#### NH COASTAL VIEWER LAYER LIST

# April 17, 2024

The NH Coastal Viewer presents data from map services published by a number of organizations, including NH GRANIT as well as various state and federal agencies. The following symbols are used to identify the organization publishing and maintaining each service:

- MH GRANIT, University of New Hampshire
- New Hampshire Department of Environmental Services
- US National Oceanic and Atmospheric Administration
- US Park Service
- Bing and Esri
- 🖳 Additional Layers (layer catalog)
- > NH SADES

FEMA FEMA

Layers listed using this font are rasters and as such, cannot be symbolized by the user

Please note that the availability and functionality of each service is the responsibility of the publishing organization.

#### Data Notes:

- 1. The Coastal Viewer focuses on the coastal watershed of New Hampshire. Some data sets may extend beyond the watershed, while others are restricted to just the watershed geography. If you are interested in mapping regions beyond coastal NH, please visit <u>GRANITView</u> a statewide mapping site maintained by GRANIT.
- 2. Tip: to quickly find a specific layer from this list in the Viewer, click "Filter Layers..." at the top of the Layer List and begin typing a layer name in the text box. A subset of layers matching your text (from within the selected Theme) will be displayed.
- 3. **Operational Layers** refer to map layers that are pre-loaded when the site is opened. **Additional Layers** refers to data sets that are not automatically included in the site, but can be added as the user desires. To access the **Additional Layers** catalog, click the **Data Sources** tab then click the **Additional Layers** icon . Folders in the Layer List that have the layer catalog icon contain **Additional Layers**.

The following presents the organizational layout and layers available in the NH Coastal Viewer.

#### CONTENTS

- > Operational Layers
- > Additional Layers

### OPERATIONAL LAYERS

### Administrative and Political Boundaries

- Coastal Zone Management Act Boundary
- NH Parcel Mosaic
  - Additional lines
  - Parcels polygons

# Biology and Ecology

- MWIPlus
- Mational Wetlands Inventory Version 2
- Shellfish
  - Matural and Restored Shellfish Areas
    - Current Shellfish Beds
    - Oyster Restoration Sites

### Historic Shellfish Sites

- Surf Clams
- Softshell Clams
  - Softshell Clams 1985
  - Softshell Clams 2006
  - Softshell Clams 2008

## Oysters

- **Oysters 1982**
- 9 Oysters 1985
- 9 Oysters 1997
- **9** Oysters 2001
- **9** Oysters 2003
- **Oysters 2004-2006**
- Oysters 2005
- 9 Oysters 2006
- **Oysters 2008**
- **Oysters 2012**
- Shellfish Aquaculture
- Shellfish Water Classification

### Eelgrass

- **2023**
- **2022**
- **2021**
- **2019**
- **9** 1996
- **9** 1986

# Cultural Society and Demographic

- Access Sites to Public Waters
- Libraries
- Hospitals
- National Register of Historic Places
- Police and Fire Stations

- Schools (K-12)
- Places of Interest
- Recreational Boater Route Density
- Recreation Areas
- Wessel Activity 2012
- **2010 Census** 
  - Population by Census Block (# persons)
  - Social Vulnerability Index by Census Tract

#### Environment and Conservation

- Conservation and Public Lands
- Designated Rivers

# Fluvial Geomorphology

- Stream Crossings
  - Geomorphic Compatibility
  - Aquatic Organism Passage Compatibility
- Hydraulic Capacity Scores
  - 20 yr Return Period
  - **25** yr Return Period
  - 50 yr Return Period
  - 200 yr Return Period

# Other Geomorphic Data

- Geomorphic Features
- Road Encroachments
- Railroad Encroachments
- Channel Straightening
- State Impact Metrics
- Fluvial Erosion Hazard Zones

### Wildlife Action Plan

- Highest Ranked Wildlife Habitat
- Wildlife Habitat Land Cover
- ME Beginning with Habitat Focus Areas

#### Other Wildlife Data

- Wildlife Corridor
- Prioritized Habitat Block
- Resilient and Connected Network
- Planning Trails for People and Wildlife

#### Land Use

- **2015** Southeast Region
- 1962 Rockingham County
- 1962 Strafford County

### **■** Impervious Cover –Best Available Data

- <u>@</u> 2021
- **2015**
- **2010**

### Land Conservation Plan

- Study Area Boundary
- Coastal Conservation Focus Areas 2021
- Coastal Priority Agricultural Resources 2021
- Conservation Focus Areas 2006 (NH)
- Conservation Focus Areas 2010 (ME)
- Water Resources Conservation Focus Areas 2016 Update

- Flood Storage and Risk Mitigation
- **9** Pollutant Attenuation
- Public Water Supply

# Single and Multi-Benefit Areas

- Areas Likely to Provide Single Benefits
- Areas Likely to Provide Multiple Benefits

### Tidal Stream Crossings

# Overall Scores

- ☐ Tidal Stream Crossings: Overall Combined Score
- Tidal Stream Crossings: Overall Infrastructure Score
- ☐ Tidal Stream Crossings: Overall Ecological Score

# Tidal Crossing Component Scores

- Tidal Stream Crossings: Crossing Condition
- ☐ Tidal Stream Crossings: Tidal Restriction Overall
- Tidal Stream Crossings: Tidal Aquatic Organism Passage
- Tidal Stream Crossings: Salt Marsh Migration Potential
- Tidal Stream Crossings: Vegetation Comparison
- ☐ Tidal Stream Crossings: Inundation Risk to Roadway
- ☐ Tidal Stream Crossings: Inundation Risk to Crossing Structure
- ☐ Tidal Stream Crossings: Inundation Risk to Low Lying Development

# Tidal Crossing Attributes

- Tidal Stream Crossings: Condition Attributes
- Tidal Stream Crossings: Site Attributes
- ☐ Tidal Stream Crossings: Tide Gate Attributes
- Tidal Stream Crossings: Desktop Assessment Attributes
- Tidal Stream Crossings: Replacement History Attributes
- Tidal Stream Crossings: Summary Sheets

# Coastal Restoration Database

- Dune Restoration
- **Eelgrass Restoration**
- Living Shoreline
- Oyster Restoration
- River Restoration
- Salt Marsh Restoration

# Geological and Geophysical

- Soil Series
- Surficial Geology

### Inland Water Resources

- Dam Inventory
- ☑ Ditches in the Great Bay and Hampton Seabrook Estuaries

### Floodplains

- FEMA Cross Sections
- FEMA Base Flood Elevations
- FEMA Flood Hazard Boundaries
- FEMA Flood Hazard Zones FEMA High Water Marks

# Surface Water

- Streams Centerlines
- Water Bodies

#### Other Water Features

# Shoreline Buffer Zones

### Perennial Streams

- 200-foot Zone
- 250-foot Zone
- 300-foot Zone

#### Intermittent and Perennial Streams

- 200-foot Zone
- 250-foot Zone
- 300-foot Zone

# Watershed Boundaries

- HUC 8
- **M** HUC 12
- Aquifer Transmissivity

### Location and Geodetic Network

- Geodetic Control Points
- Boundary Monument Points

#### Oceans and Coasts

- Dunes
- Coastal Beaches
- Shoreline Structure Inventory
- Salt Marsh Restoration Opportunities

# Predicted Marsh Migration

- **SLAMM 2022 Initial Conditions**
- **SLAMM 2022 0.3-m SLR at Year 2050**
- SLAMM 2022 0.5-m SLR at Year 2050
- **SLAMM 2022 0.75-m SLR at Year 2100**
- **SLAMM 2022 1.2-m SLR at Year 2100**
- **SLAMM 2022 1.5-m SLR at Year 2100**

### Sea Level Rise Scenarios

- MHHW Baseline
- **●** *MHHW* + 1-ft *SLR*
- **MHHW** + 2-ft SLR
- MHHW + 4-ft SLR
- *MHHW* + 6-ft SLR
- **№** *MHHW* + 8-ft *SLR*
- MHHW + 1% Storm Surge Baseline
- MHHW + 1% Storm Surge + 2-ft SLR
- MHHW + 1% Storm Surge + 4-ft SLR
- MHHW + 1% Storm Surge + 6-ft SLR
- MHHW + 1% Storm Surge + 8-ft SLR

### Beach Shoreline Change

- Historic Shorelines
  - May, 2015

- **Maril**, 1992
- **April**, 1973
- January, 1953

# Beach Elevation Change (meters)

- December, 2013 minus September, 2011
- 🛚 December, 2013 minus May, 2011
- December, 2013 minus September, 2000
- May, 2011 minus July, 2010
- **9** July, 2010 minus June, 2007
- 🗕 June, 2007 minus September, 2000

# **△** Groundwater Rise (ft) Caused by Sea Level Rise

- Groundwater Rise Caused by 1-ft SLR
- Groundwater Rise Caused by 2-ft SLR
- Groundwater Rise Caused by 4-ft SLR
- Groundwater Rise Caused by 6-ft SLR
- Groundwater Rise Caused by 8-ft SLR

# High Resolution Tidal Wetlands

- Migh Resolution Tidal Wetlands in Detail
- High Resolution Tidal Wetlands
- Living Shoreline Suitability Index Number
- Coastal Erosion Hazard Areas
  - FEMA Low Sea Level Rise Scenario
  - FEMA Intermediate Low Sea Level Rise Scenario
  - FEMA Intermediate Sea Level Rise Scenario
  - FEMA High Sea Level Rise Scenario

# Transportation Networks

#### Public Roads

- Bridges
- Interstates
- Turnpikes
- US Routes
- State Routes
- Local Roads

### Seacoast Vulnerability Assessment

Prioritized Seacoast Road Segments

### Utilities and Communication

- Cell Towers
- Transmission/Pipelines
- Mational Pollutant Discharge Elimination System (point sources)

#### Elevation

- Regional LiDAR
  - Shaded Relief
  - Digital Elevation

# Basemaps/Imagery

# Regional Orthophotography

- **⚠** Coastal 2019 1-foot RGB
- **△** Coastal 2019 1-foot CIR
- **⚠** Coastal 2017 1-foot CIR
- **≌** Coastal 2016 1-foot RGB

- Mark Regional 2010 6-inch CIR

- Regional 1974 panchromatic
- Regional 1962 panchromatic

# Statewide Orthophotography

- **M** NH 2015 1-foot RGB
- **M** NH 2015 1-foot CIR
- MH 2010/2011 1-foot RGB
- MH 2010/2011 1-foot CIR
- MH NAIP 2021 RGB
- MH NAIP 2021 CIR
- MH NAIP 2016 RGB
- MH NAIP 2016 CIR
- MH NAIP 2014 RGB
- MH NAIP 2014 CIR
- M NH NAIP 2012 RGB
- MH NAIP 2012 CIR
- **MH NAIP 2011 RGB**
- **MH NAIP 2011 CIR**
- MH NAIP 2009 RGB
- MH NAIP 2008 RGB
- **№** NH NAIP 2003 RGB
- MH DOQs 1992/98

#### Base Maps

- Bing Roads
- Bing Aerial
- Bing Hybrid (aerials with labelling)
- USGS Topo
- Light Gray Base

### ADDITIONAL LAYERS

# Biology and Ecology

# Eelgrass

- **2014**
- **2013**
- **2012**
- **2011**
- **2010**
- **2009**
- **2008**
- **2007**
- **2006**
- 20002005
- **2004**
- **2003**
- 20032002
- **2001**
- **2001 2000**
- **9** 1999
- **9** 1998
- **9** 1997
- **9** 1995
- <u>\$\text{994}\$</u>
- **9** 1993
- **9** 1992
- <u>9</u> 1991
- **1990**
- **9** 1989
- **9** 1988
- **9** 1987

### **Environment and Conservation**

# Conservation

- CL: Management Status
- CL: Agency Type
- **CL:** Primary Protection Type
- **CL:** Protection Level
- **Gap Status**
- CL: Diagonal
- **CL:** Solid

### Land Use

- **LU: 2015 Southeast**
- LU: 2010 Rockingham RPC
- LU: 2010 Southern New Hampshire RPC

- LU: 1998 SoutheastLU: 1974 Southeast
- **Oceans and Coasts** 
  - Alternate Sea Level Rise Scenarios
    - MHHW plus 30-feet
    - MHHW plus 40-feet
  - Beach Shoreline Change
    - Beach Elevation Change
      - April, 2014 minus December, 2013
      - April, 2014 minus September, 2000
      - September, 2011 minus May, 2011

# **■ Beach Extent for Elevation Change Analysis**

- December, 2013 April, 2014
- September, 2011 December, 2013
- May, 2011 September, 2011
- May, 2011 December, 2013
- 9 July, 2010 May, 2011
- June, 2007 July, 2010
- **September**, 2000 June, 2007
- September, 2000 December, 2013/April, 2104

### **Mistoric Beach Shorelines**

- **April**, 2014
- December, 2013
- **Mathematical August**, 2013
- September, 2011
- May, 2011
- **9** July, 2010
- **April**, 2010
- **4** August, 2007
- May, 2005
- Movember, 2000
- **4** April, 1998
- October, 1974
- Movember, 1962
- May, 1960
- **9** January, 1956

- July, 1866
- **9** July, 1855
- SLR Classes − Polygons
  - **MHHW** Baseline
  - MHHW + 1-ft SLR
  - MHHW + 2-ft SLR
  - MHHW + 4-ft SLR

- MHHW + 6-ft SLR
- MHHW + 8-ft SLR
- MHHW + 1% Storm Surge Baseline
- MHHW + 1% Storm Surge + 2-ft SLR
- MHHW + 1% Storm Surge + 4-ft SLR
- MHHW + 1% Storm Surge + 6-ft SLR
- MHHW + 1% Storm Surge + 8-ft SLR

# **Base Maps/Aerial Imagery**

2014 NOAA 6-inch RGB Orthophotography