



STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
BUREAU OF RESOURCE INFORMATION & LAND USE PLANNING

93 STATE HOUSE STATION
AUGUSTA, MAINE 04333

JANET T. MILLS
GOVERNOR

AMANDA E. BEAL
COMMISSIONER

May 15, 2024

Erin Zwirko, Director of Planning & Development
200 Main Street
Yarmouth, Maine 04096

Dear Erin,

The Department of Agriculture, Conservation & Forestry thanks the Town of Yarmouth for submitting its Comprehensive Plan for review for consistency with the Growth Management Act in accordance with our Comprehensive Plan Review Criteria Rule (the Rule).

As soon as the plan was accepted for review, we invited other state agencies, neighboring municipalities, and your regional planning organization to review it and submit written comments. By the end of the comment period, we received written comments from the Maine Department of Marine Resources, Maine Drinking Water Program, Maine Department of Transportation, Maine Department of Environmental Protection, and the Maine Beginning with Habitat Program. Those written comments are attached to this letter. The comments contain suggestions for improving and strengthening the plan. We urge the Comprehensive Planning Committee to consider how the plan might be revised to incorporate suggestions found in the comments.

We are now happy to report that we find the ***Yarmouth 2024 Comprehensive Plan*** to be **complete and consistent**. This means that we have found all sections of the plan, including the future land use section, to be consistent with the Growth Management Act.

Our finding of consistency is not conditional; however, we urge the Committee to consider amending the plan to incorporate the attached agency comments. Per Chapter 208 the town may incorporate the agency comments without resubmitting the Plan to the state.

We appreciate the efforts of community members and municipal staff who contributed to this plan. All involved clearly dedicated a lot of time and discussion to draft this very complete plan. Thanks to the skill and hard work of all involved, this plan will provide important guidance to the community's decision-makers for years to come. Please don't hesitate to contact me at 441-1288 or tom.miragliuolo@maine.gov

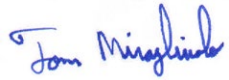
MUNICIPAL PLANNING ASSISTANCE PROGRAM
22 STATE HOUSE STATION
18 ELKINS LANE, HARLOW BUILDING
AUGUSTA, ME 04333



PHONE: (207) 419-8661
WWW.MAINE.GOV/DACF/MUNICIPALPLANNING

if you have any questions.

Sincere Best Wishes,



Tom Miragliuolo, Senior Planner
Municipal Planning Assistance Program

Attachments:

- Public comments (5)

cc: Kate Burch, North Star Planning
Ben Smith, North Star Planning
Julie Dubovsky, Yarmouth Assistant Planner
Matt Panfil, GPCOG



JANET T. MILLS
GOVERNOR

STATE OF MAINE
DEPARTMENT OF MARINE RESOURCES
21 STATE HOUSE STATION
AUGUSTA, MAINE
04333-0021

PATRICK C. KELIHER
COMMISSIONER

To: Tom Miragliuolo, Senior Planner, Municipal Planning Assistance
Program, Department of Agriculture, Conservation and Forestry

From: Melissa Britsch, Maine Coastal Program, Maine Department of Marine Resources

Re: Town of Yarmouth Comprehensive Plan Review

Date: May 2, 2024

Thank you for the opportunity to review the marine resources section of Yarmouth's Comprehensive Plan. I have provided the following comments and suggestions for your consideration.

Appropriate use of data provided by Maine Department of Marine Resources

Yarmouth's Comprehensive Plan is thorough and the provided data were used correctly, although we were unsure if all licenses were reported in the plan. We would like the town to ensure that information about all marine licenses is reported; possibly by including a table. If this is included elsewhere in the plan, please add a reference to the marine resources section.

How the plan's policies and implementation strategies promote State goals relating to DMR's principal objectives and directives

The proposed policies and implementation strategies will do much to promote State and DMR goals. We would like to encourage the town to address whether current water access is adequate for both recreational and commercial use, and what access needs could look like in the future. We would also like the town to address whether there are opportunities to improve or expand water access, and if so, what will be done to act on them. We would like the town to consider adding a strategy for local and regional harbor management plans, which was missing from the list of objectives and action items. We appreciate that the plan includes several additional goals and action items, and the plan is very thorough. The importance of marine resources and water access is clear, and the plan will do much to help the town improve access and ensure it remains resilient.

Consistency of the plan with DMR's programs and policies

Overall, the plan is consistent with DMR's programs and policies. The plan is very detailed and will be a strong guide for future planning efforts. We are encouraged to see that the town is dedicated to maintaining water access facilities and is planning for continued access and working waterfront viability in a variety of ways. The comprehensive plan is detailed and it is clear that marine resources, coastal access, water quality, and the waterfront are valuable to the town.

Measures DMR recommends the town take to ensure its plan addresses and identifies deficiencies and inconsistencies

Refer to my comments below.

Marine Resources	✓	Page	Comment #
Analyses			
Is coastal water quality being monitored on a regular basis?	x	125	
Is there a local or regional plan in place to identify and eliminate pollution sources?	x	131	
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?	x	129	
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?	x	128	
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?	x	128	1
How does local zoning treat land around working harbors?	x	130	2
Is there a local or regional harbor or bay management plan? If not, is one needed?	x	131	
Are there local dredging needs? If so, how will they be addressed?	x	130	
Is there adequate access, including parking, for commercial fishermen and members of the public? Are there opportunities for improved access?	x	121	3
Are important points of visual access identified and protected?	x	123	4
Comments: 1) With respect to the balance among uses, does the town anticipate further changes in the future? Is there currently conflict among users or could there be conflict in the future? 2) Will there be any changes in local zoning? 3) Is access adequate for current demand? Is there enough access for both recreational and commercial users? Does the town see any opportunities to improve access and/or reduce crowding, or have plans to upgrade existing facilities? 4) We appreciate seeing the information about which sites are or are not protected. Does the town have plans to protect the sites that are currently unprotected?			
Condition and Trends			
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.	x	128, 129	5
A map and / or description of water-dependent uses.	x	122	6
A brief summary of current regulations influencing land use patterns on or near the shoreline.	x	130	
A description of any local or regional harbor or bay management plans or planning efforts.	x	131	7
The location of facilities (wharves, boat ramps, pump-out stations, etc.), with a brief description of any regional or local plans to improve facilities.	x	121	3
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.	x	122	3
A list of scenic resources along the shoreline, including current ownership	x	123	4

(public or private) and any protections.			
Comments:			
5) Please add a table with a summary of all licenses. We want to be sure the information is accessible for future planning efforts. If this information is elsewhere in the plan, please include a reference to the location.			
6) We appreciate the detail in this section!			
7) Does the town need to create a harbor management plan or a mooring plan? We appreciate that the town has plans for the land side of the harbor and is working to implement them.			
Policies			
To protect, maintain and, where warranted, improve marine habitat and water quality.	x	69	
To foster water-dependent land uses and balance them with other complementary land uses.	x	69	
To maintain and, where warranted, improve harbor management and facilities.	x	69	
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.	x	69	
Comments: NA			
Strategies			
Identify needs for additional recreational and commercial access (which includes parking, boat launches, docking space, fish piers, and swimming access).	x	69	
Encourage owners of marine businesses and industries to participate in clean marina/boatyard programs.	x	69	
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.	x	70	
Support implement of local and regional harbor and bay management plans.	not discussed		8
If applicable, provide sufficient funding for and staffing of the harbormaster and/or harbor commission.	x	69	9, 10
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.	x	70	
Comments:			
8) We didn't see a strategy to support the implementation of local and regional harbor and bay management plans. Should this be included? We would encourage the town to add it as a strategy.			
9) We appreciate the extra goal to support Yarmouth's working waterfront and the action items supporting the goal. Enhancing access, considering zoning amendments, planning for where working waterfronts can move in the future, and connecting people to working waterfronts is critical for their long-term viability.			
10) We also appreciate the action item to assess public waterfront infrastructure for sea level rise vulnerability and to incorporate needed upgrades into the town's capital plan.			
The plan as a whole is very good.			

Janet T. Mills
Governor

Jeanne M. Lambrew, PhD.
Commissioner



Maine Department of Health and Human Services
Maine Center for Disease Control and Prevention
11 State House Station
286 Water Street
Augusta, Maine 04333-0011
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TTY: Dial 711 (Maine Relay)

To: Tom Miragliuolo, Senior Planner, DACF
From: Ashley Hodge, Source Water Protection Coord., Maine CDC Drinking Water Program
Re: Review of 2024 Town of Yarmouth Comprehensive Plan
Date: May 2, 2024

On behalf of the Maine CDC, Drinking Water Program (MEDWP), I have reviewed the Town of Yarmouth's 2024 Comprehensive Plan and have provided the following comments.

As you are aware, The Drinking Water Program works to ensure safe drinking water in Maine, to protect public health, by administering and enforcing drinking water and subsurface wastewater regulations, providing education and technical and financial assistance. The comments submitted below are based on the Maine State Planning Office's (SPO) instructions for agency commentors.

I. General Comments:

- a. All of the Yarmouth Water District public drinking water sources are located within the town of North Yarmouth. The Town of Yarmouth may consider partnering with the Town of North Yarmouth to help protect these drinking water sources.
- b. The town should continue to maintain, enact, and/or amend protections for groundwater and aquifer recharge areas. Taking proactive measures to protect Yarmouth's aquifers will continue to support safe drinking water now and in the future, should the Town need to expand their public water supply.

Please feel free to contact me should you have any questions regarding this information.



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0016

Janet T. Mills
GOVERNOR

Bruce A. Van Note
COMMISSIONER

April 12, 2022
Tom Miragliuolo
Senior Planner, Municipal Planning Assistance Program
Department of Agriculture, Conservation and Forestry
22 State House Station
Augusta, Me 04333-0022

Dear Tom,

MaineDOT finds the Town of Yarmouth 2024 Comprehensive Plan consistent with its mobility and transportation policies and goals. The Plan is a well-researched and smartly written document paired with useful chapter highlights. One can learn a great deal about Yarmouth and its planning activities over recent decades in reading this comprehensive plan. The "Climate Connections" featured in the Plan's chapters are thoughtful and demonstrate how inextricably climate challenges/opportunities are connected to all planning activities.

In the Transportation chapter, the Plan deftly clarifies municipal vs. state responsibilities for maintenance of infrastructure and permitting on local and state roads. These distinctions aren't always clear to citizens or volunteers on municipal boards, so the document performs a helpful role in this regard.

Under Implementation, Yarmouth aims to "continue to collaborate with MaineDOT on a plan to transition Rt. 1 from Portland St. to I-295 from an auto-centric commercial corridor to a mixed-use boulevard that is people-centered." The challenge for all parties is to increase density without increasing the volume of vehicles on Rt. 1. Will new residential growth and infill development occur without a concomitant up-tick in automobiles and traffic? The outcome is unclear, unless transportation alternatives are available and desirable.

Thank you for the opportunity to review Yarmouth's 2024 Comprehensive Plan.

Sincerely,
Stephen Cole
Regional Planner, Southern & Midcoast Maine



JANET T. MILLS
GOVERNOR

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



MELANIE LOYZIM
COMMISSIONER

To: Tom Miragliuolo, Senior Planner, Municipal Planning Assistance Program, Department of Agriculture, Conservation and Forestry

From: Alaina Chormann, Watershed Management Unit, Division of Environmental Assessment, Department of Environmental Protection

Re: Yarmouth Comprehensive Plan Review

Date: 4/30/2024

Thank you for the opportunity to review Yarmouth's Comprehensive Plan (Plan) as it relates to surface waters. I have developed the following comments and suggestions for your consideration.

Appropriate use of data provided by the DEP Division of Environmental Assessment

- The Plan includes waterbody and watershed identification and description, water quality information for Royal river estuary, Little John Causeway, Upper whistler cover, Cousins Island, Pratt Brook, and the Royal River. This information is used appropriately.

How the Plan's policies and implementation strategies promote the State goals relating to DEP's principal objectives and directives

1. Plan does a great job of recognizing that stormwater erosion contributes to the degradation of water quality and habitat in both fresh water and marine water systems. However, the plan does not explain why and the term "pollutants" is often used. Plan would benefit from making the connection between erosion and input of nutrients. Specifically, phosphorus (freshwater) and nitrogen (for marine sources). While the policies contained within the plan meet the minimum requirements of the checklist, they do not directly address limiting nutrient inputs to water resources. This is particularly important for eelgrass bed protection. Including language about regulating nutrient loads into waterbodies would greatly strengthen the plan. For example:
 1. Consider incorporating requirements for stormwater Phosphorus/Nitrogen impact analysis and mitigation for new development within the town's riverine and marine watersheds into subdivision and site review ordinances.
 2. Consider adding future water quality monitoring goals, especially for threatened or impaired waterbodies. Goal of better identification of phosphorus/nitrogen sources.

Consistency of Plan with DEP's programs and policies.

- Overall, the Plan consistent with the DEP Watershed Management Units programs

Measures DEP recommends the town take to ensure its plan addresses and identifies deficiencies and inconsistencies

- Comments regarding deficiencies and minor inconsistencies are included in the attached checklist.

Please feel free to contact me directly at (email/phone) if you have additional questions or would like more information.

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Comprehensive Plan Surface Water Resources Checklist

Watershed Management Unit

Division of Environmental Assessment, Department of Environmental Protection

May 2023

This checklist was developed to ease the preparation of comprehensive plans. Its contents are taken directly from the Comprehensive Plan Review Criteria Rule (07 105 Chapter 208). There are no requirements to submit this checklist for review as it is intended only for the plan preparers.		
Water Resources	✓	Page
Analyses		
Are there point sources (direct discharges) of pollution in the community? If so, is the community taking steps to eliminate them?	No point source pollution mentioned	
Are there non-point sources of pollution? If so, is the community taking steps to eliminate them?	✓ Non-point source pollution mentioned for marine waterbodies, town will implement current MS4 permit.	2-119, 2-127, 2-151
How are groundwater and surface water supplies and their recharge areas protected?	✓ Number of existing measures to protect water quality. Updated erosion and sedimentation control, MS4 permit, shoreland zoning, SOD and RPD. However, plan does not state specifically how drinking water sources are protected	2-151
Do public works crews and contractors use best management practices to protect water resources in their daily operations (e.g. salt/sand pile maintenance, culvert replacement street sweeping, public works garage operations)?	No specifics provided about what BMPs they use in their operations	
Are there opportunities to partner with local or regional advocacy groups that promote water resource protection?	✓	2-158
Condition and Trends		
The community's Comprehensive Planning Water Resources Data Set prepared and provided to the community by the Department of Inland Fisheries and Wildlife, the Department of Environmental Protection and the Office, or their designees.	✓	2-146
A description of each great pond, river, surface drinking water supply, and other water bodies of local interest including: a. ecological value; b. threats to water quality or quantity; c. documented water quality and/or invasive species problems.	A. Ecological value discussed for all waterbodies. B. Threats are generally discussed but not discussed	2-124, 2-147

Comprehensive Plan Surface Water Resources Checklist

Watershed Management Unit

Division of Environmental Assessment, Department of Environmental Protection

March 2022

	for each individual water body. C. Invasive and water quality issues discussed	
A summary of past and present activities to monitor, assess, and/or improve water quality, mitigate sources of pollution, and control or prevent the spread of invasive species.	Summary of invasive species monitoring is provided but no discussion of mitigation efforts.	2-146
A description of the location and nature of significant threats to aquifer drinking water supplies.	Discussion of drinking water supply, no location provided for Yarmouth wells, no threats to drinking water supplies specified	2-151
A summary of existing lake, pond, river, stream, and drinking water protection and preservation measures, including local ordinances.	There is a summary of local ordinances but no discussion of how the town is planning on protecting current/potential drinking water sources	2-155
Policies		
To protect current and potential drinking water sources.	✓	1-75
To protect significant surface water resources from pollution and improve water quality where needed.	✓	1-75, 1-76
To protect water resources in growth areas while promoting more intensive development in those areas.	✓	1-76
To minimize pollution discharges through the upgrade of existing public sewer systems and wastewater treatment facilities.	Not really discussed how public sewer systems/wastewater facilities will be upgraded	
To cooperate with neighboring communities and regional/local advocacy groups to protect water resources.	✓	1-77
Strategies		

Comprehensive Plan Surface Water Resources Checklist

Watershed Management Unit

Division of Environmental Assessment, Department of Environmental Protection

March 2022

Adopt or amend local land use ordinances as applicable to incorporate stormwater runoff performance standards consistent with: a. Maine Stormwater Management Law and Maine Stormwater regulations (Title 38 M.R.S.A. §420-D and 06-096 CMR 500 and 502). b. Maine Department of Environmental Protection's allocations for allowable levels of phosphorus in lake/pond watersheds. c. Maine Pollution Discharge Elimination System Stormwater Program	✓	1-77
Consider amending local land use ordinances, as applicable, to incorporate low impact development standards.	✓ adding low impact development requirements as part of MS4 permit	1-76
Where applicable, develop an urban impaired stream watershed management or mitigation plan that will promote continued development or redevelopment without further stream degradation.	✓ Not applicable since there are no Urban Impaired streams in Yarmouth currently	1-76
Maintain, enact or amend public wellhead and aquifer recharge area protection mechanisms, as necessary.	Vague about what mechanisms would/could be used to accomplish this strategy	1-75
Encourage landowners to protect water quality. Provide local contact information at the municipal office for water quality best management practices from resources such as the Natural Resource Conservation Service, University of Maine Cooperative Extension, Soil and Water Conservation District, Maine Forest Service, and/or Small Woodlot Association of Maine.	✓	1-75
Adopt water quality protection practices and standards for construction and maintenance of public and private roads and public properties and require their implementation by contractors, owners, and community officials and employees.	✓ Sufficiently discusses the different strategies that will be employed to protect water quality in Yarmouth	1-75
Participate in local and regional efforts to monitor, protect and, where warranted, improve water quality.	Could provide more details about current/ongoing efforts that the town plans to participate in	1-77
Provide educational materials at appropriate locations regarding aquatic invasive species.	Would be good to include what type of locations will be targeted for this outreach	1-77
Comments:		

Comprehensive Plan Surface Water Resources Checklist

Watershed Management Unit

Division of Environmental Assessment, Department of Environmental Protection

March 2022

Overall the comprehensive plan does do a good job of addressing water resource objectives and goals for the town. Demonstrates an understanding of threats to both marine and freshwater resources in the town and identifies management practices being implemented to mitigate these threats. Some things of note are:

There is a lack of any specific strategies the town plans to implement to protect its drinking water sources. This could be because they have not identified any threats, or they feel current zoning and ordinances are sufficient to protect this resource.

There is also a lack of discussion about specific water quality threats for specific waterbodies in Yarmouth. The discussion of water quality threats to the Royal River and other waterbodies mentioned is general on pages 2-151 to 2-153. Could be lack of available water quality data.

Stormwater and watershed development are discussed as potential threats to water quality in Yarmouth however nutrients as a threat is not really discussed. See notes on page one about this.



STATE OF MAINE
BEGINNING WITH HABITAT
DEPARTMENT OF INLAND FISHERIES & WILDLIFE
41 STATE HOUSE STATION
AUGUSTA ME 04333-0041



Date: May 2, 2024

To: Tom Miragliuolo, Municipal Planning Assistance

From: Lisa St. Hilaire, MNAP and Justin Schlawin, MDIFW

Re: Yarmouth Comprehensive Plan Review

On behalf of Beginning with Habitat (BwH), the Maine Department of Inland Fisheries and Wildlife (MDIFW) and the Maine Natural Areas Program (MNAP) have reviewed the town of Yarmouth's 2024 Comprehensive Plan (the Plan) and provide the following comments.

Beginning with Habitat equips Maine communities, landowners, and conservation partners with tools to protect, restore, and connect important habitats and ecosystems in a changing climate. Housed within the Maine Department of Inland Fisheries and Wildlife, Beginning with Habitat staff work with species experts, ecologists, and conservation partners to translate biodiversity information into conservation action at both a local and statewide scale.

BwH compiles habitat information from multiple sources, integrates it into one package, and makes it accessible to towns, land trusts, landowners, conservation organizations, and others to use proactively in conservation planning. The habitat information BwH provides is objective, comprehensive, and equips local decision-makers with the necessary tools to make informed and responsible land use decisions that mesh wildlife and habitat conservation with future growth needs. While BwH information is comprised of both regulated and non-regulated features, it should be used for planning purposes only. Other resources, such as MDIFW's Environmental Review Program (<https://www.maine.gov/ifw/programs-resources/environmental-review/index.html>) and MNAP's Environmental Review Program (<https://www.maine.gov/dacf/mnap/assistance/review.htm>) should be contacted for assistance as projects get closer to the design or permitting review phase.

BwH is housed at MDIFW but is comprised of more than ten public agencies and conservation partners. Comments provided below represent two BwH public agency partners (MDIFW and MNAP) but are guided by the overall conservation principles of the BwH program. Feedback and recommendations included in this memo are based on the Maine Municipal Planning Assistance Program at the Department of Agriculture, Conservation and Forestry (DACF) instructions for agency comments.

Appropriate Use of Data Provided by BwH

MDIFW and MNAP data were appropriately used in the Yarmouth Comprehensive Plan. BwH provides natural resource data to all Maine municipalities on behalf of MNAP and MDIFW. Information regarding rare plants and natural communities is provided by MNAP within DACF. MDIFW data depict high-value animal occurrences, wildlife habitats, and Critical Natural Resources.



JUDITH CAMUSO
COMMISSIONER

AMANDA E. BEAL
COMMISSIONER



Resources identified on BwH maps are accurate at the time they are produced; however, it is important to note that the data contained on these maps are regularly updated. It is recommended that requests for updated maps be made annually to ensure best available information is being used. Much of this updated information is accessible to the public online through the BwH Map Viewer:

<https://webapps2.cgis-solutions.com/beginningwithhabitat/mapviewer/>

The Town may request updated paper and digital BwH maps from MDIFW as often as needed during Plan completion and implementation:

<https://www.maine.gov/ifw/fish-wildlife/wildlife/beginning-with-habitat/maps/index.html>

Additional mapped information on stream habitats and barriers is available on the Maine Stream Connectivity Workgroup's Maine Stream Habitat Viewer:

<https://webapps2.cgis-solutions.com/mainestreamviewer/>

Additional land use planning resources and tools intended for use at the municipal level are available through BwH: <https://www.maine.gov/ifw/fish-wildlife/wildlife/beginning-with-habitat/municipalities/index.html>

Relation of Plan's Policies and Implementation Strategies to BwH Principal Objectives and Directives

The policies and implementation strategies proposed are consistent with BwH objectives and directives. Yarmouth has a clear appreciation for their Critical and Important Natural Resources, and has also committed to evaluating the impacts of climate change throughout the Plan. Beginning with Habitat staff would be happy to provide further assistance as the Town works to implement the Plan, such as providing updated maps, or technical assistance with ordinance revisions or climate planning. We have included suggested opportunities to engage Beginning with Habitat and partners to implement strategies outlined in the plan.

Consistency of Plan with BwH Programs and Policies

The proposed policies, strategies, and Future Land Use Plan are consistent with BwH programs and policies.

Critical and Important Natural Resources

The availability of high-quality habitats for plants, animals, and fish is essential to maintaining abundant and diverse populations for ecological, economic, and recreational purposes. Yarmouth is home to many Critical Natural Resources including extensive Tidal Waterfowl and Wading Bird Habitat, Roseate Tern Essential Habitat, Significant Vernal Pools, Shorebird Feeding and Roosting Areas along the Royal and Cousins River, a Seabird Nesting Island on 'The Nubbin', saltmarsh sparrow, Salt-Hay Saltmarsh along the Royal River and Cousins River, and wild leek (*Allium tricoccum*), mountain honeysuckle (*Lonicera dioica*), and American Chestnut (*Castanea dentata*). Important Natural Resources include Maquoit and Middle Bay Focus Area of Statewide Significance and numerous large Undeveloped Habitat Blocks mapped throughout the town. The plan discusses strategies to conserve these natural resources.

In addition to these Critical and Important Natural Resources, regional fisheries biologist Nick Kalejs has indicated that there are three regionally important brook trout streams in Yarmouth (Portions of the Royal River, Unnamed Brook at approximately 43.80, -70.18, and Headwater Streams of the East Branch Piscataqua River). We have appended a note describing strategies for the conservation of this resource.

Specific Plan comments and recommendations below are provided by the following staff:

- MDIFW: Justin Schlawin (Beginning with Habitat Program Coordinator), Nick Kalejs (MDIFW Fisheries)
- MNAP: Kristen Puryear (Ecologist) and Lisa St. Hilaire (Information Manager),

Resources to aid Implementation of the Yarmouth Comprehensive Plan:

Beginning with Habitat and partner organizations are available to engage Yarmouth with various strategies of the Yarmouth comprehensive plan:

- Beginning with Habitat staff are available to engage in presentations with the Comprehensive Plan Implementation Committee to collaborate on the open space acquisition goals and other strategies to protect Critical and Important Natural Resources, and with the planning department on the designation of Critical Resource Areas.
- Beginning with Habitat staff are available to review and assist with the review and update of the Conservation Value Map from the 2019 Open Space Plan, and identification of wildlife corridors throughout Yarmouth.
- The Maine Natural Areas Program maintains a user-friendly community science database for mapping and controlling invasive plant species. Maine Natural Areas Program Invasive Plant Biologist Chad Hammar offers training opportunities for residents to learn about the management of invasive plant species. chad.hammar@maine.gov
- Joe Roy, Private Lands Biologist within the Maine Department of Fisheries and Wildlife Beginning with Habitat Program provides outreach services to private landowners who wish to manage their lands to benefit wildlife. Joe is available to provide educational workshops for property owners on sustainable land management practices.
<https://www.maine.gov/ifw/fish-wildlife/wildlife/beginning-with-habitat/about/index.html>
- The Maine Natural Areas Program maintains a free service to evaluate the ecological merits of potential voluntary fee or easement conservation projects:
<https://www.maine.gov/dacf/mnap/assistance/preacquisition.html>
- Maine DOT administers several funding sources for municipal culvert replacement and infrastructure resilience that may be of interest to address stream barriers noted in the plan. More information on these funding opportunities can be found online:
<https://www.maine.gov/mdot/grants>.

Suggested Comprehensive Plan Edits:

- Mention of spotted turtle should be removed from the comprehensive plan. While a credible observation of spotted turtle was made in Yarmouth, MDIFW is uncertain whether a breeding

population of spotted turtle exists in Yarmouth. Given the uncertainty, it is difficult for the town to make strategies to plan around conservation of spotted turtle habitat.

- Page I-71, strategy NR-1.2, change the language to: “Designate Critical Natural Resources as Critical Resource Areas per the Beginning with Habitat Program in the Future Land Use Plan.”
- Page I-71, strategy NR-1.4, change the language to: “Through local land use ordinances, require the planning board (or other designated review authority) to include as part of the review process consideration of pertinent Beginning with Habitat maps and information regarding critical natural resources, and agency consultation”.
- Natural Resources section, beginning page 2-135: Mountain honeysuckle is endangered, not ‘Threatened’.
- Page 2-161, consider adding references to the Maine Geological Survey’s Sea Level Rise page and MNAP’s Marsh Migration/Coastal Resiliency page.
https://www.maine.gov/dacf/mgs/hazards/slr_ss/index.shtml
https://www.maine.gov/dacf/mnap/assistance/coastal_resiliency.html
- Page 2-147, consider adding the following language “Tidal marshes are unique and valuable coastal habitats, capable of migrating inland where geomorphic conditions and land-use permit, as long as they can migrate inland faster than they convert to open water. Surface restoration and/or removing tidal barriers can play a significant role in allowing marshes to adapt and remain resilient. Inland marsh migration space is finite and large regional models project a net loss of tidal marsh habitat under all sea level rise scenarios due to a lack of undeveloped and/or topographically suitable migration space.”
- Map Fig. 9.5 Include salt marshes as a mapped ‘natural communities’ per the Maine Natural Areas Program, not just generic wetlands.

We appreciate the opportunity to comment on Yarmouth’s 2024 Comprehensive Plan, and hope that these suggestions are helpful. Please reach out to Beginning with Habitat Program Coordinator Justin Schlawin by email at justin.schlawin@maine.gov , or by phone at (207) 557-1885 should you have any questions. Additional staff contact information and reference material are included below.

MDIFW Regional Contact Information

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Fisheries

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Appendix 1: Fisheries Comments

April 19, 2024

TO: Corinne Michaud-LeBlanc -- MDIFW

FROM: Nick Kalejs – MDIFW Fisheries

SUBJ: Yarmouth Comprehensive Plan – MDIFW Fisheries Review

To whom it may concern,

The Fisheries Division of MDIFW has completed its review of Yarmouth's comprehensive town growth plan and we offer the following comments. The comments provided below identify key issues of importance with regard to ensuring consistency with MDIFW fisheries management programs.

I. Protection and Enhancement of Fisheries and Fisheries Habitat

The plan addresses some fisheries habitat protection issues and indicates that protecting natural resources is a priority and guiding principle of future town land use. However, more emphasis should be placed on the importance of inland fisheries habitat as a natural resource. Wild brook trout are present in Yarmouth and represent a species of special conservation importance in Maine. Many streams in Yarmouth have been inventoried by MDIFW with some flowing waters supporting wild brook trout; a list of these waters has been attached at the end of these comments and should be part of an inventory of important natural resources. The Royal River is also stocked with brook trout and brown trout, representing a significant investment of state resources. Additional protection should be considered to protect these waters and other important natural resources when reviewing proposed development projects. Brook trout habitat is particularly vulnerable to a host of land-based activities, which often lead to a concurrent loss of riparian habitat. We typically request 100-foot undisturbed buffers along both sides of any stream, including stream-associated wetlands. Buffers should be measured from the upland wetland edge of stream-associated wetlands; if the natural vegetation has been previously altered then restoration may be warranted¹. Protection of riparian areas diminishes erosion/sedimentation problems, reduces thermal impacts, maintains water quality, and supplies leaf litter/woody debris (energy and habitat) for the system. Protection of these important riparian functions ensures that the overall health of the stream habitat is maintained. In addition, smaller headwater and lower order streams are often affected the greatest by development and these systems benefit the most from adequately sized, vegetated buffers.

Based on MDIFW surveys around the region, many road maintenance and construction projects also often inadvertently impede passage at stream crossings. The Town identifies known and potential barriers on the landscape and should consistently adopt stream-crossing practices (i.e., culvert installation/maintenance) which do not impede fish passage as required by the Natural Resources Protection Act². Refer to guidelines attached to this document. In addition, the Army Corps of Engineers has adopted regulations regarding stream crossings that potentially affect municipal road maintenance programs. Maine Audubon, along with many local and federal partners, has also developed a "Stream Smart" design methodology for road crossings built according to high standards of aquatic organism passage. Such a methodology may be of use to the Town in future development projects.

II. Public Access

There is a public need to provide safe angler access to all Town waters that support recreational and commercial fisheries, as well as other recreational uses. The Town plan should adopt language that reflects State and MDIFW goals^{3,4,5} and access development should be consistent with those goals. For example, public access to public waters must not be limited to Town residents only, as such action

would jeopardize existing MDIFW stocking and management programs⁶ and is inconsistent with MDIFW and State public access goals.

Based on this review, few formal boat access sites to inland waters exist within the Town. According to the plan, Yarmouth Community Services (YCS) manages a hand-carry boat launch, but it is not clearly identified by location, nor is it clear if it is a freshwater or tidal access site. The Town should ensure that consideration of future public access development includes inland waters as well as marine.

The plan does a good job of identifying public access facilities to marine waters located within the Town of Yarmouth; however, more information should similarly be provided on freshwater access. The town plan should identify and describe the status of public access to all freshwater within the Town's boundaries, including more detailed enumeration of parking capacity, facilities, and type of boat launch present, if applicable. Yarmouth encompasses or borders no Great Ponds at least ten acres in size; however, the Town contains miles of flowing waters. Waters such as the Royal River, the Cousins River, and headwater streams that form the East Branch Piscataqua River may be of special interest to anglers. Recreational access to some of these waters is displayed on a map but should be more detailed and include any existing facilities or amenities, if applicable. There is some discussion regarding the development of new access sites, and the desire to expand public access to natural resources comprises part of the plan. The Town could explicitly outline strategies to maintain or expand public access to additional water bodies, including in the form of future development goals. These strategies should help prioritize public access needs based on a variety of factors including existing access, fisheries present, water size, proximity to population centers, land availability and cost, existing waterfront development, and other related factors. Lastly, the Town should consider MDIFW and DACF as a potential partner in future public access projects. By working together Town and State agencies are more likely to be successful in achieving our common goal of improving public access.

In adopting measures to address land use and development issues, it is imperative that language and measures not be adopted which could preclude efforts by the Town, MDIFW, or other State agencies from developing public access to public waters of the State, which would be inconsistent with State and MDIFW goals^{3,4,5}. Also, land use zoning ordinances and practices designed to protect water quality should not be so strict as to impede the development of public access opportunities. Restrictive measures could limit or eliminate good access prospects on heavily developed waterfront areas. An "exemption" for public access projects should be adopted for projects which are consistent with Town, State, and MDIFW public access goals. This measure will ensure consistency while foregoing the need to undertake a very detailed and comprehensive review of all plan provisions, including their implications.

Open space is being used more and more by Towns to provide recreational opportunities and access. This is a good idea, particularly when public resources (i.e., rivers and streams) are located within or adjacent to the designated open space areas. Additionally, the open space that public water resources provide can greatly expand the total amount of recreational space for town residents and visitors. However, the Town should be sure that such areas are open to and can accommodate use by all Maine citizens and not just Town residents.

III. Significant Habitats and Fisheries

The plan discusses few habitats and values for inland waters within the Town of Yarmouth. More attention should be paid to wild brook trout habitat in particular, including promotion of protections that would allow them to flourish. Presenting trout habitat as an essential part of local environmental systems reinforces the Town's commitment to conservation of important fisheries resources. Brook trout are of special conservation importance to the State of Maine, and habitats necessary to sustain

wild populations merit additional protections. As wild brook trout habitat is present in Yarmouth, this knowledge may be useful for prioritizing public access needs/improvements, identifying significant fisheries habitats for protection, securing additional partnerships with conservation organizations, and addressing other Town planning needs.

Finally, we note that potential restoration of ecological function of the Royal River is listed as a Town action item. Should this proceed, the Town should work with MDIFW to ensure that inland fisheries habitat is considered as part of any holistic restoration effort.

IV. Miscellaneous Items/Errors

(1) Descriptions of boat access sites within the Marine Resources section includes a hand-carry access sites to the Royal River above tidal waters (page 2-123). This information should be included in the Natural and Freshwater Resources section, along with any other similar freshwater access sites.

Please call (207-287-2345) or email (nicholas.kalejs@maine.gov) if I can be of any further assistance.

Nick Kalejs
Fisheries Biologist, MDIFW

Attachments: References/Supporting Documentation, Stream Crossing Guidelines, Wild Brook Trout Streams

¹ MAINE DEPARTMENT OF INLAND FISHERIES AND WILDLIFE, STANDARD ENVIRONMENTAL REVIEW RECOMMENDATIONS

Riparian Buffers Along Streams

We recommend that 100-foot undisturbed vegetated buffers be maintained along streams. Buffers should be measured from the edge of stream or associated fringe and floodplain wetlands. Maintaining and enhancing buffers along streams that support coldwater fisheries is critical to the protection of water temperatures, water quality, natural inputs of coarse woody debris, and various forms of aquatic life necessary to support conditions required by many fish species. Stream crossings should be avoided, but if a stream crossing is necessary, or an existing crossing needs to be modified, it should be designed to provide full fish passage. Small streams, including intermittent streams, can provide crucial rearing habitat, cold water for thermal refugia, and abundant food for juvenile salmonids on a seasonal basis and undersized crossings may inhibit these functions. Generally, MDIFW recommends that all new, modified, and replacement stream crossings be sized to span at least 1.2 times the bankfull width of the stream. In addition, we generally recommend that stream crossings be open bottomed (i.e. natural bottom), although embedded structures which are backfilled with representative streambed material have been shown to be effective in not only providing habitat connectivity for fish but also for other aquatic organisms. Construction Best Management Practices should be closely followed to avoid erosion, sedimentation, alteration of stream flow, and other impacts as eroding soils

from construction activities can travel significant distances as well as transport other pollutants resulting in direct impacts to fish and fisheries habitat. In addition, we recommend that any necessary instream work occur between July 15 and October 1.

MDIFW Fisheries will rely on MDEP to review project applications for the adequacy of wetland functional assessments and the adequacy of proposed stream buffers, which should be reviewed based upon the aforementioned guidance.

² MDEP, Natural Resources Protection Act, 38 M.R.S.A SS.480-A to 480-Z, Statute, revised 4/3/2002

SS. 480-Q. Activities for which a permit is not required... 2. Maintenance and repair... "B. Crossings do not block fish passages in water courses;"

2-A. Existing road culverts..."and that the crossing does not block fish passage in the water course."

³ MSPO, Comprehensive Planning: A manual for Maine's communities.

"State Goal: To promote and protect the availability of outdoor recreation opportunities for all Maine citizens, including access to surface waters.

⁴ Strategic Plan for Providing Public Access to Maine Waters for Boating and Fishing, MDOC & MDIFW, March 1995.

"Boating and Fishing Access Goal – The primary, long term goal of state fishing and boating access programs is to ensure legal, appropriate, adequate, and equitable means of public access to waters where recreational opportunities exist."

⁵ MDIFW, Administrative Policy Regarding Fisheries Management, 12/2002

"The purpose of the Department's Access Program is to ensure that the public is able to gain access to Maine's public waters and to the fisheries within them. By law, all great ponds belong to the people of Maine. Private land ownership may limit access to great ponds. Fishing opportunity is directly linked to the public's ability to get to the waters to fish, so acquiring publicly-owned private points of access is critical, especially in areas where heavy development or restrictive private access already limits legal access by the public to the lake or pond.

It is also important to provide legal public access to flowing waters, although there is no parallel legal right to use flowing waters. Such acquisitions must, therefore, include enough land to allow access to stretches of the river or stream."

⁶ MDIFW, Administrative Policy Regarding Fisheries Management, 12/2002

"The Department will not stock waters without reasonable, legal public access, since stocking programs are to benefit the general fishing public, and not only the people that own land around a lake, pond, river or stream."

⁷ MSPO, Comprehensive Planning: A manual for Maine's communities.

"Legislative requirement: The act requires that each comprehensive plan include an inventory and analysis of: Significant or critical natural resources, such as wetlands, wildlife and fisheries habitats..."

Stream Crossing Guidelines

A good reference for information on fish passage at stream crossings may be found in the Maine Department of Transportation Fish Passage Policy and Design Guide. The following recommendations reduce the potential for culvert installations to create impediments to fish passage for most resident stream fish typically found in Fisheries Management Region A. These recommendations apply to circular culverts installed in streams.

- Do not install hanging culverts.
- Culvert installation should occur between July 1 and October 1.

- Culvert invert (downstream bottom end of the culvert) should be installed below streambed elevation; 6 inches deep for culverts less than 48 inches in diameter and 12 inches deep for larger culverts.
- Installation should not exceed the existing natural gradient.
- Use corrugated steel/aluminum culverts with the largest available corrugations. Smooth concrete and corrugated plastic culverts should only be used in very low gradient areas where water backs up the entire length of the pipe. In addition, polyethylene slip liners and smooth bore plastic culverts are becoming more popular for new or replacement installations due their longevity and low cost; however, they are creating serious fish passage problems around the State. A review of flow capacity specifications for Snap-Tite, a local distributor of slip liner technology, reveals that in all applications where smaller diameter Snap-Tite Solid liners are installed in existing corrugated metal pipes (CMP) flow capacities are increased, even though effective pipe size is decreased. For example, when a 28-inch (26 inch inside diameter) solid liner is installed in a 30 inch (inside diameter) CMP the new liner provides 187% of the original capacity provided by the metal pipe. The increase in capacity results from the smooth walls and nonwetting characteristic of polyethylene, which reduce friction within the pipe. The increased velocities that result from slip liner and smooth bore polyethylene culverts usually far exceed that which can be negotiated by most fish typically occurring in Maine streams, which typically ranges between 1 and 2 feet per second. Furthermore slip liner projects effectively increase the invert elevation, creating a hydraulic drop at the outlet, which creates an additional obstacle to fish passage. Increased flow velocities within the pipe also increase downstream scour, which can lead to degradation of the outlet plunge pool, important staging habitat for fish attempting to pass through culverts. Resulting erosion can also create "head cuts" or nick points that cause additional scouring of the stream channel and associated habitat degradation. Impediments and barriers to fish passage will generally be created using slip liners and smooth bore culverts, except under the following conditions:

- 1) In drainage ditches or similar circumstances where water is not being conveyed in a jurisdictional stream channel;
- 2) In streams where there are no fish present and where the presence of natural/artificial barriers prevent seasonal use by fish species lower in the drainage;
- 3) In very low gradient settings where water backs up the entire length of the pipe, and where the water depth at the inlet end of the liner/culvert is at least 4-6 inches deep at low flows.
- 4) Where a permanent, natural barrier is located upstream/downstream within 150 feet of the stream crossing. A permanent/natural barriers is defined as a vertical drop of at least 4 feet over a rock/ledge substrate, as measured during summer low flows. Beaver dams would not be considered a permanent impassable barrier.

- Culverts should be installed so as to provide a minimum water depth of 4-inches within the culvert during critical, seasonal movement/migration periods (spawning, summer refugia, etc.), which will vary by species. This minimum water depth is needed to provide passage opportunities for smaller fish that dominate the streams in Region A. MDOT's Fish Passage Policy and Design Guide provides information on movement periods.

- Flow velocities within the culvert should not exceed 1 and 2 feet per second during critical, seasonal movement/migration periods (spawning, summer refugia, etc.), which will vary by species. These low flows velocities are needed to provide passage opportunities for smaller fish that dominate the streams in Region A. The aforementioned flows should not be exceeded more than 50% of the time during periods of movement. MDOT's Fish Passage Policy and Design Guide provides information on movement periods and how to evaluate this standard.

- Two offset culverts may be used, such that one pipe provides passage conditions during low flow periods and the other is installed to pass design peak flows. An experienced engineer should design multiple culvert installations.

- Efforts to mitigate for fish passage problems (e.g., fish ladder, tailwater control, baffles, etc.) should always be coordinated through MDIFW.

MDIFW Inventory of Yarmouth Wild Brook Trout Streams (2024)

Stream Name:

- Royal River
- Unnamed Brook (approx. 43.80, -70.18)
- Headwater Streams: East Branch Piscataqua River