

Natural Resources (including Water, Marine, Agricultural + Forest Resources) Subcommittee Meeting Agenda Friday, June 16, 2023 – 3:00PM Location: Remote via Zoom (pursuant to the Committee's adopted <u>Remote Meeting Policy</u>) Join Zoom Meeting <u>https://us05web.zoom.us/j/83402664424?pwd=NFZIa21FZIZoYUluNIVoY285SEI10T09</u> Meeting ID: 834 0266 4424 Passcode: 04543

- 1. Call to Order
- 2. Review of Draft 1: Marine Resources Topic Area
- 3. Review of Draft 1: Agricultural & Forest Resources Topic Area
- 4. Committee/Public Comment
- 5. Set next meeting date
- 6. Adjournment

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Natural Resources (including Water, Marine, Agricultural + Forest Resources) Subcommittee Meeting Minutes Friday, May 26, 2023 – 3:00PM Location: Remote via Zoom (pursuant to the Committee's adopted <u>Remote Meeting Policy</u>)

Present: Jenny Begin (Lead), Ann Jackson (Member), Isabelle Oechslie (Consulting Planner)

- 1. Call to Order: Meeting began at 3:03PM.
- 2. **Review of Draft 1: Natural Resources Topic Area:** Isabelle directed the group to the Natural Resources Topic Area draft included in the meeting packet. To start discussion, she asked the group to focus on the following questions: Are there any questions about the data provided? Is there any additional data that you'd like to see? Does the data provided jive with your understanding of existing conditions within Damariscotta?

Jenny asked if there has been an updated DRA report card since the 2014 Plan. Isabelle responded that she would do some research and report back, related to the Water Resources Topic Area. Jenny noted that the Town doesn't necessarily collaborate with Coastal Rivers Conservation Trust. The group brainstormed revised language and indicated that a better description would be that the community *relies on* Coastal Rivers for the protection of natural resources and conservation of open spaces. Noted that the document references Great Salt Bay - the name of the water body is actually just Salt Bay.

3. **Review of Draft 1: Water Resources Topic Area:** Isabelle directed the group to the Water Resources Topic Area, beginning discussion by focusing on the same three questions as outlined above. Jenny asked if there is an updated map or chart with aquaculture leases available, noting the current conversation at the Selectboard level about intensive use of the upper Damariscotta River for oyster nurseries. Isabelle said that that is available from the Department of Marine Resources and she would include it in the next iteration of this Topic Area and/or the Marine Resources Topic Area.

Jenny noted that a possible policy/strategy would be to create a Conservation Commission to advise the Planning Board and Selectboard on issues of conservation in the community, potentially even having some review over Planning Board projects.



Jenny asked for a map of wetlands to be included within this Topic Area. She also noted that Salt Bay may be a protected marine area. Isabelle responded that she would do some additional research and update the Water/Marine Resources Topic Areas as applicable.

It was noted that there may be updated water quality testing results from Coastal Rivers (for the Damariscotta River specifically, but also potentially for other ponds or water bodies).

In the draft Topic Area, there is mention of PFAS and potential PFAS contamination in Damariscotta. Isabelle noted that this has not specifically been confirmed (to her knowledge) and asked if the group wanted to keep the reference in the Topic Area. The group responded that they thought it was important to keep the reference in. Jenny noted that PFAS contaminated compost was sold throughout Maine, including in Lincoln County. She also noted that there is a map of known PFAS sites available from the state, including one in Nobleboro on the other side of Salt Bay, which would clearly impact Damariscotta as well.

- 4. Committee/Public Comment: Jenny noted the need to find more members for this subcommittee.
- 5. Set next meeting date (to review Marine Resources and Agricultural + Forest Resources in detail): Isabelle will follow up with the group via email to set a date for the next meeting.
- 6. Adjournment: Adjourned without objection at 3:56PM.

Marine Resources

Overview

Dubbed the "oyster capital of Maine," the Damariscotta River is a major source of shellfish, with some farms claiming the river alone provides 80% of the state's oyster population. The Town shares its portion of the Damariscotta River and Salt Bay with neighboring Newcastle. The two towns work collaboratively to maintain the health of the river and to promote sustainable harvesting of shellfish via their existing Harbor Ordinance and Shellfish Ordinance, respectively. Newcastle's Harbormaster oversees permits for moorings and marinas for both Damariscotta and Newcastle.

As a major source of seafood in a time where demand has only been growing, commercial and recreational harvesting of shellfish is expected to trend upward. Several aquaculture leases operate in the river, but only one company utilizes the working waterfront tax exemption credit in Damariscotta, and the Town only maintains a single public boat launch to the river. Because Damariscotta's downtown rests directly on the shore, the Damariscotta River's ecosystems are especially vulnerable to pollution from runoff and disturbances as result of human activity.

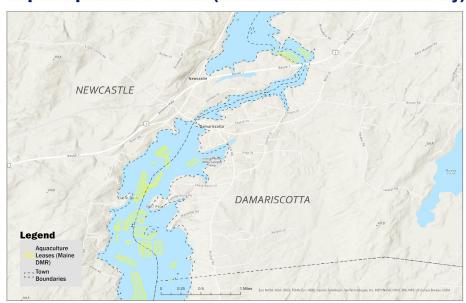
Working Waterfront

Commercial and recreational shellfish harvesting is permitted on the shores of the Damariscotta River up to the mouth of Great Salt Bay. The Maine Department of Marine Resources (DMR) lists 38 aquaculture leases in the waters of the river shared by Damariscotta and Newcastle.¹ 14 of these operate solely in waters designated as within Damariscotta's Town borders, with an additional 3 leases located in both Damariscotta and Newcastle waters. The Pemaquid Oyster Company is currently the only business in Town boundaries currently utilizing the working waterfront tax use exemption.²

https://maine.hub.arcgis.com/datasets/a0b3c775cfc243a2b92df328ad85c642/explore?filters=eyJDSVRZlipblkRhbWFyaXNjb3R0YS JdfQ%3D%3D&location=44.013991%2C-69.514457%2C12.91

¹ William Devoe, MaineDMR Aquaculture - AQ Leases, MaineDMR Aquaculture - AQ Leases (Maine Department of Marine Resources, March 21, 2019),

² Damariscotta Working Waterfront Tax Use Properties, FY2023 (data courtesy of the Damariscotta Assessor's Office).



Map of Aquaculture Leases (Damariscotta River and Salt Bay)

Commented [1]: Maps will be reformatted in final plan to be larger, likely to take up a whole page

The Town Landing, in the municipal parking lot, is Damariscotta's only public access point into the river for both recreational and commercial vessels. Use of the Town Landing for storage and water access is regulated (see Protective Measures section below for more detail) to ensure safe and timely embarkation and disembarkation of watercraft.

Leaseholder ³	Site ID	Location	Primary Harvests	Total Acreage
Pemaquid Oyster Company	DAM GL4	Damariscotta / Newcastle	Oyster Clam	8.1
Norumbega Oyster Inc.	DAM HI4	Damariscotta	Oyster	1.9
Muscongus Bay, Aquaculture, Inc.	DAM HI3	Damariscotta	Oyster Clam Scallops	7
Dodge Cove Marine Farm,	DAM HI2 DAM HI	Damariscotta	Oyster Clam	13.5

³ Ibid.

LLC	DAM HI5x		Scallop	
Dickinson, Chris	DAM GL5	Damariscotta / Newcastle	Oyster	1.2
Black Stone Oysters, LLC	DAM HI6	Damariscotta	Oyster Clam	10.9
Mook Sea Farms, Inc.	DAM EL2 DAM DCx	Damariscotta / Newcastle	Oyster Clam	11.9
Paters, Eric	DAM NP	Damariscotta	Oyster	2.6

A list of all known aquaculture harvesters with a lease from Maine DMR to operate in Damariscotta. Site ID refers to a unique alphanumeric code assigned to each site by the state. Leaseholders with multiple site IDs are harvesting in multiple locations in the Damariscotta River. The only shellfish harvester known to have working waterfront property in Damariscotta is Pemaquid Oyster Company, Map/Lot 001-006.

The Harbor Ordinance divides the waters shared between Damariscotta and Newcastle into five districts:

- Inner Harbor, on the Damariscotta river from the western-most point of Lewis Point downstream to the Southernmost edge of Walker's Point, defined by a line across the Damariscotta River to the southernmost edge of Belknap's Point.
- Lower Harbor, on the river from the southern boundary of Inner Harbor downstream to a line connecting the southernmost points of the two town's boundaries.
- Upper Harbor, on the Damariscotta River from the western-most point of Lewis Point upstream into Great Salt Bay to the Marine Protected Area.
- Great Salt Bay, on the water body beginning at the southerly boundary of the Marine Protected Area northerly to the Newcastle Town line.
- Sheepscot River, the body of water within the corporate limits of Newcastle that includes the Sheepscot River and its tidal tributaries, including the tidal portion of the Marsh River.

Scenic Views

In 2019 and 2020, the Town's Land Use Advisory Committee compiled a list of scenic views in the Town of Damariscotta, as well as the threats posed to them. Listed below are the scenic views located on the Damariscotta River. For the full inventory of scenic views, please refer to the Natural Resources section of this Plan. The most common threats to scenic marine views come from development of residential or recreational areas as well as impacts from climate change.

Scenic View	Description of view	Nearest access point	Threats to scenic view
Days Cove	View to mud flats and river	Route 129 at Days Cove	None
Salt Bay	View of fields and Salt Bay	Hard clam bed (Salt Bay)	Mid-and far-view building development

Misery Gulch	Looking across Misery Gulch to the back of the parking lot. The wreck of The Candage shows at low tide.	Schooner Landing parking lot	Climate change
Back view of Damariscotta	View of town from The River Tripper cruise	Damariscotta River	Climate change, development
Damariscotta River	Tombolo landform, horseshoe crab spawning ground	Huston Landing Preserve	Climate change
River and Lewis Point	Looking up the river toward Lewis Point	Parking lot behind Damariscotta Pottery	Condo development
Mook Sea Farm	Oyster Farming on the River	Damariscotta River from River Tripper	Additional aquaculture, loss of habitat due to climate change
Whaleback Midden	Damariscotta River	Johnny Orr Rapids looking south	None

Threats to Marine Resources

Threats to Habitat Quality

The shellfish beds around downtown Damariscotta are particularly vulnerable due to disruption from consistent human activity, development, and dredging at moorings. Not only are mud flats vulnerable to the sediment and runoff pollution from the downtown area, but disturbances from people and boats drive away shorebirds who would otherwise feed on the shellfish species' major predators.⁴

A 2019 study by the Darling Marine Center observed a rapid decline in shellfish populations such as softshell clams. The study interviewed local shellfish harvesters, 100% of whom noticed changes in the estuary and shellfish populations. The majority of harvesters noticed the only species that wasn't in decline was the Wild Oyster, whose populations seemed to actually be increasing. This has led to multiple harvesters changing licenses to primarily harvest oysters in the Damariscotta River.⁵ As demand for shellfish seems to only be growing,⁶ harvesters may begin overexploiting the one shellfish species in this area that does not seem to be in decline. A crash in shellfish populations would devastate local commercial harvesters and impede water

⁴ Maine Audubon, Conserving Wildlife in Maine's Coastal Habitats, (2006).

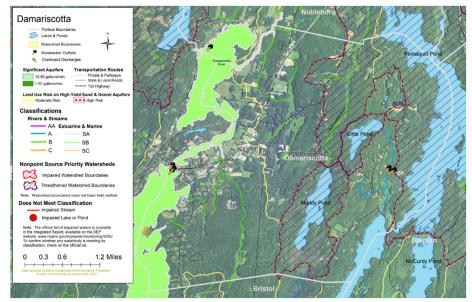
⁵ Kara Pellowe and Heather Lesllie, Current and Historical Trends in the Shellfish Resources of the Upper Damariscotta River Estuary (University of Maine, December 20, 2019), <u>https://umaine.edu/leslie-lab/wp-content/uploads/sites/151/2020/01/2019-Final-Report Damariscotta-Newcastle-Shellfish-Resilience-Project.pdf</u>.

⁶ Samuel Hill, "Demand for Maine Oysters Continues to Skyrocket," National Fisherman, August 15, 2018, https://www.nationalfisherman.com/northeast/demand-for-maine-oysters-continues-to-skyrocket.

based recreation. Because oysters act as a natural filter for runoff sediments, overfishing could also negatively impact water quality. At the time of this writing, concerns such as these have led to a moratorium on new aquaculture leases in the nearby Town of South Bristol, and attempts to enact a moratorium in the Town of Waldoboro.⁷

Pollution Sources and Hazards

Wastewater from the public sewer provider, the Great Salt Bay Sanitary District, is discharged directly into the Damariscotta River near the municipal parking lot (see map below). The District treats wastewater in an aerated lagoon system before discharging but fecal coliform is still present in the Damariscotta River, which impairs harvesting of the shellfish habitats in the river. Shellfish harvesting in the Upper Damariscotta River is conditionally approved by the Maine DEP, but restricted further downstream.⁸



Map compiled by Maine Department of Environmental Protection, Division of Environmental Assessment (2021)

As referenced in the Water Resources section of this Plan, the State of Maine's decision to ban the use of treated sewage sludge as a fertilizer source in 2022 implies that any waste from

⁷ Elizabeth Walztoni, "Waldoboro Residents to Consider Aquaculture Moratorium at Annual Town Meeting," The Lincoln County News, April 4, 2023, <u>https://lcnme.com/currentnews/waldoboro-residents-to-consider-aquaculture-moratorium-at-annual-town-meeting/</u>.

⁸ Susanne K Meidel, "2018/2020/2022 Integrated Water Quality Monitoring and Assessment Report Appendices," https://www.maine.gov/dep/water/monitoring/305b/2022/25-May-2022 2018-22 ME IntegratedRpt-LIST.pdf.

sewage treatment systems could potentially have been a point-source of PFAS.⁹ Continuing to discharge human waste in the Damariscotta river runs the risk of impairing shellfish harvesting with "forever chemicals."

Also of note is a wastewater discharge in Salt Bay, near the Damariscotta Mills fish restoration ladder in neighboring Nobleboro. The DEP has not ruled on a designation for harvesting in Salt Bay due to "insufficient data," likely because it is a marine protected area. However, the wastewater outfall could potentially mean the presence of human waste in Salt Bay. If contamination were found, this would mean another indirect source of pollution in the Upper Damariscotta River waters, which could impact the conditional approval for shellfish harvesting currently granted by the DEP.

Threats to Working Waterfront Infrastructure

The Town has one public boat landing in the municipal parking lot. It frequently floods during significant rain events, which impairs the safety of recreational and commercial boats using it and threatens to damage any structures nearby.¹⁰ Additionally, the municipal parking lot being right on the water ensures it is a consistent source of nonpoint pollution as storm and flood waters wash away sediment, road salt, and any other contaminants on the pavement.

Climate change promises to worsen the threats that storms and flooding already pose to the Town's only public access to the Damariscotta River. The increasing frequency and intensity of severe storms will make the embarkment and disembarkment inaccessible more often, and threatens to significantly damage float infrastructure. In the long-term, the low-lying municipal parking lot could remain underwater for hours of the day as sea level rise increases the average high tides for coastal and inland systems. A waterfront reconstruction project began in the fall of 2022 that will build a flood barrier around the municipal parking lot.¹¹ However, the proposed wall excludes the Town Landing, meaning it will still be vulnerable to flooding.

More frequent inland flooding also increases the rate of erosion and the risk of landslides along vulnerable spots of the riverbank, especially shoreline properties that were built without the impacts of climate change in mind. For further detail, please see the Erosion and Landslide Risk section of the Natural Resources Chapter.

Protective Measures

The Town has adopted policies intended to prevent degradation of Damariscotta's water bodies and their workable ecosystems. This includes the Town's Site Plan Review Ordinance, which requires an erosion and sediment control plan, a stormwater management plan, and a report on the phosphorus impact of any new construction or alteration (if located within the watershed of a **Commented [2]:** Flagging this for myself to ask the Town Manager to write a brief paragraph about the current project to shore up the municipal parking lot

⁹ Tom Perkins, "Maine Bans Use of Sewage Sludge on Farms to Reduce Risk of PFAS Poisoning," The Guardian (Guardian News and Media, May 12, 2022), <u>https://www.theguardian.com/environment/2022/may/12/maine-bans-sewage-sludge-fertilizer-farmspfas-poisoning</u>.

¹⁰Jessica Picard, "Damariscotta Parking Lot Floods for Second Time in Two Months," The Lincoln County News, March 6, 2018, <u>https://lcnme.com/currentnews/damariscotta-parking-lot-floods-second-time-two-months/</u>.

¹¹Evan Houk, "Damariscotta Set for More Waterfront Construction in Fall 2022," The Lincoln County News, September 30, 2021, https://icnme.com/currentnews/damariscotta-set-for-more-waterfront-construction-in-fall-2022/.

great pond, as defined in Title 38 M.R.S.A. §436-A).¹² Damariscotta has also implemented a Shoreland Zoning Ordinance which establishes land within 75 feet of a normal high water line of a stream as a Stream Protection District,land within 250 feet of coastal or freshwater wetlands as a Resource Protection District.¹³ This Ordinance regulates all new construction or alterations within this buffer zone, and expressly prohibits any new construction within 25 feet of a water body or wetland.¹⁴ See the Protective Measures section in the Water Resources chapter for additional detail.

Damariscotta and neighboring Newcastle have formed a joint Shellfish Conservation Committee and developed a Shellfish Conservation Ordinance to protect the health of their shared mudflats from overfishing by shellfish harvesters. The Committee and Harbormaster work with the Darling Marine Center and Coastal Rivers Conservation Trust to evaluate the health of shellfish habitats to plan conservation measures. The Darling Marine Center provides intensive research on the ecological trends of the Damariscotta River and Great Salt Bay. They also train volunteers for Coastal River's Tidewatch Program, which monitors dissolved oxygen, salinity, total nitrogen, transparency and temperature of the bay and river estuary.

Annual license counts are established in alignment with the Maine Department of Marine Resources (DMR), and the Harbormaster is required to consider the impacts to local wildlife when evaluating permits for moorings or any structures on the water. The Committee requires at least one of three members from each town be a shellfish harvester, and the presence of the Shellfish Warden as a non-voting member, to ensure input from relevant stakeholders in protecting Damariscotta's marine resources.¹⁵

Both towns have also formed an interlocal Harbor Management Ordinance to ensure public safety and balance commercial, recreational, and natural interests on the Damariscotta River.¹⁶ It establishes the 5 harbor districts referenced above, and forms a committee of members from both towns to work with Newcastle's Harbormaster to designate mooring districts, anchorage areas, and public boat launch areas for both communities. The Harbormaster also handles applications for commercial and recreational moorings, and regulates unattended or illegal floats.

District 1, the Inner Harbor area, is considered a special boater and public safety area, and requires an application to the applicable Selectboard for use. Floating commercial wharves are permitted by application to Harbormaster. Marina owners are required to provide parking spaces for moorings in accordance with the applicable Town's Ordinances. Water skiing and tubing is prohibited in the Inner Harbor, and the Harbor Management Ordinance formally prohibits abandoning water or fishing craft, as well as the discharge of fuel, sewage, or trash from motorcraft into the river. These provisions are enforced by the Harbormaster.

¹² See the Town's Site Plan Review Ordinance.

¹³ See the Town's adopted Shoreland Zoning Ordinance.

¹⁴ See the Town's Shoreland Zoning Ordinance.

¹⁵ See the Town's Shellfish Conservation Ordinance.

¹⁶ See the Town's Harbor Ordinance.

Damariscotta also has a Town Landing Ordinance to ensure safe and timely operation of the town boat landing area.¹⁷ It sets a time limit that watercraft are allowed to tie up to the public float before entering or exiting the water. Only skiffs 12 feet long or less may be stored on the landing, on the inner southerly facing area, and only for up to 2 hours. There are fees and penalties for misusing the floats. Swimming and recreational fishing is allowed at Town landings but littering is not permitted.

¹⁷ See the Town's Town Landing Ordinance.

Overarching policies

State goal: To protect the State's marine resources industry, ports and harbors from incompatible development and to promote access to the shore for commercial fishermen and the public.

Suggested strategies:

- Work closely with the Darling Marine Center to research reasons for shellfish population declines, and monitor population of oysters
- · Work with CRCT to develop a monitoring program for shellfish counts in mud flats
- Incorporate high astronomical tide projections into shoreland zoning to ensure structure build on riverbed aren't vulnerable to landslides
- Interview local shellfish harvesters to determine how to incentivize natural resource harvesters to operate within Town boundaries
- Work with Great Salt Bay Sanitary District to try to develop a plan to deal with the human waste currently being dumped in Damariscotta River and collaborate with neighboring Nobleboro regarding the wastewater outfall in Salt Bay

Ecological Services of the Focus Area: (from Beginning With Habitat → Salt Bay Focus Area of Statewide Ecological Significance)

- Provides high levels of biodiversity and productivity.
- Serves as migratory stopover for birds.
- Provides habitat for fish and shellfish.
- Supports eelgrass and associated eelgrass values.

Economic Contributions of the Focus Area: (from Beginning With Habitat → Salt Bay Focus Area of Statewide Ecological Significance)

- Attracts tourism for wildlife observation, paddling, hunting, angling, shell midden observation.
- Supports local marine resource industries including aquaculture.
- Contributes to recreational value of the area, including nearby coastal areas, by protecting water quality, fisheries and wildlife habitat.
- Provides scenic vistas that raise property values.
- Provides valuable open space for local residents a river walk from DRA (Damariscotta River Association) Museum under Rt. One bridge to village harbor is recommended in this plan.

MARINE RESOURCES

Damariscotta River Association's Report on The Health of the Damariscotta River Estuary Watershed

The Damariscotta River Watershed covers an area of 103 square miles, stretching from the headwaters of Damariscotta Lake to the Gulf of Maine. The watershed includes at least 25 upland natural community types such as maritime spruce-fir forests, salt marsh habitat, vernal pools and oak hardwood forests. Everything on the land, or in the water within the watershed, has the potential to drain into the estuary. The estuary is the region in which the fresh and salt water mix from the head-of-tide in Damariscotta Mills to Fort Island, where the impact of fresh water becomes negligible. Estuaries provide a wide variety of bird nesting grounds, migration stop-over locations, fish migration habitat, aesthetic and recreational value for residents and tourists, and much more. In addition, the combined value of fisheries and businesses associated with the Damariscotta River Estuary annually was determined to be \$13 million in 1994 (Damariscotta River Estuary Project).

The good news is the Damariscotta River Estuary is in relatively good health. The bad news is that there are several notable threats that have appeared on the horizon which require careful monitoring. Additionally, a significant amount of information on the ecological health of the estuary is unknown because no supporting data yet exists.

This report card is intended to gather a large amount of scientific data from a variety of sources into one concise document for the public. This document uses standards or management goals set by the State of Maine, or another scientific authority, against which the data has been compared.

REPORT CARD KEY

Grade	Reason (for pollution parameter)	Reason (for species listed)
А	Exceeds standard and no pollution evident	Exceeds carrying capacity/management goal
		and population stable
В	Exceeds standards but some pollution evident	Exceeds carrying capacity/management goal
		in successive recent years
С	Meets standards with allowable amount of	Meets carrying capacity/management goal
	90	

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	pollution evident	currently
D	Below standard	Below carrying capacity/management goal
		now and in recent past
F	Below standard and minimal controls in place	Far below carrying capacity/management goal
		and worsening

Current Trend: \uparrow Improving / \downarrow Worsening

DAMARISCOTTA RIVER ESTUARY WATERSHED REPORT CARD 2012

{see Inventory for Natural & Marine Resources in Volume II for the sources for each paramenter}

<u>Parameter</u>	<u>Grade</u>	Current Trend	Data Limitations
~Dissolved Oxygen	А	Unknown	1996 Data
~Bacterial Contamination	В	1	Generalized for large area
<u>Parameter</u>	<u>Grade</u>	Current trend	Data Limitations
~Metals: Mercury & Lead	С	Unknown	Small sample size from mussel tissue
Nickel ~Pesticides (PCB, DDE and DDT)*	D Unknown	↓ Unknown	Replicate samples variable
~Nutrients (P and N)**	А	Unknown	1996 Data
~Antibiotics	Unknown	Unknown	No Data
~Endocrine Disrupters	Unknown	Unknown	
~Marine Invasive Species	F	Ļ	Minimal historical data
~Sea Urchin	D	\downarrow	Carrying capacity unknown
~Lobster	А	↑	
~Clam ~Alewife ~Eel Grass ~American Eel	Unknown B Unknown Unknown	Unknown ↑ Unknown Unknown	No population studies available
~Rainbow Smelt (Federally Listed Species of Concern)	Unknown	Unknown	No population studies; only presence/absence of spawning sites
~Horseshoe Crab ~Bald Eagle	Unknown B	Unknown ↑	State-wide management goal (no local
~Short-nosed Sturgeon (Federally Listed Endangered Species)	Unknown	Unknown	goal exists) Data Limited

Licensed Commercial Shell Fish Harvesters - Table 1

{next page}

Maine Department of Marine Resources



	DAMARISCOTTA			MAINE ST		
	2006	2007	2008	2009	2010	2011
OMM	1	0	0	0	0	0
ISHING/CREW				1	-	alle average
OMM	4	3	2	4	7	7
ISHING/SINGLE						
OMM SHRIMP-CREW	1	0	1	0	2	1
OMM SHRIMP-	1	1	0	1	1	2
INGLE						
OMMERCIAL	0	0	0	0	0	1
ELAGIC AND NADRAMOUS INGLE						
OMMERCIAL	7	12	18	19	10	12
HELLFISH			-	20 0.		
LVER-1 FYKE NET	1	1	0	0	0	0
LVER-DIP NET	9	6	5	5	5	5
LVER-DIP NET-1 YKE	3	3	3	3	3	3
NHANCED RETAIL	0	0	0	0	0	2
OB/CRAB APPRENT	0	0	0	0	0	1
INDER 18						5.
OB/CRAB NON-	6	7	3	3	4	6
OBSTER CRAB	0	0	1	2	3	3
OBSTER MEAT	2	1	1	1	0	0
ERMIT	-	•		.	Ŭ	Ŭ
OBSTER/CRAB	3	1	4	2	0	2
PPRENT						
OBSTER/CRAB	6	8	7	7	4	3
LASSI						
OBSTER/CRAB	17	14	12	10	9	10
LASS II			1			
OBSTER/CRAB	1	0	0	0	0	0
LASS III OBSTER/CRAB	4	- 1		1 4	4	4
VER AGE 70	1	1	1	1	1	1
OBSTER/CRAB	5	6	5	3	2	2
TUDENT					-	-
ARINE WORM	3	3	4	5	5	4
IGGING						
IUSSEL - HAND	1	1	1	1	1	1
ECREATIONAL	0	0	0	0	0	2
ALTWATER FISHING				L		
PERATOR						
ECREATIONAL	0	0	0	0	0	1
ALTWATER FISHING						
ETAIL SEAFOOD	7	7	8	7	6	5
CALLOP, NON-	6	4	2	0	0	0

Maine Department of Marine Resources

DAMARISCOTTA



	2006	2007	2008	2009	2010	2011
SEA URCH/SCALLOP	0	0	0	1	0	0
TEND						
WHOLESALE NO	1	2	2	2	1	1
LOBSTERS						
WHOLESALE NO	0	1	1	0	1	1
LOBSTERS, SUPP						k.
WHOLESALE	1	0	0	0	1	1
W/LOBSTERS						\$.
WHOLESALE	1	0	0	0	1	1
W/LOBSTERS, SUPP				80 (S		ŝ.

Count of Residents Holding Marine Resource Licenses

Year	2006	2007	2008	2009	2010	2011
Dealers	8	8	9	8	7	8

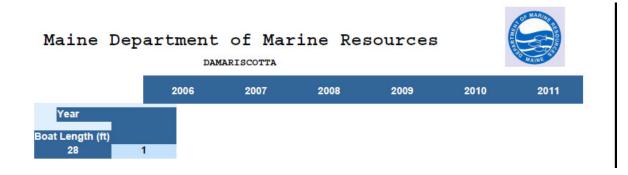
Year	2006	2007	2008	2009	2010	2011
Harvesters	60	59	53	51	44	49

Count of Lobster Traps fished by Residents

Year	2006	2007	2008	2009	2010	2011
Total Trap Tags	2000	2007	2000	2003	2010	2011
roun map rags	4290	3635	3755	3515	2760	3355

Boat Anchorage

Year	1
Boat Length (ft)	
13	2
14	5
15	2
16	4
17	3
18	2
19	1
20	3
21	4
22	2
26	1



ISSUES CONCERNING NATIRAL, CRITICAL & MARINE RESOURCES

- (1) The Damariscotta river is one of the premium environments for shellfish aquaculture in North America. The DRA (Damariscotta River Association) 2012 Report Card indicates a need for additional studies to determine the state and prognosis for a number of factors either producing the river's high environmental quality or indicating it. What is the state and trends for the Damariscotta River's eel grass beds, horseshoe population, level of Dafnia and hydrocarbons (from snow dumping at the harbor parking lot)? And how would adverse trends in these and other factors impact the river's clam flats and water quality for shellfish aquaculture?
- (2) The explosion of the invasive green crab population in he Damariscotta River estuary is of particular concern. It is reported to be consuming shellfish larvae and eel grass beds at an alarming rate. As of summer 2014 the DRA was starting a grant program on testing methods for checking green crab population if not eradicating them completely.
- (3) There are three remaining private OBDs (overboard wastewater discharge) systems in Houston Cove that, while reportedly not responsible presently for adding pollution to the river, should be removed and replaced if and when on-shore technology became feasible for the affected properties.
- (4) Concern over the water quality of stormwater is an issue. Curiosity over LID (low impact development) approaches to stormwater management prompts some interest in looking more into such approaches as rain gardens, so called, and other pre-filtering of stormwater to remove more solids and pollutants before it enters streams or the river.

STORM SURGE & SEA-LEVEL RISE

From the LCRPC (Lincoln County Regional Planning Commsiission) study of coastal flood hazard with the Maine State Geological Service:

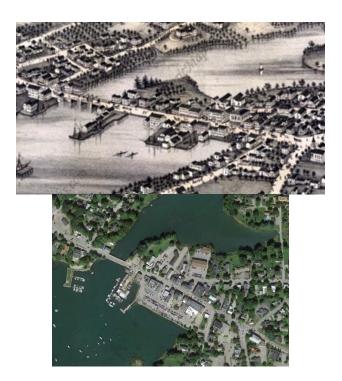
"Project Description

In 2013 the Lincoln County Regional Planning Commission (LCRPC) and the Maine Geological Survey (MGS) completed a MCP-funded Coastal Hazards-Sea Level Rise study of 450 miles of tidal shoreline in Lincoln County. The results of the study were presented to the Boards of Selectmen of 13 coastal communities, including Damariscotta, and the Board of Assessors of Monhegan Plantation. The study found that under *existing* conditions in downtown Damariscotta without any increase in sea level, two downtown buildings are potentially impacted during the highest annual tide (HAT) and nine downtown buildings, the municipal parking lot and two streets would potentially be impacted during the 1% ("100-year") storm of record. Based on knowledge of those

present during the February 1978 storm of record, the study's prediction of impacts closely follows the actual events experienced in 1978. Furthermore, an additional 20 buildings, five streets and the parking lot are impacted at HAT under sea level rise scenarios of 0.3 to 1.8 meters while 8 more buildings and 6 streets would be impacted during the storm of record under these sea level rise scenarios. While damage to these buildings will vary from scenario to scenario and only a few will likely be destroyed, their cumulative assessed value of \$7.85 million is reason enough for the town to be very interested in exploring potential adaptive techniques to protect this historic downtown neighborhood

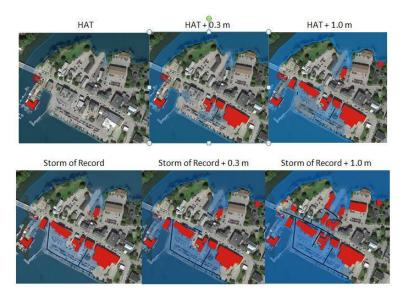
Downtown

"Downtown Damariscotta is a classic 19th century coastal Maine village which has maintained its historic character into the 21st century. While there has been only limited new construction in the downtown, many of the historic buildings have been renovated and are in very good overall condition. As shown in the following 1878 map, many of the buildings on the south side of Main Street were directly on the river. The municipal parking lot was developed in the 1960's on fill generated during construction of the Route 1 bypass and it now provides some physical separation between the buildings and the river. This means, however, that while today these buildings appear to be far from the river's edge, they are almost as susceptible to high water conditions as they were 150 years ago.



As noted above, the Coastal Hazards-Sea Level Rise study found that many buildings, streets and the municipal parking lot are at risk today during storms as well as from predicted increases in sea level on top of high tides. The following graphics from the study show the predicted inundation areas and highlight affected buildings (red) and streets (black) for HAT and the 1% storm of record under current conditions and with 0.3 and 1.0 meters of sea level rise.

2014 Damariscotta Comprehensive Plan - Vol. II - Appendices



Stakeholders

Stakeholders include the owners and occupants of 29 buildings and commercial condominium units potentially affected by rising sea levels, and the Town of Damariscotta, which owns the principal parking lot in the downtown as well as 8 streets predicted to be inundated during various scenarios. Project partners include the Town of Damariscotta, Lincoln County and the Regional Planning Commission. LCRPC. These entities have worked together on a number of projects with the most recent being the Coastal Hazards-Sea Level Rise Study. Because Main Street and the downtown also serve as the principal access to the neighboring towns of Bristol and South Bristol and because Damariscotta is a regional service center with a hospital, library, theater and major commercial district, residents throughout the Bristol Peninsula and the mid-coast may also be considered interested parties."

ISSUES WITH SEA-LEVL ROSE & STORM SURGE

- (1) The 2013 LCRPC/MGS Coastal Hazards Sea Level Rise Study energized the Town to begin seeking how to respond to the perceived future threats to its central asset, the historic downtown, one of the most vulnerable urban places identified by the study along the Lincoln County and Maine coast. So in Spring 2014 the Town secured with LCRPC an <u>Adaptation Options To Protect</u> <u>Downtown Damariscotta, Maine Against Floods, Storm Surges And Sea Level Rise Grant</u>, funded by the Maine Coastal Program. In June, 2014 an engineering consultant was chosen to be funde3d by the grant to study options both the Town and individual building owners can take to adapt and/or mitigate future flooding caused by future sea-level rise and storm surges.
- (2) The Sea-Level, Storm Surge Study integrates closely with the larger waterfront park/parking lot project. It has come to be realized by the townspeople that improvements to the harbor parking lot would be in vain without addressing future flooding on the abutting historic buildings. Part of the waterfront improvement project be measures to adapt and mitigate future flooding of the lot and the village.

G. AGRICULTURAL & FORESTRY RESOURCES

<u>Agriculture</u> -In 2014 Map 9 following, shows only the 150 acre Reny apple farm fronting Biscay Road and Pemiquid Pond was actively farmed property in Town. Thirty-three acres were in apple trees;

Agricultural + Forest Resources

Overview

Statewide, total agriculture output has been trending upward,¹ and is likely to continue to remain a priority after the State Climate Action Plan's call to triple the amount of locally produced food consumed in the state by 2030.² However, in Damariscotta, agriculture is hampered by competing interests. Some of the most suitable farmland lies in districts zoned for residential and commercial use. Furthermore, a significant amount of the most suitable farmland in Damariscotta lies within wetlands, bird habitats, and watersheds. In many of the prime agricultural spots, farming would be costly and threaten the fragmentation of protected habitats.

There are some limited efforts to conserve farmland in Damariscotta, such as the Maine Farmland Trust's work to permanently protect agricultural land in northern Damariscotta for Morning Dew Farm. But while Coastal Rivers Land Trust works to preserve natural habitats and water bodies and the Town works to regulate the same, there are no Town-wide policies or committees directly working to specifically support agriculture or timber harvesting.

Status and Trends

Agriculture

There are four known farms in Damariscotta; Townley Farm, Morning Dew Farm, Oyster Creek Mushroom Farm, and Biscay Orchards, with Townley Farm being the only operation utilizing the state farmland tax exemption. Additionally, 75 acres of the former Phillips farm is deed-protected to allow for only agricultural use in the future.³ Damariscotta has a Farmer's Market that runs out of Round Top Farm, land that was once a dairy operation that has now been conserved by Coastal Rivers and is used for events. There is a community garden on Belvedere Road,⁴ a few raised beds built by Healthy County Lincoln on Main Street,⁵ and a student garden at Round Top Farm.

Morning Dew Farm's operations in Damariscotta sit on land purchased by the Maine Farmland Trust in 2011. Through collaboration with the USDA, Maine Farmland Trust finalized the permanent protection of Morning Dew's farm land for agricultural use in 2017.⁶ Over the past

¹ Megan Gray, "Maine's Agriculture Harvest Grew in Size Last Year, While National Production Fell," Press Herald (Portland Press Herald, January 17, 2023), <u>https://www.pressherald.com/2023/01/17/maines-agriculture-harvest-grew-in-size-last-year-while-national-production-fell/</u>.

² "Maine Won't Wait: A Four-Year Plan for Climate Action," Maine Governor's Office for Policy Innovation and the Future, (2020), <u>https://www.maine.gov/future/sites/maine.gov_future/files/inline-files/MaineWontWait_December2020.pdf</u>.

^{3 &}quot;Phillips Property Sold to Maine Farmland Trust," The Lincoln County News, June 30, 2011, https://icnme.com/currentnews/phillips-property-sold-to-maine-farmland-trust/.

⁴ "DRA's Community Garden Offers Gardening at Its Best," Boothbay Register, April 19, 2017,

https://www.boothbayregister.com/article/dra-s-community-garden-offers-gardening-its-best/84982

⁵ "Giving Garden Emerges on Damariscotta's Main Street," The Lincoln County News, June 28, 2019,

https://lcnme.com/announcements/giving-garden-emerges-on-damariscottas-main-street/.

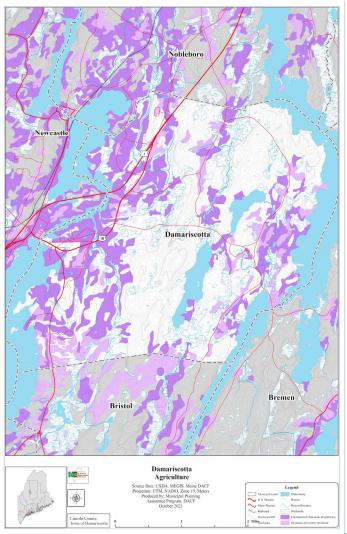
⁶ Ellen Sabina, "Land Trusts, USDA, Farmers, and Community Protect 60 Acres of Farmland on Route One in Damariscotta," Maine Farmland Trust, November 28, 2017, <u>https://www.mainefarmlandtrust.org/land-trusts-usda-farmers-and-community-protect-60-acres-of-farmland-on-route-one-in-damariscotta/.</u>

few decades, most of Damariscotta's farms have been sold and converted into open space and/or conserved for public recreation. This includes Great Salt Bay Farm and nature center in 1994 and Round Top Farm in 2008.

Given the current layout of Damraiscotta's built environment, and the presence of significant wetland and water bodies and their policy protections, there is very little area in Damariscotta with prime arable soil where new farming operations would be desirable.⁷ The largest block of undeveloped land, at 3877 acres, lies between Muddy Pond and the Damariscotta River. The most arable land within this block coincides with roads, wetlands, and the town's largest deer wintering habitat.⁸

⁷Amy Dowley, Beginning With Habitat, ed. Steve Walker, Beginning With Habitat (Maine Department of Inland Fisheries and Wildlife, 2023), <u>https://webapps2.cgis-solutions.com/beginningwithhabitat/mapviewer/</u> ⁸ ibid.

Commented [1]: Maps will be made larger in the format of the final plan, likely taking up a whole page.



Prime farmland (the area shown in light purple on the map above) is land that is best suited to producing food, feed, forage, fiber and oilseed crops. It has the soil quality, growing season, and moisture supply needed to produce a sustained high yield of crops while using acceptable farming methods. The farm map above, produced by the Maine Department of Agriculture, Conservation and Forestry, shows the land most suitable for farming are along Damariscotta's western border, running along the river and downtown districts, and the eastern border, on the

Name	Address	Map-Lot	Acreage	Utilizing Farmland Tax Use Exemption?
Townley Farm	21 Townley Dr	003-043-001	29	Yes
Morning Dew Farm	245 US Route 1	003-060-003	68	No
Oyster Creek Mushroom Farm	61 Standpipe Rd	004-009	5.3	No
Biscay Orchards	23 Reny Rd	002-030	150	No

shores of Pemaquid Pond. While the eastern block of prime farmland coincides with undeveloped land, they also run between significant wetland habitats.

Timber Harvesting

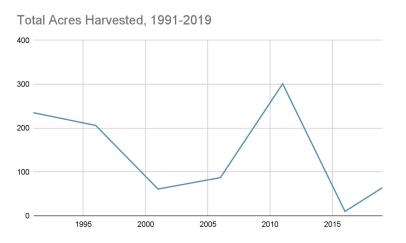
Timber harvesting in Damariscotta has fluctuated greatly in the past thirty years, but has been steadily trending upward since reaching a thirty-year low of 10 acres harvested in 2016.⁹ While the amount of wood harvested annually varies, a total of twenty landowners currently utilize the Tree Growth Tax Exemption Program.

Year	Total Harvest, Acres	Changes of Land Use, Acres	Number of Active Notifications
2001	61	0	5
2002	33	1	4
2003	65	5	6
2004	100	35	7
2005	117	28	7
2006	87	3	7
2007	90	0	11
2008	136	0	5
2009	118	8	5
2010	117	0	6
2011	300.9	0	10
2012	279	0	11
2013	231	15	9
2014	58	0	5
2015	34	0	7
2016	10	0	4
2017	50	0	4

⁹ Per data from the Town Assessor's Office.

2018	67	0	4
2019	64	0	3
Total	3184.9	107	179
Average	110	4	6

Data compiled from Confidential Year End Landowner Reports to Maine Forest Service. Timber harvesting includes selection harvest and shelterwood harvesting. No acreage was permitted for clear-cutting in the timespan above. "Active notifications" refers to the number of permits received to notify the Forest Service of a harvesting operation.



Since peaking in 2011, acres harvested fell to an all time low of ten acres in 2016. The 2014 Comprehensive Plan predicted it has been steadily increasing. The most recently available data is for 2019, at 64 acres. The number of active harvests is low, barely reaching above ten a year in the past three decades.

Threats to Farms and Forest Resources

Competing Interests

Residential and commercial sprawl threatens to disrupt current and potential agriculture and forest management areas. Most land east of Route 1 is currently in the Town's Rural Zoning District, the only zone where agriculture and timber harvesting is expressly permitted.¹⁰ In the Rural zone, one- and two-family dwelling units are also expressly permitted, as well as a variety of commercial and industrial uses. Given that the 2014 Comprehensive Plan designated all areas outside of downtown Damariscotta as Growth Areas, residential and commercial sprawl has been occurring in these areas for the past 10 years.

Sprawl is an issue in this case because viable farm and forestry operations need substantial uninterrupted acreage. The optimal size for small woodlot management can reach up to 200

¹⁰ See the Town's Land Use Ordinance for more information.

acres, and even a small herd of cattle require between 50 and 100 acres for grazing. Even 5 acre lots can disrupt manageable farm or forestry units.¹¹ Farming and timber harvesting is conditionally approved within the two commercial districts in Town, but unlikely to actually occur in these areas for the reasons stated. Not only would new farming or tree growth operations hamper development in the faster growing regions of Town, but any substantial residential and commercial development occurring would also make agricultural and forestry uses less feasible.

The Town's Solar Energy System Ordinance, adopted in 2021, limits the installation of groundmounted solar energy systems exceeding 1-acre in panel area to the Rural and C-2 Zoning Districts.¹² Because the land most suitable for solar farms usually overlaps with prime agricultural land, future commercial solar developments may directly compete with farming interests for the most optimal land.13

As noted in the Water Resources section of this Plan, the Shoreland Zoning Ordinance regulates most uses that may contaminate waterways and wetlands. This includes agriculture, as farmland can contaminate nearby ecosystems with runoff fertilizers, pesticides, and tilled soils. Under the Ordinance, manure stockpiles, livestock grazing, and tillage is restricted within 100 feet of a great pond (or river flowing to a great pond) or within 75 feet of other water bodies, tributary streams, or wetlands. Any soil tillage of 40,000 square feet or more within Shoreland Zoning districts requires a conservation plan to ensure minimal contamination of waterways and wetlands.¹⁴ Town policy that prioritizes protecting natural resources may be inadvertently creating obstacles to future farming operations.

Pollution and climate change

The prevalence of per-and polyfluoroalkyl substances (PFAS) in existing agricultural land and waterways is still being evaluated across Maine, but could pose a threat to Damariscotta's bodies of water. The State of Maine's decision to ban the use of treated sewage sludge as a fertilizer source last year implies any farmland in Damariscotta could potentially have been contaminated with PFAS.15

Climate change threatens to disrupt the economic well-being of farms and timber harvesters across the state. As referenced in the Natural Resources chapter, there are currently no recorded invasive species in Damariscotta, but migration patterns of wood-boring insects, such as the Emerald Ash Borer, could threaten the health of Damariscotta's woodland ecosystems if introduced.¹⁶ Maine Forest Service guarantines prohibit movement of material from guarantine

¹¹ State Planning Office, Comprehensive Planning: A Manual for Maine's Communities, 2005. pp. 83-95.

¹² See the Town's Solar Energy Systems Ordinance.

¹³ Kate Cough, "Maine's Prime Farmland Is Being Lost to Solar. Is 'Dual Use' the Answer?," The Maine Monitor, January 16, 2022, ¹⁴ See the Town's Shoreland Zoning Ordinance. ttps://www.themainemonitor.org/maines-prime-farmland-is-being-lost-to-solar-is-dual-use-the-answer/

¹⁵Tom Perkins, "Maine Bans Use of Sewage Sludge on Farms to Reduce Risk of PFAS Poisoning," The Guardian (Guardian News and Media, May 12, 2022), https://www.the pfas-poisoning

¹⁶"Emerald Ash Borer, "Maine Forest Service, (Maine Department of Agriculture, Conservation, and Forestry, 2021), https://www.maine.gov/dacf/mfs/forest health/invasive threats/eab/index.shtml

areas and regulate movement across state lines, meaning introduction could affect timber harvesting sales.

Efforts to Support Agriculture and Forestry

There are currently few direct efforts by the Town of Damariscotta to expand farming within the Town, which was ranked as "Farm Ambivalent" on the Maine Farmland Trust's Farm Friendly Test. The Maine Farmland Trust has worked to protect and preserve agriculture in Maine, and (as noted above) has worked to conserve a total of 135 acres in Damariscotta (on the former Phillips Farm and on the current Morning Dew Farm) for permanent agriculture use.

The main incentive farmers and timber harvesters have in Damariscotta come from the State's Farmland and Tree Growth Tax Exemption programs. Farmers can reduce their tax burden by applying to the program, which requires only 5 contiguous acres of farmland that produce an annual gross income of at least \$2,000 per year. The Tree Growth Tax Use Program requires a forest management and harvesting plan and requires at least 10 acres be used for commercial harvesting.¹⁷ The parcel may be used for multiple uses, as long as the parcel remains primarily used for the growth of trees used to produce forest products that have commercial value.¹⁸

Overarching Policies

State goal: To safeguard the State's agricultural and forest resources from development which threatens those resources.

Suggested potential strategies

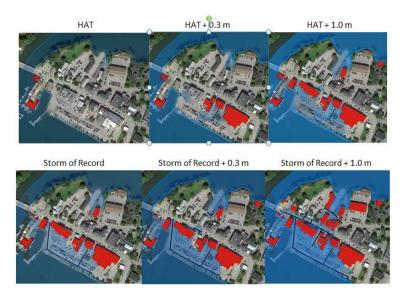
- Develop a community farm survey to gather information on what products are grown, what challenges farmers face, and why they operate in Damariscotta
- Work with CRCT to identify opportunities for timber harvesting and farming or gardening on their conserved land in Damariscotta, especially on conserved open space that is identified as prime farmland
- Consider adjusting the Land Use Ordinance to create buffer zones to agricultural land and timber harvesting woodlots, similar to the Stream Protection District defined in the Shoreland Zoning Ordinance
- Consider impact fees or similar for large commercial/residential facilities built in Rural District to raise funds to support agriculture and timber harvesting activities
- Work with CRCT and Maine Farmland Trust to develop permanent agricultural land conservation easements

¹⁷"Maine Land Use Program," Maine Revenue Services, (Department of Administrative and Financial Services, 2020) <u>https://www.maine.gov/revenue/taxes/tax-relief-credits-programs/property-tax-relief-programs/land-use-programs</u>
¹⁸ "Maine Tree Growth Tax Law, Bulletin 19," Maine Revenue Services Property Tax Division, (Department of Administrative and Services)

^{** &}quot;Maine free Growth Tax Law, Bulletin 19," Maine Revenue Services Property Tax Division, (Department of Administrative and Financial Services, December 19, 2022). https://www.maine.gov/revenue/sites/maine.gov.revenue/files/inline-files/bull19.pdf

- Promote more farmer's markets and community gardens
- Provide tax incentives or small grants to build community gardens in residential properties
- Revise solar use ordinance to allow zoning of dual-use on farmland
- Consider further incentives to encourage landowners to manage tree growth in areas with high ecological values (eg. deer wintering habitats, land near pond watersheds)
- Amend the Land Use Ordinance to expressly permit "accessory agricultural businesses" in the rural district (vet services, feed milling, etc.)
- Remove the Rural Zoning District from the Town's Growth Area
- Create a Small Farm Animal Keeping Ordinance to allow for the safe keeping of a small number of farm animals on residential lots in order to encourage small-scale agriculture in appropriate areas

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Stakeholders

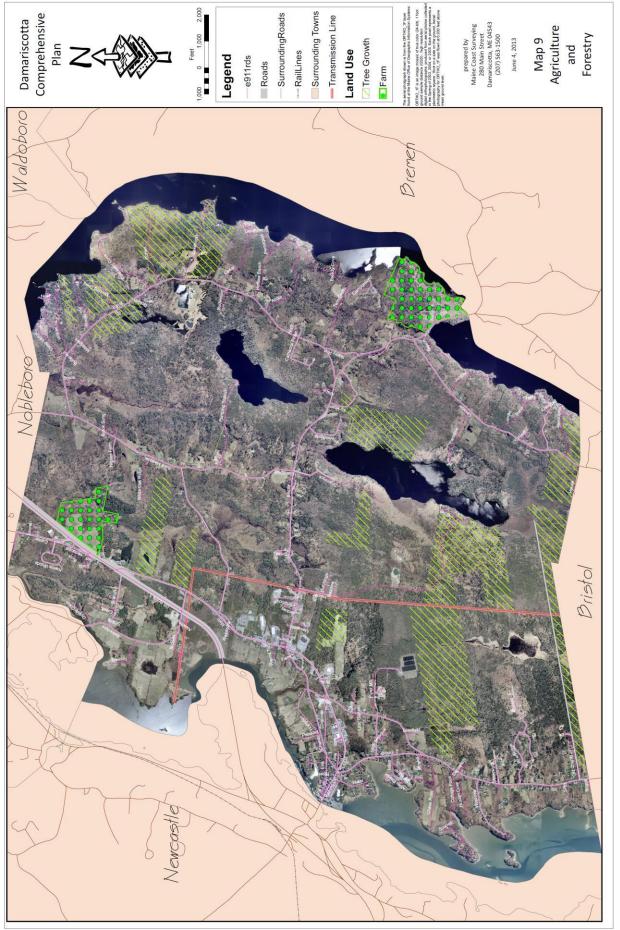
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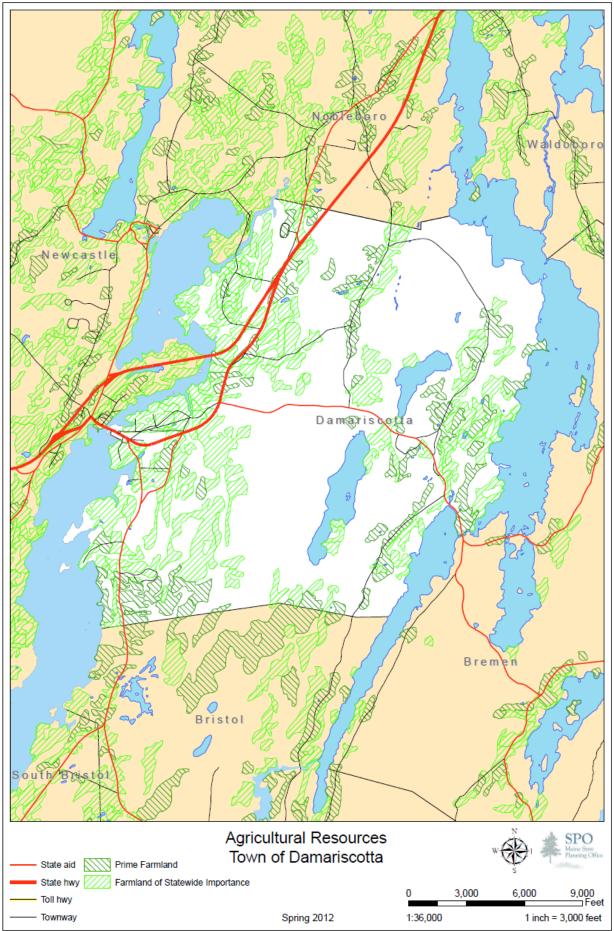
ISSUES WITH SEA-LEVL ROSE & STORM SURGE

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G. AGRICULTURAL & FORESTRY RESOURCES

<u>Agriculture</u> -In 2014 Map 9 following, shows only the 150 acre Reny apple farm fronting Biscay Road and Pemiquid Pond was actively farmed property in Town. Thirty-three acres were in apple trees;





117 acres were in the near the intersection of Route One and Rt. 1B the 75 acre Maine Farmland Trust property (former Phillips Farm), for sale in 2014, is deed-protected for only agricultural use. In 2014 the total amount of land protected in the Open Space (Farmland) Tax Program was about 50 acres and in the Tree Growth Tax Program was 1,079 acres. Together the acres enrolled in current use taxation programs constituted about 13% of total the land in Town. But local small-scale 'truck' farms supplied two local farmer's markets: on at DRA (Damariscotta River Association) headquarters on Belvedere Road; the other at the Rising Tide grocery store on Rt 1B.

The Agricultural ResourcesMap, preceding, shows the distribution of suitable agricultural soils in the flatter land along the rive r to the west and near the ponds on the east sides of town. Not coincidentially, the historic roads from the 19th Century are located in the midst of these more suitable soils serving the early farms in town.

Forestry - Commercial

The recent trend in harvesting wood in Town has varied from 17 acres to 185 with an annual average of about 105 acres per year. During this period 182 acres changes land use, presumably for development or about 2.3% of the land surface of the Town, a small .1% of the land per year on average. Due to the lingering effect of the Great Recession, it is probable that this trend will continue through to 2024.

YEAR	Selection harvest, acres	Shelterwood harvest, acres	Clearcut harvest, acres	Total Harvest, acres	Change of land use, acres		of active ations
1991	215	20	0	235	0	7	
1992	17	0	0	17	0	3	
1993	57	0	0	57	0	5	
1994	55	2	0	57	10	8	
1995	165	20	0	185	0	8	
1996	206	0	0	206	0	8	
1997	119	7	6	132	0	3	
1998	83	10	0	93	0	4	
1999	59	0	0	59	1	6	
2000	92	34	0	126	1	7	
2001	61	0	0	61	0	5	
2002	33	0	0	33	1	4	
2003	25	40	0	65	5	6	
2004	70	30	0	100	35	7	
2005	77	40	0	117	28	7	
2006	87	0	0	87	3	7	
2007	70	20	0	90	0	11	
2008	136	0	0	136	0	5	
2009	118	0	0	118	8	5	
2010	117	0	0	117	0	6	
		ential Year En Dept. of Conse					

Table 1: Type of Harvested Wood by Year – 1991 to 2010

<u>Urban Forestry</u>

In 2014 Damariscotta did not have a formal urban street tree program, nevertheless the Public Works Department maintains some street trees and trees on town land including the oak trees along the shoreline esplanade at the Harbor parking lot.

The Maine Forest Service (MFS) encourages towns to consider street and shade trees inreference to community character and beautification. Strong municipal street tree programs and street trees support a number of state goals for comprehensive planning. Street trees are part of the public infrastructure supported by comprehensive planning. Numerous studies have demonstrated the value of street trees beyond shade and beauty. Street trees play an important role in air filtration, stormwater interception, and increasing both property values and business. All of these values support thestate's goals of encouraging orderly growth and development, making efficient use of public services, planning for, financing and developing an efficient system of public facilities, and promoting an economic climate tha increases overall economic well-being. Communities with town forests can also benefit economically from active management of their forest resources. MFS administers several programs that have and can continue to benefit both the town and its residents. Project Canopy, MFS's community forestry assistance program, is available to all Maine towns and cities. Project Canopy can assist financially with street tree planting and maintenance and continued forest management planning of town-owned parcels. MFS encourages planners to recognize street trees and shade trees as part of the infrastructure, particularly in village and historical districts. Tree planting and maintenance is a viable way to improve downtown appearance, reduce pollution, and mitigate storm water runoff. Project Canopy provides cost share assistance for management planning on parcels such as these. Cost share grants are available on a limited, competitive basis. Grant applications typically are available annually. For more information, go to: <www.projectcanopy.me>

Use of inventory information: MFS's Forest Policy and Management Unit supports sustainable forest management by providing technical assistance, information and educational services to the public, forest landowners, forest products processors and marketers, municipalities, and others. MFS has ten District Foresters who provide technical assistance, conduct educational workshops, field demonstrations, media presentations, and can provide one-on-one contact with individual landowners.

H. HISTORIC & ARCHEOLOGICAL RESOURCES

{Inventory Data for Municipal Growth Management Plans - Maine Historic Preservation Commission (MHPC)}

1. <u>Historic Buildings/Structures/Objects</u>: Kirk Mohney, MHPC

Damariscotta

Table 1: Inventory of Properties on the National Register of Historic Places as of March, 2012 :

Chapman-Hall House, Main Street Matthew Cottril House, Main Street Main Street Historic District (See Map) Huston House, Bristol Road Damariscotta Baptist Church, King's Square



IS YOUR TOWN FARM-FRIENDLY?

Take This Test!

Land Use Ordinances and Regulations

Does your town have a detailed section on agriculture in your comprehensive plan? Yes No	Does your town's comprehensive plan refer to "maintaining rural character", but overlook agriculture as a primary component? Agriculture shouldn't be an afterthought! Make sure to include agriculture in the sections on economy, critical natural resources, and land use, too.
allow agricultural uses in more than one zoning district? ►►► ☐ Yes ☐ No	Some towns confine agricultural businesses to the commercial zone only, while other towns prohibit such uses in the commercial zone! Farm enterprises are often hybrids of several different uses; ordinances and regulations should allow farm businesses flexibility to adapt to changing markets.
 allow flexibility in regulations to accommodate the unique needs of agricultural businesses? Yes INO 	Both the land use impact and the off-site impact of a seasonal farm business are much less than that of a full-time business. Do your town's regulations provide for reduced restrictions such as expanded hours of business operation, temporary signs, parking near pick-your-own fields, or on street parking? Pick-your-own strawberries or Christmas tree farm businesses may struggle in a town that treats farms like all other retailers.
require buffer zones between farmland and residential uses? ☐ Yes ☐ No	The old saying "good fences make good neighbors" has a modern corollary that says "good buffer zones make new neighbors good neighbors." New development should not place the burden on existing farms to give up boundary land as a buffer zone between agricultural and residential uses. New residential development should provide for its own buffer zone and/or landscape plantings for screening neighboring farms.
 allow off-site signs to attract and direct farm stand customers? Yes INO 	Farm stands are often seasonal businesses that need to capture potential sales at harvest time. Signs that give directions to the farm stand and let customers know what's available (such as strawberries, corn, apples) are vitally important.
provide for the agricultural use of open space land created by innovative residential subdivisions?	Some towns have adopted innovative subdivision regulations like cluster housing, which provide for setting aside open space land within the subdivision. Ideally, such land should be the most valuable agricultural land, be big enough for commercial agricultural purposes, and specifically allow long term agricultural use. Smaller plots of set aside land could accommodate community gardens.
allow accessory uses to agriculture?	Remember, it's not just the farmland that makes farming possible: businesses related to agriculture (veterinarians, equipment and supply dealers, feed milling and delivery, etc.) have to be close enough to serve farmers' needs.

Adapted from "Is Your Town Farm Friendly - A Checklist for Sustaining Rural Character" presented by the New Hampshire Coalition for Sustaining Agriculture and UNH Cooperative Extension - http://cecf1.unh.edu/sustainable/farmfrnd.cfm

Fair Enforcement of Local Regulations

Does your town...

 have a consistent policy approach for local land use procedures that deal with agriculture? Yes INO 	Update your comprehensive plan to express what agriculture contributes to your town's economy and quality of life through open space, wildlife habitation, watershed purification and natural resource preservation. Make sure your select board, planning board, and code officer recognize the importance of farming and build their policies and practices around that presumption.
 …have a good idea of how much agriculture there is in town? ☐ Yes □ No 	Consider having a town committee conduct a farm inventory, survey or economic impact analysis. You may be surprised at the number and variety of farms in your community – and the impact they have on your local economy!
allow roadside stands or pick-your-own operations by right? ☐ Yes ☐ No	Consider amending your zoning ordinance so that certain agricultural operations don't need a Special Exception or Variance – or even a permit!
use zoning definitions such as "agricultural accessory uses" in a broad and inclusive manner? Yes INO	"Agricultural accessory uses" refers to everything from machinery sheds to housing for seasonal workers. Various agricultural businesses have very different needs that can test the balance of rule and exceptions. Write flexibility into ordinances or regulations that may apply to agricultural land uses so the intent is clearly to promote such uses.
allow farm stands to sell produce purchased elsewhere?	Some towns have rules that a certain percentage of farm stand produce must be grown on the farm. Such regulation may penalize farm operators who have a crop failure or wish to offer a broad range of products.
properly assess specialized agricultural structures?	Specialized structures such as silos, milking parlors, and permanent greenhouses depreciate in value over time. Providing assessors with depreciation schedules may enable more accurate valuations, which can lead to lower assessments. Even small reductions in taxes can help farmers financially.
allow non-traditional or retail-based farm businesses in an agricultural zoning district? ☐ Yes ☐ No	Agricultural businesses don't all look alike. Your town should recognize that newer types of farm businesses such as agri- tourism, horse arenas, landscape nurseries, or greenhouses are more intensive in land use, but still carry valuable elements of rural character that benefit the town.
address agricultural structures in building and safety codes? Yes No	Building practices that are state of the art for a specialized use in agriculture may not fit the specifics of codes meant for housing or commercial structures, while bringing agricultural buildings that are historic structures up to code may destroy the very qualities that make them special.

Understanding and Encouraging Farming

Does your town	
 consider farmland a natural resource and encourage conservation easements and purchase of farmland? Yes INO 	Easements and outright purchases of farmland ensure preservation of the natural resource base for agriculture. Farmland costs less to taxpayers than land developed for residential uses, and protecting it will ensure it is available for future generations to farm.
have any visible demonstration of the value of agriculture? □ Yes □ No	Does your town have a county fair, an apple festival, or an Old Home Day parade? Making agriculture visible to the general public helps establish the economic, cultural, and resource stewardship value of having active farms in a town.
respect the state Agriculture Protection Act, which helps protect farmer's rights?	Local control is an important tradition for Maine towns. Conflicts between agriculture and other land uses can be reduced when town officials are informed about Best Management Practices (BMP's) that may alleviate nuisance complaints. The University of Maine's Cooperative Extension Service writes BMP's about various agricultural practices based on sound scientific research.
 encourage farmers to take advantage of the current use tax programs to help relieve their tax burdens? Yes INO 	By reducing the tax burden on agricultural land, towns can encourage the maintenance of open space at a relatively low cost. The Voluntary Municipal Farm Support Program is a new tool that towns can use to help further reduce the tax burden on farmers in exchange for keeping land in farming.
 have farmers serving on local planning, comprehensive plan, ordinance review boards, or conservation commissions? Yes INO 	There are few better ways to incorporate agricultural concerns into local land use ordinances and regulations than having farmers serve. Farmers can help your town ¹ s land use boards keep a broad perspective by asking "Have you thought of the consequences?"
have farmers serving on the local Economic Development Committee?	Agricultural businesses are frequently undervalued in terms of their effect on the community. Much of the economic activity generated by farms stays within the community. And the regional economic impacts of farming in Maine are growing each year!
know where to go to get advice and assistance on farm questions? ☐ Yes ☐ No	 Make the connection to resources such as: the Department of Agriculture, Conservation, and Forestry (industry regulator, statewide perspective) UMaine Cooperative Extension (technical questions, BMP's) Maine Farm Bureau (non-governmental farm lobby, broad experience); Natural Resource Conservation Service (land and water resource management) Maine Farmland Trust (farmland conservation, technical assistance).

For more information on any of these topics, or about farming in Maine, go to <u>www.mainefarmlandtrust.org</u> or call Maine Farmland Trust at (207) 338-6575.



IS YOUR TOWN FARM-FRIENDLY?

Your Results...

FARM CHAMPIONS - If you answered YES on 17-21 questions, your town is especially helpful to farmers.

FARM SUPPORTERS - If you answered YES on 11-16 questions, your town knows that farmers are good neighbors who provide lots of benefits to the quality of life, but you may be able to take other steps to encourage them.

FARM AMBIVALENT - If you answered YES on 6-10 questions, your town may be less farm friendly than you think. It's time to get to work helping your fellow citizens understand the importance of protecting its agricultural base.

FARM UNFRIENDLY - If you answered YES on 5 or fewer questions, your town is not farm friendly, but there still may be hope. Seek help immediately from farmers, farm groups and organizations like a local land trust or Maine Farmland Trust.

Presented by Maine Farmland Trust – adapted from "Is Your Town Farm Friendly – A Checklist for Sustaining Rural Character" by the New Hampshire Coalition for Sustaining Agriculture and UNH Cooperative Extension.

4. Agricultural and Forest Resources

A. State Goal

To safeguard the State's agricultural and forest resources from development which threatens those resources.

B. Analyses

To generate minimum analyses to address state goals, use Conditions and Trends data in Section 3.4(C) to answer the following questions.

- (1) How important is agriculture and/or forestry and are these activities growing, stable, or declining?
- (2) Is the community currently taking regulatory and/or non-regulatory steps to protect productive farming and forestry lands? Are there local or regional land trusts actively working to protect farms or forest lands in the community?
- (3) Are farm and forest land owners taking advantage of the state's current use tax laws?
- (4) Has proximity of new homes or other incompatible uses affected the normal farming and logging operations?
- (5) Are there large tracts of agricultural or industrial forest land that have been or may be sold for development in the foreseeable future? If so, what impact would this have on the community?

- (6) Does the community support community forestry or agriculture (i.e. small woodlots, community forests, tree farms, community gardens, farmers' markets, or community-supported agriculture)? If so, how?
- (7) Does the community have town or public woodlands under management, or that would benefit from forest management?

C. Conditions and Trends

Minimum data required to address Analyses:

- (1) The community's Comprehensive Planning Agriculture and Forestry Data Set prepared and provided to the community by the Department of Agriculture, the Maine Forest Service, and the Office, or their designees.
- (2) A map and/or description of the community's farms, farmland, and managed forest lands and a brief description of any that are under threat.
- (3) Information on the number of parcels and acres of farmland, tree growth, and open space enrolled in the state's farm, tree growth, and open space law taxation programs, including changes in enrollment over the past 10 years.
- (4) A description of any community farming and forestry activities (e.g. community garden, farmer's market, or community forest).

D. Policies

Minimum policies required to address state goals:

- (1) To safeguard lands identified as prime farmland or capable of supporting commercial forestry.
- (2) To support farming and forestry and encourage their economic viability.

E. Strategies

- (1) Minimum strategies required to address state goals: Consult with the Maine Forest Service district forester when developing any land use regulations pertaining to forest management practices as required by 12 M.R.S.A. §8869.
- (2) Consult with Soil and Water Conservation District staff when developing any land use regulations pertaining to agricultural management practices.
- (3) Amend land use ordinances to require commercial or subdivision developments in critical rural areas, if applicable, maintain areas with prime farmland soils as open space to the greatest extent practicable.
- (4) Limit non-residential development in critical rural areas (if the town designates critical rural areas) to natural resource-based businesses and services, nature tourism/outdoor recreation businesses, farmers' markets, and home occupations.

- (5) Encourage owners of productive farm and forest land to enroll in the current use taxation programs.
- (6) Permit land use activities that support productive agriculture and forestry operations, such as roadside stands, greenhouses, firewood operations, sawmills, log buying yards, and pick-your-own operations.
- (7) Include agriculture, commercial forestry operations, and land conservation that supports them in local or regional economic development plans.

5. Marine Resources (if applicable)

A. State Goal and State Coastal Policies

- (1) To protect the State's marine resources industry, ports and harbors from incompatible development and to promote access to the shore for commercial fishermen and the public.
- (2) For coastal communities, the *Growth Management Act* requires that a local comprehensive plan address the state coastal management policies (38 M.R.S.A. §1801). These are:
 - a. To promote the maintenance, development, and revitalization of the State's ports and harbors for fishing, transportation and recreation;
 - b. To manage the marine environment and its related resources to preserve and improve the ecological integrity and diversity of marine communities and habitats, to expand our understanding of the productivity of the Gulf of Maine and coastal waters and to enhance the economic value of the State's renewable marine resources;
 - c. To support shoreline management that gives preference to waterdependent uses over other uses, that promotes public access to the shoreline and that considers the cumulative effects of development on coastal resources;
 - d. To discourage growth and new development in coastal areas where, because of coastal storms, flooding, landslides or sea-level rise, it is hazardous to human health and safety;
 - e. To encourage and support cooperative state and municipal management of coastal resources;
 - f. To protect and manage critical habitat and natural areas of state and national significance and maintain the scenic beauty and character of the coast even in areas where development occurs;
 - g. To expand the opportunities for outdoor recreation and to encourage appropriate coastal tourist activities and development;

- h. To restore and maintain the quality of our fresh, marine and estuarine waters to allow for the broadest possible diversity of public and private uses; and,
- i. To restore and maintain coastal air quality to protect the health of citizens and visitors and to protect enjoyment of the natural beauty and maritime characteristics of the Maine coast.

B. Analyses

To generate minimum analyses to address state goals, use Conditions and Trends data in Section 3.5(C) to answer the following questions.

- (1) Is coastal water quality being monitored on a regular basis?
- (2) Is there a local or regional plan in place to identify and eliminate pollution sources?
- (3) Has closing of clam or worm flats threatened the shellfishing industry, and are sources of contamination known? If so, are sources point (direct discharge) or nonpoint sources?
- (4) Are traditional water-dependent uses thriving or in decline? What are the factors affecting these uses? If current trends continue, what will the waterfront look like in 10 years?
- (5) Is there reasonable balance between water-dependent and other uses, and between commercial and recreational uses? If there have been recent conversions of uses, have they improved or worsened the balance?
- (6) How does local zoning treat land around working harbors?
- (7) Is there a local or regional harbor or bay management plan? If not, is one needed?
- (8) Are there local dredging needs? If so, how will they be addressed?
- (9) Is there adequate access, including parking, for commercial fishermen and members of the public? Are there opportunities for improved access?
- (10) Are important points of visual access identified and protected?

C. Conditions and Trends

Minimum data required to address Analyses:

- (1) The community's Comprehensive Planning Marine Resources Data Set prepared and provided to the community by the Department of Marine Resources, and the Office, or their designees.
- (2) A map and / or description of water-dependent uses.

- (3) A brief summary of current regulations influencing land use patterns on or near the shoreline.
- (4) A description of any local or regional harbor or bay management plans or planning efforts.
- (5) The location of facilities (wharves, boat ramps, pump-out stations, etc.), with a brief description of any regional or local plans to improve facilities.
- (6) A description or map showing public access points to the shore. Include a brief description of their use, capacity, physical condition, and plans to improve, expand, or acquire facilities such as parking or toilets.
- (7) A list of scenic resources along the shoreline, including current ownership (public or private) and any protections.

D. Policies

Minimum policies required to address state goals:

- (1) To protect, maintain and, where warranted, improve marine habitat and water quality.
- (2) To foster water-dependent land uses and balance them with other complementary land uses.
- (3) To maintain and, where warranted, improve harbor management and facilities.
- (4) To protect, maintain and, where warranted, improve physical and visual public access to the community's marine resources for all appropriate uses including fishing, recreation, and tourism.

E. Strategies

Minimum strategies required to address state goals:

- (1) Identify needs for additional recreational and commercial access (which includes parking, boat launches, docking space, fish piers, and swimming access).
- (2) Encourage owners of marine businesses and industries to participate in clean marina/boatyard programs.
- (3) Provide information about the Working Waterfront Access Pilot Program and current use taxation program to owners of waterfront land used to provide access to or support the conduct of commercial fishing activities.
- (4) Support implement of local and regional harbor and bay management plans.
- (5) If applicable, provide sufficient funding for and staffing of the harbormaster and/or harbor commission.

(6) Work with local property owners, land trusts, and others to protect major points of physical and visual access to coastal waters, especially along public ways and in public parks.