

**STATE OF MAINE**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION**  
**BOARD OF ENVIRONMENTAL PROTECTION**

IN RE: APPLICATION OF NORDIC AQUAFARMS, INC.  
MPDES PERMIT: #ME0002771, #W009200-6F-A-N;  
NRPA and SLODA: #L-28319-26-A-N, #L-28319-TG-B-N,  
#L-28319-4E-C-N, #L-28319-L6-D-N; #L-28319-TW-E-N;  
Air: #A-1146-71-A-N

PETITION TO INTERVENE  
FILED ON BEHALF OF  
THE MAINE LOBSTERING UNION,  
WAYNE CANNING, AND  
DAVID BLACK

City of Belfast and Town of Northport, Waldo County  
Submitted: July 10, 2019

---

The Maine Lobstering Union (“IMLU”), a cooperative corporation, organized and doing business in the State of Maine; Wayne Canning, Zone D Lobster Council Representative for District 11 Lobstermen and a Maine commercial lobster and crab fishing license holder; and David Black, a Maine commercial lobster and crab fishing license holder fishing in Belfast Bay and Penobscot Bay out of Belfast, Maine (hereinafter “the Petitioners”), pursuant to 5 M.R.S.A. § 9054(1) and 06-096 C.M.R. ch. 3 §11(A)(1), petition to intervene as parties in all proceedings before the Board of Environmental Protection (“BEP” or “the Board”) relating to the above-referenced applications, filed by Nordic Aquafarms, Inc. (“Nordic”).

NAF proposes to construct and operate a land-based salmon fish breeding, maturation and processing plant, on land of or adjacent to the Belfast Water District and adjacent to the Little River (“the Project”), with intake and discharge pipelines located in Belfast Bay and Penobscot Bay within the municipal boundaries of Belfast and Northport, Maine. This facility, as proposed, is an existential economic and environmental threat to Penobscot Bay, the Pen-Bay lobster fishery, and all lobstermen of Zones C and D who fish in or around Belfast Bay and Penobscot Bay. The harms are particularly significant for lobstermen who fish in the upper Penobscot Bay, Belfast Bay, and the western side of Islesboro.

The Petitioners seek leave to intervene pursuant to the Department’s Administrative Rules, Chapter 3, RULES CONCERNING THE CONDUCT OF LICENSING HEARINGS, Section 11, Subsection A, Intervention.

**THE MAINE LOBSTERING UNION (IMLU):**

In support of this Petition, the IMLU asserts the following grounds for intervention set forth below, including but not limited to:

1. The IMLU is Local 207 of the International Association of Machinists and Aerospace Workers (IAMAW), within District Lodge 4 of the IAMAW. The IMLU was incorporated in the State of Maine as a nonprofit fish marketing association. The corporation was organized as a “cooperative corporation” by filing Articles of Incorporation under the Fish Marketing Act, 13 M.R.S.A. §§ 2001-2287, with the Maine Secretary of State, on September 10, 2013.

2. The IMLU is in good standing as an entity according to the Maine Secretary of State. The IMLU's charter number is 20140002CP. For federal tax purposes the IMLU is a "cooperative" under subchapter T of the Internal Revenue Code.
3. The IMLU is an organization comprised of active, licensed lobstermen and sternmen and exists to represent the interests of *only* licensed lobstermen and sternmen (as opposed to other lobster industry participants).
4. The IMLU is the first representative organization organized as a cooperative in Maine to represent lobstermen and sternmen exclusively. The harvesters in the IMLU also have purchased and operate a wholesale and retail business that markets and sells Maine lobsters and crabs harvested by IMLU members and other holders of Maine lobster and crab fishing licenses. The IMLU's business operates under the business name Lobster207.
5. The IMLU represents lobstermen in all Maine Lobster Zones, from Kittery to Cutler, including in Zones C and D, the Zones covering Penobscot Bay, Maine, that would be most directly adversely impacted by this proposed project.
6. The IMLU has members that fish in the area directly, adversely impacted by the pipelines, dredging, blasting and wastewater and effluent dumping proposed by NAF, and in all areas of Zones C and D that will suffer direct, indirect, cumulative, primary, secondary, acknowledged, foreseeable and unforeseeable impacts from this project in the short- and long-terms.

#### **WAYNE CANNING:**

7. Wayne Canning, is the Zone D Lobster Council representative for District 11 Lobstermen and a lobsterman, holding a Maine commercial lobster and crab fishing license. Mr. Canning fishes out of Belfast, Maine in the area proposed by NAF for placement of its intake and discharge pipelines and the area where wastewater will be discharged.
8. Mr. Canning has participated in local and State proceedings and meetings in connection with this permitting process and has submitted and given testimony in opposition to the NAF project as proposed.
9. Mr. Canning has solicited input regarding the potential impacts of this proposed project from the Zone D District 11 lobstermen who he represents.
10. Zone D District 11 includes the geographic area where NAF proposes to place its intake and discharge pipelines and discharge up to 7.7 million gallons per day of warm wastewater. The construction and placement of these pipelines and discharge of wastewater into Penobscot Bay will adversely impact Wayne Canning and all District 11 lobstermen.
11. Attached as Exhibit A is Wayne Canning's personal statement detailing the adverse impacts that this project would inflict on the 82 to 100 licensed lobstermen in District 11. A list of license holders from District 11 obtained by Mr. Canning from DMR is attached to his Statement. Mr. Canning also has included the May 4, 2013 letter sent to the U.S. Army Corps of Engineers by the Downeast Lobstermen's Association, opposing the proposed Searsport dredge project. DELA's letter confirms the uncompensated, multi-year adverse impacts suffered by the lobstermen in District 11, including Mr. Canning, due to past

dredging projects, including the 2003 Belfast Harbor dredging project. Mr. Canning's statement and the DELA letter are incorporated in this petition as though stated herein.

**DAVID BLACK:**

12. David Black is a Belfast resident and a lobsterman, holding a Maine commercial lobster and crab fishing license. Mr. Black has fished for more than 55 years in Belfast Bay and Penobscot Bay out of Belfast, Maine, and fishes in the area proposed by NAF for placement of its intake and discharge pipelines and the area where wastewater will be discharged.
13. Mr. Black has participated in local and State proceedings and meetings in connection with this permitting process and has submitted and given testimony in opposition to the NAF project as proposed.
14. Attached as Exhibit B is Mr. Black's Statement detailing some of his personal knowledge of the lobster fishery in the upper Penobscot Bay and Belfast Bay – an area where he has made a living fishing for decades. Mr. Black confirms the uncompensated, multi-year adverse impacts suffered by the lobstermen in District 11, including him, due to past dredging projects (including the 2003 Belfast Harbor dredging project) and past placement of pipelines that obstruct the movement of lobsters in and around the Bay. Mr. Black's statement is incorporated in this petition as though stated herein.

**Particularized Adverse Impacts from this Proposed Project that These Petitioners for Intervenor Party Designation Will Suffer:**

15. The impacts that Petitioners will suffer from this project as proposed include direct impacts on the abundance, distribution, health, access to and commercial value of lobsters in and from Belfast Bay and Penobscot Bay, as well as the potential adverse economic impacts from possible contamination of lobsters caused by disturbing long-buried HoltraChem mercury or discharge of contaminants in the NAF wastewater, which could irreparably damage the reputation for wholesomeness of *all lobsters* marketed and sold under the Maine Lobster brand – including but not limited to lobsters that are caught or landed specifically in or from Waldo County in Belfast and Penobscot Bays.
16. Among those impacts is the deposition of process waste into Penobscot Bay, polluting the Bay and impairing the farming of mussels and harvesting of lobsters, and fouling beaches where members and their families swim and fish;
17. In addition, these impacts include permanent physical loss of use and access to traditional fishing grounds by lobstermen, crabbers, urchin fishermen and scallopers in the area of the proposed pipelines and wastewater and effluent dumping, and potential loss of use of a far more expansive area of the upper Penobscot Bay if the proposed pipeline and wastewater and effluent dumping cause new contamination and/or the re-suspension and spread of long-dormant and buried mercury contamination from Mallinckrodt and HoltraChem.
18. IMLU members and other licensed lobstermen and crabbers have already lost the use of approximately 13 square miles of lobstering and crabbing grounds near this area due to the presence of mercury contamination. This project poses a threat of disturbing similar contamination from the same original sources (Mallinckrodt and HoltraChem), as well as new and as yet not fully revealed additional contamination that will damage the

marketability and/or abundance of lobster and crab, as well as other commercially fished species in this area.

19. NAF's third proposed pipelines route and configuration proposes that a large portion of the intake pipelines and most of the outfall/discharge pipeline would be buried in the intertidal zone originating in and near the Little River and extending into Belfast and Penobscot Bay. NAF proposes that these pipelines will be buried by use of destructive mechanical trenching in this fragile and sensitive intertidal estuary.
20. NAF also proposes to use blasting to destroy ledge in this area so that it can bury these pipelines – again disturbing and spreading buried HoltraChem mercury that the federal court's experts have determined is buried in this area.
21. NAF then proposes to place the remaining length of the outfall and intake pipelines along the surface of the Bay beginning at a depth of approximately 32-feet, covered by gravel and a concrete covering. This construction process would form an underwater seawall that is approximately 5.5 feet high and 8 to 10 feet wide. This wall will inevitably alter currents in the area, trap wastewater, disrupt and obstruct the movement of lobsters and other sealife, and damage or destroy valuable lobstering grounds where 100 to 200 lobstermen currently fish from Districts 10 and 11.
22. The up to 7.7 million gallons of wastewater that NAF proposes to dump daily into the fertile lobstering grounds of Penobscot Bay will be 5° to 33° Fahrenheit warmer than the natural temperatures of Penobscot Bay – depending on the time of year of the discharge. Dumping wastewater that is significantly warmer than the ambient temperatures of the Bay will adversely impact lobsters at all stages of development and permanently harm the Penobscot Bay lobster fishery. To understate such adverse impacts, NAF has filed “expert” reports falsely claiming that there is no significant lobster presence in this area – new to the almost 200 lobstermen who make a living fishing this area each year.
23. Attached as Exhibit C are county-by-county lobster landings data from the Maine Department of Marine Resources dating from 1964 to 2018. This data flatly contradicts the specious claims made by NAF and its agents that there are few lobsters in the area where NAF proposes to place its pipelines and that NAF acknowledges will be directly impacted by its wastewater discharges. This data is incorporated by reference into this petition as though stated herein. This data can be found online at: <https://www.maine.gov/dmr/commercial-fishing/landings/documents/lobster.county.pdf>
24. Exhibit C confirms Mr. Black's statement, demonstrating the exponential increase in lobsters and lobster landings in Waldo County as the Bay has begun to recover from past industrial degradation and pollution of this area of the Bay. From 1964 to 1999, the Waldo County lobster catch was not significant enough for DMR to even be separately mention in its report. From 2000 to 2003, Waldo County's catch was included with the Knox County data. However, beginning in 2004, the Waldo County catch had rebounded enough to be separately reported by DMR.
25. In 2004, the Waldo County catch was 401,706 pounds, worth \$1,762,878 at the dock.
26. However, the catch drastically declined as a result of the effects of the 2003 Belfast Harbor dredge on the upper Bay fishery. In 2005, the catch declined by over 29% to 284,661

- pounds. The catch remained under the 400,000-pound range until 2011.
27. In 2011, the catch was 456,016 pounds with a value of \$1,449,663. Since 2014, the Waldo County Catch ranged between 746,704 pounds and 864,528 pounds, with a value in excess of \$3 million each year.
  28. The value of the Waldo County lobster catch has a value in the local and Maine economy of three to five times the value of the catch at the dock – meaning the Waldo County lobster catch has an economic worth to the Maine and Midcoast economies of in excess of \$9 million and \$15 million *annually*.
  29. The value of this catch far exceeds the potential annual economic benefits to the Maine and local economy of the proposed NAF project. This significant economic value would be lost if this project is approved.
  30. Attached as Exhibit D is a detailed list of adverse impacts of the NAF project, as proposed, that will have direct, immediate, significant adverse impacts on lobsters' health and quantities, access to traditional lobster fishing grounds currently used by 100 to 200 lobstermen, the reputation and sustainability of the lobster fishery in the upper Penobscot Bay, and the reputation for wholesomeness of Penobscot Bay lobster and the Maine lobster brand.
  31. Attached as Exhibit E is a mercury distribution chart prepared by the federal court's experts during Phase II of the PRMS. This chart is incorporated herein as though stated in this petition. This chart shows that the level of contamination from buried HoltraChem mercury in the area NAF proposes to dredge, blast and place its pipelines is 200-300 ng/gm. NAF has confirmed a level of 239 ng/gm in one of the 3 core samples they took last year. NAF's employee Ed Cotter has told the Belfast Harbor Committee that NAF did not test 7 of the 10 core samples NAF took, 2 samples were "inconclusive" for mercury, and one of the 3 tested cores showed 239 ng/gm (just as the Court's experts stated was present. It is significant that NAF found this level of mercury, since NAF confirmed that it did use the more accurate PRMS core sampling and testing protocol to do its testing.
  32. The IMLU, Wayne Canning and David Black are willing and able and prepared to participate in the Board's Hearings as Full Parties, have retained an attorney and have experts who have been studying this area of Penobscot Bay and/or the Project and are prepared to present expert testimony relevant to NAF's applications and proposed project.
  33. Consideration of the forgoing is required by:
    - a. The Clean Water Act, 33 U.S.C. 1251 et seq. and State companion statutes and regulations;
    - b. Maine State Regulations Chapter 38, Section 413, Waste Discharge Licenses;
    - c. Maine State Regulations Chapter 7 Part 10, Concentrated Animal Feed Operations;
    - d. Maine Statutes Title 38, Chapter 3, Site Location of Development;
    - e. Maine Statutes Title 38, Chapter 3, Wetlands;
    - f. Maine Statutes Title 38, Chapter 3 Natural Resources Protection Act; and
    - g. Maine Statutes Title 38, Chapter 3, Water Withdrawal.

WHEREFORE, the IMLU and its members, Wayne Canning and David Black will be “substantially and directly affected by the proceeding.”

FOR THE ABOVE REASONS, the IMLU, Wayne Canning and David Black request that this Petition for Intervention be GRANTED.

Dated this 10<sup>th</sup> day of July, 2019.

Respectfully Submitted,



Kim Ervin Tucker, Esq., Maine Bar No. 6969  
On Behalf Of the Maine Lobstering Union;  
Wayne Canning, Zone D Lobster Council  
Representative for District 11 Lobstermen; and  
David Black, Belfast Lobsterman

48 Harbour Pointe Drive  
Lincolntonville, Maine 04849  
P: 202-841-5439  
[k.ervitucker@gmail.com](mailto:k.ervitucker@gmail.com)

# **EXHIBIT**

**A**





## STATEMENT OF WAYNE CANNING

My name is Wayne Canning and I am the District 11 representative for the State of Maine Zone D Lobster Management Policy Council. I represent 100 lobster fishermen in this area. (Attached is list of names and commercial lobster license numbers of all fishermen that I represent in Zone D, District 11). The purpose of this statement is to provide concerns and facts to the Maine Board of Environmental Protection regarding the licensing request for intake and discharge pipes proposed by Nordic Aquafarms for their RAS project located in Belfast and Northport.

While every fisherman in Zone D and in Penobscot Bay would be adversely impacted by this project, those individuals in my District, District 11, would be impacted the most. As I discuss this project with fishermen regularly, it is very clear that a majority of the fishermen working in the area of this proposed pipe are very concerned and opposed to this project.

Local fishermen have the best knowledge of the conditions in the bay, and have seen the impacts of other similar projects which have caused great harm to the environment in Upper Penobscot Bay. Examples follow:

- Periodic dredging at Mack point in Searsport causes lobster production to decline in areas close to the projects.
- The dredging of Belfast Harbor in 2003 caused a sharp decline lobster production that lasted for a decade. (See attached letter from DELA).
- The placement of a sewer pipeline across Belfast Harbor in the year 2000 stopped lobster migration into the inner harbor and up the river. This area had previously been very productive lobster fishing, and has never returned to its earlier production.

The Nordic Aquafarms pipeline as proposed will affect lobster fishing in Upper Penobscot Bay in the following ways:

- Dredging and blasting for construction of this pipeline will cause lobsters to avoid the area the same as it does in any other dredging project.
- Buried mercury is a known contaminant in the bottom sediment in this area. This mercury contaminated sediment, found to be in this locations during the federal court's Penobscot River Mercury Study, will obviously be disturbed not only by dredging and blasting, but by the continuous operation of this pipeline.
- The Penobscot River is now closed to all lobster and crab fishing as far South as Stockton Harbor due to methyl mercury contamination found in samples of the lobsters and crabs taken from that area. This contamination was caused by buried mercury in the river being dislodged solely by river currents. When that area was closed, several fishermen including myself were displaced and can no longer fish there. **WE DO NOT WANT THE SAME THING TO HAPPEN IN BELFAST BAY BECAUSE OF THE NORDIC AQUAFARMS PIPELINE, IT'S CONSTRUCTION AND IT'S OPERATION.**
- As any fisherman can tell you, lobsters are very sensitive to even slight changes in the environment. This project proposes to dump enormous amounts of brackish and warm water (15°-18° Celcius; 59°-64.4° Fahrenheit) into a small area of Belfast Bay. This alone will cause lobsters and crabs to move away and not return to the area. Many fishermen will be displaced by the impacts of this project. Due to the very territorial nature of the lobstering society, it is almost impossible to relocate your fishing business to someone else's area. Many conflicts would arise.
- Interestingly, this pipeline is located just over 1 mile from the proposed dump site for the Searsport Harbor Improvement Dredge Project that resulted in huge controversy and was finally canceled because it would have caused so much destruction to the environment. **THE NORDIC AQUAFARMS PROJECT SHOULD NOT BE APPROVED FOR VERY SIMILAR REASONS.**

Lobster landings in this area have doubled in the last decade when there has been no disruption of the bottom sediments. (see State landings data for Waldo County). Nordic Aquafarms' claims that this area has few lobsters is simply false. While landings in this area are lower than other areas of the state, it is a

very important industry for Waldo County. Remember that this is a very small area, and up to 100 fishermen make a living here year in and year out. The lobster landings by these 100 fishermen are worth 3 to 5 times the amount of those landings to the local Midcoast economy according to the Maine Lobster Institute. This is a significant economic contribution to the Maine economy that will be lost if this project is allowed to proceed.

Additionally, there are several local fishermen who fish for crabs in the winter months that would be adversely impacted by this project – as would the other local businesses that then sell the catch these lobstermen bring in.

Underwater pipelines have been the root and cause of many environmental disasters over time, and this project will be no different. The few jobs that may be created by this pipeline on the mainland will be more than offset by the displaced fishermen and lost jobs of the fishermen in my District. The ripple effect in the restaurant and tourism industries will also be significant.

As the fishermen's representative in this area, I ask that you do not approve any permits for the Nordic Aquafarms pipeline proposal.

Sincerely,  
Wayne Canning  
Zone D District 11 representative

A handwritten signature in black ink that reads "Wayne Canning". The signature is written in a cursive style with a large, sweeping initial "W" and a long, trailing flourish at the end.

**Downeast Lobstermen's Association**  
**P. O. Box 88**  
**Belfast, ME 04915**  
**May 4, 2013**

Project Manager Barbara Blumeris  
US Army Corps of Engineers  
New England District, Engineering & Planning Division  
696 Virginia Road  
Concord, MA 01742

Re: Searsport Harbor Dredging Project

Dear Ms. Blumeris,

Our first and most important reason for writing this letter is to request a full Environmental Impact Statement to be conducted on the Searsport Harbor Dredging project as well as a public hearing.

We feel that the impact of this dredging project could have an adverse effect on the upper Penobscot Bay. We understand that the maintenance part of this project is a small percentage of the entire project that is being proposed.

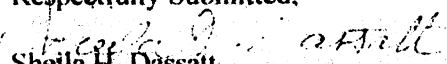
The big concern that needs to be addressed comes into the *expansion* of the project. The amount of bottom that will be removed and re-located "down toward the "I - I" Buoy", which is not classified as a "Dumpsite," will have a devastating impact on the lobster fishery in this area.

The maintenance of the existing channel should not be incorporated into an expansion project which has no relevance due to the fact that the LPG tankers will not be using the Searsport Facility.

Our members have been and continue to be involved in environmental studies concerning pollution issues and the impact of it on our marine resources. The balance of our marine eco-system is starting to make a come-back after the devastation of the dredging of Belfast Harbor from the last decade. This recovery has taken "years."

We strongly urge that the scientific and environmental data/impact of this project should be shared with the public, so those that will be directly affected by this will have an opportunity to voice their concerns.

Respectfully Submitted,

  
Sheila H. Dassatt

Executive Director

Downeast Lobstermen's Association – [dassatt711@yahoo.com](mailto:dassatt711@yahoo.com), 207 338-1406



# **EXHIBIT**

## **B**



Statement of David Black  
July 10, 2019

My name is David Black, a resident of Belfast Maine, and a lobster fisherman working from Belfast Harbor for 55 years.

Please include the information in this statement as part of the discussion on applications before you regarding the Nordic Aquafarms proposal to construct multiple pipelines into Upper Penobscot Bay in Belfast and Northport for the purpose of providing the intake of seawater and the discharge of effluents from the RAS facility proposed by Nordic Aquafarms to be located in Belfast, Maine.

As a local fisherman, I derive a significant portion of my annual income from the area beneath and adjacent to the proposed location of the Nordic Aquafarms pipeline. Therefore, I have considerable local knowledge of the area that I would like to share with you. I am sure that upon a total review of local information regarding this project that you will have many concerns about the environmental dangers and consequences of this proposed pipeline, just as I do.

Belfast Bay has a long productive history of fishing which has been diminished over time due to many municipal and industrial pollution sources. These pollution sources include decades of raw municipal sewage disposal from many points around the bay, untreated chicken waste from area poultry plants, fish waste from a long operating fish canning factory as well as mercury contamination in the bay from a facility on the Penobscot River. Add to these several dredging projects in Belfast, Searsport and other ports and you begin to see the degree of pollution this bay has suffered in the past.

I will discuss these pollution concerns separately:

### **MUNICIPAL SEWAGE**

When I was young, raw sewage was a common sight in the bay. In recent decades, the municipal sewage outfalls around the Bay have mostly been identified and corrected. The result has been lower fecal coliform levels and increased availability of clean shellfish resources.

### **INDUSTRIAL WASTE**

During the 20th century there were 2 poultry processing plants and 1 fish canning factory in Belfast that dumped untreated chicken waste and some fish waste through large pipelines directly into Belfast Harbor. The Harbor was so fouled with this effluent that Belfast Harbor was listed in the U.S.Coast Pilot publication as a harbor to avoid when cruising the Coast of Maine. After the closures of these factories, and the elimination of these discharge pipes, the bay became cleaner and more appealing to the public. However, I can tell you that today the remnants of those discharges remain in the sediment on the bottom of the bay. I believe it will take many a lifetime for this area to completely clean itself.

### **DREDGING**

In my experience, whenever there was a dredging project at Mack Point in Searsport Harbor, the lobster catch in the area slowed for several years until the environment recovered. Additionally, when Belfast Harbor was dredged in 2003, it took a decade for the environment to

recover according to a letter from the Downeast Lobstermen's Association to the U.S. Army Corps of Engineers dated May 4, 2013.

Please note that the most recent attempt to dredge Searsport Harbor was cancelled due to environmental concerns.

## **MERCURY**

Mercury contamination in the bay from unconfined industrial mercury pools in the Penobscot River being moved downriver by the current has resulted in 13 square miles at the mouth of the Penobscot River being closed to all lobster and crab fishing due to methyl mercury contamination in these shellfish. Further studies by the federal court have identified buried mercury in other areas of the bay and specifically in the area of the proposed Nordic Aquafarms pipeline.

Can we now feel comfortable with a new pipeline proposal by Nordic Aquafarms to be constructed in Belfast Bay based upon this history? Each of the aforementioned sources of pollution were the result of projects permitted by the State of Maine and the Federal government over long periods of time.

I can think of several reasons to be very cautious with this project and they are as follows:

- This proposed pipeline is to be located just over a mile from the very controversial and failed proposal to dredge and dispose of sediments from the Searsport Harbor Improvement project in Upper Penobscot Bay.
- Dredging and blasting resulting from this project will produce the same impact as other dredging projects in the area.
- The construction and operation of this pipeline is directly in an area identified as containing buried mercury that would be continuously impacted releasing mercury to be ingested by sea life resulting in further closures of lobster and crab fishing areas where I make my living.
- This project proposes discharging 7.7 million gallons of brackish warm water into the bay every day! I was told by the project manager for this RAS facility that this volume of water equals nearly 50 percent of the total water volume of this RAS facility being discharged daily. An existing RAS system in Maine is run by the University of Maine and the operator of that facility has stated that they discharge only 10 percent of the total water volume daily, a significant difference. This is water that would be heated between 5 and 30 degrees Fahrenheit above the ambient temperature of seawater from the bay ( depending on the time of year ) combined with ground water from wells. It is very unreasonable to assume that this water which has been described by the applicant as cleaner than the water being pumped into the facility from the bay, should be discarded so soon after mixing and heating. This does not sound like a RAS facility at all but rather a flow thru system. This warm and brackish water will cause lobsters to leave the area for more saline and temperate conditions. This concern alone will cause great economic hardship for myself and other local fishermen.



- The chief technical officer for Nordic Aquafarms explained to me one day in his office that all discharge water from this facility will be run through a .4 micron filter before reentering the bay. Again, at the RAS system run by the University of Maine the minimum water filter is 30 microns, almost 80 times larger than the filters being proposed by Nordic! The manager of that facility stated that filters finer than 30 microns would clog quickly and be of no value.

- Nordic Aquafarms has submitted technical data with this application stating that lobsters are absent from this area of the bay. According to DMR statistics, total annual landings of lobsters for Waldo County have nearly doubled in the past decade. The area impacted by this pipeline is essentially the same area of Waldo County that exists in the bay.

As a fisherman working in this bay for 55 years, I have become a mentor for some of the younger fishermen that are hoping to have opportunities to live and prosper on this bay just as I have enjoyed for much of my life. The old timers always told me that it was my responsibility to leave this bay in better condition than when I found it, for the benefit of the next generations, and that is exactly why I am speaking to you today.

Please exercise your responsibilities as representatives of the people of Maine and understand that a better solution for the treatment of waste water from RAS aquaculture must be found other than this out of sight and out of mind pipeline.

Your vote in opposition to this project is in order.

Respectfully submitted



David Black



# **EXHIBIT**

**C**



**HISTORICAL MAINE LOBSTER LANDINGS BY COUNTY**

<u>YEAR</u>	<u>COUNTY</u>	<u>POUNDS</u>	<u>VALUE</u>
1964	CUMBERLAND	1,992,458	\$1,248,887
1964	HANCOCK	5,574,925	\$3,819,740
1964	KNOX	5,918,168	\$3,990,996
1964	LINCOLN	2,513,892	\$1,596,701
1964	SAGadahoc	683,257	\$428,781
1964	WASHINGTON	2,824,281	\$1,881,320
1964	YORK	1,413,716	\$911,861
<b>1964</b>	<b>TOTAL</b>	<b>20,920,697</b>	<b>\$13,878,286</b>
1965	CUMBERLAND	2,438,981	\$1,760,377
1965	HANCOCK	5,062,876	\$3,884,569
1965	KNOX	5,031,068	\$3,782,906
1965	LINCOLN	2,137,941	\$1,596,978
1965	SAGadahoc	472,652	\$345,610
1965	WASHINGTON	2,546,067	\$1,915,609
1965	YORK	1,172,200	\$891,155
<b>1965</b>	<b>TOTAL</b>	<b>18,861,785</b>	<b>\$14,177,204</b>
1966	CUMBERLAND	2,759,135	\$2,064,086
1966	HANCOCK	5,230,828	\$3,916,157
1966	KNOX	5,085,871	\$3,842,203
1966	LINCOLN	2,251,721	\$1,662,829
1966	SAGadahoc	501,651	\$376,922
1966	WASHINGTON	2,858,597	\$2,108,591
1966	YORK	1,228,013	\$933,710
<b>1966</b>	<b>TOTAL</b>	<b>19,915,816</b>	<b>\$14,904,498</b>
1967	CUMBERLAND	2,398,165	\$1,939,418
1967	HANCOCK	4,106,538	\$3,431,840
1967	KNOX	4,408,318	\$3,643,992
1967	LINCOLN	1,905,352	\$1,562,718
1967	SAGadahoc	458,766	\$373,002
1967	WASHINGTON	2,180,461	\$1,776,625
1967	YORK	1,031,596	\$870,274
<b>1967</b>	<b>TOTAL</b>	<b>16,489,196</b>	<b>\$13,597,869</b>
1968	CUMBERLAND	2,990,970	\$2,118,740
1968	HANCOCK	5,116,946	\$3,756,795
1968	KNOX	5,612,580	\$4,176,368
1968	LINCOLN	2,212,151	\$1,554,841
1968	SAGadahoc	468,812	\$333,425
1968	WASHINGTON	2,924,994	\$2,110,909
1968	YORK	1,175,279	\$880,593
<b>1968</b>	<b>TOTAL</b>	<b>20,501,732</b>	<b>\$14,931,671</b>
1969	CUMBERLAND	2,868,176	\$2,287,009
1969	HANCOCK	5,258,582	\$4,260,884
1969	KNOX	5,259,009	\$4,339,129
1969	LINCOLN	2,266,981	\$1,810,627
1969	SAGadahoc	488,379	\$399,637
1969	WASHINGTON	2,589,251	\$2,028,439
1969	YORK	1,104,402	\$921,104
<b>1969</b>	<b>TOTAL</b>	<b>19,834,780</b>	<b>\$16,046,829</b>

**HISTORICAL MAINE LOBSTER LANDINGS BY COUNTY**

<u>YEAR</u>	<u>COUNTY</u>	<u>POUNDS</u>	<u>VALUE</u>
1970	CUMBERLAND	2,864,275	\$2,498,944
1970	HANCOCK	4,625,588	\$4,493,896
1970	KNOX	4,685,018	\$4,602,267
1970	LINCOLN	2,236,007	\$2,065,926
1970	SAGADAHOC	505,049	\$456,877
1970	WASHINGTON	2,248,415	\$2,146,280
1970	YORK	1,007,917	\$937,311
<b>1970</b>	<b>TOTAL</b>	<b>18,172,269</b>	<b>\$17,201,501</b>
1971	CUMBERLAND	2,962,199	\$2,786,716
1971	HANCOCK	4,302,251	\$4,396,725
1971	KNOX	4,416,189	\$4,453,354
1971	LINCOLN	2,095,061	\$2,035,796
1971	SAGADAHOC	490,068	\$469,240
1971	WASHINGTON	2,170,426	\$2,236,846
1971	YORK	1,122,157	\$1,102,614
<b>1971</b>	<b>TOTAL</b>	<b>17,558,351</b>	<b>\$17,481,291</b>
1972	CUMBERLAND	2,622,846	\$2,735,260
1972	HANCOCK	4,003,749	\$4,775,455
1972	KNOX	4,383,479	\$5,117,064
1972	LINCOLN	1,831,550	\$1,996,528
1972	SAGADAHOC	526,695	\$586,331
1972	WASHINGTON	1,906,159	\$2,248,937
1972	YORK	981,989	\$1,127,880
<b>1972</b>	<b>TOTAL</b>	<b>16,256,467</b>	<b>\$18,587,455</b>
1973	CUMBERLAND	2,359,302	\$3,071,620
1973	HANCOCK	4,659,668	\$6,423,905
1973	KNOX	4,609,040	\$6,450,114
1973	LINCOLN	1,585,130	\$2,126,290
1973	NOT-SPECIFIED	97,572	\$103,362
1973	SAGADAHOC	449,436	\$609,732
1973	WASHINGTON	2,193,247	\$3,039,310
1973	YORK	1,090,799	\$1,445,526
<b>1973</b>	<b>TOTAL</b>	<b>17,044,194</b>	<b>\$23,269,859</b>
1974	CUMBERLAND	3,068,091	\$4,196,683
1974	HANCOCK	4,036,936	\$5,647,808
1974	KNOX	3,829,720	\$5,568,985
1974	LINCOLN	1,883,347	\$2,636,777
1974	NOT-SPECIFIED	165,807	\$240,420
1974	SAGADAHOC	466,882	\$630,799
1974	WASHINGTON	1,926,350	\$2,739,279
1974	YORK	1,080,533	\$1,552,057
<b>1974</b>	<b>TOTAL</b>	<b>16,457,666</b>	<b>\$23,212,808</b>
1975	CUMBERLAND	2,724,404	\$4,328,047
1975	HANCOCK	3,885,192	\$6,304,169
1975	KNOX	4,837,753	\$7,731,712
1975	LINCOLN	1,875,360	\$2,984,051
1975	SAGADAHOC	388,083	\$615,571
1975	WASHINGTON	1,741,523	\$2,830,549

**HISTORICAL MAINE LOBSTER LANDINGS BY COUNTY**

<u>YEAR</u>	<u>COUNTY</u>	<u>POUNDS</u>	<u>VALUE</u>
1975	YORK	1,063,273	\$1,726,035
<b>1975</b>	<b>TOTAL</b>	<b>16,515,588</b>	<b>\$26,520,134</b>
1976	CUMBERLAND	3,110,007	\$4,519,468
1976	HANCOCK	4,584,207	\$7,239,797
1976	KNOX	5,158,034	\$8,107,279
1976	LINCOLN	2,277,724	\$3,392,486
1976	SAGadahoc	427,541	\$646,061
1976	WASHINGTON	2,488,568	\$3,873,606
1976	YORK	954,972	\$1,459,674
<b>1976</b>	<b>TOTAL</b>	<b>19,001,053</b>	<b>\$29,238,371</b>
1977	CUMBERLAND	3,226,682	\$5,323,995
1977	HANCOCK	4,205,001	\$7,503,175
1977	KNOX	5,094,081	\$9,073,213
1977	LINCOLN	2,413,772	\$4,057,875
1977	SAGadahoc	490,600	\$787,870
1977	WASHINGTON	2,020,443	\$3,579,839
1977	YORK	1,036,559	\$1,775,456
<b>1977</b>	<b>TOTAL</b>	<b>18,487,138</b>	<b>\$32,101,423</b>
1978	CUMBERLAND	3,596,115	\$5,934,405
1978	HANCOCK	4,484,457	\$8,289,614
1978	KNOX	5,365,457	\$9,724,425
1978	LINCOLN	2,290,070	\$3,939,448
1978	SAGadahoc	487,927	\$808,139
1978	WASHINGTON	1,935,679	\$3,486,567
1978	YORK	970,754	\$1,695,778
<b>1978</b>	<b>TOTAL</b>	<b>19,130,459</b>	<b>\$33,878,376</b>
1979	CUMBERLAND	4,480,833	\$7,759,939
1979	HANCOCK	5,295,663	\$9,860,013
1979	KNOX	6,075,224	\$11,031,240
1979	LINCOLN	2,305,009	\$3,992,068
1979	SAGadahoc	539,997	\$943,808
1979	WASHINGTON	2,394,212	\$4,432,780
1979	YORK	1,042,297	\$1,880,784
<b>1979</b>	<b>TOTAL</b>	<b>22,133,235</b>	<b>\$39,900,632</b>
1980	CUMBERLAND	4,611,648	\$8,263,903
1980	HANCOCK	5,104,368	\$10,697,291
1980	KNOX	6,045,212	\$11,094,366
1980	LINCOLN	2,315,798	\$4,243,301
1980	SAGadahoc	555,410	\$1,034,977
1980	WASHINGTON	2,041,003	\$3,912,741
1980	YORK	1,313,455	\$2,482,535
<b>1980</b>	<b>TOTAL</b>	<b>21,986,894</b>	<b>\$41,729,114</b>
1981	CUMBERLAND	5,579,224	\$11,103,111
1981	HANCOCK	4,746,458	\$10,579,130
1981	KNOX	6,170,828	\$12,954,701
1981	LINCOLN	2,208,479	\$4,257,435
1981	SAGadahoc	444,911	\$886,124
1981	WASHINGTON	2,268,604	\$5,027,662

**HISTORICAL MAINE LOBSTER LANDINGS BY COUNTY**

<u>YEAR</u>	<u>COUNTY</u>	<u>POUNDS</u>	<u>VALUE</u>
1981	YORK	1,213,110	\$2,428,760
<b>1981</b>	<b>TOTAL</b>	<b>22,631,614</b>	<b>\$47,236,923</b>
1982	CUMBERLAND	5,261,568	\$10,730,106
1982	HANCOCK	4,683,244	\$11,074,364
1982	KNOX	6,482,139	\$14,842,830
1982	LINCOLN	2,410,734	\$4,992,894
1982	SAGadahoc	440,816	\$985,246
1982	WASHINGTON	2,308,104	\$5,168,765
1982	YORK	1,143,648	\$2,549,391
<b>1982</b>	<b>TOTAL</b>	<b>22,730,253</b>	<b>\$50,343,596</b>
1983	CUMBERLAND	4,416,116	\$9,817,101
1983	HANCOCK	4,605,315	\$11,160,720
1983	KNOX	6,409,731	\$15,226,090
1983	LINCOLN	2,719,334	\$6,066,982
1983	SAGadahoc	507,968	\$1,179,713
1983	WASHINGTON	2,102,073	\$4,978,461
1983	YORK	1,216,018	\$2,805,224
<b>1983</b>	<b>TOTAL</b>	<b>21,976,555</b>	<b>\$51,234,291</b>
1984	CUMBERLAND	4,338,359	\$10,718,752
1984	HANCOCK	3,242,341	\$8,448,884
1984	KNOX	5,266,101	\$13,363,418
1984	LINCOLN	3,004,389	\$7,506,168
1984	SAGadahoc	622,056	\$1,563,829
1984	WASHINGTON	1,962,383	\$4,871,950
1984	YORK	1,110,053	\$2,825,134
<b>1984</b>	<b>TOTAL</b>	<b>19,545,682</b>	<b>\$49,298,135</b>
1985	CUMBERLAND	4,533,636	\$9,801,714
1985	HANCOCK	3,745,265	\$8,592,995
1985	KNOX	5,407,181	\$12,170,058
1985	LINCOLN	2,740,767	\$6,016,037
1985	SAGadahoc	520,048	\$1,162,365
1985	WASHINGTON	1,706,873	\$3,802,041
1985	YORK	1,471,407	\$3,490,348
<b>1985</b>	<b>TOTAL</b>	<b>20,125,177</b>	<b>\$45,035,558</b>
1986	CUMBERLAND	4,849,236	\$11,080,754
1986	HANCOCK	3,506,325	\$8,480,346
1986	KNOX	4,766,660	\$11,111,098
1986	LINCOLN	2,725,809	\$6,395,265
1986	SAGadahoc	603,101	\$1,414,965
1986	WASHINGTON	1,824,153	\$4,205,278
1986	YORK	1,429,033	\$3,483,518
<b>1986</b>	<b>TOTAL</b>	<b>19,704,317</b>	<b>\$46,171,224</b>
1987	CUMBERLAND	4,559,383	\$11,888,723
1987	HANCOCK	3,497,830	\$10,052,882
1987	KNOX	5,090,703	\$14,411,711
1987	LINCOLN	2,437,208	\$6,707,997
1987	SAGadahoc	546,418	\$1,493,718
1987	WASHINGTON	2,262,085	\$6,094,344



**HISTORICAL MAINE LOBSTER LANDINGS BY COUNTY**

<u>YEAR</u>	<u>COUNTY</u>	<u>POUNDS</u>	<u>VALUE</u>
1987	YORK	1,354,139	\$3,898,762
<b>1987</b>	<b>TOTAL</b>	<b>19,747,766</b>	<b>\$54,548,137</b>
1988	CUMBERLAND	5,112,196	\$13,818,159
1988	HANCOCK	3,591,152	\$10,627,748
1988	KNOX	5,843,876	\$16,263,371
1988	LINCOLN	2,638,248	\$7,190,508
1988	SAGADAHOC	539,410	\$1,498,831
1988	WASHINGTON	2,498,102	\$6,994,500
1988	YORK	1,516,083	\$4,349,321
<b>1988</b>	<b>TOTAL</b>	<b>21,739,067</b>	<b>\$60,742,438</b>
1989	CUMBERLAND	5,608,429	\$13,065,569
1989	HANCOCK	4,250,571	\$11,726,236
1989	KNOX	6,390,475	\$16,601,508
1989	LINCOLN	2,594,524	\$6,451,529
1989	NOT-SPECIFIED	116,850	\$308,484
1989	SAGADAHOC	529,325	\$1,359,354
1989	WASHINGTON	2,334,633	\$5,812,471
1989	YORK	1,543,912	\$4,227,060
<b>1989</b>	<b>TOTAL</b>	<b>23,368,719</b>	<b>\$59,552,211</b>
1990	CUMBERLAND	6,787,884	\$13,629,935
1990	HANCOCK	5,106,442	\$11,711,525
1990	KNOX	7,590,126	\$17,147,472
1990	LINCOLN	3,494,217	\$7,383,200
1990	SAGADAHOC	736,903	\$1,646,795
1990	WASHINGTON	2,254,275	\$5,116,366
1990	YORK	2,098,391	\$4,992,680
<b>1990</b>	<b>TOTAL</b>	<b>28,068,238</b>	<b>\$61,627,973</b>
1991	CUMBERLAND	7,749,756	\$16,988,836
1991	HANCOCK	6,170,719	\$15,478,852
1991	KNOX	7,437,632	\$17,438,775
1991	LINCOLN	4,113,817	\$9,233,186
1991	SAGADAHOC	747,107	\$1,690,358
1991	WASHINGTON	2,315,861	\$5,715,437
1991	YORK	2,253,754	\$5,719,903
<b>1991</b>	<b>TOTAL</b>	<b>30,788,646</b>	<b>\$72,265,347</b>
1992	CUMBERLAND	6,828,259	\$16,811,285
1992	HANCOCK	3,679,896	\$11,338,289
1992	KNOX	7,603,133	\$20,555,537
1992	LINCOLN	3,849,510	\$9,716,413
1992	SAGADAHOC	787,094	\$2,054,477
1992	WASHINGTON	1,988,616	\$5,509,805
1992	YORK	2,093,940	\$5,836,893
<b>1992</b>	<b>TOTAL</b>	<b>26,830,448</b>	<b>\$71,822,699</b>
1993	CUMBERLAND	6,775,632	\$15,405,739
1993	HANCOCK	4,860,419	\$12,787,474
1993	KNOX	9,452,680	\$23,730,240
1993	LINCOLN	3,904,496	\$9,121,585
1993	SAGADAHOC	795,007	\$1,862,573

### HISTORICAL MAINE LOBSTER LANDINGS BY COUNTY

<u>YEAR</u> <u>COUNTY</u>	<u>POUNDS</u>	<u>VALUE</u>
1993 WASHINGTON	2,241,069	\$6,189,100
1993 YORK	1,897,161	\$4,766,727
<b>1993 TOTAL</b>	<b>29,926,464</b>	<b>\$73,863,438</b>
1994 CUMBERLAND	7,657,841	\$19,179,259
1994 HANCOCK	6,818,893	\$18,443,049
1994 KNOX	13,361,606	\$34,623,540
1994 LINCOLN	4,653,983	\$11,412,922
1994 SAGADAHOC	1,041,593	\$2,736,076
1994 WASHINGTON	2,711,394	\$7,391,732
1994 YORK	2,703,557	\$7,150,100
<b>1994 TOTAL</b>	<b>38,948,867</b>	<b>\$100,936,678</b>
1995 CUMBERLAND	5,930,682	\$15,762,117
1995 HANCOCK	7,462,326	\$20,069,012
1995 KNOX	14,265,374	\$39,019,937
1995 LINCOLN	3,938,181	\$10,515,328
1995 SAGADAHOC	785,248	\$2,154,172
1995 WASHINGTON	2,538,271	\$7,502,859
1995 YORK	2,288,242	\$6,869,748
<b>1995 TOTAL</b>	<b>37,208,324</b>	<b>\$101,893,173</b>
1996 CUMBERLAND	6,058,133	\$16,825,569
1996 HANCOCK	5,995,604	\$18,443,475
1996 KNOX/WALDO	13,096,320	\$38,066,330
1996 LINCOLN	4,088,410	\$11,582,610
1996 SAGADAHOC	921,660	\$2,829,996
1996 UNKNOWN	14,282	\$44,402
1996 WASHINGTON	3,377,524	\$10,946,845
1996 YORK	2,531,510	\$8,241,330
<b>1996 TOTAL</b>	<b>36,083,443</b>	<b>\$106,980,557</b>
1997 CUMBERLAND	9,121,551	\$26,082,338
1997 HANCOCK	8,910,151	\$26,594,709
1997 KNOX	17,333,911	\$51,000,288
1997 LINCOLN	4,132,380	\$11,920,293
1997 NOT-SPECIFIED	162	\$729
1997 SAGADAHOC	1,016,955	\$2,939,848
1997 WASHINGTON	3,954,077	\$11,960,030
1997 YORK	2,554,084	\$7,794,203
<b>1997 TOTAL</b>	<b>47,023,271</b>	<b>\$138,292,438</b>
1998 CUMBERLAND	7,764,518	\$21,761,129
1998 HANCOCK	10,431,174	\$31,176,249
1998 KNOX	16,550,383	\$46,198,512
1998 LINCOLN	4,512,540	\$12,936,440
1998 SAGADAHOC	1,020,663	\$3,124,052
1998 WASHINGTON	4,397,233	\$14,254,906
1998 YORK	2,360,325	\$7,738,053
<b>1998 TOTAL</b>	<b>47,036,836</b>	<b>\$137,189,341</b>
1999 CUMBERLAND	10,154,577	\$34,240,433
1999 HANCOCK	10,806,518	\$37,898,308
1999 KNOX	19,132,420	\$64,583,196

**HISTORICAL MAINE LOBSTER LANDINGS BY COUNTY**

<u>YEAR</u>	<u>COUNTY</u>	<u>POUNDS</u>	<u>VALUE</u>
1999	LINCOLN	4,925,141	\$16,877,253
1999	SAGadahoc	1,137,076	\$3,999,913
1999	WASHINGTON	3,889,216	\$14,564,325
1999	YORK	3,449,470	\$12,450,643
<b>1999</b>	<b>TOTAL</b>	<b>53,494,418</b>	<b>\$184,614,071</b>
2000	CUMBERLAND	9,519,281	\$30,514,219
2000	HANCOCK	15,382,558	\$49,411,598
2000	KNOX	18,653,641	\$59,804,314
2000	LINCOLN	5,000,332	\$15,828,327
2000	SAGadahoc	905,903	\$3,088,365
2000	WASHINGTON	4,788,939	\$18,363,877
2000	YORK	2,964,752	\$10,704,117
<b>2000</b>	<b>TOTAL</b>	<b>57,215,406</b>	<b>\$187,714,817</b>
2001	CUMBERLAND	6,520,260	\$19,803,951
2001	HANCOCK	10,082,125	\$32,411,845
2001	KNOX/WALDO	17,223,951	\$54,580,530
2001	LINCOLN	5,041,845	\$15,105,261
2001	SAGadahoc	422,716	\$1,283,635
2001	WASHINGTON	6,948,785	\$23,047,741
2001	YORK	2,378,011	\$7,749,303
<b>2001</b>	<b>TOTAL</b>	<b>48,617,693</b>	<b>\$153,982,266</b>
2002	CUMBERLAND	9,591,508	\$31,220,418
2002	HANCOCK	16,549,841	\$57,267,041
2002	KNOX/WALDO	19,765,074	\$63,227,621
2002	LINCOLN	5,359,690	\$16,770,773
2002	SAGadahoc	1,414,264	\$4,669,764
2002	WASHINGTON	7,499,213	\$25,857,154
2002	YORK	3,446,155	\$11,937,259
<b>2002</b>	<b>TOTAL</b>	<b>63,625,745</b>	<b>\$210,950,030</b>
2003	CUMBERLAND	5,595,642	\$20,519,959
2003	HANCOCK	13,962,989	\$53,555,884
2003	KNOX/WALDO	19,758,708	\$71,927,116
2003	LINCOLN	5,019,251	\$18,302,492
2003	NOT-SPECIFIED	130,810	\$536,424
2003	SAGadahoc	911,867	\$3,580,788
2003	WASHINGTON	6,872,748	\$26,651,797
2003	YORK	2,718,933	\$10,640,869
<b>2003</b>	<b>TOTAL</b>	<b>54,970,948</b>	<b>\$205,715,329</b>
2004	CUMBERLAND	9,255,280	\$36,591,790
2004	HANCOCK	16,537,170	\$69,166,111
2004	KNOX	24,804,328	\$98,174,305
2004	LINCOLN	6,770,722	\$25,908,554
2004	SAGadahoc	1,303,911	\$5,302,330
2004	WALDO	401,706	\$1,762,878
2004	WASHINGTON	7,873,692	\$32,674,789
2004	YORK	4,627,535	\$19,498,090
<b>2004</b>	<b>TOTAL</b>	<b>71,574,344</b>	<b>\$289,078,847</b>
2005	CUMBERLAND	8,335,125	\$37,755,755

**HISTORICAL MAINE LOBSTER LANDINGS BY COUNTY**

<u>YEAR</u>	<u>COUNTY</u>	<u>POUNDS</u>	<u>VALUE</u>
2005	HANCOCK	18,882,812	\$88,660,604
2005	KNOX	21,419,378	\$98,319,258
2005	LINCOLN	5,574,889	\$24,377,448
2005	NOT-SPECIFIED	14,655	\$72,488
2005	SAGadahoc	1,526,964	\$7,136,879
2005	WALDO	284,661	\$1,380,216
2005	WASHINGTON	9,323,532	\$44,493,250
2005	YORK	3,367,845	\$15,752,438
<b>2005</b>	<b>TOTAL</b>	<b>68,729,861</b>	<b>\$317,948,336</b>
2006	CUMBERLAND	9,444,550	\$38,237,173
2006	HANCOCK	21,159,600	\$85,552,617
2006	KNOX	22,123,241	\$90,162,700
2006	LINCOLN	6,361,330	\$24,580,617
2006	NOT-SPECIFIED	244,886	\$954,973
2006	SAGadahoc	1,850,308	\$7,951,396
2006	WALDO	372,901	\$1,620,134
2006	WASHINGTON	10,686,067	\$43,180,287
2006	YORK	3,173,459	\$13,464,040
<b>2006</b>	<b>TOTAL</b>	<b>75,416,341</b>	<b>\$305,703,938</b>
2007	CUMBERLAND	8,367,473	\$36,552,598
2007	HANCOCK	17,635,973	\$78,327,083
2007	KNOX	19,201,116	\$83,313,212
2007	LINCOLN	5,345,748	\$22,569,053
2007	NOT-SPECIFIED	21,837	\$89,374
2007	SAGadahoc	1,406,855	\$6,162,745
2007	WALDO	304,784	\$1,366,213
2007	WASHINGTON	9,273,724	\$41,086,679
2007	YORK	2,423,850	\$11,211,246
<b>2007</b>	<b>TOTAL</b>	<b>63,981,361</b>	<b>\$280,678,206</b>
2008	CUMBERLAND	9,077,125	\$32,153,313
2008	HANCOCK	19,350,787	\$69,190,516
2008	KNOX	20,218,311	\$69,876,410
2008	LINCOLN	5,635,488	\$18,883,924
2008	NOT-SPECIFIED	476	\$1,971
2008	SAGadahoc	1,381,763	\$5,024,168
2008	WALDO	306,738	\$1,066,923
2008	WASHINGTON	10,988,328	\$37,431,946
2008	YORK	2,949,486	\$11,520,855
<b>2008</b>	<b>TOTAL</b>	<b>69,908,504</b>	<b>\$245,150,026</b>
2009	CUMBERLAND	10,330,898	\$30,478,441
2009	HANCOCK	23,528,918	\$69,567,150
2009	KNOX	23,375,555	\$66,435,362
2009	LINCOLN	5,661,410	\$16,636,556
2009	SAGadahoc	1,535,623	\$4,677,360
2009	WALDO	293,435	\$831,688
2009	WASHINGTON	13,141,424	\$37,945,045
2009	YORK	3,307,374	\$10,965,289
<b>2009</b>	<b>TOTAL</b>	<b>81,174,638</b>	<b>\$237,536,890</b>

**HISTORICAL MAINE LOBSTER LANDINGS BY COUNTY**

<u>YEAR</u>	<u>COUNTY</u>	<u>POUNDS</u>	<u>VALUE</u>
2010	CUMBERLAND	11,649,232	\$39,436,920
2010	HANCOCK	31,306,262	\$103,696,417
2010	KNOX	25,561,334	\$83,308,122
2010	LINCOLN	6,194,426	\$19,622,036
2010	NOT-SPECIFIED	90	\$266
2010	SAGadahoc	1,720,544	\$6,307,314
2010	WALDO	372,415	\$1,225,675
2010	WASHINGTON	16,213,914	\$52,830,939
2010	YORK	3,190,555	\$11,624,752
<b>2010</b>	<b>TOTAL</b>	<b>96,208,772</b>	<b>\$318,052,441</b>
2011	CUMBERLAND	12,469,579	\$41,667,556
2011	HANCOCK	34,071,486	\$108,189,416
2011	KNOX	29,672,698	\$94,380,783
2011	LINCOLN	6,391,550	\$19,964,854
2011	SAGadahoc	1,659,690	\$5,877,406
2011	WALDO	456,016	\$1,449,663
2011	WASHINGTON	16,910,075	\$51,171,345
2011	YORK	3,293,634	\$11,838,711
<b>2011</b>	<b>TOTAL</b>	<b>104,924,728</b>	<b>\$334,539,734</b>
2012	CUMBERLAND	13,807,189	\$40,434,664
2012	HANCOCK	43,467,568	\$114,227,278
2012	KNOX	35,154,555	\$95,524,992
2012	LINCOLN	6,799,804	\$18,327,355
2012	SAGadahoc	2,061,928	\$5,962,184
2012	WALDO	546,494	\$1,448,372
2012	WASHINGTON	21,744,391	\$53,948,126
2012	YORK	3,739,493	\$12,206,549
<b>2012</b>	<b>TOTAL</b>	<b>127,321,422</b>	<b>\$342,079,520</b>
2013	CUMBERLAND	12,193,758	\$39,113,119
2013	HANCOCK	44,136,419	\$123,785,668
2013	KNOX	34,532,764	\$103,729,589
2013	LINCOLN	6,378,457	\$19,003,421
2013	SAGadahoc	2,138,756	\$6,757,811
2013	WALDO	688,618	\$2,063,728
2013	WASHINGTON	23,874,397	\$62,278,091
2013	YORK	3,865,268	\$13,652,554
<b>2013</b>	<b>TOTAL</b>	<b>127,808,437</b>	<b>\$370,383,981</b>
2014	CUMBERLAND	11,874,479	\$46,797,697
2014	HANCOCK	42,575,285	\$154,881,082
2014	KNOX	33,705,103	\$126,487,159
2014	LINCOLN	5,982,176	\$22,115,616
2014	SAGadahoc	2,021,714	\$7,839,769
2014	WALDO	864,528	\$3,396,418
2014	WASHINGTON	23,282,620	\$81,210,885
2014	YORK	4,020,018	\$16,779,759
<b>2014</b>	<b>TOTAL</b>	<b>124,325,923</b>	<b>459,508,385</b>
2015	CUMBERLAND	12,299,414	\$53,104,387
2015	HANCOCK	41,612,365	\$167,686,441

**HISTORICAL MAINE LOBSTER LANDINGS BY COUNTY**

<u>YEAR</u>	<u>COUNTY</u>	<u>POUNDS</u>	<u>VALUE</u>
2015	KNOX	34,656,419	\$144,846,058
2015	LINCOLN	6,228,200	\$25,935,943
2015	SAGadahoc	1,867,984	\$8,109,875
2015	WALDO	805,478	\$3,400,078
2015	WASHINGTON	21,333,130	\$82,054,104
2015	YORK	3,860,403	\$17,313,423
<b>2015</b>	<b>TOTAL</b>	<b>122,663,393</b>	<b>502,450,309</b>
2016	CUMBERLAND	14,381,231	\$61,443,396
2016	HANCOCK	45,027,295	\$180,694,824
2016	KNOX	35,159,752	\$148,524,186
2016	LINCOLN	7,129,928	\$29,223,307
2016	SAGadahoc	2,086,181	\$8,921,975
2016	WALDO	827,209	\$3,514,944
2016	WASHINGTON	23,511,586	\$88,325,367
2016	YORK	4,493,242	\$20,092,294
<b>2016</b>	<b>TOTAL</b>	<b>132,616,424</b>	<b>540,740,293</b>
2017	CUMBERLAND	11,363,567	\$47,978,992
2017	HANCOCK	38,482,461	\$147,154,626
2017	KNOX	29,120,054	\$120,629,057
2017	LINCOLN	6,115,832	\$25,015,124
2017	SAGadahoc	1,347,351	\$5,833,952
2017	WALDO	791,731	\$3,168,086
2017	WASHINGTON	20,930,267	\$70,994,766
2017	YORK	3,752,393	\$17,481,938
<b>2017</b>	<b>TOTAL</b>	<b>111,903,656</b>	<b>438,256,541</b>
2018	CUMBERLAND	13,511,305	\$59,633,797
2018	HANCOCK	39,626,782	\$155,272,400
2018	KNOX	30,855,267	\$134,236,609
2018	LINCOLN	6,881,021	\$29,694,975
2018	SAGadahoc	1,016,464	\$4,540,401
2018	WALDO	746,704	\$3,011,412
2018	WASHINGTON	22,376,816	\$76,868,437
2018	YORK	4,626,021	\$21,285,602
<b>2018</b>	<b>TOTAL</b>	<b>119,640,380</b>	<b>484,543,633</b>

**Last updated 2/19/2019**

\*The 2002 & 2003 landings may possibly reflect the increased effort by DMR to collect voluntary landings from some lobster dealers; caution is advised when comparing these numbers to previous years.

\*\*Lobster reporting became mandatory in 2004 for all Maine dealers buying directly from harvesters, so caution is advised when comparing these landings to previous years.

All 2018 data are preliminary

# **EXHIBIT**

**D**





## **I. SUMMARY OF OTHER GROUNDS FOR DENYING THIS LEASE APPLICATION**

The placement of these pipelines in Penobscot Bay, as proposed by NAF, would have potentially devastating impacts on the environment and economy of the Midcoast region – especially on our commercial fisheries and fishermen, including the iconic Maine lobster fishery in Penobscot Bay – which is the foundation of our economy in this region and the source of thousands of existing well-paying jobs. These adverse impacts include, but are not limited to the following:

- **Disturbing Buried HoltraChem Mercury:** The dredging and blasting required to bury a portion of NAF’s pipelines in the Bay would disturb long-buried mercury from HoltraChem’s discharges almost fifty (50) years ago. HoltraChem legacy mercury has previously been determined to be buried in this area of the Bay by the federal court’s experts who conducted the Penobscot River Mercury Study (“PRMS”). In 2014, the Maine Department of Marine Resources (“DMR”) shut down approximately 7 square miles in the lower Penobscot River and upper estuary of Penobscot Bay to all lobstering and crabbing due to the high level of mercury lobsters in this area had in their meat. That closure was based on data collected by the federal court’s experts in the Penobscot River Mercury Study (PRMS). In 2016, DMR shut down an additional 5.5 square mile area in the upper Penobscot Bay to all lobstering and crabbing, after finding a mean level of mercury in the tail meat of 40 adult lobsters of 292.7 ng/g, caused by exposure to HoltraChem mercury in the surface sediments south of Verona Island resulting in methyl mercury contamination. 13-188 C.M.R. ch. 25, §25.65. The DMR concluded that any mean levels of mercury in lobster meat, over 200 ng/g, justified its closure of both the lobster and crab fishery (even in the absence of such levels in the crabs in that area). The mercury levels the court’s experts determined are found buried beneath the surface sediment in the area NAF proposes to dredge is 200 – 300 ng/g.<sup>1</sup> At the April 24, 2019 Belfast Harbor Committee Meeting, NAF’s representative (Ed Cotter) revealed that NAF-commissioned sediment tests (which have not been made public), confirmed a level of 239 ng/g in one core sample that they took in this area and that NAF had failed to test most of the 10 core samples they had taken. During the December 17, 2018 NAF public information meeting, NAF’s representative confirmed that the sediment testing method NAF’s agents used to do their tests was not the more accurate PRMS sediment testing standard. Indicating that the level of mercury that is buried in this area may be even higher than previously determined, since NAF found 239 ng/g there even using a less accurate sediment testing protocol that was likely to understate the

---

<sup>1</sup> The relevant DMR rule states:

**25.65 Lobster and Crab Closure in Penobscot River**

It is unlawful to fish for or take lobsters or crabs by any means from the waters north of a line starting at the western most point of Perkins Point in the Town of Castine continuing in a northwesterly direction to the southern most point of Squaw Point on Cape Jellison in the Town of Stockton Springs. This section does not apply to equipment operated by the Department of Marine Resources.

true level of mercury and its depth under the surface. Re-suspension of the HoltraChem mercury in the area of Penobscot Bay where NAF proposes to dredge and blast could spread methyl-mercury contamination throughout the entire food web of the Bay – destroying the lobster fishery that provides hundreds of lobstermen the ability to make a good living in now, damaging the reputation for wholesomeness of the Maine Lobster brand, harming all people and businesses that depend on the Midcoast lobster catch, and endangering the health and safety of all Midcoast residents and wildlife that live in and around Penobscot Bay.

- **A 5.5-Foot Underwater Wall:** According to NAF’s latest schematic drawings for installation of their pipes in the intertidal land and under the Bay’s waters, the portion of the pipelines that are not buried will form a wall on the surface of the Bay’s bottom off Northport. The three pipes would be covered by gravel and a mesh cover. This configuration would form a wall along the bottom that is roughly 5.5 feet tall and roughly a half-mile long. Lobstermen who fish this area and who have had experience with disruptions to lobster movements caused by prior pipeline placements in Belfast Harbor, advised the Belfast Harbor Committee on April 24, 2019 that NAF’s proposed underwater seawall will significantly disrupt the migration of lobsters in and around Penobscot Bay and radically change currents in this area and throughout at least the upper Bay. The effect on shorelines, erosion or navigation is unknown but likely also significant.
- **Contents and Characteristics of the Wastewater:** The impacts of the 7.7 million gallons of wastewater a day that NAF proposes to discharge into Penobscot Bay from these pipelines can also not be ignored when evaluating the impacts on riparian owners’ rights and on commercial fishing and fisheries’ health.<sup>2</sup> According to the current, new Commissioner of DEP during his January 30, 2019 confirmation hearing, the impacts of this discharge on commercial fisheries is a subject in the jurisdiction of DACF-BPL not a consideration of the DEP during the MEPDES process. However, no information on the nature and predicted impacts of this wastewater discharge has been submitted by NAF, to date, to either agency.
  - **Wastewater Temperature:** The proposed warm temperature of this wastewater (59° to 64.4° Fahrenheit; revealed as 15° - 18° Celcius in the MEPDES permit application) – discharged year round -- is between 5° and 33° Fahrenheit warmer than the Bay’s normal temperatures (depending on what time of year it is discharged). If a rise in temperature of the Gulf of Maine or the Bay of 0.5° Fahrenheit can devastate our ecosystems – what could the impact of discharging this volume of wastewater daily, in a relatively shallow embayment and estuary be?! In light of the loss of the lobster fishery in southern portions of New England, attributed to warming waters in those areas, the adverse impacts on the lobster fishery in Penobscot

---

<sup>2</sup> To put this in perspective, the entire community of Bayside’s wastewater treatment facility is limited to discharging 7 million gallons a year of treated wastewater into the Bay

Bay would be catastrophic in the upper and western Bay, and potentially wide-ranging throughout the Bay as the water circulates.

- **Nitrogen:** The discharge will contain, according to NAF, 1484 pounds (673 kg) a day of nitrogen, which poses the risk of dangerous algae blooms, fish die-offs, and could put the Bayside Mussel Farm – an existing aquaculture leaseholder in the area of the discharges – out of business.
- **Currents and Circulation:** It will take fourteen days after discharge to leave the immediate area of the outfall pipe to circulate to every corner of Penobscot Bay and then out into the Gulf of Maine. This circulation estimate by NAF’s consultant means that in the immediate area of the outfall there will be a constant accumulation of approximately 108 million gallons of wastewater – destroying the viability of the existing mussel farm aquaculture business that thrives in the currently clean waters in this area and harm the use of these waters by all existing riparian owners in this corner of the upper Bay. This NAF current estimate was made without consideration of the impact of prevailing winds and we believe was done prior to the adoption of the re-configuration of the pipelines to an above-ground placement.
- **Salinity Changes:** According to NAF, 15% of the wastewater will be fresh water – permanently changing the salinity of the Bay through man-made alterations.

No one can predict the scope of the adverse impacts that will result from allowing NAF to convert Penobscot Bay into its own giant chemistry experiment, but the impact on the health and reputation of all of Penobscot Bay’s fisheries – especially our currently thriving and lucrative lobster fishery – will be significant, long-term and likely devastating. The adverse impacts on the thousands of lobstermen who fish in Penobscot Bay are incalculable, but certainly not off-set by the illusory promise by NAF of “up to” 100 jobs of unspecified salary ranges.



# **EXHIBIT**

**E**



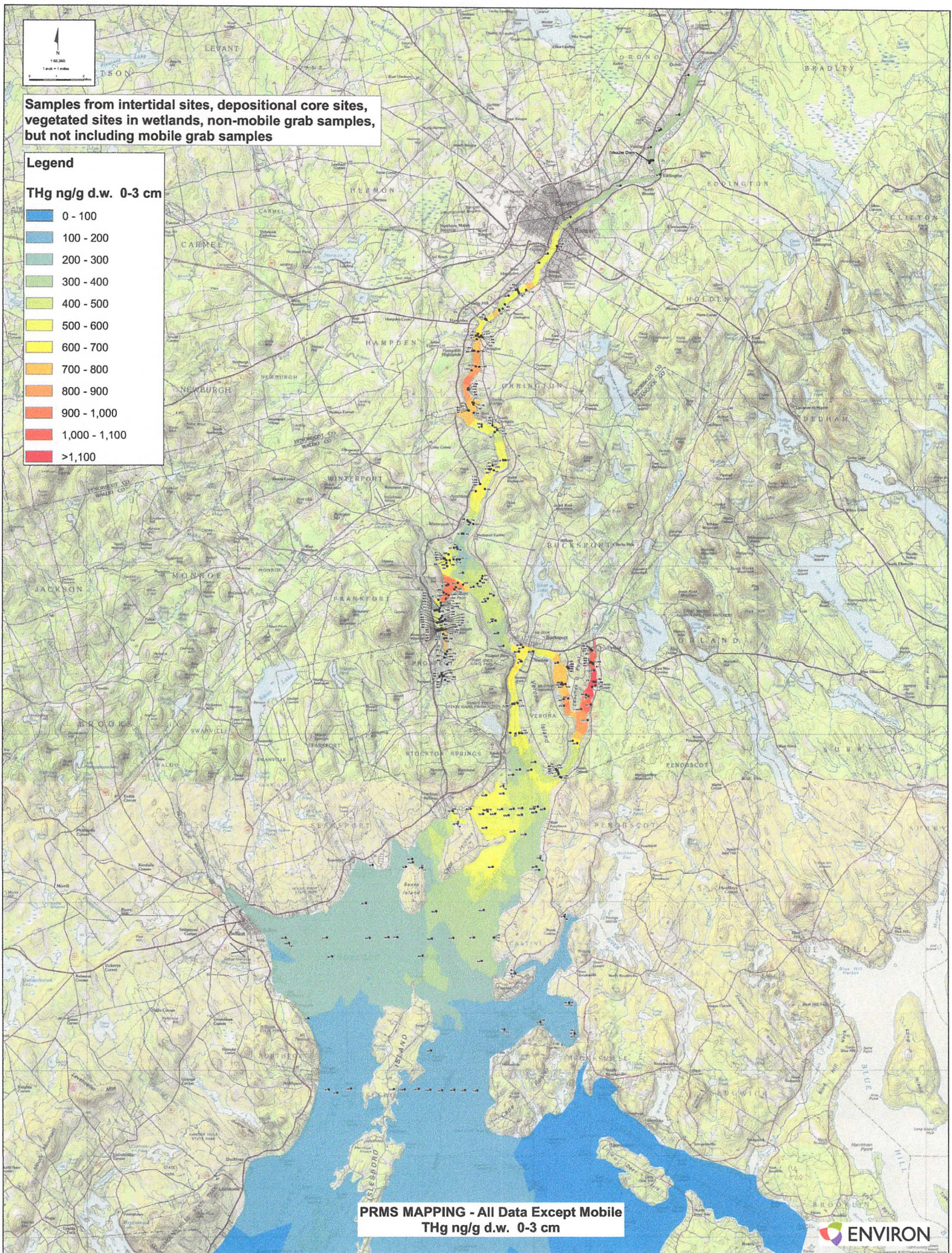


Samples from intertidal sites, depositional core sites, vegetated sites in wetlands, non-mobile grab samples, but not including mobile grab samples

Legend

THg ng/g d.w. 0-3 cm

- 0 - 100
- 100 - 200
- 200 - 300
- 300 - 400
- 400 - 500
- 500 - 600
- 600 - 700
- 700 - 800
- 800 - 900
- 900 - 1,000
- 1,000 - 1,100
- >1,100



PRMS MAPPING - All Data Except Mobile  
THg ng/g d.w. 0-3 cm



