

# Water

## Resource Use and Conservation in Georgia

**S**urface water, ground water, and wetlands are interconnected resources that are vital to our coastal ecosystems, and these water resources are already being overused. For example, by taking too much groundwater for one type of user (industry), we have greatly reduced the capacity of the aquifer to provide potable drinking water for continued population growth. Because such huge amounts are withdrawn for industry and power production, if current water use efficiency in coastal Georgia could be improved by just 10%, enough water would be saved to support population growth for at least 35 years. This approach would provide needed water without further jeopardizing water resources or aquatic life, unlike virtually every other alternative.

The coastal region's economy greatly depends on water flow and water quality throughout vast watersheds, covering more than 60% of Georgia's geographic area, to support nature-based businesses.

Note: This piece and other position papers are posted for public review on the Georgia Comprehensive Water Plan Study Committee website, [www.cviog.uga.edu/water](http://www.cviog.uga.edu/water).

Champney River at Daybreak

## What is a Healthy Environment Worth?

- ❖ **Recreational fishing** in coastal Georgia was estimated to generate \$350 million in business activity during 2000.
- ❖ If this region reflects the national average (**nature-based tourism** averaging one-quarter of total tourism), at least \$450 million a year in our tourism business activity is derived from natural resources.
- ❖ **Commercial fishing**, while in decline, is still a major economic factor in coastal Georgia – between \$200 and \$250 million estimated total annual business impact.
- ❖ This combined annual total of a **one billion dollar nature-based business sector** supports an estimated 40,000 jobs in the region, and many coastal communities depend on them.
- ❖ National studies find that natural features enhance **property value of homesites** by up to 30%
- ❖ **Respiratory illnesses, birth defects, and other health problems caused by pollution** can be controlled through wiser and safer use of natural resources.

Yet, we continue to parcel out and deplete water resources as if there is no limit. With the approval of state officials, every year more water is being taken out of coastal river systems and aquifers, and more wetlands are being ditched, drained and filled. Combined, these practices are depleting the capacity of our natural water-dependent ecosystems. No one knows for certain how much environmental damage would be done by taking still more water from the Altamaha, Ogeechee and other coastal rivers. We do know that our rivers are under threat from rapidly growing upstream areas – every year there are more state permits issued for taking water from our rivers and for discharging more waste into them. This unquestionably reduces the amount and quality of fresh water available downstream here on the coast. Furthermore, statewide from 1989 through 1998, EPD issued wastewater permits for the release of 83% more toxins into Georgia waters. (EPA Toxic Release Inventory reports.)

Instead of proceeding recklessly by withdrawing and impounding more water from our rivers, and granting still more pollution permits, we should consider making existing amounts of water go further by conserving water presently being wasted. This would solve all Georgia's water supply problems for the foreseeable future.(SEE BOX PAGE 10)

- ❖ National studies have found that between 10% and 50% of water in municipal, commercial, and industrial systems is being squandered – either through faulty equipment (leaking pipes, valves & meters), excessive use (like irrigating during a rainstorm!), or obsolete, water-intensive processing methods.
- ❖ There has been no comprehensive Georgia study to evaluate the feasibility of achieving greater water use efficiency, while the state continues to issue permits that further threaten public resources unnecessarily.

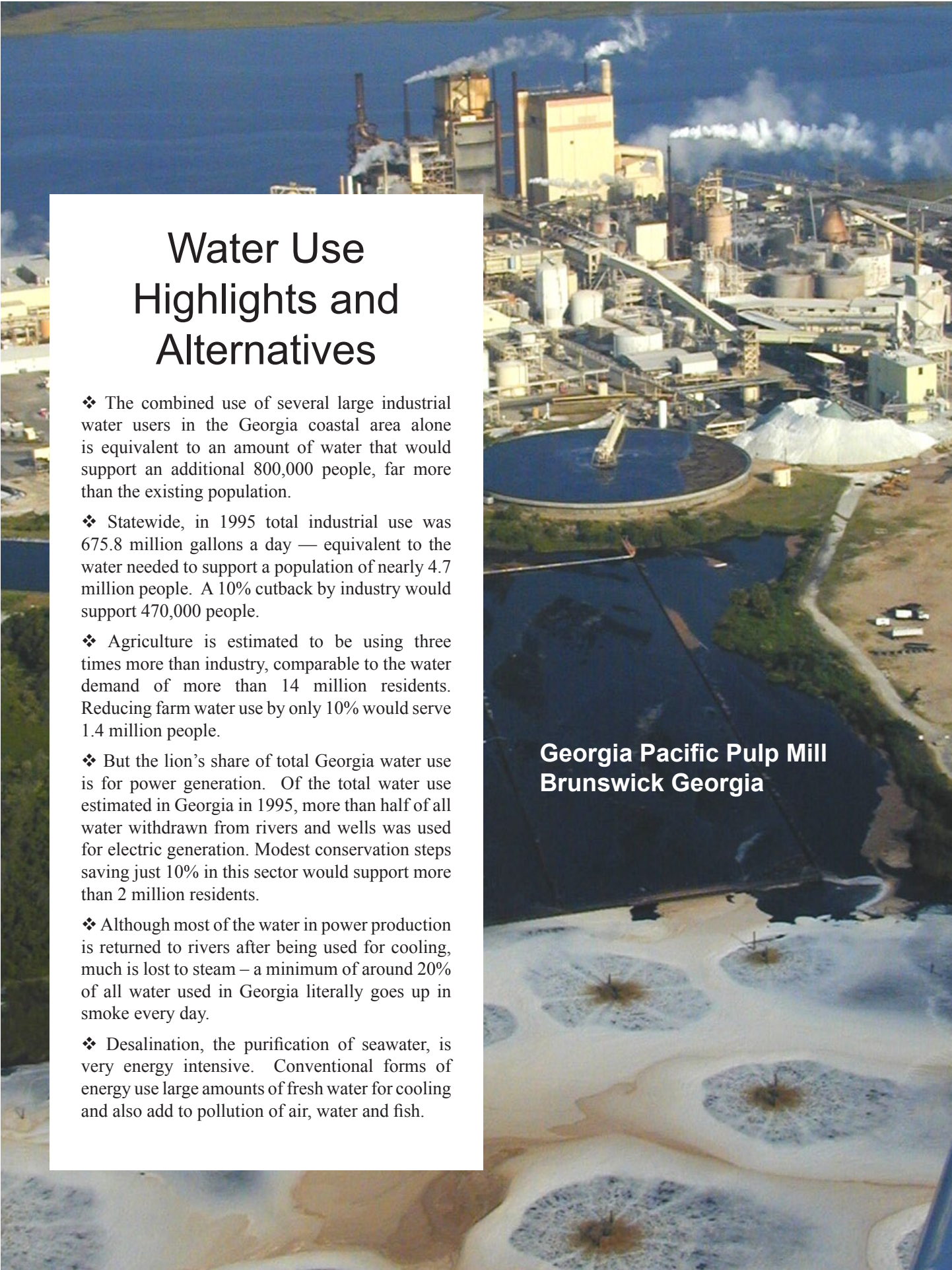
We need to get smart about water use in Georgia sooner rather than later. This means adopting and enforcing an aggressive water conservation policy, while becoming more thoughtful about development choices. We should choose options that are compatible with our natural environment and the proven, traditional nature-based business sector – having a growth potential beyond most every other alternative – while preserving our quality of life within the sustainable capacity of natural systems. Natural resources are our most irreplaceable form of public wealth – let's invest them wisely for the continuing benefit of this and future generations.

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## The Center Needs You Why Your Membership Is Important!

With your support, we will continue promoting new policies to help redefine "progress" in coastal Georgia. The Center is providing essential guidance that will help determine how our natural resources are to be used, conserved and protected.

Your tax-deductible donation is an investment in the future of coastal Georgia. Please join us in confronting the profound challenges that our region faces as Georgia's growth continues. Be assured that every membership counts and your commitment to our work will help improve the prospects for you and generations to come. Support the Center and encourage your friends and neighbors to follow your example. Please use the postage-free return envelope included in this issue to send your comments and contribution. Together, we can ensure the prosperity of our coastal communities while safeguarding natural resources.



## Water Use Highlights and Alternatives

- ❖ The combined use of several large industrial water users in the Georgia coastal area alone is equivalent to an amount of water that would support an additional 800,000 people, far more than the existing population.
- ❖ Statewide, in 1995 total industrial use was 675.8 million gallons a day — equivalent to the water needed to support a population of nearly 4.7 million people. A 10% cutback by industry would support 470,000 people.
- ❖ Agriculture is estimated to be using three times more than industry, comparable to the water demand of more than 14 million residents. Reducing farm water use by only 10% would serve 1.4 million people.
- ❖ But the lion's share of total Georgia water use is for power generation. Of the total water use estimated in Georgia in 1995, more than half of all water withdrawn from rivers and wells was used for electric generation. Modest conservation steps saving just 10% in this sector would support more than 2 million residents.
- ❖ Although most of the water in power production is returned to rivers after being used for cooling, much is lost to steam – a minimum of around 20% of all water used in Georgia literally goes up in smoke every day.
- ❖ Desalination, the purification of seawater, is very energy intensive. Conventional forms of energy use large amounts of fresh water for cooling and also add to pollution of air, water and fish.

### Georgia Pacific Pulp Mill Brunswick Georgia