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July 19, 2021

Protect the Passage
C/o Alison Smith
29 Merganser Way
Freeport, Maine 04032

Re: Eelgrass Survey within the Proposed Bailey Coffin Department of Marine Resources (DMR) aquaculture lease site between Bustins Island and Sow and Pigs Island in Freeport, Maine.

1.0 INTRODUCTION

At your request, Atlantic Environmental, LLC (AE) was retained to perform a shallow subtidal eelgrass (*Zostera marina*) survey of approximately seven (7) acres of marine bottom as shown on the Bailey Coffin Aquaculture lease application submitted to the Department of Marine Resources (DMR) with a draft application submission date of 5/8/2020. The Applicant is proposing both Bottom (no gear) and Suspended (gear in the water and /or on the bottom). The intent of the report is to document if eelgrass is present within the proposed lease area.

2.0 METHODOLOGIES

AE performed a desktop analysis to determine if there is eelgrass mapped in the project vicinity. The 2018 eelgrass data layer maintained by the Maine Department of Environmental Protection (MDEP) mapped an area of eelgrass south and west of the lease site, no eelgrass is shown within the lease site at that time. However, the 2010 data layer indicates a bed of eelgrass over 400 acres in size between the mainland (Lower Flying Point Road and Merganser Way) and all the islands to the east (Williams south to Bustins Island). The proposed lease site appears to be 100% covered by eelgrass at that time. The 5/9/2016 Google Earth imagery data appears to show that eelgrass covers approximately half the proposed lease site.

The site was accessed with a 16' aluminum boat outfitted with a Garmin GPS and sounder. The perimeter of the lease site was taken from the coordinates provided within the application and is shown in purple. The track log of the boat is shown in red. Video transect locations are

Environmental Consultants, Wetland Scientists, Specializing in Federal, State and Local Permitting, Expert Witness

shown in green. Due to shallow depths within the site, the northwest portion of the lease site was not surveyed. However, based on visual observations from the boat eelgrass does not appear to be present within that area. Two (2) video transects were recorded with a GOPRO camera mounted on a pole beside the boat.

3.0 RESULTS

AE conducted an on-site eelgrass survey on July 12, 2021 between 7:30 AM and 8:30 AM. The Tide was low (+/- 0.1 MLW) and water depths ranged from 1.0 to 5.0 feet. Water depths increase from northwest to southeast within the proposed lease site. The weather conditions during the survey were overcast with little to no wind and the water was turbid with visibility in the one (1) to two (2) foot range. The substrates within the proposed lease area consist of shell hash, soft bottom and eelgrass. AE identified an eelgrass bed within the proposed lease area that extends in a southeast direction and covers the southeast portion of the lease site. Due to high turbidity the quality of the video imagery was poor. However, eelgrass was clearly observed throughout both recorded transects and in select locations was observed from the boat. Eelgrass was also easily observed on the sounder as the boat navigated within the site. AE also observed several striped bass fining within shallow areas of the site.

4.0 DISCUSSION

The purpose of the survey was to confirm, locate, and document the extent of eelgrass within the project area. Due to poor visibility the extent of eelgrass within the site could not be determined. However, it is AE's opinion that a significant area of eelgrass exists within the southeast corner of the lease site.

That finding is contrary to the statements made within the Application under **Section 11. ENVIRONMENTAL CHARACTERIZATION D.5. Describe the presence and extent of submerged aquatic vegetation, i.e. eelgrass, within the proposed lease area. Please include the date of this observation along with the method of observation. If submerged aquatic vegetation is observed, please also describe the abundance below and sketch the limits of the beds in the vicinity map.**

APPLICANT RESPONSE- *According to the Maine DMR Aquaculture Map (2013 and 2018 eelgrass layers), there is no eelgrass present within the proposed lease area. I visited the site throughout the summer months of 2020 to conduct a visual observe and did not find eelgrass within the*

proposed lease area.

5.0 CONCLUSION

It is AE's opinion that eelgrass exists within the site and the applicant should perform an eelgrass survey to determine the extent and density of eelgrass within the site. Given the historic eelgrass data from 2010 indicating that the entire site was once part of a +/- 400 area eelgrass bed, the potential for eelgrass to occupy the entire proposed lease site and surrounding area exists.

Respectfully,

Atlantic Environmental, LLC.

A handwritten signature in black ink that reads "Timothy A. Forrester". The signature is written in a cursive style with a large, stylized initial 'T'.

Timothy A. Forrester, Owner



Image One: Google Earth Image (background 2016) indicating the proposed lease site, track log and video transects at the Bailey Coffin Proposed Lease site in Freeport Maine.



Photograph One: Eelgrass within the Proposed Bailey Coffin Lease site in Freeport Maine. AE, July 12, 2021.



Photograph Two: Eelgrass within the Proposed Bailey Coffin Lease site in Freeport Maine. AE, July 12, 2021.