
Technical Memorandum

Cedar Bayou/Vinson Slough Restoration Project

Aransas County, Texas

Weekly Summary 5/5 through 5/11

Mobilization

As of 5/11/2014, RLB's mobilization is at 60% with all equipment delivered to the site through Cedar Bayou in compliance with all permit and contract requirements. For land operations, RLB has offloaded 6 off-road dump trucks, 2 excavators, and 3 bulldozers along with other miscellaneous support equipment, fuel tanks, and tools.

The hydraulic dredge has been mobilized along with over 13,000 linear feet of pipeline to transport sand from the dredge templates to the placement areas on the beach. Figure 1 shows the hydraulic dredge being prepped to start work.



Figure 1. The hydraulic dredge mobilized to the start of the Cedar Bayou dredging.

Cedar Bayou Dredging

Dredging is now in full swing in Cedar Bayou with approximately 200 feet of advance made from the north end of the dredging template during the past week. The material is pumped with the dredge to a booster pump, which helps provide energy to push material the full length of 10,000 feet out to the beach placement areas. Silt curtains are in place around the active dredging area to protect nearby aquatic resources delineated by a pre-construction habitat survey.

Spoil Pile Excavation

As of 5/11, RLB has excavated approximately 70% of the existing spoil pile with excavators and off-road dump trucks which transport the sand to the specified placement areas on the beach.

Figure 2 shows the trucks travelling to the spoil pile areas to be loaded.



Figure 2. Empty off-road trucks making their way to the spoil pile.

RLB is using 2 excavators to fill the off-road dump trucks with approximately 22 cubic yards of sand each to transport along the haul route to the placement areas as seen in Figure 3.



Figure 3. Excavators removing sand from the spoil pile.

Beach Placement Areas

All material excavated from the spoil pile is transported along the haul route and dumped into Placement Area 1 and then graded by a bulldozer (Figure 4). To date, the material has been placed in approximately 1,000 feet of the 4,000 foot long placement area.



Figure 4. Bulldozer preparing to grade dumped sand in to Placement Area 1.

Sand transported by the hydraulic dredge has also been pumped to the northeast portion Placement Area 1. Figure 5 shows the sand pumped onto the beach through the pipeline, with very little accumulation seen. Although pressure is still low due to the long length of pipe, a diffuser is currently being built, and once installed on the end of the pipe will reduce potential for scouring at the point of discharge. All material placed in Placement Area 1 has been waterward of the MHHW line.



Figure 5. Hydraulic dredge pipeline discharging into Placement Area 1.

Environmental Monitoring

RLB's bird and turtle monitor patrolled the active work areas and work limits for any signs of turtle activity prior to the start of work every day. No sightings of turtle nesting, piping plovers, or migratory birds were recorded during this week.

Overall Progress

Progress during the week of 5/5 to 5/11, as well as overall project progress to date, is shown in Figure 6.

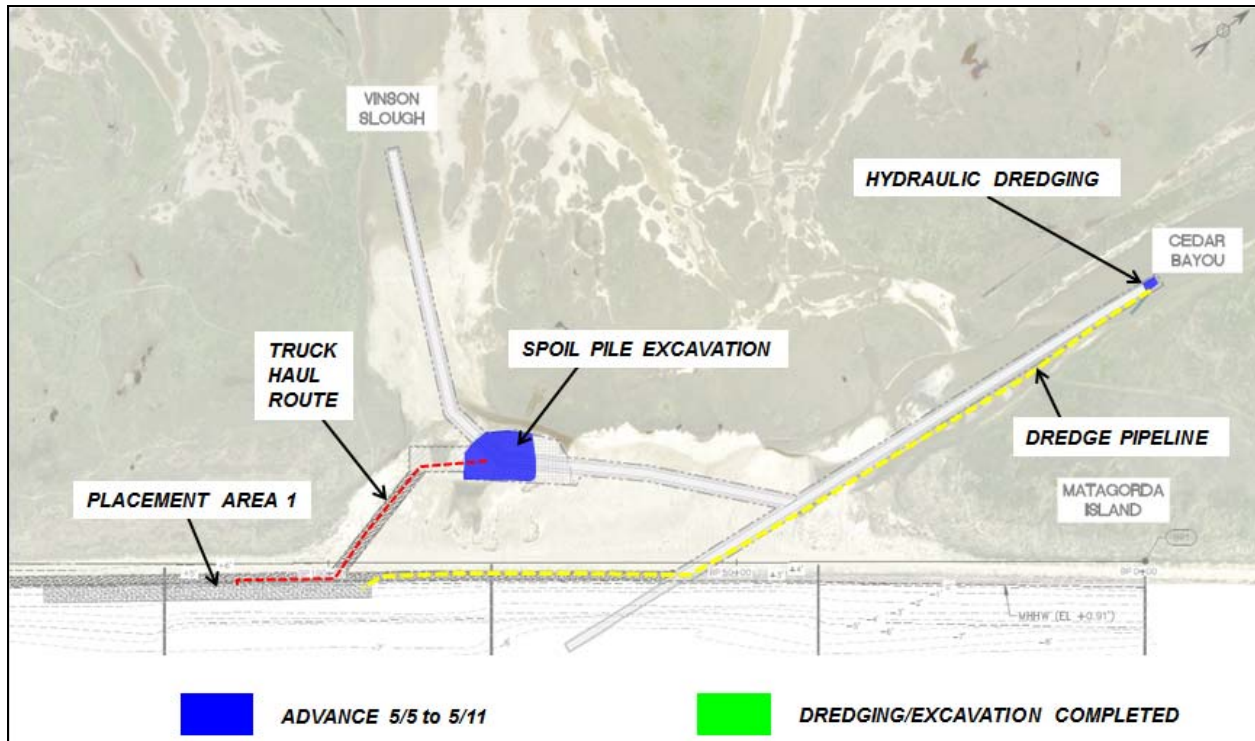


Figure 6. Cedar Bayou/Vinson Slough Restoration Project Progress.