

11 April 2021

TO: The Joint Committee on Inland Fisheries and Wildlife
RE: LD 114, An Act To Address Airboat Operation In The State

Honorable Co-Chairs and Committee members:

Thank you for considering my comments, below, and for your work on this issue of statewide importance.

I am a retired biologist residing in Pembroke ME, on Cobscook Bay but I grew up in Freeport, spending much of 1954 – 1977 on the waters of the Harraseeket River and Casco Bay, and as a biologist I had study sites in Maquoit Bay, Harpswell and the New Meadows River. I have experienced airboats going down river on the Harraseeket only in the last couple of years. Recently, I also listened to the meetings of the airboat consensus group that just completed its work.

I urge you to vote “ought not to pass” on LD 114, for two main reasons:

- 1) DECIBEL LIMITS: The decibel limits are still too high in LD 114, and do not represent much of a compromise between the residents of the shoreland zone and airboat operators.
- 2) WILDLIFE CONSIDERED: LD 114 makes no mention of the impact of airboat noise on wildlife. If any committee in the legislature has a responsibility to consider impacts on wildlife, it would be your committee, the Inland Fisheries and Wildlife Committee.

Below are my findings about the importance of considering airboat noise on wildlife. I submitted similar testimony in Dec. 2020 when the airboat noise rule was being considered by MDIFW.

1. Maine’s Species of Greatest Conservation Need are potentially and actually affected by airboat noise:

I predicted in Dec. 2020 that wildlife identified by the state of Maine (MDIFW) as species of greatest conservation need in Maine’s Wildlife Action Plan would be disturbed by airboat noise, because their habitats overlap with airboat routes and work areas.

Last week Ms Pam Brennan from Freeport sent in testimony to you on her observations of exactly that kind of disturbance. After I read her testimony I asked her which bird species she personally witnessed “panic and scatter” (Ms. Brennan’s words) when the airboats came by and she said “terns, sandpipers and loons”. Terns, sandpipers and loons are all Species of Greatest Conservation Need on the state of Maine’s Wildlife Action Plan, written by the Department of Inland Fisheries and Wildlife. **Are we going to disregard Maine’s Wildlife Action Plan because the disturbance that affects them is from a commercial fishing activity?** Does that make any sense?

2. Maine has mapped significant wildlife habitat areas under Natural Resources Protection Act (NRPA) and setbacks for landowners in the Shoreland Zoning Act (SZA). Those identified habitat areas are areas in which airboats are active.

NRPA and SZA are laws are intended to protect wildlife and wildlife habitat. In Maine, we value wildlife and wildlife habitat enough to **restrict landowners and developers** from doing anything they want on their lands near **significant habitats mapped by IFW**.

3. What is known about the impacts of airboat noise on birds?

WATERBIRD/WADER FLUSH DISTANCE:

A study conducted in FL exposed 13 species of waterbirds to the direct approach of an airboat to determine each species' flush distance. (Of the 13 species studied, 8 are residents of Maine as well.)(Rogers, J. A. and S. T. Schwikert. Buffer Zone distances to protect foraging and loafing waterbirds from disturbance by airboats in Florida. Waterbirds 26(4): 437-443, 2003)

THE RECOMMENDED BUFFER DISTANCE FROM AIRBOATS BASED ON FLUSH **DISTANCE RANGED FROM**

Name	Status in Maine	recommended buffer from airboats (m)	recommended buffer from airboats (feet)
bald eagle	federally protected	364	1194
Double crested cormorant	x	284	931
Great Egret	x	251	823
osprey	x	250	820
great blue heron	SCGN - Special concern species	247	810
Little blue heron	SCGN	207	679
glossy ibis	x	193	633
snowy egret	SCGN - regional	192	629

629 Ft to 1,194 ft.

Table 1. Data originally from Rogers and Schwikert, 2003, Table 1: species tested that reside in Maine.

(see next page)

Table 1. Flush distances (m) of waterbirds to the direct approach of an airboat and minimum recommended buffer distances (m) to prevent flushing.

Species	Number	Mean ± SD	Difference ^a	Recommended distance ^b
Double-crested Cormorant <i>Phalacrocorax auritus</i>	22	152 ± 43	A	284
Anhinga <i>Anhinga anhinga</i>	89	108 ± 48	B	264
Great Egret <i>Ardea alba</i>	104	113 ± 43	A	251
Great Blue Heron <i>Ardea herodias</i>	102	99 ± 44	B	247
Little Blue Heron <i>Egretta caerulea</i>	80	89 ± 34	C	207
Snowy Egret <i>Egretta thula</i>	97	81 ± 31	C	192
Tricolored Heron <i>Egretta tricolor</i>	117	65 ± 26	C	166
White Ibis <i>Eudocimus albus</i>	91	94 ± 30	A	200
Glossy Ibis <i>Plegadis falcinellus</i>	81	85 ± 30	B	193
Mottled Duck <i>Anas fulvigula</i>	14	103 ± 32		213
Bald Eagle <i>Haliaeetus leucocephalus</i>	46	173 ± 66	A	364
Osprey <i>Pandion haliaetus</i>	18	103 ± 44	B	250
Snail Kite <i>Rostrhamus sociabilis</i>	115	49 ± 18	C	131

^aMeans with the same letter within the same avian order or family are not significantly (ANOVA, Fisher's protected least significant difference test performed on log-transformed data, $P > 0.05$) different.

^bMinimum recommended set-back (RS) distances calculated by using the formula $RS = \exp(\hat{\mu} + 1.6495\hat{\sigma}) + 40$ m.

This team also compared the flush distances of nine species of waterbirds in response to an outboard-powered boat versus an airboat moving at similar speeds (35-40 km/h = 21-25 MPH).

****All nine species tested exhibited significantly (t test, $P < 0.0001$) larger flush distances to the approach of an airboat compared to an outboard-powered boat ****

For example, a great blue heron flushed in response to an outboard-powered boat at 138 feet, but flushed at 324 feet to an airboat.

SHOREBIRDS

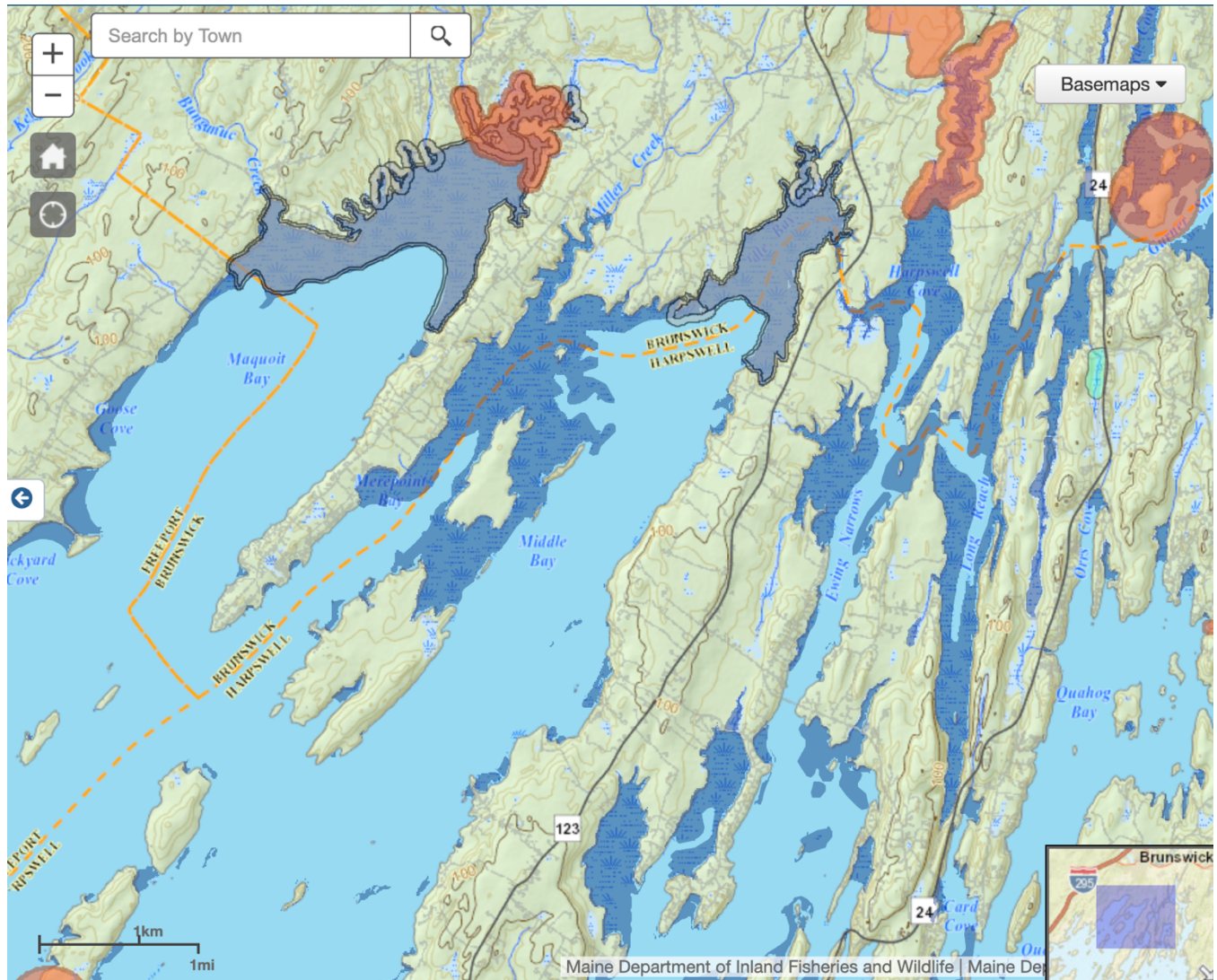
There are numerous papers on boat disturbance impacts on shorebirds.

Here in Maine, in 2015 IFW biologists recommended areas where rockweed harvest should be restricted because of the potential for disturbing shorebirds. The biologists were assuming the seaweed harvest was being conducted by boats with normal motors, not airboats, - yet there was this recommendation because of disturbance.

Why, then, isn't MDIFW recommending areas where airboats should not be operated because of bird disturbance? It's ironic that some of the bird species that are on the list created by IFW as "Species of Greatest Conservation Need" are also the species that are easily flushed by airboats, according to the 2003 study.

The very areas that are desirable/suitable for airboat operation are likely to be mapped bird habitat. For an example, see Middle Bay, below, where airboats are operated, much of which is shown on the MDIFW habitat map as shorebird habitat and tidal wader habitat. See map below.

(<https://webapps2.cgis-solutions.com/beginningwithhabitat/map2/>)

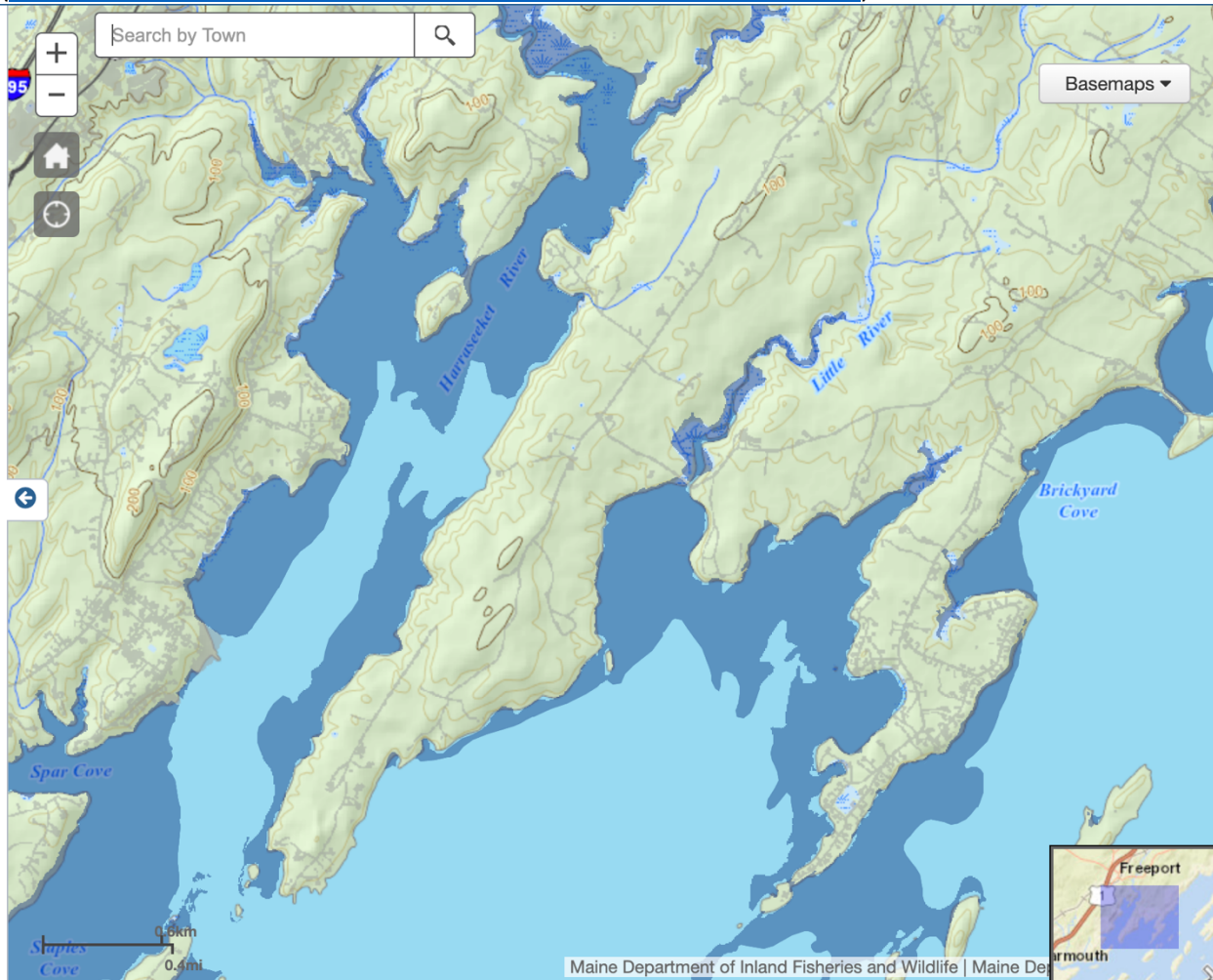


Legend:

-  State Listed Animal Habitats
-  Deer Wintering Areas
-  Inland Wading Bird and Waterfowl Habitat
-  Tidal Wading Bird and Waterfowl Habitat
-  Essential Plover and Tern Habitat
-  Shorebird Habitat

Here is the map for the Harraseeket River and Little River area of Freeport, where airboats are operated.

(<https://webapps2.cgis-solutions.com/beginningwithhabitat/map2/>)



SUMMARY:

Laws regulating airboat operations should have decibel limits and spatial restrictions added to protect wildlife. I suggest wording such as “may not be operated within 1000 feet of a significant wildlife habitat (wading and tidal waterfowl or shorebirds) as mapped by the Department of Inland Fisheries and Wildlife” and “May not be operated during seasonal migration period” when shorebirds, for example, rely on feeding undisturbed so they can make their seasonal migrations successfully.

LD 114 doesn’t limit decibels enough, and says nothing about wildlife. It needs to be rejected. Please vote “ought not to pass” on LD 114.

Thank you for considering my comments.

Sincerely,

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