

Water-Use Planning And Zoning For Enclosed Coastal Seas

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Rapid development since the 1920s has increased land-use conflicts in the United States, leaving local governments and the courts searching for solutions. What evolved was a complex scheme of land-use planning and zoning that has guided development and the use of land for the last 70 years. This scheme has depended on classifying land and regulating it for certain uses, based on its classification.

Just as land was primed for development in the 1920s, enclosed coastal seas are experiencing rapid increases in use and user conflicts. And contemporary managers, much like their earlier counterparts, are searching for solutions with an eye toward some of the same approaches that addressed land-use conflicts.

This discussion will summarize a project that examines the application of land-use planning and zoning principles to an enclosed coastal sea. The project, entitled *North Carolina's Estuaries: A Pilot Study for Managing Multiple Use In the State's Public Trust Waters*, employs several techniques, including GIS, to develop a model management strategy for Bogue Sound. Water-use classifications were developed by conducting an inventory of the sound's aquatic resources and existing water uses, giving the resources and uses a value and using GIS technology to overlay this information. As a result, coastal waters were assigned one of three classifications — developed, conservation or preservation. A steering committee acting much like a local planning board established policies and use standards for each of the water-use classifications. The result was a model water-use plan containing water-use classifications, water-use policies and recommendations for water-use zoning ordinances.