

Jekyll Creek CMPA Application

Project Description:

Background and Justification

The existing boat ramp site serves as the only public boating access facility on Jekyll Island. This facility needs to be updated to provide safe access for users. This project is a partnership between Jekyll Island Authority and Coastal Resources Division of Georgia's Department of Natural Resources.

Existing site conditions offer a public boat ramp and courtesy dock. The existing ramp is approximately 176 feet long by 50 feet wide (8,800 square feet) and supported by approximately 232 square feet of riprap on its north side, above the CMPA. Rip rap on its north side, below the CMPA line totals approximately 508 square feet. Similarly, the ramp is supported to the south by rip rap totaling approximately 545 square feet, below the CMPA line. Total existing riprap is approximately 1,053 square-feet. The boat ramp is sloped appropriately in its bottom third but lacks sufficient slope on its upper two-thirds. This insufficient slope makes launching vessels from medium to high tides difficult. Vehicles are required to back so far down the ramp at higher tides that they jeopardize trailers and vehicles as many tow vehicles are backing their bumpers into the water. These conditions are what justify the rehabilitation to increase accessibility and safety for users.

The proposed project will update the boat ramp by increasing the slope of the upper portion of the boat ramp. Construction will regrade the upper section of the ramp, from the top down approximately 109 feet and 50-feet wide (5,450 square feet) by adding approximately 145 cubic yards of material between the existing ramp grade and the proposed ramp slope. Existing concrete ramp in this portion will be removed, #4 and #57 stone will be added to achieve the proper slope, and the new ramp surface will be poured in place. Approximately 827 square feet (30 cubic yards) of riprap and 112 square feet (5 cubic yards) of filter stone will be added along the ramp's perimeter for stabilization below the CMPA line. Likewise, approximately 601 square feet (17 cubic yards) of riprap and 234 square feet (10 cubic yards) of filter stone will be added for stabilization above the CMPA line. The small concrete sidewalk connecting the ramp to the concrete sidewalk extending from the fixed dock will be removed during regrading. An approximately 5-foot wide, 97-foot long (approx. 485 square feet) sidewalk will connect the existing sidewalk extending from the fixed dock to a 20-foot long, 28-foot wide ADA parking pad (560 square-feet). Approximately 4,720 square feet at the top of the ramp will receive Tru-Grid pervious paving, filled with gravel. All work will be done from the upland with heavy equipment to remove ramp material, add stones, pour new concrete surface, and add supporting riprap. The proposed improvements will not extend beyond the current boat ramp footprint and will not extend into the waterway past MLW. The project is approximately 300 feet from the navigable channel, and the project is approximately 1,000 feet from the nearest adjacent structure, the Jekyll Island Marina floating docks, to the north.

Existing impacts include the 8,800 square feet boat ramp plus approximately 1,053 square feet of supporting riprap for a total impact of approximately 9,853 square feet.

Proposed impacts include: approximately 5,450 square feet for the upper portion of the boat ramp being replaced, approximately 1,428 square feet (47 cubic yards) of supporting riprap, approximately 346 square feet (15 cubic yards) of filter stone, approximately 4,720 square feet of pervious paving, and

approximately 1,117 square feet of impervious sidewalk and parking (72 square-feet existing sidewalk, plus 485 square-feet improved sidewalk, plus 560 square-feet improved ADA parking). The impacts for this project total approximately 13,061 square feet.

Alternative Analysis

The proposed modifications to Jekyll Creek Boat Ramp are necessary as it is the only public access facility on Jekyll Island; there is not alternative for this rehabilitation. The improvements are necessary to increase safety and accessibility at the site.

Erosion and Sedimentation Statement

The proposed project will be compliant with all erosion and sedimentation control responsibilities.

Public Interest and Project Necessity Statement

1. The project design is such that no harmful obstructions or alterations to the natural flow of navigable water will occur within the project area.
2. The project design will not introduce harmful or increased erosion, shoaling, or stagnation.
3. The project design will not unreasonably interfere with the conservation of fish, shrimp, oysters, crabs, clams, and other marine life, wildlife, and other resources, including but not limited to water and oxygen supply.

Marshland Component

The marshland component of this project includes approximately 3,150 square feet of ramp, 827 square feet (30 cubic yards) of riprap, and 112 square feet (5 cubic yards) of filter stone.

Upland Component

The upland component includes approximately 2,300 square feet of ramp, 601 square feet (17 cubic yards) of riprap, 234 square feet (10 cubic yards) of filter stone, 1,117 square feet of impervious sidewalk and ADA parking, and 4,720 square feet of TrueGrid pervious paving. The upland components for this project do not exist entirely within the 50-foot marshlands buffer. The impervious sidewalk and parking pad will exist in the buffer (1,117 square-feet), along with the impervious ramp area above the CMPA line (2,300 square-feet), totaling approximately 3,417 square feet of impervious impact in the buffer. Similarly, of the 4,720 square feet of pervious paving at the head of the ramp, approximately 3,613 square-feet exists within the buffer. In total, the upland component contains approximately 29,465 square-feet of pervious and impervious surfacing. 24,764 square-feet of the upland component exists within the buffer. Stormwater will sheet flow from impervious impacts to the marshland. The area at the head of the ramp used for the pervious paving is the area that will be used as the construction staging area. All work will take place from the upland.