Georgia Water Council

March 1, 2006

DNR Board Room - Floyd Tower East
Atlanta, GA

Minimizing Water Withdrawals through Water Conservation and Reuse

Rationale

- Population expected to double in 25 years
- Some reduction in use per capita
- Demand expected to outpace limited supplies
- Regional resources already stressed

Premises & Principles

- Objective of policies and tools is to minimize water withdrawals
- Certain policies and management tools should apply statewide
- Additional tools should apply to where the resources are stressed
- All water use sectors must be addressed
- No two sectors are alike and no two water users are identical

Atlanta Athletic Club

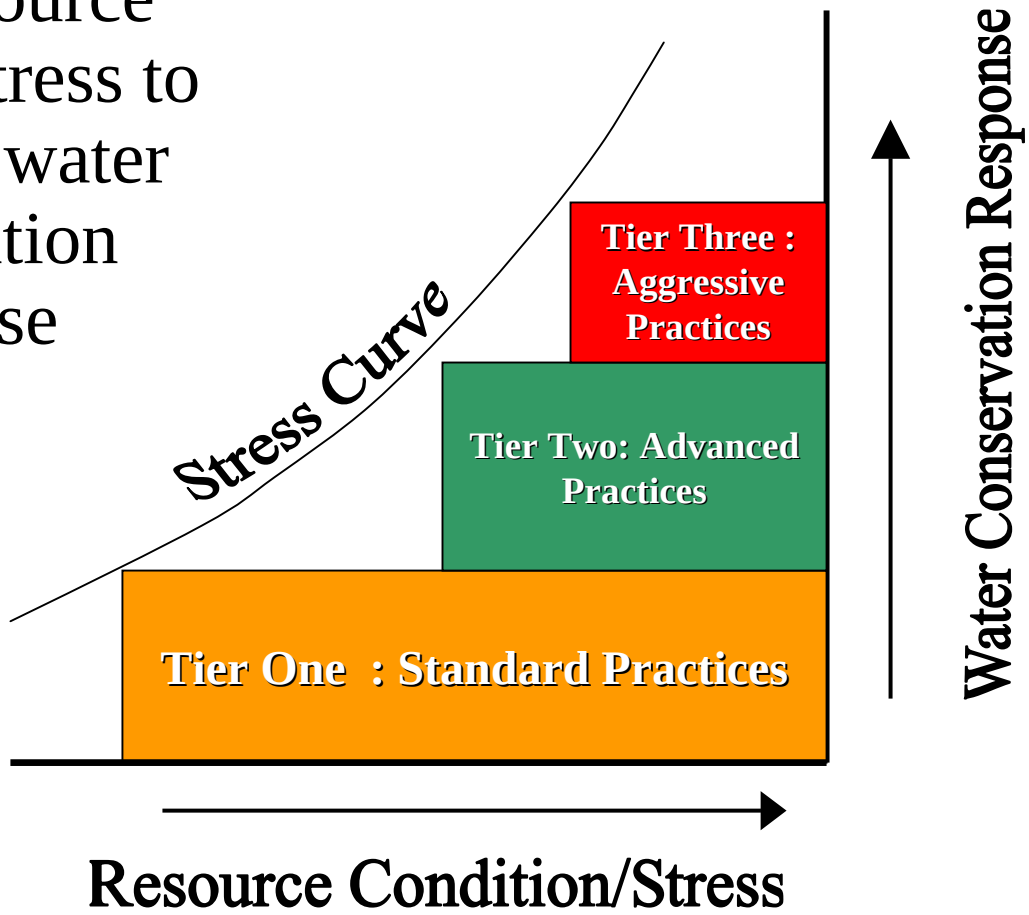
BAC Discussion Package

Three primary elements:

1. Policy framework for determining water conservation response
2. Water conservation goals
3. Standard water conservation practices

Policy Framework: Resource-based Tiered Approach

Water resource condition/stress to determine water conservation response



Resource-based Tiered Approach

- Unknowns
  - Characteristics of resource stress
  - Thresholds of resource stress
  - Calculations of conservation response
- Knowns
  - Must apply statewide
  - Must allow flexibility to determine the most appropriate response

BAC Considerations for Framework

Commonalities

- General acceptance of framework concept
- Concern for details
  - Stress characteristics
  - Break points btw tiers
- Need to assess water availability
- Reuse must off-set other sources

Divergent Issues

- Equity concerns
  - Water distribution
  - Responsibilities
- Questions of scale and implementation
- Consumptive loss or minimize use

Water Conservation Goals

General management objective-specific goals that all water uses and sectors can achieve, to some degree

- Apply statewide
- Apply to all use sectors and users
- Not quantifiable – *yet*
- Broken down into information goals (4) and conservation goals (5)

Water Conservation Goals

Information Goals:

- Meter water uses and improve water use reporting.
- Conduct reuse feasibility studies.
- Conduct water audits.
- Build understanding of conservation through education and outreach programs.

Water Conservation Goals

Conservation Goals:

- Reduce water loss.
- Minimize outdoor water use and waste.
- Maximize in-house efficiency.
- Adopt conservation-oriented rate structures.
- Adjust management practices to minimize water use.

Water Conservation Practices

Sector-specific activities or management practices to achieve conservation goals and min. withdrawals

- Agricultural Irrigators
- Industrial Water Users
- Power Providers
- Public and Private Water Providers

Discussion

Maximizing Returns

Premise

- Stream flow patterns & amounts allow present and future downstream water needs to be met
- Georgia's reasonable use principle requires consideration of downstream needs in making upstream consumptive use decisions
- Decisions and investments made today may limit the ability to respond to stresses that become apparent in the future

Stream Flow Influences

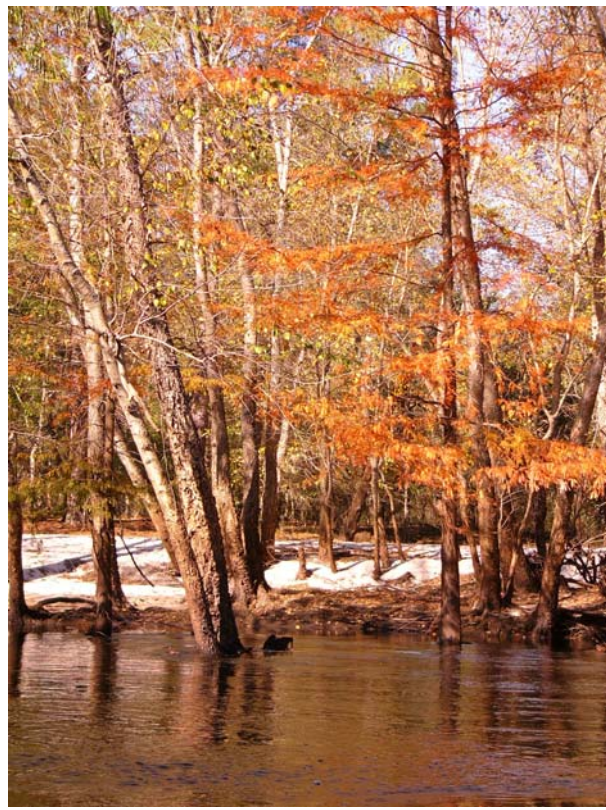
- ***No Statewide Regulatory Control***
  - Climate/Precipitation
  - Stream/Aquifer Interactions
  - Ground Cover/Slope Circumstances
- ***Statewide Regulatory Control***
  - Interbasin Transfers (IBTs)
  - Septic
  - Land Application Systems (LAS)
  - Reservoirs (location, size, operation)
  - Withdrawals & Discharges

Prototype Policy Framework

- Establish Desired Flow Regimes in Sub-Basin Settings
- Set ‘Safe Allowable Consumptive Use’ for Sub-Basins
- Manage IBTs, Septic, LAS within Sub-Basins to Conform to ‘Safe Allowable Consumptive Use’

BAC Meeting Dates

- March 8 – Flint, Ochlockonee
- March 9 – Coosa, Tallapoosa, Tennessee
- March 13 - Metro District Overlay & Oconee, Ocmulgee, Altamaha
- March 14 – Satilla, Suwanee, St. Mary & Chattahoochee
- March 21 – Savannah, Ogeechee
- March 23 – Statewide Advisory Committee



Canoochee River, GA

Discussion

Budget

State Water Plan Budget

Year	Federal Drinking Water State Revolving Fund	State Appropriated	Total
'05	$300,000	$300,000	$600,000
'06	$390,000	$540,000	$930,000

Water Planning Contracts & Expenditures

(March 1, 2006)

CONTRACTS	NATURE OF WORK	TOTAL & SOURCE	BILLED	BALANCE
Carl Vinson Institute (UGA)	Policy Research	$247,150 (state)	$146,075	$101,075
Fanning Institute (UGA)	Professional Facilitation	$494,500 (federal)	$0	$494,500
Corps of Engineers (Mobile/Savannah)	Project Management Software Training	$16,950 (state)	$16, 950	$0
CH2M Hill	Statewide Water Use & Conservation Analysis	$60, 000 (federal)	$12,000	$48,000
TOTAL		$758,600	$158,525	$544,675

Other Business