STATE OF MAINE DEPARTMENT OF MARINE RESOURCES AQUACULTURE DIVISION

)	
IN RE:	BAILEY COFFIN)	
	STANDARD AQUACULTURE)	PRE-FILED DIRECT TESTIMONY OF
	LEASE APPLICATION)	TIMOTHY A. FORRESTER, PWS
)	

- I, Timothy A. Forrester, PWS, after being duly sworn, states under oath as follows:
- 1. My name is Timothy A. Forrester. I work as the Director of Coastal Resources at Flycatcher, LLC ("Flycatcher"). I have worked as an environmental consultant at Flycatcher since April 2023. Prior to Flycatcher, I worked as an environmental consultant at my own consulting firm. I have been in the environmental consulting field for over 25 years. I hold a Bachelor of Science in Environmental Analysis and Planning from Frostburg State University in Frostburg, Maryland. I am a certified Professional Wetland Scientist, Certified SCUBA diver, former executive committee member and active member of the Maine Association of Wetland Scientists. My professional experience and qualifications are further detailed in my resume previously submitted to the Maine Department of Marine Resources ("MDMR") with intervenors Concerned Citizens of Bustins Island and Flying Point's ("CCBIFP") Expert Witness Designation, dated May 16, 2023.
- 2. Flycatcher is an environmental consulting firm located in Yarmouth, Maine.

 Flycatcher provides a wide range of environmental consulting services, including but not limited to wetland and other natural resource mapping, federal/state/municipal environmental permitting, wildlife habitat identification, shoreline stabilization, coastal resiliency, marine inventories, terrestrial and marine habitat functional assessments, permitting and design contracting for

shorefront projects, coastal wetland identification, intertidal and subtidal characterizations, and conducting eelgrass surveys.

- 3. Prior to working at Flycatcher, I was the founder and owner of Atlantic Environmental, LLC, an environmental consulting firm located in Woolwich, Maine, where I provided environmental services, including but not limited to natural resources permitting, wetland delineations, residential and commercial dock design and permitting, marina design, shoreline stabilization, wildlife and marine habitat assessment, and conducting eelgrass surveys.
- 4. Prior to owning Atlantic Environmental, I worked for 17 years as a consultant for another Maine based environmental consulting firm.
 - 5. Atlantic Environmental, LLC joined Flycatcher in April 2023.
- 6. I am a certified SCUBA diver. I have conducted eelgrass surveys and been involved in aquaculture lease projects in Maine for over 15 years. The majority of that work has occurred in Casco Bay and Downeast, Maine. I have surveyed (via SCUBA) aquaculture lease sites to assess habitat assessments, eelgrass distribution and flora and fauna identification. I have provided my findings to federal and state agencies in order to revise habitat maps including Tidal Waterfowl and Wading Bird Habitat ("TWWH") maps.
- 7. In my role as an environmental consultant, I have become familiar with regulations of the MDMR regarding aquaculture leases, the regulations of Maine Department of Environmental Protection ("MDEP") regarding significant wildlife habitat and marine habit, and I work closely with the Maine Department of Inland Fisheries and Wildlife ("MDIFW"). I am also familiar with the publicly available eelgrass maps and wildlife habitat maps that are available from the Maine Office of GIS.

8. I present this testimony on behalf of certain CCBIPF intervenors in support of their opposition to the Bailey Coffin standard aquaculture lease application submitted to MDMR for a lease site between Bustins Island and Sow and Pigs Island in Freeport, Maine.

I. Eelgrass Survey

- 9. Atlantic Environmental, LLC was retained by the group of concerned landowners in Freeport, Maine known as Protect the Passage in June of 2021, to perform a shallow subtidal eelgrass (*Zostra marina*) survey of approximately seven (7) acres of marine bottom in the proposed aquaculture lease area identified in the Bailey Coffin aquaculture lease application submitted to MDMR with a draft application submission date of May 8, 2020.
- 10. The results of the eelgrass survey that I performed in 2021 are described in my report entitled, 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, and dated July 19, 2021 (the "Eelgrass Survey Report"). A true and accurate copy of the Eelgrass Survey Report has been submitted to DMR as CCBIFP's Exhibit 1 and is expressly incorporated into my pre-filed testimony by this reference.
- 11. As described in the Eelgrass Survey Report, I performed a desktop analysis to determine if eelgrass was mapped in the vicinity of the proposed lease area. I reviewed the Historic Eelgrass Coverage map maintained by MDEP. The 2010 data layer indicated that an eelgrass bed covered over 400 acres in size, located between the mainland (Lower Flying Point Road and Merganser Way) and all the islands to the east (Williams south to Bustins Island). Bailey Coffin's proposed lease area appears to be 100% covered by this eelgrass bed at that time. I also reviewed Google Earth satellite images of Casco Bay in and around the proposed lease

area. The May 9, 2016 Google Earth imagery data appears to show eelgrass within approximately half of the proposed lease area. *See also* Exhibit 1 at 1.

- 12. As described in the Eelgrass Survey Report, I also conducted an on-site eelgrass survey of Bailey Coffin's proposed lease area on July 12, 2021. The proposed lease area was accessed with a 16-foot aluminum boat outfitted with a Garmin GPS and multibeam scanning sounder. The perimeter of the proposed lease area was located using the coordinates provided in Bailey Coffin's lease application to MDMR. I also took two video transects of the southeast portion of the proposed lease area using a pole mounted GoPro® camera. Despite visibility in the one to two-foot range, I was able to identify an eelgrass bed within the proposed lease area that extends in a southeast direction and covers the southeast portion of the proposed lease area. Eelgrass was clearly observable within the proposed lease area on recorded transects and, in select locations, eelgrass was even observable when viewing from the boat. I also observed several striped bass fining within the shallow areas of the proposed lease area. See also Exhibit 1 at 1-2, 4-6.
- 13. The purpose of the survey was to confirm, locate, quantify and document the extent of eelgrass within the proposed lease area described in the Bailey Coffin aquaculture lease application. Due to poor visibility during the survey, the full extent of eelgrass within the proposed lease area could not be determined. However, a significant area of eelgrass was observed within the southeast corner of the lease site. *See also* Exhibit 1 at 2-3.
- 14. Since I issued my report, I have learned that MDMR staff observed eelgrass both within and near the proposed lease area during their site visits on July 8 and/or July 28, 2021. According to the MDMR Site Review Report, dated January 22, 2022, eelgrass was also previously observed within the proposed lease area during an eelgrass survey conducted in 2018

- by MDEP. However, that eelgrass observation was erroneously omitted from the 2018 data layer of the Historic Eelgrass Coverage maps maintained by MDEP.
- 15. MDMR's observation of eelgrass during its site review in July 2021 and the revelation that eelgrass was also observed by MDEP in 2018 are consistent with the results of my desktop analysis and on-site eelgrass survey, confirming that an area of eelgrass was documented within the proposed lease area.
- 16. These findings contradict the statements made in Bailey Coffin's aquaculture lease application that there is no eelgrass present within the proposed lease area.

II. Tidal Waterfowl and Wading Bird Habitat

- 17. In April 2022, the group of concerned landowners in Freeport, Maine known as Protect the Passage retained Flycatcher to provide consultation regarding the potential wildlife impact of Bailey Coffin's proposed aquaculture lease located West of Sow and Pigs Island in Casco Bay, Freeport, Maine. The results of that consultation are set forth in greater detail within Flycatcher's memorandum report, dated July 6, 2022 (the "Flycatcher Memo"). A true and accurate copy of the Flycatcher Memo has been submitted to DMR as CCBIFP's Exhibit 2.
- 18. I have reviewed the Flycatcher Memo and conferred with my colleague Rodney Kelshaw at Flycatcher, who authored the Flycatcher Memo, and concur in its conclusions.
- 19. As part of its consultation, Flycatcher reviewed project documentation regarding Bailey Coffin's proposed aquaculture lease. Flycatcher also corresponded with staff at the MDMR and MDEP, and biologists at MDIFW, regarding Bailey Coffin's proposed aquaculture lease and the wildlife resources that may be impacted by the proposed aquaculture lease. *See also* CCBIFP Exhibit 2 at 1-3.

- 20. As described in the Flycatcher Memo, Flycatcher performed a desktop analysis of publicly available maps, the MDMR report, and documents submitted as part of the aquaculture application, Flycatcher identified two natural resource areas in proximity to Bailey Coffin's proposed lease area: the eelgrass beds discussed above and Tidal Waterfowl and Wading Bird Habitat (TWWH). *See also* CCBIFP Exhibit 2 at 2.
- 21. As described in the Flycatcher Memo, the northern and western portions of Bailey Coffin's proposed lease area overlap with a 508.33-acre TWWH that is rated "High" in value by MDIFW, making the identified TWWH a Significant Wildlife Habitat (SWH) under MDEP Rules, Chapter 335, regarding Significant Wildlife Habitat. *See also* CCBIFP Exhibit 2 at 3.
- 22. On July 16, 2021, MDMR sent a request for agency review and comment to MDFIW regarding Bailey Coffin's aquaculture lease application. MDIFW concluded that Bailey Coffin's proposed lease area intersected with a TWWH, which is considered a SWH, however, MDIFW concluded there was only a 1.7% overlap with a SWH and that MDIFW biologists anticipated minimal impacts to wildlife resulting from this proposed aquaculture lease. *See also* CCBIFP Exhibit 2 at 3.
- 23. MDIFW's determination that Bailey Coffin's proposed lease area would have "minimal impacts to wildlife" could be considered incomplete because it did not have the opportunity to consider the additional eelgrass beds that were surveyed by MDEP in 2018 (because they were not included in the eelgrass dataset) or the eelgrass observed by myself and MDMR in 2021. See also CCBIFP Exhibit 2 at 3.
- 24. Under MDEP Rules, Chapter 335, Significant Wildlife Habitat, one of the four TWWH habitat types is aquatic bed habitat, and one type of aquatic bed habitat is defined by the presence of eelgrass. Therefore, the TWWH that overlaps the proposed lease area should include

the additional eelgrass beds observed in 2018 and 2021, making the actual overlap between the SWH and Bailey Coffin's proposed lease area greater than 1.7%. The MDIFW could have a different opinion regarding the impact to wildlife based on the amount of lease area that intersects the mapped eelgrass bed. *See also* CCBIFP Exhibit 2 at 3.

III. MDEP Casco Bay Seagrass Mapping

- 25. I have also reviewed the recent January 24, 2023 MDEP report entitled Casco Bay Seagrass Mapping prepared by Normandeau Associates (the "2023 MDEP Seagrass Report").
- The Casco Bay Seagrass Mapping effort performed by Normandeau Associates in 2022 included aerial photography surveys, GIS mapping and spot field verifications. While those methods work well in covering large survey areas (Cape Elizabeth to Phippsburg), they lack site specific accuracy within a precise location, such as the southeast corner of the proposed lease site. It does not appear that Normandeau Associates specifically field checked the area within the proposed lease site. Furthermore, according to the report the smallest map units are defined as 0.5 acres. It is highly possible that eelgrass exists within the site and was not identified based on those constraints. The mapping effort is further limited by differences in observers during the surveys, level of effort, equipment error, weather conditions, etc. While the 2022 maps provide large scale data for comparison, they should be used as indicators of the potential for eelgrass to be present within a precise location. Field surveys such as the ones conducted by Atlantic Environmental, LLC and MDMR in 2021 provide a higher level of detail and both surveys concluded that eelgrass exists within the lease site.

IV. Conclusions

27. Eelgrass existed within the proposed lease area when the lease application was submitted, based on the eelgrass beds observed in 2018 and 2021. Given the historic eelgrass

data from 2010 indicating that the entire site was once part of a +/- 400 area eelgrass bed, in conjunction with the observed eelgrass bed in 2018 and 2021, the potential for eelgrass to occupy the entire proposed lease site and surrounding area exists.

28. The northern and western portions of Bailey Coffin's proposed lease area overlap with Significant Wildlife Habitat, specifically, Tidal Waterfowl and Wading Bird Habitat. That Significant Wildlife Habitat could be expanded to include additional eelgrass areas that were erroneously left out of the 2018 eelgrass maps but were field verified in 2021 by Atlantic Environmental and MDMR. Accordingly, if the TWWH mapping were updated to include the additional eelgrass area identified in 2018 and 2021 the proposed lease area would occupy a larger area than MDIFW originally concluded.

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Dated: May 12, 2023

Timothy A. Forrester, PWS Director of Coastal Resources Flycatcher, LLC

STATE OF MAINE COUNTY OF CUMBERLAND, ss.

Personally appeared before me on the 17 day of May, 2023, the above-named Timothy A. Forrester, PWS, Director of Coastal Resources, Flycatcher, LLC and made oath as to the truth of the foregoing pre-filed testimony.

Before me,

Notary Public / Attorney at law

Jason J. Theobald, Bar No. 5605

My commission expires:

[SEAL]