

# Lincolville Harbor Evaluation, Planning and Feasibility Study

## FINAL REPORT

Lincolville, ME

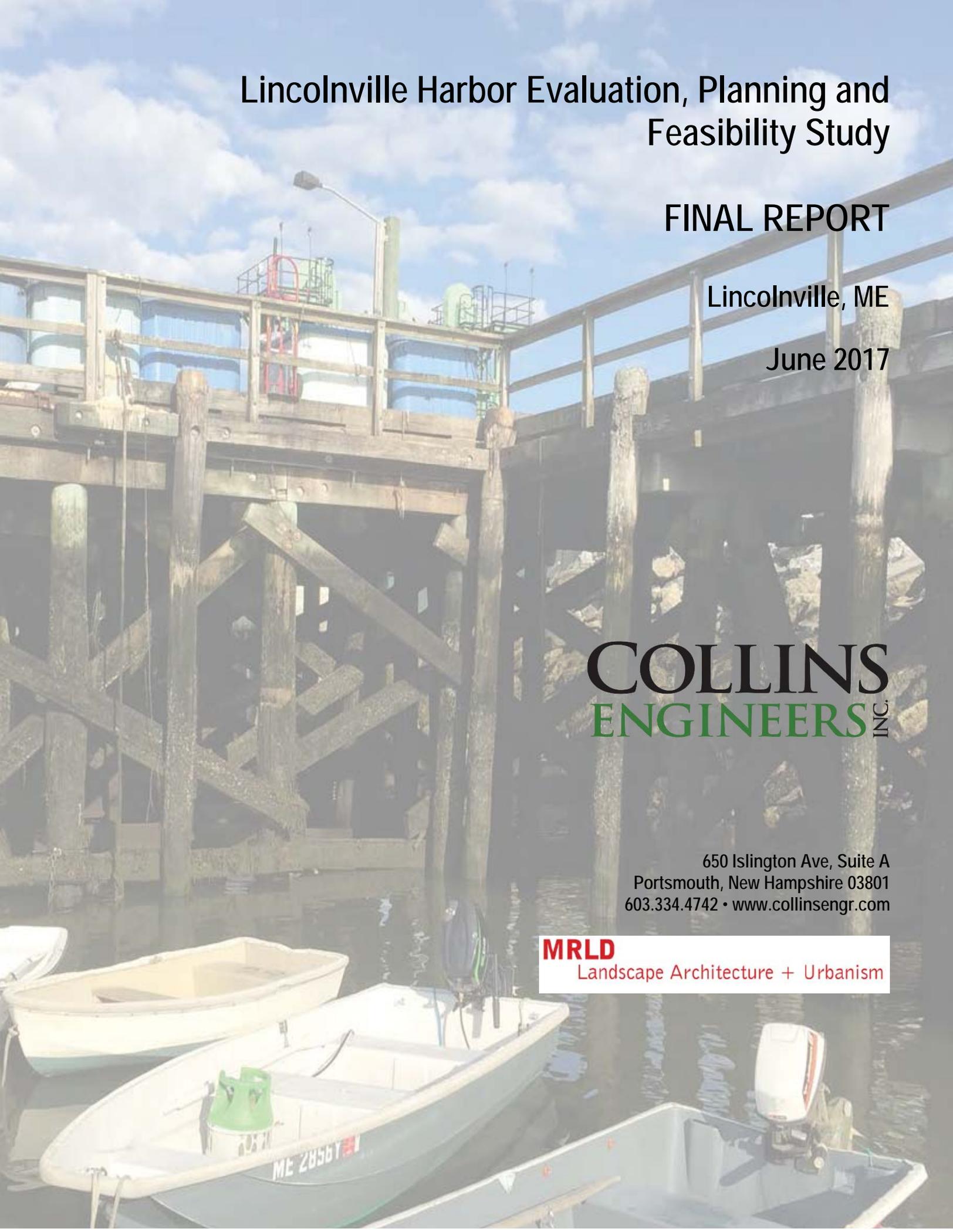
June 2017

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This report was prepared for the Town of Lincolnville under award from the Maine Coastal Program, Maine Department of Agriculture, Conservation and Forestry. The statements, findings, conclusions and recommendations are those of the author(s) and do not necessarily reflect the views of the Maine Coastal Program, the Maine Department of Agriculture, Conservation and Forestry or the State of Maine.



## PREFACE

The Lincolnville Harbor Evaluation, Planning and Feasibility Study is the result of a collaborative effort between the consultants and the Lincolnville community. Input was received from the public at four well attended public meetings. Small group and individual meetings / interviews were held with the Lincolnville Harbor Committee, representatives from the local commercial fishermen, representatives from Islesboro Board of Selectmen and business owners, visiting recreational and commercial boaters, and Lincolnville business owners and residents.

## ACKNOWLEDGEMENTS

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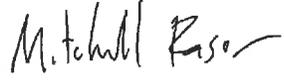
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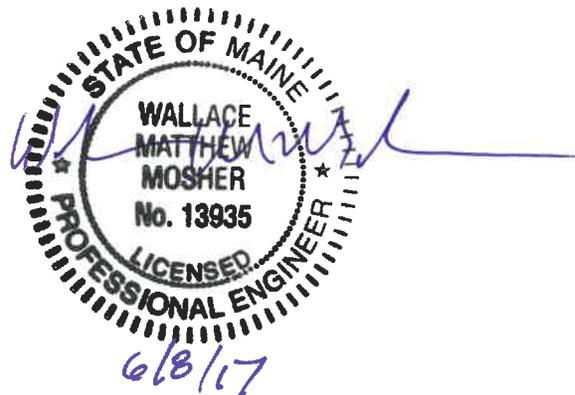
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## Introduction

Lincolnville is a coastal community located in Waldo County with a population of approximately 2,200 residents. The Town is located on the West side of Penobscot Bay and has approximately 3.75 miles of coastline. The Town is predominantly known for its sandy beaches, lakes, mountains, small downtown area, and the State ferry terminal servicing Islesboro, located approximately 3 miles due East across West Penobscot Bay.

While Lincolnville Beach, the open views to Islesboro, the Ferry Terminal, Route One and the public parking, as well as the Fish Pier provide the appearance of an active harbor with optimal access and landside support, the Town has for many years faced issues regarding equitable access for commercial, recreational, and transient users of the harbor and facilities. This is not a situation unique to Lincolnville. All waterfront facilities require careful calibration to maximize the efficiency between different users, while remaining resilient in light of ever changing environmental, economic, and management issues. The “pier pressure” often associated with the public interface between the land and the sea is a complex dynamic representing real and perceived barriers to the expansive commercial and recreational resources of Maine’s coastal waters.

## Background and Scope

The purpose of this Report is to work with the community to identify the most efficient and effective use of all harbor facilities (existing and proposed) in order to optimize the harbor facilities in a fiscally, programmatically, and environmentally sound manner. Town facilities and issues reviewed and considered in the Report include (but are not limited to):

- Mooring Field
- Fish Pier
- Floats and Gangways
- Wave Screen(s)
- Wave Break
- Parking
- Launching Ramp
- Dinghy Storage
- Hoists
- Guest Moorings
- Redesign of sewer pump station
- Policies
- Management
- Maintenance Costs
- Revenue / Economic Impact Analysis
- Relationship with Islesboro

To address these issues and develop an informed and inspired plan for Lincolnville, the following Tasks are addressed in this Report:

1. Review existing harbor facilities, operations, finances, policies/procedures, and planning documents. Interview key stakeholders including, but not limited to the Harbor Committee, Selectman, harbor users, and ferry service to understand current and future needs.
2. Compile a list of needed harbor and upland infrastructure improvements.
3. Develop a plan and conceptual design options for the harbor facility in order to maximize efficiency and utilization by all concerned parties.



4. Conduct an economic analysis of the existing harbor, from which estimates will be made for anticipated maintenance, operations, and replacement or redesign of facilities. In addition, project future revenues to determine the long-term viability of the harbor and whether any future financial subsidy will be required for ongoing operations and/or maintenance/replacement costs.
5. Develop a maintenance schedule for the infrastructure.
6. Present findings to the Lincolnville Board of Selectman, the Harbor Committee, and the public.
7. Prepare a final report with findings and recommendations to include input from Town Staff, the Harbor Committee, and the Board of Selectman.

## Review of Findings from Public Outreach, Research, & Ordinance Review

The consultant team held a series of public outreach meetings and private interviews with Lincolnville and Islesboro Selectmen, the Lincolnville Harbor Committee, Harbormasters from Lincolnville, Islesboro and neighboring communities, commercial and recreational users of Lincolnville Harbor, representatives from the Lincolnville business community, and concerned citizens. The team also performed a thorough review of existing ordinances, policies, procedures, finances, past engineering studies, and historical documents.

The following summarizes the salient issues and challenges that became evident during the course of the research phase:

### Findings: Operations and Management

1. Management of the facilities could be more user-friendly to recreational boaters.
2. The pier and floats are owned and primarily maintained by Lincolnville, but in terms of use, Islesboro relies heavily on the pier for commercial (water taxi, crew boats, material deliveries), recreational, and emergency services related activities. Islesboro traffic accounts for at least 50% of current activity according to interviews and observations. This statistic should be considered for future fiscal planning, harbor management, maintenance, and inter-community relations, particularly when the current Agreement with the State expires in 2021.
3. There is consensus amongst Lincolnville residents and recreational users that Lincolnville is not a “welcoming” harbor, and that improved waterfront access for visiting recreational and transient boaters would be a benefit to the community.
4. The harbor facilities are not financially self-sustaining as compared to other harbors such as Belfast and Camden. User fees and other possible sources of revenue do not cover operating and maintenance costs. Most of the cost of operating the facilities is covered by appropriations and warrant items. In summary, the facilities are currently Lincolnville tax dollars at work. It was recognized by most that maintaining the working waterfront is critical, but moving forward, how can the community better fund the underutilized facilities.
5. There is general agreement amongst Lincolnville commercial fishermen and Islesboro commercial users that the current physical layout and operations and management of the pier suits their needs. There is a good working relationship amongst the commercial users whereby activities at the pier are coordinated to minimize conflicts.



6. Alternatively, while there is near unanimous agreement amongst residents that the Town should not impede the use of the harbor by the commercial fishermen, there is a general feeling in the community that the management and operations at the pier limit its availability to residents and visitors alike.
7. There are apparent management issues of the harbor and facility that, on one hand are “proportional” to the current capacity of the harbor and upland support, but inflexible in terms of looking for solutions to maximize and expand the use of the facilities (pier, floats, and harbor) for all users. It is difficult to compare one harbor to another, for example, Belfast with Lincolnville. Belfast has 348 moorings, approximately 30 slips, a full-tide boat ramp, and other utilizations for revenue. Belfast provides the similar accommodations of a private marina, including showers. Besides long-term maintenance and improvement projects requiring City appropriations, Belfast is self-sustaining.
8. In speaking with the Belfast Harbormaster, a full-time City job, it was made clear that the Belfast facilities are on par with the services of a private marina, however it is a public, not-for profit enterprise that generates profits. This is a point of comparison with the Lincolnville facilities based on community feedback, analysis of use, and review of ordinances. The Lincolnville facilities, while proportionally smaller in use and revenues than Belfast, in many ways is considered as operated as a private facility due to the emphasis on commercial fisheries. Every community is different and every harbor has unique characteristics, but when oversight of the facilities has potentially real and perceived conflicts of interest in the use and management – supported by embedded policies, ordinances, and financial arrangements – there is the distinct opportunity for concerns to arise regarding transparency, accountability, and equity.
9. Recreational moorings account for approximately 48% of the annual user fees, however, in numerous site visits and aerial survey reviews there were never more than approximately ten active recreational moorings in the harbor. Is this due to exposure, lack of parking, lack of dinghy space, or harbor management? The discrepancy between registered moorings and active use of moorings is most likely due a combination of the above factors.

### Findings: Physical Infrastructure

1. Lincolnville is not a natural harbor; shallow water and high exposure to prevailing wind driven waves limits opportunities for dramatically expanding use.
2. Lack of available parking and dinghy storage are limits of the waterfront.
3. The Pier is overdesigned for the current uses and capacity of the harbor, creating short-term and long-term maintenance issues. This is one of the unique conditions found in Lincolnville; a robust facility serving only 5-7 lobster boats, a few recreational boats, and transient commercial, recreational, and emergency services for Islesboro.
4. Available float space for transient use and dinghy tie up is below current demand.
5. Lack of available parking near the pier was consistently near the top of the list of issues amongst all user groups.
6. Maintenance of the floats has historically been poor and underfunded and is seen as unsafe and a hindrance to recreational and commercial use.

7. The Pier is a vital link for emergency service access to and from Islesboro, the narrow width of the gangways and presence of trap chutes are an obstacle to efficient transport of patients and equipment during emergency situations.
8. The boat ramp is only usable within an hour or two of high tide and the shallow grade makes launching and hauling difficult at best. The lack of trailer parking in the vicinity of the ramp is a further hindrance to public use.
9. A recent structural engineering survey of the pier indicated several areas in need of repairs including handrails, ladders, curbs and select areas of the deck.
10. The levels of sediment in the vicinity of the pier, ramp and mooring areas fluctuate with the seasons but in general, the harbor has reportedly been filling in over the years, with the rate of siltation reportedly increasing since the re-construction of the State Ferry Terminal in 1990.
11. The current generated while a ferry is docked at the adjacent terminal presents a hazard for boaters utilizing the outer floats and poses a serious danger should someone fall into the water in the vicinity of the ferry pen.
12. There is a lack of handicap accessibility to the beach.

The planning team performed a detailed review of harbor facilities, polices, regulations, procedures, users, and finances, a summary of which is included in Appendix A.

## Summary of Harbor Facilities and Conditions

Lincolnville Harbor is located on the west side of Penobscot Bay between Camden and Northport. It is the closest harbor to Islesboro and is home to the Lincolnville Ferry Terminal with year-round service to Islesboro. Figure 1 shows an aerial view of the Harbor and indicating the primary features. A detailed review of the harbor facilities with a review of the condition of the individual components with recommended repairs, cost estimates, and associated maintenance plan can be found in Appendix B. The following is a brief overview of the facilities, highlighting the features and conditions that are relevant to the findings and recommendations in this report.



Figure 1 – Lincolnville Harbor

1. Lincolnville Beach
  - a. A public beach with adjacent parking, shopping, restaurants, and town amenities
2. Public boat ramp
  - a. Small boat access at mid to high tides only. Shallow grade of ramp prevents efficient launching and hauling. Limited available trailer parking near the ramp. Ramp is primarily utilized by residents for small boat launching, and occasionally used for barge landing for delivering heavy equipment and materials to the islands.
3. Fish Pier
  - a. Built in 1991 with a combination of public and private funds, the timber pier was constructed to commercial standards and provides the primary access to the water for Lincolnville residents and commercial fisherman. The pier also accommodates water taxis, emergency services and commercial transport to and from Islesboro, serves as a



- public landing with temporary tie-up on three timber floats, provides dinghy storage for access to the mooring field, and serves the commercial fishing fleet with bait storage and two davit hoists. The existing submerged lands lease for the pier can be extended indefinitely unless there is a change in use, at which point a review by the state may be triggered.
- b. Near term recommended repairs to the pier include: replacement of all floats within 3 years, minor repairs to curbs, rails and ladders, and selective deck repairs. Within 5 years, it is expected that additional minor repairs to select substructure elements will be required.
4. Mooring field (Inner Harbor and Outer Harbor)
    - a. The Lincolnville mooring field is comprised of the Inner and Outer Harbors defined as follows:
      - i. The Inner Harbor is defined as the harbor area west of a line drawn from the northern turning dolphin on the ferry dock to the shoreline due north. The area is essentially situated in the lee of the wavescreen.
      - ii. The Outer Harbor is defined as the area (excluding the Inner Harbor) from a line starting at Frohock Point, due east to the G "7" Bell, then north to the Lincolnville/Northport border.
    - b. There are a total of 57 mooring holders, including 3 guest moorings. This includes 27 inner harbor, 20 outer harbor, and 10 littoral. Only moorings located in the Inner Harbor have tender privileges.
  5. Lincolnville Ferry Terminal
    - a. Reconstructed in 1990 to its current configuration, the ferry terminal is owned, operated, and maintained by MaineDOT. The State maintains a 150 foot radius around its operations for safety, thereby limiting options for placement of floats and moorings.
  6. Wave Screen
    - a. The wave screen is constructed within the Ferry Terminal pier and provides protection to the main pier and Inner Harbor from southerly wind generated waves. Recent repairs to the wave screen were completed in 2010 and 2015.

## Review of Historic Finances

One of the purposes of this Report is to review historic and recent trends in financing the harbor facilities in order to identify funding gaps and potential opportunities for closing or balancing these gaps. As noted above, the facilities do not generate enough revenues to cover operating expenses and maintenance through user fees and grants. Communities such as Rockland, Camden, and Belfast have active harbors with extensive mooring fields, windjammers, and other sources of revenue. Smaller harbors such as Northeast Harbor or Islesboro are cruising destinations and are therefore economic drivers. In the case of Belfast, the range and number of users has historically improved grant opportunities for the community.

In summary, the operation and maintenance of the harbor facilities are funded through the following mechanisms:



1. Yearly appropriations as part of the Public Works budget
2. Harbor fees/donations (clarification is needed whether funds from Islesboro are considered a donation)
3. Capital Improvement Funds (specific warrant items on the Town budget)
4. Grant money (for either improvements or planning purposes)

The Town maintains a running balance in a Harbor Savings account that is managed like a mutual fund. Information on the performance of this account is not part of this Report.

As noted in Figure 2, a summary of these accounts for fiscal years 2008-2009 through 2015-2016, the interplay between these different funding mechanisms varies from year to year. There have been comments that the facilities cost the community \$60,000.00 a year in tax dollars to operate. In the 2015-2016 fiscal year \$20,100.00 was appropriated for general operations and \$30,000.00 was earmarked through a CIP warrant item, for a total of \$50,100.00. This amount was offset by \$14,093.00 in fees and donations, but any cost savings is not returned to the general fund, but carried over in the Harbor Savings fund.

Operating and maintaining the harbor facilities is expensive, particularly in light of the relative limited use the entire community directly benefits from the facilities. But direct benefit may not be the point, as consensus from stakeholder outreach is that the facilities are a benefit and maintaining the working waterfront economy is a priority, but not at the expense of limiting other users, revenues, or maintaining a harbor management system that many believe is arranged to best serve a few, particularly commercial users.

See the Appendix A for a more detailed review of historic finances.

Fiscal Year	Appropriation	General Operations Expended	Balance to Harbor Savings	Fees/Donations to Harbor Savings	Capital Improvement Funds	Grant Money	Harbor Savings Balance @ June 30
2008-2009	\$ 29,349.00	\$ 27,949.04	\$ 1,399.06	\$ 10,400.00		\$ 14,962.50	\$ 91,186.04
2009-2010	\$ 23,899.00	\$ 20,219.51	\$ 3,679.49	\$ 11,157.50	\$ 10,000.00		\$ 112,710.55
2010-2011	\$ 17,399.00	\$ 17,008.40	\$ 390.60	\$ 7,555.00	\$ 10,000.00	\$ 78,351.81	\$ 44,121.42
2011-2012	\$ 20,637.00	\$ 20,637.00		\$ 8,785.00			\$ 52,819.13
2012-2013	\$ 20,573.00	\$ 17,716.46	\$ 2,856.54	\$ 8,945.00			\$ 54,727.08
2013-2014	\$ 23,453.00	\$ 13,903.00	\$ 9,550.00	\$ 11,488.50	\$ 12,500.00		\$ 70,660.95
2014-2015	\$ 23,525.00	\$ 11,333.41	\$ 12,191.59	\$ 10,713.50	\$ 30,000.00		\$ 93,881.08
2015-2016	\$ 20,100.00	\$ 18,983.28		\$ 14,093.00	\$ 30,000.00		

Figure 2 - Fiscal Year Harbor Facility Funding Summaries, Source: Town of Lincolnville



## Harbor Plan – Recommendations and Alternatives

Recommendations and alternatives provided herein are divided into 1) Physical Infrastructure, and 2) Harbor Operations and Management. Where recommendations or alternatives incur costs, estimates are provided with proposed timelines.

### Harbor Plan – Physical Infrastructure

#### Parking

There are six spaces in the Maine State Ferry lot and approximately eight spaces by the boat ramp designated for 32 mooring holders. Inner Harbor mooring permit holders are issued a parking pass/placard to hang in their vehicle. These spaces are on a first come first serve basis, thus in general, commercial users typically secure a parking space for the day, leaving no parking spaces for recreational users. As noted on Figure 3, there are three opportunities to expand parking for the harbor facilities:

1. 18 +/- spaces could be located along the southeastern edge of the Maine State Ferry parking lot by expanding the paving to the east.
2. 8 +/- spaces (trailer and non-trailer) can be located on top of the proposed buried sewer infrastructure to the north of the existing boat ramp.
3. 8 +/- spaces are available at the Lincolnville Improvement Association School House Museum, which is approximately 1,300 feet from the harbor facilities.

There are not many parking ordinances with mooring fields noted as a “use” requiring designated parking, but one community with a smaller harbor requires one space for every three moorings. In considering existing and potential parking capacity totaling 48 spaces, this results in a potential inner and outer harbor with 144 moorings. Realistically, this ratio could be increased to five spaces per mooring, allowing for 240 moorings. However, it is questionable whether the mooring field actually has the capacity or is attractive enough to 240 mooring holders. But the potential to release any pent-up demand on the harbor facilities due to current parking limitations appears to be an issue that can be addressed in a realistic manner through negotiations with the Ferry, Sewer District, and LIA.

To better allocate parking in order to protect the working waterfront while promoting more recreational users, commercial parking spaces should be specifically designated. At a minimum, seven spaces should be designated for commercial use, aligning with the seven local commercial mooring holders. This number can be revisited in the future depending on the actual use of the remaining spaces.

However, there are many moving parts when considering facility capacity. Just because the number of parking spaces may increase, there is still the matter of:

- Dinghy capacity
- Mooring field layout
- The willingness of users to keep a boat in the outer harbor, a long row from shore and exposed to the elements

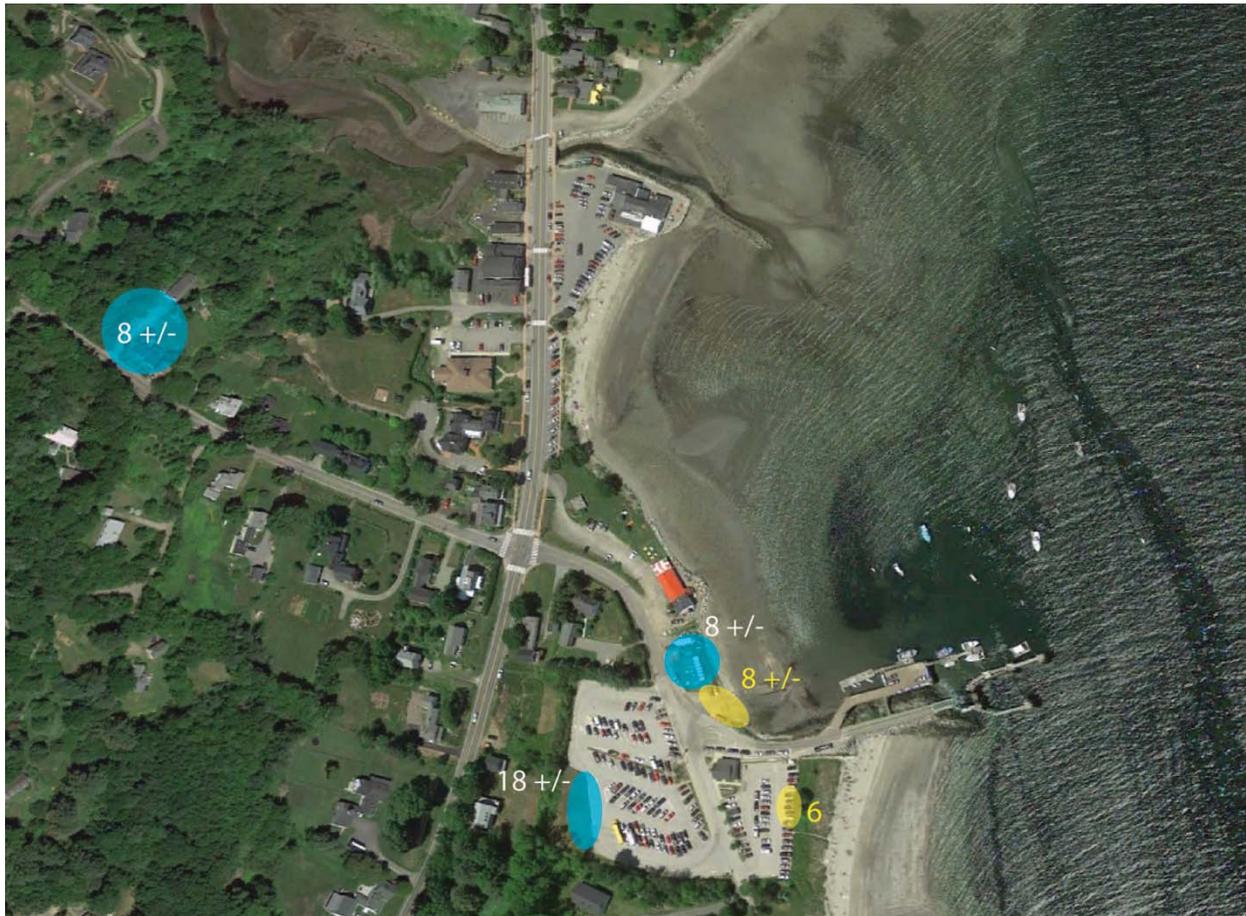


Figure 3: Location of Existing Potential Parking Serving the Harbor Facilities

### Moorings

The latest information provided by the Town noted 57 mooring holders. This included 27 in the inner harbor; 20 in the outer harbor; and 10 littoral. As noted before, there is an apparent discrepancy between mooring holders and active moorings. This is most likely due to a lack of parking and dinghy space as well as the exposure of the harbor. The harbor is actively used by approximately seven lobstermen. During site visits and based on input from the public and stakeholders, there are between 4-10 active recreational users. It has been noted that there are as many as 20 dinghies and skiffs tied to the float, which might be a better indicator of the actual number of active users of moorings.

During the course of the study, input was received from numerous sources that if there were more dinghy spaces, more recreational users would actively use the harbor. Currently the needs of the commercial use are met in terms of moorings, parking, dinghy space, bait boxes, hoists, and other infrastructure. Recreational users do not have an advocate to provide access to paid moorings. Parking is on a first-come first served basis, commercial fisherman arriving early in the morning typically utilize the available spaces. As the current Pier Agreement expires in 2021, the Town now has to make decisions on how to best move forward in terms of accommodating different types of users, providing



the required infrastructure, and establish policies / ordinances to support the equitable distribution and access to moorings.

It is recommended that that Town adopt a one mooring, one person/entity policy for recreational and commercial users. Multi-use moorings and the rental of moorings should not be allowed given the limitations of the Inner Harbor. The allowance in the Harbor Ordinance Article XI, Transitional Provisions for certain "...individuals, corporations or entities with single or multiple mooring sites at the time of enactment of this ordinance shall retain the right to renew all sites so long as permits remain valid and all fees are paid. The four mooring areas in the inner harbor which have been used as rental mooring sites on or before January 1, 2004 shall be allowed to remain as rental mooring areas..." should not be allowed.

The 2005 Report of the Harbor Study Committee was inconclusive on the legality of renting moorings, noting that the issue was under review by the Town Attorney with conflicting findings from the Harbor Master and Committee research. Included in the Appendix of the 2005 Study is Title 38, Chapter 1, Subchapter 1: Harbor Masters. Section 3 Mooring Sites of this Title notes, "unless permitted by an Ordinance adopted under section 3-A Mooring Transference by Ordinance, mooring assignments may not be transferred. Assignments may not be rented unless the provision for rental was part of the agreement when the mooring was assigned." It is recommended to research if rental privileges were a condition of the original rental assignment for the four inner harbor moorings. Section 3-A notes, "a municipality may adopt an ordinance that allows the transference of a mooring assignment used for commercial fishing purposes." Section 3-A continues to note that transference of a mooring may only be to "family" and maintained for "commercial fishing purposes."

Also, included in the Appendix of the Study is a letter from Tony and Whitney Opperdorff, Lincolnville residents with property on 700-Acre Island. It is noted that in 2005, they paid the Harbor Master \$500.00 to rent a mooring, \$150.00 to the State for a seasonal parking ticket, and an annual fee to the Town to be on the waitlist for a mooring (an additional fee was waived for parking in the Town lot as the Harbor Master waives fees for renters of his moorings). The Opperdorfs asked the Committee in the letter to consider that a good mooring should be made available at less than \$500.00. A 2016 Resident Non-Commercial Mooring Permit cost \$60.00.

It is understood that the number of outer harbor mooring has been increased recently to the point where there is no longer a waiting list. This in part has relieved pressure on the wait list, but this policy decision has also added to the perception of access for all, when in reality the facilities are a limiting factors for access.

If Phase 2 – Recommended Harbor Improvements, as outlined below, are implemented, it is possible that the demand for additional outer harbor moorings will increase. Due to the exposed nature of the outer (and to a lesser extent, inner) harbor moorings, it is recommended that the all mooring permit holders must be made aware of the risks and responsibilities associated with mooring their boat in such an exposed location. With that understanding, there is no reason the outer mooring field could not be expanded as needed to meet demand.



Due to the exposed location of the mooring fields, it is recommended that the Harbor Ordinance be modified to include minimum standards, identifying minimum mooring gear and tackle based on the size vessel the mooring is permitted for. The current Harbor Ordinance requires annual inspection “by one with the required expertise, approved by the Harbormaster”. It is recommended that the inspection report be made a requirement as part of the renewal process.

Additionally, it is recommended that all mooring balls be consistent in appearance and have the owner’s name and registration number clearly affixed.

See the ‘Management and Operations – Alternatives’, ‘Harbormaster’ section for additional recommendations regarding the management of mooring.

### Recommended Phase 1 Repairs

Based on review of available reports, discussions with users, and experience with similar vintage and constructed facilities, the following repairs are recommended to ensure that the Fish Pier and accompanying floats is maintained to satisfactory condition. It is recommended the Town program to complete the repairs within the next 5 years. Figure 4 outlines the recommended Phase 1 Repairs.

#### Phase 1 Repairs

Phase 1 repairs are programmed from 2017 through 2023 and are considered required repairs to maintain the safe operational capabilities of the main pier and five floating docks. Repairs are consistent with those presented in the November 2016, *Existing Conditions Findings, Repair Recommendations, and Maintenance Plan*, and include recommended Immediate, Near Term and Deferrable Repairs. In general, these repairs are required to avoid operational restrictions and to restore safety-related structures to as-built capacity.

#### Safety Repairs

Immediate repairs recommended for 2017 include access ladder replacement and partial handrail replacement detailed in the 2016 Pinnacle Hill inspection report.

#### Near Term Repairs

Near Term Repairs recommended through 2019 include partial main pier deck and curb replacement, and prioritized float replacement based on severity of deterioration:

1. The Pinnacle Hill report indicates moderate deterioration of the 4x10 timber decking with wear likely attributable to abrasion from turning vehicles and snow plows. The report recommends replacing all decking with a thickness less than 2 ¾” (or greater than ¾” wear). It is estimated that approximately 25% of the deck meets this criteria. It is understood the Town performed a survey of the deck and mapped out the deficient areas. Replacement of select deck boards is recommended, however consideration should be made to minimize the impact of mixing new boards with old ones and the impact it will have on plowing activities.
2. All five floats are recommended for replacement by the end of 2019. Several alternatives to timber floats were investigated, with the final preferred alternative to replace the floats in-kind. Steel pontoon and precast concrete are excellent heavy duty floats, however they have a high initial cost, are more difficult to haul and repair, and would require more substantial moorings

to anchor them in this exposed location. The continued use of mooring blocks and chains is recommended for durability during storm conditions. Separation of the two outer floats is good practice in this environment to reduce the likelihood of damage during storm conditions.

*Deferrable Repairs*

Deferrable repairs recommended through 2023 include discrete main pier fender pile replacement, and main pier timber bracing/pile cap bolted connection and hardware replacement.

Table 1: Phase 1 Repair Costs and Timeline

<b>PHASE I - Near Term Repairs</b>		
<b>Item</b>	<b>Year</b>	<b>Est. Cost*</b>
1. Immediate Repairs & Near Term Repairs	2017	\$ 8,000
2. Select repairs to deteriorated decking (est. 25%)	2017	\$ 15,000
3. Replace 5 floats (prioritize & program 1-2 floats/yr @ \$21k/float)	2017	\$ 35,000
	2018	\$ 35,000
	2019	\$ 35,000
4. Deferrable Pier Repairs	2023	\$ 35,000
	<b>SUM =</b>	<b>\$ 163,000</b>

\* Cost estimate in 2017 dollars, includes engineering, permitting, contractor mob/demob, OH&P

# Phase 1



## SITE PLAN

SCALE: 1"=50'



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LINCOLNVILLE HARBOR PLANNING		REV. NO.	DATE	REVISIONS DESCRIPTION
TOWN OF LINCOLNVILLE LINCOLNVILLE HARBOR PLANNING LINCOLNVILLE, ME		1		
		2		
		3		
		4		
		5		
		6		
		7		
				REVISIONS
				2017

designed by: \_\_\_\_\_ x  
 checked by: \_\_\_\_\_ x  
 approved by: D.O'CONNOR  
 QA/QC by: \_\_\_\_\_  
 project no.: 15-xxxx.16  
 drawing no.: \_\_\_\_\_  
 date: January 26, 2017



## Recommended Phase 2 Harbor Improvements

Recommended Phase 2 Harbor Improvements are programmed from 2018 through 2019 and include relatively low cost, and high impact improvements with the aim of providing increased access, increased facility functionality, and recommended maintenance measures that will extend the useful service life of the gangways and floating docks. Figure 5 outlines the recommended Phase 2 Harbor Improvements.

### Dredging

Dredging in the areas surrounding the main pier and dinghy floats is recommended to increase available draft depth for commercial and recreational vessels and to enable the addition of one dinghy float.

The clean, coarse sand bottom in Lincolnville Harbor indicates that the dredge materials may be suitable for offshore disposal or beneficial re-use. To support the dredge design, and to refine quantities and costs, a hydrographic survey of the harbor must be performed. The survey will support the design and permitting process which will define the dredge areas, depths, and disposal options, procure the necessary permits, and develop a set of design documents for competitive bidding to area contractors.

It is recommended to dredge the eastern end of the pier and floats to a depth of 6 ft and the inshore areas around the dinghy floats to 3 ft and up to the Mean Lower Low Waterline (MLLW). In the absence of current hydrographic data, total dredge quantity is assumed to be 1,300 cubic yards (CY) for cost estimating purposes. The Town should anticipate the need for periodic maintenance dredging, the frequency of which is dependent on the rate of siltation (unknown) but is estimated to be between 3 and 10 years. The dredge permit will provide provisions for maintenance dredging, however the Town will be responsible for procuring a contractor to perform the work. Often significant savings can be realized by being flexible with the dredge schedule and working with nearby towns and a contractor to dredge multiple sites in the region at one time. This allows the cost of mobilization and monitoring (for small projects, often as expensive as the actual dredging) to be shared.

### Mooring Plan

In conjunction with the hydrographic survey to support the dredge study, it is recommended to incorporate a survey of the mooring fields with DGPS location of all existing moorings, floats, and navigation areas. Once this information is obtained, a mooring reorganization plan can be developed to optimize mooring layout and quantities in the inner and outer harbors.

### Additional Dinghy Float & Shared Dinghies

The proposed dredge area will enable the Town to install an additional dinghy float to help fulfill the demand for more storage space. It is also recommended the Town provide up to five “shared” dinghies. It is expected that shared dinghy’s will reduce the number of individual dinghy’s required for mooring access and subsequently increase useable dock space.

### Gangway Hoists

Gangway hoists are recommended to reduce damage sometimes resulting from moderate or extreme weather events. These hoists can be found at exposed waterfront structures and are used to elevate the landing portion of the gangway so that the gangway is neither damaged by, or damages, the floating dock it services. The hoists can be manually operated by one person and generally require additional

piles to secure the hoist and to enable operation. The significant advantage of a gangway hoist is it mitigates the possibility of severe damage that might otherwise require operational restrictions and subsequent limited use.

### General Accessibility Improvements

Finally, it is recommended to provide accessibility improvements including ramps to the beach and appropriate signage, to increase safe beach access for overall public use and enjoyment.

Table 2: Phase 2 Costs and Timeline

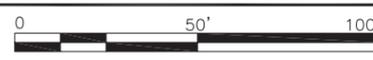
PHASE 2 - Near Term Harbor Improvements		
Item	Year	Est. Cost*
1. Studies		
1a. Hydrographic survey, mooring plan	2018	\$ 9,000
2a. Dredge feasibility study and permitting	2018	\$ 10,000
2. Dredge area around floats to 3 ft at dinghy floats & 6 ft at outer floats (est. 1300 CY).	2019	\$ 55,000
3. Additional dinghy float	2019	\$ 20,000
4. Install gangway hoists (3 total)	2019	\$ 15,000
5. Shared dinghies (5 total)	2018	\$ 5,000
6. General beach accessibility improvements	2019	\$ 13,000
	<b>SUM =</b>	<b>\$ 127,000</b>
* Cost estimate in 2017 dollars, includes engineering, permitting, contractor mob/demob, OH&P		

# Phase 2



## SITE PLAN

SCALE: 1"=50'



650 Islington Street, Suite 1  
 Portsmouth, NH 03801  
 Tel: (603) 334-4745  
 Fax: (603) 334-4745  
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LINCOLNVILLE HARBOR PLANNING  
 TOWN OF LINCOLNVILLE  
 LINCOLNVILLE HARBOR PLANNING  
 LINCOLNVILLE, ME

2017  
 REVISIONS

designed by: \_\_\_\_\_ x  
 checked by: \_\_\_\_\_ x  
 approved by: D.O'CONNOR  
 QA/QC by: \_\_\_\_\_  
 project no.: 15-xxxx.16  
 drawing no.: \_\_\_\_\_  
 date: January 26, 2017



Phases I & II - 20 Year Cost Forecast

It is anticipated that general annual maintenance and management costs associated with the pier and floating dock areas will be approximately \$30,000 per year. This figure includes any town personnel salaries associated with the harbor, the current maintenance of the harbor from the Public Works budget and additional funds that will be required for maintenance of the Phase I and II installations. This maintenance forecast also includes a major structural rehabilitation of the pier in 2027 estimated at \$240,000. Other major costs include floating dock replacement approximated at \$21,000 per float every 10 years as well as maintenance dredging around the pier and floating docks every 5 years approximated at \$55,000.

Table 3: Phases 1 & 2, 20 Year Cost Forecast

20 Year Cost Forecasting Table - Fixed Costs and Recommended Phased Improvements																						
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036		
<b>General annual maintenance and management cost</b>	\$30k	\$30k	\$30k	\$30k	\$30k	\$30k	\$30k	\$30k	\$30k	\$30k	\$30k	\$35k										
<b>General waterfront structural rehabilitation</b>											\$240k											
<b>Maintenance dredging (assumed 5 year interval)</b>								\$55k					\$55k					\$55k				
<b>PHASE I - Near Term Repairs</b>																						
1. Immediate Repairs & Near Term Repairs		\$8k																				
2. Select repairs to deteriorated decking (est. 25%)		\$15k																				
3. Replace 5 floats (prioritize & program 1-2 floats/y)	\$35k	\$35k	\$35k											\$35k	\$35k	\$35k						
4. Deferrable Pier Repairs							\$35k															
<b>PHASE 2 - Near Term Harbor Improvements</b>																						
1. Studies																						
1a. Hydrographic survey, mooring plan		\$9k																				
2a. Dredge feasibility study and permitting		\$10k																				
2. Dredge area around floats (est. 1300 CY).			\$55k																			
3. Additional dinghy float			\$20k																			
4. Install gangway hoists (3 total)			\$15k																			
5. Shared dinghies (5 total)		\$5k																				
6. General beach accessibility improvements		\$13k																				
<b>ESTIMATED ANNUAL EXPENDITURE =</b>	<b>\$88k</b>	<b>\$89k</b>	<b>\$168k</b>	<b>\$30k</b>	<b>\$30k</b>	<b>\$30k</b>	<b>\$65k</b>	<b>\$85k</b>	<b>\$30k</b>	<b>\$30k</b>	<b>\$270k</b>	<b>\$35k</b>	<b>\$90k</b>	<b>\$70k</b>	<b>\$70k</b>	<b>\$70k</b>	<b>\$35k</b>	<b>\$90k</b>	<b>\$35k</b>	<b>\$35k</b>		

\* Cost estimate in 2017 dollars, includes engineering, permitting, contractor mob/demob, OH&P & 25% concept contingency

### Physical Infrastructure – Alternatives

A range of alternatives for physical improvements to the Harbor were considered. The three alternatives presented below are designed to build upon the Phase 1 & 2 recommended repairs and improvements and are based on interviews and discussions with all user groups, consultation with Maine environmental regulatory agencies and marine contractors for constructability and cost. The goal of the improvements is to increase utility, durability, and accessibility of the Harbor for all users.

Several large scale alternatives such as breakwaters and large fixed or floating structures were considered but ultimately rejected due to exceedingly high costs and difficult environmental permitting.

#### Alternative 1 – Town Float for Recreational and Emergency Use

This alternative consists of the installation of a town floating dock and gangway projecting to the north from the existing pier. The proposed dredge area would encompass the float, providing 6 ft of water depth at low tide. The town float would be restricted to recreational and emergency use only and would be built with a gangway hoist, similar to the Phase 2 improvements to protect the new floating dock and gangway from damage during extreme weather events. This will allow for the existing floats to be used for dinghy storage, while keeping the town float free for temporary tie-up for recreational related activities and emergency use if needed. Figure 6 shows the recommendations as outlined in Alternative 1.

Table 4: Alternative 1 Costs and Timeline

<b>ALTERNATIVE I - Town float for recreational and emergency use</b>		
<b>Item</b>	<b>Year</b>	<b>Est. Cost*</b>
1. Gangway	2020	\$ 10,500
2. Gangway hoist	2020	\$ 5,000
3. Floating dock	2020	\$ 20,000
4. Seaflex mooring system	2020	\$ 5,000
	<b>SUM =</b>	<b>\$ 35,500</b>
* Cost estimate in 2017 dollars, includes engineering, permitting, contractor mob/demob, OH&P & 25% concept contingency		



Alternative I - 20 Year Cost Forecast

It is anticipated that the additional gangway and floating dock system would be installed in 2020 and that the additional structures would require on average approximately \$500 per year or \$1,000 every other year over the next 20 years. Routine maintenance would consist of replacing top of deck mooring hardware, decking and Seaflex mooring components on an as-needed basis.

Table 5: Alternative I, 20 Year Cost Forecast

ALTERNATIVE I - Town float for recreational and emergency use																						
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036		
1. Gangway				\$11k																		
2. Gangway hoist				\$5k																		
3. Floating dock				\$20k																		
4. Seaflex mooring system				\$5k																		
<b>Additional annual maintenance and management costs</b>						\$1k																
<b>ESTIMATED ANNUAL EXPENDITURE =</b>	-	-	-	\$41k	-	\$1k																

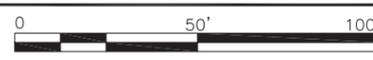
\* Cost estimate in 2017 dollars, includes engineering, permitting, contractor mob/demob, OH&P & 25% concept contingency

# Alternative 1



## SITE PLAN

SCALE: 1"=50'



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LINCOLNVILLE HARBOR PLANNING  
 TOWN OF LINCOLNVILLE  
 LINCOLNVILLE HARBOR PLANNING  
 LINCOLNVILLE, ME

REVISIONS

2017

designed by: \_\_\_\_\_ x  
 checked by: \_\_\_\_\_ x  
 approved by: D.O'CONNOR  
 QA/QC by: \_\_\_\_\_  
 project no.: 15-xxxx.16  
 drawing no.: \_\_\_\_\_  
 date: January 26, 2017



Alternative 2 – Boat ramp, ramp floats to main pier and upland improvements

Alternative 2 envisions upland improvements and a modern, pre-cast concrete boat ramp with accompanying floats, primarily dedicated to providing access for recreational users. Figure 7 shows the recommendations as outlined in Alternative 2.

The current boat ramp is functional only a few hours either side of high tide, at best. The grade is too shallow to permit efficient launching and hauling, and the ramp does not extend to low water, further limiting its utility. The optimal grade for a fully functioning ramp is between a 12% and 15% slope.

To achieve this, careful coordination will be required with the Lincolnville sewer district to accommodate needed higher ground elevations at the top of the ramp. It is further recommended that the Town work with the sewer district to plan for additional vehicle and trailer parking spaces. In the absence of available site topographic and hydrographic data, it is estimated that a re-configured boat ramp could provide ¾ tide access.

This concept envisions a series of floats constructed beside the ramp to assist in launching and hauling operations. The south side of the floats would also be suitable for dinghy storage. It is possible to connect the ramp float system to the inshore pier floats if an alternate pier access route is desirable.

Re-development at the top of the ramp, through coordination with the sewer district, provides the Town with a unique opportunity to provide additional parking and other amenities to add convenience and improve access for multiple users. Lincolnville Beach provides public amenities and the improved streetscape on Route One is an asset. This area should remain the focus for viewing the harbor and accessing the beach. Site amenities in the area of the improved boat ramp should be practical and support the harbor activities. Rather than focusing on decorative benches, lighting, or street trees, upland improvements should include kayak/dinghy/SUP racks, a wash down area, area lighting, and signage clearly marking designated spaces for recreational and commercial users. Because of the potential to better coordinate space and parking with the current sewer improvements, there is also the opportunity to designate a small support building that in the future could accommodate ticketing for schooners as well as be a visible location for a seasonal employee helping to manage transient users and provide information on local attractions.

Table 6: Alternative 2 Costs and Timeline

<b>ALTERNATIVE II - Boat ramp, ramp floats to main pier &amp; upland improvements</b>		
<b>Item</b>	<b>Year</b>	<b>Est. Cost*</b>
1. 3/4 tide precast concrete boat ramp	2020	\$ 150,000
2. Floats	2020	\$ 50,000
3. Sitework, paving, signage, lighting, utilities, park amenities	2020	\$ 100,000
		<b>SUM = \$ 300,000</b>
* Cost estimate in 2017 dollars, includes engineering, permitting, contractor mob/demob, OH&P & 25% concept contingency		

### Alternative 2 - 20 Year Cost Forecast

It is anticipated that the upland features, boat ramp and floats would be installed in 2020 and that the additional structures would require on average approximately \$10,000 every year over the next 20 years. Routine maintenance would consist of replacing decking and hardware for the floating docks on an as needed basis. This figure also includes additional funds for snow removal, trash removal, and park amenities upkeep. Boat ramps should also be cleaned of marine growth on an annual basis and sediment removal may be required on an as needed basis. It is estimated that the floats will need replacement every 10 years.

Table 7: Alternative 2, 20 Year Cost Forecast

ALTERNATIVE II - Boat ramp, ramp floats to main pier & upland improvements																					
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	
1. 3/4 tide precast concrete boat ramp				\$150k																	
2. Floats				\$50k																	
3. Sitework, paving, signage, lighting, utilities, park amenities				\$100k																	
<b>Additional annual maintenance and management costs</b>					\$5k	\$10k															
<b>Programmed replacement of floats, gangways, appurtenances</b>														\$50k							
<b>ESTIMATED ANNUAL EXPENDITURE =</b>	-	-	-	\$300k	\$5k	\$10k	\$60k	\$10k	\$10k	\$10k	\$10k	\$10k	\$10k								

\* Cost estimate in 2017 dollars, includes engineering, permitting, contractor mob/demob, OH&P & 25% concept contingency

# Alternative 2



## SITE PLAN

SCALE: 1"=50'



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LINCOLNVILLE HARBOR PLANNING	2017
TOWN OF LINCOLNVILLE	
LINCOLNVILLE HARBOR PLANNING	
LINCOLNVILLE, ME	

designed by: \_\_\_\_\_ x  
 checked by: \_\_\_\_\_ x  
 approved by: D.O'CONNOR  
 QA/QC by: \_\_\_\_\_  
 project no.: 15-xxxx.16  
 drawing no.: \_\_\_\_\_  
 date: January 26, 2017

REVISIONS



Alternative 3 – Pile supported wharf, boat ramp, ramp floats and upland improvements

Alternative 3 builds upon the concepts in Alternative 2 and envisions a pile supported wharf extending into the harbor to increase space for parking and public use while permitting construction of a full tide ramp with accompanying floats. Figure 8 shows the recommendations as outlines in alternative 3.

Pushing the head of the ramp further into the harbor, and landing within the proposed dredge area will allow it to be functional at all tides. The accompanying floats would be suitable for both dinghy storage and temporary tie-up for visiting vessels. Similar to Alternative 2, close coordination with the Lincolnville sewer district would be required to include needed improvements to the upland area in order to integrate with the wharf.

The proposed wharf would be constructed of precast concrete deck supported by timber piles and caps. The structure would be capable of H-20 (a 20 ton truck) loading and could accommodate offseason storage of floats on the deck.

The upland area would include dedicated trailer parking, walkways and benches, lighting, and a dock-house that can be utilized for a variety of uses such as an informational center, ramp attendant, ticket booth for charters, etc.

Table 8: Alternative 3 Costs and Timeline

<b>ALTERNATIVE III - Pile supported wharf, boat ramp, ramp floats, &amp; upland improvements</b>		
<b>Item</b>	<b>Year</b>	<b>Est. Cost*</b>
1. Wharf & ramp	2020	\$ 1,750,000
2. Upland improvements	2020	\$ 100,000
3. Floats	2020	\$ 50,000
4. Utilities	2020	\$ 10,000
		<b>SUM = \$ 1,910,000</b>
* Cost estimate in 2017 dollars, includes engineering, permitting, contractor mob/demob, OH&P & 25% concept contingency		



Alternative 3 - 20 Year Cost Forecast

It is anticipated that the upland features, wharf, ramp and floats would be installed in 2020 and that the additional structures would require on average approximately \$10,000 every year over the next 20 years. Similar to Alternative 2, routine maintenance would consist of replacing decking and hardware for the floating docks on an as needed basis. This figure also includes additional funds for snow removal, trash removal, and park amenities upkeep. Boat ramps should also be cleaned of marine growth on an annual basis and sediment removal may be required on an as needed basis. It is estimated that the floats will need replacement every 10 years.

Table 9: Alternative 3, 20 Year Cost Forecast

ALTERNATIVE III - Pile supported wharf, boat ramp, ramp floats, & upland improvements																						
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036		
1. Wharf & ramp				\$1750k																		
2. Upland improvements				\$100k																		
3. Floats				\$50k																		
4. Utilities				\$10k																		
<b>Additional annual maintenance and management costs</b>					\$10k																	
<b>Programmed replacement of floats, gangways, appurtenances</b>														\$50k								
<b>ESTIMATED ANNUAL EXPENDITURE =</b>	-	-	-	\$1910k	\$10k	\$60k	\$10k															

\* Cost estimate in 2017 dollars, includes engineering, permitting, contractor mob/demob, OH&P & 25% concept contingency

# Alternative 3



## SITE PLAN

SCALE: 1"=50'



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LINCOLNVILLE HARBOR PLANNING	2017
TOWN OF LINCOLNVILLE	
LINCOLNVILLE HARBOR PLANNING	
LINCOLNVILLE, ME	

designed by: \_\_\_\_\_ x  
 checked by: \_\_\_\_\_ x  
 approved by: D.O'CONNOR  
 QA/QC by: \_\_\_\_\_  
 project no.: 15-xxxx.16  
 drawing no.: \_\_\_\_\_  
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## Management and Operations – Alternatives

### Harbormaster

The Harbormaster balances the needs of commercial, recreational, and transient users as well as the limitations of the harbor and facilities, while best trying to meet the intent of the 1989 Fish Pier Contract, which states:

“Lincolnville agrees to provide all necessary maintenance to the basic public fish pier facility and to operate it in a safe and sanitary manner and to ensure that it is available on a fair and equitable basis to commercial fisherman allowing the public reasonable access to the facility. Lincolnville further covenants that any future agreement with public cooperatives, private fisheries companies, etc. for the use of the pier contain similar access language for the basic public pier described in this Agreement.”

Furthermore, the Harbormaster has to balance the management of the facilities and the 1989 Fish Pier Agreement with the nuances and details of the Harbor Ordinance, which states that the general purpose of the Harbor Ordinance is to:

“Maintain order, organization, and proper utilization of the Lincolnville Harbor area, watercraft launch area, the municipal Lincolnville Fish Pier, float system and other related harbor facilities, in a manner conducive to the best interest of the Town of Lincolnville and the boating public, to ensure commercial fisherman access and to establish the rules by which the Town of Lincolnville will assign mooring privileges.”

The expectation of equal public and commercial access is generated through policy, ordinances, and the mooring list does not align with parking, dinghy, and environmental limitations – in addition to the commercially oriented management of the facilities. In summary, the facilities, management, and policies, and ordinances have created a “public access bottleneck” that is a point of frustration for many members of the community.

Simply put, the specific needs of the seven active lobstermen are met through parking, dinghy space, moorings, bait boxes, a lobster raft, hoists, floats infrastructure as well as the general management of the facilities. Lincolnville currently operates a waterfront facility that primarily serves a few commercial fishermen in addition to passenger service between Islesboro and Lincolnville. The community wants more out the facility and has shown frustration at the inability to move forward with ideas to create more access. It was stated in more than one stakeholder interview that the facilities are operated to a certain degree like a private facility.

There is an argument that the current environmental conditions, limited designated parking, limited dinghy space, and the wording of the Fish Pier Agreement and other ordinance language results in a logically commercial-oriented use of a publicly funded facility. Some have argued that the working waterfront is being subsidized by the Town. And there is often confusion regarding the details of the use of facilities. As an example, the Harbor Ordinance notes in Section 6 Parking Privileges, that the six

spaces in the Ferry Terminal parking lot are “intended for commercial fisherman,” however in public forums and stakeholder interviews this specific language was not cited when discussing the designated parking spots. But perception of issues, not a close reading of ordinances and policies can often add to miscommunication between stakeholders, the Town, and elected officials. Because this is a Town facility, the 1989 Fish Pier Agreement has provisions for general public access, the Harbor Ordinance intent notes “the best interest of the Town of Lincolnville and the boating public,” and a mooring list is in place where only nine of the 57 mooring holders are designated as commercial, it is easy to see how the management of the harbor is complex in light of competing directives, public expectation for access, and the limited resources.

Because the current Harbormaster primarily makes a living through the commercial fishery and associated work, there is an inherent tension or possible conflict of interest in the management of the harbor for multiple users either perceived or real. In addition, the current Harbormaster is given special consideration by having more than one mooring for personal/business use. Other users are not grandfathered special rights.

The Harbormaster is also paid a small stipend from the annual appropriation for services. During the course of this report, it was also noted that the Harbormaster is paid to plow the pier and is provided additional compensation for work such as towing floats.

These arrangements might be the most practical way to handle maintenance for a facility that does not have a large revenue of stream and a community with limited staffing, but for many it reinforces the perception (and possibly the reality) that the facilities currently only meet the needs of a few commercial users and any changes to the management or funding of the facilities is considered a direct threat to the working waterfront, not a more equitable use of the facilities.

This Study recommends that the Town adopt a management structure where the existing or future harbormaster does not have a financial interest in the operation of the facilities. As the Pier Agreement terms end in 2021 and younger lobsterman are entering the workforce, now is the time for the Town to review policies and protocols regarding the management of the facilities in order to remove any perceived or real conflicts of interest between the duties of the Harbormaster and the use of the harbor facilities. In summary, as the Town moves forward with plans for maintaining and operating the facilities, a clear separation of management and use is required and the existing or future Harbormaster, if also a user of the facility, should not be provided non-salary financial benefits that are not afforded to all users.

#### Fee structure

Every community has different fee structures depending on the use of the harbor and management policies. In a summary review of fee structures in other communities, it appears that Lincolnville can increase commercial and recreational fees. There is no issue regarding undercutting the prices of private marinas. It would not be out of line to increase recreational mooring fees from \$60.00 to \$100.00 and commercial mooring fees from \$60.00 to \$200.00 (taking into account that commercial fisherman also pay bait box, hoist, and other fees). An increase in user fees is not the remedy for making the harbor

financially self-sustaining, but if use is increased as desired, this additional revenue will help offset maintenance and operating expenses.

It is recommended that the fee structures be carefully reviewed to maintain the viability of access for those who need or want a mooring and those that are not actively using a mooring and paying the annual fee because it is not a burden.

Furthermore, the fee of \$1,450.00 for Commercial and Passenger Boats should be reviewed for general compliance with other communities. This appears to be a fair fee and could potentially be increased without burden.

#### *Improved coordination with Islesboro – joint committee, shared Harbormaster?*

As shown on Figure 4, Islesboro has in effect a harbor that spans between the two towns. This concept diagram illustrates not only the positive relationship between the two communities, but the potential to improve relations in terms of communication, management, and financing models.

Islesboro originally paid for half – or \$25,000.00 of the local share of the cost of the pier facilities in 1991. Since this initial investment on the behalf of Islesboro, there has not been a formalized agreement for cost sharing between the two communities. Maintaining a local budget is complex and often politically charged. Entering a joint venture agreement with another community regarding financing infrastructure can be even more complex, but can ultimately lead to cost savings. Communities have entered consolidation cost saving measures with other communities for schools, dispatch, fire and rescue, trash and recycling and other essential services.

During the process of preparing this Report, input was received from Lincolnville, Islesboro, and third party residents that at least 50% of the use of the Lincolnville facilities is serving the needs of Islesboro residents and workers on a year-round basis.

The percentage or intensity of use was not an issue that was a point of disagreement, but rather that Islesboro requires specific protocols aligning with their CIP process and budgeting that is transparent and fair. In other words, there is a level of discomfort in just allocating half the anticipated cost of operating and maintaining the Lincolnville facilities and transferring that amount without having specific input on how the money is spent, managed, and in the case of the Harbor Savings Fund, invested.

It is the recommendation of this Report that the two communities work with a professional facilitator and legal counsel to develop clear strategies and protocols to more equitably pay for the maintenance and operations of the facilities in a transparent, consistent, and professional manner. With the Fish Pier Agreement ending in 2021, this is an opportune time for the two communities to come together and make informed decisions that are mutually beneficial.

It should be noted that during the stakeholder interviews, fisherman opposed the concept of giving up local control of the facilities.

A few concepts to consider:

1. A joint harbor fund – separate from other funds or appropriations – overseen by a joint Harbor Committee requiring oversight by the governance of both communities.

2. Establish a fixed, but negotiable, annual contribution from Islesboro to Lincolnville.
3. One Harbormaster managing the Lincolnville and Islesboro facilities (a seasonal assistant could be hired in Lincolnville to monitor local issues).
4. Revisions to the Harbor Ordinance that specifically address a strategic partnership with Islesboro.
5. Lincolnville disposing of the facilities to Islesboro, becoming a user of the facilities and not the manager. A transfer of ownership might be logical and beneficial for both communities in the long term. The facilities are a benefit to Lincolnville, but not an essential service. Provisions would be required to maintain commercial and recreational access for Lincolnville residents.
6. Dispose of the existing facilities to a fisherman cooperative and fund, manage, and maintain new facilities as shown in the concepts in this Report serving the needs of Lincolnville and Islesboro.

It is important that however the Town moves forward with the maintenance and management of the harbor facilities that any privatization (ranging from a mooring to pier and float infrastructure), either real or perceived, is avoided in order to maintain transparency in the funding, maintenance, and use.

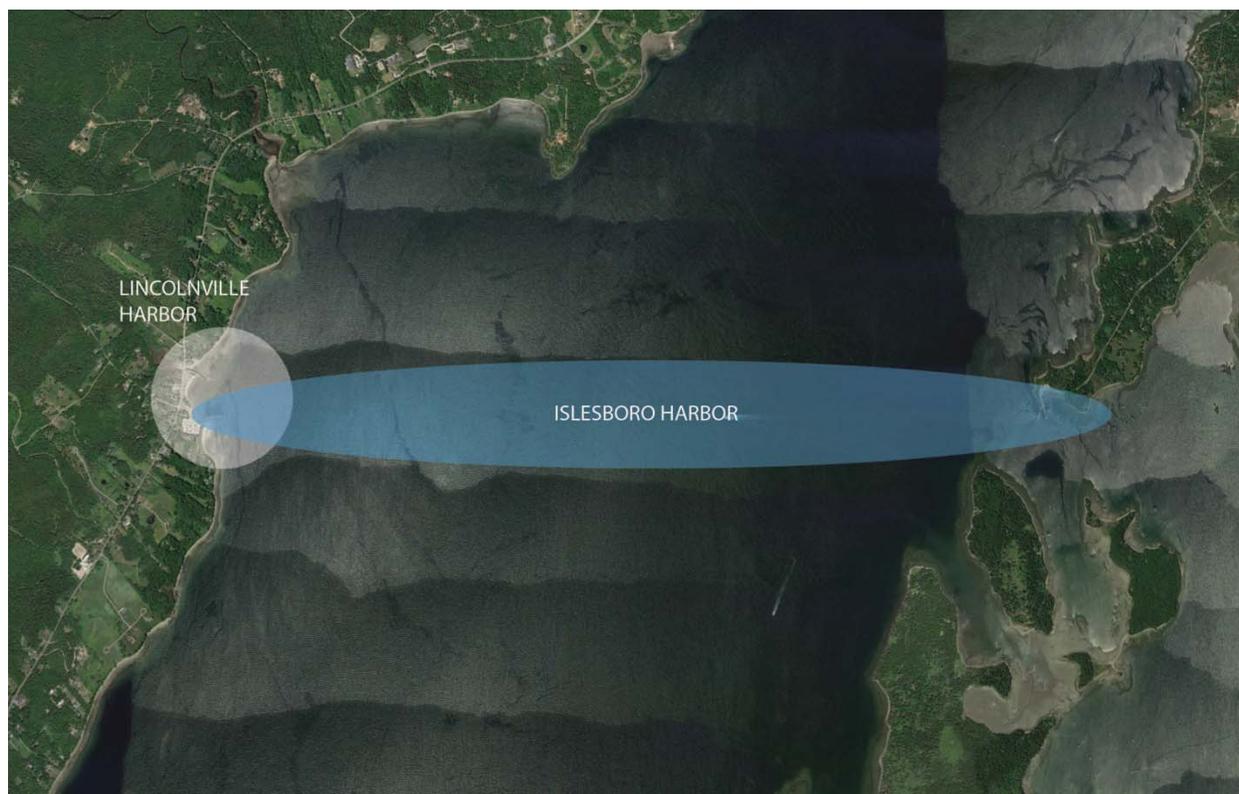


Figure 4 - Diagram of Spatial Overlap between Lincolnville and Islesboro Harbors

## Economic Analysis

The economic analysis noted below is preliminary in nature as during the development of this Study the scenarios were not ranked by the Town leading to a preferred scenario. There are many variables in the economic analysis of the harbor, and the three approaches outlined below should be considered relative to each other rather than a precise analyses of each approach. The following economic analysis is also relative to the maintenance and improvement plan(s) the Town choses to implement. Increasing access and capacity will generate more fees. However, any net revenue in fees must also take into account the cost of financing maintenance or improvements.

### Status quo

Proceeding with the existing funding mechanisms in place – and not making changes to the facilities to improve access for recreational and transient users – will only increase friction within the community. It was made evident in every public forum and stakeholder interview that while the working waterfront is valued, it should not be subsidized. Just as those in the fisheries in Maine feel increasingly marginalized and squeezed out of waterfronts – and living further inland – in Lincolnville there is a distinct tension between those working the water and those wanting access to it for recreation as well as to make the harbor a “parking lot” for boats visiting and supporting downtown businesses. As noted above, the existing facilities including parking, the pier, floats, dinghy storage, hoists, and other infrastructure, support a small lobstering economy. Furthermore, fisheries are cyclical and as many communities are addressing sea level rise and other issues impacting the economy of harbors, the status quo approach may not be inherently resilient.

Preliminary numbers for Option 1 show a continued investment on behalf of the Town of approximately \$20,000.00 to \$50,000.00 (this accounts for CIP funding as well) annually. If improvements are made, such as increasing parking, increasing fees, and increasing dinghy capacity (through either communal dinghies or expanded upland and float storage), this number can be reduced by approximately \$14,000.00 to \$18,000.00.

### Incorporate recommended changes to fee structure and Islesboro contributions

When considering the funding of the maintenance and operations of the facilities in light of user percentage and intensity, an option worthy of consideration is a funding model where Islesboro is an active and informed partner. This scenario and options were addressed above.

If proper checks and balances were established and an effective agreement was established with Islesboro, typical annual funding on behalf of Lincolnville could be reduced to approximately \$10,000.00 to \$25,000 (this accounts for CIP funding as well) annually. When taking into account increases in user fees and potential revenue, there is the potential that the facilities could be generally financially self-sustaining except for major improvements or maintenance projects.

### Dispose of facilities and become a user, not an owner and manager

As noted previously, the facilities are a benefit to Lincolnville, but not an essential service. There is the potential to rethink how the community engages with facilities. Rather than operate the facilities at an annual cost, a mechanism could be established for disposing or selling the facilities while strategically



securing recreational and commercial access of the moorings. In this scenario, access is key, not ownership. Lincolnville has the harbor and beach, which are unique assets. In this model, there is the potential to have a net positive revenue stream from such fees as moorings and parking. Depending on the extent of improving recreational access, the Town could see a benefit of approximately \$14,000.00 annually while removing short-term and long-term liabilities.



## References:

1. Interviews held between 9/2/2016 and 4/16/17
2. Lincolnville Harbor Ordinance, 2006 (amended 2016)
3. Town of Lincolnville, Maine Comprehensive Plan, March 2006
4. Report of the Harbor Study Committee, March 2005
5. Municipal Fish Pier Agreement, November 1989
6. Lincolnville Fish Pier Condition Assessment



## Appendix A – Harbor Facilities, Policies, Regulations, Procedures, Users, and Finances

## Harbor Facilities, Policies, Regulations, Procedures, Users, and Finances

This is a review of the Lincolnville harbor facility policies, regulations, procedures, users, and finances. This review is comprehensive in nature in order to create a foundation for proceeding with informed recommendations for the harbor facilities (generally defined as the pier, floats, boat ramp, and related parking). The task may appear to be oversimplified, but it is a key step for the Project Team, the Board of Selectman, and the community to look at both the big picture and the details in order to maximize the efficient use of the harbor facilities and in turn best align finances with needs and harbor capacities. This summary review and analysis is the first step in making informed recommendations regarding the design, management, maintenance, and financing of the harbor facilities.

### 1. Comprehensive Plan Summary

The 2006 Town of Lincolnville Comprehensive Plan provides background information as well as guiding policies for the harbor facilities. The 2006 Plan updated the 1993 Plan – which was adopted two years after the completion of the Pier. This Plan is ten years old, but still provides the policy framework for helping the community make decisions regarding infrastructure, economic development, and policy. In addition, while there have been some changes to the harbor facility operations and regulations since 2006, in general, the existing facilities and operations of the harbor are consistent with the findings from 2016.

The most relevant chapters of the Comprehensive Plan in regards to the harbor facilities are Chapter V. Public Facilities and Services, Chapter VII. Local Economy, Chapter VIII. Marine Resources, and Chapter IX. Recreational Resources. Below is a summary of the above noted chapters:

#### Chapter V. Public Facilities and Services

The pier is specifically identified in Chapter V, noting, “The fish pier facility at Lincolnville Beach was completed in 1991 to serve both commercial and recreational boaters. The 40’ X 80’ structure, illuminated for night use, allows vehicular access for loading and unloading materials.”

Summary: In 2016, the pier remains a public facility for commercial and recreational boaters. As with most public facilities, the management and maintenance of the facility is an ongoing concern for the community.

#### Chapter VII. Local Economy

Fishing and Marine are designated as one 13-market sectors in Lincolnville. Key points from Chapter VII include:

- In 1991, four boats were lobstering and two dragging for scallops.
- During the mid 1990's commercial use of the pier increased with the sea urchin expansion – and then subsequent collapse.
- In 2002, there were two full time lobster dealers buying catch landed at the pier, and one full time bait dealer.
- In 2002, there were five full-time and five part-time lobster boats
- As of 2003, there was a five to eight year waiting list for the 58 available moorings.
- Two Islesboro-based boatyards used the facility on a daily basis in addition to the Quicksilver, a 30-person water taxi service.
- Cruising guides to the Maine coast note that Lincolnville Beach is exposed to weather and the steep configuration of the harbor and rocky bottom make anchoring problematic. Lincolnville is less attraction to yachtsmen than harbors to the south and on Islesboro, limiting tourism, recreational, and commercial uses.
- It was not noted as a priority item, however the 2005 Report of the Capital Needs Committee mentions a request for \$30,000 from the Harbor Committee for new floats and inclines to expand dock space. The Capital Needs Committee forwarded this request to the Harbor Study Committee convened in September of 2004. Recommendations by the Harbor Study Committee are summarized below in the review of Marine Resources.

Summary: The findings from the 2006 Comprehensive Plan are relevant to 2016.

#### Chapter VIII. Marine Resources

- In 1991, the Town amended the Zoning Ordinance to include a Harbor District. The Harbor District includes the town pier lot and the State owned Ferry Terminal property. Besides these four parcels, all marine frontage in Lincolnville is zoned either Limited Residential or Limited Commercial. It should be noted that the Limited Commercial District includes three parcels with frontage on the “beach.” None of these uses are defined as water dependent, but certainly benefit from the tourist draw of the beach location and harbor activity.
- In 2004, the Board of Selectman convened the Harbor Study Committee comprised of Comprehensive Plan Review and Harbor Study Committee members, recreational, fisherman, and local businessman. This Committee was tasked with reviewing current practices in ocean waters – particularly the town facilities and operations and landside support. The Committee released their findings in 2005 and are integrated into the Goals and Implementation Strategies of the Marine Resources Section of the Comprehensive Plan and the Harbor Ordinance (as most recently amended).
- The Town has a Harbor Ordinance – as amended in 2016. See below for detailed summary of the Harbor Ordinance. This was a critical step in codifying regulations for the harbor.

- The Harbor Ordinance identifies the Harbor Master’s responsibilities in regards to the pier, float system, mooring space, and operations of Lincolnville Harbor.
- The Harbor is defined as the tidal shoreline from the southern end of State Beach to the northern side of Ducktrap River.
- The Harbor Ordinance undergoes annual review by the Harbor Committee consisting of five residents in addition to the Harbormaster and Deputy Harbormaster.
- In 2005, the Board of Selectman ordered a revision of the Harbor Ordinance following the recommendations of the Harbor Study Committee.
- Between the 1993 and 2006 Comprehensive Plans, a number of improvements were made to the harbor facilities, including but not limited to:
  - The expansion of the Maine State Ferry parking lot – increasing dedicated harbor parking from two to six spaces.
  - Additional marine related use such as a lobster bait dealer and the Islesboro *Quicksilver* water taxi.
- Marine Resources Goal #3: Maintain a mutually beneficial relationship with Islesboro, including the following implementation strategies:
  - Pursue funding for waterfront improvement projects that benefit both towns.
  - Promote communication between the two towns regarding harbor affairs.
- Marine Resources Goal #4: Create a Parking Committee to develop a plan for parking that will adequately serve the harbor facilities. Maintain existing parking facilities and expand parking options for additional facilities within walking distance of waterfront
- Marine Resources Gal #6: Ensure that Lincolnville manages its harbor and shoreline development and pier construction in a manner that maintains free and safe navigation for all vessels and preserves the beauty of Lincolnville’s coastline
  - Annually review the Harbor Ordinance to ensure that it continues to address the needs of all users of the Harbor
  - Continue to require that the Harbor Master approve pier designs and that the Planning Board must take into consideration the Harbor Master’s recommendations in approving private piers
- Marine Resources Goal #7: Continue to annually review existing user fees and maintenance costs of facilities, and those of surrounding communities
  - Monitor current user fees of surrounding communities and make recommendations to Board of Selectman
  - Develop a marine resources capital improvement plan and maintain and augment the reserve contingency fund set by town voters in 1993/94 for harbor improvements
- Relocate bait storage from pier to allow for larger pier area
- Maintain wave break
- Maintain Fish Pier and pilings
- Seek funding to upgrade the boat ramp and install finger floats to improve public access

Summary:

- The Harbor Ordinance was an important step for the community in terms of developing regulations and policies for the waterfront facilities. However, in both the stakeholder discussions and the public forum, aspects of this Ordinance were identified as being impediments to what some see as necessary change in the management of the facilities.
- While Islesboro and Lincolnville originally split the approximate cost of the Pier, improvements have continued to be in general mutual, but paid for by Lincolnville.
- Communication between Lincolnville and Islesboro has not been open and consistent. Two examples are that there is no fixed agreement between the towns for cost sharing maintenance and improvements for the facilities and most recently Islesboro declined to participate in the funding of this Study, while numerous stakeholders noted that a conservative estimated use of the municipal facilities by Islesboro residents or workers is 50%.
- Parking has not been expanded beyond the six spaces. There are no trailer parking spaces.
- Bait storage has been expanded, not removed from the pier.
- The boat ramp has been maintained, but is not properly engineered for launching boats.
- The Comprehensive Plan is very specific that the harbor facilities are to be available for all users on an equal basis. The 1989 Fish Pier Contract with the State is less clear in terms of use of the pier
- User fees may be similar to surrounding communities, however a harbor such as Camden has many more users and multiple income streams. The Camden harbor is financially self sustaining and does not require Town subsidy.
- At the time of the preparation of this summary memo, the balance of the contingency fund is not known.

#### Chapter IX. Recreational Resources

- Lincolnville Beach is approximately 177' feet wide and drains to flats at low tide
- Approximately 30 recreational boats were moored in the harbor in 2002. According to the Harbormaster, 50% of these moorings belonged to out-of-town residents.
- There is parking for 75-100 cars in the public lot shared with the Lobster Pound Restaurant.
- To the south of the Ferry Terminal is a second beach purchased by the State in 1990. It is referred to as State Beach and is accessible to the public, although there is no dedicated parking for this beach.

Summary: Lincolnville Beach continues to be a draw for locals and tourists and is adequately served by four hour parking in the town parking lot or along Route One. Many are not aware that the portion of the beach from the public bathrooms to the boat ramp is not public, but owned by McLaughlin's Lobster Shack.

#### Summary of Comprehensive Plan Public Input

- Less than 5% of the those surveyed for the Comprehensive Plan thought that improvement to water facilities was a desired Town Service
- 30% of those surveyed felt that Lincolnville Beach was one of the most important features in town (along with the Center and the Center Store – as compared to wildlife, ponds, and trees which 50% of those surveyed considered a most important feature).

## 2. Harbor District Summary

Section 13.D of the Lincolnville Zoning Ordinance defines the Harbor District as:

The Harbor District includes areas where the existing predominant pattern of development is consistent with the allowed uses of this district as indicated in Table of Land Uses, Section 14, and other areas, which are suitable for functionally water-dependent uses.

The Harbor District, in summary, begins at the normal high water line for Penobscot Bay encompassing all or part of Tax Map 6, Lots 80, 81, 82, and 83.

The Harbor District falls within the Shoreland Zone and all activity must meet the standards of Section 16 Shoreland Zone Land Use Standards.

Please see Section 14, Table of Land Uses at the end of this document.

## 3. Harbor Ordinance Summary

The 2006 Harbor Ordinance (as amended 2016) is the primary regulatory document for the harbor facilities. The Harbor Ordinance is a direct – but further fine-tuned – outcome of both the Comprehensive Plan and the 2005 Report of the Harbor Study Committee. However, in enacting ordinances, certain intentions are lost in translation and other unintended consequences can be codified in the Ordinance. Ordinances are subject to review and revision in order to best serve the needs of the community.

The general purpose of the Harbor Ordinance is “to maintain order, organization, and proper utilization of the Lincolnville Harbor area, watercraft launch area, the municipal Lincolnville Fish Pier, float system and other related harbor facilities, in a manner conducive to the best interest of the Town of Lincolnville and the boating public, to ensure commercial fisherman access and to establish the rules by which the Town of Lincolnville will assign mooring privileges.”

Following is a summary of the key findings of a review of the Harbor Ordinance.

- The Lincolnville Harbor is divided into the Inner Harbor, the Outer Harbor, the Coastal Harbor, and the Inner Harbor Channel. The division of the harbor into three areas – and

the identification of the channel – is mainly related to the assignment of moorings and ensuring that access is maintained to the pier and floats by all users.

- A Harbor Committee appointed by the Board of Selectman acts as an advisory committee to the Board of Selectman on harbor matters. The Harbor Master attends the quarterly meetings in an advisory capacity.
- The Board of Selectman appoints the Harbor Master.
- The Harbor Master reports to and receives direction from the Lincolnville Town Administrator.
- The public landing, boat launching ramp, mooring locations, the pier, float system, and other related harbor facilities are under the direction and control of the Harbor Master or Deputy Harbor Master.
- Harbor user fees (moorings, mooring wait list, commercial use of pier, bait dealers etc.) are to be reviewed annually. See attached “2016 Town of Lincolnville Harbor Application” for a detailed list of current fees.
- The Town owns and operates the Lincolnville Fish Pier – or otherwise known as the pier. The Harbor Ordinance defines the purpose of the pier “to provide access to the water, primarily for commercial fisherman while allowing reasonable public access to the facility.” In comparison, and discussed in more detail below, the 11.6.1989 Fish Pier Agreement with the State notes that Town agrees to “operate it in a safe and sanitary manner and to ensure that it is available on a fair and equitable basis to commercial fisherman allowing the public reasonable access to the facility.”
- The Harbor Master shall maintain a “Lincolnville Fish Pier & Float Usage Plan.” The Plan is to be “reviewed, updated, and submitted to the Town Office by the Harbor Master” on an annual basis.
- Boom hoists shall be operated by authorized permit holders only.
- Floats are to be use exclusively for the loading and unloading of passengers or gear. 20 minute period for this use. In addition, floats include space for dingy / skiffs, two-hour tie periods, and areas available for longer hours, but no overnight docking
- The Harbor Master shall designate mooring locations and maintain a plot plan of watercraft and the areas to be used as channels.
- An expert approved by the Harbor Master shall inspect moorings annually. A form for the purpose of recording the annual inspection shall be sent annually to mooring owners along with mooring permit fee bill.
- Individuals, corporations and other entities shall be limited to one multi-use mooring in the inner harbor. Multi-use moorings are permitted in the outer and coastal harbors.
- Multi-use mooring holders may rent their mooring so long as the mooring is occupied by the watercraft assigned to the mooring for 30 consecutive days per the year.
- The Board of Selectman set the number of and fee for guest moorings.
- Mooring site assignments may not be rented unless the provisions for rental are part of the agreement when the mooring was assigned.
- There shall be no rental moorings in the inner harbor except as allowed in article XI.
- Individuals, corporations or other entities shall be limited to one rental mooring in the outer harbor.

- Rental moorings shall be permitted in coastal harbor at the discretion of the Harbor Master.
- From April 1<sup>st</sup> to November 1<sup>st</sup>, mooring holders may not transfer or reassign moorings except a period not to exceed 14 days with written notice to and written approval from the Harbor Master.
- The application for a mooring site shall specify each applicant who is a non-resident.
- There shall be Bait Box container space available on the pier available to Lincolnville residents. Bait Box spaces will be numbered as shown on the Lincolnville Pier and Float Usage Plan. To obtain a bait box, a resident shall meet the criteria of Section 3. Bait Box Container Space.
- Inner harbor mooring permit holders shall be issued tender tie-up privileges. The Harbor Master is entitled to one preferred tender space.
- Tender tie-up privileges of outer harbor mooring permit holders in existence prior to the enactment of the Harbor Ordinance shall remain intact.
- The Harbor Master shall have jurisdiction over municipal marine launch ramps
- Parking for mooring permit holders is adjacent to the launching ramp and in State Ferry lot on a first-come-first-served basis for Harbor Use Permit Holders only. The permit parking spaces in the State Ferry Lot are intended for commercial fisherman.
- The Board of Selectman may appoint the Harbor Master and Deputy Harbor Master as parking enforcement officers.
- The Harbor Master may revoke mooring and pier privileges per the criteria of Section 9.
- Any person may appeal a decision of the Harbor Master in accordance with Article VI.
- The Harbor Ordinance conveys no grandfathering of rights for a particular mooring site. Those individuals, corporations or entities with single or multiple mooring sites at the time of the enactment of this ordinance shall retain the right to renew all moorings site so long as permits remain valid and all fees paid. The four rental mooring areas in the inner harbor shall be allowed to remain as long as fees are paid.

#### Summary:

- While each community has different harbor management plans and different Ordinances, it is not typical to allow one person, entity or corporation to hold more than one mooring in a mooring field, particularly when there is a wait list for that mooring field. So called “secondary moorings” are allowed – in a review of Midcoast communities – when there is no waitlist and the case can be made for economic necessity. An example of economic necessity might be a boatyard requiring additional moorings for the function of the business.
- The Lincolnville Harbor Ordinance is extensive and assigns authority over many matters to the Harbor Master, however there are no provisions for in the Ordinance for determining the Harbor Master’s compensation.
- It does not appear that a Pier and Float Usage Plan is prepared on an annual basis.
- There are no specific technical requirements for moorings.
- The Board of Selectman appoints the Harbor Master – and required submissions from the Harbor Master are made to the Board of Selectman (or to the Board of Selectman

via the Harbor Committee), however the Harbor Master reports to and receives direction from the Town Administrator. In most cases in the Ordinance, the Board of Selectman makes harbor policy and regulations that are then to be enforced by the Harbor Master. There might be more clear channels of communication if the Harbor Master reported to and received direction from the Board of Selectman, not the Town Administrator.

#### 4. Parking Ordinance Summary

The Parking Ordinance of the Town of Lincolnville zoning Ordinance has one specific area addressing harbor facilities parking. Section F notes, “After signs are erected indicating LINCOLNVILLE PERMIT PARKING ONLY, persons WITHOUT a Lincolnville permit shall not be allowed to stand, stop, or park a motor vehicle at any time within the following permit parking areas:

##### (1) Lincolnville Beach Boat Launch Ramp Area

The Ordinance is to be enforced by Municipal Officers or their duly authorized designee.

Summary: If this portion of the Ordinance is referencing the six spaces in the Maine State Ferry lot, it has been noted that six spaces does not serve the need the harbor facilities. In addition, it was noted during the public forum that vehicles without permit stickers sometimes occupy these spaces. Enforcement of the parking regulations is considered problematic. Multiple authorities – including the Police Department and the Harbor Master – have the ability to enforce the parking regulations and there is the potential for miscommunication.

#### 5. Relationship with Ferry Service Summary

The Maine State Ferry Service to Islesboro is a major waterfront presence and use in the Harbor District. The facilities – including the ferry pier, queuing, parking, and ticketing buildings – are used year round with peak season in the summer months.

There are not many synergies between the Ferry and Town facilities, except six designated Town spaces for mooring holders are located along the State Beach.

The location of the Islesboro ferry adds to the activity of the harbor, which in turn can be interpreted as adding to tourism and other market sectors in Lincolnville.

#### 6. Relationship with Islesboro Summary

Through site observation, public comment, stakeholder interviews, and media reporting, it is apparent that the Lincolnville harbor facilities are critical infrastructure for the daily function of

Islesboro residents. It is a reasonable assumption that 50% of the use of the harbor facilities – specifically the pier and floats – is by Islesboro residents or workers commuting to the island.

In stakeholder interviews and at the public meeting, it was generally expressed that Islesboro is a community partner and that the Lincolnville facilities should be shared with the island, but on a more financially equitable basis.

A survey of town facilities by different users in different seasons has not been completed, but stakeholders do not recommend approaching equitable financing only through user fees as enforcement is an issue. Certain users, such as the Quicksilver, pay an annual use fee, but to capture the volume of all trips would require continual enforcement, which would in turn lead to unwarranted tensions between the two communities.

Specific information regarding the Islesboro funding and use of the Lincolnville facilities includes:

- When the Pier was built in 1991, Islesboro provided \$25,000.00 towards construction. That money included public and private sources.
- The November 6, 1989 agreement between Lincolnville and the State of Maine Department of Transportation states that Lincolnville “or other local funding sources” are responsible for a 20% match of the construction cost of the Fish Pier, or \$50,000.00 This suggests that the \$25,000.00 paid by Islesboro for the facilities was 50% of the 20% match.
- As noted in an article in Village Soup dated February 11, 2016, Islesboro gave Lincolnville \$5,000 between 2003 and 2008 (except 2006 when it was \$2,500). From 2009 to 2010 Islesboro paid \$3,000 annually. No payments were received from 2011-2012. For 2013 and 2014 \$2,490 was received and for 2015 no payment was received.
- The 2006 Comprehensive Plan Marine Resources Goal #3 directly addresses the relationship with Islesboro:
- Marine Resources Goal #3: Maintain a mutually beneficial relationship with Islesboro, including the following implementation strategies
  - Pursue funding for waterfront improvement projects that benefit both town
  - Promote communication between the two town regarding harbor affairs
- Stakeholder interviews with residents of Lincolnville, Islesboro, and other surrounding communities all note that at least 50% of the use of the facilities is by Islesboro residents, workers commuting to the island, or deliveries such as construction materials.
- The 2012 Islesboro Comprehensive Plan projects growth in persons per square mile to increase from 42.2 in the year 2000 to 60.8 in year 2030. This is in a time when many island populations are facing declines in population.
- Between 1992 and 2008 the number of jobs held by off-island people increased from 27 to 101, or a 275% increase. This number is anticipated to increase, with the assumption that this will impact the commuter use of the Lincolnville facilities

- The Islesboro Comprehensive Plan addresses jobs and commuting by providing the following details:
  - A 9.2.2008 count noted 88 workers commuting to the island on the 8AM and 9AM ferries
  - The Quicksilver transports 120 workers to the island per day in July and August
  - The Pendleton Yacht Yard runs two boats for commuters, each with a 20-person capacity
  - The Islesboro Comprehensive Plan also identified in one count 30 trucks parked for the weekend at the ferry as week workers commuting to the mainland for the weekend
- In the Transportation Section of the Islesboro Comprehensive Plan, there are specific numbers provided on users of the ferry and the airport, but not the Lincolnville facilities.
- In summary, there is no mention of the Lincolnville harbor facilities in the Islesboro Comprehensive Plan nor is there any mention of cost sharing or establishing more clear lines of communication between the two communities.
- It should also be noted that Islesboro declined to help pay for this Study or host a public forum on the island regarding the use of the Lincolnville facilities.

## 7. Harbor Facilities Financial Summary

The Project Team has received input that on average the harbor facilities cost approximately \$30,000.00 a year to operate and maintain. User fees and donations average \$10,000.00 year, leaving taxpayers to subsidize the remaining two thirds of the operating costs, or \$20,000.00. As part of this review, the Project Team is also preparing a summary of required pier maintenance based on a recent inspection. This information will be further integrated to provide insight into harbor related costs.

Lincolnville maintains a Harbor Savings Fund to offset maintenance costs, however the pier is at point where repair and maintenance costs are anticipated to increase annually. A key aspect of this Study is to help the community prioritize the design and maintenance expenditures for the harbor facilities in order to more proactively plan for capital expenditures and limit taxpayer exposure.

See attached spreadsheet with information on harbor finances for fiscal years beginning in 2008.

## 8. Harbor Users / Moorings / Financials Summary

A review of the 2016 harbor users providing by the Town – a one-year snapshot of recent user trends – includes the following information (this does not reflect actual watercraft on moorings):

- There are 57 mooring holders

- 27 Inner Harbor
- 20 Outer Harbor
- 10 Littoral
- An official mooring / watercraft count was not completed, but on several visits the Project Team counted less than 20 active moorings in the Inner and Outer Harbors.
- Of the 57 mooring holders, one holds four Inner Harbor and one Outer Harbor moorings and two moorings holders have two moorings each in the Littoral Harbor. In summary, there are three mooring holders on the mooring list that have more than one mooring.
- Nine of the 57 mooring holders are classified as commercial. Two of the nine commercial users are for Islesboro transport.
- 43 of the mooring holders are Lincolnville residents. According to the 2010 census, the Lincolnville population is 2,164.
- Six of the mooring holders are non-residents with Islesboro addresses. The remaining moorings are from surrounding communities or out of state
- 32 of the mooring holders receive parking permits, allowing these mooring holders to park in the six spaces in the Maine State Ferry parking lot or other designated spaces by the boat ramp (note: there does not appear to be signed / designated spaces by the boat ramp).
- Total user fees collected for 2016 is \$11,869.00
  - Of the \$11,869.00 collected in user fees, \$5,757.00 was classified as commercial, or 48%. Of this 48%, two of the three Islesboro users – transportation – accounted for 58% or \$3,325.00 of total commercial user fees. These two Islesboro commercial transport users account for 28% of all user fees generated by the harbor facilities.
- In addition to the information provided by the Town, stakeholder interviews noted extensive use of the facilities by the islands for transport of workers and materials for construction – and these users are most likely not compensating the Town.

#### 9. 1989 Fish Pier Contract Summary

On November 6, 1989 the Town of Lincolnville entered an agreement with State of Maine Department of Transportation entitled “Agreement for a Municipal Fish Pier in the Town of Lincolnville.”

While agreements such as this require proper legal review for specific findings – and over the years the Town has asked for legal clarification of aspects of the agreement – following is a summary of aspects of the agreement as many different constituents and stakeholders have referenced this document in terms of the purpose and use of the pier:

- Article V: Maintenance and Operations states that “Lincolnville agrees to provide all necessary maintenance to the basic public fish pier facility and to operate it in a safe and sanitary manner and to ensure that it is available on a fair and equitable basis to commercial fisherman allowing the public reasonable access to the facility. Lincolnville

further covenants that any future agreement with public cooperatives, private fisheries companies, etc. for the use of the pier contain similar access language for the basic public pier described in this Agreement.”

- In terms of the timeframe, the agreement states: “Lincolnville further agrees to continue the maintenance and operations of the facility at the public commercial fish pier for a minimum of thirty years following its completion.” The pier was completed in 1991. Again, legal counsel is recommended on the terms of the agreement, but in a straight reading of the agreement it appears that the Town can exercise more local control of the use, maintenance, and design of the pier beginning in 2021.
- Article VI: Funding states that Lincolnville “or other local funding sources” are responsible for a 20% match of the construction cost of the Fish Pier, or \$50,000.00

Summary: In terms of use of the pier the language is not specific regards to use, only stating that commercial fisherman have “fair and equitable use” and that the public has “reasonable access” to the facility. The terms of the agreement appear to expire in 2021, allowing the Town more flexibility with local ordinances, policies, and capital improvement planning.

Please see a copy of the Agreement at the end of this document.

## 10. Public Meeting and Stakeholder Summary Notes

### Summary Notes from the 9.2.16 Public Meeting

#### **Parking**

- 6 spaces in State lot for town use
- No more parking will be made available from the State
- Upcoming sewer project may make some spaces available at the top of the ramp, appears to be space for trailer parking – need to review W&C drawings for layout
- Offsite parking is an option, potentially at schoolhouse ~ 6 spaces

#### **Moorings**

- 40-48 moorings - includes all areas
- 3 guest moorings, no fees (tough to manage), 24 hr max
- Limited pier and parking mean there is little capacity for more moorings despite the demand
- Mooring field is exposed to SW and NE, harbor must evacuate in winds over 35 mph
- Long wait list for inner harbor, land owners go to top of the wait list. No more dinghy space available at pier
- Outer harbor moorings do not have tender privileges

## Pier

- Construction in 1991 with federal grant funds. Required to maintain public and commercial access. \$500k initial cost (not incl. floats and ramps)
- HS20 rating, used by bait trucks and boom trucks
- Inspection completed spring 2016, need to review report
- Deck needs replacement. Handrails and curbing are also in need of work. Pier is approaching period in its lifecycle where more frequent and extensive repairs will be required.
  - Discussed concrete deck replacement – need to reconcile with age/condition of timber substructure.
- 3 floats stay in year-round. In need of repair
- Pier is exposed to NE, wavescreen provides some protection from SW but not complete.
- Granite wavescreen has been in place 10 yrs
- “Fees for harbor use do not come close to covering maintenance costs ~ \$60k.yr cost vs. \$10-14k/yr income”
  - Grant funds have helped offset some pier maintenance costs but taxpayers on hook for any shortfall
  - Islesboro historically contributes ~ \$5k annually, but not every year
- Use:
  - 24/7 water taxi operation
  - Supports construction activities on Islesboro
    - Use by Islesboro is increasing year over year
  - Town tries to collect fees from anyone using the pier for commercial activities
  - Consensus that Islesboro does not pay ‘fair share’
  - Transient users do not pay fees
  - Vehicles often driven onto pier for private/recreational use. How to manage?
- Solution needs to be consistent with town comprehensive plan

## Ramp

- No trailer pkg available
- Mid to high tide access only
- Ramp is asphalt over sand, shallow grade makes it difficult to launch
- Regular repairs required at bottom of ramp where sand washes out
- Sees only moderate use, 3-5/day at height of season (how much is due to parking/tide issues?)
- Closest full tide ramps in Camden, Rockport, Belfast
- Concept to re-grade the ramp to 12-15 deg slope
- See parking notes above for potential trailer spots adjacent to ramp. State owns road to ferry, likely R.O.W. issues with work at top of ramp

# 2016 Harbor User Application

# 2016 TOWN OF LINCOLNVILLE HARBOR APPLICATION

Harbor No: \_\_\_\_\_

Date: \_\_\_\_\_

**Applicant's Information:**

Name(s): \_\_\_\_\_

Resident of Lincolnville?

Mailing Address: \_\_\_\_\_

Email: \_\_\_\_\_

Physical Address: \_\_\_\_\_

Do you anticipate a change in your residency next year? \_\_\_\_\_

Home Phone: \_\_\_\_\_

Cell Phone: \_\_\_\_\_

Other Phone: \_\_\_\_\_

**Boat Information:**

Length: \_\_\_\_\_

Width: \_\_\_\_\_

Depth: \_\_\_\_\_

Registration No. \_\_\_\_\_

Boat Name: \_\_\_\_\_

Commercial \_\_\_\_\_

Pleasure \_\_\_\_\_

Power \_\_\_\_\_

Sail \_\_\_\_\_

**MOORING AND SEASONAL LAUNCHING**

**Mooring Fees** (please check applicable usage):

- |   |          |  |
|---|----------|--|
| <input type="checkbox"/> Resident Commercial Mooring (M-C)  | \$ 60.00 | <i>Do you anticipate a change in your commercial/non-commercial usage next year? _____</i> |
| <input type="checkbox"/> Resident Non-Commercial Mooring (M-NC)                                   | \$ 60.00 |  |
| <input type="checkbox"/> Non-Resident Commercial Mooring (M-C)                                    | \$150.00 |  |
| <input type="checkbox"/> Non-Resident Non-Commercial Mooring (M-NC)                               | \$150.00 |  |
| <input type="checkbox"/> Resident Multi-Use/Guest/ Service/Rental Mooring (Multi)                 | \$ 60.00 |  |
| <input type="checkbox"/> <i>( ) Attach copy of Army Corps of Engineer Permit with application</i> |          |  |
| <input type="checkbox"/> Non-Resident Multi-Use/Guest/Service/Rental Mooring (Multi)              | \$300.00 |  |
| <input type="checkbox"/> <i>( ) Attach copy of Army Corps of Engineer Permit with application</i> |          |  |
| <input type="checkbox"/> Dinghy Fee (reserved for those with dinghy privileges)                   | \$ 35.00 |  |

Mooring Placement: \_\_\_\_\_

**Seasonal Launching**

- |  |           |
|--|-----------|
| <input type="checkbox"/> Resident (L)  | \$12      |
| <input type="checkbox"/> Non-Resident (L)                                    | \$60      |
| <input type="checkbox"/> Landing Craft (submit proof of liability insurance) | \$1450.00 |

**Mooring, Floats, and Incline Fees (Non-Public):**

- |  |          |
|--|----------|
| <input type="checkbox"/> Resident (NP)     | \$ 30.00 |
| <input type="checkbox"/> Non-Resident (NP) | \$150.00 |

**MOORING WAIT LISTS**

- Inner Mooring Wait List (IMWL):** \$12      **and/or**       **Outer Mooring Wait List (OMWL):** \$12

The assignment of mooring sites shall be made by the Harbor Master in accordance with the following priorities and consistent with the provisions of the Lincolnville Harbor Ordinance and State law. Please check the applicable category.

- a. Property owners with real estate abutting the waters immediately adjacent to the proposed mooring location pursuant to Title 38 M.R.S.A. Chapter 1 §3;
- b. Residents engaged in commercial fishing activity as defined in Title 12 M.R.S.A. §1862;
- c. Resident engaged in non-fishing commercial activity;
- d. Resident non-commercial;
- e. Non-residents engaged in commercial fishing activity as defined in Title 12 M.R.S.A. §1862;
- f. Non-resident engaged in non-fishing commercial activity;
- g. Non-resident non-commercial.

If you already have an Outer Harbor mooring and are waiting for an Inner Harbor mooring, please check here \_\_\_\_\_.

**TOTAL MOORING AND/OR WAIT LIST FEES: \$ \_\_\_\_\_**

**Please note: Late fee(s) will be applied if mooring and/or wait list payments are not received by March 11, 2016. Late fee(s) will be double the applicable fee(s). Reminders will be not sent. If payment and late fee are not received by April 8, 2016, mooring privileges will be lost and/or your name will be removed from wait lists. Commercial Pier fees are due prior to use of the Commercial Pier.**

**Please make checks payable to: Town of Lincolnville  
Mailing Address: Lincolnville Town Office, 493 Hope Road, Lincolnville, ME 04849**

**COMMERCIAL PIER USE**

**Harbor No:** \_\_\_\_\_ *(Complete Applicant and Boat Sections on reverse side)*

**Commercial Pier Use Permit:** *(Includes wash-down pump)*

- Resident (with a vehicle up to 12,000 GVW) (CP) \$ 25.00
- Non-Resident (with a vehicle up to 12,000 GVW) (CP) \$120.00
- Seafood/Bait Dealers for individual Commercial Permit Holders (BD) \$120.00
- Additional Vehicle up to 12,000 GVW (AV) \$ 25.00

Vehicle Registration (Plate) No. \_\_\_\_\_

Vehicle Registration (Plate) No. \_\_\_\_\_

**Waterproof Insulated Bait Storage: (4' x 4' space - fee per space)**

- Resident (BBS) \$30.00 x \_\_\_ of spaces = \_\_\_\_\_
- Bait Box Space Wait list (BBSWL) \$7.00 x \_\_\_ of spaces = \_\_\_\_\_

**Wash-Down Pump Use:**

- Residents (P) \$ 30.00
- Non-Residents (P) \$150.00

**Winch use by certified individuals: (Requires a Commercial Pier Use Permit)**

- Resident (W) \$ 30.00
- Non-Resident (W) \$150.00
- One Time Use – Authorized by Harbor Master (WOT) \$ 60.00
- Lost Key Charge \$ 12.00

**Seafood Dealer Permit: (Individual/Company dealing in seafood)**

- Class I: Four wheels on ground (SDI) \$ 90.00
- Class II: Up to six wheels on ground (SDII) \$300.00
- Class III: Up to ten wheels on ground (SDIII) \$600.00

**Note:** Additional fee - \$33 per 2,000 lbs. each vehicle exceeds the 12,000 lb. maximum.  
*(Seafood Dealer Permit includes Commercial Pier Permit, Winch, and Wash-Down permits.)*

**Bait Dealer Permit: (Individuals who sell bait to Commercial Fisherman)**

- Class I: Four wheels on ground (BDI) \$ 90.00
- Class II: Up to six wheels on ground (BDII) \$300.00
- Class III: Up to ten wheels on ground (BDIII) \$600.00

**Note:** Additional fee - \$33 per 2,000 lbs. each vehicle exceeds the 12,000 lb. maximum.  
*(Bait Dealer Permit includes Commercial Pier Permit, Winch, and Wash-Down permits.)*

**Commercial Tour and Passenger Boats (including tenders) and Boat Rentals:**

- Resident (CTour) \$ 240.00
- Non-Resident (CTour) \$1,450.00
- Resident Occasional Use (up to once a week) (Occasional Use) \$ 100.00
- Non-Resident Occasional Use (up to once a week) (Occasional Use) \$ 500.00

**Plus:** Commercial Pier Use Permit is required for company vehicles(s).

=====

**TOTAL COMMERCIAL PIER FEES: \$ \_\_\_\_\_**

=====

**Please note:** Late fee(s) will be applied if mooring and/or wait list payments are not received by March 11, 2016. Late fee(s) will be double the applicable fee(s). Reminders will be not sent. If payment and late fee are not received by April 8, 2016, mooring privileges will be lost and/or your name will be removed from wait lists. Commercial Pier fees are due prior to use of the Commercial Pier.

**With the exception of mooring fees, all fees will be discounted 50% beginning September 1<sup>st</sup> of each year.**

**Please make checks payable to: Town of Lincolnville**  
**Mailing Address: Lincolnville Town Office, 493 Hope Road, Lincolnville, ME 04849**

# Fisher Pier Agreement

AGREEMENT  
FOR A  
MUNICIPAL FISH PIER  
IN THE TOWN OF LINCOLNVILLE

This Agreement made this 6<sup>th</sup> day of November 1989,  
between the State of Maine, Department of Transportation  
(hereafter "DEPARTMENT") and the Town of Lincolnville, a  
municipal corporation and body politic, located in Waldo County,  
State of Maine (hereafter "LINCOLNVILLE").

WITNESS

WHEREAS, the State of Maine has determined that a need  
exists to provide improved fish pier facilities for its fishing  
industry at several coastal locations and has approved a Fish  
Pier Improvement Program; and

WHEREAS, the citizens of the State of Maine approved the  
issuance of bonds, which will assist municipalities to construct  
or improve their fish piers by providing a proportional share of  
the required funds; and

WHEREAS, LINCOLNVILLE has been identified as a community  
having a need for a public commercial fish pier; and

WHEREAS, **LINCOLNVILLE** has asked to participate in the Fish Pier Improvement Program on the following terms and conditions:

NOW, THEREFORE, the parties in consideration of agreement of the other do agree as follows:

#### ARTICLE I - GENERAL

The **DEPARTMENT** agrees to provide funds to assist in the development, design, and construction of a "basic fish pier facility" in Lincolnville, Maine. As used in this Agreement, a basic fish pier facility shall include those items as outlined in Appendix A. The **DEPARTMENT** may, upon proper documentation from Lincolnville, participate in the funding of such other related activities as it finds consistent with the intent of the Fish Pier Improvement Program.

**LINCOLNVILLE** further agrees to follow the herein outlined program of development for the design and construction of the fish pier facility (hereafter "PROJECT"). The **DEPARTMENT** will be the lead agency for the development of the Project in coordination with **LINCOLNVILLE**.

**LINCOLNVILLE** further agrees to establish an advisory committee for the purpose of coordinating the development of the Project.

The DEPARTMENT will be responsible for the engineering, of the Project including design and construction supervision, either through the use of consultants or its own forces. LINCOLNVILLE will act, generally, in a review and advisory capacity.

#### ARTICLE II - PRELIMINARY DESIGN PHASE

The DEPARTMENT agrees as follows:

- i. To proceed with preliminary design.
- ii. To prepare applications for all necessary State and Federal permits.
- iii. To submit the preliminary design plans to LINCOLNVILLE and revise them, as necessary, to obtain LINCOLNVILLE'S approval before proceeding with final design.
- iv. To hold a public meeting in Lincolnville, if appropriate, to obtain public input to the design of the Project.

### ARTICLE III - FINAL DESIGN PHASE

Upon approval of the preliminary design, the DEPARTMENT agrees to the following:

- i. To complete the final design of the Project.
- ii. To review the final plans with LINCOLNVILLE and revise them, as necessary, to obtain LINCOLNVILLE'S approval before proceeding to advertise for bids.
- iii. To obtain all necessary State and Federal permits.
- iv. To advertise for bids and award a construction contract (if adequate funding is available).

### ARTICLE IV - CONSTRUCTION PHASE

The DEPARTMENT agrees to supervise the construction of the Project and to provide construction engineering and inspection. Any change order to the construction contract must be approved by LINCOLNVILLE before implementation. The DEPARTMENT will make a final inspection of the completed Project, which will be coordinated with LINCOLNVILLE prior to acceptance from the contractor.

## ARTICLE V - MAINTENANCE AND OPERATIONS

LINCOLNVILLE agrees to provide all necessary maintenance to the basic public fish pier facility and to operate it in a safe and sanitary manner and to ensure that it is made available on a fair and equitable basis to commercial fishermen allowing the public reasonable access to the facility. LINCOLNVILLE further covenants that any future agreement with public cooperatives, private fisheries companies, etc. for use of the pier contain similar access language for the basic public pier described in this Agreement.

LINCOLNVILLE further agrees to continue the maintenance and operations of the facility at the public commercial fish pier for a minimum of thirty years following its completion. LINCOLNVILLE also agrees to operate the facility in compliance with all Federal, State, and municipal laws and regulations.

## ARTICLE VI - FUNDING

LINCOLNVILLE and the DEPARTMENT agree that the activities described in Articles II, III and IV will be funded as a State and local venture with the intention of claiming this work as a part of the State and local match to any Federal funding. Funding of all non-Federal Project activities will be 80% State and 20% local. LINCOLNVILLE or other local funding sources may contribute more than the minimum 20% local match at LINCOLNVILLE'S sole discretion.

LINCOLNVILLE may be credited with the appraised value of any real estate it contributes toward its share of the Project costs. Certain costs of in-kind services performed by LINCOLNVILLE may also be credited toward its share upon review and approval by the DEPARTMENT. The funding currently programmed for this Project is as follows:

LINCOLNVILLE	\$ 50,000
DEPARTMENT	200,000
FEDERAL	<u>48,550</u>
	\$ 298,550

Should LINCOLNVILLE be unable to contribute the \$50,000 in real estate, funds, and/or in-kind services, the DEPARTMENT'S contribution will be reduced proportionately by the ratio above.

All costs incurred by the DEPARTMENT in the development and construction of the Project will be financed from the Project funding described above.

#### ARTICLE VII - TERMINATION

This Agreement may be terminated at any time prior to the award of a construction contract by mutual agreement of the

DEPARTMENT and LINCOLNVILLE. Should either party serve notice on the other that it desires to terminate the Agreement, a plan for the termination, including responsibility for costs incurred, will be negotiated within 30 days. In the event of termination of this Agreement, Project development activities by the DEPARTMENT would be promptly closed out unless otherwise agreed by both parties.

#### ARTICLE VIII - INDEMNIFICATION

LINCOLNVILLE shall indemnify and hold harmless DEPARTMENT and its agents and employees from any and all claims, actions, or liabilities of any nature whatever arising out of the negligence or any other act or omission of LINCOLNVILLE or its agents, servants, employees or independent contractors in the development and execution of the Project.

#### ARTICLE IX - INTERPRETATION AND PERFORMANCE

This Agreement shall be governed by the laws of the State of Maine as to interpretation and performance.

IN WITNESS WHEREOF, the Maine Department of Transportation and the Town of Lincolnville by their duly authorized representatives have caused this Agreement to be executed.

WITNESS

Tonya Young

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

BY Russell W. Spinney  
Russell W. Spinney  
Deputy Commissioner

WITNESS

[Signature]

TOWN OF LINCOLNVILLE

BY Richard M. McLaughlin  
Richard M. McLaughlin, Selectman

BY Robert H. Richards  
Robert H. Richards, Selectman

BY Ernest Littlefield  
Ernest Littlefield, Selectman

BY Willard H. Hardy  
Willard H. Hardy, Selectman

BY J. Rosson Overcash  
J. Rosson Overcash, Selectman

Approved by the Board

Thomas G. [Signature]  
Chairman, Board

## APPENDIX A

### BASIC FISH PIER FACILITY

For the purposes of the Fish Pier Improvement Program a "basic fish pier facility" shall include the following:

1. Adequate land to support the pier facility, floats, access and limited parking.
2. Pier development including demolition, access construction, pier construction.
3. Hoists and/or take-out stations.
4. Lighting to meet OSHA minimum standards for a commercial fish pier.

Funds may also be used for the following additional/pier related items:

1. Berth dredging for anticipated use by fishing vessels.
2. Catwalks and floats
3. Expanded parking areas

## Harbor Finances

Fiscal Year	Appropriation	General Operations Expended	Balance to Harbor Savings	Fees/Donations to Harbor Savings	Capital Improvement Funds	Grant Money	Harbor Savings Balance @ June 30
2008-2009	\$ 29,349.00	\$ 27,949.04	\$ 1,399.06	\$ 10,400.00	\$ -	\$ 14,962.50	\$ 91,186.04
2009-2010	\$ 23,899.00	\$ 20,219.51	\$ 3,679.49	\$ 11,157.50	\$ 10,000.00	\$ -	\$ 112,710.55
2010-2011	\$ 17,399.00	\$ 17,008.40	\$ 390.60	\$ 7,555.00	\$ 10,000.00	\$ 78,351.81	\$ 44,121.42
2011-2012	\$ 20,637.00	\$ 20,637.00	\$ -	\$ 8,785.00	\$ -	\$ -	\$ 52,819.13
2012-2013	\$ 20,573.00	\$ 17,716.46	\$ 2,856.54	\$ 8,945.00	\$ -	\$ -	\$ 54,727.08
2013-2014	\$ 23,453.00	\$ 13,903.00	\$ 9,550.00	\$ 11,488.50	\$ 12,500.00	\$ -	\$ 70,660.95
2014-2015	\$ 23,525.00	\$ 11,333.41	\$ 12,191.59	\$ 10,713.50	\$ 30,000.00	\$ -	\$ 93,881.08
2015-2016	\$ 20,100.00	\$ 18,983.28	\$ -	\$ 14,093.00	\$ 30,000.00	\$ -	\$ -

## **Section 14 Land Uses**

the mid-point of the McKay Road to the easterly side of U.S. Route One; thence running northerly along the easterly side of U.S. Route One to the southeasterly corner of the bridge crossing Frohock Brook, being the point of beginning, including within the geographic area set forth in Section 13 (F) (3) any portion of Lot 100 located within 250 feet horizontal distance of the normal high water line of Penobscot Bay. Meaning and intending by this amendment to include within the geographic area set forth in Section 13 (F) (3) the waterside portion of Lot 100 as set forth on the 1989 Tax Map Number 6, which is within 250 feet horizontal distance of the normal high water line of Penobscot Bay. Upon enactment of this amendment, Section 13 (F) (3) shall encompass within the Limited Commercial District all of Lot 77, 78, and 79, and the portion, as set forth above, of Lot 100 of the 1989 Tax Map Number 6.

G. Areas Outside the Shoreland Zone

General District

The General District includes all areas of the Town of Lincolnville which are not included in the Shoreland Zone.

**SECTION 14 – TABLE OF LAND USES**

All land use activities in the Shoreland Zone, as indicated in Table 1, Land Uses, shall conform with all of the applicable land use standards in Section 16. All land use activities in the General District, as indicated in Table 1, Land Uses, shall conform with all of the applicable land use standards in Section 15. The district designation for a particular site shall be determined from the Official Land Use Map.

<p>Key to Table 1:                  Yes = Allowed (no permit required but the use must comply with all applicable land use standards.)                  No = Prohibited                  PB = Allowed with permit issued by the Planning Board                  CSPR = Allowed with commercial site plan review and approval granted by the Planning Board                  CEO = Allowed with permit issued by the Code Enforcement Officer                  LPI = Allowed with permit issued by the Local Plumbing Inspector                  SE = Special Exception Permit granted by Appeals Board required                  * = Subject to specific land use standards                  ** = Consult with Maine Forest Service regarding applicable statewide standards</p>		
<p>Abbreviations:                  RP=Resource Protection District                  RC=Resource Conservation District                  LR=Limited Residential District                  HD=Harbor District                  SP=Stream Protection District</p>	<p>LC= Limited Commercial District                  GD= General District</p>	<p>* = See Section 16                  Y = Yes                  N = No</p>

<b>TABLE OF LAND USES</b>							
LAND USES	Shoreland Zone						Areas Outside Shoreland Zone
	SP	RP	RC	LR	HD	LC	GD
Non-intensive recreational uses not requiring structure, such as hunting, fishing, & hiking	Y	Y	Y	Y	Y	Y	Y
Motorized vehicular traffic on existing roads & trails	Y	Y	Y	Y	Y	Y	Y
Forest management activities except for timber harvesting	Y	Y	Y <sup>1</sup>	Y	Y	Y	Y
Timber Harvesting	**	**	**	**	**	**	**
Clearing or removal of vegetation for activities other than timber harvesting	CEO <sup>1</sup>	CEO <sup>1</sup>	CEO <sup>1</sup>	Y	Y	CEO	Y
Fire prevention activities	Y	Y	Y	Y	Y	Y	Y
Wildlife management practices	Y	Y	Y	Y	Y	Y	Y
Soil & Water conservation practices	Y	Y	Y	Y	Y	Y	Y
Mineral exploration	N	Y <sup>2</sup>	Y <sup>2</sup>	Y <sup>2</sup>	Y <sup>2</sup>	Y <sup>2</sup>	Y
Mineral exploration, including sand & gravel extraction	N	PB <sup>3</sup>	N	PB	PB	PB	Y
Surveying & resource analysis	Y	Y	Y	Y	Y	Y	Y
Emergency operations	Y	Y	Y	Y	Y	Y	Y
Agriculture*	Y	PB	N	PB	PB	PB	Y
Aquaculture*	PB	PB	N	PB	PB	PB	Y
Principal structures & uses One & two-family residential, including driveways, not located within shoreland zone	N/A	N/A	N/A	N/A	N/A	N/A	CEO
Principal structures & uses One & two-family residential, including driveways, located 100 feet or less from the protected shoreland resource	PB <sup>4</sup>	N	PB	PB	N	PB	N/A
Principal structures & uses One & two-family residential, including driveways, located more than 100 feet from the protected shoreland resource	CEO	N	CEO	CEO	N	CEO	N/A
Multi-unit residential-3 or more units	N	N	N	PB	N	PB	PB
Commercial	N	N <sup>10</sup>	N	N <sup>10</sup>	PB <sup>5</sup>	PB	PB-CSPR
Industrial	N	N	N	N	PB <sup>5</sup>	N	PB-CSPR
Governmental & institutional	N	N	N	N	PB <sup>5</sup>	PB	PB-CSPR
Small non-residential facilities for educational scientific, or nature interpretation purposes	PB <sup>4</sup>	PB	PB	PB	PB <sup>5</sup>	PB	PB-CSPR
Non-conforming non-residential Municipal Uses or Public	SE	SE	SE	SE	SE	SE	SE

Utility							
Structures accessory to allowed uses*	PB <sup>4</sup>	PB	PB	CEO	CEO	CEO	CEO
Piers, docks, wharves, bridges & other structures & uses extending over or below the normal high water line or within a wetland: a) Temporary b) Permanent	CEO PB	CEO PB	N N	CEO PB& DEP	CEO PB <sup>5</sup> & DEP	CEO PB& DEP	Y CEO& DEP

\* Subject to specific Land Use Standards, Section 16

**TABLE OF LAND USES**

	(-----Shoreland Zone-----)						Areas Outside Shoreland Zone
LAND USES	SP	RP	RC	LR	HD	LC	GD
Conversion of seasonal residences to year-round residences	LPI	N	LPI	LPI	LPI	LPI	LPI
Home Occupations	CEO	N	CEO	CEO	CEO	CEO	CEO
Private Sewage disposal systems for allowed uses	LPI	N	LPI	LPI	LPI	LPI	LPI
Essential services	PB <sup>6</sup>	PB <sup>6</sup>	PB <sup>6</sup>	PB	PB	PB	CEO
A. Roadside distribution lines (34.5kV and lower)	CEO <sup>6</sup>	CEO <sup>6</sup>	Y <sup>11</sup>	Y <sup>11</sup>	Y <sup>11</sup>	Y <sup>11</sup>	CEO
B. Non-Roadside or cross country distribution lines involving ten poles or less in the shoreland zone	PB <sup>6</sup>	PB <sup>6</sup>	CEO	CEO	CEO	CEO	CEO
C. Non-roadside or cross country distribution lines involving eleven or more poles in the shoreland zone	PB <sup>6</sup>	PB <sup>6</sup>	PB	PB	PB	PB	CEO
D. other essential services	PB <sup>6</sup>	PB <sup>6</sup>	PB	PB	PB	PB	CEO
Service drops, as defined, to allowed uses	Y	Y	Y	Y	Y	Y	Y
Public and private recreational areas involving minimal structural development	PB	PB	N	PB	PB	PB	CEO
Individual private campsites	CEO	CEO	CEO	CEO	CEO	CEO	Y
Campgrounds	N	N	N	N	N	N	CEO
Road Construction	PB	N <sup>8</sup>	PB	PB	PB <sup>5</sup>	PB	Y
Parking facilities	N	N <sup>7</sup>	N	PB	PB <sup>5</sup>	PB	Y
Marinas	PB	N	N	PB	PB	PB	PB
Filling & earthmoving less than 10 cubic yards	CEO <sup>9</sup>	CEO <sup>9</sup>	CEO <sup>9</sup>	Y <sup>9</sup>	Y <sup>9</sup>	CEO <sup>9</sup>	Y
Filling & earthmoving more than 10 cubic yards	PB <sup>9</sup>	PB <sup>9</sup>	CEO <sup>9</sup>	CEO <sup>9</sup>	CEO <sup>9</sup>	CEO <sup>9</sup>	Y <sup>10</sup>
Signs*	Y	Y	N	Y	Y	CEO	CEO

\* Subject to specific Land Use Standards, Section 16

Uses similar to allowed uses	CEO	CEO	CEO	CEO	CEO	CEO	CEO
Uses similar to uses requiring a CEO permit	CEO	CEO	CEO	CEO	CEO	CEO	CEO
Uses similar to uses requiring A PB permit	PB	PB	PB	PB	PB	PB	PB
Essential Municipal Services for Sewage Disposal Systems, & Public Toilet Facilities	N	N	N	N	PB	PB	CEO
Medical Marijuana Dispensary	No	No	No	No	No	CSPR <sup>12,14</sup>	CSPR <sup>12,14</sup>
Methadone Clinic	No	No	No	No	No	CSPR <sup>13,14</sup>	CSPR <sup>13,14</sup>

Notes:

1. In RP not allowed within 75 feet horizontal distance of normal high water line of great ponds, river, and streams, except to remove safety hazards.
2. Requires a permit from CEO if more than 100 square feet of surface area, in total, is disturbed.
3. In RP not allowed in areas so designated because of wildlife value.
4. Provided that a variance setback requirement is obtained from the Board of Appeals.
5. Functionally water-dependent uses and uses accessory to such water-dependent uses only.
6. See further restrictions in Section 16(L)(2)
7. Except when an area is zoned for resource protection, due to floodplain criteria, in which case a permit is required from the Planning Board.
8. Except as provided in Section 16(H)(4).
9. DEP permit is also required within seventy five (75) feet of the normal high water line.
10. Except for commercial uses otherwise listed in the table, such as marinas and campgrounds, that are allowed in the respective district.
11. Permit not required but must file a written "notice of intent to construct" with CEO.
12. See performance standards in Section 15(B).
13. See performance standards in Section 15(C).
14. Use limited to lots with frontage on Route 1 and located south of the intersection of Beach Road (Route 173) and Route 1.

A person performing any of the following activities shall require a permit from the Department of Environmental Protection, pursuant to Title 38 MRSA, Section 480-C, if the activity occurs on, in, over or adjacent to any coastal or freshwater wetland, great pond, river, stream or brook and operates in such a manner that material or soil may be washed into them:

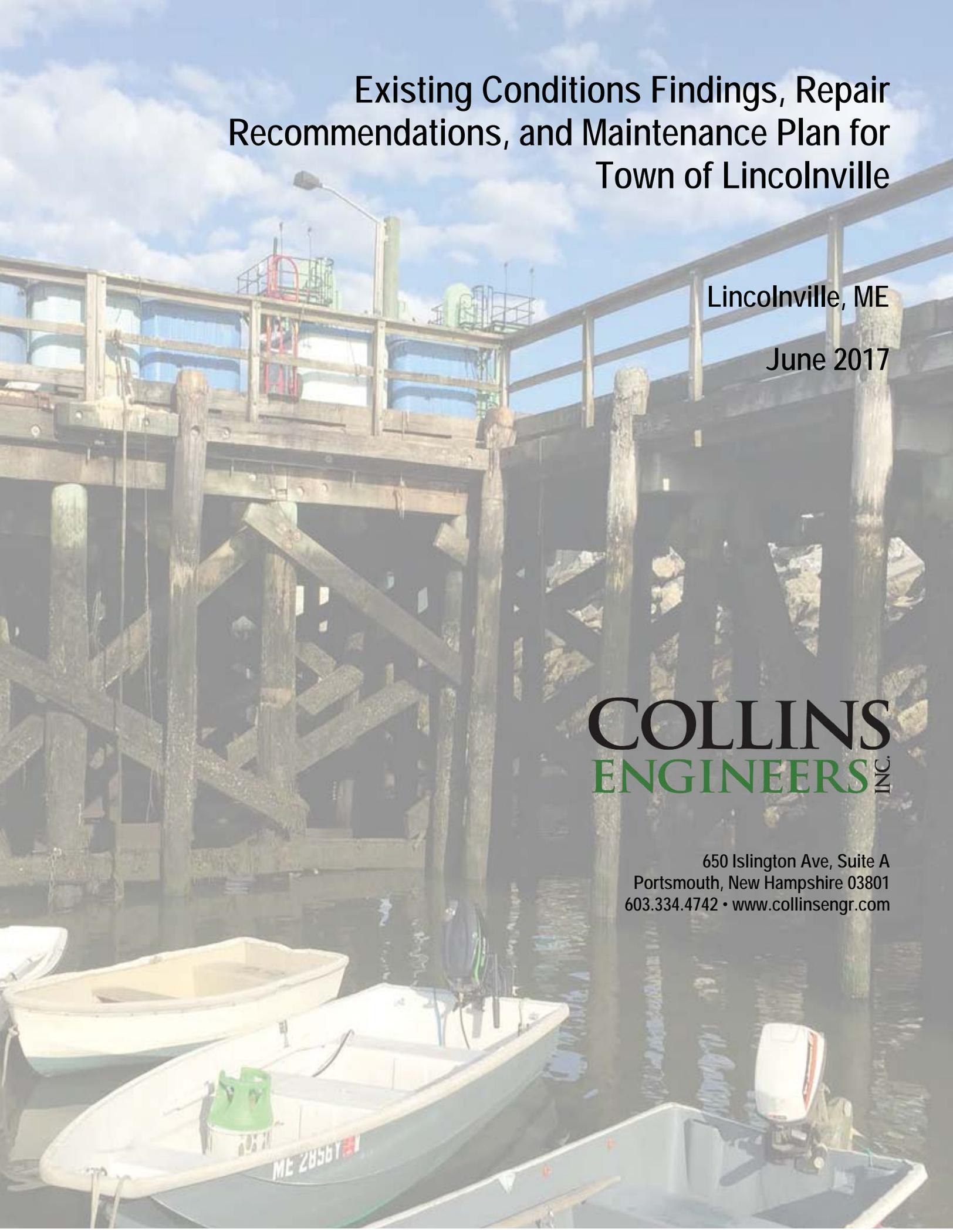
- A. Dredging, bulldozing, removing or displacing soil, sand, vegetation or other materials;
- B. Draining or otherwise dewatering;
- C. Filling, including adding sand or other material to a sand dune; or
- D. Any construction or alteration of any permanent structure.

**SECTION 15 - TOWN-WIDE LAND USE STANDARDS**

- A. Building and Land Use Standards - All Areas Outside of the Shoreland Zone:
  1. Lot Area: Minimum lot area shall be 40,000 square feet per individual dwelling unit or other principal use. A dwelling unit is



## Appendix B – Existing Conditions, Findings, Repair Recommendations, and Maintenance Plan for Town of Lincolnville



# Existing Conditions Findings, Repair Recommendations, and Maintenance Plan for Town of Lincolnville

Lincolnville, ME

June 2017

**COLLINS**  
**ENGINEERS** INC

650 Islington Ave, Suite A  
Portsmouth, New Hampshire 03801  
603.334.4742 • [www.collinsengr.com](http://www.collinsengr.com)

## Lincolnville Harbor and Waterfront Facilities

### Existing Conditions Findings, Repair Recommendations, and Maintenance Plan

This report provides an overview of the waterfront facilities in Lincolnville, summarizes the existing conditions and provides recommended Immediate, Near Term and Deferrable repairs with associated cost estimates. Appended to this report is a recommended Maintenance Plan for the fish pier and wave screen.

#### Harbor And Waterfront Facilities

Lincolnville Harbor is located on the west side of Penobscot Bay between Camden and Northport. It is the closest harbor to Islesboro and is home to the Lincolnville Ferry Terminal with year-round service to Islesboro. From North to South, the Harbor’s waterfront facilities consists of:

- Lincolnville Beach
  - A public beach with adjacent parking, shopping, restaurants, and town amenities
- Public boat ramp
  - Small boat access at mid to high tides
- Fish Pier
  - Built in 1991 with a combination of public and private funds, the timber pier was constructed to commercial standards and provides the primary access to the water for Lincolnville residents and commercial fisherman. The pier also accommodates water taxis and commercial transport to and from Islesboro, serves as a public landing with temporary tie-up on three timber floats, provides dinghy storage for access to the mooring field, and serves the commercial fishing fleet with bait storage and two davit hoists.
- Mooring field (Inner Harbor and Outer Harbor)
  - The Lincolnville mooring field is comprised of the Inner and Outer Harbors defined as follows:
    - The Inner Harbor is defined as the harbor area west of a line drawn from the northern turning dolphin on the ferry dock to the shoreline due north. The area is essentially that which is protected by the wave screen from the south.
    - The Outer Harbor is defined as the area (excluding the Inner Harbor) from a line starting at Frohock Point, due east to the G “7” Bell, then north to the Lincolnville/Northport border.



Figure 1 - Site Plan

- There are approximately 40 to 48 total moorings including 3 guest moorings. Only moorings located in the Inner Harbor have tender privileges.
- Lincolnville Ferry Terminal
  - Reconstructed in 1990 to its current configuration, the ferry terminal is owned, operated, and maintained by MaineDOT. The State maintains a 150 foot radius around its operations for safety, thereby limiting options for placement of floats and moorings.
- Wave Screen
  - The wave screen is constructed within the Ferry Terminal pier and provides protection to the main pier and Inner Harbor from southerly wind generated waves. Recent repairs to the wave screen were completed in 2010 and 2015.

### Environmental Conditions

Lincolnville's Inner Harbor is exposed to a 3 mile fetch to the East and Southeast, and a 5 mile fetch to the Northeast. The Outer Harbor is additionally exposed to an almost unlimited fetch to the South-Southeast. The wave screen on the ferry terminal and the granite wave break just to the south provide protection to the Inner Harbor from wind generated waves and open ocean swells from Southwest to South-Southeast.



*Figure 2 - Harbor Exposure*

The Harbor is located in a VE flood zone with a base flood elevation<sup>1</sup> of 15.0 ft. The shoreline and immediate upland areas are located in an AE flood zone with a base flood elevation of 13.0 ft.

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<sup>1</sup> Elevations references to NGVD88

It is reported that the silting in of the harbor has accelerated since the ferry terminal was constructed. Discussions with users indicate that standard operating procedure for the ferry operators is to leave the engine in gear while at the dock (typically a 15 minute duration). The prop wash creates a strong current, drawing water from north to south. It is reported that on multiple occasions, small vessels have been pinned against the wave screen when the ferry is at the dock.

#### Waterfront Structures – Existing Conditions and Recommended Repairs

The existing Lincolnville Harbor municipal waterfront structures are identified in Figure 1 and include floating docks (A), gangways (B), a main pier (C), an access pier (D), and a timber walkway (E). An above-water inspection of the structures was completed by Pinnacle Hill Engineering in May 2016. Overall inspection results indicated that operational restrictions (reduced live vertical loads, mooring/berthing loads) and “emergency” repairs were not required. A summary of inspection recommendations is provided in Table 1 and a discussion of the inspection results and subsequent repair recommendations follows. Repair recommendations are identified as Immediate, Near Term, or Deferrable based on consideration of inspection report recommendations as they relate to safety and functionality.



*Figure 3 - Lincolnville Harbor Waterfront Facilities*

**Table 1 – Summary of Repair Recommendations**

Structure	Priority	Component	Recommendation
Floating Docks (A)	Near Term	General	Haul, Inspect and Repair
Gangways (B)	Deferrable	General	None
Main Pier (C)	Immediate	Ladder	Repair/Remove
	Immediate	Handrails	Partially replace
	Near Term	Curbs	<ul style="list-style-type: none"> <li>• Replace 20-ft (east)</li> <li>• Replace north</li> </ul>
	Deferrable	Fender Piles	Partially replace and install caps
	Near Term	Decking	Partially replace
	Deferrable	Bracing	Replace bolts
	Deferrable	Pile cap connections	Partially replace
Access Pier (D)	Deferrable	General	None
Timber Walkway (E)	Deferrable	General	None

**Immediate**

System or element is in failure, or is expected to fail in the next year. Such failure will likely result in the significant loss of facility operations, Life/safety issues, and/or will likely cause significant property damage.

**Near Term**

System or element is currently functional, but has a high probability of failing before the next scheduled inspection<sup>2</sup>. Such failure will likely result in the significant loss of facility operations, and/or will likely cause significant property damage

**Deferrable**

System or element is expected to remain functional until the next scheduled inspection. If failure does occur, it will not likely result in the significant loss of facility operations, and/or will not likely cause significant property damage.

### Floating Docks (A)

The timber floating docks were not inspected in the Pinnacle Hill report and their condition is undocumented at this time. cursory inspection of the floats as well as discussions with multiple users of the facility indicates that the floats are nearing the end of their useful life and should be programmed for replacement within the next 10 years.

Timber floating dock structures typically have a useful service life up to 25 years depending upon type of wood, level of treatment, use and exposure conditions. Practically, in Lincolnville Harbor where the floats see heavy use, are often left in year round, and are exposed to northeast wind and waves, a useful service life of 10-15 years can be expected. Periodic timber dock maintenance items may include discrete curb and deck replacement, rub strip/fender replacement, cleat replacement, and utility repairs (if present). Less frequent repairs may include replacement of connection hardware (frequently requires replacement of connected timbers), replacement of moorage appurtenances (chains and fittings),

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<sup>2</sup> For facilities in good condition and aggressive environments (salt water), a 4-year inspection cycle is recommended in accordance with Table 2-2 provided in the American Society of Civil Engineers, Underwater Investigations – Standards Practice Manual.

replacement of stringers, and the addition/replacement of underside floats. Some of these repairs can be completed with the floating docks in place; other repairs will require removal of the docks from the water to a staging area on shore. It is considered good practice to haul timber floats on an annual basis in order to inspect and complete repairs.

### Gangways (B)

The three aluminum gangways were reported to be in “reasonably” good condition. The gangway decking consists of weathered 5/4x6 Southern Yellow Pine (SYP) pressure treated timber. Repair recommendations include replacing the decking on the east gangway. Recent repairs have been completed to the underside bracing.

Aluminum gangways typically have a useful service life of up to 30 years depending upon the loading, use, connections, and relative alignment/motion of the supporting structures. Overloading is typically evidenced by warped or failed decking and, in extreme cases, by laterally deflected main members. Floating docks which are moderately to severely listed (whereby freeboard<sup>3</sup> is significantly different from one side to the other) will increase the stress on the gangway connections and may force the gangway to twist longitudinally. This twisting action can increase stress on internal bracing/welded connection and may increase the possibility of cracking/failure. Floating docks in extreme conditions or subject to significant wave action may exhibit extreme movement, which is translated to the gangway. As a result, future gangway inspections should include observations of connections, end rollers (if used), roller plates on the floating docks (if used), and bracing. Deck connections and bent or distorted bracing/components should be verified and identified as a significant structural deficiency. These inspections can be typically completed with the gangway in place, as underside components can be visually observed using mirrors as needed.

### Main Pier (C)

The timber main pier is approximately 40-ft wide by 80-ft long and is oriented east/west. It is supported on nine timber pile bents oriented north/south, consisting of six timber piles spaced at 8-ft. Pier components consist of SYP handrails, curbs, decking, stringers, pile caps, bracing and vertical/battered piles. The 2016 inspection report indicates the fender piles are a mix of SYP and untreated oak. The main pier supports both pedestrian and vehicular live loads. Recommendations include completing an underwater inspection of the portion of piles/bracing permanently submerged to evaluate the extent of marine borer damage. Repair recommendations include the following.

1. Ladder – repair corroded portion of ladder, or remove if not used<sup>4</sup>
2. Handrails – replace deteriorated sections (quantity not determined)
3. Curbs – replace 20-ft of east curbing, replace north curbing within “next few years” (quantity not determined)
4. Decking – replace decking with less than 2.75-in remaining thickness (quantity not determined)

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<sup>3</sup> Distance from top of floating dock to waterline.

<sup>4</sup> Recommend consideration to replace the ladder in-kind.

5. Bracing – replace bolts<sup>5</sup>
6. Pile connections – Inspect and replace splice bolts (quantity not determined), re-coat or replace the galvanized connections straps/bolts, install cap nuts (quantity not determined)

Timber piers typically have a useful service life between 25 and 50 years depending upon type of wood, level of treatment, exposure conditions and extent of routine maintenance. Above water, timber decay is typically accelerated at locations with incomplete timber preservative treatment, at bolted connection locations, and at the ends of the cut timber bracing. Timber is also susceptible to abrasion and impact damage. Below water and within the tidal zone, timber pile/bracing deterioration typically occurs due to marine organisms and incomplete timber preservative treatment.

#### Access Pier (D)

The timber access pier is approximately 15-ft wide by 120-ft long. The eastern 70-ft portion of the pier is oriented east/west parallel to the ferry access road where it connects to the Main Pier; the remainder is skewed and connects to the ferry access road. It is supported on timber pile bents oriented perpendicular to the pier, consisting of three timber piles spaced at ~7.5-ft. Pier components consist of SYP handrails, curbs, decking, stringers, pile caps, bracing and vertical/battered piles. The pier supports both pedestrian and vehicular live loads. For the purposes of this report it is assumed that main pier recommendations include the access pier as well.

#### Timber Walkway (E)

Constructed dimensions of the timber walkway are unavailable. The walkway appears to be a single span and is oriented north/south and connects the access pier to the ferry access road. Pier components consist of SYP handrails, decking and stringers. The 2016 inspection report indicates no observed defects.

#### References:

1. Interviews held between September 2<sup>nd</sup>, 2016 and April 16<sup>th</sup>, 2017
2. Lincolnville Harbor Ordinance, 2006 (amended 2016)
3. Town of Lincolnville, Maine Comprehensive Plan, March 2006
4. Municipal Fish Pier Agreement, November 1989
5. Lincolnville Fish Pier Condition Assessment

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<sup>5</sup> Recommend verifying bracing condition at bolt hole locations, as timber typically develops advanced decay at these locations.

# REPAIR COST ESTIMATES



Client: LincolNville Harbor  
Project: LincolNville Harbor and Waterfront Facilities  
Description: Construction and Maintenance Cost Estimates  
Job No.: 15-xxxx.16  
Prep. By: CTC Date: 11/8/2016

**REPAIR COST ESTIMATE**

**Immediate Repairs & Near Term Repairs (2017)**

<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total Cost</u>
Ladder Replacement	1	Lump Sum	\$1,000	\$1,000
Handrail Partial Replacement (assume 75 LF)	75	LF	\$10	\$750
Curb Partial Replacement (assume 100 LF)	100	LF	\$25	\$2,500
Decking Partial Replacement (assumes 20% of deck)	800	SF	\$15	\$12,000
Float Haulout and Repair	1	Lump Sum	\$5,000	\$5,000
		Contractor Mobilization/Demobilization		\$2,000
		Contractor Overhead & Profit (25%)		\$5,900
		Contingency (10%)		\$3,000
		Construction Cost Estimate Subtotal		\$32,150
		<b>Total</b>		<b>\$33,000</b>

**Deferrable**

<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Total Cost</u>
Fender Pile Partial Replacement (assume 4 piles)	4	EA	\$2,100	\$8,400
Bracing Hardware Partial Replacement	10	EA	\$500	\$5,000
Pile Cap Connections	3	EA	\$1,500	\$4,500
		Contractor Mobilization/Demobilization		\$7,500
		Contractor Overhead & Profit (25%)		\$6,400
		Contingency (10%)		\$3,200
		Construction Cost Estimate Subtotal		\$35,000
		<b>Total</b>		<b>\$35,000</b>

# RECOMMENDED MAINTENANCE PLAN

# Lincolnton Waterfront Maintenance Plan

Provided by: Collins Engineers, Inc.

November 2016

Note: Inspections should be performed as soon as possible to establish a baseline for the future.

## Timber Pier:

- **Inspect every four years. Perform a visual inspection of handrails, ladders, and curbs (and all other safety related items) at least annually to identify failed components or unsafe conditions.**
- **Typical Service Life: 20-50 Years (For service loading conditions, i.e. vehicular and moderate to severe environment)**
- **Typical Useful Life: 50+ Years (For reduced load conditions, i.e. pedestrian access only and sheltered to moderate environment)**

## Annual Maintenance/Inspection Items:

Handrails	Tighten loose connections/components, replace corroded / missing hardware or deteriorated members as needed
Curbs	Tighten loose connections / components, replace corroded / missing hardware or deteriorated members as needed
Deck	Replace members which have significant section loss due to wear, rot, or deflect significantly under normal loading conditions. Replace members less than 2 ¾ inches thick
Mooring hardware	Tighten loose components and inspect connections underside, replace corroded / missing hardware as needed
Ladders	Inspect submerged portions, tighten loose components, re-coat exposed steel, and replace missing rungs
Stringers	Identify locations and extent of decay, most notably at the ends and mid span
Pile caps & connections	Identify locations and extent of decay, most notably at the pile supports and mid span
Pile bracing & connections	Identify locations and extent of decay, most notably at the ends, replace failed elements and significantly corroded/missing hardware
Piles and fender piles	Identify locations and extent of decay, abrasion or marine borers (hour glass shape or significant voids/section loss are critical). Replace pile. Replace fender pile caps as needed to protect vulnerable exposed end grain.

- Notes: 1. The underwater inspection should be performed by qualified divers with experience inspecting timber waterfront structures.
2. Locations of decay and section loss should be tapped with a hammer or pierced with an awl to evaluate the extent of internal deterioration. A hollow sound when tapped by a hammer, or easy penetration over 1/2" deep may be indication of a significant defect. Additional testing using an increment borer may be required.

## Advanced Repairs

For elements below the deck, consider replacement or repair, depending upon extent of the defect, interruptions to operations, and estimated repair costs. Engineered repairs included strengthening pile caps and stringers via 'sister' members on either side and bolted through, or installing pile jackets to extend the service life of the piles. Piles can also be repaired via 'posting' whereby deteriorated sections of the pile are removed and replaced.

## Floating Docks:

- **Inspect in the dry (via staging area on land) annually and inspect underwater moorings/connections ever four years.**
- **Typical Service Life: 25 Years**

### Annual Maintenance/Inspection Items:

Mooring hardware	Tighten loose components and inspect underside connection conditions, replace significantly corroded/missing hardware
Deck	Replace members which have significant section loss due to wear, rot, or deflect significantly under normal loading conditions. During winter, clear deck of snow and ice.
Rub-rails	Replace damaged/failed sections as needed
Framing/stringers	Identify locations and extent of decay, replace failed elements
Float modules	While in the water, identify freeboard at the four corners of the float (indicates uneven buoyancy); out of the water, clean and inspect float modules for punctures (plastic) or saturated/missing sections (foam), replace/reconnect as needed

### Advanced Repairs:

Typically complete replacement is recommended where float module and framing repairs are extensive.

## Gangways:

- **Inspect in the dry annually.**
- **Typical Service Life: 30 Years**

Handrails & truss members	Identify damaged/distorted members, failed connections, and cracked welds. Replace / re-weld as needed.
Deck	Replace members which have significant section loss due to wear, rot, or deflect significantly under normal loading conditions. Tighten or replace loose/corroded connections
Bearing/connections	Inspect connections to the pier. Tighten or replace loose / corroded connections. If rollers or rub strips are present, replace if failed or significantly worn.

Note: It is important to identify global failure of truss or framing elements typically indicated by bowing/bent stingers or truss members along their full length. Unusual twisting or deflecting of the truss should also be noted as these are critical findings. If gangway cannot be removed from pier, use mirrors to view the underside framing and connections.

### Advanced Repairs:

If there are multiple failed connections of the welds, truss or framing members, or if there is evidence of global failure, complete replacement may be necessary. In the event the gangway is significantly distorted, it will be necessary to identify and correct the cause before installing a replacement gangway.

## Wave Screen:

- **Inspect every four years.**
- **Typical Service Life: 20-50 Years**

### Annual Maintenance/Inspection Items:

Timber and connections	Replace members which have significant section loss due to abrasion, rot, marine borers, or deflect significantly under normal loading conditions
Piles	Identify locations and extent of decay, abrasion or marine borers (hour glass shape or significant voids/section loss are critical)

Notes: 1. The underwater inspection should be performed by qualified divers with experience inspecting timber waterfront structures.  
2. Locations of decay and section loss should be tapped with a hammer or pierced with an awl to evaluate the extent of internal deterioration. A hollow sound when tapped by a hammer, or easy penetration over 1/2" deep may be considered a significant defect.

### Advanced Repairs:

Typically complete replacement is recommended where pile and timber repairs are extensive.



Client: Lincolnvil Harbor  
 Project: Lincolnvil Harbor and Waterfront Facilities  
 Description: Long Term Maintenance Cost Estimate  
 Job No.: 15-xxxx.16  
 Prep. By: CTC Date: 11/10/2016

**LONG TERM MAINTENANCE COST ESTIMATE (STATUS QUO OPTION)**

Item	Projected Yearly Cost					
	2017-2026	2027	2028-2037	2038	2039-2048	
Pier	\$14,000	\$150,000	\$10,000	\$200,000	\$10,000	
Floating Docks	\$1,500	\$50,000	\$1,200	\$1,200	\$1,500	
Gangways	\$750	\$30,000	\$500	\$500	\$750	
Wave screen	\$1,000	\$5,000	\$1,000	\$7,500	\$1,000	
Boat ramp	\$250	\$2,000	\$250	\$2,000	\$250	
<b>Total Yearly Cost</b>	<b>\$17,500</b>	<b>\$237,000</b>	<b>\$12,950</b>	<b>\$211,200</b>	<b>\$13,500</b>	<b>\$887,700</b> Extended Total for 32 Year Timespan (58 yr service life of facility)

Note: All values in 2016 dollars and do not account for inflation.

Years	Years from 2016	Narrative
2017-2026:	10	-If the pier remains in its satisfactory state, it can be reasonably assumed that regular maintenance as described in the maintenance plan should be the only activity necessary to keep the waterfront facilities in their functioning state. This is in addition to the immediate and deferrable repairs.
2027	11	-In the facility's current state, it can be reasonably assumed that after 10 years from now, if properly maintained, the first significant structural rehabilitation of the pier will be necessary. After this time, the floating docks and gangways may need replacement. This will lead to a lower maintenance cost for the gangways and docks. Construction items may include jacketing or replacing piles, and repairing/replacing pile caps, stringers and significant portions of decking and above deck components.
2028-2037	21	-As the pier and wave screen age ,the yearly costs will increase, while the cost for maintaining recently replaced docks and gangways will be lower.
2038	22	-After 10 years from the initial structural repairs, there may be several additional elements which were not repaired or replaced during the initial rehabilitation. These additional elements will need to be repaired and/or replaced. Previous repairs which have not held up over the past 10 years will also have to be fixed. This second major rehabilitation will likely be more costly than the first due to the increasing rate of deterioration of the original pier elements. If designed and constructed correctly, the repairs should be sufficient for another 10 years.
2039-2048	33	-As the pier and wave screen continue to age, the yearly costs will increase, while the cost for maintaining aging docks and gangways will be higher. After this point, the pier will be 58 years old since the original construction in 1991, at which point it will be necessary to determine if it will be more economical to build a new pier or continue maintaining the original. The original timber elements will eventually reach a state where they cannot be repaired.



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Appendix C – Memo to the Board of Selectmen  
11-28-16



## **Harbor Facilities Policies, Regulations, Procedures, Users, and Finances Existing Conditions Review**

Summary Review of Findings  
LincolNville Board of Selectman  
November 28, 2016

This is a review of the LincolNville harbor facility policies, regulations, procedures, users, and finances. This review is comprehensive in nature in order to create a foundation for proceeding with informed recommendations for the harbor facilities (generally defined as the pier, floats, boat ramp, and related parking). The task may appear to be oversimplified, but it is a key step for the Project Team, the Board of Selectman, and the community to look at both the big picture and the details in order maximize the efficient use of the harbor facilities and in turn best align finances with need and harbor capacities. This summary review and analysis is the first step in making informed recommendations regarding the design, management, maintenance, and financing of the harbor facilities.

### **1. 2006 Comprehensive Plan Summary**

The 2006 Comprehensive Plan findings appear relevant as refined with these findings from 2016:

- The number of commercial or non-transport commercial user fees was approximately seven in 2016. The Comprehensive Plan notes five full-time and five part-time lobster boats. The actual number of active commercial fisherman was not available at the time of this report.

- Approximately 30 recreational boats were moored in the harbor in 2002. According to the Harbormaster, 50% of these moorings belonged to out-of-town residents. In 2016, there were approximately 20 recreational boats moored in the inner and outer harbor based on field observations. According to Town records, there were approximately 57 mooring holders, with 14 of these mooring holders being non-residents (six are Islesboro, including the Quicksilver and Pendleton. This is less than the 50% of the non-resident moorings reported in 2002.
- There is still a mooring wait list, but allowing additional moorings in the outer harbor has reduced pressure.
- The Quicksilver and two Islesboro boatyards still actively use the facilities, but according to Town records only the Quicksilver and Pendleton Yacht Yard are paying user fees.
- The harbor is still not a popular destination for boats cruising the coast due to environmental conditions, the lack of support facilities, guest moorings are not available for overnight use, and the preference for nearby harbors that are better protected and offer more supporting facilities.
- Parking and access remain as key concerns. There are six dedicated spaces for the harbor facilities.
- In 1991, the Town created the Harbor District. The standards for this District can be updated as required.
- In 2006, the Town adopted the Harbor Ordinance - as amended in 2008.
- Established lines of communication and a formal agreement with Islesboro regarding use of the facilities have not been established.
- While Islesboro and Lincolnville originally split the approximate \$50,000.00 local match cost of the Pier, improvements have continued to be in general mutual, but paid for by Lincolnville.

- The Comprehensive Plan is very specific that the harbor facilities are to be available for all users on an equal basis. The 1989 Fish Pier Contract with the State is less clear in terms of use of the pier.

## **2. Harbor District Summary**

- The Harbor District was established in 1991
- Section 13.D of the Lincolnville Zoning Ordinance defines the Harbor District as:

The Harbor District includes areas where the existing predominant pattern of development is consistent with the allowed uses of this district as indicated in Table of Land Uses, Section 14, and other areas, which are suitable for functionally water-dependent uses.

- The Harbor District, in summary, begins at the normal high water line for Penobscot Bay encompassing all or part of Tax Map 6, Lots 80, 81, 82, and 83.
- The Harbor District falls within the Shoreland Zone and all activity must meet the standards of Section 16 Shoreland Zone Land Use Standards.
- Section 14, Table of Land Uses, details allowable uses in the Harbor District.
- There was a 15-year delay between the establishment of the Harbor District, and the adoption of the Harbor Ordinance in 2006.

## **3. Harbor Ordinance Summary**

- The Town adopted the Harbor Ordinance in 2006
- The Board of Selectman appoints the Harbor Master.
- The Harbor Master reports to and receives direction from the Lincolnville Town Administrator.

- The Town owns and operates the Lincolnville Fish Pier - or otherwise known as the pier. The Harbor Ordinance defines the purpose of the pier “to provide access to the water, primarily for commercial fisherman while allowing reasonable public access to the facility.” In comparison, and discussed in more detail below, the 11.6.1989 Fish Pier Agreement with the State notes that Town agrees to “operate it in a safe and sanitary manner and to ensure that it is available on a fair and equitable basis to commercial fisherman allowing the public reasonable access to the facility.”
- The Harbor Master shall maintain a “Lincolnville Fish Pier & Float Usage Plan.” The Plan is to be “reviewed, updated, and submitted to the Town Office by the Harbor Master” on an annual basis. It does not appear this Plan is prepared on an annual basis.
- Individuals, corporations and other entities shall be limited to one multi-use mooring in the inner harbor. Multi-use moorings are permitted in the outer and coastal harbors.
- Multi-use mooring holders may rent their mooring so long as the mooring is occupied by the watercraft assigned to the mooring for 30 consecutive days per the year.
- The Board of Selectman set the number of and fee for guest moorings.
- Mooring site assignments may not be rented unless the provisions for rental are part of the agreement when the mooring was assigned.
- Inner harbor mooring permit holders shall be issued tender tie-up privileges. The Harbor Master is entitled to one preferred tender space.
- Tender tie-up privileges of outer harbor mooring permit holders in existence prior to the enactment of the Harbor Ordinance shall remain intact.
- Parking for mooring permit holders is adjacent to the launching ramp and in State Ferry lot on a first-come-first-served basis for Harbor Use Permit

- Holders only. The permit parking spaces in the State Ferry Lot are intended for commercial fisherman.
- Article VI Transitional Provisions of the Harbor Ordinance conveys no grandfathering of rights for a particular mooring site. Those individuals, corporations or entities with single or multiple mooring sites at the time of the enactment of this ordinance shall retain the right to renew all moorings site so long as permits remain valid and all fees paid. The four rental mooring areas in the inner harbor shall be allowed to remain as long as fees are paid.
  - According to the most recent Town records only one mooring holder has multiple inner and outer harbor moorings. The above noted from Article XI appears to only apply to one mooring holder of the approximate 57 mooring holders.
  - While each community has different harbor management plans and different Ordinances, it is not typical to allow one person, entity or corporation to hold more than one mooring in a mooring field, particularly when there is a wait list for that mooring field. So called “secondary moorings” are allowed - in a review of Midcoast communities - when there is no waitlist and the case can be made for economic necessity. An example of economic necessity might be a boatyard requiring additional moorings for the function of the business.
  - The Lincolnville Harbor Ordinance is extensive and assigns authority over many matters to the Harbor Master, however there are no provisions for in the Ordinance for determining the Harbor Master’s compensation.
  - It does not appear that a Pier and Float Usage Plan is prepared on an annual basis.
  - There are no specific technical requirements for moorings.
  - The Board of Selectman appoints the Harbor Master - and required submissions from the Harbor Master are made to the Board of Selectman (or to the Board of Selectman via the Harbor Committee), however the

Harbor Master reports to and receives direction from the Town Administrator. In most cases in the Ordinance, the Board of Selectman makes harbor policy and regulations that are then to be enforced by the Harbor Master. There might be more clear channels of communication if the Harbor Master reported to and received direction from the Board of Selectman, not the Town Administrator.

#### **4. Relationship with Islesboro Summary**

- When the Pier was built in 1991, Islesboro provided \$25,000.00 towards construction. That money included public and private sources.
- The November 6, 1989 agreement between Lincolnville and the State of Maine Department of Transportation states that Lincolnville “or other local funding sources” are responsible for a 20% match of the construction cost of the Fish Pier, or \$50,000.00. This suggests that the \$25,000.00 paid by Islesboro for the facilities was 50% of the 20% match.
- In stakeholder interviews and at the public meeting, it was generally expressed that Islesboro is a community partner and that the Lincolnville facilities should be shared with the island, but on a more financially equitable basis.
- As noted in an article in Village Soup dated February 11, 2016, Islesboro gave Lincolnville \$5,000 between 2003 and 2008 (except 2006 when it was \$2,500). From 2009 to 2010 Islesboro paid \$3,000 annually. No payments were received from 2011-2012. For 2013 and 2014 \$2,490 was received and for 2015 no payment was received.
- Stakeholder interviews with residents of Lincolnville, Islesboro, and other surrounding communities all note that at least 50% of the use of the facilities is by Islesboro residents, workers commuting to the island, or deliveries such as construction materials.

- The 2006 Comprehensive Plan Marine Resources Goal #3 directly addresses the relationship with Islesboro:
- The 2012 Islesboro Comprehensive Plan projects growth in persons per square mile to increase from 42.2 in the year 2000 to 60.8 in year 2030. This is in a time when many island populations are facing declining in population.
- Between 1992 and 2008 the number of jobs held by off-island people increased from 27 to 101, or a 275% increase. This number is anticipated to increase, with the assumption that this will impact the commuter use of the Lincolnville facilities
- In the Transportation Section of the Islesboro Comprehensive Plan, there are specific numbers provided on users of the ferry and the airport, but not the Lincolnville facilities.
- In summary, there is no mention of the Lincolnville harbor facilities in the Islesboro Comprehensive Plan nor is there any mention of cost sharing or establishing more clear lines of communication between the two communities.
- It should also be noted that Islesboro declined to help pay for this Study or host a public forum on the island regarding the use of the Lincolnville facilities.

## **5. Harbor Facilities Financial Summary**

- The Project Team has received input that on average the harbor facilities cost approximately \$30,000.00 a year to operate and maintain. User fees and donations average \$10,000.00 year, leaving taxpayers to subsidize the remaining two thirds of the operating costs, or \$20,000.00. As part of this review, the Project Team is also preparing a summary of required pier maintenance based on a recent inspection. This information will be further integrated to provide insight into harbor related costs.

- Lincolnville maintains a Harbor Savings Fund to offset maintenance costs, however the pier is at point where repair and maintenance costs are anticipated to increase annually. A key aspect of this Study is to help the community prioritize the design and maintenance expenditures for the harbor facilities in order to more proactively plan for capital expenditures and limit taxpayer exposure.
- The Project Team is currently working with the Town to analyze harbor finances for Fiscal years 2008 through 2016 to understand how annual costs relate to a maintenance plan, harbor use plan, and fiscal plan, which will be the next steps in the Study.

## **6. Harbor Facilities Financial Summary**

A review of the 2016 harbor users providing by the Town - a one-year snapshot of recent user trends - includes the following information (this does not reflect actual watercraft on moorings):

- There are 57 mooring holders
  - 27 Inner Harbor
  - 20 Outer Harbor
  - 10 Littoral
- An official mooring / watercraft count was not completed, but on several visits the Project Team counted less than 20 active moorings in the Inner and Outer Harbors.
- Of the 57 mooring holders, one holds four Inner Harbor and one Outer Harbor moorings and two moorings holders have two moorings each in the Littoral Harbor. In summary, there are three mooring holders on the mooring list that have more than one mooring.
- Nine of the 57 mooring holders are classified as commercial. Two of the nine commercial users are for Islesboro transport.

- 43 of the mooring holders are Lincolnville residents. According to the 2010 census, the Lincolnville population is 2,164.
- Six of the mooring holders are non-residents with Islesboro addresses. The remaining moorings are from surrounding communities or out of state
- 32 of the mooring holders receive parking permits, allowing these mooring holders to park in the six spaces in the Maine State Ferry parking lot or other designated spaces by the boat ramp (note: there does not appear to be signed / designated spaces by the boat ramp).
- Total user fees collected for 2016 is \$11,869.00
  - Of the \$11,869.00 collected in user fees, \$5,757.00 was classified as commercial, or 48%. Of this 48%, two of the three Islesboro users - transportation - accounted for 58% or \$3,325.00 of total commercial user fees. These two Islesboro commercial transport users account for 28% of all user fees generated by the harbor facilities.
- In addition to the information provided by the Town, stakeholder interviews noted extensive use of the facilities by the islands for transport of workers and materials for construction - and these users are most likely not compensating the Town.

## **7. 1989 Fish Pier Contract Summary**

On November 6, 1989 the Town of Lincolnville entered an agreement with State of Maine Department of Transportation entitled "Agreement for a Municipal Fish Pier in the Town of Lincolnville."

While agreements such as this require proper legal review for specific findings - and over the years the Town has asked for legal clarification of aspects of the agreement - following is a summary of aspects of the agreement as many

different constituents and stakeholders have referenced this document in terms of the purpose and use of the pier:

- Article V: Maintenance and Operations states that “Lincolnville agrees to provide all necessary maintenance to the basic public fish pier facility and to operate it in a safe and sanitary manner and to ensure that it is available on a fair and equitable basis to commercial fisherman allowing the public reasonable access to the facility. Lincolnville further covenants that any future agreement with public cooperatives, private fisheries companies, etc. for the use of the pier contain similar access language for the basic public pier described in this Agreement.”
- In terms of the timeframe, the agreement states: “Lincolnville further agrees to continue the maintenance and operations of the facility at the public commercial fish pier for a minimum of thirty years following its completion.” The pier was completed in 1991. Again, legal counsel is recommended on the terms of the agreement, but in a straight reading of the agreement it appears that the Town can exercise more local control of the use, maintenance, and design of the pier beginning in 2021.
- Article VI: Funding states that Lincolnville “or other local funding sources” are responsible for a 20% match of the construction cost of the Fish Pier, or \$50,000.00



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