Belle Isle State Park Ecosystem Restoration Feasibility Study Frequently Asked Questions

Where is Belle Isle State Park?

The Belle Isle State Park is located in Lancaster County, Va., approximately 120 miles southeast of Washington, D.C., and 71 miles northwest of Norfolk, Va.

What is the composition of the Belle Isle State Park?

Belle Isle was the first state park purchased with funds from the \$95 million Parks and Recreational Facilities Bond Referendum of 1992. The 733-acre state park is a window to the beautiful, lower Rappahannock River in Lancaster County. With seven miles of waterfront on the north shore of the Rappahannock, the park features diverse tidal and nontidal wetlands, lowland marshes, tidal coves and upland forests. The diverse habitats provide homes to many predator birds, such as blue herons, osprey, hawks and bald eagles. White-tailed deer, turkeys, groundhogs, rabbits, squirrels, moles, reptiles and amphibians are common. The park offers a wide range of community recreation, such as picnic sites, a hiking trail, boat launch and a gift shop.

Why is USACE performing this feasibility study?

The Belle Isle State Park Ecosystem Restoration Feasibility Study is an endeavor to evaluate measures aimed at eliminating erosion and improving habitat quality at the project site.

A Preliminary Restoration Plan (PMP) study completed in 2004 by Norfolk District, Army Corps of Engineers, determined that upland, beach and intertidal habitat degradation and loss of shoreline were primarily due to erosion resulting from high wave energy and rain runoff.

According to a 1977 Virginia Institute of Marine Science (VIMS) report, an average of 2.5 feet of shoreline is lost at Belle Isle Bluff each year due to the intensity of stormgenerated wave action. This wave action has caused the loss of considerable acreage of beach and estuarine marsh at the project site.

Additionally, the water quality of the Rappahannock River is negatively impacted by the ongoing beach erosion at Belle Isle State Park. Eroded sediments are introduced into the ecosystem resulting in increased turbidity and suspended solids. These changes in water quality have also caused degradation of aquatic habitat. The VIMS report concluded that significant amounts of fish and wildlife habitat have been lost or degraded by high wave energy and resultant changes in water quality related to shoreline loss and erosion. A specific example of habitat impairment, said the report, can be observed in submerged aquatic vegetation (SAV). Currently, no SAV exist at the project site, although SAV does exist in more sheltered, less-eroded sections of beach, located upstream of the project.

What authority approved this feasibility study, and who is paying for it?

The Belle Isle State Park Ecosystem Restoration Feasibility Study is authorized under Section 206 of the Water Resources Development Act (WRDA) of 1996, for restoration of aquatic ecosystems (Continuing Authorities Program). Under WRDA, this feasibility study will determine federal interest in improving aquatic habitat at Belle Isle State Park. If the study determines that there is a federal interest, Congress will fund the Corps study through a cost-share agreement with the Virginia Department of Conservation and Recreation (VDCR). Funding: 65 percent Corps; 35 percent VDCR.

What will the Corps feasibility study at Belle Isle State Park consist of?

The feasibility study will evaluate measures aimed at eliminating erosion and improving habitat quality at the project site. A possible alternative, identified during a 2004 USACE Preliminary Restoration Plan (PMP) study, included the placement of a series of segmented offshore breakwaters along the intertidal shoreline, designed to attenuate wave energy and beach re-nourishment, using high quality sand. In addition, other restoration methods, such as the construction of groins or other submerged structures, slope stabilization and re-vegetation will be investigated during the feasibility study.

Are there any archaeological impacts at the proposed project site?

Belle Isle State Park is listed on the National Register of Historic Places as the location of the Belle Isle plantation, operated on the site throughout the 19th century. Other archaeological sites are located near the project site. The Corps feasibility study will carefully assess potential impacts on these cultural sites and work closely with the Virginia Department of Historic Resources to resolve any issues.

Will community recreation at the park be curtailed or discontinued during this feasibility study?

Throughout most of the feasibility study, recreational activities will not be disrupted. However, there will be times when Corps employees will be on the site to collect data and to perform surveys necessary to design the project. Access to the beach may be limited during this field work. Further information will be available to the public as it becomes known.