

# Florida's Water Story Distilled

Cutting through the rhetoric of water  
supply in the Sunshine State

Cynthia Barnett

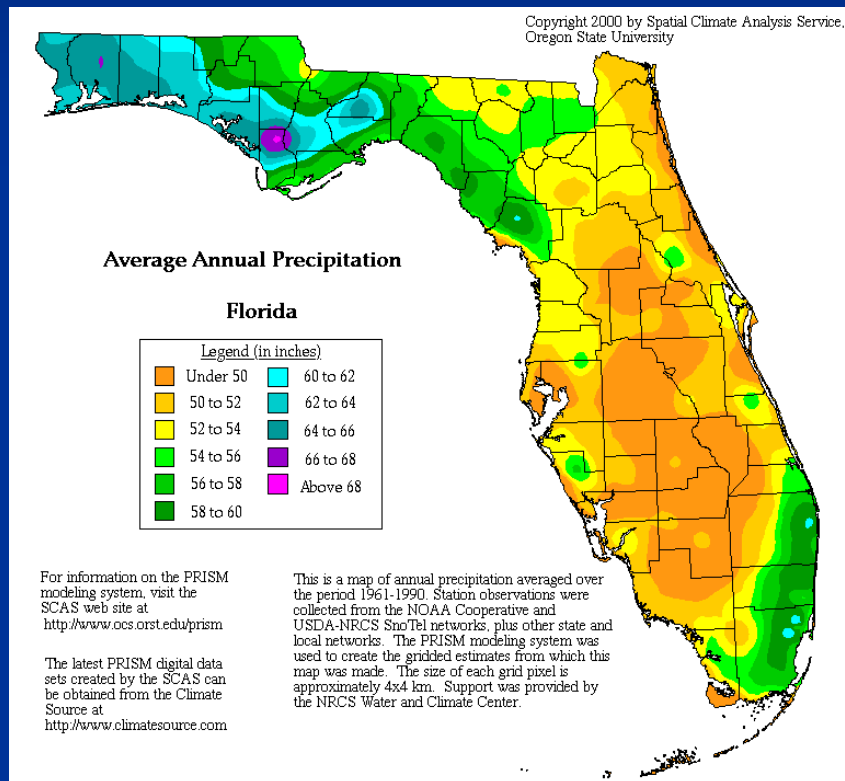
April 1<sup>st</sup> 2005

PURC/Askew Institute Water Conference, Orlando

# **Conventional Wisdom #1:**

**“Florida is Different.”**

# Rainfall-dependent Florida



- “Hydrologic divide” dissects the state above Orlando in a line from Cedar Key to just south of Daytona Beach.
- 80% of Florida’s population lives south of the line.
- Only 44% of precipitation falls south of the line.

(Sources: Oregon State University; Florida’s Water Management Districts.)

# Uneven distribution of water a primary supply issue everywhere:

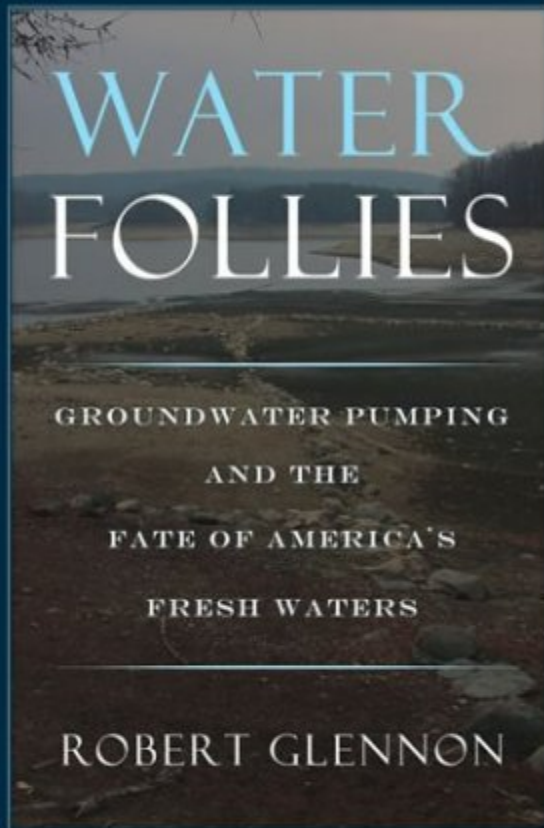
- **Global:** Two-thirds of Earth's freshwater trapped in glaciers and snow-cover.
- **Continental:** Chili, Peru and other South American countries have extreme shortages in some areas and severe flooding in others.
- **National:** Great Lakes region holds 95% of U.S. fresh surface water and 8% of population.

**Distilled version:**

**Florida is not so different.**

## **Conventional Wisdom #2:**

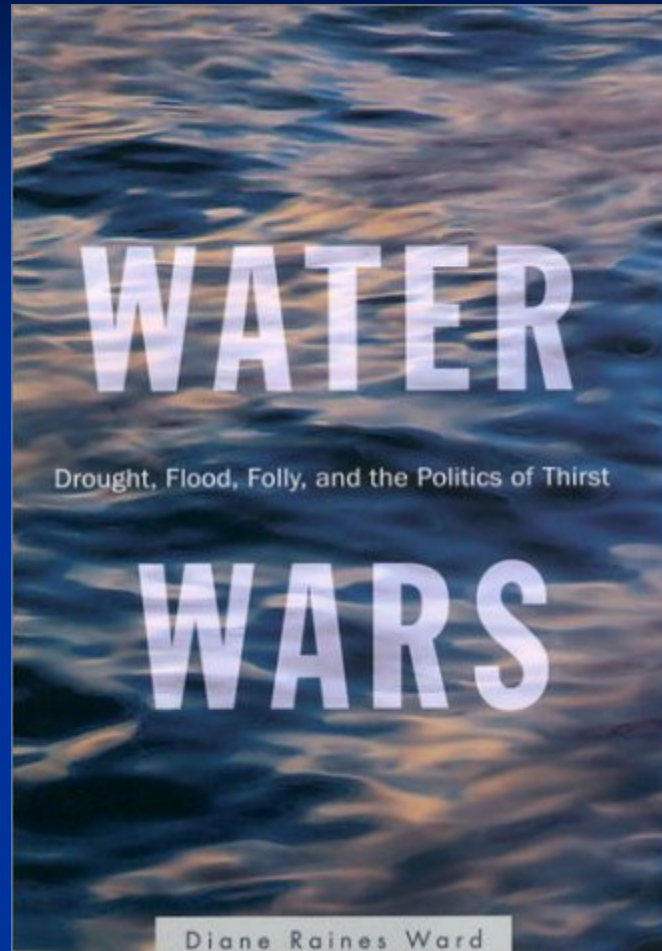
**“Florida has the highest consumption of water in the world.”**



WATER  
FOLLIES

GROUNDWATER PUMPING  
AND THE  
FATE OF AMERICA'S  
FRESH WATERS

ROBERT GLENNON



**TOTAL FRESHWATER  
WITHDRAWALS IN FLORIDA,  
2000:**

**8.2 BILLION GALLONS A DAY**

(Source: U.S. Geological Survey Estimated Use of Water in the U.S. 2000)

**FLORIDA PER-CAPITA  
CONSUMPTION:  
174 GALLONS OF WATER PER  
RESIDENT PER DAY**

(Public supply divided by population. Source: USGS)

UNITED STATES PER-  
CAPITA CONSUMPTION:  
**180 GALLONS** OF WATER PER  
RESIDENT PER DAY

(Public supply divided by population. Source: USGS)

PER-CAPITA CONSUMPTION  
IS ON THE DECLINE  
NATIONALLY BUT ON THE  
**UPSWING** IN FLORIDA.

(Source: USGS)

# Per-Capita Comparisons

- Florida: 174 gallons per person per day.
- United States: 180 gallons per person per day.
- Minimum amount needed for drinking, cooking, bathing and sanitation: 13 gallons a day.
- About a third of the people on the planet don't get that much.
- Example: Average per person use in water-stressed Gambia: a little over 1 gallon a day.

## **Distilled version:**

**Florida doesn't have the highest  
consumption of water in the world.  
But it's getting close.**

## Conventional Wisdom #3:

“No one is willing to talk about the price of water. Politicians, especially.”

# Average U.S. Monthly Spending:

- Cable TV: \$49.62
- Soft drinks and non-carbonated drinks: \$58.91
- Water and wastewater charges: \$39.50 (Source: U.S. Environmental Protection Agency's Office of Water.)
- Florida water and wastewater average: \$37 (Source: Florida DEP 1999 Wastewater and Drinking Water User Charge Survey.)

# Average Water Rates: Florida

- DEP Wastewater and Drinking Water User Charge Survey 12/99.
- 36% response rate.
- Average monthly wastewater charge for 5,000 gallons: \$22.
- Average monthly drinking water charge 5,000 gallons: \$15.

CEDAR KEY WATER & SEWER DISTRICT  
 510 THIRD STREET  
 P.O. BOX 309  
 CEDAR KEY, FL 32625  
 PHONE: (352) 543-5285

TYPE OF SERVICE	METER READING		USED	CHARGES
	PRESENT	PREVIOUS		
Wat	929910	926420	3490	15.50
Sewer				14.42

Account #307 Meter CKS-B

METER READ MONTH	METER READ DAY	CLASS	NET AMOUNT TO BE PAID	PAY EARLY SAVE THIS!	GROSS AMOUNT TO BE PAID
01	20	02	29.92	5.00	34.92
			0.00	← TAX →	0.00
				← OTHER →	
			29.92	← TOTAL →	34.92

THIS AMOUNT NOW DUE AND PAYABLE →

# The Pricing Debate

- Human-rights/some environmentalists: Water is a basic necessity and a human right. Shouldn't be viewed as a commodity.
- Economists: If water is priced competitively, people and industry will do a better job of conserving it.
- Seems silly to debate it because both sides are right. Water is a right and people deserve reasonable access to it. Yet it can be priced competitively. This is not happening in Florida. (Ex: Belle Glade's basic rate: \$62.50. Almost double the statewide average.)

# Crumbling Infrastructure

- Public systems heavily subsidized but still can't keep up with repairs.
- Florida's current drinking-water infrastructure backlog: \$3.7 billion.
- Florida's current wastewater infrastructure backlog: \$9.96 billion.
- Florida loses 364 million gallons of drinking water a day due to leaking pipes. (Source: American Society of Civil Engineers, "2005 Report Card for America's Infrastructure.")

# “New Water”

- Alternative water-supply projects underway across Florida: desal, reverse-osmosis, reservoirs. To what extent will users help pay for them?
- Conservation: “Every drop saved is the equivalent of finding new water.” – Bill Hammond, professor of environmental studies, Florida Gulf Coast University.

**“You shouldn’t pay a cheap amount  
for a scarce resource.” –Florida Sen.  
Paula Dockery (R-Polk County)**

# Infrastructure funding ideas 2004-2005

- Raised in Sen. Dockery's "Water Work Group":
- Bottled-water tax.
- Ad-valorem hike.
- Quarter-penny sales tax hike.
- User fee. (Fairest option? What do the utility representatives in the audience think?)

## **Distilled version:**

**Floridians, even elected officials, are talking about the price of water. They have to.**

## **Conventional Wisdom #4:**

**“Privatization of water is not an issue  
in Florida.”**

# Growth of Private Water Cos.

- In 1990, 51 million people got water from private companies. Today it's 400 million.
- The three largest global water companies – Germany's RWE and France's Suez and Vivendi – are turning to the lucrative U.S. market now that they are up and running in Europe, Africa, Latin America and Asia.
- “Our chairman ... has committed to our shareholders to have a growth of around 10% a year in terms of market. 10% a year is very feasible. We could go much faster.” – **Vivendi President Oliver Barbaroux.**

# Privatization: the Negatives

- “Promising the moon” to land a contract and then renegotiating it later.
- Less accountable/responsive than government: The case of Atlanta and United Water.
- High rates: The case of Jacksonville and United Water.

# Privatization: the Positives

- U.S. water systems will require investment of \$250 billion over the next 30 years. Top infrastructure need in the U.S. How to pay?
- New AEI-Brookings Institution report findings:
  - 1) Customers do not appear to pay more for water, on average.
  - 2) Private-owned systems comply with health/safety regulations about as well as government-owned systems.

# Privatization: the Inevitable

- *Aqua America* (NYSE: WTR), largest publicly traded water utility in the U.S., acquired Florida Water last year, adding 63 Florida systems and bringing customer base here to 100,000.
- Also acquired 27 other water utilities along the east coast last year.
- Combining large and small system acquisitions, says Chairman Nick DeBenedictis “We've increased our future earnings potential, as well as our potential for customer growth, *especially in our Southern states.*”

## **Distilled version:**

**Water privatization is a key issue in the United States including Florida.**

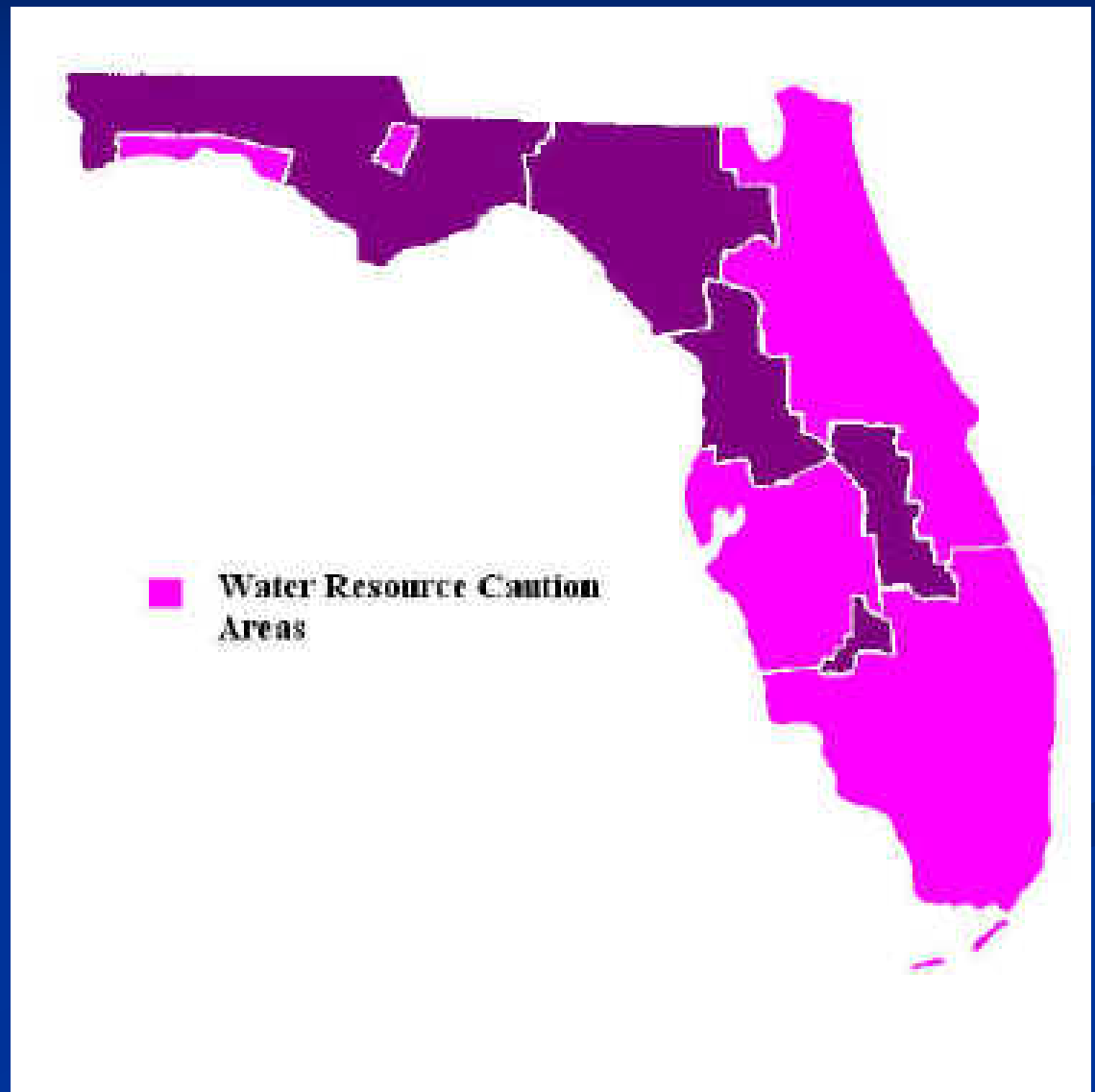
## **Conventional Wisdom #5:**

**“Floridians in 2005 do not face a statewide water crisis at present.”**

# Water Resource Caution Areas

- Those parts of Florida where the water management districts consider water supply either scarce or contaminated.

(Source: Florida Department of Environmental Protection.)



# Psychology of a Crisis

- Arnold and Beverly Larsen of Spring Hill would say we have a crisis.
- For the rest of the population, it may require another drought.



# Crises du Jour:

- **March 2005 Cape Coral:** Thousands of wells running dry. Fire department fears not enough water pressure to supply hydrants in a major fire.
- **March 2005 St. Lucie West:** City imposed a building moratorium after water supply dried up, leaving 15,000 residents without water.
- **March 2005: Tampa, St. Pete, Hernando, Pasco:** Sinkholes as usual.

# Drought and Water Reform in 1972

- Severe drought; hundreds of acres of burning Everglades left black smoke hanging over all of South Florida. Crisis helped Governor Askew make his case.
- How significant was the drought to the public's willingness to authorize bonds, to politicians' willingness to pass the strongest water laws in the nation?



## **Distilled version:**

**Floridians in 2005 face a statewide water crisis at present. Many just don't realize it.**

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