

Agency: Commerce, Community and Economic Development**Grants to Municipalities (AS 37.05.315)****Grant Recipient: Thorne Bay****Federal Tax ID: 92-0088485****Project Title:****Project Type: Maintenance and Repairs**

Thorne Bay - Manholes and Sewer Lines Repairs

State Funding Requested: \$200,000**House District: 33 / Q**

Future Funding May Be Requested

Brief Project Description:

Repairing of Sewer Manholes and Sewer Lines to reduce the inflow of ground and surface water into the sewer system.

Funding Plan:

Total Project Cost:	\$200,000
Funding Already Secured:	(\$0)
FY2014 State Funding Request:	<u>(\$200,000)</u>
Project Deficit:	\$0

Funding Details:

The City has used Village Safe Water funding to conduct studies that have located some infiltration problems. For the last 10 years the City has spent on average \$5000 to attack the infiltration problems.

Detailed Project Description and Justification:

Over the years the City of Thorne Bay Sewer Collection System has deteriorated allowing the inflow of ground and surface water to enter the system and thus entering the Sewage Treatment Plant. At times the treatment plant, with operating capacity of 100,000 gallons per day, is forced to handle in excess of 200,000 gallons per day. This is over 10 times the amount of potable water being treated per day.

Time has taken its toll on the concrete manholes and concrete pipe. Acidic soils and ground water have reacted with the concrete causing concrete manholes and piping to crack and concrete to crumble and flake away. These reactions have allowed ground and surface waters to infiltrate in to the Sewage Collection System. This excess fresh water then ends up being treated through the Sewage Treatment Process driving up operational costs.

The initial sewer system was installed in the early 80's to serve a logging camp. The City of Thorne Bay inherited the system at the time of incorporation and has been trying to maintain the operations through user fees. The decline in logging brought with it a loss of population and a loss of utility revenues. Since the mid 90's sthe City has not been able to keep up with maintenance and upgrades to the collection system. Some of the system was inspected with a TV camera and the occasional repair made when other work was needed in the area. Over the past 10 years the City has spent on the average \$5000 per year for projects to re-direct surface water away from manholes, raised manhole tops and dig up manholes and sealed outsides but funding has not allowed for major repair, replacement work or a thorough investigation to set priorities for repairs.

The excess flows are pushing the sewage treatment process past it's limits making it difficult, to nearly impossible, to meet

discharge requirements to day let alone comply with the new forth coming EPA standards. Thorne Bay is being faced with one of two options: seek funding to increase the capacity of the Sewage Treatment Plant, or seek funding to work toward elimination of fresh water infiltration into the sewage collection system. The \$200,000 the City of Thorne Bay is seeking is to address the second alternative. Rebuilding and expanding the Treatment Process when the City should be treating less than 50,000 gallons per day does not appear to be cost effective. To find and reduce infiltration into the system will be more cost effective.

Studies done by Village Safe Water and USKH consulting discuss the need and importance to eliminate fresh water infiltration and have set the baseline for infiltration elimination. The City of Thorne City Council also has recognized the importance of addressing the infiltration problem through support of these studies, resolutions (Number 1 priority) and funding. The funding being sought after by the City is to address some of the known problem areas and determine other areas of major impact and develop a program for repair and replacement of those areas.

Depending on the study additional funding may be needed to address infiltration issues beyond the work being conducted with this project.

Project Timeline:

\$130,000 for repairs will be started in the summer of 2014

\$70,000 for flow analysis can be started as soon as funding is made available.

Engineering will be done by DOWL HKM the consulting firm that the City has hired as their City Engineer

This project will have both a financial and environmental impact for the community

Entity Responsible for the Ongoing Operation and Maintenance of this Project:

The City of Thorne Bay

Grant Recipient Contact Information:

Name: Wayne Benner
 Title: City Administrator
 Address: 110 Freeman Drive
 Thorne Bay, Alaska 99919
 Phone Number: (907)828-3380
 Email: administrator@thornebay-ak.gov

Has this project been through a public review process at the local level and is it a community priority? Yes No

CITY OF THORNE BAY
RESOLUTION 09-10-20-01

A RESOLUTION OF THE CITY COUNCIL FOR THE CITY OF THORNE BAY, ALASKA, REQUESTING THE FY10 LEGISLATIVE APPROPRIATIONS FOR CONSTRUCTION OF DAVIDSON LANDING, DESIGN AND ENGINEERING OF A WATERFRONT MASTER PLAN, THORNE BAY ROAD SAFETY IMPROVEMENTS, DESIGN AND ENGINEER OF A MULTI-USE FACILITY, AND HARBOR AIRPLANE PARKING FLOAT CONVERSION PROJECTS

WHEREAS, the City Council is the governing body for the City of Thorne Bay, Alaska; and

WHEREAS, the State of Alaska Legislature is appropriating funds for critical community infrastructure, economic and other capital improvement projects; and

WHEREAS, The City of Thorne Bay is requesting the following FY10 State Legislative allocations:

- Priority #1: \$250,000.00 for Construction of Davidson Landing Harbor
- Priority #2: \$80,000.00 for Conceptual Design of a Waterfront Master Plan
- Priority #3: \$150,000.00 for Thorne Bay Roads Safety Improvements
- Priority #4: \$150,000.00 for Design and Engineering of a Multi-Use Facility
- Priority #5: \$50,000.00 for Harbor Airplane Parking Float Conversion

WHEREAS, all five projects are listed on the City's FY10 Comprehensive Economic Development Strategy (CEDS) / Strategic Plan and are deemed critical development projects that will improve City services, provide sustainable infrastructure, and foster economic growth for Thorne Bay residents,

NOW, THEREFORE, BE IT RESOLVED

The City of Thorne Bay hereby submits their FY10 State of Alaska Legislative appropriation requests...

PASSED AND APPROVED October 20, 2009

James Gould, Mayor

ATTEST:

Teri Hammons, City Clerk

THORNE BAY, ALASKA 2013



Manhole bottom broken



Manhole bottom with concrete flaking away



Sewer stub that had no cap on the end of pipe allowing groundwater to run straight in the manhole

