

POLICY AND POLITICAL CONSIDERATIONS IN WATERSHED PROTECTION

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INTRODUCTION

The Piedmont region of Georgia is currently experiencing considerable pressures on the natural resources. The Piedmont is the most densely populated portion of the state, includes the major metropolitan areas of Atlanta, Macon, Athens, Augusta, and Columbus, and is the area where most of the major population growth is occurring. Sixty-five percent of the people in the state live in the Piedmont. The fastest growing counties in Georgia are in the Piedmont, with most being associated with metropolitan Atlanta. Sixteen Piedmont counties have exhibited a growth rate greater than 20 percent during the past eight years, and 82 percent of the population increase in the state in the last eight years is estimated to have occurred in the Piedmont.

Besides population growth, other major activities are occurring in the Piedmont that have a direct bearing on the wise use of our natural resources. With the population pressures and the recent droughts, increased emphasis is being placed on water supply development. Seventeen regional and 14 local reservoirs have been identified as needed; of these 31 reservoirs, 21 are located in the Piedmont, 4 in the mountains, and 6 in the Ridge and Valley.

A recent survey on solid waste disposal by the Georgia Department of Community Affairs received 111 responses from counties related to the expected life of their landfill. The range was from 0 to 50 years, with 80 counties indicating that the expected life of their landfill is 10 years or less. Of these 80 counties, 42 are located in the Coastal Plain, 27 in the Piedmont, 6 in the Ridge and Valley, and 5 in the mountains.

Other changes occurring in the Georgia landscape are the construction of developmental highways, the potential conversion of wetlands to other uses, the conversion of forests and agricultural land to residential and commercial uses, and many other changes common to a rapidly growing locality.

These pressures make it clear that protection of critical areas, and particularly water supply watersheds, is an important and essential part of current and future planning in the region. While the need and importance of watershed protection is clear, the ability of governments to carry out meaningful watershed protection ordinances is uncertain. Our work with the Northeast Georgia Water Supply Task

Force (a Task Force that is made up of representatives of 11 counties and 12 municipalities) has shown that while government officials understand the need for watershed protection, they are concerned about the political feasibility of imposing stringent watershed protection plans.

The purpose of this paper is twofold:

- 1) to present the results of a survey recently conducted with local officials in north Georgia regarding the feasibility of implementing different practices for watershed protection; and

- 2) to present the results of case studies of five watershed protection programs in the southeastern United States. The case studies were designed to analyze different political situations for achieving watershed protection.

SURVEY RESULTS

We recently conducted a survey of public and private leaders in north Georgia regarding the feasibility of implementing watershed protection techniques in their area. The survey was sent to members of the boards of directors of 4 area planning and development commissions in north Georgia. Survey participants were requested to rate the ease or difficulty of implementation of 30 different watershed protection techniques. The techniques were broken down into six major categories: 1) area covered by controls; 2) buffer strips and setbacks; 3) minimum residential lot size; 4) specific land use controls; 5) runoff and performance controls; and 6) other government actions.

The respondents felt that very few actions would be easy to accomplish. They clearly felt that under certain circumstances minimum lot sizes could be required, that under limited circumstances vegetative buffers could be required, that a public education campaign regarding the need for watershed protection could be easily developed, and that minimum inspection and maintenance standards for on-site wastewater treatment systems could be required. On these three points there was fairly close agreement among the respondents.

Almost all the other actions were considered somewhat difficult to achieve. Included in the difficult actions were establishing controls consistently across the entire watershed, purchasing buffer strips adjacent to water bodies, acquiring critical parcels of land, limiting the percentage of a lot that can be disturbed, and prohibition of practically any kind of residential or commercial development in the watershed.

CASE STUDIES

Five case studies were conducted to ascertain how different areas in the southern United States have been able to implement watershed protection plans. The purpose of the case studies was to determine what political or policy factors were either a help or a hindrance in the development of watershed protection plans. The case studies are:

1) **Randleman Dam Projec.** in North Carolina. Involved in this project are five cities including Archdale, Greensboro, High Point, Jamestown, and Randleman; one county (Randolph County) and one water authority: Piedmont Triad Regional Water Authority. These entities developed a joint governmental agreement to develop a 6000 ac reservoir that is estimated to yield 48 mgd. While there is no mention of watershed protection in the governmental agreement, two counties (Randolph and Guilford Counties which include Greensboro and High Point) have adopted watershed protection ordinances.

2) **Falls of the Neuse and Jordan Lakes; North Carolina.** These lakes were constructed by the Corps of Engineers in the early 1980s. The reservoirs are located in the Raleigh-Durham-Chapel Hill area of North Carolina. The Triangle J Council of Governments (made up of six counties and 30 municipalities) developed a watershed protection plan in 1983 which has been adopted by the nine affected local jurisdictions to varying degrees. This protection project is considered one of the more successful projects, with success being attributed to effective local leadership, local expertise being readily available, a common perception of the problem, and a perception of the need for a preventive strategy.

3) **Salem Lake**, near Winston-Salem, North Carolina. Salem Lake is a water supply reservoir of approximately 25 square miles. The lake is located entirely in one county (Forsyth) with four jurisdictions affecting the watershed. At one time all four political jurisdictions had adopted a watershed protection, but recently two of the jurisdictions have rescinded their approval. The reasons for these actions will be examined in the presentation.

4) **Georgia.** Recent attempts at watershed protection in Georgia, including Big Haynes Creek involving Gwinnett and Rockdale counties, Cornish Creek involving Newton and Walton counties, and the Department of Natural Resources efforts towards implementation of the Growth Strategies Commission recommendations on watershed protection also will be examined in the presentation.

CONCLUSIONS

The need for watershed protection in the Piedmont is clear and appears to be understood by local government officials and citizens. However, the political realities often make implementation of watershed protection plans extremely difficult. Case studies indicate that factors such as local leadership, local expertise, meaningful public participation in the plan development process, clear recognition of the need, and other factors all help lead to implementation of good protection plans.