

## Supplemental Map Information (User Report) Outline

Project ID: RO5Y04P04

Project Title or Area: VIRGINIA EASTERN SHORE UPDATES

Source Imagery (type, scale and date): COLOR INFARED (CIR), 1:40K SCALE, PHOTO DATE: 04/94 | BLACK & WHITE, 1:40K, PHOTO DATE: 04/00.

Collateral Data (include any digital data used as collateral): 1995 DOQQ CIR IMAGERY, DIGITAL LINE GRAPHS, DIGITAL SOILS (SURRGO), DIGITAL RASTER GRAPHS, STATE WETLAND DATA.

Inventory Method (original mapping, map update, techniques used): Map update. Enhancements to the base data did not require significant effort—very few wetlands were found missing or under-mapped; however, *updates* to the project area were significant:

- Ocean-facing maps were found greatly changed due to coastal erosion/deposition processes in the time frame spanning the base data (90's era) to most recent imagery (2000 era). We estimate westward migration along the Atlantic shoreline was approximately 800-1000 feet in about 10 years due to beach erosion. The amount of deposition of barrier sands over marshland varied, but certain deltaic blowouts covered significant amounts of tidal marsh. The changes found during updating are likely of great interest to coastal zone managers and agencies.
- Many quads consist only of tidal marshes fronted by barriers, with no headlands or infrastructure. As a result, rectification was difficult without fixed points. The best solution to this problem was to use sheltered tidal creeks, relatively the most stable features; where practical, back-referencing to mainland to the west also aided rectification.
- Timber harvest on inland coastal flatwoods of the mainland required considerable updating.

Classification (Cowardin wetlands, riparian, uplands, hydrogeomorphic, etc.): Cowardin Classification System

Data Limitations: Based on imagery used and based data. Due to budget constraints and the scope of changes encountered, emphasis was on updating the coastal erosion and deposition on the barriers and timber harvest changes. Updating tide flats was not a priority, as these change

all the time; however, the movement of certain irregularly flooded (“P”) spits and islands and channel changes interpretable on the B&W imagery (ex: Great Machipongo Inlet) were updated.

General description of the Project Area: Composed of 20 quads in the Eastern coastal area of Virginia. Chesconessex, Parksley, Bloxom, Pungoteague, Accomack, Metomkin Inlet, Jamesville, Exmore, Wachapreague (Chincoteague NW), Franktown, Nassawadox, Quinby Inlet, Cheriton, Cobb Island, Great Machipongo Inlet, Townsend, Ship Shoal Inlet, Fishermans’ Island (Chincoteague SW)Cape Charles, Elliots Creek (Richmond SE)