

**Department of Marine
Resources Expansion Site
Report**

Standard Lease DAM PPN
Norumbega Oyster
19 Snow Road
Nobleboro, ME 04555

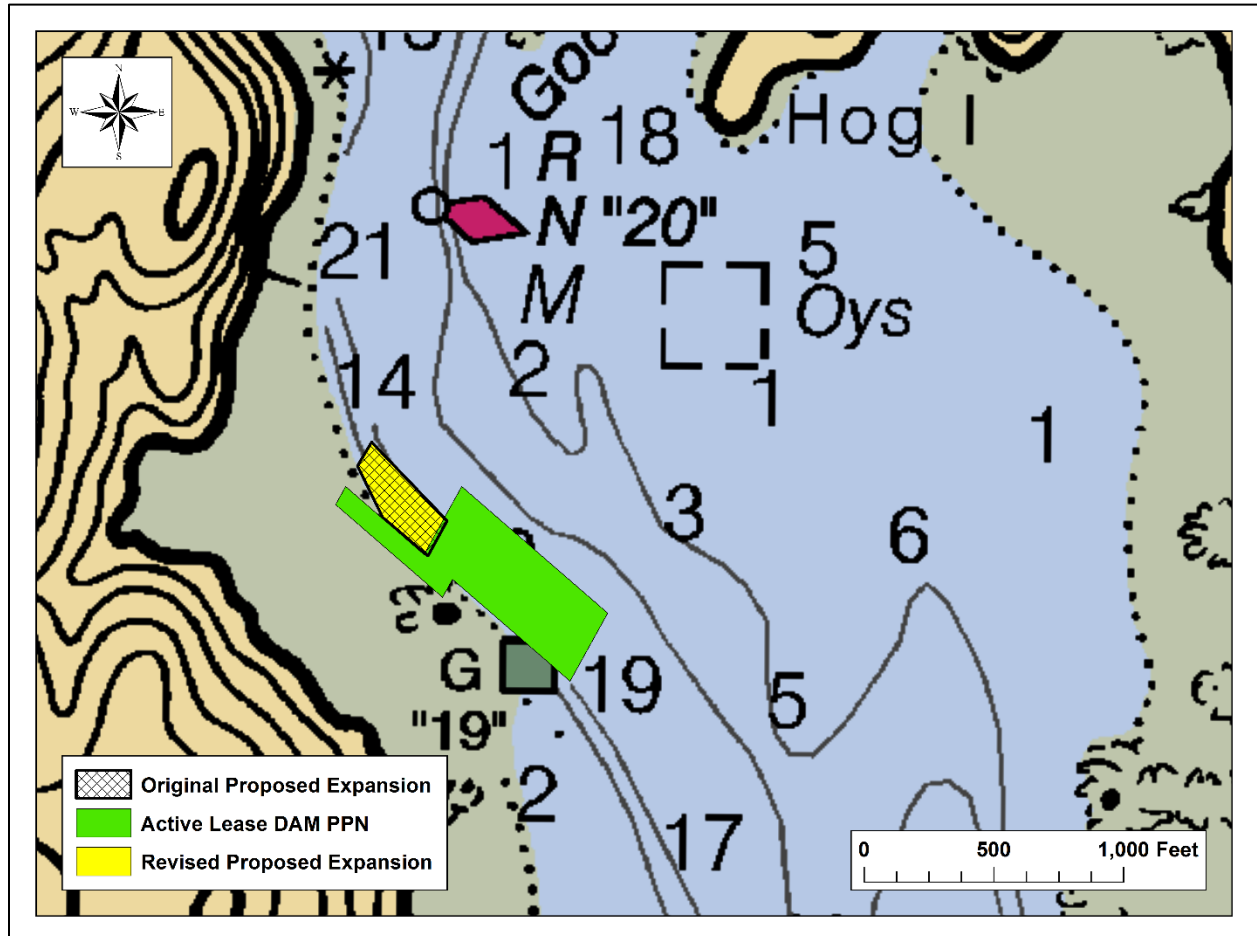


Figure 1: Vicinity map¹

Location: Northeast of Perkins Point, Damariscotta River, Newcastle, Lincoln County, Maine

Acreage of Existing Lease DAM PP2: 5.98 Acres

Acreage of Proposed Expansion: 1.39 Acres²

Total Combined Acreage: 7.37 Acres

Site Review by: Marcy Nelson and Cheyenne Adams

Report Preparation by: Cheyenne Adams and Marcy Nelson,

Report Submitted: August 9, 2022

¹ All figures in this report were created in ArcMap version 10.8 using digitized NOAA Nautical Charts or geo-referenced aerial photographs provided) The Maine Office of GIS (orthoCoastalCentralCoast2003and2005).

² The application requests 1.45 acres, but the coordinates provided in the application overlap with the active lease DAM PPN. Therefore, DMR adjusted the proposed SW and SE corners slightly (<20 feet) to intersect with the boundary of DAM PPN and then calculated the acreage of the revised expansion area as 1.39 acres (Figure 1).

Proposed Expansion

The applicant, Norumbega Oyster, is requesting a 1.39-acre expansion extending northwest from the northwest boundary of Tract 1 of existing standard lease DAM PPN, in the Damariscotta River (Figure 1).³ This expansion is proposed for the suspended culture of shellfish. Species that are currently authorized on DAM PPN include American oysters (*Crassostrea virginica*), European oysters (*Ostrea edulis*), Atlantic surf clams (*Spisula solidissima*), blue mussels (*Mytilus edulis*), bay scallops (*Argopecten irradians*) and sea scallops (*Placopecten magellanicus*). The applicant proposes to deploy 4 longlines with 25 oyster cages (36" W x 60.5" L x 24" H) each, and 2 longlines with 80 ADPI bags (18" W x 38" L x 3.5" H) each.⁴ During winter months, November to April, any ADPI bags would be removed and oyster cages sunk to the bottom.⁵

On June 2, 2022, Maine Department of Marine Resources (MDMR) staff Marcy Nelson and Cheyenne Adams visited the proposed expansion. Hearings Officer Maria Eggett was also present. MDMR staff arrived on site at approximately 12:15 pm. Low tide on this date was predicted for 8:19 am with a height of 0.41 feet.⁶ Depth at the proposed NW expansion corner was measured with a transom-mounted depth sounder at 12:20 pm; the water at this proposed corner is approximately 1.07 feet deep at mean low water (MLW, 0.0').

General Characteristics

Standard lease DAM PPN is located northeast of Perkins Point along the western shoreline of the Damariscotta River in Newcastle, Maine, which is primarily rocky with sporadic sections of salt marsh. The Newcastle uplands host a mixed forest and residential properties (Images 1-3). The applicant's standard lease is to the southeast and southwest (Image 4), and the Towns of Newcastle and Damariscotta are to the north (Image 6).

Four poly ball and 2 small toggle buoys were observed within the proposed expansion (not shown in Figure 2). What appeared to be an oyster drag vessel on a mooring, presumably associated with the applicant, and 3 additional moorings were observed in close proximity to the proposed expansion (Figure 2). Additionally, a dock was observed in the cove to the west of the proposal, and another dock was observed along the western shore of the river to the northwest of the proposal (Figure 2). The closest dock is located approximately 570 feet from the expansion's western boundary, and the nearest mooring other than the oyster drag vessel is approximately 90 feet to the north (Table 2). Kayaks were observed on the uplands nearby the nearest dock.

On June 2, 2022, MDMR staff conducted a visual analysis of the bottom of the proposed lease with a handheld digital video camera contained within an underwater housing (Figure 2). The bottom of the proposed lease is composed of soft mud. Species observed included moon jelly (*Aerelia aerita*) in the water column, and drifting rockweed (*Ascophyllum nodosum*) and eelgrass (*Zostera marina*).

³ Application, page 1

⁴ Application pages 3 & 5

⁵ Application page 4

⁶ <http://tbone.biol.sc.edu/tide/tideshow.cgi>



Image 1: Looking northwest at the Newcastle shoreline from the NW boundary of the proposed expansion (June 2, 2022).



Image 2: Looking west at the Newcastle shoreline from the NW boundary of the proposed expansion (June 2, 2022).



Image 3: Looking southwest at the Newcastle shoreline from the NW boundary of the proposed expansion (June 2, 2022).



Image 4: Looking southeast at the lease DAM PPN from the NW boundary of the proposed expansion (June 2, 2022).



Image 5: Looking east at the Damariscotta shoreline from the NW boundary of the proposed expansion (June 2, 2022).



Image 6: Looking north toward the Towns of Newcastle and Damariscotta from the NW boundary of the proposed expansion (June 2, 2022).

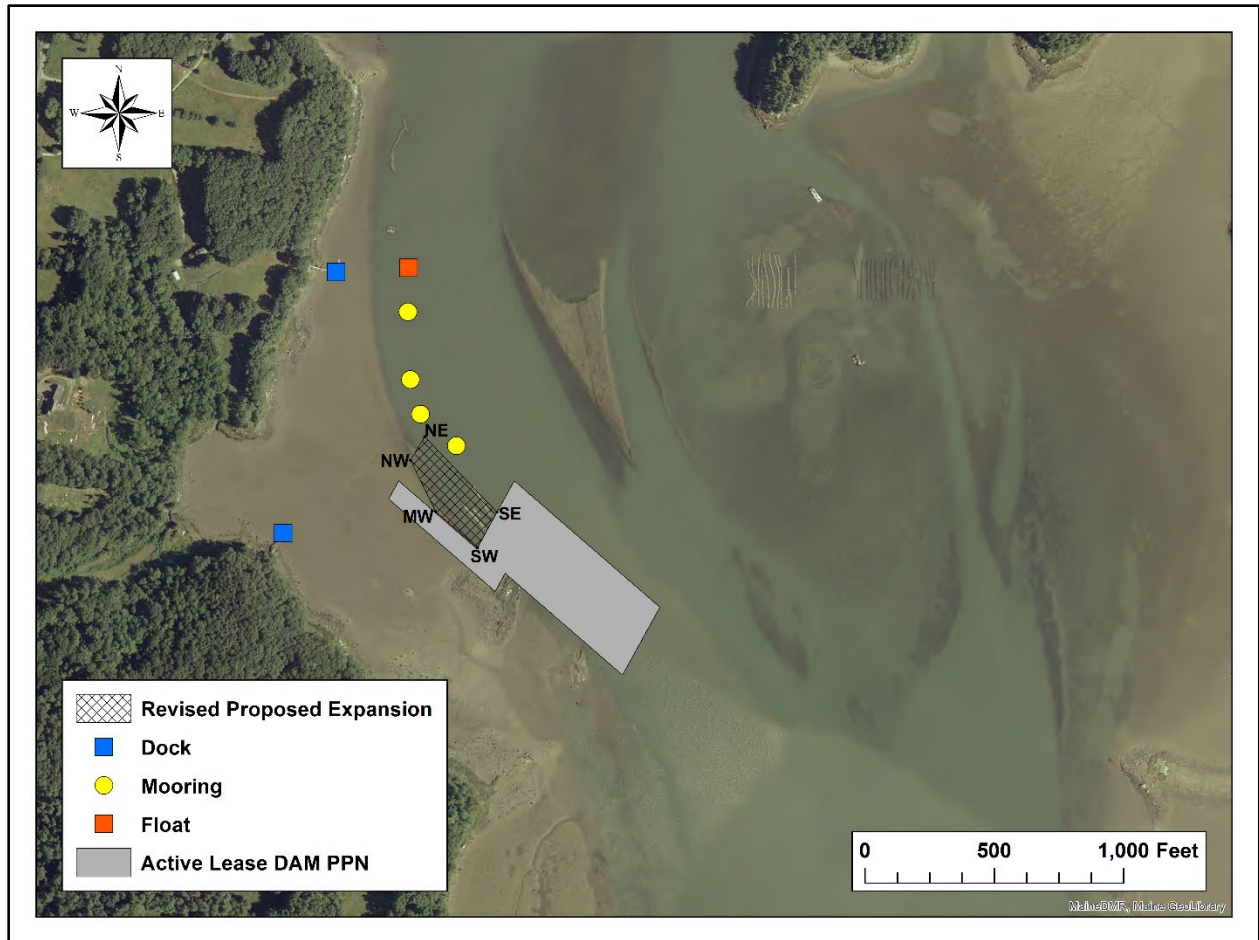


Figure 2: Proposed lease and surrounding area.

Position and Distances to Shore

POSAID Positioning Software was used to verify the distances and bearings between proposed lease corners. Distances to shore were determined using the measuring tool in ArcMap 10.8, digital orthophotography provided by the Maine Office of GIS (unless otherwise noted), and the revised application coordinates.

Coordinates for Proposed Expanded Lease DAM PPN (Datum WGS 84)

Expansion Acreage: 1.39

Total Acreage: 7.37

<u>Tract</u> ⁷	<u>Corner</u>	<u>Latitude</u>	<u>Longitude</u>	
1	A	44° 00' 24.72"N	69° 32' 41.92"W	<i>then 299.61 feet at 28.93° True to</i>
1	B	44° 00' 27.32"N	69° 32' 39.96"W	<i>then 199.70 feet at 310.83° True to</i>
1	C	44° 00' 28.60"N	69° 32' 42.04"W	<i>then 545.08 feet at 310.92° True to</i>
1	D	44° 00' 32.10"N	69° 32' 47.71"W	<i>then 299.62 feet at 208.93° True to</i>
1	E	44° 00' 29.50" N	69° 32' 49.67"W	<i>then 744.78 feet at 130.89° True to A.</i>
2	A	44° 00' 28.57"N	69° 32' 48.16"W	<i>then 79.51 feet at 208.92° True to</i>
2	B	44° 00' 27.88"N	69° 32' 48.68"W	<i>then 545.08 feet at 310.92° True to</i>
2	C	44° 00' 31.38"N	69° 32' 54.35"W	<i>then 79.51 feet at 28.93° True to</i>
2	D	44° 00' 32.07"N	69° 32' 53.83"W	<i>then 545.07 feet at 130.92° True to A.</i>
X	NW	44° 00' 32.86"N	69° 32' 52.31"W	<i>then 105.99 feet at 31.12° True to</i>
X	NE	44° 00' 33.76"N	69° 32' 52.47"W	<i>then 403.75 feet at 136.11° True to</i>
X	SE ⁸	44° 00' 30.91"N	69° 32' 48.61"W	<i>then 155.70 feet at 208.66° True to</i>
X	SW ⁸	44° 00' 29.55"N	69° 32' 49.62"W	<i>then 213.83 feet at 310.46° True to</i>
X	MW	44° 00' 30.91"N	69° 32' 51.86"W	<i>then 220.73 feet at 333.84° True to NW.</i>

Size of Lease Expansion

Existing standard lease DAM PPN is 5.98 acres in size. The proposed expansion to this lease, after DMR revised it to be contiguous with the existing lease, encompasses 1.39 acres. Per 12 MRSA §6072 (12-C), the leaseholder may only expand their lease by 25%, or 4 acres, whichever is less. As 25% of DAM PPN is 1.50 acres, and because the proposed expansion to this lease is less than 4 acres, the proposal is in compliance with the size restrictions established in 12 MRSA §6072 (12-C). When combined, the existing lease and proposed expansion encompass a total of 7.37 acres.

⁷ 'X' indicates the proposed expansion area

⁸ Coordinate adjusted <20 feet by DMR to prevent overlap with existing lease DAM PPN

Table 2: Approximate distances determined using ArcMap 10.8, digitized NOAA Charts, and the revised expansion coordinates.

<u>Feature</u>	<u>Distance</u>
NW Corner to rocky western shoreline of Damariscotta River, nearest point (~MLW)	~575 feet to the northwest
NE Corner to rocky western shoreline of Damariscotta River, nearest point (~MLW)	~600 feet to the west
SE Corner to Red Nun “20” (NOAA Chart)	~865 feet to the northeast
SE Corner to 2-foot Contour Line on Eastern Side of Navigational Channel (NOAA Chart)	~510 feet to the northeast
SW Corner to Active Lease DAM PPN	~ 5 feet to the southwest
MW Corner to Active Lease DAM PPN	~ 5 feet to the southwest

Some of the criteria MDMR uses to determine the suitability of an aquaculture expansion to a particular area (MDMR Regulations Chapter 2.61(4)) are discussed below, with respect to the proposed expansion:

Riparian Ingress/Egress and Navigation:

Norumbega Oyster is proposing to use this expansion for the suspended culture of shellfish. The proposed expansion would extend ~175 feet beyond a line between the two northernmost corners of the existing lease DAM PPN. Therefore, a riparian vessel attempting to access the cove to the west of the proposal area, whether for the dock or shore landing, may be required to alter their course slightly to avoid the expansion area, if it is granted. Approximately 575 feet of navigable water at appropriate tidal stages would remain for riparian landowners to transit between the expansion area, if granted, and the western shoreline at the nearest point. At low tide, the cove to the west of the existing lease and proposed expansion comprises exposed mudflats, naturally preventing navigation.

The nearest observed mooring, other than that utilized by the oyster dragging vessel presumably associated with the applicant, is ~90 feet to the north of the proposal. This mooring was empty at the time of DMR’s site assessment; however, it is unlikely that a vessel consistent with the size and type of vessel typically observed on moorings in the Damariscotta River would swing into the proposed expansion area. At certain tidal stages and in inclement weather, access to and use of this mooring may be more difficult due to the proximity of the proposal, if it were granted, especially for vessels under sail.

The harbormaster questionnaire, which was sent to the town of Newcastle, stated that the proposal would not alter the use of the nearby moorings or navigation in the area.

Fishing and Other Water-Related Uses:

No commercial fishing activity or commercially important species were observed during MDMR's site assessment on June 2, 2022.

Existing System Support

No live ecologically significant flora or fauna were observed during MDMR's site assessment, including during the underwater video transect. No eelgrass has been mapped in the proposal area.⁹ A Wildlife Biologist for the Maine Department of Inland Fisheries and Wildlife, in response to a Request for Agency Review and Comment, stated that minimal impacts to wildlife are anticipated from this proposal.

⁹ Data obtained from Maine Office of GIS (Eelgrass2010 and Eelgrass1997)