



## Shore and Harbor Planning Grants

### Town of Milbridge

#### *Narraguagus River Dredge Analysis Project (Fiscal Year 2019, project awarded 2018)*

*“The funding from Maine Coastal Program and other partners was essential for establishing the importance of the boat launch and pier to the town of Milbridge and the surrounding area. This put us in a good position to make a case for dredging the harbor and we could not have done this on our own.” – Lewis Pinkham, Milbridge Town Manager*



*Photo: Lewis Pinkham*

### Project Description

Milbridge’s public boat launch and pier started experiencing rapid and excessive sedimentation after the replacement of two upstream bridges in 2009. This sedimentation drastically reduced the usefulness of the town harbor because the boat launch became unusable at mid to low tides. This project was designed to understand the sources and causes of the sedimentation and also to document the socio-economic value of the facility to the local and regional economy.

Milbridge’s Marine Resources Committee partnered with the Washington County Council of Governments (WCCOG) for the economic study and hired the engineering firm CES, Inc. for the sedimentation study. The U.S. Army Corp of Engineers also assisted with the project.

## Project results

The economic analysis established the importance of the Milbridge boat launch and pier to the local economy – the pier is used by locals and residents of communities from Machias to Bar Harbor. Marine Patrol, the Coast Gard, commercial harvesters, recreational users, and many local businesses rely on the facility to get their boats in and out of the water. The parking lot also is used to store boats during extreme weather events. The economic analysis showed that commercial fishing, activities supporting commercial fishing, and ship and boat building are far more important to the local economy than they are in other parts of the Maine Coast. The analyses in this study likely undercounted the activity at the facility because many people are self-employed and their activities are not captured in US Census employment statistics.

The engineering study gathered information about river geology and hydrology and previous dredging attempts – the most recent dredging effort was completed in 2007. Information about the bridge reconstruction was also included in the report. Changes in the river channel from construction and a recent dredging effort likely altered the water velocity in the area, leading to increased sedimentation along the river edge at the location of the harbor. The river has extensive sediments directly upstream of the bridges and these are a likely source for the sediment. However, a detailed hydrological study would be needed to fully understand the water flow and origin of sediment deposited at the town boat launch. The engineering report did not conclusively determine the source and cause of the sedimentation. The report recommended that the town complete the detailed hydrological study and, based on the results, consider building a rip-rap sea wall either in the river channel or near the boat launch to alter the river flow and direct sediment away from the boat launch. The town could also explore further dredging projects or removing ledges near the bridges to alter the river flow and direct it away from the town launch.



*Photo: Lewis Pinkham*

## Project follow-up

Milbridge is still coping with high sedimentation at the public boat launch and pier – at times they lose about 4 ft. in a year. The town excavates sediment twice a year to keep the boat launch useable, but it is still only useable at quarter or half tides instead of the expected all-tide use. Fortunately, due to the information gathered in this study, including the economic analysis showing the importance of the pier, Milbridge was able to pursue other funding to dredge the harbor more completely. The town got funding from the U.S. Army Corp of Engineers, who will dredge the harbor in 2024 or 2025.

The town is aware that federal dredging won't occur as frequently as needed and they are constantly exploring options and funding to find ways of keeping the facility operational.



*Photos: Lewis Pinkham*

## Lessons Learned

Milbridge hired the engineering firm (CES, Inc) after receiving the Shore and Harbor Planning Grant. Town Manager Lewis Pinkham stressed the importance of having a detailed Request for Proposal (RFP) when searching for a consultant. The RFP is essential for helping the town clarify what outcomes they want to achieve with their money. It is also important to get quotes to understand what can be done with the amount granted through the Shore and Harbor Planning Grant.

Milbridge found that the economic impact study has been very helpful in their efforts to get additional funding for dredging their harbor. The reports from both studies were helpful for summarizing the issues facing the harbor, but the economic study helped them realize how important the harbor was for multiple user groups in the local area and multiple nearby towns. The facility has a far-reaching impact and is locally important. Documenting these facts helped the town justify their need and secure additional funding. Town Manager Pinkham felt that the economic study was useful and could easily be applied to other towns.



*Photo: Lewis Pinkham*

*Thank you to Lewis Pinkham for his time and assistance preparing this document.*

