

# Developing a Regional Planning Framework for Land Conservation

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**Land conservation is an important component of environmental resilience.** By preserving open space, coastal jurisdictions can help preserve the natural character of the area and maintain the biodiversity of ecosystems. The need for large, contiguous tracts of land to improve biodiversity means that cities must look beyond their borders and adopt a regional planning approach.

## Defining Goals and Developing a Vision

To successfully integrate land conservation into local policy it is important to understand that land conservation strategies can vary depending on the value judgements made by local leaders. In coastal regions, one of the primary motivations for land conservation is flood mitigation. The Federal Emergency Management Agency provides communities up to 2,870 points for open space conservation through the Community Rating System program.<sup>1</sup> These points can help reduce flood insurance premiums, which gives coastal communities a strong incentive to prioritize open space acquisition that provides natural protection from flooding. Government jurisdictions that have acquired lots of open space for flood protection often receive the most points under the program. King County, Washington, has conserved more than 100,000 acres within its floodplain, which has resulted in a class 2 ranking, one of the best in the nation, and an average special flood hazard area premium discount of \$722.<sup>2</sup>

One thing to keep in mind when drawing up a local conservation strategy is that it can be difficult to convey the environmental value of a single land parcel, which is why a broad, regional vision is necessary when establishing conservation goals. A land conservation story centered on a large environmental feature or ecosystem, such as a river or swamp, can become the driving impetus of regional conservation and serve as a kind of regional brand that gives form and shape to conservation efforts. In the northern Gulf of Mexico, with its high annual rainfall and large waterways, the stories told to illustrate the value of conservation generally center around river deltas and estuaries. In southern

Alabama, the Mobile-Tensaw River Delta has been a driving force for land conservation in the region.

The Mobile-Tensaw is Alabama's largest wetland ecosystem and is approximately 45 miles long and is home to over 400 square miles of wetland.<sup>3</sup> The ecological value they possess is why a group of southern Alabama leaders came together to form an organization devoted to promoting the environmental wonders of the delta known as the Alabama Delta Alliance.<sup>4</sup> Consisting of around 40 members, the Alabama Delta Alliance will promote the natural wonders of the delta along with various recreation and ecotourism opportunities that exist in the region.

## Coordinating Environmental Restoration with Land Conservation

Coastal land poses two conservation challenges: first, they must acquire natural land for conservation purposes, and second, they must identify opportunities to reduce the urban footprint and reclaim land that can become a vital component of the coastal landscape.

One interesting example of coastal restoration being utilized in conjunction with land management and conservation is near Boston. Just to the east of the city are 34 islands and peninsulas known as the Boston Harbor Islands, an important fixture of the region's coastal ecosystem.<sup>5</sup> The environmental importance of these islands was recognized in 1996 when Congress designated the islands as a national recreation area within the National Park System. Some locations had been environmentally compromised. One island in particular, Spectacle Island, had been heavily degraded from years of heavy industrial use and city dumping. Though dumping was eventually discontinued on the island, leaking toxins made the site a hazard.

An unlikely savior for the island was Boston's Big Dig (a highway construction project), for which large amounts of dirt and stone were excavated to build a tunnel.<sup>6</sup> The legislature decided to use excavated material as part of a large harbor clean-up effort. In 1992 the first batches of excavated material from the Big Dig were relocated to

Spectacle Island, and a landscape architecture firm was selected to design and re-grade the island.<sup>7</sup> Dirt helped cover the old landfill with clay and topsoil. Re-grading on the island was performed to restore the original island formation. In 2006 the island was open to visitors. In 2012, around 130,000 visitors were ferried to Georges, Spectacle, and Peddocks islands.<sup>8</sup>

Farther south, in coastal Alabama, the value of coordinating restoration with conservation can be demonstrated by the small town of Bayou La Batre. The town, which is known as a center of the seafood industry, is an important economic and cultural fixture in southern Alabama. It is also vulnerable to long-term sea level rise and the damaging effects of storm surge. To address this, The Nature Conservancy has partnered with the city and others to enhance nearby shoreline habitats that can aid in flood mitigation.<sup>9</sup> At the center of this initiative is the Lightning Point restoration project, located where the Bayou La Batre navigation channel meets the Gulf of Mexico.

The project restored critical habitat previously lost to erosion and has provided a measure of natural protection to Bayou La Batre from coastal storms and hurricanes.<sup>10</sup> For the project, The Nature Conservancy utilized more than 240,000 cubic yards of dredged material to construct 40 acres of marsh in the area. The Lightning Point project helps extend and protect a critical conservation corridor of natural shoreline that extends to the Mississippi/Alabama border. Following the groundbreaking event in April 2019, 37 acres of the project were transferred to the Forever Wild Land Trust to be incorporated into the Grand Bay Savanna tract.<sup>11</sup> Project funds were also used to acquire additional conservation lands on the east side of the channel as well. It also built jetties for use by commercial shrimp boats and recreational fishers.

### The Importance of Building Coalitions

The ACE Basin Task Force's conservation efforts in the lowcountry of South Carolina center around 350,000 acres that drain into the Ashepoo, Combahee, and South Edisto Rivers between Charleston and Beaufort, one of the largest undeveloped estuaries on the east coast.<sup>12</sup> Formalized in 1988, the task force includes the U.S. Fish and Wildlife Service, S.C. Department of Natural Resources, Lowcountry Land Trust, and Ducks Unlimited. The membership also includes in its ranks philanthropic organizations. Since its establishment, over 275 easements have been recorded in the area, constituting 83 percent of the protected land in the basin.<sup>13</sup>

The Basin Task Force has evolved over time. What originally started as a mission to preserve a vast, undeveloped estuary has now brought its conservation efforts to bear on Charleston County, the lowcountry's most populous county. In 2016 the Task Force and Ducks Unlimited worked with the county to preserve 638 acres.<sup>14</sup> This property, which includes a mile-long forested buffer along a highway and a 100-acre bottomland swamp, will establish future trail corridors.

### Conclusion

Great conservation stories are expressed on a grand scale. Large, contiguous tracts of preserved lands are not only advantageous to flora and fauna, they also beckon one to explore nature's beauty. Land conservation also provides a number of concrete benefits to cities as well, such as improved water quality and flood protection. By utilizing the power of regional networks, coastal communities can develop a vision for conservation that provides opportunities for regional buy-in while fully addressing the needs of the broader ecosystem. 🦋

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### Endnotes

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