

Upstream Watch Comments on Olver Associates Submission to the
Belfast Planning Board

Marine Resources

October, 20, 2020

Olver Associates Write:

The discussion of surface water quality related to the pipeline covers both the construction and disturbance of mercury contaminated soils and the impacts of the waste water effluent discharge. Relying on information submitted by the applicant and the Department of Marine Resources, the DEP finds that construction of the pipelines and the discharge of effluent from the wastewater treatment facility will not have an adverse effect on Penobscot Bay. The conditions associated with this includes requiring that the excavated material from the pipeline installation go to a licensed landfill and that care is taken during construction to minimize sediment transport. NAF will also need to conduct further sampling and analysis of the sediment prior to construction to verify there are no additional parameters found of concern to DEP in addition to mercury.

This statement does not evaluate the DMR's comments to the DEP concerning "Fisheries and Industry Impact", nor does it take into account the comments from local fishermen who have experienced dredging and other disturbances in the bay for decades. Under Section 82-3 the City is obligated "*to protect fish spawning grounds, aquatic life [and] to protect commercial fishing and maritime industries and activities.*" View this obligation, Upstream is bringing the below points to the Planning Board's attention in the hopes that

Mandy may offer comment, and that the board will further examine the potential impacts on the marine environment, and local fishing.

The DMR reports states that:

“The proposed RAS discharge pipe will be located within an area prohibited to shellfish harvesting under the authority of 12 M.R.S.A. § 6172.”

This area, like so many others along the coast, is closed and significantly diminished due to present pollution levels from sewage treatment plants and overboard pollution, as well as ongoing degradation since colonial take over. It is not that this area cannot support shellfish, but that existing pollution has already closed the area, and lowered water quality so significantly that shellfish can no longer exist there, and when they do, they are contaminated.

What will the impact be of adding more pollution to this already degraded area? Is it not in the interest of the local fishing community to enhance and clean this area in order to raise water quality and fishing opportunities? Is it not the DMR’s mission to “conserve and develop marine and estuarine resources”? Or, is Belfast willing to consider this area a “sacrifice zone”? (Please see our comments on “Climate Alteration” concerning the impacts of allowing degradation of Marine ecosystems to persist and accumulate.)

We are all aware that the Belfast and Penobscot Bays were once thriving marine environments, and we know that ongoing pollution, general degradation, industrial failures, and dams are at fault for its current state. Restoration is taking place, as local fisherman Mr. Black points out below, and must continue in order to maintain cool and clean waters that support as much life as possible. It is counter

intuitive to assert that additional dredging and polluting will not hamper this progress—progress that is more urgent than ever due to the climate and extinction crisis.

According to the DMR report, landings for Waldo county in 2017 and 2018 for lobsters alone totaled over \$3 million each year. This doesn't include all other aspects of the economy that this lobstering helps support. It also doesn't take into account the documentation of commercial landings that include: scab, scallops, sea urchins, menhaden, periwinkles, mussels, clams, elvers, sea urchins and smelts, as well as recreational landings of several migratory species. In addition, around 250 species of fin fish call the Gulf of Maine home. Many of these species have been observed in Upper Penobscot Bay (this includes Belfast Bay). The DMR writes, "concerns regarding the impact of this project on spawning of cod and haddock were also mentioned though there is no active ground fish fishery in the area." While there are no longer commercial "fisheries" due to centuries of pollution, and degradation, *these species are being caught*. How else do "fisheries" recover if not over time with the required conditions, and support of the DMR?

As David Black, a senior fisherman, writes concerning the Bay's recovery from past pollution:

"The Harbor was so fouled with this effluent that Belfast Harbor was listed In the U.S.Coast Pliot publication as a harbor to avoid when cruising the Coast of Maine...I believe It will take many a lifetime for this area to completely clean Itself."

He goes on to point out that:

"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 a prominent Lobster fishermen's Association to the U.S. Army Corps of Engineers dated May 4, 2013...Dredging and blasting resulting from this project will produce the same Impact as other dredging projects In the area.”

Wayne Canning, the District 1 representative for the State of Maine Zone D Lobster Management Policy Council. points out in his testimony on behalf of local fishermen that:

“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.”

Finally, Mr. Black testified that:

“I have fished in the area of this project from May until the end of December ...The overlap between my fishing "season" and this dredging and disposal project occurs in November and December which in recent years have become more productive months due to an increase in the water temperature of the bay. This change in water temperature has resulted in a later out migration of lobsters than was evident in past years and decades. The environment in this area of Penobscot Bay is changing very rapidly.”

This testimony reaffirms that this area is an active fishing ground, and that dredging and pollution do have long term impacts that affect fishing. Should we be allowing more warm waters and pollution to enter this environment, or should we be doing all we can to keep

these waters cool and clean?

The DMR writes:

“Traditional fishing access could be a concern for lobster, crab and scallop fishing due to intake and discharge structures. These structures will be between 2 - 9 feet above the sea floor and would pose as a trap for fishing gear to become entangled upon. It is possible that an exclusion zone along the pipeline will need to be established. The loss of fishing bottom would be approximately 149,000 square feet or 3 .4 acres.”

So, while the project should not result in adverse impacts, the area and fishing where the pipes would be laid will be lost. Is the loss of 3.4 acres significant to the fishermen who fish there now? According to Mr. Black it is. What is the impact of this loss combined with the effluent? Fishermen have already lost significant portions of the Penobscot Bay to pollution. Do they deserve to lose even more? Can we afford to lose any portion of the seas? Is not this idea that acres of seabed can just be destroyed the same thinking that has gotten us into the extinction and climate crisis, and drastically reduced our fishing communities?

While Mr. Black's and other fisherman's testimonies are ignored by the agencies, most of us understand that fishing people's local ecological knowledge is among the most essential data that exists. These men and women are on the bay almost every day. They also pass down their knowledge from generation to generation. Do we have the right to put Mr. Black's, and other fishermen's livelihoods on the line? Are there options that will guarantee the continued recovery of the Bay, support local fishing, address global warming, and clean up existing pollution sources, rather than adding to them?

We would like to point out as well the the Federal Hatchery at Craig Brook was in violation of its own phosphorus standards for several years. “Maine DEP was only now requesting a consent agreement with the hatchery because it had taken several years to accumulate a sampling of water quality data.” <https://www.ellsworthamerican.com/maine-news/jurisdiction-issues-phosphorus-cloud-waters-at-lake-alamoosook/>

If it takes years to “accumulate a sampling of water quality data” when a violation takes place at a government establishment, how long would it take to address Nordic’s violations? Cooke Aquaculture, also licensed and overseen by DEP has been in violation of its permits for years. It will now pay a fine that is insignificant compared to its profits. <https://bangordailynews.com/2019/10/16/news/canadian-salmon-firm-will-pay-156k-over-fish-pen-violations-to-fund-salmon-restocking/>

In other words, once these facilities are in, pollution and violations happen—technologies fail and humans make mistakes. Is Belfast prepared to take this risk at this crucial time?

Finally, though this is extremely recent information, we would like to bring to the attention of the board a model that was discussed on October 19th at the Senator George Mitchell Center for Sustainability at the University of Maine. This new model is on Estuarial Tidal Flow dynamics. Specifically this activity has focused on harmful algal blooms using a "particle model" for now, and a more sophisticated model once the "Estuary Builder" comes online. The coastline of Belfast Bay is shown in red as a "Vulnerable Area". We cannot offer more information than this, however Lauren Ross and Dr. Sean Smith from the Mitchell Center are the people to

communicate with regards to this newest modeling.

Concerning the endangered Atlantic salmon it is important to note that the DMR cited data from 2002 and 2012. However, the restoration of the Penobscot River took place in 2013 and 2015. According to NOAA, “on July 28, Maine Department of Marine Resources reported 1,426 salmon returns, up from 1,076 in 2019. These numbers are a vast improvement from 2014, when only 248 Atlantic salmon returned to the river to spawn. The Penobscot River hosts the largest remaining run of Atlantic salmon in the United States. However, numbers are just a fraction of what they used to be —75,000 to 100,000 Atlantic salmon used to return to the river to spawn.” <https://www.fisheries.noaa.gov/feature-story/penobscot-river-salmon-run-surges-second-straight-year>

Therefore more recent data is needed to determine the activity of Atlantic salmon in the area of the pipes and effluent, especially considering the fact that “75,000 to 100,000 Atlantic salmon used to return to the river to spawn”, and we know that the salmon historically used the entire Penobscot Bay, and migrated through the Belfast Bay to the Passagassawakeag River, https://www.fws.gov/GOMCP/maps_salmon.html. This is why the entire Belfast Bay is under protection of the Endangered Species Act for both Atlantic salmon and Shortnose sturgeon. Due to changes in water temperature salmon and sturgeon migration may also vary as temperature is one of the factors that determines migration. <https://nefsc.wordpress.com/2017/05/26/salmon-team-and-predators-ready-for-spring-on-the-penobscot/> It is thought that there might also be appropriate habitats for small runs on the Little River and the Goose River. While we realize that Whole Oceans just received a permit to pollute, we do not believe that this justifies adding even more pollution to this ecosystem.

Concerning the endangered Short-nose sturgeon and the Atlantic Sturgeon, data from 2010 was cited. “There are no recoded reports of short-nose present in the area of the pipeline. (Fernandes et al. Seasonal Distribution and Movements of Shortnose Sturgeon and Atlantic Sturgeon in the Penobscot River Estuary, Maine. Transactions of the American Fisheries Society 139:1436-1449, 2010).” More recent data was used concerning the lack of spawning in the area. However, according to a study in 2015:

“Evidence has become available in this century indicating that populations of the endangered Shortnose sturgeon *Acipenser brevirostrum* *migrate outside their natal river systems, but the full extent and functional basis of these migrations are not well understood.* Between 2007 and 2013, 40 Shortnose Sturgeon captured and tagged in four Gulf of Maine river systems migrated long distances in coastal waters to reach the Kennebec System where their movements were logged by an acoustic receiver array. Twenty-one (20%) of 104 Shortnose Sturgeon tagged in the Penobscot River.” <https://afspubs.onlinelibrary.wiley.com/doi/abs/10.1080/00028487.2015.1037931> In other words, Shortnose Sturgeon are making a come back due to the removal of the Edwards dam, and the dams on the Penobscot. It is well known that the Passagassawakeag River means “a good place to spear sturgeon by torchlight.” Making sure they can make it back to the Passagassawakeag is a responsibility we all share.

So, the question is not only if fish, and other marine life, are currently present, but *could they be present again* if the right conditions existed?

Amazing restoration stories abound concerning fish, marine and river

habitats in Maine and beyond. In addition to marine life restoration, foundation species such as eel grass can and must be protected and restored now more than ever. Eel grass exists in the outfall area of these pipes. While restoration of eel grass has not yet been seriously attempted in our area, Virginia's Eastern Shore is home to the "world's largest seagrass restoration project, [where] scientists have observed an ecosystem from birth to full flowering." https://www.sciencenews.org/article/seagrass-restoration-project-virginia-ecosystem-rapid-recovery?fbclid=IwAR32Z2r_U5YDbMM6gqHzUEBEXHfLK9brRv2cfH8rtJDjr91uEhZ01_1UCSA One of the most important elements of this restoration is the seagrass's ability to sequester carbon. Could Belfast launch a similar restoration effort? One main ingredient is clean, clear water...Something 7.7 million gallons of effluent added to existing effluent, will make very difficult, if not impossible to maintain.