SWG-2022-00162

Alternatives Analysis

TPWD and DU evaluated wetlands within the JD Murphree WMA for restoration using BUDM as part of project efforts during the planning phase. Some of the parameters evaluated were marsh condition, proximity to open water, erosional potential, ease/difficulty of providing necessary containment, ease/difficulty of getting dredged material to the site, and potential impacts on natural and cultural resources. Below is a comparison of the alternatives that were analyzed.

Alternative A-Proposed Action (9-cells, Preferred Alternative): Alternative A, the proposed action, includes restoration of 9 separate wetland cells within the JD Murphree WMA by BUDM to preserve, enhance and/or create a total of 1,951.02 acres of wetlands, as described in the project description above. This alternative includes restoration of degrading wetland areas along wetland/water interfaces that are subject to accelerated erosion. All nine cells are easy to access and contain. Restoration of these cells would preserve, enhance, and create valuable wetland habitat, and preserve the functions and values of the affected wetlands, as well as those further inland of the cell locations. The project was designed to eliminate and/or minimize adverse impacts to natural and cultural resources and is expected to result in long term beneficial impacts to both, which is why it was selected as the preferred alternative.

Alternative B (10-cells): Alternative B is similar to Alternative A, the Proposed Action, except that it included an additional cell further north of the 9 proposed cells. This alternative would have resulted in the preservation, enhancement, and/or creation of 2,331.51 acres of wetlands. The 10th cell was not as severely degraded as the other nine cells, and it was harder to access with equipment and to transport material to. The difficulty of accessing this area would have resulted in greater impacts to water quality and surrounding wetlands. For these reasons, it was eliminated from analysis.

No-Action Alternative: Under the No-Action Alternative, the wetlands in the JD Murphree project area would not be restored and would continue to degrade, eventually resulting in the conversion of some areas to open water. Erosion of these areas would result in increases in turbidity and suspended solids in waters in and around the project area over time and the loss of valuable wetlands that filter and collect sediment from runoff water, provide protection from storm surge by storing excess water during storm events; provide valuable habitat for aquatic and terrestrial species, and provide numerous recreational opportunities. The no-action alternative was not selected for these reasons, as conversion/loss of wetland habitat is contradictory to the purposes and goals of TPWD.