



Date Application Received
<i>(For MaineDOT Use Only)</i>

Maine Infrastructure Adaptation Fund

Request for Application

Overview of the Grant Opportunity

The Maine Department of Transportation (MaineDOT) is seeking applications for the Maine Infrastructure Adaptation Fund (MIAF) to provide direct funding to **public entities enrolled in the Community Resilience Partnership (CRP), including municipal, tribal, and infrastructure districts to adapt their critical infrastructure to reduce vulnerability to climate change** resulting from extreme weather, sea level rise, inland and coastal flooding, severe heat, and other climate impacts. This Request for Application (RFA) document provides instructions for submitting applications. The program is administered by MaineDOT and uses state funding. This program builds on other available funding opportunities, including the capacity building and planning efforts available through the [Community Resilience Partnership program](#) administered by the Governor’s Office of Policy Innovation and the Future (GOPIF). The CRP and MIAF programs will help develop a pipeline of infrastructure projects that are ready for construction and eligible for future federal support or private investment. Projects that come out of the Community Action Grants of the CRP, such as those identified through a vulnerability assessment, capital plan, watershed plan, or projects that were partially completed, will be priorities for funding awards. Eligible projects include the **scoping, design, and/or construction of specific public infrastructure, including stormwater, wastewater, drinking water, public lands, working waterfronts, or transportation infrastructure.**

The applicant must identify hazards associated with climate change, evaluate their impact on critical assets, identify adaptation practices, and present recommendations that adapt the infrastructure to reduce the vulnerability. The applicant should clearly demonstrate how the projects have been designed to better respond to changing climate conditions and to incorporate new climate change data. Projects should incorporate climate change projections that align with the lifespan of the project. Final design or construction plans shall be stamped by a Maine Professional Engineer, as the law dictates.

The Maine Infrastructure Adaptation Fund provides grants to entities participating in the CRP program to support 1) scoping (problem solving), 2) design planned through the CRP, 3) local match for implementation and construction (following completed design). Applicants may request up to \$50,000 to support scoping and/or design, and \$125,000 to support match for construction. For construction projects, these funds cannot be used to pay more than 30% of total project costs. Applicants are required to provide at least 5% match. All local match must be directly related to the proposed project and tasks, and necessary substantiating documentation must be provided. Costs incurred prior to execution of the grant agreement including application preparation costs will not be considered as part of the match requirements. These funds can be used as state match for federal

grants.

If selected for an award, the applicant will be required to submit annual progress updates and a final project report. Annual updates will include description of progress, any scheduling changes, and invoicing/payments.

The applications will be scored by a select group of MaineDOT staff with input from other relevant agencies, including Maine Department of Environmental Protection and Department of Health and Human Services, as necessary. The MaineDOT Commissioner may use the funds at their discretion to support the efforts of regional significance or emergency exigent circumstances imminent risk to life or property. Entities requesting funds for these efforts must follow the MIAF application process to provide transparency and show how the funds will support the effort.

Application

Section 1: General Information

Applicant Name(s): Town of Arrowsic		
Contact Person: Walter Briggs		
Mailing Address: 340 Arrowsic Road		
City: Arrowsic	State: Maine	Zip: 04530
Daytime Phone No.: 207-522-7987	Email: walter.briggs@arrowsic.org	
NOTE: The following sections of this application request specific project-related information. If warranted, pictures, maps, exhibits, diagrams, survey summaries, etc., should be included with the application. Please be concise. If additional space is required, please attach supplemental sheets.		

Section 2: Project Information

Note: Separate complete application(s) are required for each different project application

Date on Community Resilience Partnership (CRP) Enrollment confirmation letter: 12/19/2022. The CRP is funding Arrowsic's Climate Action Plan (CAP) referenced within this application.

Location of Project:

Provide abutting street name(s), elevation, and additional project location references. Feel free to attach designs/ diagrams, maps, etc. that will help provide a clear description of the proposed scope and location:

Arrowsic Town Roads: Spinney Mill and Indian Rest. Both roads connect to State Highway Route 127. The elevations of both roads are approximately 2-4 feet above mean high tide. See Arrowsic Map and Project Location Maps attached.

Project Summary:

Describe the proposed climate change adaptation project including vulnerable asset, asset age and condition, as well as the climate change natural hazards, potential risk to system, and proposed improvements (500 words or less)

Spinney Mill and Indian Rest roads are subject to severe flooding during astronomical high tides and severe storm events, causing problems with road maintenance, safety, and access. Both roads cross salt marshes, have

severely restricted flow in and out of the marshes, and undersized culverts. This results in water flowing over the roads, saturating, eroding and sinking the road bed. The functionality of the marshes upstream are significantly compromised. We request funding to assess geotechnical conditions at both sites and to develop conceptual alternatives to address flood impacts. Our goal is to identify design solutions based on site hydrologic, ecosystem, and geotechnical conditions, that will increase resilience to climate change, reduce road maintenance costs, increase safety and access, improve the health and function of the adjacent marsh, and enhance fish passage. The work completed in this scoping effort will serve as the foundation for developing engineering design options.

Historically, **Indian Rest Road** served as the only access to the bridge crossing to Georgetown. With the construction of a new section of Route 127 in the 1970s, this road became redundant. No improvements have been made to the road in recent years aside from resurfacing. The metal culvert is 3-foot diameter, severely undersized, perched on both ends, and is at least 20 years old. Over 200 ft. of road is subject to flooding with a 3.3 foot sea level rise. During high water events, water flows through the road bed material that underlies the pavement, and occasionally overtops the road. Future sea level rise makes this road even more vulnerable to flooding. Because the culvert is perched and undersized, the marsh upstream is never able to fully drain. Maintenance at this site will only become more challenging and expensive with rising waters and more frequent and intense storms.

Spinney Mill Road was originally constructed to provide access to a historic tidal saw mill (operating in the 1800's). It is a dead-end road and the sole source of access to 11 homes beyond the tidal crossing. Flooding regularly strands residents during every new moon tide west of the culvert. The road has been resurfaced numerous times, and larger culverts were installed in 2008. The surface of the road was raised approximately 2 feet, and crushed rock was added to the edge to reduce erosion. The roadway continues to sink, and the crushed rock is eroding. The two 7.25-foot diameter culverts at this location are not at the base of the channel, so fish passage is limited to mid-tide and above. About a mile upstream from these culverts is a 46 acre pond (Sewall Pond) with spawning habitat for alewives. The entrance to Sewall Pond is under Route 127 and includes a climate resilient culvert with pool and weir baffles, which was installed in 2014. The recently restored alewife run, an important feature of this stream, is managed by volunteers and includes a provisional harvest. As a result, it is a high priority location for the town.

Vulnerability and Climate Change Adaptation (35 points):

Demonstrate climate change impacts or vulnerability to hazards and provide documentation of historic events
(500 words or less):

Severe flooding due to climate change is already being experienced on these two road segments. In the fall of 2020, the Arrowsic Conservation Commission (ACC) began documenting these events. Photo data can be viewed at <https://www.anecdata.org/projects/view/789>.

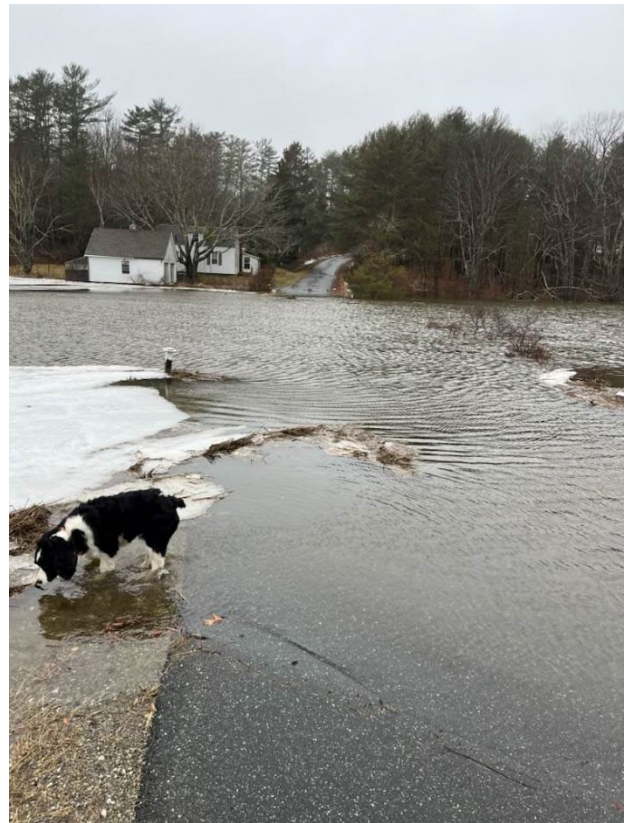
The intensity and frequency of flooding events has increased and will only continue as climate change progresses. During the January 2024 twin storms, both roads were impassable for 5 consecutive days during high tide for at least 3-5 hours, stranding all residents on Spinney Mill Road (see photo A) and further eroding the culvert and marsh on Indian Rest Road (see photo B). Water was observed flowing through the road bed material at Indian Rest Road before the road was overtopped. These photos were taken on a high flood stage but the highest levels ever seen occurred on January 13. In December of 2022, a similar event stranded

residents on 3 consecutive days.

The roads are closely monitored for flooding damage, minor repairs to the unsurfaced portions of the roadside are sometimes needed. Occasionally during floods, ice floes or logs get stuck on the road and heavy equipment is required to remove them.



A. Spinney Mill Rd with photopost flooded (January 10, 2024)



B. Indian Rest Rd with photopost visible on left (January 10, 2024)

Describe risk to public safety associated with vulnerable infrastructure and which groups (business, general public etc.) will benefit from the project (500 words or less):

For residents of Spinney Mill, recent flooding events have trapped residents for hours over multiple consecutive days, limiting access to medical care, emergency services, and access to food, job sites, school, and replenishment of fuel or medications. At both sites, there is a danger imposed by unaware people trying to get through flood waters and destruction of the roadways by more continuous flooding. It is primarily the general public and home businesses that serve the residences that would be impacted.

Arrowsic is zoned residential with no businesses open to the public in town. However, several individuals responsible for key positions in the town, including the Town Clerk, and one member of the three-member Selectboard, and Co- chair of the Climate Resilience Committee all live in houses cut off by flooding on Spinney Mill Road.

When the Indian Rest Road crossing floods, it does not directly cut off transportation or access for members of vulnerable populations. However, the Town is in the process of developing a water access and public small boat launch site on the property just west of the tidal restriction. Any improvements to the road, whether it is

to upgrade the road to be resilient to climate change impacts or to dead-end and remove the road where it crosses the marsh, will directly benefit the water access site.

Using the [Maine Social Vulnerability Index \(MSVI\)](#), describe how this project will support vulnerable populations. Social vulnerability relates to the circumstance of a person or community that affect their capacity to anticipate, confront, repair, and recover from the effects of a disaster. The MSVI uses 17 socioeconomic and demographic indicators including poverty, minority status, people without vehicles, people with disabilities, older adults, and people with limited English proficiency (500 words or less):

While Arrowsic has low social vulnerability according to the Maine SVI, it is a small town with 477 residents, with no full time municipal staff, and low municipal capacity. The town relies on all-volunteer fire and emergency services and struggles to recruit volunteers for key positions. The primary vulnerable population in Arrowsic are older adults (65+). The Maine Coastal Risk Explorer identifies that 35% of the Arrowsic population is 65+. The town also has a large self-employed population (27%).

When Spinney Mill Road floods, the 11 households trapped beyond the flooded section of road include one family with school-aged children, and about one third of the residents are older adults (65+). This older population is particularly threatened by lack of access to medical services during road flooding. Without action to minimize flood impacts, a reduction of the value of the properties on Spinney Mill Road is inevitable due to increasing limited road access. The latest valuation of these properties indicate they represent 4.5% of the town's total valuation. A loss or reduction of these values would impact the entire town.

Project Scoping and Design (30 points):

Describe whether the project is scoping, design, or implementation/construction (150 words or less):

This project includes scoping and conceptual design with hydrologic modeling and geotechnical surveys at both road crossing sites. The models will include flow through the culverts, marshes, and fish and wildlife friendly culvert between Spinney Creek and Sewall Pond. Condition and sustainability of road beds and surfaces will also be assessed.

An important piece of the project is equitable community engagement. Community conversations will identify and confirm community needs and goals and weigh costs and benefits of conceptual alternatives for both sites. Some considerations that will be included are long-term maintenance costs, construction costs, emergency access, school bus access, and links to the new Town recreation area. In addition, considerations for increasing health and resilience of the impacted salt marshes will be included as this is a goal outlined in Arrowsic's Climate Action Plan.

The results will be used as a basis for engineering and construction following this study.

Provide a bulleted list of proposed specific improvements organized by task, including work to be completed, methodology, deliverables, and project team members (300 words or less):

All work for this project will be overseen and guided by an Advisory Committee including:

- Project Manager from Kennebec Estuary Land Trust
- Arrowsic Fire Chief

- Representatives from each of the following Town committees:
 - Selectboard
 - Arrowic Climate Resilience Committee
 - Arrowsic Road Commission
 - Arrowsic Conservation Commission
 - Arrowsic Fish Commission

The project will be coordinated by KELT’s Program Director (the Project Manager) in partnership with a Municipal Project Leader approved by the Select Board.

Project Tasks	
1	Additional Data Collection: <ul style="list-style-type: none"> ● Complete additional water level, elevation, and habitat monitoring needed. ● Lead: KELT
2	Project Team Coordination: <ul style="list-style-type: none"> ● Provide regular updates to the Advisory Committee and coordinate Advisory Committee meetings. ● Lead: KELT, Municipal Project Leader
3	Community Engagement: <ul style="list-style-type: none"> ● Hold one community meeting before engineering work gets underway to share project information and gather input on community priority and needs. Hold one community meeting after the report is completed to review results and conceptual alternatives and discuss next steps. Advisory Committee members will provide regular updates to their committees.” ● Lead: Advisory Committee
4	Select Engineering Firm: <ul style="list-style-type: none"> ● Complete bid process to select a firm for the project. ● Lead: Advisory Committee
5	Hydrologic and Hydraulic Model Development: <ul style="list-style-type: none"> ● Develop models for both sites. ● Lead: Engineering Firm
6	Geotechnical Assessment: <ul style="list-style-type: none"> ● Assess geotechnical conditions at both sites. ● Lead: Engineering Firm
7	Conceptual Design Development: <ul style="list-style-type: none"> ● Develop conceptual alternatives to meet community goals based on site hydrologic, ecosystem, and geotechnical conditions. ● Lead: Engineering Firm, Advisory Committee

8	Final Report: <ul style="list-style-type: none"> ● Complete report sharing project results. ● Lead: Engineering Firm, Advisory Committee
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Describe (if applicable) design efforts that have been completed to date on the proposed project and attach any completed design information, and proposed schedule for design or implementation completion (500 words or less).

This scoping project will kick-off the design work for these two highly vulnerable town road sites, however, KELT and Arrowsic have collected preliminary data, which will be utilized to inform the proposed project. In the fall of 2023, KELT and town volunteers collected 29 days of water level measurements for the two vulnerable road locations. Data were collected upstream and downstream of both crossing sites and below the Sewall Pond outlet at Route 127; which is ~1 stream mile from the Spinney Mill Road crossing. The next step is underway, to process and analyze water level data in NAVD88 and use this information to identify additional data collection needs for spring/summer 2024. The results of that monitoring will feed into the hydrologic and hydraulic modeling that will be completed as a part of the project scoping.

Schedule (15 points):

Provide detailed timeline of project tasks with anticipated completion dates for the project, including deliverables, likelihood of project success based on support of landowners and public, funding feasibility, technical, financial, and management capacity, and regulatory hurdles (500 words or less):

Arrowsic is a small town with an engaged population. As noted in the public engagement section below, more than 10% of the town’s residents participated in the in-person climate resilience planning meeting in 2022 that the town held when they joined the Community Resilience Partnership. Road flooding was identified as one of the top priorities at that meeting.

In the areas upstream from both of the road crossing sites, there are no buildings located at elevations below the highest annual tide plus 6 feet of water, increasing the feasibility for next steps by limiting challenges that could arise from changes to the hydrology with new road crossing structures.

The Town of Arrowsic is partnering with the Kennebec Estuary Land Trust to add technical expertise and management capacity. KELT’s Project Director will serve as the Project Manager for this effort. The Project Manager will work closely with a Municipal Project Leader on project coordination. Regular updates will be shared with the Advisory Committee. The Advisory Committee will be responsible for decisions that guide the project.

The Town of Arrowsic has previously worked with KELT and Maine DOT to help fund, construct, and install the Route 127 pool and weir culvert to Sewall Pond. In addition, KELT has been involved with the Arrowsic Shellfish Committee and with the preparation of a community stewardship guide. All of these cooperative efforts have met with success.

Part of this project scoping is to identify conceptual alternatives that will provide more accurate cost estimates

for the next steps: project engineering and project construction. This will enable the Town to select alternatives that are financially feasible and develop funding plans for both sites. This project includes cost and time efficiencies by bundling the two sites into one effort and contract with an engineering firm. Any approval of project funds beyond those outlined in this proposal will require approval by the Select Board.

Project Timeline			
Task	Timeline	Task Description	Task Deliverables
Task 1	June - September 2024	Additional Data Collection	1) Data from additional field monitoring
Task 2	June 2024 - December 2025	Advisory Committee Coordination	1) At least 4 Advisory Committee meetings during the project
Task 3	Community Meetings: September/October 2024 & September/October 2025 Advisory Committee Updates: June 2024 - December 2025	Community Engagement	1) Pre-project community input meeting with at least 15 attendees 2) Project results and next steps community meeting with at least 15 attendees.
Task 4	June - September 2024	Select Engineering Firm	1) Engineering firm selected
Task 5	October 2024 - April 2025	Hydrologic and Hydraulic Model Development	1) Models are developed for both sites
Task 6	October 2024 - May 2025	Geotechnical Assessment	1) Geotechnical borings completed for both sites
Task 7	May - July 2025	Conceptual Design Development	1) Conceptual alternatives developed and modeled for both sites
Task 8	August - December 2025	Final Report	1) Final project report
Project Completion Date: 12/31/2025			

Provide all applicable public meeting dates including town council/selectboard meeting for the project, for the budgetary approvals of funding and local match (300 words or less):

- January 23, 2024: Arrowsic Select Board Meeting: Unanimous approval of MDOT grant submission and partnership with Kennebec Estuary Land Trust staff for Project Management and match requirement.

Provide any public engagement activities that have occurred to date (300 words or less):

- Fall of 2020: Volunteers installed nine four-by-four wooden photo-posts in locations where town roads tend to flood, including these two road segments, allowing for reliable and consistent data collection.
- July, 2022 - Produced a flier (attached) advertising Community Workshop on Climate change which was published in the town’s weekly email blast. Flyers were also distributed door-to-door by volunteers for 80% of residents by segmenting the town into neighborhoods.
- August 2022 - Sent letter to parents of middle & high school students inviting students to attend community workshop on climate change.
- August 16, 2022 - Community workshop to brainstorm climate change issues in Arrowsic (55 attendees).
- September 2023 - Produced fliers advertising a public meeting to help set priorities on the CAP. Fliers were also distributed door-to-door by volunteers for 60% of residents by segmenting the town into neighborhoods.
- September 26, 2023 - Public meeting to determine top priorities in draft Climate Action Plan (45 attendees) where road flooding at these two locations (and 4 others) were identified as top priorities for the town to address in the draft Climate Action Plan. Based on this input, an implementation table and timeline that included addressing road flooding was added to the CAP.
- November 20, 2023 - The CAP was made available to all town residents for comment on the town website and via a QR code. A letter (attached) sharing the QR code was sent with each resident’s tax bill to ensure broad participation (280 letters).
- December 1, 2023 - Email to all town committee chairs and officials (17 in total) including a comment-enabled version of the revised CAP, asking them to meet with their committees and provide input within 6 weeks.
- January 20th - Input from town committees, officials and the public compiled. Consensus: we need to address road flooding as part of creating a more climate resilient town.

Budget (20 points):

Provide detailed budget by completing table below (As noted above, Applicants may request up to \$50,000 to support scoping and/or design, and \$125,000 to support match for construction. For construction projects, these funds cannot be used to pay more than 30% of total project costs):

Project Budget Table

Estimated Cost of Infrastructure Project

Preliminary/Final Design Engineering/Environmental Permitting:	1. \$ 54,118
Construction:	2. \$ -
Construction Oversight/Engineering (CE):	3. \$ -
Total Value of Project (add lines 1 through 3):	4. \$ 54,118

Local Match/Voluntary Contributions (Note: All match/voluntary contributions must be detailed. Bonus consideration may be given to applications that offer additional match/voluntary contributions beyond any applicable required local match.)

Cash (in most instances, cash is the only allowed match):	5. \$ 2,500
Potential quantifiable labor and/or materials contribution: Materials as proposed local match, please provide attachment With overview detailing how many hours, hourly rates, material quantities and costs, etc.)	6. \$ 1,618
Total Local Match Contributions (minimum 5% of total project required)	7. \$ 4,118
Funds Requested from MaineDOT	8. \$ 50,000

Note: The sum of Lines 7 and 8 should equal Line 4 above.

Please describe source of local match:

The cash match is provided by a cooperative agreement grant from the USFWS Gulf of Maine Coastal Program to the Kennebec Estuary Land Trust. These funds will support the time of the Project Manager, including salary, benefits, payroll taxes, and 10% indirect (2024 rate: \$40.45/hour).

Labor match values are based on the Maine volunteer rate from: <https://independentsector.org/resource/value-of-volunteer-time/> Their currently reported state of Maine rate is: \$28.89.

The values are calculated based on 6 participants from the Advisory Committee at four 2 hour meetings, and 2 additional planning hours for each meeting for the municipal project lead - a total of 56 hours.

Section 3: Authorized Signatures

These signatures indicate that if the municipality is approved for funding, that the municipality will enter into a municipal/state agreement with MaineDOT requiring the municipality/applicant/sponsor to administer the development, design, and construction of the project abiding to federal, state, and local requirements. The signature also indicates that the community understands that it will be entirely responsible for maintenance of the finished project, and that the public will have access to the project for the life of the project.

Note: Information will be available on the Department's grant page

<https://www.maine.gov/mdot/grants/>

An authorized representative of the city/town

Municipal Official:

Name(s): Walter Briggs

Title: First Selectman

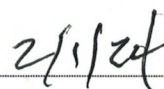
Phone #: 207-522-7987

Email: walter.briggs@arrowsic.org

Signature(s)



Date



Local Project Municipal Contact (likely to be the Local Project Administrator)

Name: Jack Witham

Title: Fish Commission member

Phone #: 207-841-0088

Email: jwitham@maine.edu

Section 4: Application Process

MaineDOT issues the RFA for the Maine Infrastructure Adaptation Fund. Applicants must submit a completed PDF application consisted with this RFA and using the space provided.

Applications must be received by **February 2, 2024, at 11:59 p.m.** local time. Applications received after the deadline will be ineligible for award consideration. Submit application by email in accordance with the schedule.

Applications are to be submitted to MaineDOT via Adaptation.DOT@maine.gov. Only applications receive by email will be considered. Applicants are to insert the following into the subject line in their email "RFA Submission – Applicant's Name". Applicants should submit a PDF file with the file name: "TOWN NAME.PDF".

When we receive email, you will receive a response of receipt within one week. If you do not receive a response, call Taylor LaBrecque at 207-441-7696 as soon as possible.

Information will be available on MaineDOT's grant page:

<https://www.maine.gov/mdot/grants>

Contact information:

Taylor LaBrecque
Environmental Office
Maine Department of Transportation
16 State House Station
Augusta, ME 04333

Town of Arrowsic

Location of MIAF sites



Phippsburg

Kennebec River

127 Spinney Mill Road

Indian Rest Road

Georgetown

Back River

209

127

Google Earth Image

Data Sources:
Maine Natural Areas Program
Maine Department of Transportation
Kennebec Estuary Land Trust
Maine Office of GIS
NOAA
The Nature Conservancy
Ortho Imagery: Naip2018
11/2023, Map by R. Indrick





Kennebec River

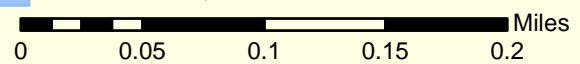
Spinney Mill Road

Route 127

Spinney Mill Road Arrowsic

Brackish Tidal Marsh: 47.6 acres
Marsh Migration Area with 6ft. Sea Level Rise: 28.5 acres
Feet of Road Flooded with 1m Sea Level Rise: 1197.7 ft.
Buildings Cut off with Flooded Road: 12

-  Spinney Mill Road Culverts (two 7.25 ft. round)
-  Inundated Roads with 1m SLR
-  Project Marshes for Resilience Enhancements
-  Tidal Marsh Migration Area with 6ft Sea Level Rise



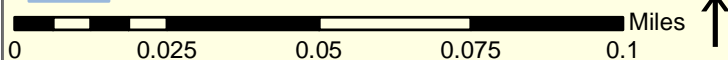
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, USDA FSA



Indian Rest Road Arrowsic

Spartina Salt Marsh: 5.5 acres
Marsh Migration Area with 6ft. Sea Level Rise: 1.2 acres
Feet of Road Flooded with 1m Sea Level Rise: 211.2 ft.
Buildings Cut off with Flooded Road: none

- Indian Rest Road Culvert (3 ft. round)
- Inundated Roads with 1m SLR
- Project Marshes for Resilience Enhancements
- Tidal Marsh Migration Area with 6ft Sea Level Rise



Data Sources:
 Maine Natural Areas Program
 Maine Department of Transportation
 Kennebec Estuary Land Trust
 Maine Office of GIS
 NOAA
 The Nature Conservancy
 Ortho Imagery: Naip2018
 11/2023, Map by R. Indrick

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community, USDA FSA

TOWN OF ARROWSIC

340 ARROWSIC RD.

ARROWSIC, ME 04530

TEL. 207-443-4609

FAX 207-442-9082

February 2, 2024

Taylor LaBrecque
Environmental Office
Maine Department of Transportation
16 State House Station
Augusta, ME 04333

Dear Ms. LaBrecque,

Together we are writing to express our support for and commitment to engage in the Town of Arrowsic's proposed Indian Rest and Spinney Mill Roads Assessment Project.

On January 23, 2024, the Arrowsic Select Board met and voted unanimously to approve the submission of this application and to partner with Kennebec Estuary Land Trust (KELT) Projects Director Ruth Indrick to manage the project and provide a 5% match.

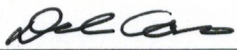
In addition, we are committed to serving on the Advisory Committee for this project, meeting regularly with Ruth and the project engineering consultant and making key decisions to guide project outcomes. We will provide our time in-kind at a value of \$1,618 (56 hours @ \$28.89/hr) for participation in planning meetings.

With road flood mitigation being identified as a top priority of our community-driven (draft) Climate Action Plan and a key component of overall safety and resilience, we are eager to explore solutions to flood impacts that will benefit the entire community and surrounding ecosystem – ones that we can hopefully fund and implement in the not-too-distant future.

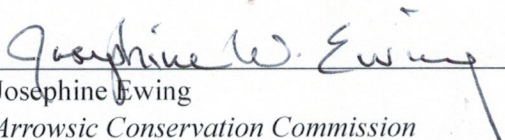
Sincerely,




Walter Briggs
First Selectman, Town of Arrowsic



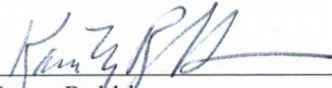
Dale Carlton
Arrowsic Fire Chief



Josephine Ewing
Arrowsic Conservation Commission



Jody Jones
Arrowsic Climate Resilience Committee



Karen Robbins
Arrowsic Fish Warden



James Stump
Arrowsic Road Commission

Taylor LaBrecque
Environmental Office
Maine Department of Transportation
16 State House Station
Augusta, ME 04333



February 1, 2024

Dear Ms. LaBrecque,

The Kennebec Estuary Land Trust (KELT) is strongly committed to collaborating with the town of Arrowsic on the scoping project for the tidal crossings on Indian Rest Road and Spinney Mill Road.

Over the years, KELT has collaborated with the Town of Arrowsic on a number of projects, from the installation of pool and weir culvert to facilitate fish and wildlife passage under Route 127, to green crab trapping with the shellfish committee, to the preparation of a community stewardship guide. In fall of 2023, KELT staff worked with a member of the Arrowsic Conservation Commission to carry out preliminary work that will facilitate the hydrologic and hydraulic modeling for both road sites. We installed five water level sensors for a full spring/neap tidal cycle at sites upstream and downstream from the two crossings and just below the road crossing at the lake outlet upstream from the Spinney Mill Road crossing. We collaborated with USFWS Gulf of Maine Coastal Program to survey in the elevation of these five sensors. This winter, we will be processing and analyzing the water level data that was collected.

KELT has experience developing and implementing CoastWise tidal crossings at sites in the Kennebec Estuary region, and we will share this experience as a resource for this project. The largest project that we are currently managing is the Back River Creek marsh tidal crossing project in Woolwich, a project which will restore >90 acres of marsh and increase the resilience of town road and boat launch infrastructure. We are also managing a tidal marsh restoration project in collaboration with the town of Georgetown that will replace a culvert and remediate historical agricultural impacts on 126 acres of Swett Marsh along Flying Point Road. As a part of these projects, we have worked closely with local municipalities and other state and federal restoration stakeholders to coordinate project partners, carry out the fieldwork, assess environmental parameters, identify preferred alternatives, and secure funding for construction.

We will bring that expertise to the table to support the Town of Arrowsic in the project scoping work that will result in conceptual designs for the crossings at Spinney Mill Road and Indian Rest Road. Our work on this project will be funded by a cooperative agreement grant with USFWS. We commit \$2,500 of that agreement to support staff time for Project Management for the Arrowsic project scoping effort.

We look forward to being able to work with the town of Arrowsic to identify the designs that will enable them to meet community goals and needs, support fish passage and coastal habitats, and increase the resilience of their road infrastructure.

Sincerely,

A handwritten signature in green ink that reads "Becky Kolak".

Becky Kolak
Executive Director



Office: 92 Front Street
Mailing: P.O. Box 1128 • Bath, Maine 04530
(207) 442-8400 • www.kennebecestuary.org





YOUR INPUT NEEDED

The **Arrowsic Climate Resilience Committee** is asking you to review the current draft of the Climate Action Plan. Does it accurately represent your needs and concerns?

You can access the draft Climate Action Plan at the following link on the Town's website: www.arrowsic.org/climate/climate_action_plan.pdf, or contact us if you would like a printed version. Please send your comments to the co-chairs of the ACRC before December 31, 2023 or call Jody at (207) 522-3441.

The current version of the draft Climate Action Plan includes input from community workshops. The most commonly voiced concerns were the effects of climate change on roads, bridges, and groundwater resources in Arrowsic. Let us know what your priorities are.

Once finalized, the Plan will be presented at the 2024 Town Meeting to serve as a roadmap, increasing our community's resilience and easing the impacts of climate change.

Sincerely,

The Arrowsic Climate Resilience Committee

Date: November 20, 2023

Contact:

Jody Jones, email: jodyinarrowsic@gmail.com

Aleisha Khan, email: aleisha.khan@gmail.com

Scan the QR Code to
read the Plan!





Help Keep Arrowsic Above Water

**When: August 16, 2022
6:30 - 8:00 PM**

Where: Arrowsic Fire Barn



Sponsors: Governor's Community Resilience Partnership and the Arrowsic Conservation Commission

All residents and all ages are welcome to join the conversation and help set priorities for carbon reduction and climate resiliency here in our town!

Refreshments will be provided as we brainstorm, chat, and chew!



With support from Community Resilience Partnership Service Providers

What is this all about?

Whether it's purchasing homeowner's insurance or putting on a seatbelt, there are many ways we all prepare for the unexpected in our daily lives. It shouldn't be any different with climate change. We know the climate is changing and that our community is already experiencing some of the effects, from flooding roads to drought to an uptick in ticks, to name a few. And while we can't flip a switch to reverse, let alone stop, the changing climate, we can prepare for it. This is the idea behind [climate resilience](#), defined as "the ability to anticipate, prepare for, and respond to hazardous events, trends or disturbances related to climate."

If we do nothing, we will be reacting and responding for generations—an expensive strategy that will whittle away at our collective quality of life. If we are proactive now, we can better protect this community that we all love so much.

Why is this important now?

At our 2022 Town Meeting, [Warrant Article 57](#) was passed to help Arrowsic plan for a changing climate. The Arrowsic Climate Resilience Group (Conservation Commission plus additional volunteers) is organizing this work, which will allow Arrowsic to become part of the [Community Resilience Partnership](#). The program was set up by the Governor's Office of Policy Innovation and the Future. Most important is that communities that join the Partnership are eligible to apply to the State for grants to fund projects that will reduce greenhouse gas emissions and/or help communities adapt to climate change.

The group is currently gathering information from Town committees and officials. ***The next step is to hear from you.*** Your knowledge and ideas are critical to ensuring that the projects pursued address the needs of the entire community. Concerned that your road is flooding more often? We want to hear from you. Worried that the pattern of droughts is increasing the risk of wildfire? What about long-term power outages following severe weather events? ***Let's talk!*** All are welcome, whether you have lived here for generations or only months.

Want to learn more, share your thoughts, and help plan for the future?

***Please come to the workshop on
Tuesday, August 16, 6:30 p.m., at the Fire Barn!***

RSVP appreciated, but not required. Email conserve@arrowsic.org.

Unable to attend? Email your questions and comments to conserve@arrowsic.org.

—The Arrowsic Climate Resilience Group