

What can science research contribute to the future of Maine wetlands?

Winter Conference & Annual Meeting
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Image Credit: http://assets1.bigthink.com/system/idea_thumbnails/55119/primary/boring_lecture.jpg?1400100679

Live Audience Participation

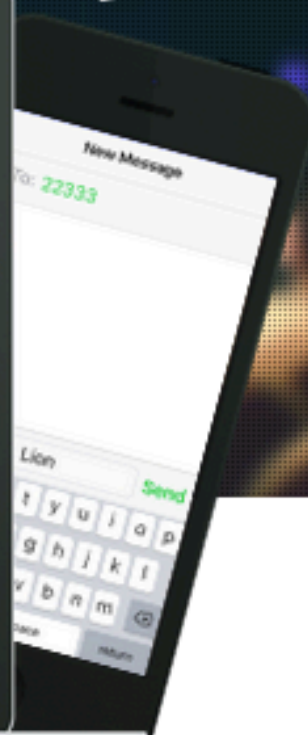
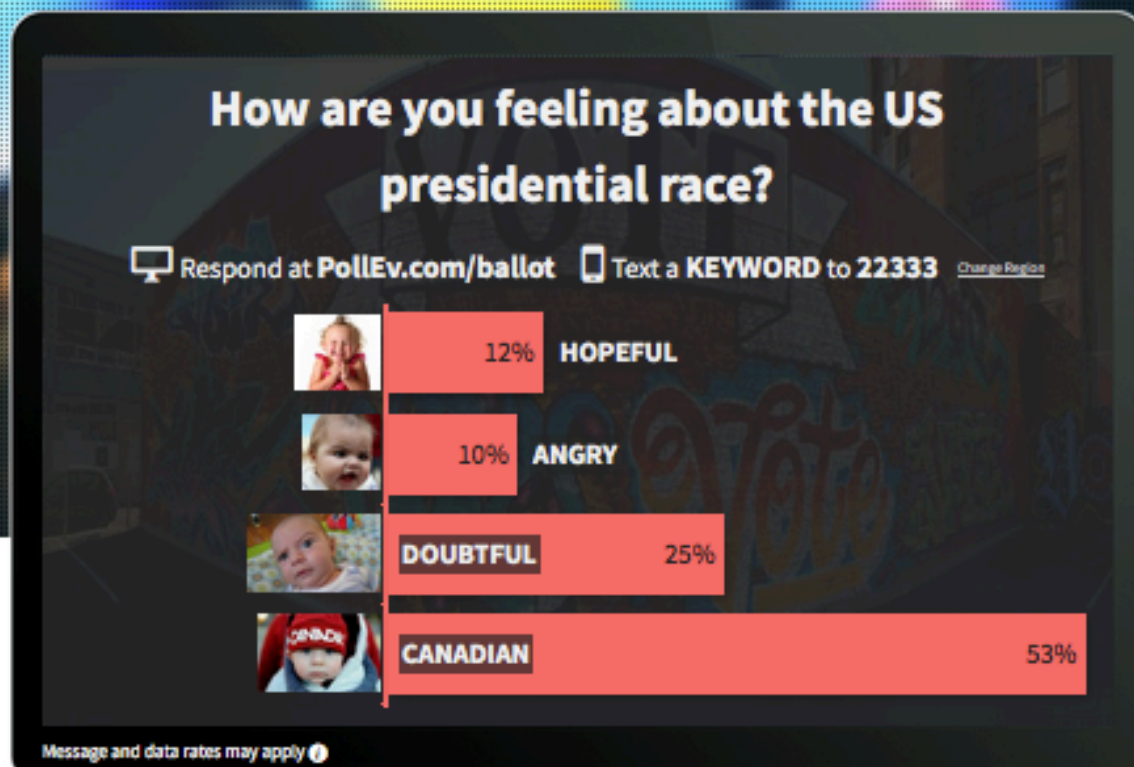
Poll Everywhere lets you engage your audience or class in real time

Create your first poll

Takes 30 seconds. No signup required

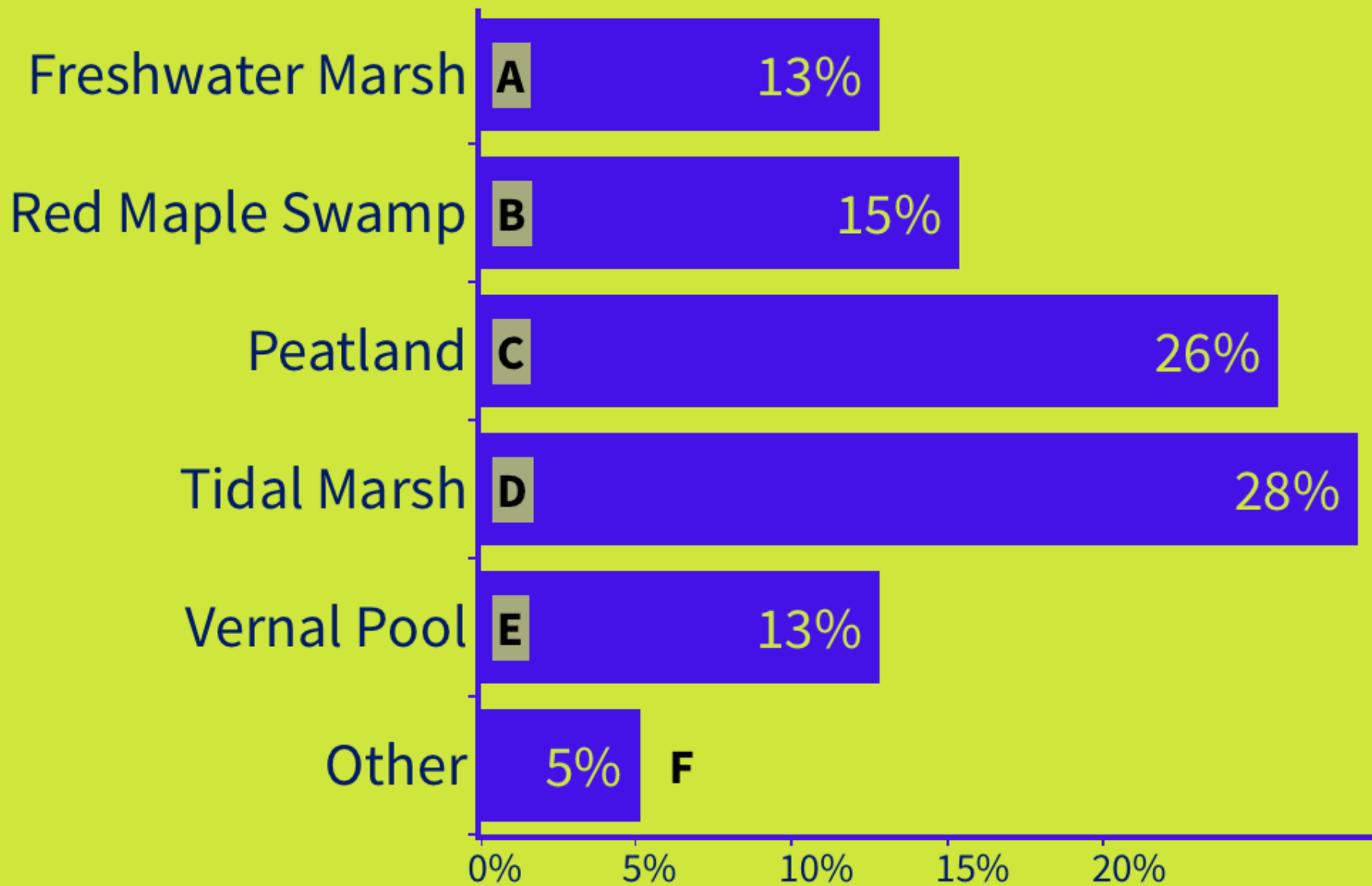
Watch our 2 min video

Use your phone to text a vote now!



What is your favorite Maine wetland type?

Respond at [PollEv.com/pammorgan030](https://www.poll Everywhere.com/pammorgan030) Text **PAMMORGAN030** to **37607** once to join, then **A, B, C, D, E...**



Maine EPSCoR

Experimental Program to Stimulate Competitive Research

Sustainability Solutions Initiative



Senator George J. Mitchell Center for Sustainability Solutions



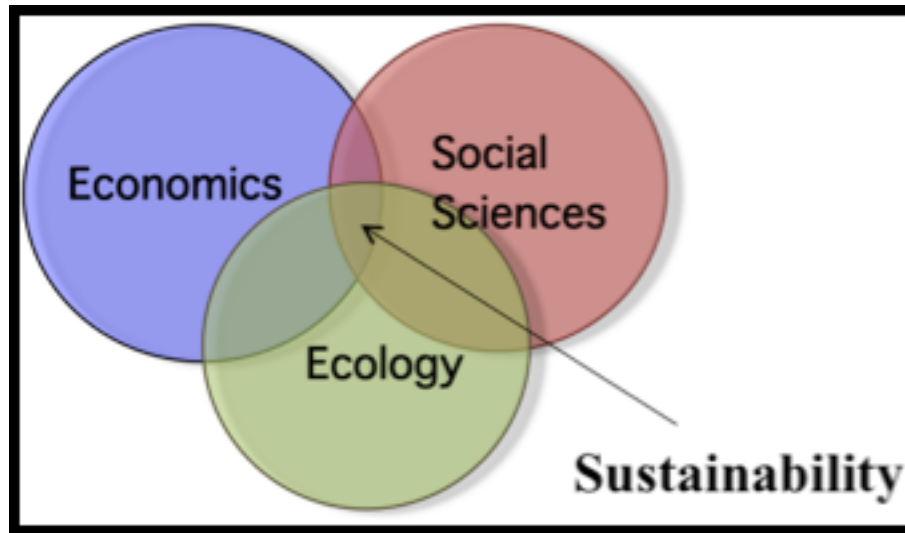
Sustainability Solutions Initiative

The Sustainability Solutions Initiative (SSI) is funded by a five-year, \$20 million National Science Foundation EPSCoR (Experimental Program to Stimulate Competitive Research) grant to ME EPSCoR at the University of Maine. The project's mission is to connect knowledge with action in ways that promote strong economic, vibrant communities and healthy ecosystems in and beyond Maine.

Senator George J. Mitchell
Center for Sustainability
Solutions Home

2016 Maine Sustainability &
Water Conference

Sustainability science



“...seeks to understand the fundamental character of interactions between nature and society and to encourage those interactions along more sustainable trajectories.”

A message for research scientists

“You must learn to live with **vagueness** and uncertainty, and make decisions with incomplete information and competing pressures.

You must also **learn to work with people outside your profession** who represent different value systems, hold perspectives that may be unfamiliar to you, and have the power to do things that you cannot do or cannot stop.”

- Meffe et al. 2002
*Ecosystem Management: Adaptive,
Community-Based Conservation*

Importance of place-based research

“Such an integrated, place-based science will require new research strategies and institutional innovations to enable them.”

- Kates et al. 2001. *Science*







Who are the stakeholders who care about and are responsible for the Saco River estuary?



Connecting UNE and the Community

Citizens of Biddeford
Citizens of Saco
Saco Planning Board
Saco Comprehensive Committee
Saco Conservation Commission
Biddeford Conservation Commission
Heart of Biddeford
Saco Valley Land Trust
Biddeford Open Space Committee
Biddeford Planning Board
Saco River Salmon Club
Saco River Coordinating Committee
Biddeford Pool Land Trust
Friends of Wood Island Lighthouse
Biddeford Pool Improvement Association
Biddeford Chamber of Commerce
Blandings Park Wildlife Sanctuary
Biddeford Environmental Board
Saco Coastal Waters Commission
UNE Waste Water Treatment Facility



What are your concerns?
What do you value?





Sustainability Science



Coastal Development

Sea Level Rise

Nitrogen inputs

Bacteria/E. coli

Estuarine Health

Invasive Species

Water
quality

???


What can science research contribute to the future of Maine wetlands?



Current wetland research

- Mapping, monitoring, assessment
 - Documenting wetland loss & change
- Wetland restoration/creation success
 - Assessing compensatory mitigation efforts
- Changes in wetland species diversity
- Effects of human impacts on wetlands
 - Development
 - Nutrient loading
 - Invasive species
 - Altered hydrology
- Ecosystem services and wetlands
- Climate change
 - Carbon budgets
 - Response to changes in hydrology, temperature
 - Effects of sea level rise
- Tipping points

What should Maine wetland research focus on?

 Poll is full and no longer accepting responses



What should be the focus of Maine wetland research?

Respond at [PollEv.com/pammorgan030](https://www.poll-ev.com/pammorgan030) Text **PAMMORGAN030** to **37607** once to join, then text your message

“Tipping points”

about 19 hours ago

“Habitatconnectivity”

about 19 hours ago

“Nutrient loading capacity vs disturbance and toxicity”

about 19 hours ago

“Prioritization, role of wetlands under climate change, planning for long term, landscape scale effects.”

about 19 hours ago

“Long term monitoring”

about 19 hours ago

“RestorationCreationSuccess”

about 19 hours ago

“Deforestation and the affect on wetland systems (spruce budworm, logging, etc)”

about 19 hours ago

“Restoration”

about 19 hours ago

“Pammorgan030”

about 19 hours ago

“Ecosystem services, forest industry impacts and wetlands/vps, climate change”

about 19 hours ago

“Climatechange”

about 19 hours ago

“Public perception of wetland values to society”

about 19 hours ago

“Effect of climate change on montane wetland ecosystems”

about 19 hours ago

“Volkswagen”

about 19 hours ago

“Public perception of wetland values to society”

about 19 hours ago

“Geographic differences in Maine wetlands”

about 19 hours ago

“Washing machines”

about 19 hours ago

“Old tires”

about 19 hours ago

“Ecosystem Tipping points”

about 19 hours ago

“Wetland migration monitoring”

about 19 hours ago

“Regulatory support of mitigation banking.”

about 19 hours ago



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