

# NASA – Stennis Space Center +/- 1,160 Acre Wetland Delineation

# **Preliminary Findings**

### Presentation November 3, 2016

### I. Overall Area of Investigation (AOI) Description – Physiography

- A. +/- 1,160 Acres of Upland pine flatwood and Palustrine Forested and Palustrine Scrub Shrub type habitats bisected by a perennial stream Turtleskin Creek, and various small ephemeral and intermittent streams and drainage conveyances that feed Turtleskin Creek.
- **B.** Major Physiographic Provinces
  - 1. Upland Pine Flatwoods Primarily in the Northeastern and some within the Central portions of the AOI.
  - 2. Mixed Palustrine Forested and Palustrine Scrub Shrub habitats these form the bulk of the AOI in the Northwest, Central and Southern portions of the AOI where Pines "mixed" with deciduous hardwoods form transitional zones between bottom land hardwood/riparian buffer zones with more distinct uplands at higher elevations.
  - 3. Fluvial Drainage Ways and Bottomland hardwoods these areas are represented by the bottom land drainage ways along Turtleskin Creek and the ephemeral streams and wetland drainage ways that connect to it.

#### II. Man-Made Features

- A. Rail Beds and Rail Spurs North and NW AOI. These features represent the transportation corridors into the former Ammunition Plant area. These features appear to have confined surface water drainage between the road and wetlands to the north, and have also created some linear wetland features between the corridors.
- **B.** Landfill; NE portion of the AOI This man-made feature seems to have confined surface water drainage around the toe of the landfill and appears to have restricted flow in this area and created additional wetlands that possibly would not have otherwise existed.
- C. Disturbed (Potentially Filled) Areas in the southwest and southeastern portions of the AOI near the power line corridor along Moses \_\_\_\_ Road, several disturbed areas exist near the man made ditch where surface area has been altered; presumably from the construction of or improvements to the ditch structures just off the main roads.



- **D.** Logging Roads Central and Southern part of AOI have restricted surface water flow. The most notable is along Keller Road Southern part of AOI.
- E. Silviculture Practices man-made cut/small drainage features in the NE AOI were previously created to help drain/convey surface water from these areas prior to timber harvesting. The dates/time periods of the silvicultural practices are not certain at this time.
- III. Wetlands Within this +/- 1,160 acre AOI, there are approximately 298 acres of land that we believe the USACOE would most likely consider to be wetlands over which they would have regulatory jurisdiction.

# IV. Potential Zones for Development

Based on the field surveys conducted during October 2016, the three areas of the overall AOI that appear to contain the "least" amount of wetlands that would be potentially impacted by future site development are the following:

- A. Area A Northeastern Portion of the AOI. Approximately 49 acres of the overall 235 acres outlined within the "hypothetical" boundary are considered to be wetlands.
- **B.** Area B Southern Portion of AOI Approximately 42 Acres of the overall 224 acres would be considered to represent wetlands.
- C. Area C Northwestern Portion of AOI Approximately 25 acres of the overall 243 acres would be considered to be wetlands.













