

To: The Off Shore Wind Port Advisory Group, Maine DOT and Maine Port Authority  
Re: **June 26th Final OSWPAG meeting**  
From Becky Layton Bartovics

I am writing to you personally. I am writing as a resident of Penobscot Bay, as a grandmother and as a member of a family whose income is dependent upon the health of this incredibly valuable embayment. I also write as a person committed to supporting efforts to address climate change.

I come from a long line of lawyers and activists concerned about the process of democracy. As such, I had fleeting hopes that this Advisory Group would actually delve into the important and perhaps difficult processes of evaluating the potential sites for Off Shore Wind development. Unfortunately it became apparent even before the Freedom of Information Act revealed the truth, that the Department of Transportation along with the Mills Administration were offering this process merely as window dressing to try to stave off citizen activism against developing Sears Island.

There has been no bona fide information about either of the other potential locations. No robust analysis of soil or costs has been presented. No actual economic analysis other than the 50 to minus 30% accuracy of the original Moffat and Nichols report has been presented. There has been zero analysis of the carbon/ GHG footprint of the project. The very suggestion of barging back and forth across the harbor is a prime example. This Advisory Group has been provided little information about anything other than explorations on Sears Island. The economic advantage provided by developing Eastport, for instance, to that whole depressed region is not examined. Weighing the costs, when the Federal Government's IRA funds are openly available begs the question of whether any serious analysis has been addressed.

One wonders how much wasted taxpayer money has been spent on spurious consultants who don't actually provide real facts but only focus on one goal- to build on Sears Island. And, parenthetically, how much time and money other entities have spent in a process that was already determined from the outset. Looking at materials presented, either the Moffat and Nichols report or the recent Final AA Matrix, the lack of actual comparable information is stunning. Much has been omitted or ignored. For instance, there **still** is no information included about the cost of mitigating the wetlands on Sears Island. The dredge numbers were known to be significantly overstated on the Mack Point side of the equation in the first M&N report- but we have yet to see the updated \$1.5 million in-depth analysis from them. For instance, suggesting that there are monarch butterflies on Mack Point but none on Sears Island is patently ridiculous, and begs the question as to whether the researcher knows anything about them at all. Sears Island has a sand beach for which it is named in Penobscot (Wasumkik). That beach is omitted in the matrix. Normal scientific analyses compare similar information to the various scenarios. That norm is not followed here. And therefore, it appears that there was no interest in providing adequate robust analysis.

Sears Island is the largest undeveloped island in Penobscot Bay, and likely the whole coast of Maine. Its wetlands provide resources that feed the bay- the largest embayment on the Coast of Maine. Because of the proximity of the Penobscot River, the configurations of the islands and the gyres that exist in Penobscot Bay waters, this bay provides resources that are a significant part of Maine's Gross Annual Income. Eelgrass has been present surrounding Sears Island over millennia and is the nursery for many species that provide for our fisheries. Its health is essential for future aquatic species. It provides carbon capture as do the forested wetlands that feed it.

In fact, it is completely ironic that the State of Maine, that professes to be advanced in approaching responses to climate change, would not see the perfect metaphor of building a renewable energy site on a previous fossil fuel tank farm . The State touts “Maine Won’t Wait” but ignores the fact that preservation of coastal wetlands and forested wetlands is very high on the list of potential strategies to address advancing climatic weather impacts. Having lost 60 to 80% of insect and bird species, the value of Sears Island as a sanctuary for them and for the people who visit it gives it even greater value- one could put a dollar value on it if one cared to.

With the woeful lack of real science on the part of the Maine DOT to evaluate Mack Point or Eastport as alternatives, and the knowledge that from the outset the DOT and Administration were looking to develop Sears Island, citizens are left frustrated. Maine DOT, Maine Port Authority and the OSWPAG have not built the kind of trust that could have engendered support. I am sorry to say that this process has been a great disappointment. Developing Off Shore Wind is likely necessary to electrify the economy and remove the degradation caused by fossil fuel use. Siting is key.

I have not included references to my statements because I know you will have ample references in other material provided by members of this Advisory Group. However, if you would like them from me, I will happily provide them.

Respectfully Submitted,

Becky Layton Bartovics

[Redacted signature block]

**From:** [REDACTED]  
**To:** [REDACTED]  
**Subject:** Public Comment on OSWP FW: MaineDOT Contact Form Submission: project  
**Date:** Tuesday, June 27, 2023 2:50:31 PM

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[EXTERNAL EMAIL]: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Afternoon,

Below is a comment for OSWP that came into our general communications email.

Thank you,

Jamie M. Sienko  
Administrative Assistant for  
Commissioner, Bruce A. Van Note  
Deputy Commissioner, Nina Fisher  
24 Child Street, #16 SHS  
Augusta, ME 04333-0016  
[REDACTED]

-----Original Message-----

**From:** MaineDOT, Communications [REDACTED]  
**Sent:** Tuesday, June 27, 2023 12:09 PM  
**To:** Sienko, Jamie M [REDACTED]  
**Subject:** FW: MaineDOT Contact Form Submission: project

-----Original Message-----

**From:** [REDACTED]  
**Sent:** Sunday, June 25, 2023 11:48 PM  
**To:** MaineDOT, Communications [REDACTED]  
**Subject:** MaineDOT Contact Form Submission: project

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The following message was submitted from the MaineDOT contact form.

**Date:** Sunday, 25-Jun-2023 18:35:22 EDT  
**Name:** Celeste Carey  
**Phone:** [REDACTED]  
**Email:** [REDACTED]

**Topic:** project

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**Comments:**

Maine DOT OSWPAG Meeting Comments for June 26, 2023 by Celeste Carey, Newcastle

Maine's project for offshore wind energy is exciting and needed. It is a very practical step in Maine's efforts to replace expensive, environmentally damaging, fossil fuel generated electric energy with a non-carbon alternative. My husband and I have followed Dr. Dagher's floating turbine work at the University of Maine - supported with federal grants - for some time now. We showed up at the legislature where my husband testified in support of his proposed research project off Monhegan Island. After that hearing, Dr. Dagher effusively thanked him for his testimony.

The order of business today is helping to select a port for marshalling scaled-up floating wind turbines. This port will need to allow for marshalling material, fabricating floating platforms, constructing deployment-ready assemblies, and loading it all on an adjacent semi-submersible barge for delivery. The June 12, 2023 Moffitt and Nichol OSW Port Alternatives Drawings lays out a feasible Mack Point design capable of constructing OSW turbines as large as 20 MW with blades up to about 420' long. Given the Brownfield area of Mack Point, site development work could be subsidized with federal remediation funding. Choosing Mack Point would, also, leave untouched natural ecosystems on Sears Island and permit its public use as we have been accustomed.

Yes, we have a site on Sears Island we once set aside for possible transportation usage. That does not mean this project is a good fit. Sears Island is visited by many folks, including tourists. On the trails, I have met runners in training on the jetty road, hikers, photographers, dog walkers, picnickers, birders, fishermen, families, kids from colleges, wheelchair users on the shore, and, I believe, Indigenous individuals. I know the island matters to hunters, too, and is used for educational events. There is such a sense of community about this island. It is so peaceful - one can lose their cares. I don't know how this island would be as attractive a spot to visit with manufacturing and assembling going on nearby. It will be a fairly loud, constantly used, lit for safety site, you told us. Care to take a nature walk near such a site?

I see something missing in the analysis you have provided so far. While you have been given a report of no eelgrass at the Sears Island site, that is not the end of story. There has and likely still is coastal eelgrass around the rest of the island. Eelgrass waxes and wanes. It is true that the island's coastal acreage measurements of eelgrass has lessened. (New DMR data should be available next year, including green lidar data by NOAA.) Still, we now know to mitigate that loss and continue to learn more about restoring our coastal ecology, as our Maine Climate Council demands. If we are taking care of business, we are taking care to not create coastal dead zones. Did you ask your environmental expert consultants what they would recommend to improve the eelgrass situation or did you just ask about its current state? Did you know that scientists are looking at seeding more southern species of eelgrass further north where the waters have gone warmer? Did you consider how a baykeeper could help keep tabs on a more commercially utilized bay? Because of efforts by Friends of Casco Bay, Portland is cleaning its waters. The baykeepers are helping to get the excessive nitrogen, nitrogen generated by human activities, reduced.

We have to consider what a Sears Island site would mean for the bird and insect population. The whole planet is losing about half of some of its birds, we are told. Insects have been lost, too. We have to worry about increasing numbers of endangered or threatened species. Sears Island matters here in the scheme of all things and in the ecologies of our State.

You will soon start on a remarkable engineering endeavor. Do it well.

Thank you!

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If required, please respond as soon as possible.

Captain David Gelinis

Closing Statement to the Maine Floating Offshore Wind Port Advisory Group

June 26, 2023

As we come to the conclusion of over a year's worth of meetings, one fact of the offshore wind industry resonates in recent stories involving the financial reality for successful offshore wind energy development: Costs Matter. Regardless of government incentives and public support, the ability to successfully construct, deploy, and service floating offshore wind modules will ultimately depend upon an economically sustainable model. Already, in the infancy of fixed-bottom offshore wind generation, two separate developers in Massachusetts are seeking to void contracts comprising three quarters of that state's projected offshore wind capacity due to financial concerns.

Last Spring, when we held our first meeting, the cost estimate to construct a floating offshore wind Port on Sears Island was quoted as \$184 million dollars; now that figure is given as \$479 million. For Mack Point, the early construction estimate for Phase II was \$285 million. Now that figure is projected to cost upwards of nearly a Billion dollars. For each of these locations, there is only one direction which these construction costs are going to go, and we all know which direction that is.

While both locations will be subject to cost increases, Mack Point presents the greatest opportunity for cost overruns simply because it possess' more variables to development than Sears Island does. How much will the railroad want for their land? Can the rail be reconfigured to still serve the expectations of the State's \$57 million dollar investment in the Northern Maine Regional Railway Project? Will rail-generated cargo bound to and from Searsport be diverted to a Canadian port? Will dust from road salt, iron oxide, and petroleum coke piles contaminate multi-million-dollar wind generator bearings and electrical components? What becomes of the existing tanks that would need to be relocated? CAN they be relocated? How long could permitting take, and what becomes of those industries that rely on those tanks in the interim? Would the liquid dock, the single most important piece of energy infrastructure meeting the needs of mid- Maine, need to be relocated? How much time and cost would that entail, while keeping the existing dock in service? And what WILL the final lease cost be?

Another significant consideration for Mack Point, and Mack Point ONLY, is the need for dredging. There is a long and well-documented history of opposition to dredging in Searsport Harbor from various environmental groups, as well as lobster fishermen. In response to a 2013 Navigation Improvement Dredging Project, the Sierra Club stated that “***Disturbing buried legacy mercury from HoltraChem through the proposed dredging in Searsport could result in contamination of the entire Penobscot Bay food web, creating an environmental, economic and human crisis in this region and the State of Maine.***” Specific Ecological Threats of the Searsport Dredging Project cited by the Islesboro Island Trust included “***Sediment plumes result(ing) from the dredging are expected to extend between 1500 feet and one mile of the dredging and disposal areas. Elevated turbidity associated with the sediment plumes threatens critical marine spawning and feeding habitat.***”

While some conservation advocates have had a change of heart regarding the ills of Searsport Harbor dredging, rest assured that other groups will not show such flexibility in their beliefs. In 2019, the attorney for the Maine Lobstering Union (among others), testified in favor of LD1287, “***An Act to Protect the Penobscot River and Penobscot Bay from Mercury Contamination***”. The eight-page testimony was unequivocal in its opposition to dredging in Searsport Harbor and other locations in upper Penobscot Bay, stating that “***Dredging (hydraulic or mechanical) always involves the resuspension, or remobilization of sediment. There is no way to avoid this with existing dredging technology. All dredging-even of perfectly clean sediment- causes harm to lobsters and damages the lobster catch for years after a dredge.***” Support for floating offshore wind from the Maine lobstering community is about as rare as catching a blue lobster. Why would the State risk further alienating this constituency whose livelihood is already facing so many challenges? Foisting a 500,000 cubic yard dredge on the Penobscot Bay lobstering community, when the option exists to avoid dredging entirely, would be like rubbing salt in the wounds of these mariners.

I am grateful for the opportunity to share with this group some of the observations I have gleaned over thirty years of ship-handling in the Port of Searsport. I appreciate the Administrations’ exhaustive efforts in recording the myriad suggestions they have received over the course of these meetings, and incorporating these ideas into their constantly evolving designs. Of the designs for a Floating Offshore Wind Port Facility in Searsport, I am in support of the only dredge-free option.

Governor Mills has a generational opportunity before her. She can unleash the considerable talent and work ethic that this State’s workforce possesses and put Maine on the path to becoming a leader in a burgeoning new maritime endeavor.

And, equally as important, she can do this by finally delivering on a promise made to voters and taxpayers of this State fourteen years ago; the promise of a truly “Joint Use” for Sears Island.

Respectfully,

David Gelinas

[REDACTED]

[REDACTED]

[REDACTED]

**From:** [REDACTED]  
**To:** [REDACTED]  
**Subject:** Fwd: Final OSWPAG meeting comments  
**Date:** Tuesday, June 27, 2023 8:10:59 AM

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----- Forwarded message -----

**From:** David Italiaander [REDACTED]  
**Date:** Tue, Jun 27, 2023 at 7:22 AM  
**Subject:** Final OSWPAG meeting comments  
**To:** Kay Rand [REDACTED]

Hi Kay,

Below please the text of my comments to MDOT delivered at yesterday's meeting. I'm afraid I became a bit breathless during my oration as 6th grade stage fright made a surprise reappearance. I hope the record will clearly reflect my sentiments.

“ Comments to OSWPAG

We know, and by we I mean the friends and allies of Sears Island, know that it was always all about Sears Island.

We know because we have the receipts thanks to Maine's Freedom of Access law.

We know it was always Sears Island.

We know from your correspondence with Moffatt & Nichol about their 2020 feasibility study that MaineDOT preferred Sears Island.

We know your original specifications to Moffatt and Nichol for the design and permitting of a marshaling port in Searsport was ON SEARS ISLAND.

We know you engaged consultants for “Stakeholder Engagement” to build support for a wind port on Sears Island.

Because you needed to have at least the appearance of alternative locations, you added the GAC parcel and the Sprague put parcel, both fantastical, and Mack Point to the mix. You then added moribund Eastport, an impossible port on-a-hill.

Thus, it was no surprise that the Moffat and Nichol initial design report heavily favored the Sears Island location.

It was always Sears Island.

Which brings us here, to the final meeting of the Off Shore Wind Port Advisory Group.

This august body is a faint and feckless echo of the former Joint Use Planning Committee despite having many of the same stakeholders on board. This was obviously by design as there is no mechanism to reach a consensus nor would any consensus have any weight or influence on your location decision, by design.

I've come to know and admire many of the members of this group, so I am saddened and



frustrated by this year long charade. Because that is what this was. This was all about creating a paper trail to help you obtain NEPA permitting for Sears Island and not Mack Point.

We know from your own timeline that you have already begun or are about to start the process of obtaining NEPA permits to develop the Sears Island site.

Now you should know that the opposition to your siting this project on Sears Island is both broad and deep. These forces have united and fought against your overreach on Sears Island in the past and you have inspired them again with this threat.

They, We, and for clarity's sake I am not authorized to speak for any group or groups, but I have the knowledge and confidence to predict the we will fight you in every venue, over every permit, we will attend every public meeting and defend Sears Island. We will fight you in every court we can get standing, we will organize, and demonstrate and rally, we will pressure our legislators and the Governor, and we will make Sears Island so controversial a subject as to discourage federal grants or private investment from developers like Orsted or RWE.

We may not win. But it will take years to know the eventual outcome. Years, I submit, you do not have.

Because we also know that in order to accomplish your goal, no matter the site, you need to raise the better part of half a billion dollars, a challenge under the best of circumstances.

I've attended most of these meetings in person. I was a stand-in during the group's Eastport facility visit and I helped lead the the group on its tour of Sears Island and joined them on the tour of Mack Point.

My background is commercial. Fifty years of trading, shipping, ports and terminals informs me. I know that 'tho Searsport is Maine's 2nd largest port, it ranks only 72nd nationally in cargo tonnage, yet it is world class in its management and Sprague is the perfect partner to help in the building and servicing of a wind port terminal.

My experience also informs my knowledge of how hard it will be for you to raise money to develop Sears Island, a visibly and vocally challenged location. Especially given the small number of potential partners in floating off shore wind development and the extreme challenges the OSW industry writ large is currently facing due to rising costs and supply chain bottlenecks leaving developers demanding renegotiated contracts under threat of abandoning their projects.

We now know that the costs of developing either site are virtually the same, despite your attempts to conflate capital and operating expenses.

We also know that it's not too late to make the right choice and improve your chances of success. Choose Mack Point and you will have a united community, a united region even a united state supporting the development of a wind port at Mack Point.

That has to be the path of least resistance to success.

Thank you.

David Italiaander  
Searsport “

Thank you Kay.  
Dave

OSWPAG Comments: May 26, 2023

Respectfully submitted by Rolf Olsen

Vice President, Friends of Sears Island and Searsport Resident

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Most of my comments and observations will be about the process this group is now concluding. Others – and especially Steve Miller – are offering detailed and substantiated observations on many of the technical aspects of this offshore wind port siting effort that I’m not capable of crafting.

When I became first involved as a member of OSWPAG, I felt open to learning about and from all perspectives. I arrived with the Friends of Sears Island board of directors’ official statement that Mack Point should be chosen over Sears Island if a wind port will be developed in Penobscot Bay. Our organization is a very small, volunteer-led nonprofit, with an environmental focus, to be sure, but we are as interested and concerned about global warming as anyone else. Most of us are parents and grandparents, and we are mindful of the role our generation played in creating the terrible situation we are trying to repair or at least remediate. We applaud all efforts to develop renewable sources of energy that can ultimately eliminate our use of fossil fuels.

From the start, during our initial discussion about the stakeholder engagement process, I enjoyed meeting Kay Rand, and Adam Archual from Gannett Fleming. I’ve always found Matt Burns to be extremely personable and very responsive. I learned that decades ago, MaineDOT commissioner Bruce Van Note participated in surveying Sears Island as an early project in his tenure with the department. He’s also very engaging and interesting to talk with. Virtually everyone is likeable and intelligent, and that ought to set the stage for trusting in an open and honest discussion of issues and solutions.

Sadly, early on, I became cynical. The feeling arose in me that there have been several thumbs – and even larger, heavier body parts – on the scales since before the beginning of this stakeholder engagement process, in favor of developing the wind port on Sears Island. Yet, from the beginning of our discussions in May 2022, Bruce and others have stated clearly that their process has followed the 2007 Consensus Agreement that requires Mack Point to be given preference over any development on Sears Island.

If you took the time to read Steve Miller’s extensive and very clear document, sent to all members of this group, its leaders and facilitators, you might have noticed that in March 2021, a DOT pre-decisional working paper states that the focus would be on the “primary site, Sears Island.” Also, in September 2021, Kay Rand’s “Stakeholder Plan” stated: “GOAL: To develop and execute a stakeholder outreach strategy that would enable Governor Mills to announce the

results of the M & N study, announce a commitment to pursue development of Sears Island as the Renewable Energy Port of the Northeast, and announce a statewide port strategy spanning the entire coast to provide auxiliary roles to position Maine as a national leader in the Offshore Wind Industry.” These two documents were created well before Friends of Sears Island and most other stakeholders were informed and brought into the process.

I say “most” because it’s become clear that some of the voices on this committee appear to be imbued with more significance than mine. Early on, during my own due diligence, I read an article about Dr. Dagher that introduced him by stating, in part, “He holds more than 80 patents, most on technologies related to various aspects of floating wind power, including methods of construction, hull designs, and buoys.” I asked Kay if we could have an open discussion at our next meeting of possible conflict of interest. After all, Dr. Dagher is one of the principal design engineers on the floating turbine base that is expected to be implemented here in Maine, at least for the “test array.” First, I was told that MaineDOT doesn’t consider it an issue, but I persisted. I was next told that the patents are held by the University of Maine, not Dr. Dagher personally. Again, I cited the article and then I was told that UM holds the patents, and Dr. Dagher and others involved might stand to benefit only after the University took its largest share of royalties off the top. Kay told me that Dr. Dagher would make a statement at the next meeting of this group. He left early from that next meeting, so no discussion was held. Ultimately Jake Ward, the University’s vice president who oversees patents, among other things, addressed our group via Zoom to explain how it works. Why did it take so long to get to what might be a simple answer, even if it does still include at least the appearance of, if not actual conflict of interest? Is it not a matter of course in our state government to avoid the appearance of conflict of interest? If not, it should be.

Let me add here that following the second meeting, well before the issue of conflict of interest arose, I approached Dr. Dagher just to introduce myself and chat for a few minutes before heading home. In our brief conversation, he told me in no uncertain terms, that Mack Point is not a viable option and only Sears Island could meet the needs of this wind port. Clearly his decision was made very early on, and I can imagine that I was not the only person he shared it with. He is a noted expert, so his opinion is carefully considered.

From the beginning, we were promised a comprehensive stakeholder engagement process. On the web page for this group, it states, “This OSWPAG process will provide the structure for a robust stakeholder and public communication process with respect to wind port development.” In my experience, it has not approached that aspiration, especially the part about “public communication.” In February, I asked Bruce, Matt, and Kay to please hold a public communication meeting in Searsport, the community most to be directly affected by the proposed wind port. I had been surprised by the lack of public awareness in the community of the port plan. Some people thought the plan was to install wind turbines on Sears Island. Only a

few understood that there was a plan that might result in a new port, but no one knew that a port with a footprint larger than Bath Iron Works, might be built in our town within five years. This port would affect life here for residents and businesses, no matter if it were built on Sears Island or on Mack Point. My request was denied, with the message that it was too early in the process. I also went to the Searsport Select Board asking them to convene a meeting and invite DOT to participate. There I was told that if MaineDOT presented a meeting, they would gladly attend and learn.

Another dead end. But meanwhile, on Facebook and other social media, MaineDOT is paying to post information about road and bridge projects, and links to surveys asking for public input. But nothing regarding what might be one of its largest and arguably most important development projects in a long time.

So, the ad hoc group we call CROWS – Citizens for Responsible Offshore Wind Port Siting – took matters into our own hands. We planned our own public information meeting for the people of Searsport to be held on May 20 in the Searsport Community Building. A little more than a month in advance, we invited Matt Burns, Bruce Van Note, Kay Rand and others to make a presentation of the plans as they stood at that time, and they could hear comments and respond to questions. After waiting more than a week for a reply, I asked again and was told that Matt Burns had a previously planned family commitment out of state, and that is perfectly acceptable. But soon after we learned that there is no one at Maine Port Authority or MaineDOT who could speak about the project, that Matt is the sole spokesperson. Instead, they would send a video and try to keep to the offered 15-minute time slot and get it to us quickly so we could review it. But the video we received was 27 minutes long and we received it on May 18<sup>th</sup>. After I watched the video, I determined that the last approximately 16 minutes focused on the port itself and would be useful. The first part was mostly about the larger wind energy effort, so not so locally pertinent.

On May 20, we had more than 170 people in attendance, a reflection of how curious and interested people are in this proposed development. While it's true that most were probably not in favor of using Sears Island, there were certainly a few voices that didn't care if the island would be developed for this port. We heard dozens of comments and questions, and it would have been great if someone from the State could have been there to both hear and respond. In Matt's video presentation, he invited comments and questions directly to him, and he even provided his email address and a promise to respond within a few weeks. Since the meeting I've heard anecdotally from two people who sent questions or comments but have not received a response.

At best, some of the statements made by MaineDOT, Maine Port Authority, and others leading this project seem disingenuous. At worst, they could be actively dishonest.

That's probably more than enough about my frustration and disillusionment with the process. Now I'll step back to offer a hopefully briefer assessment of where I see things standing, in very broad strokes.

Based on the information we have most recently received, including the matrix, and accompanying memo, it looks to me that Mack Point and Sears Island are essentially comparable, in terms of both space available and estimated cost. I looked to see if I could learn how long it would take to develop the port at each site, but I couldn't find that information. That seems important because, as I learned in finance class years ago, time has value.

Instead of the initially proposed multi-stage development, we are leapfrogging to full commercial production capability that requires a much larger and more extensive port facility. Yet the floating platforms that will be built there are experimental. Let me repeat: Experimental. The technology has never been tested at anything near full scale in the open ocean. There's also the hope, and I would even say the expectation, that Maine can market these floating turbines to other states, and that the demand would justify investing half a billion dollars in building this new port.

What if Sears Island is chosen to be developed, and the plan makes it through all permitting and other hurdles? What if then the platform design should fail for some unanticipated reason, in real life conditions? What if we invest taxpayer and investor dollars in developing the port and the market for this new design doesn't materialize? We will have an albatross around our necks, to use a nautical metaphor, an enormous flat area by the ocean, with no new cargo stream that I'm aware of. I suppose on 100 acres we could set up dozens and dozens of pickleball courts to hold the world championships in a wonderful seaside setting. Or something like that.

Returning to the real world, here are the simple facts, as I understand them:

- There is enough land on Mack Point.
- Sprague welcomes the development.
- A brownfield would be repurposed to develop a new source of renewable energy.
- 75 or more acres of forest that already sequester carbon would be preserved.
- As Steve Miller pointed out, "The Intergovernmental Panel on Climate Change 2022 report makes the case that conservation of fully functioning ecosystems provides a highly effective climate change response."
- Development on Sears Island would, I believe, provoke significant public outcry and protest, and probably legal challenges that would prolong the process.
- Development on Mack Point would be most likely accepted by the community, pending more information about the fiscal and other impacts on the Town of Searsport's tax base, and other considerations.

If a new port is required in Penobscot Bay, build it on Mack Point and not on Sears Island, and get this renewable source of electricity flowing into Maine homes, and get these anticipated paychecks from great new jobs online as quickly as possible.

And while you're at it, please do what you can to restore trust in our state bureaucracy.

Thank you.

## **Sierra Club Maine Comments to Offshore Wind Port Advisory Group for June 26, 2023 Meeting**

I appreciate the opportunity to comment on behalf of Sierra Club Maine. I have come to this space with an open mind, willing to learn and be challenged. The time, commitment, passion, and advice/questions from my colleagues have been generative and inspiring. I'm grateful to have a seat at the table with so many experienced stakeholders. Yet, my Sierra Club Team and I have some concerns about the process, and there is still quite a bit of information unknown to evaluate.

As Mainers, Americans, and people on earth, we need to act systemically and swiftly to address our climate crisis. As we make extremely important, difficult decisions that will impact future generations, we must get this right. Siting considerations for renewable energy will be one of the most contentious tasks of our time, requiring thoughtful planning and community engagement. We will need new infrastructure to offset fossil fuel infrastructure plus more as we electrify everything.

Thus, we need to adjust our mentality to infrastructure for our renewable energy future. It will require some visual impacts to the landscape, some construction noise, etc. in some places. But, much can and should be avoided or mitigated. We do not need to concede intact habitat or critical recreational/cultural areas to future infrastructure, especially if viable, practicable alternatives exist.<sup>1</sup>

While Sierra Club strongly [supports the development of substantial wind resources for electricity generation](#), we have also been [staunch advocates to protect and preserve Sears Island](#). As we build a robust and just renewable energy economy, we will face difficult choices that force us to balance speed, equity and long-term impacts. We must also minimize effects on wildlife and ecosystems to the greatest extent possible to avoid accelerating the ongoing biodiversity crisis. Environmentally responsible offshore wind energy projects can spur economic development, create jobs in coastal communities, improve energy security, and dramatically cut pollution. We believe the best precedent for this transition is to construct the new wind port on the industrial site, Mack Point, while fully utilizing all federal funds currently available to offset the financial costs.

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<sup>1</sup> Climate resilient development is enabled when governments, civil society and the private sector make inclusive development choices that prioritize risk reduction, equity and justice, and when decision-making processes, finance and actions are integrated across governance levels, sectors, and timeframes (very high confidence).

[https://www.google.com/url?q=https://report.ipcc.ch/ar6syr/pdf/IPCC\\_AR6\\_SYR\\_SPM.pdf&sa=D&source=docs&ust=1687711092835033&usq=AOvVaw1j6ffOPvqhMlvCy8Kp\\_6-o](https://www.google.com/url?q=https://report.ipcc.ch/ar6syr/pdf/IPCC_AR6_SYR_SPM.pdf&sa=D&source=docs&ust=1687711092835033&usq=AOvVaw1j6ffOPvqhMlvCy8Kp_6-o)



We want to remind folks of Sierra Club's involvement in preserving Sears Island, alongside many other community activists over the years. See more here:

<https://www.sierraclub.org/maine/blog/2023/02/updates-sears-island>

Maine's offshore wind development must follow the policy outlined by the Maine Climate Council and develop renewable energy with minimal disruption to the natural systems. Part of the [plan](#) focuses on conservation and enhancement of coastal ecosystems for adaptation and mitigation in keeping with conserving 30 percent of lands and coastal waters by the year 2030, or "30 X 30." A haven for migratory birds and waterfowl, Sears Island is surrounded by eelgrass beds, essential habitat for juvenile lobster, flounder, crab, cod etc. Only 15 percent of coastal ecosystems [remain nationwide](#). They are essential carbon sinks and provide important sea level rise mitigation ecosystems as highlighted by [Maine Won't Wait](#).

By comparison, Mack Point is already developed. It has an essential rail line, shuttered oil tanks, and adjacent available acreage on site and along the rail spur at the former GAC plant. It also has a very willing landowner. As Maine continues to experience more development pressure, more use of natural resources, and an intensifying climate crisis, it is incumbent upon us to value all undeveloped land and protect intact habitats whenever possible, even if they are owned by MDOT.

The [2007 Sears Island Planning Initiative Consensus Agreement](#) and the subsequent [executive order in 2009](#), stated that 'Mack Point shall be given preference as an alternative port to development on Sears Island.' Considering it is one thing, but preference means "the act, fact, or principle of giving advantages to some over others." Environmental law requires that the Least Environmentally Damaging Practicable Alternative does not prioritize financial cost. Even if Mack Point were more expensive, we should try to make it work.<sup>2</sup> Particularly, we suspect there are federal funds available that might make the cost issue mute. We need to fully vet all potential mitigation, funding opportunities, and more to fully evaluate Mack Point as the preferred alternative.

Even though I have had an open mind, I have been shocked and very concerned about the revelations contrary to existing state policy of "preference given to Mack Point". I refer to the statement from Islesboro Islands Trust that uncovered through FOIA requests that MDOT held to choosing Sears Island for port development while presenting an unbiased analysis process to the public. While doing one thing (making

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<sup>2</sup> There is of course a line of what is feasible, even in relation to the consensus agreement, but the availability of federal funds should allow for a more even weight for monetary cost. Additionally, the cost benefit analysis formula is currently being rewritten at the federal level that could more accurately reflect loss of habitat/lands. <https://www.whitehouse.gov/wp-content/uploads/2023/04/DraftCircularA-4.pdf>

an internal case for Sears Island), MDOT seemed to have done another in giving an illusion of an impartial analysis of port possibilities to the public.

The [webpage for the OSWPAG](#) says this: “This OSWPAG process will provide the structure for a robust stakeholder and public communication process with respect to wind port development.”

The [minutes of the 1st OSWPAG meeting on 5/26/2022](#) say this under Meeting Takeaways:

“2. No port siting decisions have been made and Maine fully acknowledges the need to undertake a rigorous alternatives analysis leading to the identification of a preferred location that has the least adverse impact to the environment.”

and, under Meeting Notes:

“Dan Burgess, Director of the Governor’s Energy Office...stated that no port siting decisions have been made and Maine fully acknowledges the need to undertake an alternatives analysis and agree to a Least Environmentally Damaging Practicable Alternative (LEDPA).”

In terms of public engagement, we are unsatisfied. The public facing website for our advisory group says it will provide a structure for a “public communication process.” Although there is no real statutory issue with the way MDOT has involved the public, some see it as a breach of public trust. We acknowledge robust public participation is challenging, but it should be strived for, especially around this type of decision with decades of history. Specifically, we think there should have been at least one public education/feedback meeting or charette in the potential impacted communities. The folks in the communities could have helped give more advice to MDOT prior to a decision being made. Specifically, for Searsport, local residents had to self organize a public meeting to inform and receive feedback from the public. Also, this has been stated at previous meetings, but we still believe there could have been (and should be) more outreach to the Tribes, on whose ancestral lands we are discussing. Their participation and knowledge is necessary for adequately analyzing alternatives. Last, we had no local input on our advisory group from Eastport– there should have been folks from all areas considered.

### **Outstanding Questions to be Addressed Before a Decision is Made**

To fully evaluate cost implications, MDOT needs to incorporate federal funding opportunities for port development. We and others on this advisory group have forwarded various grant/funding mechanisms for brownfield remediation, port development, and more through the Bipartisan Infrastructure Act and the Inflation Reduction Act. How much could the state be awarded from the federal government to cover the costs of Mack Point? There are billions of dollars available for various aspects of port development.<sup>3</sup> We are told they can't apply for funds until a decision is made, but MDOT could talk with the federal government and estimate how much could potentially be awarded. **We request that MDOT fully vet all funding opportunities and submit that analysis to this group before presenting their port choice.**

Why does the matrix show no environmental remediation on Sears Island? Is this because it's not a brownfield? Is remediation also supposed to incorporate mitigation for wetland losses? Either way, there needs to be more mention of eelgrass impacts and potential mitigation. The state needs to provide whatever survey DMR conducted that showed no eelgrass present. No eelgrass would be a very significant finding, especially due to how eelgrass impacted past development proposals. Is MDOT suggesting that if there is no eelgrass present no mitigation needs to occur? If there is no eelgrass currently present, it is most likely due to human behavior.<sup>45</sup> It was recently here, and even if there is none present on Sears Island right now, that does not mean development can occur without mitigation. At the very least, we should have to restore as much as possible.

More specifically, there needs to be more information about the impacts on aquatic organisms. Just looking at the eelgrass bed at the 17-acre pier location off of Sears Island is not adequate. Eelgrass in adjacent waters along the shore will be seriously impacted by turbidity in the water column just in the process of building the pier on Sears Island. As is commonly known, eelgrass provides essential habitat for aquatic species<sup>6</sup>; and Sears Island is an aquatic hatchery for the entire Penobscot Bay. Ignoring that in any impact analysis is likely to affect many more people and species than taking

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<https://www.maritime.dot.gov/sites/marad.dot.gov/files/2023-02/FY%202023%20PIDP%20NOFO%20final.pdf>

<sup>4</sup>Human behavior includes excess nitrogen from wastewater, stormwater, and air pollution which, in turn, creates excess algal growth that harms eelgrass beds. Data of collected water samples in Portland Harbor in 2016 and compared to 2022 Nab data in Portland Harbor, for instance, is helping to refine nitrogen discharge limits in Clean Water Act permits and inform the Maine Department of Environmental Protection (DEP) in developing nitrogen criteria for Casco Bay. See:

<https://www.cascobay.org/nab-data-suggest-land-based-sources-contribute-to-nitrogen-pollution/>

5

<https://www.mainepublic.org/climate/2023-03-23/casco-bay-eelgrass-dropped-by-half-in-four-years-report-finds>

<sup>6</sup> <https://www.fisheries.noaa.gov/feature-story/importance-eelgrass>

an already developed site at Mack Point and continuing to concentrate industrial development there. Ecosystem services of undeveloped, diverse habitats are wide ranging, and the environmental analysis needs to incorporate all of these impacts.<sup>7</sup>

Leasing Mack Point seems to be a considerable monetary concern, but we need to see more information from developers, who would likely be offsetting those state costs (e.g. community benefit agreements). With the potential for billions of dollars in investment and return, leasing costs might not be as significant as we think.

As a matter of equity, the Washington County economic development that this project could have provided should have been part of the equation. It is not. Even with the state's overarching three- port strategy, Eastport has not been as seriously considered as Searsport (e.g. no one from Eastport is on our advisory group). Removing rail access and poor road maintenance are only two of the issues. We need to see more analysis data for Eastport. Moreover, the removal of earth from Eastport does appear very impactful, but is there no other way to reuse that material nearby?

**To fully give advice and feedback on port development, this advisory group would need to see all related data that has informed the matrix, outstanding field data, and the economic analysis. That highlights the biggest issue with this process. We are providing input and some information, but the only way to provide informative advice is to have all the relevant information.**

**Also, all of our written comments should be posted publicly on the website, not just notes from what is said at the meeting.**

**Comments on Current Matrix Draft:**

- **From an environmental lens, there is insufficient information in the AA matrix to dissuade MDOT from changing the language of the 2009 agreement that Mack Point is to be given preference for future development.**
- Forest comparisons/ the mature and mixed age forest on Sears Island is valuable for greenhouse gas sequestration. We need to see the location of wetlands on Mack Point and value compared to Sears Island development, including roadway construction.
- Add data on recreational use or community attitudes for development in the area. Also, need to see impacts on the rest of Sears Island in regard to visitor experience, biodiversity, bird migration, etc.

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<sup>7</sup> <https://www.fao.org/ecosystem-services-biodiversity/background/supporting-services/en/>

- In the analysis, under Column 5: “rough weather” comment is unnecessary for Mack Point. “It is unknown what the effects of rough weather could be between the wharf face and moored floating foundations.” Rough weather could have unknown impacts on any orientation of the port, especially with a new industry in a place that has never marshaled this type of infrastructure.
- Column 7: With the comment on impacting existing uses, is MDOT suggesting that counter to the statement by Jim Theriault of Sprague Energy that there is not room for existing uses on Mack Point? Also in Eastport? New development should be able to design accommodations.
- Column 8 and 9: CAD cell information lacking. Why is the soil harvested from the dredge not being used in the pier/soil in-fill and compaction process for the addition on Mack Point? CAD cell location will be of concern for local commercial fisheries-due to water column turbidity issues.
- We haven’t seen data from the soil tests. In terms of Column 9: more definition for soil importing and exporting would be helpful. Could the dredge spoils from the Mack Point option be used for pier/upland fill? Could the soil from Eastport be reused nearby? Soil Harvesting disallowed on Sears Island per the consensus agreement.
- Columns 10 and 11: lease cost is likely born by developer, not the state-immaterial in the grand scale of things.
- Column 11: Add all anticipated/estimated operational costs for Sears Island. Think maintenance dredging, long term road/infrastructure upgrades, etc, especially ones that a lease on Mack Point would cover. Relocation of liquid dock and rail line are likely to be necessary due to sea level rise anyway, Inflation Reduction Act funds can be used to stabilize the port in the face of likely future needs due to climate change.
- Columns 12 and 13: Proper survey of actual resources is necessary: vernal pools, streams, wetlands, etc. These numbers do not square with experienced visitor information.
- Column 18: What is the evidence for Brook Trout habitat on Mack Point?
- Column 21: How are endangered Monarch butterflies<sup>8</sup> listed for Mack Point but not Sears Island?<sup>9</sup> Sears Island has an active monarch butterfly program and so development there could seriously impact their populations.
- Columns 22: need more data on groundwater levels and quality, particularly for Sears Island. Is there no aquifer on Sears Island?
- Columns 24, 25 and 26: will need more than walkovers. LIDAR or other more significant methods of determining archeological sites will be necessary.

8

<https://www.mainepublic.org/environment-and-outdoors/2022-07-22/migratory-monarch-butterflies-are-now-endangered-moving-closer-to-extinction>

<sup>9</sup> <https://www.govinfo.gov/content/pkg/FR-2020-12-17/pdf/2020-27523.pdf>

- Column 32: Add landscape-wide impact of lighting. Dark night sky is important for migratory species and for human health.
- Column 35: Air quality improvements from transition of fossil fuel infrastructure and tank farm will be significant and should be considered one of the major benefits of the Mack Point siting.
- Columns 38 and 39: Need to see more evidence that impacts would be the same between the alternatives.

Thank you for considering and evaluating our input for a Maine marshaling port. We highly value achieving the State's offshore wind energy goals. We appreciate the University of Maine work by Dr. Dagher and his team in developing the floating wind turbine concept and the future arrays. We expect more information to be analyzed and presented before any decision is made, and based on what we have seen thus far, we believe Mack Point is still the best choice for port development.

Matt Cannon  
State Conservation & Energy Director  
Sierra Club Maine

## Islesboro Islands Trust Offshore Wind Port Advisory Group Comments

Islesboro Islands Trust (IIT) supports the development of an offshore wind facility at Mack Point, and opposes development of that facility on Sears Island, if any such facility is to be built in Penobscot Bay.

On November 18, 2021, the Maine Department of Transportation (MDOT) released the *Offshore Wind Port Infrastructure Feasibility Study* prepared by Moffatt and Nichol (M&N). It concluded, in part, that, “With certain modifications, both the Mack Point and Sears Island sites can meet the floating OSW Port Criteria.” However, that November 2021 M&N report proposed development of “a marine terminal on Sears Island as a centralized hub for assembly and launching of floating foundations as well as erection of the WTG components onto the foundations.”

Today, 19 months after release of the initial M&N report and one year after formation of the Offshore Wind Port Advisory Group (OSWPAG), every measurable, publicly available criterion discussed and reviewed over that time period reconfirms that, “With certain modifications, both the Mack Point and Sears Island sites can meet the floating OSW Port Criteria.”

When developing an offshore wind manufacturing, assembling, and/or launching facility, otherwise called an offshore wind port, IIT strongly urges the MDOT and State of Maine to: (1) ensure that the least environmentally damaging plan is pursued, (2) favor repurposing outdated industrial and/or energy sites for the proposed facility, (3) avoid damaging undeveloped and ecologically significant locations, and (4) thoroughly evaluate impacts on wildlife and fisheries.

Considering the above, IIT supports the development of an offshore wind facility at Mack Point, and opposes development of that facility on Sears Island, if any such facility is to be built in Penobscot Bay.

## Renewable Energy, Climate Change and the Environment

IIT applauds our State Government’s vigorous response to climate change and offshore wind research. In this context, we cannot over-emphasize the crucial importance of applying strong, proven environmental standards and existing state policies to siting and construction of an offshore wind port.

The Intergovernmental Panel on Climate Change 2022 report makes the case that conservation of fully functioning ecosystems provides a highly effective climate change response. For example, in this scientifically validated report we find the following:

- "Conservation, improved management, and restoration of forests and other ecosystems offer the largest share of economic mitigation potential..."
- "Some options, such as conservation of high-carbon ecosystems (e.g., peatlands, wetlands, rangelands, mangroves and forests), deliver immediate benefits..."

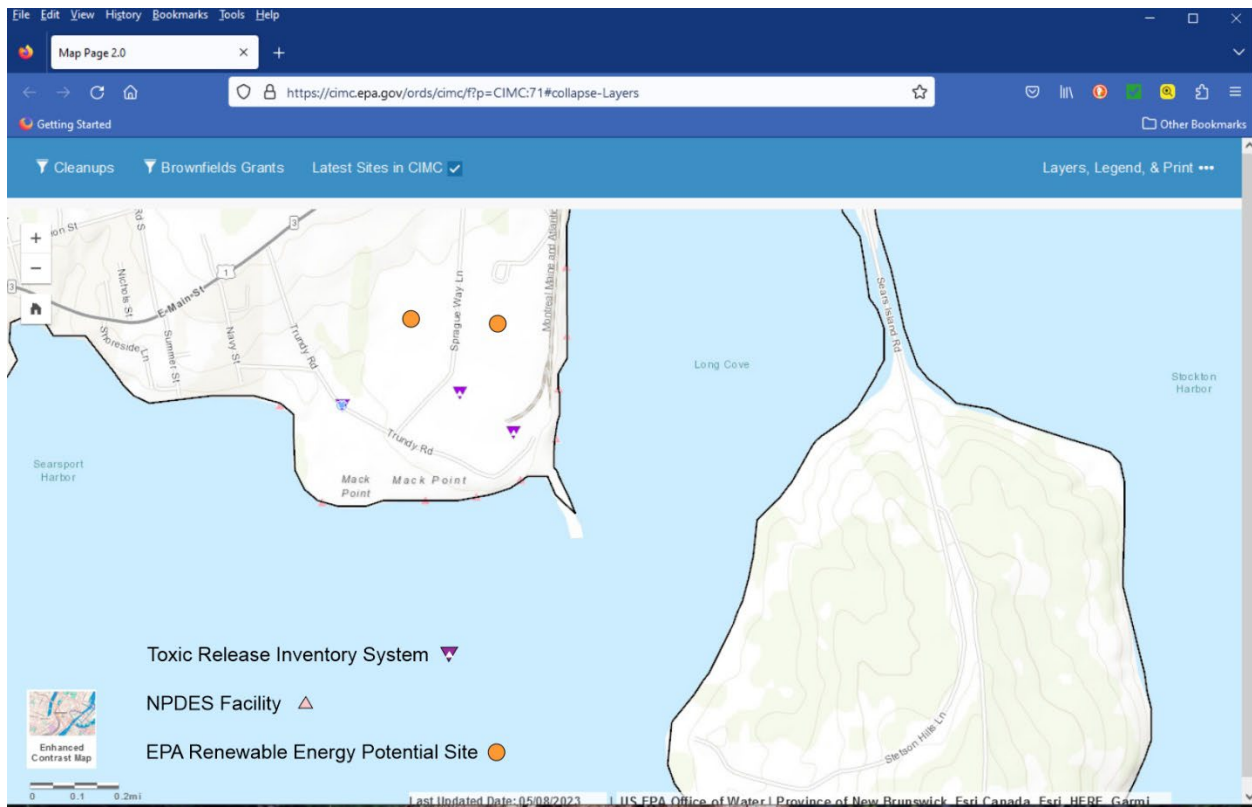
Maine's *Offshore Wind Roadmap* includes the following at Objective E:

- "Maine is committed to protecting and preserving the Gulf's marine species, habitats, and wildlife, and to pursuing responsible development of offshore wind technology that advances renewable energy **with as few adverse impacts as possible.**" [Emphasis added.]

The Maine Climate Council's *Plan for Climate Action, Maine Won't Wait*, says in part:

- "Climate change and development are harming Maine's natural and working lands and waters, which are key to the state achieving its carbon neutrality commitment by 2045. Protecting natural and working lands from development maintains their potential to draw back carbon from the atmosphere, as well as provide important co-benefits. Maine's coastal and marine areas also store carbon, while supporting our fishing, aquaculture, and tourism industries."

A United States Environmental Protection Agency (EPA) program called RE-Power (see <https://www.epa.gov/re-powering>) urges repurposing outdated or unused carbon-based



<https://cimc.epa.gov/ords/cimc/f?p=CIMC:71#collapse-Layers>



energy facilities for renewable energy use. EPA identified Mack Point (see map illustration above) as a suitable site for this re-powering/renewable energy development program.

The National Oceanic and Atmospheric Administration (NOAA) recognizes the Penobscot River and Bay as a nationally important habitat focus area. One objective of this Penobscot watershed habitat focus cited by NOAA would, “Promote habitat restoration that results in benefits to water quality, watershed-based recreation, and resilient coastal communities.”

### **Key Points:**

- Build-out at Mack Point furthers Maine’s Offshore Wind Roadmap and related state and federal climate change policies.
- Built-out at Mack Point consolidates industry in one location, economizes on existing infrastructure and replaces and remediates Mack Point’s past outdated coal and oil history.
- MDOT consultants and Dawson Associates determined that Maine’s OSW manufacturing, assembling and launching needs can be fulfilled at Mack Point.
- Sprague Energy publicly favors working in partnership with the State of Maine to locate such a facility at Mack Point.
- Sears Island’s current undeveloped, natural condition, provides important ecological services to the region and state, especially for fisheries, carbon sequestration and publicly assessable recreation. Mack Point does not provide these ecological services.
- Acquiring federal, state and local permits for an offshore wind facility at Mack Point would be far less controversial than attempting to secure those permits for Sears Island, and prevent protracted intervention and possibly litigation during Site Location Law, NEPA, Clean Water Act and other permitting reviews
- A groundswell of public opinion supports protecting Sears Island’s ecological resources.

If Maine pursues building an OSW facility in Penobscot Bay, Mack Point is best for business, best for the environment and best for the State of Maine.

### **The OSWPAG Process**

On March 11, 2020, Governor Janet Mills circulated a press release (<https://www.maine.gov/governor/mills/news/governor-mills-announces-assessment-mack-point-terminal-searsport-support-growth-renewable>; copy attached) announcing an assessment of Mack Point for possible support of offshore wind. Sears Island was not mentioned in that announcement. The title of the Governor’s press release explicitly and exclusively identified the “Mack Point Terminal in Searsport” as the location of the study.

Somewhat aside, the press release also notes that the single Aqua Ventus experimental turbine slated for deployment near Monhegan hoped to assemble and launch at Mack Point, following PUC approval in late 2019, which assembly and launch has not yet happened.

Twenty months later, the M&N report proposed creation of a “Port of Searsport offshore wind hub” built around “a marine terminal on Sears Island as a centralized hub for assembly and launching of floating foundations as well as erection of the WTG components onto the foundations.”

Caught off-guard by the M&N report’s recommendation, IIT wondered what happened between March of 2020 and November of 2021 that caused Sears Island to become the recommended “centralized hub.” Personal communication among some highly respected environmental leaders who, we were told, had been notified of the report’s findings, revealed they received telephone calls from representatives of the Governor’s administration prior to release of the M&N saying that the OSW hub required use of Sears Island.

In order to learn exactly how M&N came to recommend Sears Island as the OSW hub, attorney David Perkins, on behalf of IIT, sent a Freedom of Information request to Maine DOT on February 22, 2022.

Information provided as a result of the request shows evidence of preference to develop Sears Island prior to M&N and OSWPAG.

**Documents include [emphasis added]:**

- A “Pre-decisional Working Paper Prepared by MaineDOT” dated **March, 31, 2021** (copy attached) lists, in part: “Next Steps to Support Floating Off-Shore Wind (OSW) Port Development”

Near-term Steps (within 3-4 months):

- Planning for Request for Information (RFI/RFP) to Explore Potential for Partnerships.
  - Derived from the results of the M&N feasibility study. Focused on Port Development for OSW.
  - **RFI will focus on primary site, Sears Island**
  - **RFI is synonymous with “Open for Business for OSW”**
  - Award criteria and approval TBD by GEO
  - Need to nail down how the timing of the RFI interacts with the pursuit of the research lease.
  - Also consider whether we are looking for partners with wind projects in the region, not necessarily the state.

Long-term Steps (8 months +):

- **Start Terminal Design.** Start 30% design effort on OSW terminal. This will further refine and update scope and cost estimates and bring the project to the level needed for design/build with a partner.

This memo precedes public release of M&N by nearly 8 months, indicates that the M&N report was completed, refers to Sears Island as the “primary site” and “open for OSW business,” exposes that a 30% Sears Island design effort was imminent and clearly displays MDOT preference and intentions regarding Sears Island.

- Six months after the above memo, a confidential memo from Matt Burns to Josh Singer of M&N, dated September, 10, 2021 (copy attached) references “MaineDOT **Sears Island OSW Terminal 30% Design Project;**
  - “MaineDOT is requesting a proposal for a 30% design effort to construct a terminal for floating wind turbine hull fabrication and WTG installation (Marshalling Facility). The design will utilize the concept developed by Moffatt & Nichol for the Offshore Wind Port Infrastructure Feasibility Study Concept Design Report as a basis for designing a new terminal on the transportation parcel of Sears Island.”
  - **“Primary Tasks/Components of Sears Island 30% Design include “Environmental permitting assistance with relevant state/federal agencies (Pre-application meeting assistance)”**

Movement toward a new contract with M&N for a Sears Island 30% design quickly resulted in a draft proposal sent from M&N to Matt Burns dated October 26, 2021 (copy attached) containing considerable scope of work detail that clearly required discussion and communications not been included in the FOAA received by IIT.

- This draft proposal says, in part,
  - Moffat & Nichol (M&N) is pleased to submit this proposal for the preliminary design of a proposed floating offshore wind (FOSW) marine terminal on **Sears Island** Searsport, Maine.
  - This preliminary design of the terminal will aim to provide sufficient flexibility so that a wide variety of foundation types and logistics plans can be accommodated. In addition, **it will aim to provide the State of Maine with a flexible marine terminal that can service multiple cargo types (containers and bulk) both between wind projects and after the market for FOSW turbines has run its course.**
  - **We understand that MaineDOT wants to move forward with design and permitting** of Phase 1 of the OSW terminal at this time.
  - VHB will prepare draft permits for the Phase 1 FOSW terminal.
  - Total Moffat & Nichol Fee - \$1,697,007

Just five days after the confidential memo from Matt Burns to M&N requesting a proposal for a Sears Island OSW Terminal 30% Design Project and two months before release of the M&N November 2021 report, on September 15, 2021, Kay Rand sent email (copy attached) to several people in the Governor’s administration about an OSW/Port Development Stakeholder Plan. That email included a *Stakeholder Management Plan* dated September 8, 2021, which included:

- **GOAL: To develop and execute a stakeholder outreach strategy that would enable Governor Mills to announce the results of the M & N study, announce a commitment to pursue development of Sears Island as the Renewable Energy Port of the Northeast...**
- **Sears Island to become the Renewable Energy Port of the Northeast; other ports up and down the Maine coast will play auxiliary roles to support OSW**
- **Sears Island can become the Renewable Energy Port of the Eastern Seaboard**

MDOT signed a final contract for the 30% design on or about December 29, 2021. One year later, IIT learned of that final 30% design agreement and asked for copies of the final report. To date, that report has not been released for public review.

Figure 2 (below), found in “Final Recommendations, Supply Chain, Workforce, Ports and Marine Transportation Working Group of the Maine Offshore Wind Roadmap” on page 4, is captioned, “Examples from the study of statewide port infrastructure for offshore wind.”

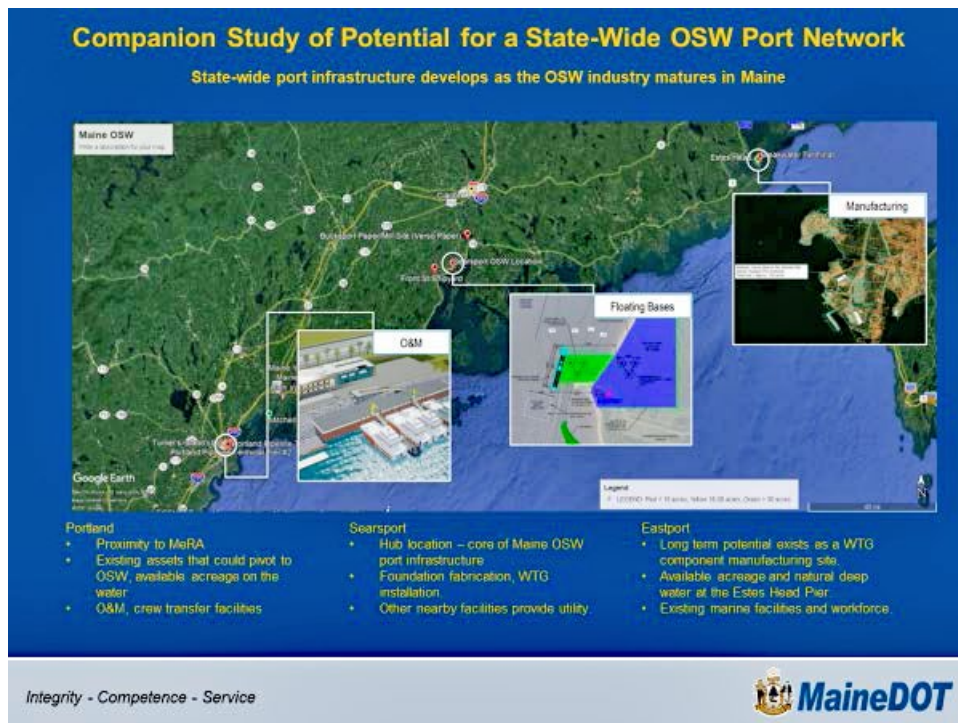


Figure 2 above identifies Sears Island, not Mack Point, as the Floating Bases Hub for fabrication and WTG installation; nearby facilities “provide utility,” illustrating how “State-wide port infrastructure develops.”

Metadata for the version of the Supply Chain, Workforce, Ports and Marine Transportation report available as of 2/27/2023 at <https://www.maineoffshorewind.org/working-group-recommendations/> appears to have last been modified by Blaze Partners on February 6, 2023. Therefore, the “Companion Study” from M&N, or at least part of it, was available to Blaze Partners and, presumably, the Supply Chain, Workforce, Ports, and Marine Transportation Working Group. The “Companion Study” has not been made available to OSWPAG or the public.

Five months prior to OSWPAG formally beginning on May 26, 2022, during a Mainers for Offshore Wind presentation, the slide below showing a “Marshalling and Fabrication Terminal” on Sears Island and identifying the existing Mack Point piers as the “Utility/Support Terminal” illustrated the proposed OSW port concept. Although acknowledged that no decision had been made at that time, the slide continued to illustrate preference for developing Sears Island.

**A Potential Wind Port Hub  
Port of Searsport**

**A Long-term, Multi-terminal Concept  
to Support  
Research and Commercial OSW**

**November 2021**

**Maine's Wind Energy Port  
Port of Searsport**

**Sprague Terminal**

**Mack Point**  
• Utility/Support Terminal  
• Barge/Vessel Connection to Sears Island  
• Rail Access

**Sears Island**  
• Marshalling and Fabrication Terminal  
• 330 Acre Transportation Parcel  
• 40 Acre OSW Terminal Concept

**GAC Industrial Park**  
• Component Manufacturing  
• 100 Acre Industrial Park  
• Rail/Truck to Mack Point

**STOCKTON HARBOR**

**LONG COVE**

**PENOBSCOT BAY**

**CONCEPTUAL ECOLOGICAL EDUCATION PROTECTED AREA**

**TRANSPORTATION PARCEL**

**MaineDOT**

*Integrity - Competence - Service*

**MaineDOT**

Often throughout the OSWPAG process, IIT requested background information, such as copies of the M&N 30% design report, the eelgrass inventory, available information about Mack Point and all documentation in support of the Matrix; all to no avail.

IIT presented several questions about entries in the matrix draft brought to the April 2023 OSWPAG and requested to see reference materials used for the matrix. These reference materials have not been delivered to OSWPAG.

We continue to have significant questions. Freshwater Open Water at Mack Point? Brook Trout Habitat? USFWS Birds of Conservation Concern and Other Migratory Birds? Federal agencies in the past noted that, "Mack Point has much less diverse marine habitat composed primarily of a small amount of rocky intertidal habitat and larger areas of unvegetated intertidal and subtidal bottom. The quality of the unvegetated subtidal habitat has undoubtedly been diminished due to its proximity to the Searsport primary treatment wastewater discharge and chronic exposure to vessel operations and occasional oil spills from the existing facility on Mack Point. NMFS has concluded that the marine habitat on Mack Point comprises a notably less diverse habitat assemblage than the intertidal and shallow subtidal zones at the proposed port location on the western shore of Sears Island."

At the beginning of the OSWPAG, MODT provided an explanation of this process. We were assured that, "The Advisory Group program will provide the structure for a robust and transparent stakeholder and public participation process with respect to wind port planning and development." The absence of repeated requests for supportive information undermines the "robust and transparent" nature of these proceedings.

State policy, established by the January 22, 2009 Baldacci Executive Order, requires compliance with the Sears Island Planning Initiative Steering Committee (SIPISC) Consensus Agreement, signed in April 2007. Among the many terms of the SIPISC Consensus Agreement we know that, "Mack Point shall be given preference as an alternative to port development on Sears Island" and among the list of activities and uses not appropriate for Sears Island is "soil harvesting." MDOT's blatant preference shown for developing the OSW facility at Sears Island, as well as acknowledgement by M&N that developing Sears Island requires harvesting 1,215,000 cubic yards of soils, expose unmistakable failure to comply with State policy.

## Conclusion

Sadly, all of the above instances of MDOT preference for developing Sears Island, failure to comply with the SIPISC Consensus Agreement and the absence of important information did not surprise IIT. We have engaged with MDOT for more than 30 years as proposals to develop

Sears Island -- cargo port, LNG terminal, container port – failed. In August 2017, the *Searsport Intermodal Commodity Final Report* (relevant pages attached) undertaken by HDR engineering consultants for the Maine Port Authority and MDOT, opined that “Sears Island... could be used for project cargo, specialized production or assembly of offshore wind components or neo-bulk cargoes.” For decades, MDOT continues to search for a reason to develop Sears Island even when a need to develop Sears Island fails to materialize.

On June 2, 2023, President Biden spoke from the Oval Office, praising the way that two very different perspectives negotiated a debt ceiling agreement. He said, "We were straightforward with one another, completely honest with one another, and respectful with one another. Both sides operated in good faith."

As representative of IIT, I conveyed our perspective on OSW port issues candidly and in the hope that our common concerns about climate change and ecological overshoot could perhaps find mutual understanding. Despite a preponderance of evidence showing MDOT preference to develop Sears Island, the absence of important information and indications of MDOT insincerity, IIT remained committed to this process throughout.

OSWPAG and the State of Maine will be judged by our decision in this OSW port matter. We can choose to ignore Rachel Carson's wise observation that, "The real wealth of the Nation lies in the resources of the earth -- soil, water, forests, minerals, and wildlife..." and destroy the lavish fertility of Sears Island. Or we can acknowledge our incontrovertible connection with what Physicist David Bohm calls the undivided wholeness of reality and what Aldo Leopold understood as a "community to which we belong," and pursue research into floating offshore wind that (1) confirms the least environmentally damaging plan, (2) favors repurposing outdated industrial and/or energy sites, (3) avoids damaging undeveloped and ecologically significant locations, and (4) considers impacts on wildlife and fisheries.

Leopold again: "A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise." IIT again urges, implores MDOT to do the right thing. If an offshore wind facility is to be built in Penobscot Bay, it should be located at Mack Point, not on Sears Island.

Governor Mills Announces  
Mack Point Assessment  
March 11, 2020



# Governor Mills Announces Assessment of Mack Point Terminal in Searsport to Support Growth of Renewable Energy Industry in Maine

March 11, 2020

Searsport, MAINE – Standing at the pier of Mack Port Terminal, Governor Janet Mills announced today that her Administration will examine the site for opportunities to support Maine’s renewable energy industry, specifically offshore wind. The announcement follows Governor Mills’ visit to Scotland last week as a member of a U.S. state and federal delegation organized by the United Kingdom government to learn more about offshore wind. It also follows her State of the State address in which she spoke of unleashing Maine’s offshore wind potential.



(L:R): Representative Scott Cuddy (D-Winterport), Governor Mills, Tim Theriault, VP of Materials Handling for Sprague, Dan Burgess, Commissioner Heather Johnson, Commissioner Bruce Van Note and Searsport Town Manager James Gillway

“Offshore wind is poised to become a \$1 trillion industry by 2040, creating thousands of good-paying jobs, providing clean renewable energy, and spurring economic growth. With our existing port infrastructure and proximity to both European and east coast markets, Maine is well-positioned to become a leader in the offshore wind industry just as Scotland has,” said Governor Mills. “Searsport has been critical for the delivery and deployment of onshore wind in New England for years. My Administration will evaluate how the Port can do the same for offshore

wind. I look forward to the results of this assessment and charting a path forward for this industry in Maine.”

The assessment, called the Port Infrastructure and Market Potential Assessment, will be led by the Maine Department of Transportation (Maine DOT), the Governor’s Energy Office, and the Department of Economic and Community Development as a part of the [Maine Offshore Wind Initiative](#). It will utilize the [2017 Searsport Intermodal Commodity Study](#) as a foundation and identify and assess short-term and long-term port opportunities related to the offshore wind industry. It will, at a minimum, review current site characteristics, provide an analysis of potential port users and identify structural improvements or capital investments that may be needed. Additional analysis and review will also be undertaken to review offshore wind supply chain opportunities such as foundation and turbine assembly as well as the workforce needed to support these activities in Maine.



Searsport Town Selectpersons

In addition, Aqua Ventus, the project slated to be the first floating offshore wind project in the country, is also planning for approval to use the Port to assemble the hull that will be towed out to the demonstration test site off Monhegan Island. In June of 2019, Governor Mills signed into law LD 994, a Resolve sponsored by Republican Senator David Woodsome, directing the Maine PUC to approve the contract for Aqua Ventus, which was done in late 2019. The University of Maine has estimated that Aqua Ventus will produce nearly \$152 million in total economic output, and more than 553 Maine-based direct jobs during the construction period, including jobs for design and construction. Operations and maintenance of the facility will create an additional direct economic output of approximately \$16 million over 20 years.

Prior to the announcement, Governor Mills toured Mack Point Terminal and viewed onshore wind turbine components that have been delivered to the terminal for the Weaver Wind onshore project in Hancock County.

An active seaport since the 1700s, Searsport is Maine's second largest seaport and is home to an intermodal port facility serving coastal and inland areas of Maine. The Mack Point terminal is currently able to handle a diverse array of product including bulk shipments as well as project and containerized cargo. The terminal currently has space for laydown, bulk piling, warehousing and liquid tank storage as well as a potential for further development on existing property. Sprague Operating Resources, LLC operates Mack Point and owns the liquid bulk pier, while the Maine Port Authority owns the dry bulk pier, which Sprague operates. The Maine Port Authority and MaineDOT recently invested in a new heavy bulk cargo handling equipment at the port. In addition, MaineDOT over the last two years has made investments in upgrading the connecting rail infrastructure at the port.

"Onshore wind development has provided a great boost to Maine's economy. Hundreds of Maine construction workers have been kept employed by this industry for many years," said Representative Scott Cuddy. "The oncoming development of offshore wind is an exciting time for Maine and an exciting time for Searsport. Maine is poised to be an industry leader, and Searsport is perfectly situated to help make that happen!"

"The town of Searsport is excited and pleased to see progress in the development of offshore wind out of our Port," said Searsport Town Manager, James Gillway. "We have been closely connected to the ocean since our inception in 1845. We thank the Governor for moving this industry forward as clean, renewable energy is vitally important to our community and state.



(L:R): Governor Mills, Representative Scott Cuddy, Dan Burgess, Commissioner Bruce Van Note, Commissioner Heather Johnson

"The port facility in Searsport is playing an integral part in the logistics of bringing in the components to construct the Weaver wind project, as it has on previous wind power projects we've developed in Maine," said Paul Gaynor, chief executive officer of Longroad Energy.

"Over the last decade, wind investment in Maine has crossed the \$2 billion mark – the Searsport

terminal and many other Maine businesses have benefited from this influx of capital; importantly, it allows our investment to directly benefit Maine people and Maine industry."

Over the past year, Maine has made significant progress in moving forward renewable energy and offshore wind, including lifting the wind moratorium, passing legislation requiring the PUC to approve the contract for Maine Aqua Ventus, which will be the first floating offshore wind project in the country, and joining with New Hampshire and Massachusetts on the federal Gulf of Maine Renewable Energy Task Force to examine opportunities for offshore wind. The Task Force, led by the federal government, seeks to identify potential opportunities for renewable energy leasing and development sites in federal waters off the coast of Maine.

As a part of the Maine Offshore Wind Initiative, the state will also soon be launching an initiative to engage directly with the commercial fishing industry to facilitate communication and solicit input to ensure any potential development considers the fishing industry and other maritime interests.

<https://www.maine.gov/governor/mills/news/governor-mills-announces-assessment-mack-point-terminal-searsport-support-growth-renewable>

Pre-decisional Working Paper

Prepared by MaineDOT

March 31, 2021

## Next Steps to Support Floating Off-Shore Wind (OSW) Port Development

### Near-term Steps (within 3-4 months):

1. Finalize and Publish M&N Feasibility Study. Finalize/release “Offshore Wind Feasibility Study” by M&N. The study is substantially completed and needs a final/overall Sears Island use drawing (access road, trails, water access, parking, etc.).
2. Identify and Contract with a Public Relations Liaison Specific to OSW.
3. Planning for Request for Information (RFI/RFP) to Explore Potential for Partnerships.
  - Derived from the results of the M&N feasibility study. Focused on Port Development for OSW.
  - RFI will focus on primary site, Sears Island
  - RFI is synonymous with “Open for Business for OSW”
  - Award criteria and approval TBD by GEO
  - Need to nail down how the timing of the RFI interacts with the pursuit of the research lease.
  - Also consider whether we are looking for partners with wind projects in the region, not necessarily the state.
4. Prepare Renderings and Summary. Produce higher quality 3D conceptual drawings, rendering, schematic videos and high-level summary (PowerPoint) of selected OSW port terminal concept(s).
5. Refine Permitting Risk. Discussions/briefings/coordination with permitting and oversight agencies to identify hurdles and refine permitting timelines. We have had one discussion with MDEP to date but will need to do another (pre) pre-meeting that is more focused and better organized.
6. Early Policy Work. Identify supporters / opponents. Reach out to gauge support. Brief Congressional staff / key legislators / committees / opinion leaders.
7. Perform Further Market Research. Scope of work has been written and MaineDOT received a proposal from Moffatt & Nichol for a Ports Opportunity Analysis, currently under assignment. There will also be high level economic impacts of OSW (regional and state) included in this study. Estimate July 2021 completion date.

### Mid-term Steps (TBD: 4-8 months)

8. Start Permitting. Pre-permitting meetings with state and federal agencies (ACOE and MDEP).
9. Perform Additional Site Investigation Work Including:
  - a. Geotechnical borings
  - b. Topo survey (upland area)
  - c. Bathymetric survey
  - d. Utility discussion (investigate if any existing infrastructure and talk to utility companies)
  - e. Any other site work necessary to fill gaps and tighten estimates.

10. Issue RFP/RFI to Seek a Port Development Partner. 1-2-month advertisement. Selection process could take months to get to the point of signing a contract.

**Long-term Steps** (8 months +)

11. Seek Terminal Project Funding. Sources TBD, but will likely include private partner, federal, state bonding, or a combination of all. Very important to have discussions with Congressional delegation staff and members early. All delegation members expressed public support the UMaine / NEAV demonstration project when announced on August 5, 2020. This project could very fit well with infrastructure priorities of the incoming Administration.
12. Start Terminal Design. Start 30% design effort on OSW terminal. This will further refine and update scope and cost estimates and bring the project to the level needed for design/build with a partner.

Confidential Memo

Burns to Singer

September 10, 2021



**CONFIDENTIAL**

To: Josh Singer, M&N

From: Matt Burns, MaineDOT

**Subject: MaineDOT Sears Island OSW Terminal 30% Design Project**

Date: 9/10/21

MaineDOT is requesting a proposal for a 30% design effort to construct a terminal for floating wind turbine hull fabrication and WTG installation (Marshalling Facility). The design will utilize the concept developed by Moffatt & Nichol for the Offshore Wind Port Infrastructure Feasibility Study Concept Design Report as a basis for designing a new terminal on the transportation parcel of Sears Island.

The terminal design will be based from the Phase 2 concept (1000MW project) provided by M&N and optimized for use. This design should include a clear delineation between the Phase 1 and Phase 2 facility concepts as the State of Maine intends to permit for Phase 2 but will likely only pursue funding for Phase 1 construction.

Phase 2 facility features:

- Approximately 21-acre heavy lift area (5,000psf)
- Heavy-lift quay structure with appropriate crane(s)
- 44-acre upland area (3,000psf)
- Capability to support up to a 1000MW commercial scale floating OSW farm.

Primary Tasks/Components of Sears Island 30% Design

- Project initiation/kickoff
- Geotechnical/Bathymetric analysis
- Topographic survey
- Site layout and landscaping
- Utility Coordination and terminal lighting
- Hull fabrication logistics and optimization
- Drainage/Stormwater design
- Heavy lift area design
- Quay design
- Upland area design
- Terminal office building design
- Access road design
- Terminal fencing and security design
- Sears Island recreational improvement design (eastern side of island)
- **Environmental permitting assistance with relevant state/federal agencies (Pre-application meeting assistance)**
- 3D renderings and presentation
- Refined project estimates

Draft Sears Island  
30% Design Proposal  
October 26, 2021

## Hughes, Amy

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**From:** Dominguez, Justin [REDACTED]  
**Sent:** Tuesday, October 26, 2021 3:54 PM  
**To:** Burns, Matthew  
**Cc:** Singer, Joshua  
**Subject:** Searsport 30% Design Draft Proposal  
**Attachments:** DRAFT MaineDOT Searport Proposal 2021 10 26.pdf

**EXTERNAL: This email originated from outside of the State of Maine Mail System. Do not click links or open attachments unless you recognize the sender and know the content is safe.**

Hi Matt,

Attached is a draft of our proposal for preliminary design of the proposed floating offshore wind marine terminal in Searsport. I would have liked to have sent you a final version by now, but our main hang-up is getting the drilling program squared away. We found out that the soonest our original geotechnical consultant could get a driller out to do the marine borings was April, which would have extended the schedule out much too far. We have reached out to a new consultant who has confirmed that they can get a driller out there much sooner (ideally as soon as permits will allow, in an attempt to complete most of the work before the worst of the winter weather), but we are still awaiting their proposal. In the attached draft, we included an estimated cost for the geotechnical explorations scope for now, so we could get something in front of you for review.

Please let us know if you have any comments or questions. Once we get the drilling proposal in and we've addressed any preliminary comments you might have, we can get you an updated proposal.

Thanks,  
Justin

**Justin A. Dominguez, P.E.**  
Senior Geotechnical Engineer



[moffattnichol.com](http://moffattnichol.com)  
Creative People, Practical Solutions.®



Per Title VI of the Civil Rights Act, Moffatt & Nichol will not discriminate on the grounds of race, color, or national origin in the selection and retention of subconsultants, including procurement of materials and leases of equipment. Moffatt & Nichol will ensure that minorities will be afforded full opportunity to present proposals and will not be discriminated against in consideration for an award. For additional information go to: <http://www.moffattnichol.com/content/small-business-outreach>.

October 26, 2021

Matt Burns  
Director of Ports and Maritime Transportation  
MaineDOT

Re: Searsport Offshore Wind Port Preliminary Design

Mr. Burns,

Moffatt & Nichol (M&N) is pleased to submit this proposal for the preliminary design of a proposed floating offshore wind (FOSW) marine terminal on Sears Island in Searsport, Maine. This terminal will allow for the following activities:

- Manufacturing/assembly of the foundations.
- Delivery of the wind turbine generation (WTG) components (towers, nacelles, and blades).
- Storage, staging and preassembly of the WTG components.
- Transfer of foundations from wharf deck to waterway
- Installation of WTG components onto foundation in water at quayside
- Rigging of fully assembly floating foundation and WTG components for tow out to installation site.

This work will build on the M&N report entitled "*Maine Department of Transportation Offshore Wind Port Infrastructure Feasibility Study, Concept Design Report*" submitted to the MaineDOT on February 9, 2021.

We appreciate your invitation to provide a proposal to MaineDOT for the subject assignment. Our proposal outlines our project scope, associated fee, and project schedule.

The project scope discussion outlines our proposed approach to the project. We have included a short list of assumptions with our proposed scope and will work with you as we move forward so that our efforts will precisely meet your needs.

We are the industry leaders in the development of port infrastructure to support the quickly growing US offshore wind industry. Our work in this field incorporates six states on the eastern seaboard, Louisiana, and California. We were recently awarded a contract with the U.S. Department of the Interior's Bureau of Safety and Environmental Enforcement/Bureau of Ocean Energy Management to assess port infrastructure needs and capabilities to support development of floating offshore wind farms on the Pacific Coast and Hawaii. Our hands-on familiarity in developing new and retrofitting existing port infrastructure to service the offshore wind industry will provide the State of Maine with a high level of industry knowledge and relevant experience.

## **PROJECT UNDERSTANDING**

In 2020, M&N performed a feasibility study of four candidate sites to be considered for the construction of a port in the Searsport area to support the OSW industry on the eastern seaboard. We concluded that two of the sites, Mack Point and Sears Island were suitable for development, and based on a

number of factors, recommended that the Sears Island site be chosen to develop. We understand that MaineDOT wishes to move forward with design development of the Sears Island site.

Sears Island is a wooded, undeveloped area located about a half-mile off the mainland. The island is connected to the mainland via an earthen causeway. MaineDOT owns an approximately 330-acre Transportation Parcel on the western side of the island. There are approximately 9,000 linear feet of undeveloped available water frontage. Vessel access to the site is via Penobscot Bay and the maintained federal navigation channel. The parcel is zoned for Transportation/Marine development.

A section of the Transportation Parcel will be developed in two stages. Stage 1 will be designed to be capable of supporting a demonstration-type FOSW project of approximately 150 MW to 200 MW. Stage 2 will be designed to be capable of supporting a full-scale commercial wind farm installation (approximately 1,000 MW).

The deployment of fully assembled floating FOSW turbines requires approximately 35 to 40 feet of water at the berth. In order to attain this depth at the site, the berthing face needs to be located approximately 600 to 900 feet offshore. In our feasibility report, we recommended that the berthing face be formed by a steel sheet pile cellular cofferdam, with a pile-supported relieving platform to be constructed along the outer 50 feet of the cofferdam, to allow heavily loaded equipment to access the berthing face. The area between the cofferdam and shore would be infilled with soils excavated from the uplands, and riprapped slopes would protect the sloped ends of the infill. The uplands would be cut to grade, providing a level surface for the terminal uplands. The project will also include upgrading the access road from the north end of the island to the terminal to accommodate the anticipated industrial traffic.

Phase 1 would include development of approximately 600 linear feet of berthing face, 7 acres of heavy-lift area in between the cofferdam and shore, and 30 acres of uplands. Phase 2 would expand the facility to 1,600 of berthing face, 22 acres of heavy-lift area, and 44 acres of uplands. Figure 1 shows the approximate footprint of the two phases. The exact configuration and extents of the wharf and uplands developed in each stage may vary from the amount stated above. M&N and the MaineDOT will meet to establish the extents of the berths and uplands required for Phase 1 as a part of the project kickoff.

Floating offshore wind technology is currently in the prototype/demonstration stage. There are multiple foundation types of differing geometries and weights being proposed and installed. In addition, each FOSW developer will have a preferred logistics and loadout plan for the marine terminal. This preliminary design of the terminal will aim to provide sufficient flexibility so that a wide variety of foundation types and logistics plans can be accommodated. **In addition, it will aim to provide the State of Maine with a flexible marine terminal that can service multiple cargo types (containers and bulk) both between wind projects and after the market for FOSW turbines has run its course.**

In addition to the marine terminal facility, improvements to the Conservation Parcel area of the island will be installed. The exact scope of this work has not yet been defined; however, a preliminary plan was submitted in the previously referenced report. These preliminary improvements included public amenity space consisting of an educational center building and enhanced trail, parking and landscaping features.

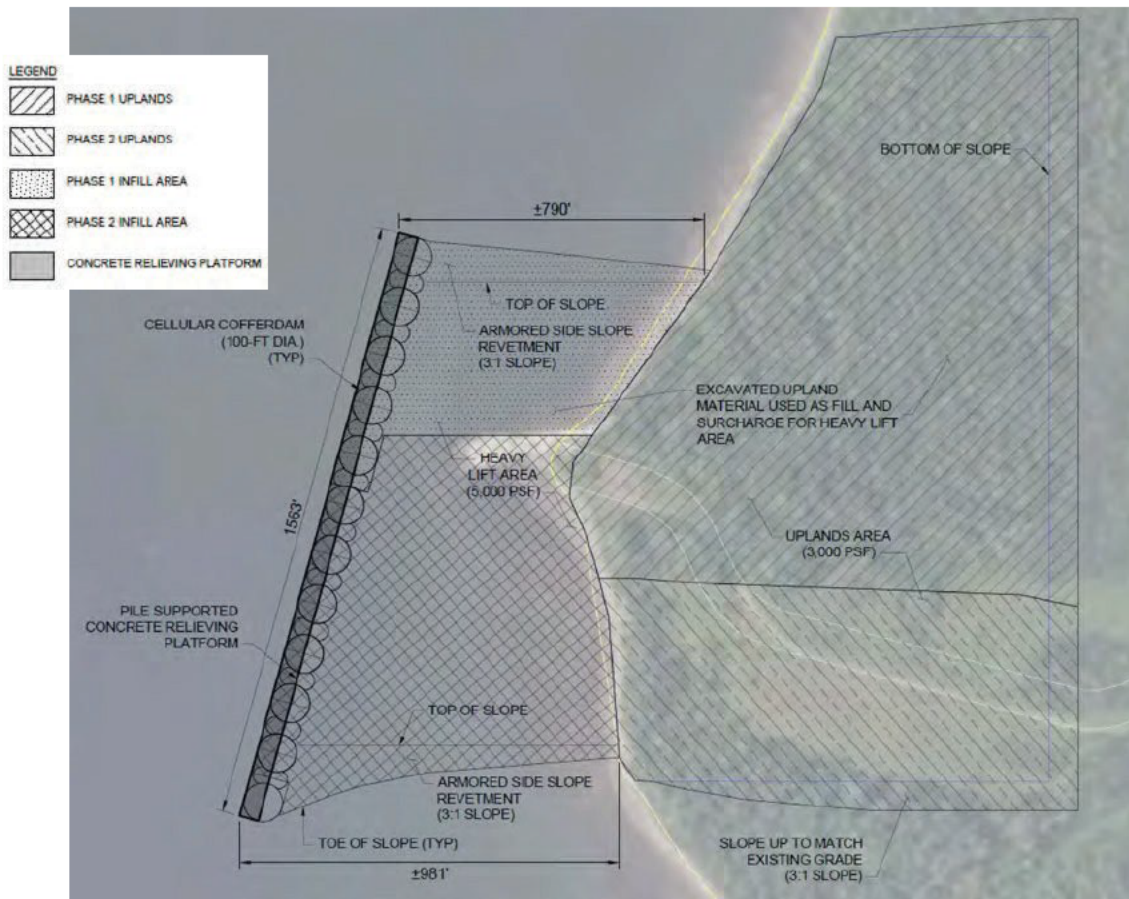


Figure 1- Phases 1 and 2 of the proposed OSW facility.

## PROJECT SCOPE

This section provides our proposed Scope of Services and associated approach to the completion of the preliminary design for the Sears Island FOSW marine terminal, upgrades to Sears Island Road (which will serve as the access road to the terminal), and public improvements to the Conservation Parcel area of Sears Island. The preliminary design will be based on berth and uplands concept developed in the feasibility study. The scope will be to develop preliminary design (30%) documents (plans, specifications, opinion of probable construction costs, and construction schedule) and draft permit application for Phase 1. The preliminary design drawings will be of sufficient detail to submit in the permitting package.

We are proposing to perform the field work for the design of both phases under the current scope in order to eliminate the need for additional mobilizations, resulting in cost savings for the overall project.

The design will include two buildings, an office building on the Transportation Parcel and an educational center building on the Conservation Parcel. For 30% design, we have assumed that design of these buildings will be limited to developing the footprint and approximate location of the buildings. The M&N team anticipates that this level of detail will be sufficient for permitting of the project.

The Scope is based on our general understanding of the study efforts completed to date and our interpretation of efforts required to fulfill preliminary design requirements for the Sears Island FOSW

project. While we have carefully considered project development needs, we are prepared to modify or otherwise tailor the proposed Scope as needed to fulfill project requirements and meet the needs of MaineDOT.

While the tasks associated with the Scope are presented in general chronological order, the nature of preliminary design is such that tasks are iterative and comparative in nature; therefore, there is some overlap within the preliminary design tasks.

#### **TASK 1: PROJECT INITIATION**

Key M&N Team members will meet with MaineDOT, project stakeholders, and others involved to initiate the project and to fully define and clarify project objectives, schedule requirements, and budget constraints. These lines of communication will remain open throughout the design process to form a system of continual input and feedback. The proposed meeting location is at MaineDOT's offices in Augusta. A team visit to the Sears Island site will occur following the kick-off meeting.

M&N will provide a draft kick-off meeting agenda for review, incorporate input, and distribute to attendees. M&N will record meeting notes and distribute the record of discussion for review and comment.

#### **TASK 2: DATA COLLECTION/REVIEW AND SITE INVESTIGATIONS**

M&N will collect and review all data provided by MaineDOT. This data will allow M&N to gain an understanding of the existing conditions at the facility and to develop a data-gap analysis to support the preliminary design. M&N will produce a list of requested information and submit to MaineDOT at the commencement of the project. There has been a significant information exchange during the feasibility phase of this project, and in this task, we will consolidate the existing information and gather any additional available information on the site.

In addition, we will engage several subconsultants to perform field surveys and site data collection.

##### Limited Site Survey

Our subconsultant Vanasse Hangen Brustlin, Inc. (VHB) will serve as the site surveyor. For 30% design, we will utilize LiDAR data from the National Oceanographic and Atmospheric Administration for topographic data for 30% design. Therefore, VHB will perform limited site survey to identify existing features within the project limits. A control point will also be set up on the Mack Point Pier to provide a tie-in for water depth measurements for the bathymetric survey. We anticipate that full topographic survey will be performed during final design. Performing a full survey during final design will also be easier in the wooded areas, because some tree clearing will have been performed for the uplands geotechnical explorations.

##### Wetlands Delineation

VHB will delineate the wetlands boundaries within the project area. The delineation will focus on the Phase 1&2 Terminal footprint and an approximately 15-acre area at the northeast corner the Conservation Parcel, where most of the public improvements are planned. As the extents of the public

improvements are not fully defined at this time, there may be additional areas (i.e., along trails might be improved) that may need delineation at a later date.

Additional details for this scope item are provided in VHB's proposal, which is included in Attachment A.

#### Bathymetric and Geophysical Survey

Our subconsultant Ocean Surveys, Inc. (OSI) will perform bathymetric and geophysical surveys of boat-accessible waters within 300 feet of the proposed quay. Multibeam soundings will be performed to develop a bathymetric contour plan (1 ft intervals). A sub bottom geophysical survey will be used to identify the top of a hard stratum (likely either glacial till or bedrock). Both high (chirp) and low (boomer) frequencies will be used to give the best chance of obtaining stratigraphic information. Sub bottom results will be ground-truthed to the results of the water-based geotechnical borings. Daily operations will be based out of a marina in Belfast.

Additional details for this scope item are provided in OSI's proposal, which is included in Attachment A.

#### Geotechnical Explorations and Laboratory Testing

Our subconsultant Haley & Aldrich, Inc. (H&A) will perform a geotechnical exploration and laboratory testing program. The goals of the program are the following:

- Obtain stratigraphic information, including depth to various soil units and bedrock.
- Collect soil and rock samples for laboratory testing.
- Perform in-situ testing (i.e., standard penetration tests) and laboratory testing to characterize the strengths and bearing capacities of the site soils and develop recommendations for the reuse of the onsite soils.
- Characterize the amount of cobbles and boulders present in the glacial till soils.
- Obtain information about the groundwater conditions on land.
- Provide information for the design of stormwater treatment structures.

Based on these goals, we have developed an exploration program consisting of up to 10 water borings, up to 16 land borings, and up to 20 test pits and a laboratory testing program consisting of index testing (moisture content, grain size, and Atterberg limits), modified Proctor compaction tests, California Bearing Ratio tests, and unconfined compression testing of rock.

The water borings will be performed using a barge-mounted drill rig. The barge will be left at the work area overnight and on weekends, and the drill crew will travel by boat to the site from a nearby marina each work day.

The land borings will be performed using an all-terrain vehicle drill rig, and the test pits will be excavated using a rubber-tired backhoe. Significant tree clearing will be required to access the land boring and test pit locations. H&A has budgeted for a tree service to perform clearing. The tree clearing effort will be limited to the amount necessary to access the exploration locations and provide adequate work space at each location. Trees will be left where they fall; removal of fallen trees and grubbing of stumps has not been included in this scope.



H&A will prepare a geotechnical data report summarizing the findings of the exploration program and presenting boring/test pit logs and geotechnical laboratory results. We have also included budget for H&A to consult with M&N's engineering staff during the design.

Additional details regarding the geotechnical exploration scope are provided in H&A proposal, which is included in Attachment A. [Note to MaineDOT: H&A's proposal is still pending, so we have included an estimated cost as a placeholder.]

Maine Stormwater Management Law requires that a certified soil scientist log test pits at the location of each stormwater treatment location. Main-Land Development Consultants, as a subcontractor to M&N, will provide a certified soil scientist to observe and log test pits at proposed stormwater treatment locations. Additional details regarding the soil scientist scope is included in Attachment A. [Note to MaineDOT: Main-Land's proposal is still pending, so we have included an estimated cost as a placeholder.]

#### Semi-submersible Barge Compatibility Consultation

A large semi-submersible barge will be required to accommodate the transfer of the fully assembled floating wind foundations from the quay to water. The finished foundations will be transferred from the quay to the barge via SPMTs. Once the foundation is secured, the barge will be moved to the sinking basin to be sunk and allow the foundation to become buoyant.

The deck of the barge will need to remain level with the quay deck at all times during the foundation transfer. This will require self-ballasting capabilities and certain freeboard and vessel draft characteristics.

Our subconsultant, Crowley Engineering Services, will evaluate the compatibility of various types of barges to complete this transfer. These types include:

- Existing Jones-Act-compliant Crowley Barges
- Existing international barges
- New build Jones-Act-compliant barge

If the existing barges cannot perform this transfer, Crowley will provide an order of magnitude cost estimate to retrofit the barge to allow for the transfer as well as a high-level time frame to perform these retrofits. Crowley will also provide an order of magnitude cost estimate to build a Jones-Act-compliant barge and provide a high-level time frame for this buildout.

This task is not meant to perform the preliminary or final design of the semi-submersible barge, but rather to confirm the feasibility of this loadout methodology.

Additional details regarding the barge compatibility consultation scope are provided in Crowley's proposal, which is included in Attachment A.

#### **TASK 3: BASIS OF DESIGN**

M&N will prepare a Basis of Design (BOD) document for the project. The BOD will establish criteria to be used throughout the evaluation and design process, including geometric, environmental, equipment,

and loading characteristics, along with a bibliography of applicable design codes, standards, and references. The following is a list of typical items in a BOD for a project of this size and complexity.

- A. Project Basis - Provides a description of project, codes references and standards that will be used for design.
- B. General Design Data - Identifies project datums and coordinate system, elevations and service life of structures, project boundary limits, navigation criteria, and property lines.
- C. Functional Requirements - Establishes the key functional aspects that will be incorporated into the design including site elevations, berth depths, site settlement requirements, etc.
- D. Operational Criteria - Establishes operational vehicles, crane sizes and wheel loadings, pavement area load ratings, functional and operational service descriptions, allowable overtopping criteria.
- E. Environmental Criteria - Establishes environmental design criteria (wind, wave, current, rainfall, etc.) and forces that will be imparted on the structures. Establishes the base flood and design flood elevation for the quay and upland areas.
- F. Geotechnical Criteria - Establishes subsurface conditions and geotechnical design criteria for the project based upon existing and new geotechnical boring investigations. Define methodologies for slope failure analysis, pile capacities, seismic analysis, and approach to consolidation/compaction of fill.
- G. Vessel Design Parameters - Establishes the design vessels for the facility and defines the parameters impacting the design of the mooring and fendering systems. Defines cold ironing vessel requirements.
- H. Design Loads - Establishes the design loadings and loading combinations on the structures.
- I. Material Properties - Identifies required material properties for the structures.

The basis of design document will be submitted to MaineDOT and others (as requested by MaineDOT) for review and input, as the project moves into the initial phase. Similarly, as the designs and design input from potential manufacturers and/or offshore wind component lease holders evolve, the BOD will be updated to remain current.

#### **TASK 4: UTILITY COORDINATION**

Power, water, telecommunication, and possibly sewer are required for development of the site. Based on the proposed usage, M&N will create a utility demand list for the site and share this list with the utility providers. M&N will coordinate with the utility providers to help them understand the level of service that will be required to support the proposed project and gain an understanding of any potential charges to the project from the utilities to meet this demand. We have assumed that this coordination can be done primarily by teleconference. We have budgeted for two on-site meetings at Sears Island (one for electrical and telecommunications and one for water and sewer), where we would meet with the project team and the various utility suppliers.

It is assumed that the utilities will bring lines to the northern extents of the Transportation and Conservation Parcels and that M&N will start the preliminary utility design from this point.

## **TASK 5: PERMITTING**

M&N subconsultant VHB will lead the permitting effort on this project. There are two main goals of the permitting: (1) to enable the geotechnical exploration program, and (2) to prepare a draft permit submittal based on the preliminary design. Additional details of the permitting scope are provided in VHB's proposal, which is included in Attachment A. M&N will support VHB's efforts by providing relevant input and figures as needed. Based on VHB's reviews of the local permitting, the level of detail required for these permits is essentially the same or less than that needed for national and state permits. Therefore, budget for drafts of the local applications is not included in this scope of work. We anticipate that the local permit applications can be prepared by drawing extensively from the national and state permits, so we recommend that the local permit applications be developed after the national and state permit applications are finalized.

**We understand that MaineDOT wants to move forward with design and permitting of Phase 1 of the OSW terminal at this time.** While it is likely that we can demonstrate that Phase 1 is a "single and complete project" (USACE terminology), Maine's Site Law requires that an application include plans for "all phases of a development to be undertaken on a parcel". This scope also includes meeting with the state and federal permitting agencies to present an overview of the Phase 2 project. It is assumed these will be virtual meetings.

Inclusion of Phase 2 design and permitting would require additional effort that is not included in our Phase 1 30% design scope. Therefore, we recommend that we consult with DEP and USACE as soon as practical to confirm that our design and permitting approach is acceptable.

### Geotechnical Exploration Program Permitting

The geotechnical exploration program will require the submittal of a permit application to the Maine Department of Environmental Protection (MDEP) and the U.S. Army Corps of Engineers (USACE). A single permit application will be submitted to MDEP and USACE. VHB will develop the permit in consultation with M&N. Based on the extents of clearing required for the uplands explorations, it is likely that MDEP will require the preparation of a site-specific Soil Erosion and Water Pollution Control Plan for the geotechnical explorations. M&N will prepare this Plan, as well as all figures and descriptions of work needed for the permit application.

### Phase 1 OSW Terminal Permitting

**VHB will prepare draft permits for the Phase 1 FOSW terminal.** Preparation of the permits will include the following tasks:

- Consult with the various state resource agencies requesting information about known locations of significant cultural resources and state threatened and endangered species.
- Coordinate a pre-application meeting with MDEP and USACE to present the project, confirm permitting requirements and required content of the applications, establish review timelines, and discuss potential resource protection and impact mitigation measures with agency staff.
- Develop a draft application for a USACE Individual Permit.
- Develop a draft application for a Maine Site Law Permit.
- Develop a draft application for a Maine Natural Resources Protection Act Permit

Additional details are provided in VHB's proposal, which is included in Attachment A.

#### **TASK 6: SITE LAYOUT/LOGISTICS OPTIMIZATION**

M&N will develop a site layout plan that includes conceptual locations of the various buildings, laydown areas, transport paths, site access, and logistical flow of operations. Our initial layout/logistics plan would be developed based on our experience with OSW ports and other marine terminal facilities.

We will present this plan for MaineDOT initial review, and revise based on MaineDOT comments. We will then participate in an in-person site layout design review meeting to be arranged by MaineDOT and facilitated by M&N. The proposed meeting location is Maine Port Authority's offices in Portland. We anticipate that this meeting would include representatives from M&N, MaineDOT, and potential terminal users as identified by MaineDOT.

The purpose of the meeting would be to elicit input from the prospective tenants and MaineDOT to develop a site layout that meets the near-term needs of the demonstration-phase FOSW facility, intermediate-term needs of the commercial-scale OSW facility, and the State's long-term needs considering potential use after OSW.

We will prepare a memo documenting the meeting and present an updated site layout plan. We anticipate that the layout plan will be distributed to the stakeholders. We will incorporate additional comments on the layout into the 30% design drawings.

#### **TASK 7: CONSERVATION PARCEL SITE LAYOUT DEVELOPMENT**

M&N prepared a conceptual layout for Conservation Parcel improvements at the northeast quadrant of Sears Island during the project's conceptual design phase. For this effort, M&N will advance this concept to the 30% level in cooperation with MaineDOT and key project stakeholders.

M&N will participate in an in-person meeting to discuss the layout of public area improvements. This meeting will be arranged by MaineDOT and facilitated by M&N. The proposed meeting location is MPA's offices in Portland. This meeting will include representatives from M&N, MaineDOT, and any other stakeholders MaineDOT feels appropriate to involve in the design process. The purpose of the meeting is to elicit input from MaineDOT and project stakeholders. In preparation for the in-person meeting, M&N will prepare an updated conceptual plan based on our latest understanding of the project.

M&N will prepare a memo documenting the meeting, along with a revised public improvements concept plan that clearly defines the overall limit of works (project boundary). MaineDOT will be responsible for collecting and distributing follow-on internal and stakeholder feedback. M&N will incorporate any additional comments on the layout into the 30% design drawings.

#### **TASK 8: COASTAL ANALYSIS**

M&N will perform a coastal analysis of the site that consists of the following:

- A. Establish Site Environmental Parameters - M&N will establish the relevant site environmental parameters. These parameters will include:

1. Design Water Levels, including extreme flood elevations and sea level rise
  2. Operational and Extreme Wave Heights
  3. Operational and Extreme Winds
  4. Operational and Extreme Currents
  5. Ice Loading
  6. Temperature Range
- B. Establish Environmental Forces on Structures - M&N will use the selected environmental factors to calculate the environmental forces on the designed structures. These forces will then be used in the appropriate loading combinations.
- C. Vessel Berthing and Mooring Forces - The operational level wind, wave and current conditions will form the basis for a dynamic mooring analysis of the design vessels in berth to determine mooring line loads, bollard capacities and fender size requirements. At the 30% level, mooring and berthing loads will be approximated based on typical vessels and barges that will be anticipated to be used at the facility.

#### **TASK 9: CIVIL DESIGN**

M&N will perform the preliminary civil design for the project uplands. The area being filled behind the cofferdams will be considered a heavy-lift area and will be rated at an allowable uniform live load of 5,000 psf. The existing uplands soils in the cut area will be rated at an allowable uniform live load of 3,000 psf. This design consists of the following:

- A. Estimate water capacity needs for potable water and fire protection to support the utility coordination outlined in Task 4. The estimate of site demands will factor in the future needs of the Phase 2 work. We will develop recommendations for further study to enable water supply.
- B. Evaluate sizing and options for sanitary design requirements. We anticipate that wastewater could be handled in three ways: {1) store, pump, and haul offsite; {2) treat onsite; and {3) connect to existing municipal sewer. The purpose of this subtask will be to identify the preferred alternative for wastewater handling. Depending on the selected alternative, additional design effort may be required to bring the preferred alternative to the 30% design level.
- C. Convert topographic files from NOAA and limited site survey data from VHB to base plans for the site civil and utility designs.
- D. Develop site grading plan.
- E. Develop overall layout for stormwater management design.
- F. Develop overall layout for utilities and site lighting, including utility vault locations and duct banks.
- G. Develop overall layout for terminal fencing and security design. At the 30% design level, security features will be shown schematically, based on a level of security that is typical for this type of facility and input from M&N staff experienced in port security design. During final design, a security assessment will need to be performed to finalize the security layout for the facility.

- H. Select location for terminal office building, educational center building, and parking areas associated with the buildings and the proposed trailhead parking area off of the cell tower access road.
- I. Design the layout and traffic flow of entry and exit gates of terminal.
- J. M&N will perform the design of the terminal topping surface. This surface will be dense graded aggregate.
- K. Perform stormwater management design in support of permit applications. This includes stormwater outfalls. These outfalls will return water to Penobscot Bay.
- L. Develop Soil Erosion and Water Pollution Control plan in support of permit applications.
- M. Develop overall layout for the terminal access road, extending from the existing access gates at the north end of Sears Island to the proposed terminal. We have assumed that the access road will follow the existing Sears Island Road alignment, and that modifications will be limited to minor geometric adjustments (i.e., curvature and slope) and design of a full-depth pavement replacement.

#### **TASK 10: GEOTECHNICAL DESIGN**

M&N will perform geotechnical engineering and design required for the preparation of the preliminary design for this project. The geotechnical related activities in support of the detailed design efforts will include:

- A. Assemble and review all existing geotechnical data for the site.
- B. Develop soil/rock design parameters, assess liquefaction considerations, develop seismic design parameters, and select site coefficients for all development areas of the project.
- C. Perform global stability and slope stability evaluations for revetment and uplands cut slopes.
- D. Prepare pile capacity evaluations including axial capacities and lateral capacities for the foundation elements for the project.
- E. Determine suitability of excavated uplands soils for use as backfill.
- F. Provide recommendations for imported select soils where needed (e.g., cofferdam fill and dense graded aggregate topping surface).
- G. Determine appropriate method for backfilling and soil consolidation/compaction for the infill area.
- H. Assess short term and long-term settlement of the infill area, including design of surcharge and wick drains.
- I. Provide bearing capacity recommendations for the infill and uplands areas.

### **TASK 11: STRUCTURAL DESIGN**

M&N will perform the preliminary structural design for the project. A cellular cofferdam with a pile-supported relieving platform is being considered for design. The structural design of the marine infrastructure and uplands will consider the ability to integrate with future expansions to the south of the current terminal area (Phase 2). These designs consist of the following:

- A. Design of Cofferdam Structures - M&N will advance the design of a gravity-based cellular sheet pile cofferdam bulkhead that will serve as the berthing surface for the quay, with a length of about 630 feet. The cofferdam will be designed to retain and support the lateral earth pressures of the filled upland area and an allowable uniform live load of 5,000 psf.
- B. Design of Pile-Supported Relieving Platform - M&N will advance the design of a pile-supported relieving platform that will be located over the approximately outboard half of the cellular cofferdam. This platform will run the full 630-foot length of the cofferdam. The relieving platform piles will be topped with a concrete deck, and the deck will be topped with dense graded aggregate. This relieving platform will be rated for an allowable live load of 5,000 psf.
- C. Design of Mooring Dolphins - The Phase 1 quay allows for approximately 630 linear feet of berthing space. In order to allow for mooring of one of the floating units, two mooring dolphins are proposed to the south of the quay.
- D. Design of Stormwater Inlet Grates, Manholes, Conveyance Piping, Trench Drains and Stormwater Treatment Structures - M&N will use the preliminary calculations performed in the civil design phase to perform the preliminary structural design of these elements. These elements will be structurally rated to handle the proposed terminal loadings. The design of these elements will be in conformance with the State of Maine Best Management Practices Manual and Maine Stormwater management rules.
- E. Preliminary Layout of Mooring Bollards and Fender System - M&N will select the appropriate capacity bollards and fenders so that the design vessels can be moored at the berths. M&N will size the bollards and fenders. It is anticipated that bollards and fenders will be installed every +/- 50 ft to 75 ft.

### **TASK 12: ELECTRICAL DESIGN**

M&N will perform preliminary electrical design for the project. This design consists of the following:

- A. Estimate electrical load demands to support the utility coordination outlined in Task 4. The estimate of site demands will factor in the future needs of the Phase 2 work. We will provide an overall electrical load estimate provide this list to the site service provider.
- B. Preliminary design of nacelle rack electrical system. The staged nacelles require power to perform system diagnostics and testing. The location of these outlets **will** be selected in Task 6.
- C. Preliminary design of vessel cold ironing system. This system will provide ship to shore power for the design vessels. The system will allow operation of hotel loading and vessel operations power. Ship-based cranes will not be powered by this system.
- D. Electrical one-line diagrams for the sites.

- E. Layout of electrical system including locations of electrical gear and ductbank routing for the sites.
- F. Layout of lighting along access road, education center area, and terminal.
- G. Layout of telecommunications.

#### **TASK 13: LANDSCAPE ARCHITECTURE DESIGN**

M&N will perform preliminary landscape architecture design for this project. We will incorporate the modifications to the design of the public improvements resulting from the review meeting in Task 7. Preliminary landscape architecture design consists of the following:

- A. Layout of the public improvements on the Conservation Parcel. At this stage in design, the layout will be limited to a delineation of paved, hardscaped, and landscaped areas. Specific hardscape and landscape features will be identified during final design.
- B. Development of a preliminary planting plan for the public improvements.
- C. Typical cross sections illustrating the design concept.

#### **TASK 14: PHASE 2 PRELIMINARY DESIGN REPORT**

M&N will prepare a preliminary design report (PDR) for Phase 2 of the FOSW terminal. The purpose of the PDR will be to provide MaineDOT with a reference document that can be used to communicate the conceptual design of Phase 2 without having to advance the design to a 30% level (as is being done for Phase 1). This PDR will clearly define the Phase 2 work with both text and supporting sketches and will be of sufficient detail to describe the project to the various permitting agencies.

We anticipate that the PDR will draw heavily from the already Conceptual Design Report that the M&N team has already developed but will be updated to focus primarily on Phase 2 in the context of being an upgrade to the Phase 1 facility, and any changes to the layout informed by the site layout design review meeting in Task 6.

We have assumed that we will prepare a draft of the PDR after the completion of Task 6. We will incorporate review comments from MaineDOT into a draft final version of the PDR. At the conclusion of Phase 1 30% design, we will update the PDR based on any changes made during the 30% design. We have assumed this update will also receive one round of review from MaineDOT.

#### **TASK 15: THREE-DIMENSIONAL RENDERINGS AND PRESENTATION**

M&N will develop a three-dimensional rendering of the proposed Phase 1 and the Phase 2 work. This rendering will show the following elements for each of the phases:

- Wharf development
- Upland development
- WTG components on the uplands
- Land based crawler crane
- Scheuerle SPMT transport units (or similar) on uplands
- FOSW vessels at berth
- FOSW foundations being assembled on the uplands



- Semi-submersible barge at berth or dolphins
- One-story building with parking lot
- Security fence at perimeter of site

The deliverable will be up to 8 photo-realistic, oblique-aerial renderings/photo-simulations of the project and immediate environment. The final output of renderings (file type and size) will be predetermined by MaineDOT.

We will develop a PowerPoint master slide deck presenting the design features of the project to aid in developing presentations to various stakeholders. Presentations will be developed from this master slide deck and adjusted to meet the needs of the meeting and the audience. We anticipate that the slide deck will include overview maps, layout plans, typical cross sections, descriptions of design features, and 3D renderings.

### **TASK 16: DESIGN DELIVERABLES**

M&N will create 30% design documents for the project. At the 30% level, these documents will meet the following criteria:

- A. Drawings -At this level, plans, cross sections, and elevations of the following information will be included:
  - Preliminary geotechnical information
  - Preliminary demolition
  - Site topographic and bathymetric survey drawings
  - Preliminary site erosion and sediment controls
  - Preliminary grading and storm drains
  - Preliminary utilities
  - Preliminary structures
  - Preliminary electrical plans and diagrams

The 30% drawing level is intended to clearly represent the main elements of the projects and their sizing and geometric layout.

- B. Technical Specifications -A list of the technical specification sections will be provided.
- C. Opinion of Probable Construction Costs - M&N will produce a Class 4 estimate, as defined by the American Association of Cost Estimating (AACE) Recommended Practice No. 18R-97, for this project. This estimate has a level of accuracy of +20% to +50% and -15% to -30%. The work will be broken down into tasks and a quantity and unit price will be developed for each task. This estimate will have a 25% contingency included.
- D. Construction Schedule - We will develop an estimated construction schedule. The work will be broken down into a series of sequential and concurrent tasks, and a duration will be estimated for each task. A critical construction path will be identified.

### **TASK 17: MEETINGS**

We will hold periodic coordination calls with MaineDOT to coordinate the work. We anticipate that bi-weekly meetings will be appropriate, supplemented by occasional weekly meetings during busier times in the project.

We have also budgeted for two face-to-face meetings in Portland during design development, for coordination and discussions with MaineDOT and potential leaseholder(s), in addition to the meetings in Tasks 1, 4, 5, 6, and 7 specifically noted above. We anticipate that periodic teleconferences will occur as required to coordinate work.

### **ASSUMPTIONS AND EXCLUSIONS**

The following assumptions, qualifications, and exclusions are made regarding the services the M&N team will provide to MaineDOT for the Preliminary Design for the Sears Island FOSW Marine Terminal:

1. The scope and associated fee for M&N and subconsultant services represent our understanding of work performed to date, and MaineDOT's project development needs. We are prepared to modify or otherwise tailor the proposed Scope as needed to fulfill project requirements, and otherwise achieve the needs of MaineDOT.
2. Negotiation with state and federal environmental agencies for required environmental mitigation and design of environmental mitigation will be by others.
3. Design work to bring utilities to the site from the mainland is not included.
4. Sampling and testing soils and existing structures for hazardous, toxic, radioactive, and other waste materials are excluded from the scope.
5. Environmental and fish and wildlife investigations, testing, and reporting (e.g. water, air, noise, hazardous substances, threatened and endangered species) are excluded from the scope.
6. Cultural, archeological, and historic investigations and reporting are excluded from the scope. The Maine Historic Preservation Commission will determine if the site is potentially sensitive in terms of archeological resources and may require a Phase 1 cultural resources survey.
7. Real Estate considerations, including land acquisition, right-of-way acquisition, land and riparian easements, and mitigation impact design are not included in this scope. M&N is not responsible for identifying any easements on the property. If easements exist, they will be provided by MaineDOT.
8. Services required because of third-party intervention or challenges to the project are not included.
9. Given MaineDOT's desire to incorporate public feedback into the design of the public improvements, there is a possibility that the design of these features lags the design of the terminal. We will incorporate changes informed by the design meeting in Task 7. Changes to the layout of the public improvements based on stakeholder feedback that are requested after this meeting may require additional scope and fee to incorporate.
10. Architectural, structural, mechanical, electrical, and plumbing design of the proposed terminal buildings will not be performed as part of this scope.
11. This fee proposal includes the performance of a number of soil borings and test pits anticipated at this time to meet the needs of the project design requirements. Should it be determined that additional borings are required to obtain acceptance of the project by government agencies, the cost for additional borings will be separately charged to MaineDOT.

12. Contaminated soils are not expected to be encountered. Costs of off-site disposal of contaminated soils and drilling fluid are not included in this fee proposal.
13. The drilling budget includes a contingency of 5 weather days (i.e., no-work days) for inclement weather. Standby time will apply for drill rigs and barge that have been mobilized to the site but cannot operate due to weather.
14. The bathymetry and geophysical budget includes a contingency of 20% of the field budget for inclement weather. Standby time will apply for the survey boat that has been mobilized to the site but cannot operate due to weather.
15. Base mapping from previous evaluations, designs, and/or surveys will be provided by the MaineDOT, in electronic format (AutoCAD).
16. A Metes and Bounds survey will not be performed as a part of this scope. It is assumed that the MaineDOT will provide the site boundaries for M&N use.
17. Coastal evaluations include only wind, wave, current, water elevation, and preliminary mooring and berthing assessments. Refined coastal evaluations, including but not limited to wave run-up assessments, sedimentation and scour evaluations, shoreline morphology, and similar studies and evaluations are excluded from this scope. Design of coastal revetments (excluding northern and southern sides of fill area), breakwaters, jetties, groins, and similar coastal protection structures are excluded from this scope of work.
18. Special studies and other work not specifically defined as services included in the Scope are fully excluded.
19. Submerged and submarine utilities are assumed to not exist. Assessment of submerged obstructions is limited to those depicted within public documents (NOAA navigation charts), or as otherwise identified by the multi-beam survey.
20. The proposed site stormwater system will treat water with in-line solids removal systems and then return treated water to the Penobscot Bay. There will be no stormwater retention on site.
21. MaineDOT will provide copies of current or previous agency authorizations, permits and approvals. The other authorizations and approvals may include EIS, EIR, National Pollutant Discharge Elimination System (NPDES) Permits, or Maine DEP permitting.
22. The Scope represents development for an approximate 30% level of design. Once preliminary design is completed, M&N can provide MaineDOT an additional proposal to capture the work associated with final design, plus additional efforts associated with bidding, award, and construction phase services through project acceptance and close-out. These services, if desired, would be performed under a separate future agreement.
23. **M&N** will provide a list of technical specifications only. It is assumed that MaineDOT will provide Front End specifications for the project.
24. It is assumed there are no functioning monitoring wells on site. Design of monitoring well closure or relocation has not been included in the scope or fee.
25. It is assumed the entity providing the high-mast lights will also provide the foundation design for these lights. Geotechnical information will be provided to facilitate this design.

## **PROPOSED FEE**

M&N proposes to complete this work on a time and materials basis as broken down in Table 1 below. A detailed fee breakdown is provided in Attachment B.

**Table 1: Proposed Fee**

Task	Item	Fee
1	PROJECT INITIATION	\$10,932
2	DATA COLLECTION/REVIEW AND SITE INVESTIGATIONS	\$41,326
3	BASIS OF DESIGN	\$29,314
4	UTILITY COORDINATION	\$34,248
5	PERMITTING	\$32,912
6	SITE LAYOUT/LOGISTICS OPTIMIZATION	\$17,252
7	CONSERVATION PARCEL SITE LAYOUT DEVELOPMENT	\$27,900
8	COASTAL ANALYSIS	\$36,558
9	CIVIL DESIGN	\$102,152
10	GEOTECHNICAL DESIGN	\$45,374
11	STRUCTURAL DESIGN	\$158,370
12	ELECTRICAL DESIGN	\$69,284
13	LANDSCAPE ARCHITECTURE DESIGN	\$59,424
14	PHASE 2 PRELIMINARY DESIGN REPORT	\$20,762
15	THREE-DIMENSIONAL RENDERINGS AND PRESENTATION	\$20,880
16	DESIGN DELIVERABLES	\$148,686
17	MEETINGS	\$29,578
	<b>Moffatt &amp; Nichol Labor Fee</b>	<b>\$884,952</b>
	Permitting and Site Survey Subcontract (VHB)	\$79,900
	Bathymetry and Geophysical Subcontract (Ocean Surveys Inc.)	\$65,985
	Geotechnical Exploration Subcontract (Haley & Aldrich)	\$550,000 (estimated)
	Barge Consultation Subcontract (Crowley)	\$42,800
	Soil Scientist Subcontract (Main-Land)	\$20,000 (estimated)
	Subconsultant Markup (5%)	\$37,934
	Moffatt & Nichol Expenses	\$15,436
	<b>Total Moffat &amp; Nichol Fee</b>	<b>\$1,697,007</b>

**SCHEDULE**

We anticipate an approximately 7-month duration to complete the scope above. An estimated project schedule that graphically depicts the timeline and association of work activities is provided in Attachment C.

The key personnel and technical staff that will be involved in the Preliminary Design of the Sears Island FOSW Facility, and any subsequent and other related assignments, are available and committed to providing the highest level of service to you.

**M&N** appreciates the opportunity to submit a proposal for this project. Please contact me with any questions or if you require any additional information.

Sincerely,

MOFFATT & NICHOL

Justin A. Dominguez, PE (MA)  
Project Manager

# **Attachment A**

## **Subconsultant Proposals**



September 21, 2021

Justin A. Dominguez, P.E.  
Joshua Singer, P.E.  
Moffatt & Nichol  
180 Wells Avenue, Suite 302  
Newton, MA 02459

RE: Proposal to Support Sears Island Offshore Wind Port Permitting

Dear Justin and Josh:

VHB is pleased to submit our proposal to provide permitting and regulatory support services for the Sears Island Offshore Wind Port Project (Project). We appreciate you including us on Moffatt & Nichol's team and look forward to continuing to work with you on this Project.

We have reviewed the Concept Design Report and Conceptual Sears Island Master Plan that you provided, as well as our notes from our recent meetings. Based on this information, we believe we have developed a scope of services that meets the needs of Moffatt & Nichol and the Maine Department of Transportation as they move the Sears Island site forward.

VHB is excited about the opportunity to submit this proposal and to build a relationship with Moffatt & Nichol. If you have any questions about our proposed approach, please don't hesitate to contact me at 207.536.2588 or via email at SHale@vhb.com.

Sincerely,

A handwritten signature in blue ink that reads 'S.D.H.' with a stylized flourish at the end.

Sean Hale

Director, Environmental/ Energy Services

500 Southborough Dr.  
Suite 105B  
South Portland, Maine 04106  
P 207.889.3150

Engineers | Scientists | Planners | Designers





**SCOPE OF WORK  
AGREEMENT FOR PROFESSIONAL SERVICES  
BETWEEN  
VANASSE HANGEN BRUSTLIN, INC.  
AND  
MOFFATT & NICHOL**

**September 21, 2021**

## **1.0 Project Understanding**

Vanasse, Hangen, and Brustlin, Inc. (VHB) previously contracted with Moffatt & Nichol (M&N) on a proposal to the Maine Department of Transportation (MOOT) to study the feasibility of constructing a port, in the Searsport region, to support the offshore wind (OSW) industry on the eastern seaboard. This feasibility study included an assessment of the physical infrastructure as well as the economic case for certain identified locations within the Searsport area, as well as potential permitting hurdles. Based on this analysis, the Final Concept Design Report recommended installing this port facility on Sears Island.

The Sears Island site is part of an approximately 330-acre parcel owned by the MOOT and which is undeveloped. The Phase 1 Development project is comprised of approximately 30-acres of upland area for the component storage area and development support, with approximately 7.2-acres of infill and cofferdams. The Phase 2 Commercial Scale project would expand to approximately 44-acres of uplands and 21.5-acres of infill and cofferdams. Because the entire site is owned by the MOOT and there are no existing structures with which to contend, it is not necessary at this time to closely delineate the areas that will be developed. The area is accessed by Sears Island Road, which is also known as Stetson Hills Road, which connects to a causeway from the mainland. Topography is gently sloping from east to west, with elevations ranging from approximately 70 feet amsl to the east to 4 feet amsl at the western end. In addition, the MOOT is contemplating including a new public amenity, the Sears Island Education Center, as part of their application.

VHB understands that the Maine Department of Transportation intends to contract with Moffatt & Nichol to advance the Sears Island site to the 30% design stage (the "Project") in preparation for submitting the required permit applications. To support this work, VHB will provide services related to a) permitting the necessary site studies; and b) developing drafts of selected federal and state applications. VHB also appreciates that this work needs to be completed in coordination with the MDOT's public information activities and that contacts with outside entities need to receive prior approval.

## **2.0 Technical Approach and Preliminary Scope of Work**

This scope of work includes the development of selected state and federal permit applications to a draft status, so as to advance the planning and design of the Project. A detailed breakdown of the scope of work and associated tasks are described below. VHB's overall approach to this Project is based on our commitment to provide the highest quality of service to M&N. This approach and commitment to quality, schedule, and costs are reflected in our company's philosophy for successful delivery of services.

# Stakeholder Management Plan

September 8, 2021

## Hughes, Amy

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**From:** Hinkley, Angela R  
**Sent:** Friday, September 17, 2021 12:34 PM  
**To:** Merrill, Paul  
**Subject:** FW: OSW/Port Development Stakeholder Plan  
**Attachments:** PORT DEVELOPMENT TO SUPPORT OFF SHORE WIND INITIATIVE.docx; Stakeholder Messaging.docx

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**From:** Kathryn Rand [REDACTED]  
**Sent:** Wednesday, September 15, 2021 3:21 PM  
**To:** Van Note, Bruce A [REDACTED]; Moulton, Nathan [REDACTED]; Burns, Matthew [REDACTED]; Pingree, Hannah [REDACTED]; Burgess, Dan [REDACTED]; Cunningham, Celina [REDACTED]; Ronzio, Anthony [REDACTED]; Mercer, Paul [REDACTED]; Mendelson, Meredith [REDACTED]; Hinkley, Angela R [REDACTED]; Miller, Cheryl [REDACTED]  
**Subject:** Re: OSW/Port Development Stakeholder Plan

**EXTERNAL: This email originated from outside of the State of Maine Mail System. Do not click links or open attachments unless you recognize the sender and know the content is safe.**

I've attached the proposed Stakeholder Management Plan and timeline that we'll be discussing on Friday.

I've also attached some draft messaging points that we should also plan to discuss. It may be that we'll want to create a media team to refine the messaging points.

I look forward to the conversation! Thanks, again, for your contributions to this plan.

---

**From:** Kathryn Rand [REDACTED]  
**Date:** Wednesday, September 15, 2021 at 2:38 PM  
**To:** "Van Note, Bruce A" [REDACTED], "Moulton, Nathan" [REDACTED], "Burns, Matthew" [REDACTED], "Pingree, Hannah" [REDACTED], "Burgess, Dan" [REDACTED], "Cunningham, Celina" [REDACTED], "Ronzio, Anthony" [REDACTED], "Mercer, Paul" [REDACTED], "Mendelson, Meredith" [REDACTED], "Hinkley, Angela R" [REDACTED], "Miller, Cheryl" [REDACTED]  
**Subject:** OSW/Port Development Stakeholder Plan

Kathryn Rand is inviting you to a scheduled Zoom meeting. Topic: OSW/Port Development Stakeholder Plan Time: Sep 17, 2021 03:00 PM Eastern Time (US and Canada) Join Zoom Meeting <https://us02web.zoom.us/j/87319643774?pwd=aU0wcTRteC91aG5uRnNQTOdCWUVQdz09> Meeting ID: 873 1964 3774 Passcode: 737881 One tap mobile +13126266799,,87319643774#,,,,\*737881# US (Chicago) +19294362866,,87319643774#,,,,\*737881# US (New York) Dial by your location +1 312 626 6799 US (Chicago) +1 929 436 2866 US (New York) +1 301 715 8592 US (Washington DC) +1 346 248 7799 US (Houston) +1 669 900 6833 US (San Jose) +1 253 215 8782 US (Tacoma) Meeting ID: 873 1964 3774 Passcode: 737881 Find your local number: <https://us02web.zoom.us/j/87319643774?pwd=aU0wcTRteC91aG5uRnNQTOdCWUVQdz09>

**PORT DEVELOPMENT TO SUPPORT OFF SHORE WIND INITIATIVE**

**STAKEHOLDER MANAGEMENT PLAN**

**September 8, 2021**

**Kay Rand  
Kay Rand LLC  
8 Pine Street  
Bar Harbor, Maine 0460**

**Background:** The Maine Department of Transportation (MaineDOT), as part of Governor Mills' Maine OffShore Wind Initiative, retained Moffatt & Nichol to study the feasibility of constructing a port in the Searsport region to support the off shore wind (OSW) industry on the eastern seaboard.

4 potential sites were studied and compared against an extensive list of criteria – Mack Point Terminal, Sears Island, Sprague Put Parcel, and the GAC Chemical Site, and the study recommended the selection of the Sears Island site to construct a port to service the floating offshore wind industry. The circumstances at Sears Island make it uniquely positioned to serve, not just the Gulf of Maine, but also a more extensive US Northeast floating offshore wind market.

Some urgency exists to stay ahead of other states along the eastern seaboard also planning to invest in their ports for this purpose, including Massachusetts, Connecticut, New York, New Jersey and Virginia.

The University of Maine (UMaine) is a national leader in research and development around wind power and is the holder of a patent on the VoltturnUS floating concrete hull technology that can support wind turbines in very deep water. The economic benefit of building UMaine's hull design in Maine is huge. Developing the port infrastructure that allows it to happen in Maine, rather than having another state reap the financial benefits of the research that took place right here, is a significant accomplishment and game changer for Maine's ports, the Maine economy and our climate change goals.

**GOAL: To develop and execute a stakeholder outreach strategy that would enable Governor Mills to announce the results of the M & N study, announce a commitment to pursue development of Sears Island as the Renewable Energy Port of the Northeast,** and announce a statewide port strategy spanning the entire coast to provide auxiliary roles to position Maine as a national leader in the OffShore Wind Industry.

If the Stakeholder Plan is successful, the public announcement will include supportive parties representing the Town of Searsport, business and environmental leaders, and address the opposition to be expected from Maine's fishing community by committing to listen to them and involve them in the planning of the port development to minimize impacts to fishing and other ocean uses.

## KEY FOUNDATIONAL CONCEPTS:

1. **DOT should be the project lead**, coordinating closely with an internal team of the Governor's Energy Office, the Office of Policy and Innovation, the Governor's Off Shore Wind Advisor; the Department of Community Development and the Maine International Trade Center.
2. **DMR and DEP should always be copied on all materials**, and their input is key, but they should not be listed or officially included in the decision-making internal team as they both have regulatory roles over the project. They will also be key liaisons to the fishing and conservation communities who must trust their ability to objectively perform their regulatory roles.
3. **The key messages are three:**
  - a. **Maine is committed to developing the port infrastructure at Sears Island to be the Renewable Energy Port of the Northeast** and at other ports up and down the Maine coast to comprehensively support the Off Shore Wind Industry;
  - b. The economic benefit of building the hulls designed by UMaine in Maine and investing in other Maine ports to provide auxiliary roles to support the OSW industry is significant; and
  - c. Maine's climate goals are significantly advanced by enabling the development of a strong Off Shore Wind industry.
4. A power point containing these messages will be developed for use by all team members for each stakeholder briefing.
5. **NEAV and UMaine** are key partners to the project and should be kept apprised of documents and plans and allowed input.
6. **Interface with the Road Map Project is key.** Announcing the Research Array ahead of the Road Map being completed was controversial. To avoid that with this announcement, it'll be important for the Governor to give the Road Map specific follow up duties – namely to ask the Fisheries Working Group and the Ports and Marine Transportation Working Group to analyze impacts to ocean users from increased shipping traffic and the port development and design strategies to eliminate or minimize them.

## STAKEHOLDER OUTREACH STEPS:

**STEP ONE:** Arrange and conduct a meeting with the **Maine Coast Heritage Trust and Friends of Sears Island** to alert them to the study's conclusions and to present the conservation investments that MaineDOT is also planning to make on Sears Island's conservation parcels.

TBD: Who will arrange meeting? Who will participate in the briefing? Should DEP be included in this meeting as the 3<sup>rd</sup> party enforcer outlined in the Executive Order?

## Stakeholder Plan for Port Development to Support Offshore Wind

**STEP TWO:** Arrange and conduct a meeting with **Sprague Energy** to share the study and its conclusions.

TBD: Who is best to make contacts? Who will participate in meeting?

**STEP THREE:** Call **Jim Gilway, Searsport Town Manager** to brief him and to request and schedule an opportunity to present the study in Executive Session to the Board of Selectmen. Under Maine's Right to Know Law, municipal boards are allowed to meet in Executive Session to discuss economic development matters.

TBD: Who is best to make contacts? Who will participate in briefing? Will we present powerpoint with all messaging or simply present the study?

**STEP FOUR:** Brief, by phone, the members of **Searsport's legislative delegation (Senator Chip Curry and Representative Scott Cuddy)** and tell them that the Board of Selectmen in Searsport is being briefed in executive session.

TBD: Who is best to contact?

**STEP FIVE:** Arrange a remote meeting with the state staff of all four members of the **Maine Congressional Delegation** to alert them to the pending announcement and to enlist their aid in identifying available federal funding. A follow up joint conversation with Governor Mills and the four Members could be arranged the evening before the announcement or the morning of the announcement.

TBD: Who is best to arrange meeting? Who will participate in the briefing?

**STEP SIX:** Brief, by phone, **President Bill Brennan of the Maine Maritime Academy**, to solidify their support and interest in developing the port as future employment for their graduates, and as one of the closest neighbors to the port.

TBD: Who is best to make the contact?

**STEP SEVEN:** Reach out and individually brief the executive director or president of **business organizations and labor organizations** that are likely to support the initiative. Offer in depth briefings after the announcement.

- × Dana Connors, Maine State Chamber of Commerce
- × Maria Fuentes, Maine Better Transportation Association
- × Jeremy Payne, Maine Renewable Energy Association
- × Matt Marks, AGC Maine
- × Jack Humeniuk, Maine Longshoreman (AFL-CIO)
- × Matt Schlobohm, AFL-CIO

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- × Maine Lobsterman's Union

TBD: Who is best to make the contacts?

**STEP EIGHT:** Brief key leaders of Maine's environmental non-governmental organizations. Offer in depth briefings after the announcement.

- × Don Perkins and David Reidmiller - Gulf of Maine Research Institute
- × Jeff Marks, Acadia Center
- × Sam Belknap, Emma Wendt, Nick Battista - Island Institute
- × Sarah Leighton, Matthew Cannon - Sierra Club
- × Andrew Beahm, Eliza Donoghue, Nick Lund – Maine Audubon
- × Anya Fletcher, Environment Maine
- × Beth Ahearn, Maine Conservation Voters
- × Keith Arnold, Robert Wood, Kaitlyn Bernard - The Nature Conservancy
- × Lisa Pohlmann, Pete Didisheim, Melanie Sturm, David Costello, - Natural Resources Council of Maine
- × Sean Mahoney, Conservation Law Foundation

TBD: Are these the right representatives of the organizations? Who is best to make the contacts?

**STEP NINE:** Call each member of the Road Map's Fisheries Working Group to provide a heads up about the pending announcement and alert them to the role that the Governor will ask of them as part of the Road Map project.

TBD: Who is best to make the contacts?

**STEP TEN: ANNOUNCEMENT** (Note: We should consider editorial board briefings with Maine Biz, Bangor Daily News and Portland Press Herald the day before the announcement)

TBD: Who will comprise the Media Team to prepare press advisories and press releases? Who will assume responsibility for Governor's speech? Should we do Editorial boards? Are there Key reporters to whom we should grant exclusive interviews? Are there Industry publications that we should reach out to arrange interviews?

**STEP ELEVEN:** Send invitation to the town manager/key official of each **municipality in the proximity of Searsport**, inviting them to a location in Searsport to get a briefing about the project, perhaps hosted by the Town of Searsport, and include area legislators. The invitation should be sent the day of the announcement, but calls should also be placed alerting them to the event. Those towns include:



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Belfast, Stockton Springs, Bucksport, Winterport, Lincolnville, Islesboro, Penobscot, Castine, Brooksville, North Haven

TBD: Who should the invitation come from? Who is best to make the calls? Where will the briefing be? Who will participate in the briefing? Are there other islands in Penobscot Bay, other municipalities in Waldo or Hancock Counties that should be invited?

### **TIMELINE:**

Week of October 18: Meeting with area town/county officials

October 13, 14, or 15 – ANNOUNCEMENT

October 11-12: Contact members of Fisheries Working Group

October 6-8: Contact Environmental NGOs

October 4-5: Contact business and labor groups

October 4: Contact MMA

September 27-October 1: Meet with MCHT/FOSI; Meet with Sprague Energy; Meet with Town of Searsport; Call Searsport legislators

The post-announcement stakeholder management strategy is being developed and will be partially informed by the feedback and reactions gained during the roll-out of the pre-announcement stakeholder strategy, but should definitely revolve somewhat around the Road Map project.

## Messages Supporting Roll-out of OSW Port Development

- I. OSW Background – Why Maine?
  - II. Sears Island to become the Renewable Energy Port of the Northeast; other ports up and down the Maine coast will play auxiliary roles to support OSW
  - III. Building the VOLTURNUS floating hulls designed by UMaine in Maine will create significant economic benefit – Maine patented and Maine built
  - IV. OSW energy critical to achieving our climate action goals
- 
- I. Off Shore Wind – Why Maine can be become the National Hub
    - × OSW represents Maine’s largest untapped sources of clean energy with more than 156 gigawatts (156,000 megawatts) of potential energy off the Maine coast
    - × UMaine is a national leader in research and development around wind power and the holder of a patent on the VOLTURNUS floating hull technology that can support wind turbines in deep water – a demonstration of UMAINE’s floating hull technology is moving forward off Monhegan Island
    - × Maine has an enterprising citizenry with centuries of maritime experience
    - × Maine is pursuing federal approval for a Research Array of up to 12 floating turbines using UMaine technology – to best determine how OSW and Fisheries can co-exist
    - × Governor Mills’ Energy Office received \$2.167 million EDA Grant to develop OSW industry in Maine
  - II. Port Infrastructure in Maine to Support OSW Industry
    - A. As part of Governor’s OSW Initiative, DOT commissioned Moffatt & Nichol to study the feasibility of constructing a port in the Searsport region to support OSW industry on the eastern seaboard
      - a. Four locations were extensively studied – Mack Point Terminal, Sears Island, Sprague Put Parcel, and the GAC Chemical Site
      - b. Study criteria included the required draft for delivery vessels; vessel clearances; upland area sufficient to fabricate the foundations and storage and staging of wind turbine components; required loading levels; unlimited air draft; length of quay, capacity for sufficiently-sized land based crane; and distance to installation sites.
      - c. The Sprague Put Parcel and GAC Chemical Site were ruled out based on an initial analysis to identify fatal flaws;
      - d. Sears Island was recommended as the ideal location
        - i. Required depths can be met WITHOUT DREDGING at the site
        - ii. There is sufficient upland area for fabrication and component assembly

- iii. There is access to existing deep water for the fabricated hull and the completed turbine
    - iv. Total project costs will be less than at Mack Point
  - B. Moffatt & Nichol is also conducting a Phase 2 study to analyze port locations along the entire Maine coast to perform auxiliary roles such as Maintenance and Operations, Crew Transfer, Component Manufacturing
  - C. **Sears Island can become the Renewable Energy Port of the Eastern Seaboard**
  - D. Other ports up and down the Maine coast can perform auxiliary roles– making Maine a national hub for the OSW industry
- III. Building the VOLTURN US in Maine yields the greatest economic benefit of Maine-based research at the University of Maine
  - × In a March 2019 study led by Professor Todd Gabe at UMaine’s School of Economics, it was estimated that constructing the OSW floating hull would result in 3,928 jobs for five years for each 500 MW project;
  - × Building 9,000 MW of offshore wind by 2035 will create more than 10,000 jobs
  - × Jobs include iron workers, carpenters, electricians, plumbers, operating engineers, laborers, truck drivers, maintenance technicians, vessel crews and white collar engineering, permitting and management jobs
  - × The total economic gain to Maine has not been quantified, but will be a game-changer
- IV. Enabling the OSW Industry from Maine will significantly advance the state’s and nation’s climate goals
  - × OSW will diversify Maine’s energy sources and reduce fossil fuel emissions

Searsport Intermodal Commodity  
Final Report  
August 3, 2017



## FINAL REPORT

# Searsport Intermodal Commodity Study

Maine Port Authority/Maine DOT

HDR Project No. 10040573

*Searsport, Maine*  
August 3, 2017



**Figure 13: Existing Main Rail Yard and Heavy Weight Pad Area<sup>75</sup>**



### **Land Expansion and Industrial Park Development**

Another primary concern is the availability of land for Port expansion. Development of Sears Island has been a controversial issue for a number of years, but Searsport represents one of the most flexible and adaptable Port facilities in the Northeast. If the Port were to grow with the removal of constraints, additional land would be needed for handling of cargo. Future development of an efficient, major container terminal on Sears Island is impractical. This site, however, could be used for project cargo, specialized production or assembly of offshore wind components, or neo-bulk cargoes. While not an immediate need, preservation of the Sears Island site for future Port use should be considered since lack of land for expansion is often the major constraint in the growth of successful ports.

Developing an industrial park near the Port should be included in Searsport’s future town planning. The Town has identified industrial property near the Port which could include some 100 acres of industrial land for new development. This could be enhanced for development by planning the property and identifying utility capabilities, including the provision of gas through Bangor Gas’s line into the Port. Additionally, during interviews with Town officials, it was made apparent that the Town is committed to embracing its maritime heritage. It is therefore recommended that the Town consider appointing an employee to be responsible for focusing on Port planning and industrial issues for future growth.

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<sup>75</sup> Source: HDR