Reports and Deliverables for Gulf Coast Prairie LCC SLAMM Gap Analysis Project

Deliverable 1: This deliverable includes the following files/directories:

README file (PDF) This document

GCP SLAMM Projections: GCP_SLAMM_Projections.pdf

> A PDF file describing the Layer Name, Site Name, State, and Projection of the files in the GIS repositories included in this deliverable.

GIS Repository (shape files): GCP_GIS_1.zip

> A repository of shape (*.shp), shape index (*.shx), database (*.dbf), and projection (*.prj) files representing each of the SLAMM applications to be used in the current study.

Existing Gulf of Mexico SLAMM Input Parameters: GCP_Existing_SLAMM_Input_Parameters.zip

> Separate Excel files with parameters for each study including parameter names and units. These names and units may be useful in interpreting the data in the shape files above.

Gulf of Mexico SLAMM Application Reports: GCP_Existing_SLAMM_Application_Reports.zip

> An archive of final model application reports for all previous SLAMM applications to be used in the current study. Summaries of model parameter choices and project results.

Gulf of Mexico SLAMM Project Repository GCP Existing SLAMM Input Grids Repository.zip

> Archives of input files for each SLAMM project to be used, including the SLAMM project file and input rasters described above. In some projects, an NWR or Raster output file may be included - this file specifies output polygons of USFWS Refuges or areas of interest. File types are *.SLAMM5, *.SLAMM6, *.txt, *.asc

SLAMM Color Legend: slamm_colors_qgis.txt

> This file may be used with QGIS to create a SLAMM color legend. Alternatively, default SLAMM colors may be derived for each SLAMM land-cover category as follows. For each line in the file, the first number is the index number of the SLAMM cover class. The second third and fourth represent R, G, and B portion of the color (0-255), the fifth number defaults to 255, and the land-cover description follows.

Spatial Input Metadata Database: GCP Existing SLAMM Spatial Layers Metadata Database.xlsx

This spreadsheet has a worksheet for each previous Gulf of Mexico SLAMM application to be used in the current study. Each worksheet includes:

> **Cell Size** (in meters) – area of each cell can be determined by squaring cell size.

Projection - Coordinate Reference System of the rasters associated with the site.

DEM - Digital Elevation Map data. Preferrable derived from LiDAR. Contour data (from the National Elevation Database, for example) are typically inappropriate to use for calculating sea level rise effects but serve as data in areas where more precise data are not available (in this case the elevation preprocessor module may be used). (units are meters)

SLAMM Categories - Wetlands Inventory categories. Dominant wetland category for each cell is converted into SLAMM categories. This is also used to refine elevation estimates for each cell. The SLAMM Codes correspond to the following SLAMM Names: 1 DevDryland, 2 UndDryland, 3 Swamp, 4 CypressSwamp, 5 InlandFreshMarsh, 6 TidalFreshMarsh, 7 ScrubShrub, 8 RegFloodMarsh, 9 Mangrove, 10 EstuarineBeach, 11 TidalFlat, 12 OceanBeach, 13 OceanFlat, 14 RockyIntertidal, 15 InlandOpenWater, 16 RiverineTidal, 17 EstuarineWater, 18 TidalCreek, 19 OpenOcean, 20 IrregFloodMarsh, 21 NotUsed, 22 InlandShore, 23 TidalSwamp, 24 Blank, 25 VegTidalFlat, 26 BackShore

SLOPE - Slope of each cell, used to calculate partial changes in cell composition. As derived from the Digital Elevation Map. (units are degrees)

DIKE – Boolean defining whether each cell is protected by dikes (1) or not (0). This is available as an attribute of the NWI data, special modifier "h."

Pct. Impervious - derived from National Land Cover Dataset (NLCD). Dry land with percent impervious greater than 25% is assumed to be "developed dry land."

VDATUM – correction raster used to adjust the zero elevation to mean tide level (which is the internal SLAMM datum). Derived by determining the MTL elevation (relative to some vertical datum) minus the NAVD88 elevation (relative to that same vertical datum). The NOAA VDATUM product is often the best source of vertical datum corrections and was used to derive the majority of corrections in the GoM. (units are meters)