Planning for Sea Level Rise in the Matanzas Basin: GIS Database Guide

Kathryn Frank, Principal Investigator, University of Florida, kifrank@ufl.edu

1. **Study Area**
   1.1. 5km Study Area Outline (ArcGIS shapefile)
2. **Land Cover Change**
   2.1. SLAMM
      2.1.1. 0.2m by 2100 SLAMM scenario (ArcGIS raster file)
      2.1.2. 0.5m by 2100 SLAMM scenario (ArcGIS raster file)
      2.1.3. 1.0m by 2100 SLAMM scenario (ArcGIS raster file)
      2.1.4. 1.5m by 2100 SLAMM scenario (ArcGIS raster file)
      2.1.5. 2.0m by 2100 SLAMM scenario (ArcGIS raster file)
      2.1.6. 2.5m by 2100 SLAMM scenario (ArcGIS raster file)
      2.1.7. All_SLAMM: Zip file with all SLAMM .asci output files and excel summary spreadsheets (.asci and .xls files)
      2.1.8. SLAMM code descriptions (excel spreadsheet)
   2.2. Sea Level Rise
      2.2.1.LiDAR based Digital Elevation Model (ArcGIS raster file)
      2.2.2.0.5m Sea Level Rise Bathtub Projection (ArcGIS raster or shapefile)
      2.2.3.1.0m Sea Level Rise Bathtub Projection (ArcGIS raster or shapefile)
   2.3. Storm Surge
      2.3.1.Base 100 year storm surge inundation model (ArcGIS raster or shapefile)
      2.3.2.100 year storm surge inundation model with 0.5m SLR (ArcGIS raster or shapefile)
      2.3.3.100 year storm surge inundation model with 1m SLR (ArcGIS raster or shapefile)
3. **Future Development**
   3.1. Trend 2060 development scenario with no sea level rise (ArcGIS raster file)
   3.2. Trend 2060 development scenario with 1m sea level rise (ArcGIS raster file)
   3.3. “Conservation” development scenario with no sea level rise (ArcGIS raster file)
   3.4. “Conservation” development scenario with 1m sea level rise (ArcGIS raster file)
4. **Conservation**
   4.1. Conservation Land Cover Data
      4.1.1.Current land use/land cover (ArcGIS raster file)
      4.1.2.1m SLR land use/land cover (ArcGIS raster file)
      4.1.3.1m SLR land use/land cover with future development (ArcGIS raster file)
      4.1.4.2.5m SLR land use/land cover (ArcGIS raster file)
      4.1.5.FLUCCS Code Descriptions (Excel spreadsheet)
   4.2. Focal Species
      4.2.1.Habitat model outputs for all species for current, 1m, and 2.5m sea level rise (ArcGIS raster file), with habitat model output description (MS Word document)
      4.2.2.Priority future habitat for select species (ArcGIS raster file)
   4.3. Priority Natural Communities
      4.3.1.See SLAMM and Conservation Land Cover Data categories for natural community data.

4.4. Surface Water Priorities

4.4.1. CLIP 3.0 significant surface water protection priorities (ArcGIS raster file)

4.4.2. CLIP 3.0 aquifer recharge priorities (ArcGIS raster file)

4.4.3. Draft CLIP 3.0 surface water restoration priorities (ArcGIS raster file)

4.4.4. Riparian network (ArcGIS raster file)

4.5. Biodiversity Hotspots

4.5.1. Current biodiversity priorities (CLIP 3.0 Biodiversity Resource Category) (ArcGIS raster file)

4.5.2. 1m SLR biodiversity priorities

4.5.3. 2.5m SLR biodiversity priorities

4.6. Estuarine Habitat Priorities

4.6.1. 1m SLR estuarine habitat impacts and priorities (ArcGIS raster file)

4.6.2. 2.5m SLR estuarine habitat impacts and priorities (ArcGIS raster file)

4.6.3. 1m SLR estuarine habitat priorities contiguous with the GTM NERR (ArcGIS raster file)

4.7. Reserve Scale Conservation Priorities

4.7.1. 1m SLR Reserve scale aggregated priorities (ArcGIS raster file)

4.7.2. 2.5m SLR Reserve scale aggregated priorities (ArcGIS raster file)

4.8. Regional Conservation Priorities

4.8.1. Regional aggregated priorities (ArcGIS raster file)

4.8.2. Florida Ecological Greenways Network (FEGN) priorities (ArcGIS raster file)

4.8.3. Florida black bear habitat priority ecological areas (ArcGIS raster file)

4.8.4. FEGN coastal to inland connectivity areas (ArcGIS raster file)

4.8.5. FEGN major river ecological connectivity opportunities (ArcGIS raster file)

4.8.6. CLP 3.0 landscape integrity index (ArcGIS raster file)

4.8.7. CLIP 3.0 aggregated priorities (ArcGIS raster file)

4.9. Coastal to Inland Connectivity

4.9.1. Coastal to inland connectivity priorities (ArcGIS raster file). Includes datasets identifying potential corridors from the GTM to the Ocala National Forest, Relay Tract in Flagler County, and Twelve Mile Swamp.

Constraints on Accessing and Using the Data

This data was developed for the "Planning for Sea Level Rise in the Matanzas Basin" project conducted between 2011-2014 by staff from the University of Florida (UF), Guana Tolomato Matanzas National Estuarine Research Reserve (GTMNERR) and others, and is maintained by UF and GTM staff for use in on-going planning endeavors within the Matanzas Basin and GTMNERR. It is not intended, nor sufficient, to be the basis for local government comprehensive plans, environmental resource, or agency permitting decisions without first consulting the final "Planning for Sea Level Rise in the Matanzas Basin" project report which describes the detailed methodology for data production and intended use and/or the primary UF and GTM project staff involved in the project and production of this data. Some data was also obtained from partners not directly within the core project team, including Florida Natural Areas Inventory and the Florida Fish and Wildlife Conservation Commission as noted in project metadata. Data based on the Critical Lands and Waters Identification Project (CLIP) should be used with reference to CLIP documentation at http://fnai.org/clip.cfm .