



Field Tour: Herbert Hoover Dike

Friday, May 4

Stormwater Treatment Area 3/4:

Stormwater Treatment Area (STA) 3/4 was built and is operated and maintained by the South Florida Water Management District (SFWMD). STAs are constructed wetlands that remove and store nutrients through plant growth. Five STAs south of Lake Okeechobee are now removing excess nutrients from agricultural runoff before discharge it into the Everglades. STAs are comprised of parcels of land with compartments or cells with different plants predominating in each cell. Emergent plants like cattails, pickerel weed, and bulrush remove nutrients and store them in peat-like soils as they decay. Submergent plants including hydrilla, southern naiad, and chara also take phosphorus directly from the water in the STAs. The STAs built to improve the quality of water entering the Everglades system south of Lake Okeechobee are the largest of their kind in the world.

HHD John Stretch Park S-3/S-354:

John Stretch Park at Herbert Hoover Dike has a good overview of the project as was built in the 1930's and 1960's. This portion of embankment has not received rehabilitation yet which is planned in the coming years. At this location, there are two active structures: Pump Station S-3 which serves to prevent local flooding and Spillway S-354 which allows for the release of water into the Miami Canal (a canal system that makes its way to Miami where it turns into the Miami River). There are emergency stockpiles that can be observed, the navigational canal, and Lake Okeechobee wetlands. There are also retired pump station machinery on display in the parking area.

HHD Torry Island S-2/S-351/Gap Closure:

Torry Island at Herbert Hoover Dike is a site with active seepage cutoff wall construction (both by jet grouting and convention methods). This section of HHD embankment is part of the active rehabilitation program. The site has Pump Station S-2 which serves to protect against local flooding, and Spillway S-351 which allows for the release of water into the North New River and Hillsboro Canal. The location around these structures requires highly technical methods for seepage cutoff wall construction using jet grouting to prevent damage to the structures while ensuring the reduction of seepage. So far USACE has constructed approximately 21 miles of cutoff wall and plans to construct another 35 miles of cutoff wall, all predominately in the southern portion of the dam.

HHD C-10A Construction Site:

Water Control Structure C-10A (S-271) at Herbert Hoover Dike is a location of an active removal and replacement of one of the original 1930's constructed water control structures (aka culverts). During HHD risk assessments, it was determined that the aging culverts were posing some of the highest risks to the dam; therefore, a removal and replacement program was established. In total, there were 32 culverts operated and maintained by USACE at HHD. So far we have removed 1, replaced 4, and have 19 active removal/replacement construction contracts. C-10A is one of the largest culvert replacements and required a temporary culvert to be constructed adjacent to it for water supply and flood damage reduction during the removal and replacement operations.