticals

Common Concerns

- better understanding of local and regional hydrogeology - not just pilots
- need overall aquifer management plans

Common Concerns

must have contingency plans - what are the alternatives?

roles for conservation and reuse

understand biochemical/geothermal interactions and leaching of harmful substances like uranium, radon and arsenic - specifically noted concern of CROGEE

CROGEE

- National Academy of Sciences
Committee on Restoration of the
Greater Everglades Ecosystem
- SFWMD agreed to do CERP ASR
Regional Study (\$55 million) to be
completed by 2010
- ASR well estimates to be revised in
2006, 2009, 2009
- ASR contingency planning to start June,
2004

Common Concerns

recovery rates and storage properties -
is 70% attainable?

impacts to plant and animal
communities

Common Concerns

prevention of contamination of drinking water supplies – what are financial commitments to restore to pre-contamination levels?

fate of microorganisms and die-off in brackish water

Common Concerns

adequacy and sufficiency of
monitoring wells

CERP plan scale 17 times larger than
any existing system - 333 wells
storing 1.7 bgd

Common Concerns

same process used for Class I UIC wells which now shows movements into underground drinking water sources at 24 sites being used for ASR modeling

contingency plans for dealing with contamination

Summary of ASR Issues

- Cautious support IF
- If water quality issues can be addressed
- If hydrogeologic issues dealt with
- If alternatives analyses show ASR the best
- If contingency plan(s) developed
- If cleanup plans in place