

York River Salt Marsh Data, Reports, and Resources

Information compiled in preparation for January 31, 2017 ORV Subcommittee meeting

Additional information added after meeting (noted in orange)

Data / Activities / Reports / Status	Source Info / Notes / Links
<p>Saltmarsh acreage for York River watershed ~ 500 acres total (NWI data)</p> <p>Significant overlap of saltmarsh and conservation lands, esp. along Smelt Brook</p> <p>Upper York River marshes abutted by large tracts of undeveloped lands (both conserved and not conserved)</p>	<p>Data available in Maine Habitat Viewer. Shapefiles and Excel data provided by Claire Enterline, MCP.</p> <p>Tidal marshes: (All tidal marshes, not just those for the marsh migration study), under section “Digital Data”: http://www.maine.gov/dacf/mnap/assistance/tidal_marshes.htm</p> <p>Map series produced by Sue Bickford, WNERR – shows estuarine marsh areas, freshwater wetlands, and conservation lands for three segments of the York River (lower, middle and upper sections):</p> <ul style="list-style-type: none"> • Lower Section of York River: http://www.yorkrivermaine.org/wp-content/uploads/2017/01/YR-Lower-TidalSaltmarshRouteOneSouthLines2016.pdf • Middle Section of York River: http://www.yorkrivermaine.org/wp-content/uploads/2017/01/YR-Middle-TidalSaltmarshScotlandRdRouteOne2016.pdf • Upper Section of York River http://www.yorkrivermaine.org/wp-content/uploads/2017/01/YR-Upper-TidalSaltmarshScotlandRdNorth2016.pdf
<p>Sea Level Rise and Potential Marsh Migration Areas, MNAP/MGS</p> <p>York River maps show change in highest annual tide (HAT)/saltmarsh areas for 1’, 2’, 3’ and 6’ sea level rise scenarios</p> <p>Maps and analysis looking at developed and undeveloped buffers around future salt marsh habitats, MCHT</p>	<p>Shapefiles and reports provided by Don Cameron, MNAP; York River maps produced by Stefan Claesson from the data [Note: project mapping excludes fringing salt marshes and most marshes <2.5 acres]. Statewide analysis looked at intersection of HAT/migration areas with developed/undeveloped lands, conservation lands, and NWI freshwater wetlands - we don’t have that analysis for the York River.</p> <ul style="list-style-type: none"> • MNAP/MGS Full Report (<i>Potential for Tidal Marsh Migration in Maine</i>): http://www.yorkrivermaine.org/marsh-migration_final-report_mnap_march-2014/ • MNAP/MGS Summary Report (<i>Conservation Planning for Tidal Marsh Migration Due to Sea Level Rise</i>): http://www.yorkrivermaine.org/tidal-marsh-migration_mohf-summary-report/ • Map Series for York River HATs (existing and 1’, 2’, 3’, and 6’ changes in sea levels): http://www.yorkrivermaine.org/wp-content/uploads/2017/01/Saltmarsh-Areas-Existing-Sea-Level-to-6-foot-SLR.pdf • Presentation by Kristin Puryear, MNAP, at January 31, 2017 meeting: http://www.yorkrivermaine.org/wp-content/uploads/2017/02/MarshMigration_YorkRiverWatershed-KP-MNAP.pdf • Maps/analysis presented by Jeremy Gabrielson, MCHT, at January 31, 2017 meeting: <ul style="list-style-type: none"> Upper York River marshes: http://www.yorkrivermaine.org/wp-content/uploads/2017/02/MarshMigYorkRiver.pdf Libby Brook/Cider Hill Creek marshes: http://www.yorkrivermaine.org/wp-content/uploads/2017/02/MarshMigLibbyBrook.pdf <p>Coastal Resiliency information: SLR, tidal marshes, marsh migration, and undeveloped blocks (Maine Natural Areas Program site): http://www.maine.gov/dacf/mnap/assistance/coastal_resiliency.html</p> <p>Sea-level rise / storm surge data (Maine Geological Survey site), under section “Data Download” close to the bottom of the page: http://www.maine.gov/dacf/mgs/hazards/slr_ss/index.shtml</p>

Saltmarsh Surface Elevation Table (SET) project – site in York River (project of MCP, MNAP, WNERR, YLT, IFW, others)	Project will measure marsh migration using surface elevation tables (SETs) in at least ten salt marshes across the state, with one York River site. Within the selected marsh, three permanent marks will be used to measure elevation changes every six months to every year. Data available in 2022.
2005 WNERR York River Fringing Marsh Study	Report: http://www.yorkrivermaine.org/wp-content/uploads/2017/01/YR-Study-of-Fringing-Salt-Marshes-2007.pdf Six sites studied. In general, found sites to be healthy with species present that indicate good water quality.
2004 Wheeler Marsh restoration; post-restoration assessment and monitoring by WNERR	18 acre site created in 1961 when dredge spoils were deposited on mud flats; site enhanced for improved marsh function in 2004
2012-13 Steedman Woods marsh restoration (David Burdick, UNH); Potential plans for design with periwinkle exclusion	Report: http://www.yorkrivermaine.org/wp-content/uploads/2017/01/Saltmarsh-Burdick-OldYorkPhase-II-DRAFT-FinalReport_compressed.pdf Periwinkle predation limiting factor in plant survival for new plantings
2015 York Golf Course restoration and ongoing monitoring	WNERR project; Restoration of 5.5 acres of salt marsh with redesign and replacement of failed culverts
State Priority Habitat for IFW/BwH/MNAP; Saltmarsh habitat is driver for State Focus Area of Ecological Significance (York River Focus Area)	Focus area description: https://www1.maine.gov/dacf/mnap/focusarea/york_river_headwaters_focus_area.pdf <i>“[York River Focus Area] is notable for the Tidal Marsh Estuary Ecosystem that includes the intertidal bays and one of the largest unprotected spartina saltmarshes, a rare community type, in the state.”</i> Upper York River saltmarsh (~440 acres) – further inland and away from coastal development
Floodplain maps	Maine Floodplain Management Program: http://www.maine.gov/dacf/flood/mapping.shtml
Tide gauge data	The nearest tide gauge is Seavey Island, but that stopped data collection in 2001: https://tidesandcurrents.noaa.gov/sltrends/sltrends_station.shtml?stnid=8419870 The nearest gauge with continual data is Portland: https://tidesandcurrents.noaa.gov/sltrends/sltrends_station.shtml?stnid=8418150