GEORGIA CONSERVANCY STATEMENT ON
JEKYLL ISLAND REVITALIZATION
SEPTEMBER 2010

Conservation as Guiding Principle

Jekyll Island represents a unique legacy. The Georgia Conservancy believes the state acted wisely by investing in Jekyll in 1947 and that state stewardship carries with it a responsibility to ensure that current and future generations of Georgians can appreciate its unspoiled qualities and unique characteristics.

We recognize that the financial viability of Jekyll Island State Park is a fundamental impetus to redevelopment plans. While we agree that revitalization is warranted, those activities must be guided and constrained by the natural resources and coastal hazards that are integral to barrier island systems.

Revitalization efforts offer an opportunity for the State of Georgia to employ the best, latest understanding of responsible coastal planning and development practices—and in the process educate the public about their importance to preserving the island's ecological integrity.

Key Positions

1. Development should be guided first and foremost by an adopted conservation plan.
2. Development should not proceed without a plan and policies for:
    - determining the island's carrying capacity for human activities, natural systems and wildlife populations;
    - protecting and fostering the dune and sand sharing system;
    - assessing and managing the island's maritime forest resources;
    - retreat and adaptation in the event of catastrophic storm damage;
    - determining the JIA's revenue needs and establishing revenue goals to ensure future operations and financial stability; and
    - public investment in infrastructure needed to realize revitalization goals.
3. The location and scale of development should take into account and respect natural site restrictions, including moving back from the beach and dune fields and limiting impact on maritime forest resources.
4. Development and infrastructure design should incorporate the highest standards for green building and coastal hazards management.
5. Accommodations for public access and visitor mobility should be guided by innovative alternatives to vehicle use and traditional parking facilities.

Georgia Conservancy Statement on Jekyll Island Revitalization: Supplemental Information

Respecting Natural Site Restrictions

Keep Development Back from the Beach and Dunes

The location of new and revitalized development is a critical coastal management question for protecting both people and the environment. First and most important is the need to protect and foster the dune and sand sharing system. Simply put, natural elements such as maritime forest and man-made structures alike depend upon a healthy dune system to protect them.

- In order to allow the natural landward march of dunes—especially in light of sea level rise—the placement of streets, parking, and structures of all kinds needs to be as far from the dunes as possible. The boardwalks, streets and parking in the Linger Longer village proposal are fated either to being engulfed by sand or to being perpetually dug out. The latter will undermine the dune fields' integrity and compromise their protective abilities. Building close to the beach and dunes can also provide projectile ammunition that will amplify collateral damage from wind and wave storm action.
- Jekyll's beach and dune systems are also important habitats to protect and restore from a fish and wildlife perspective. The dunes in the area of the proposed development have been lost or degraded in the past and are basically large boulders covered with sand. These areas should be restored to dynamic dune fields to reduce the erosional forces of storms and replenish lost sand from storms. (US Fish & Wildlife Service)
- Vegetative and forested cover should be maintained behind the dunes to mitigate wind and storm damage. This will dissipate incoming storm wave damage and reduce scour from retreating wave action.
- Ongoing dune field creation, protection and maintenance programs should be required or all oceanfront leases the Jekyll Island Authority (JIA) administers. Post-storm analysis of every recent hurricane demonstrates irrefutably that the higher and wider the dunes, the more protection afforded to the beach and the built environments.
- As a consequence, the proposed Beach Village development, convention center redevelopment, and all other non-water dependent revitalization projects on the island should be moved back from the beachfront area. Setbacks should be established in the Jekyll Island Master Plan and Conservation Plan that allow natural erosion and accretion cycles to occur, help maintain lateral beach access and reflect site-specific coastal processes, hazards and building styles (see Coastal Hazards Assessment for Jekyll Island, Georgia, Sialia Environmental, pages 94-95).

Evaluate and Protect Maritime Forest Resources

Moving development further inland, however, may disturb valuable maritime forest habitat. Used by migratory birds and indigenous species, this habitat is especially prized because it takes an unusually long time to form, and is fast disappearing from the eastern seaboard. Yet the shelter of the forest also provides relative safety in higher ground and cover from wind damage, making this area potentially better suited for locating structures.

Depending upon past activities such as logging and cultivation, or the presence of significant species, it may be that some development can coexist within the maritime forest areas of the island's developable area.

- A thorough evaluation of these forested areas is needed to determine

their ability to accommodate development while maintaining their important habitat, water quality protection, and other conservation functions and values.

- The results of this evaluation, coupled with the need to move back from the beach and other siting restrictions, will determine the appropriate scale of activities on the island.

Build to Newest and Highest Standards

Employ Green Building and Low Impact Development Standards

- LEED and EarthCraft building and site design standards, on-site treatment of stormwater, and replacement of impervious pavement with permeable materials will help to reduce impacts from any eventual plan. Use of these standards should be required for all Jekyll Island revitalization projects.
- Long term maintenance of on-site treatment systems will be important to their ability to continue to function and absorb stormwater. Any agreement the JIA enters into with a private revitalization partner or lessee should specify the party responsible for such systems.
- Landscaped and park areas in the proposed Linger Longer development and other revitalization projects should be planted with native vegetation to improve the habitat value for wildlife, particularly migratory birds.

Build with Hazards in Mind

- Green building and low impact site design practices are of marginal value if development projects are sited inappropriately. Setbacks reflecting site-specific coastal processes, hazards and building styles should be established and incorporated into the Jekyll Island Master Plan along with certain construction and land use performance standards for areas falling within a particular erosion hazard zone (see *Coastal Hazards Assessment for Jekyll Island, Georgia*, Sialia Environmental, pages 94-95).
- In addition to protecting the integrity of the beach and dune system, storm damage to buildings and infrastructure can be minimized by employing structural design considerations such as those discussed on pages 93-98 of *Coastal Hazards Assessment for Jekyll Island, Georgia*, Sialia Environmental. These principles should be incorporated into the Jekyll Island Master Plan as standards and required for all new and redevelopment projects.

Provide Innovative Access and Reduce Parking Needs

Addressing ways to minimize the need for vehicles and large parking lots on Jekyll is an important environmental goal.

- Many parks and resort areas have successfully employed innovative ways of reducing dependency on cars, such as satellite parking for hotel and convention employees and trolleys to provide convenient access to various areas. Other options such as electric cars, scooters, and beachside wagons to help families get to the beach should also be considered.

- Parking facilities should be pervious to minimize stormwater runoff, non-point source pollution and heat island effects.
- Parking lots should be separated from beach and dune areas by adequate vegetative cover to mitigate wind and storm damage. Any lots close to the beach and dunes should be governed by a retreat and adaptation policy (i.e., a policy that allows for encroachment of dune fields and plans for parking lot removal and relocation).

Planning for the Future

Post-Storm Planning

- Because all man-made structures on barrier islands are vulnerable, and because the risk from storm damage will increase with sea level rise, the JIA should have a retreat policy requiring redevelopment to be placed a safe distance away from the water's edge in the event of catastrophic damage. This is particularly relevant to all beachfront revitalization projects on the island, some of which already have been approved by the JIA.
- In the wake of a storm, rebuilding identically at all locations may be unwise, or may require indefensible armoring of the shoreline to protect vulnerable structures. The JIA should adopt post-storm policies now that anticipate allowing nature to regenerate and rebalance, rather than relying on structural armoring designed to stabilize the ocean shoreline. Sea walls, jetties, groins and other erosion control devices have adverse effects on water currents, erosion and accretion patterns, and should be prohibited.
- Post storm planning should also address structural relocation, staggered setbacks, road realignment and other recommendations outlined in *Coastal Hazards Assessment for Jekyll Island, Georgia*, Sialia Environmental.

Beach Renourishment

- Although beach renourishment can provide a short term solution to the erosion of beaches used for public access, it is an ineffective and expensive tool in the long run and works counter to natural beach functions that are critical for plants, wildlife and storm protection.
- Artificial replenishment of sand is particularly damaging to wildlife habitats in that the placement of sand initially smothers the benthic invertebrates migratory birds depend upon for feeding to fuel their migrations. In addition, the beach is often hardened by renourishment and may have other detrimental effects on beach habitat (US Fish & Wildlife Service).
- If the state chooses to renourish the beach for visitor use and enjoyment, it should be part of a wider beach management plan that will maximize its survivability, while minimizing environmental impact.

Sources:

Coastal Hazards Assessment for Jekyll Island, Georgia, prepared by Sialia Environmental for the Georgia Conservancy, January 2008.

Statement by Kathy Chapman, U.S. Fish and Wildlife Service, Coastal Suboffice, Brunswick, Georgia, Jekyll Island Authority and Linger Longer Communities Public Input Session, November 14, 2007.