



## PROJECT UPDATE



FALL 2019

The U.S. Army Corps of Engineers continues work on Herbert Hoover Dike, the 143-mile structure surrounding Lake Okeechobee. Since 2001, the Corps has made a significant investment, over \$1.3 billion, in projects designed to reduce the risk of catastrophic failure of the aging structure.

## DIKE HISTORY

In the late 1920s, flooding from hurricanes killed thousands of people living in communities around the lake. As a result, Congress authorized the Corps to construct a series of levees. In the 1930s, the Corps built 68 miles of levee on the south shore of the lake, and an additional 16 miles of levee near the city of Okeechobee on the north.

Following another hurricane in 1947 that left much of south Florida under water for weeks, Congress authorized a project that raised and widened the existing levees. Congress also authorized the Corps to build an additional 59 miles of levee, bringing the dike to the 143-mile footprint that it has today. In 1960, the series of levees was renamed the Herbert Hoover Dike.

The dike was built with gravel, rock, limestone, sand and shell. These natural materials allow water to seep through the embankment. As the water level in the lake increases, the seepage can lead to internal erosion. Without intervention, the movement of material within the dike could cause the dike to fail, putting thousands of people in harm's way.

## REHABILITATION

In the 1990s and early 2000s, the Corps observed issues at the dike during high water events in Lake Okeechobee. These issues included movement of dike material, such as sloughing, the development of sinkholes, and other erosion. The Corps dealt with issues immediately to keep the dike from failing. A series of studies was undertaken on various sections of the dike. As the results of those studies became available, the Corps began rehabilitation of the dike.

## WORK COMPLETED/ONGOING

Since 2001, the \$1.3 billion invested by the Corps resulted in the following work at the dike:

- Construction of a 21.4 mile seepage barrier (known as a partial-penetrating cutoff wall) completed between Port Mayaca and Belle Glade on the southeast side of the lake, an area previously identified as Reach 1.
- Completed construction of cutoff wall tie-ins at four existing water control structures located in Reach 1.
- Completion of 17 water control structures. These structures (also known as “culverts”) posed a failure risk due to loss of embankment material into and along them.
- Removal/abandonment of four water control structures.
- Replacement of 11 water control structures is ongoing.



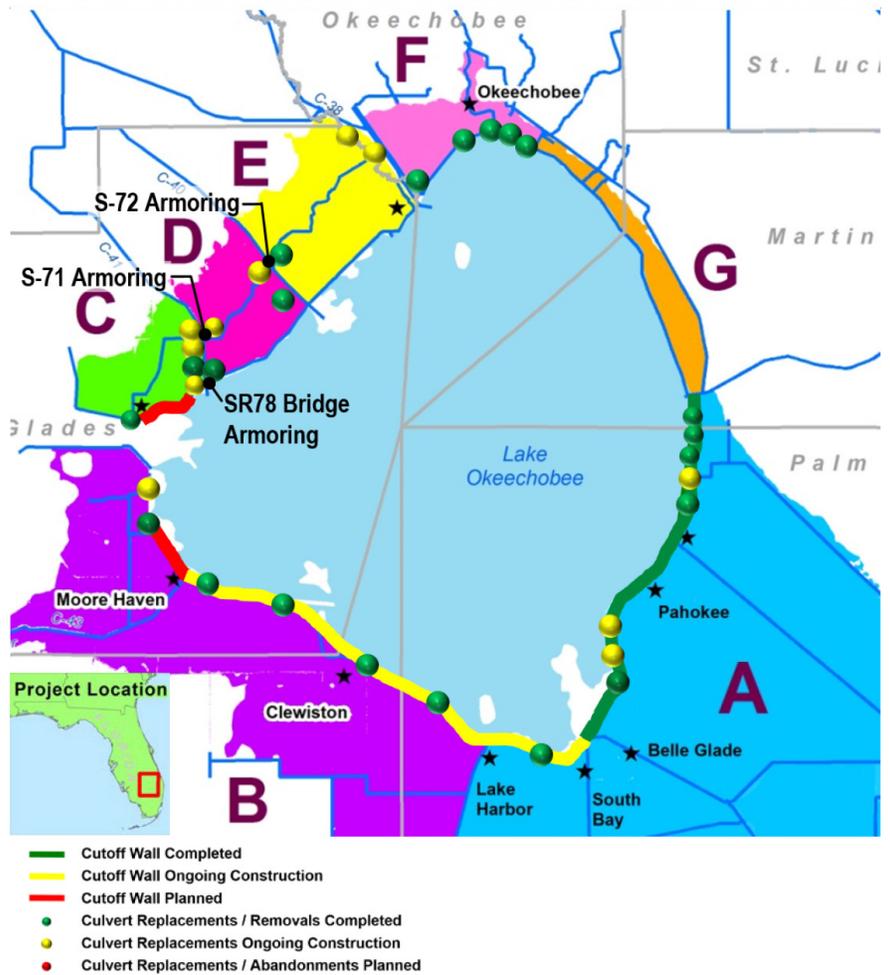
### CUTOFF WALL WORK ONGOING

- Construction of 6.6 miles of seepage barrier between Belle Glade and Lake Harbor.
- The Corps has awarded contracts for the construction of 20.6 miles of seepage barrier from Lake Harbor to Moore Haven.

### REMAINING WORK

- Construction of 3.9 miles of seepage barrier west of Moore Haven. This contract is planned for award in the spring of 2020.
- Construction of 4.1 miles of seepage barrier in the Lakeport area. The final cutoff wall contract is planned for award in the spring of 2020.
- Armoring the State Route 78 bridge abutments at the Harney Pond Canal. Placement of armoring at this location reduces the risk of dike failure due to storm surge brought about by a tropical system with a high lake level.
- Armoring the HHD Structure S-71 and S-72 embankments on the Indian Prairie and Harney Pond Canals. This helps reduce the risk of embankment failure from over-washing or over-topping by placing armoring on the embankments adjacent to each structure.

### HHD Common Inundation Zones



### COST/SCHEDULE

The Corps estimates the total cost of the rehabilitation effort to be more than \$1.8 billion. The HHD project is fully funded to completion with the FY2019 President's Budget, the State of Florida's \$100 million contribution and inclusion in the Supplemental Long-Term Disaster Recovery Investment Plan. The Corps anticipates rehabilitation work will continue through 2022.

### FOR MORE INFORMATION



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