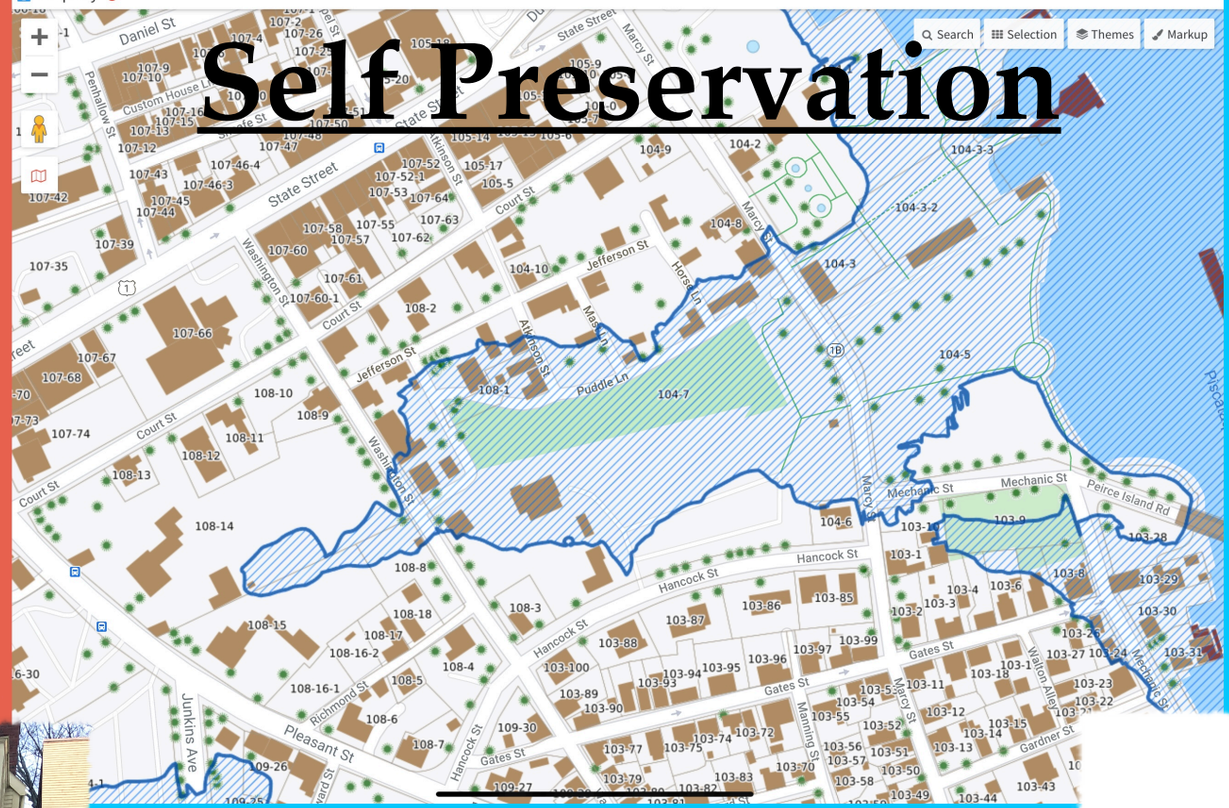
Finding Solutions, Creating Change

Rodney Rowland
Director of Facilities and Environmental Sustainability
Strawbery Banke Museum


Portsmouth Pier
Sheafes Wharf
Shapleys Wharf
Drifes Wharf
Long Wharf
Ayres Wharf
Shaws Wharf
QUA RIVER
Dec.r 22nd 1813
ROSEMARY LANE
STREET
PUDDLE LANE
DOCK
GRAVESEND STREET
Burying ground
G
COLD LANE
GATE STREET
PEIRCES LANE
SAVAGE STREET
Wm Gardner Esq.
MH
PICKERINGS LANE
EDWARD STREET
Liverpool Street
WESTWORTH STREET
Merchant Street
Collars Lane
1813

Self Preservation



Hurricane Bob 1991


WHEELWRIGHT
HOUSE
18th Century
Cooking Demonstration
(enter through side door)
&
DISCOVERY
CENTER
Interactive Play and
Learning For Kids

Utility Costs

FY 21 $121,000

FY 22 $146,000

FY23 $160,000

FY24 (projected) $180,000

6% of the annual budget

Others??

We need transformational change operating on processes and behaviors at all levels: individual, communities, business, institutions and governments.

We must redefine our way of life and consumption."

United Nations Intergovernmental Panel on Climate Change, 6/2021

Effect Change

in your institution, in your community and beyond

Water, water everywhere: Community is the answer

Most Popular Our Picks Upcoming Events

By Rodney D. Rowland

Posted Apr 13, 2018 at 5:40 PM Updated Apr 13, 2018 at 5:40 PM

Late last month, Strawbery Banke hosted a forum with key organizations from around the Seacoast who are actively involved with measuring, analyzing, and adapting to the impacts of climate change and sea level rise on our community. One might ask why Strawbery Banke Museum, a history education and discovery institution, is engaging this particular community. The answer is best demonstrated by the visible impact of groundwater rising through the dirt floors of some of our most historic buildings - especially during the King Tides and nor'easters we experienced this winter. We're now seeing 16 to 27" of salt water in those cellars along with crumbling brick dissolved by the salt (for a timelapse view, visit http://www.strawberybanke.org/sea-level-rise.cfm)

CAW
New Hampshire Coastal Adaptation Workgroup
RESOURCEFUL • READY • RESILIENT

ResilientStAug

Annapolis Weather It Together
Protect Our Historic Seaport

Boston Green Ribbon Commission


FARM POWERED
Bar-Way Farm
Deerfield, MA


FARM POWERED
Bar-Way Farm
Deerfield, MA

Annual Digester Input:

- 9,125 tons of manure
- 36,500 tons of food waste

Annual Digester Output:

- Produces 7,700 MWh of renewable energy/year
- Offsets 5,500 lbs. of CO2 emissions daily
- Produces renewable energy equivalent to 1,600 homes

FARM BENEFITS

- Liquid, organic fertilizer to increase crop yields
- Reduced energy cost
- Odor reduction
- Reduction in chemical fertilizer use
- Enhance nutrient management plan
- Heat reuse and Animal Bedding

- **$4 million to build**
- **Multiple partners**

About Us

The Coalition

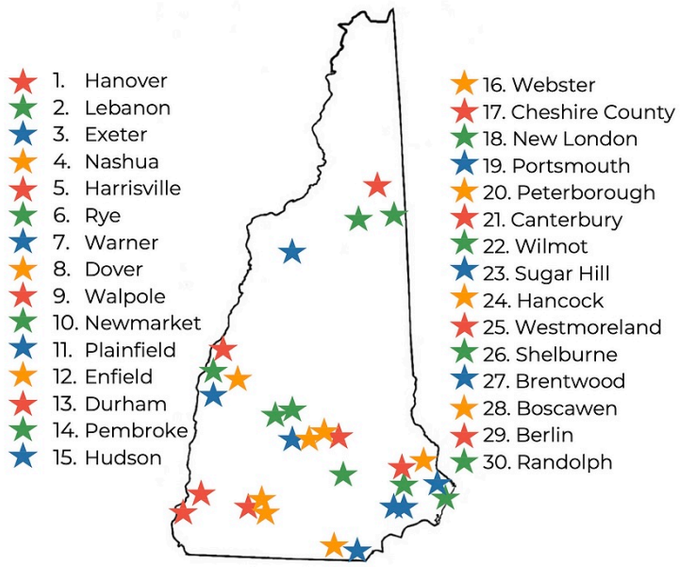
The Community Power Coalition of New Hampshire is a non-profit Joint Powers Agency incorporated on October 1, 2021 — governed "by communities, for communities" — empowering towns, cities and counties across New Hampshire to:

1. Streamline the process for authorizing a Community Power program locally.
2. Share services and staff support across member cities, towns and counties.
3. Participate in joint power solicitations and local project development opportunities.
4. Share knowledge and collaborate regionally on clean energy and resilient infrastructure development.
5. Speak with one voice at the Legislature and Public Utilities Commission on public advocacy issues related to energy and Community Power.

Coalition Membership is open to all New Hampshire cities, towns, counties and regionally operated Community Power Aggregations.

There are no upfront costs to join the Coalition. The expense of launching and operating each Member's Community Power program will be repaid after program launch, through electricity rates, and the revenues received from participating customers in each program.

As of April 1, 2023, the Coalition is made up of twenty-nine municipalities and one county member.



Cod buying guide

BUY

Look for Pacific cod from Alaska and follow the below tips if it's caught elsewhere in the U.S. or imported.

- **U.S. wild-caught:** Pacific cod from Alaska is a Best Choice, and it's a Good Alternative when it's caught on the West Coast. Only buy wild Atlantic cod if you confirm it was caught with handlines and hand-operated pole-and-lines in the U.S. Georges Bank or U.S. Gulf of Maine.
- **Imported wild-caught:** Look for Pacific cod caught in British Columbia, Canada.
- **Certified:** Look for cod certified by the Marine Stewardship Council.

AVOID

Pass on the below sources or if you don't know where and how the cod was caught.

- **U.S. wild-caught:** Steer clear of Atlantic cod caught with bottom trawls, set gillnets, or set longlines. More than 75 percent of the U.S. catch of Atlantic cod is caught with these fishing gears.
- **Imported wild-caught:** Pass on Atlantic cod from Canada and Pacific cod from Japan and Russia.

BEST CHOICE

Buy first

Atlantic cod *Gadus morhua*

Also known as
Cod, Codfish, Scrod, True Cod, Whitefish

Farming method
Indoor recirculating tanks (with wastewater treatment)

Other details
N/A

Country or region
Worldwide

Body of water
N/A

View details

CERTIFIED

Buy this certified product

Atlantic cod *Gadus morhua*

Also known as
Cod, Codfish, Scrod, True Cod, Whitefish

Fishing gear
Bottom trawls

Other details
Marine Stewardship Council Certified
Greenland cod, haddock and saithe trawl

Ecotourism:Take Only Memories, Leave Only Footprints

Academic Center - Teaching Sustainability

12,000 RAIN GARDENS in Puget Sound

ADD A RAIN GARDEN

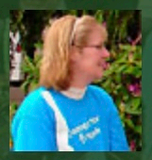
RAIN GARDENS in Puget Sound: 6,207

Search

DONATE

About Rain Gardens | Build a Rain Garden | Grants & Rebates | Resources | Get Involved | About Us

"I don't consider myself a gardener, so I really appreciate that my rain garden is low maintenance"



SALLY
Eatonville, WA

Join your neighbors cleaning up Puget Sound!

Upcoming Events

CITY OF PORTSMOUTH, N.H.
SETTLED 1623
INCORPORATED 1849

Placework

Strawbery Banke Museum
Stormwater Management Master Plan

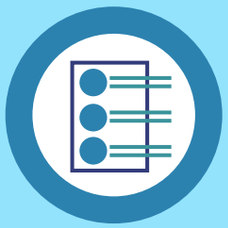
The challenges of Sea Level Rise at Strawbery Banke Museum will be most effectively addressed through an actionable, holistic master plan. A whole-systems understanding of associated conditions and vulnerabilities will inform a realistic plan and implementation strategy.

VULNERABILITY AND RISK TOLERANCE ASSESSMENT

As part of this planning effort, we will determine the degree to which every aspect of the Museum is vulnerable. Evaluating risk tolerances will order the urgency for action in particular areas across the campus.

MITIGATION PLAN

The Stormwater Management Master Plan will outline high-level objectives as well as actionable strategies, including water management strategies for specific buildings or campus elements and guidelines for future preservation, restoration and/or new development on campus.



IMPLEMENTATION PLAN

The plan will coordinate and prioritize steps for incremental or phased implementation, creating a roadmap for efficient progress that aligns with the planned objectives.

EDUCATION AND OUTREACH

In addition to guiding museum development and operations, this understanding and approach to campus managent will become relevant to the museum's education and outreach efforts. Water mitigation is critical to historic preservation; educating the public will increase awareness of this issue in our region.

Now is the time to address sea level rise with a focused, action-oriented stormwater master plan.

Placework 96 Penhallow Street, Portsmouth, NH 03801 | 603.319.8199 | www.placework.studio

STRAWBERY BANKE PORTSMOUTH NEW HAMPSHIRE

PRESERVATION & EDUCATION CENTER

Horsley Witten Group
Sustainable Environmental Solutions

Placework
ARCHITECTURE · PLANNING

Resilience and Sustainability Measures

The Museum's primary concern for the success of the project and charge to the design team was dealing with water – rising sea and ground water levels, and severe storm events. Analysis of current flood mapping information as well as structural and drainage capacity of soils on the site supported the curent conceptual site and building design.

A shallow foundation will stay above the water table but is designed to withstand and manage eventual rise of the water table. Landscape features will retain and filter stormwater on site to relieve burden on adjacent ground and municipal systems.

While plans for this project involve specific response to flooding issues the Museum is already experiencing, the design more broadly addresses matters of sustainability and resilience.

Renewable resources harvested on site:

- Solar electricity and hot water
- Rain water catchment for landscape irrigation and use in the building (toilets, laundry).

High performance building:

- Well insulated buidling envelope
- Triple-glazed windows
- Optimized daylighting to reduce energy demand
- Energy-efficient equipment: heating and cooling, lighting, appliances, etc.
- Water efficient plumbing fixtures

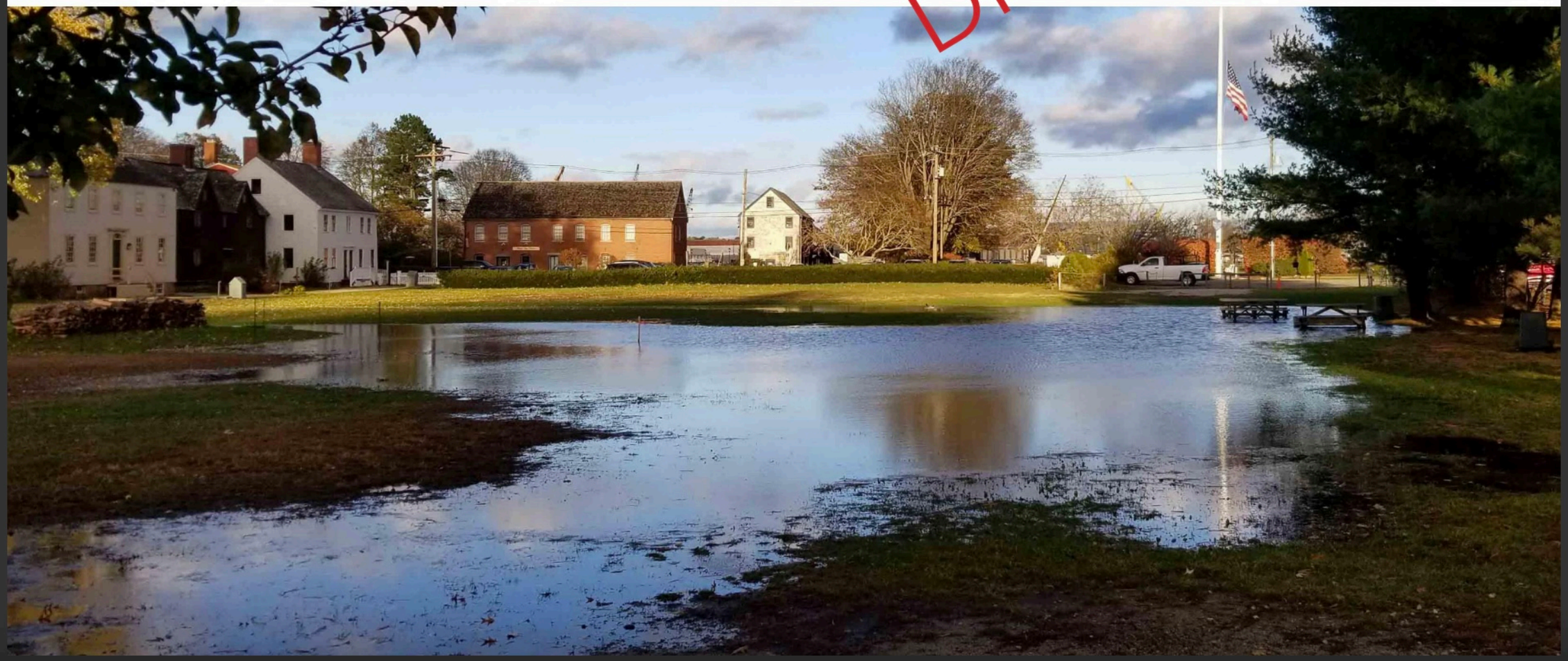
REPORT

Strawbery Banke Museum

Stormwater Plan

03.17.23

DRAFT

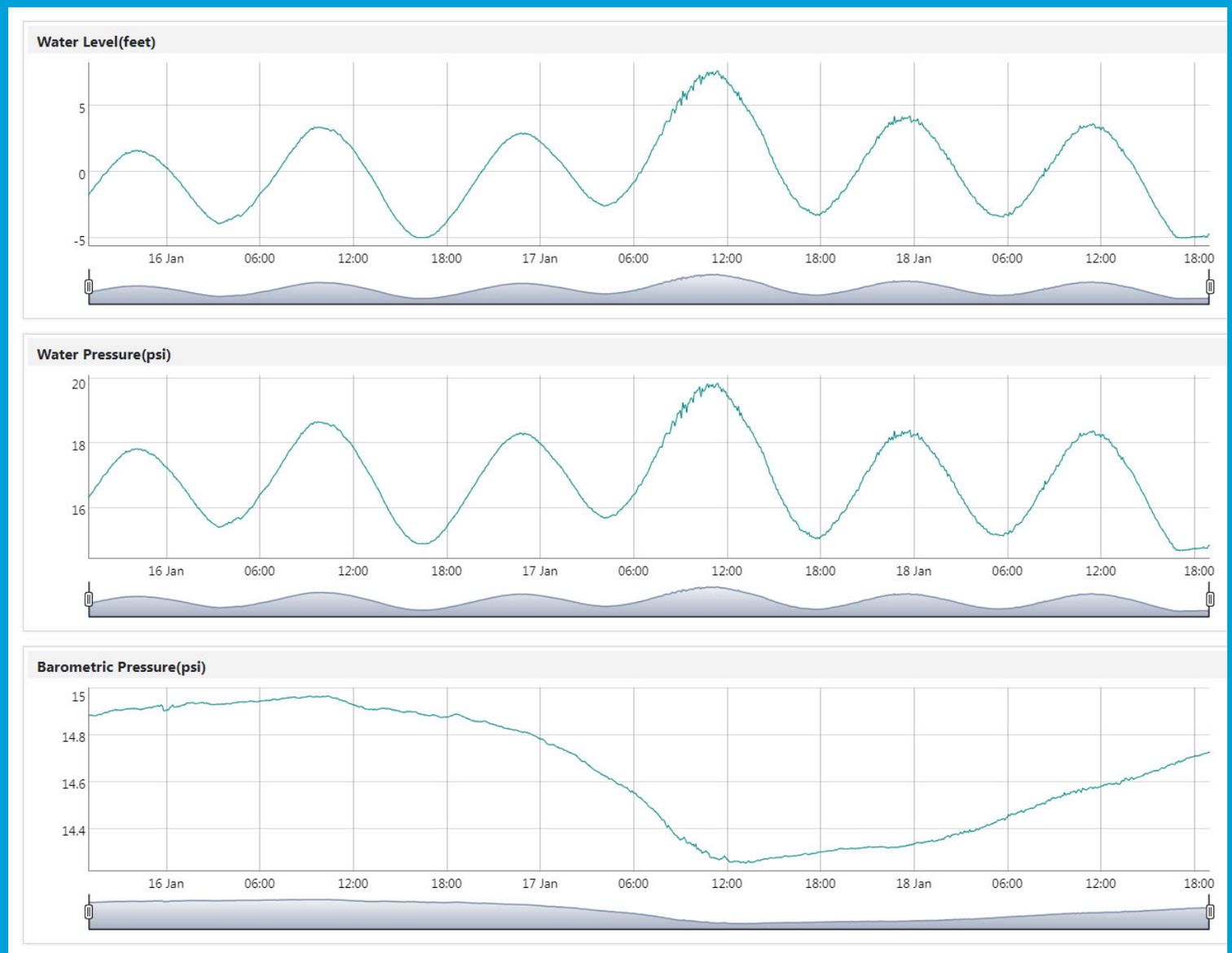


University of New Hampshire

Geospatial Science Center (GSSC)

Michael Routhier

Manager of UNH GIS Laboratory for Remote Sensing and Spatial Analysis



DEC 25, 2020

Object 101

A History of the World in 100 Objects

a world must know it can solve the greatest challenges: climate change, disease, injustice, war only by working together with generosity and good will, by remembering that we are in the same fragile boat.

Neil MacGregor, Director, British Museum