

# Riverfront Master Plan

Caribou, Maine - **DRAFT**

September 19, 2026



rasor landscape architecture

87 Main Street

Yarmouth, Maine 04096

hello@rasor.co

## Table of Contents

|                                                                                       |           |
|---------------------------------------------------------------------------------------|-----------|
| <b>1. INTRODUCTION.....</b>                                                           | <b>4</b>  |
| 1.1 OVERVIEW .....                                                                    | 4         |
| 1.2 KEY PROPERTIES AND THE RAILROAD CORRIDOR .....                                    | 6         |
| 1.3 POTENTIAL HIGHEST AND BEST USES.....                                              | 7         |
| 1.4 SEVEN GOALS.....                                                                  | 8         |
| 1.5 MASTER PLAN TIMELINE .....                                                        | 16        |
| 1.6 COMMITTEE, STAFF, AND CONSULTANTS .....                                           | 16        |
| <b>2. ANALYSIS.....</b>                                                               | <b>17</b> |
| 2.1 PUBLIC MEETINGS .....                                                             | 17        |
| 2.2 PUBLIC SURVEY RESULTS .....                                                       | 17        |
| 2.3 EXISTING OWNERSHIP, ZONING, TRAILS, AND NATURAL RESOURCES .....                   | 25        |
| 2.3 MARKET ANALYSIS .....                                                             | 31        |
| 2.4 COMPREHENSIVE PLAN AND AROOSTOOK COUNTY HAZARD MITIGATION PLAN IMPLICATIONS ..... | 37        |
| <b>3. MASTER PLAN CONCEPTS.....</b>                                                   | <b>40</b> |
| 3.1 OVERVIEW .....                                                                    | 40        |
| 3.2 FOCUS AREA 1 .....                                                                | 42        |
| 3.2.1 OVERVIEW OF CONCEPT PLAN .....                                                  | 42        |
| 3.2.2 SEVEN GOALS .....                                                               | 42        |
| 3.2.3 ZONING CONSIDERATIONS .....                                                     | 44        |
| 3.2.4 OWNERSHIP CONSIDERATIONS .....                                                  | 44        |
| 3.2.5 ENVIRONMENTAL CONSIDERATIONS .....                                              | 44        |
| 3.3 FOCUS AREA 2 .....                                                                | 52        |
| 3.3.1 OVERVIEW OF CONCEPT PLAN .....                                                  | 52        |
| 3.3.2 SEVEN GOALS .....                                                               | 52        |
| 3.3.3 ZONING CONSIDERATIONS .....                                                     | 54        |
| 3.3.4 OWNERSHIP CONSIDERATIONS .....                                                  | 54        |
| 3.3.5 ENVIRONMENTAL CONSIDERATIONS .....                                              | 54        |
| 3.4 OTTER BROOK.....                                                                  | 63        |
| 3.4.1 CONCEPT PLAN OVERVIEW.....                                                      | 63        |
| <b>4. MARKET EVALUATION OF DEVELOPMENT CONCEPTS AND OPPORTUNITIES .....</b>           | <b>64</b> |
| <b>5. PROBABLE COSTS .....</b>                                                        | <b>66</b> |
| 5.1 FOCUS AREA 1- CARIBOU CONFLUENCE: PROBABLE COST .....                             | 66        |
| 5.2 AREA 2 – DAM SITE: PROBABLE COST.....                                             | 67        |
| 5.3 OTTER BROOK PROBABLE COST .....                                                   | 68        |

|                                                                                  |           |
|----------------------------------------------------------------------------------|-----------|
| <b>5.4 OVERALL 4.5-MILE MAINE DOT RIGHT OF WAY RAIL TO TRAIL CONVERSION.....</b> | <b>68</b> |
| <b>6. <u>APPENDICES AND MEETING NOTES – <i>IN PROCESS</i>.....</u></b>           | <b>69</b> |

# 1. Introduction

## 1.1 Overview

Rasor Landscape Architecture was retained by Caribou in the fall of 2025 to prepare a Riverfront Master Plan (Plan) for the Aroostook River. Over a ten-month period, a vision for redeveloping the riverfront was informed by public input, site analysis, and the oversight and guidance of the Caribou Riverfront Redevelopment Committee (CRRC).

The City of Caribou grew up around the confluence of the Caribou Stream and the Aroostook River as shown on **Figure 1** below. Many communities in Maine are rediscovering the vital connection to their waterfronts. It is not uncommon to visit a community and find little visual or physical access to their rivers, having turned their backs on this invaluable resource with changes in the economy and modes of transportation. We are revisiting our waterfronts as key economic development and community assets in the postindustrial era for a range of commercial, heritage, recreational, ecological, and housing uses. As many communities are looking to revitalize and reinvent their downtowns, they are turning to the original reason for their being – waterfronts and riverfronts – as the foundation for a sustainable and vibrant future. The image below shows that Caribou once spread up from the Aroostook River along the Caribou Stream. Access to water and falls was nature’s infrastructure driving the economy like roads, bridges, distribution centers, and high-speed internet drive the economy today.



**Figure 1:** Historic View of Caribou Stream Confluence

This type of natural resource and heritage-driven economic development is consistent with both statewide and regional visions for future growth and prosperity. The State of Maine's 10-Year Economic Development Strategy highlights the opportunities for building resilient economies around the state's rich outdoor and ecological resources. Specifically, Action C4 in the plan is to Leverage Maine's Natural Resources by "focus(ing) on developing businesses that utilize Maine's natural resources for economic growth and sustainability." At the regional level, the vision statement in the Aroostook Washington Economic Development District Comprehensive Economic Development Strategy (CEDS) reads in part: "Our region is a place of abundant natural resources that is reflected in the beauty of our landscape and the potential for economic and social prosperity it offers." As we know, the outdoors and ecological resources are critical for Maine's economy. Investments in enhancing access, use, and proximity to these natural resources benefit residents and visitors alike.

The CRRC is actively considering the redevelopment of the riverfront. The ongoing work of the CRRC along with this planning effort will guide Caribou into a healthy and vibrant future.

Caribou split the Plan area into two primary Focus areas to develop the best possible Plan with the scope, schedule, and budget available as shown on **Figures 7 through 9**.

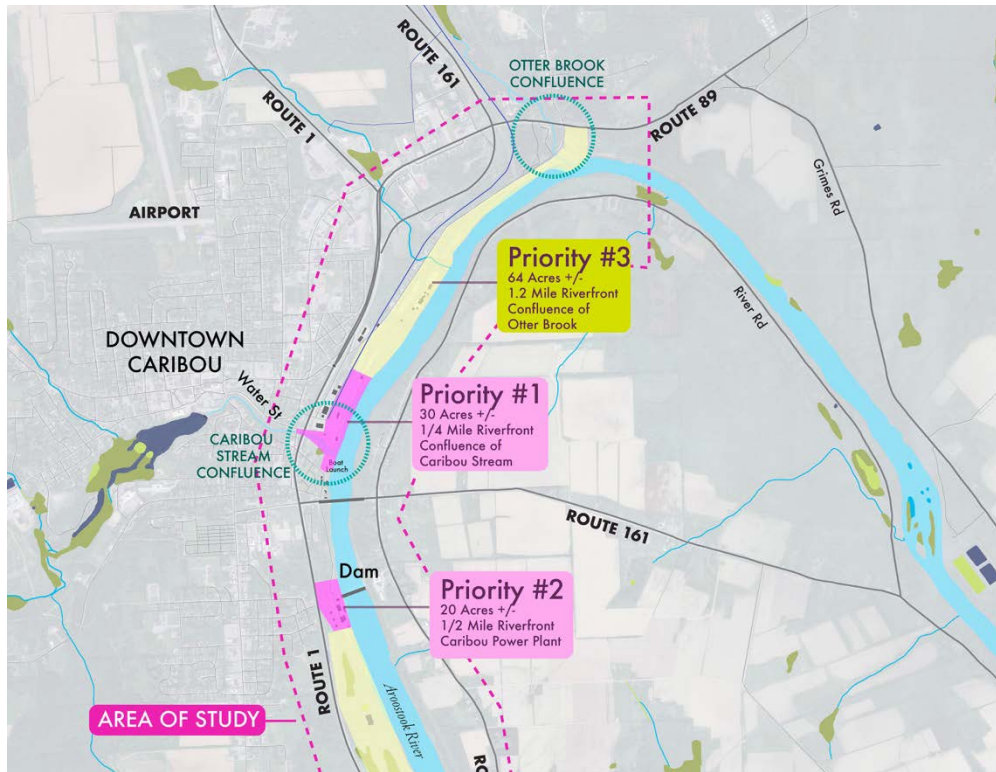
The study area includes approximately 365 acres and approximately 4.5 miles of river frontage. The land is held in private, the State of Maine, and by the city. Uses range from a solar farm, abandoned industrials sites, a boat launch, wetlands, and scattered commercial and residential structures. The study area includes confluences with the Prestile Brook, the Caribou Stream, Longfellow Brook, and Otter Brook. These confluences have ecological and historical importance, particularly the Caribou Stream confluence, and begin to suggest a natural rhythm and framework for different types of access, uses, and phasing.

The sub-areas prioritized the Plan work, which is primarily focused on City-owned properties in two areas in the vicinity of the dam and the Caribou Stream confluence.

**Focus Area #1:** City-Owned Properties of the former Bangor & Aroostook Train Station, Starch Plant, and Lyndon Street Boat Launch at confluence of the Caribou Stream and Aroostook River, as well as consideration of the Water Street Connection to Main Street in Caribou. See **Figure 2**. Approximate Size: 25 Acres or ¼ Mile stretch of riverfront area and ½ mile stretch of Water Street.

**Focus Area #2:** Steam and Diesel Plant site from the Dam North to Area of Lower Washington Street. Approximate Size: 20 Acres or ½ Mile stretch of riverfront. See **Figure 2**.

**Priority Area #3:** Areas North of the Priority Area #1 extending to Otter Brook and South of Priority Area #2 to Dow Siding Road. See **Figure 2**.



**Figure 2:** Study Area with two focus areas. See below for full study area

## 1.2 Key Properties and the Railroad Corridor

While the City owns key parcels in Focus Areas 1 and 2 (such as the Train Station, the Starch Plant, and the Steam Plant sites) and is proceeding with the purchase and remediation of sites in these areas, it is of strategic importance that an access easement or use agreement for the rail corridor be granted to the City of Caribou from the State of Maine. The City of Caribou most recently wrote to the Maine Department of Transportation regarding planning for access to this corridor in a letter dated May 29, 1925. This corridor includes legacy infrastructure that can be reused for motorized and non-motorized recreational access, minimizing future environmental and cost implications.

The rail corridor runs the full length of the study area from Dow Siding Road to Otter Brook as noted on **Figure 16**. There are parts of the corridor where the infrastructure such as culverts and crossings are degraded beyond repair, but this alignment and remaining infrastructure are still a critical path for not only connecting the north to south along the river but allowing for future east to west connectivity to neighborhoods and natural resources along the corridor.

If access to the corridor cannot be secured, alternative routes for connectivity are recommended in the Plan.

### 1.3 Potential Highest and Best Uses

The two focus areas provide different opportunities for economic development.

Focus Area 1 at the end of Water Street is more about views of the river and mixed-use development opportunities at the Train Station site and adjacent to and / or integrated into the Starch Plant site. Area 1 has a direct connection to Downtown and Route 1. There is easy and direct access. Area 1 also is below the dam, and the river water levels fluctuate seasonally. The development parcels at the end of Water Street are outside the shoreland and FEMA zones.

Focus Area 2 is more about physical and visual access to the river compared to Area 1. This location is above the dam and there is less seasonal fluctuation in water levels. The topography allows for access to river for boating and swimming. Area 2 is also at the dead end of Lower Lyndon Street and access is limited. The drive accessing this area is approximately a half mile long. The potential development areas are within the shoreland and FEMA zones. Due to access and environmental constraints, Focus Area 2 will be more of a destination for outdoor recreation uses such as glamping, birding, and boating.

As a general comment, single-family housing should not be allowed in Focus Area 1 and 2 as this use does not benefit the community at large and privatizes critical riverfront access.

Highest and Best Uses for Focus Area 1 (Train Station and Starch Plant Sites):

- Trails and open space
- Amphitheater / performance space
- Food trucks
- Train Station redevelopment (retail, restaurant, outfitters)
- Mixed-use building
- Multi-family housing
- Potential for development on reconfigured Dead River property

Highest and Best Uses for Focus Area 2 (Lower Lyndon / Dam Site):

- Trails and open space
- Community boathouse
- Boat launch
- Natural playground
- Outfitters
- Glamping
- Food trucks
- Birding
- Swimming and sauna
- Multi-family housing

## 1.4 Seven Goals

The Request for Proposals listed seven goals for the master plan. The seven goals are noted below with overview responses. How the Plan specifically addresses these goals is noted in Section 2: Master Plan Concepts.

1. Identify specific actions the city can pursue to develop a vibrant riverfront area, including gaps in Caribou's community development.

Specific actions include implementation of passive and active recreation amenities, strategic land development, phasing of work, and the identification of locations within the study area for a range of economic development activities including multi-family housing, glamping, commercial development, cultural performance spaces, all-season outdoor recreation, and trail development.

Gaps in community development include:

- Limited funding for public investments
- Declining and aging population
- Low-income levels leads to lack of disposable income in the local market
- Few willing entrepreneurs to start businesses
- Limited access to capital for private investors
- Lack of available labor to support business growth
- Difficulty in recruiting potential workers to fill new jobs in the region
- Tourism potential is highly seasonal and dependent on weather

Gaps in community development regarding development opportunities include:

- Multi-family housing
- Riverfront recreation and glamping
- ATV's and snow machines
- Riverfront trails and birding
- Riverfront access for boating
- Natural resource investment such as Atlantic Salmon for Northern Maine
- Energy production with the dam
- Small incubator business sites
- Food trucks
- Swimming

2. Identify potential investment areas in the riverfront that will create a healthy and well-functioning commercial and recreational riverfront area.

The Plan identifies locations for investment in housing, commercial, mixed-use, community development and outdoor recreation.

3. Identify areas suitable for private investment and development in the riverfront to attract visitors and residents to Caribou.

The Plan identified both city owned, state owned, and private properties suitable for private investment and how adjacent parcels can leverage proximity to maximize public access AND economic development.

4. Visualize the potential for recreational and mixed-use development through conceptual renderings.

The Plan includes plans, mood boards, and perspective illustrations as visualizations to help the community and investors see both the big picture potential for the riverfront and area specific opportunities.

5. Incorporate previous informal planning efforts into this new Riverfront Master Plan.

The Plan carefully integrates the previous work by the CRRC, the latest Comprehensive Plan, The MaineDOT Downtown Study, and Aroostook County Hazard Mitigation Plan.

6. Provide development ideas that may benefit existing riverfront businesses with job creation/retention from economic development planning.

The riverfront area presently lacks established businesses with growth potential. Any future job creation in the area must therefore be driven by attracting new businesses to the riverfront.

7. Create a plan that will consider expected climate and weather hazards, as documented in the 2021 Aroostook Hazard Mitigation Plan.

The Plan considers climate and weather conditions such as flooding, ice jams and scouring, and rising temperatures. Additional trees will help with urban heat island effect, reducing temperatures and providing shade. Creating a safe and designated swim area will give the community a place to cool off and recreate.



**Figure 3:** Existing View of Area 1 / Caribou Stream Confluence looking West



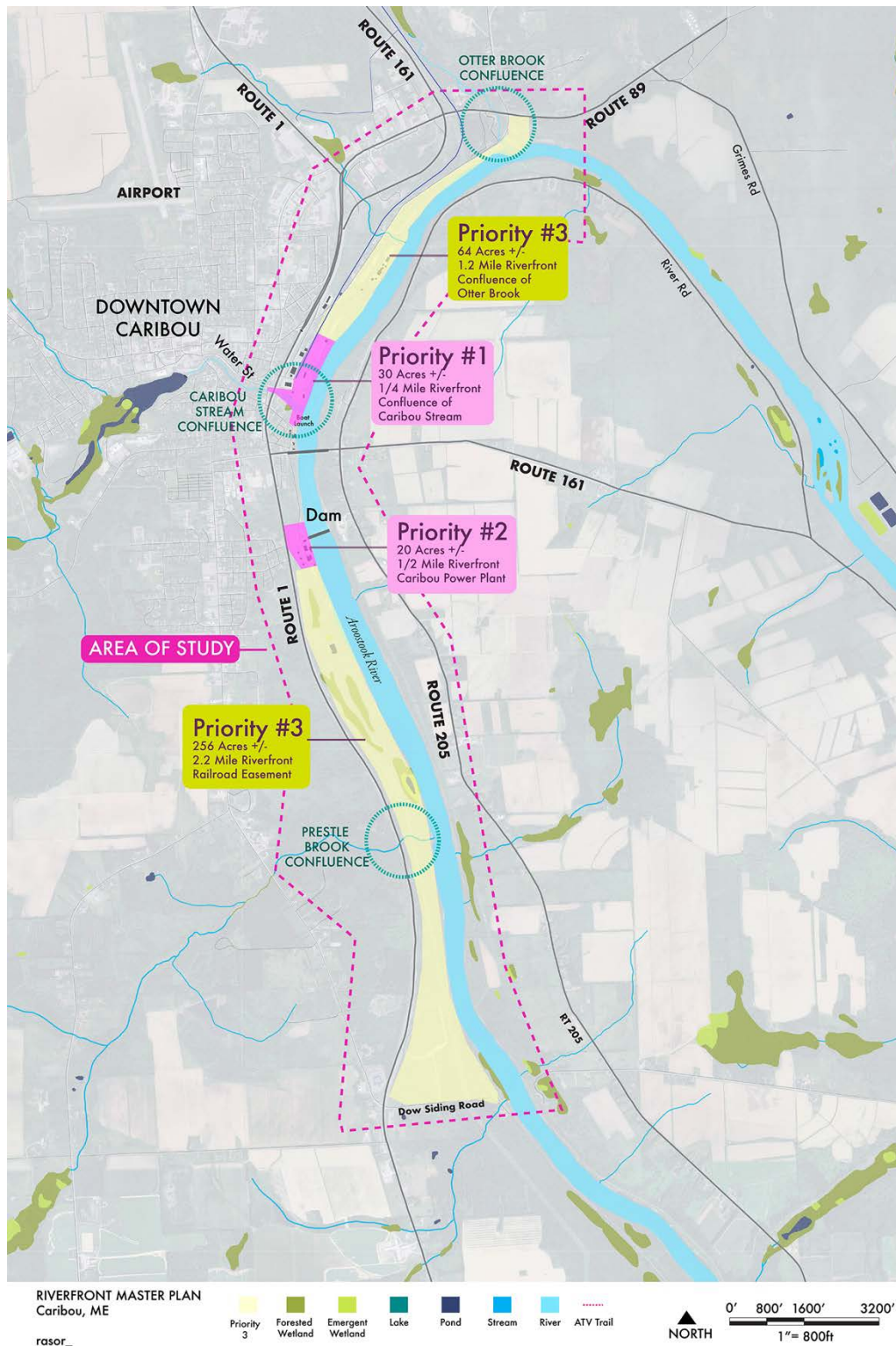
**Figure 4:** Existing View of Area 1 / Caribou Stream Confluence looking South



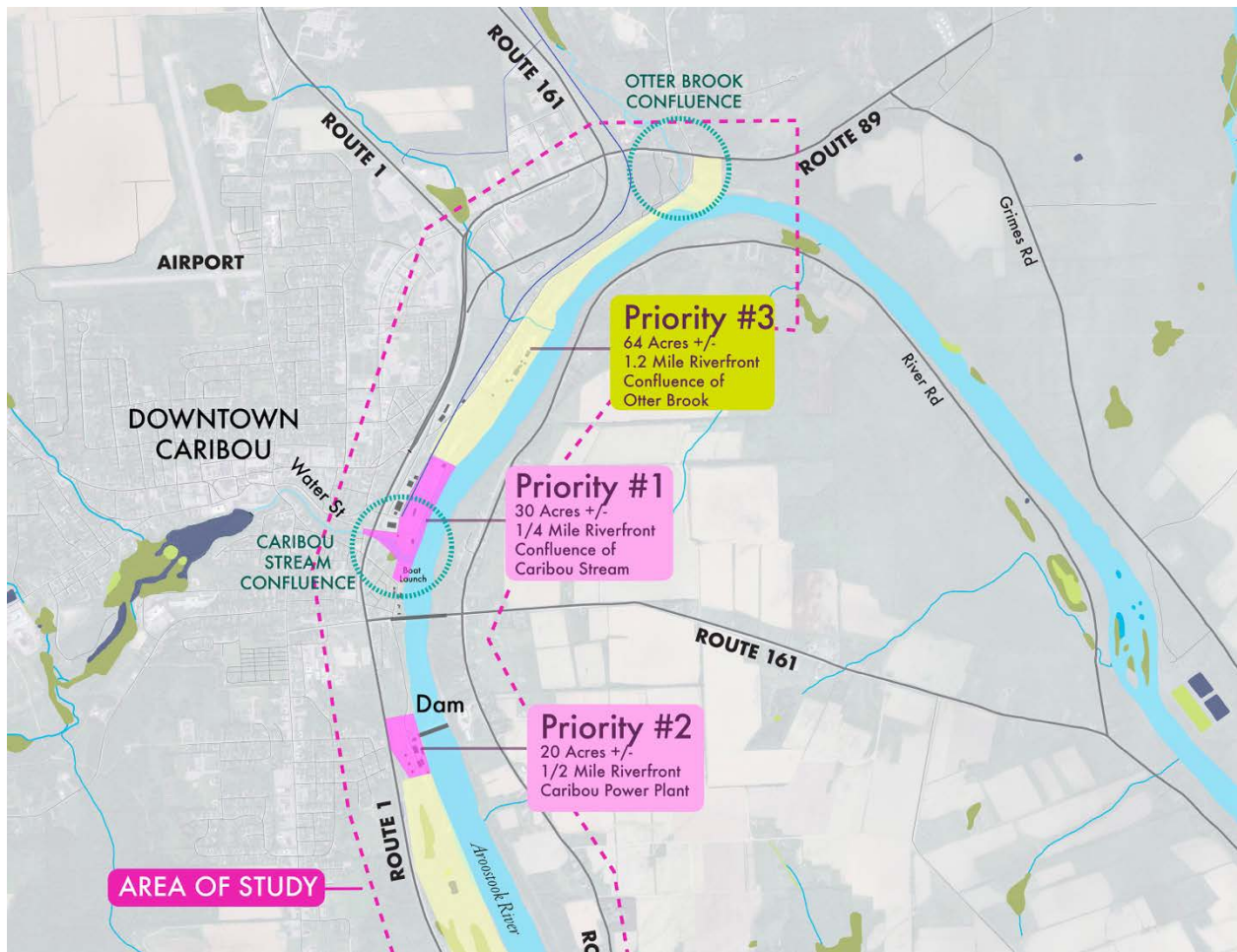
**Figure 5:** Existing View of Area 2 / Steam Plant Site looking Northwest



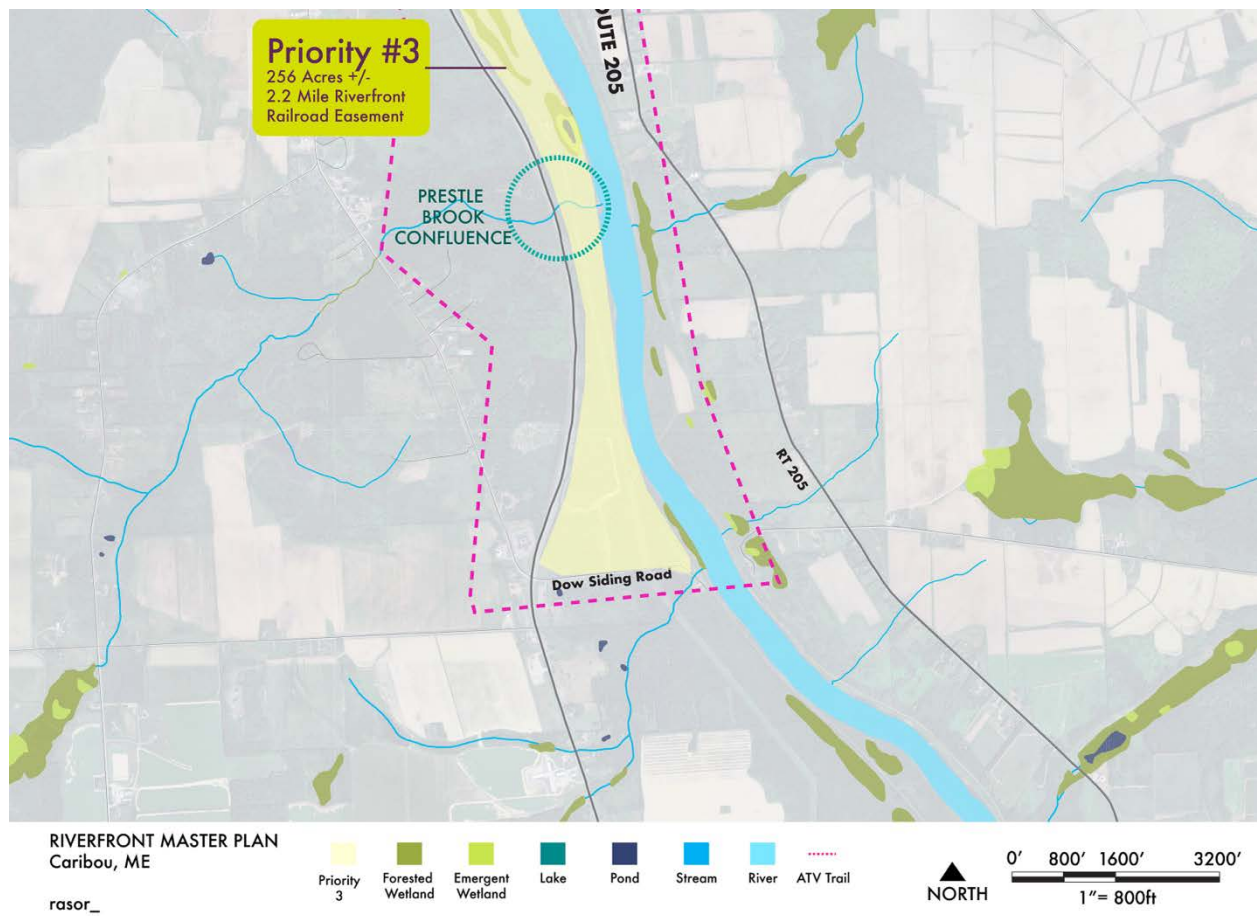
**Figure 6:** Existing View of Area 2 / Steam Plant Site looking Down



**Figure 7: Study Area**



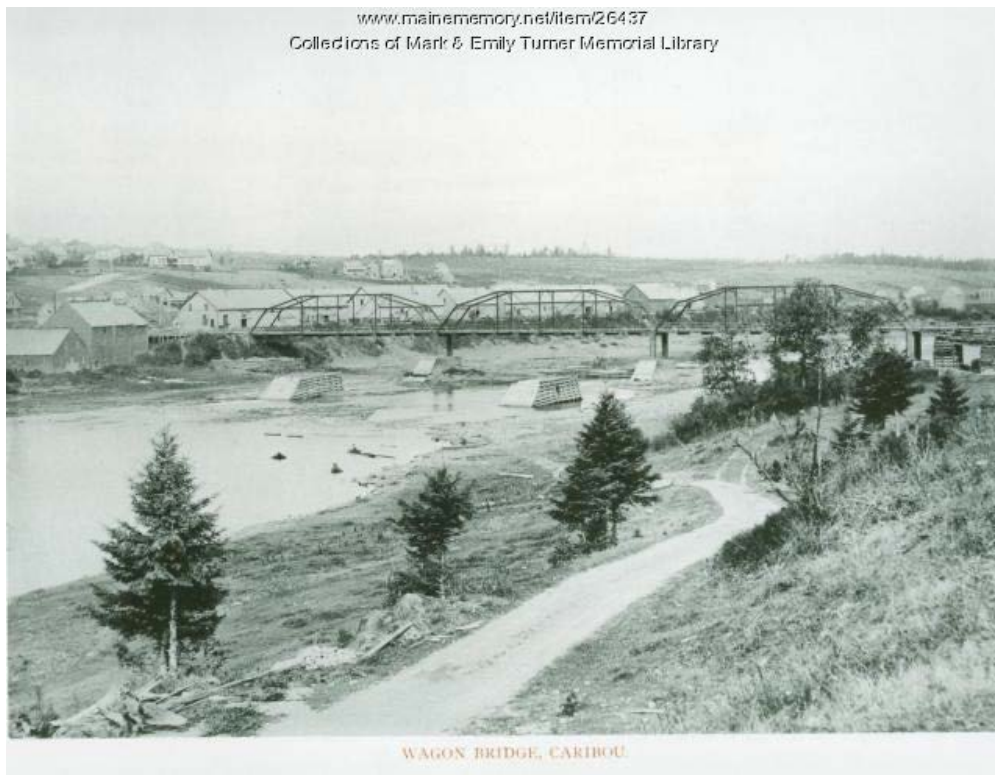
**Figure 8: Study Area – North**



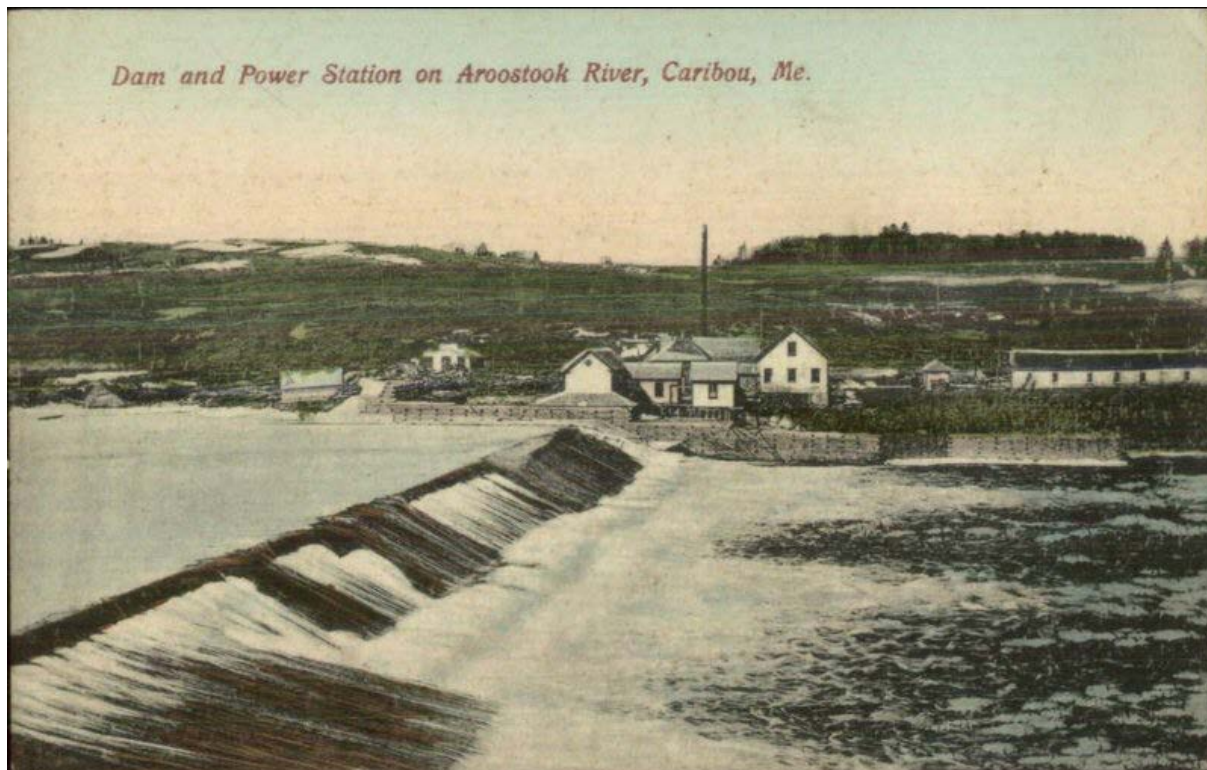
**Figure 9: Study Area – South**



**Figure 10:** Historic view of Starch Plant and the Aroostook River at the end of Water Street



**Figure 11:** Historic view looking northwest at the Starch Plant site at the foot of the bridge.



**Figure 12:** Historic view looking west across the Aroostook River of the dam and Steam Plant site.

## 1.5 Master Plan Timeline

**Task 1 – Data Collection and Kick-Off Meeting:** September to Late October 2025

**Task 2 – Plan Initiation (30% Phase):** November 2025

**Task 3 – In Process Review (60% Phase):** December 2025 through March 2026

**Task 4 – Plan Close Out (90% Phase):** March through May 2026

**Task 5 – Finalize the Riverfront Master Plan:** August 2026

## 1.6 Committee, Staff, and Consultants

- Mark Draper, CRRC Chair
- Melinda Barnard, CRRC member
- Christina Kane-Gibson, CRRC member & tribal economic development liaison
- Ken Murchison Jr, CRRC member
- David Belyea, PE, CRRC member
- Tamara Lovewell, City Councilor, CRRC City Council Liaison
- Jan Murchison, PE, Committee Volunteer
- Michelle Hersey, PE, Consultant to the City

### City Staff

- Eric Sanderson, Economic & Community Development Specialist
- Penny Thompson, City Manager
- Karen Gorman, Special Projects Coordinator
- Gary Marquis, Caribou Recreation Superintendent

## Rasor Landscape Architecture

- Mitchell Rasor, Landscape Architect
- Gavin Zeitz, Landscape Architect
- David Versel, Planner and Economist
- Katie Benedict, Designer

## 2. Analysis

### 2.1 Public Meetings

Public meetings were held in Caribou on November 6, 2025 and June 16, 2026 in order to gather feedback on community needs as well as responses and impressions to draft concepts. See notes the last section of the Plan.



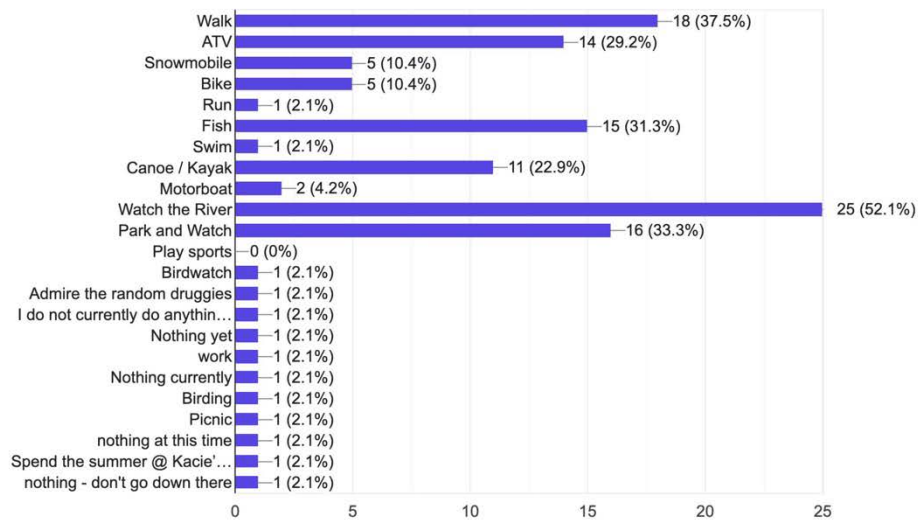
### 2.2 Public Survey Results

An online survey was developed with input from the CRRC and City staff to gain insight on ideas and concerns for redeveloping the riverfront. Results from the survey are below.

Key results to consider are that 52% stated that efforts should focus on Area 1, that walking trails and seating areas are a priority, that the economic development opportunities should be integrated into the plan, and that the greatest concern is the cost of redeveloping the riverfront and the potential impact on taxes.

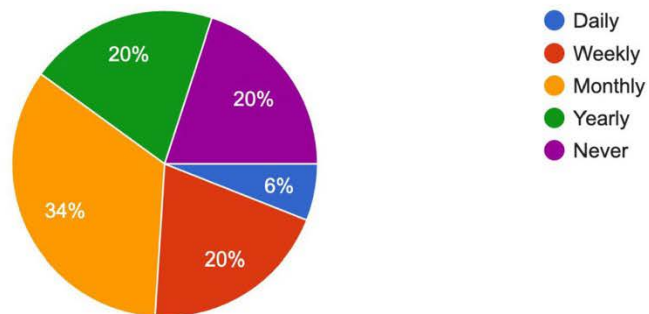
# What do you currently do at the riverfront?

48 responses



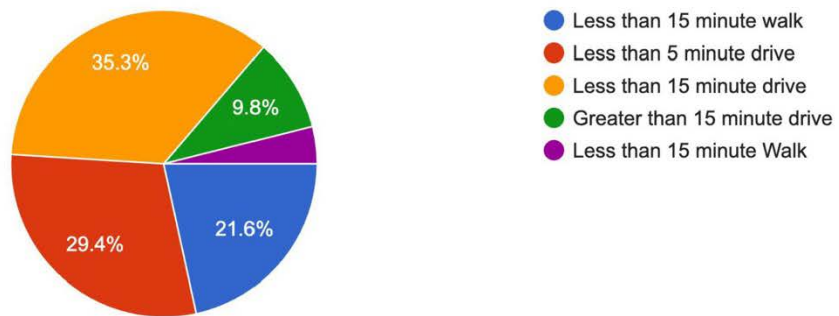
### How often do you currently visit the riverfront?

50 responses

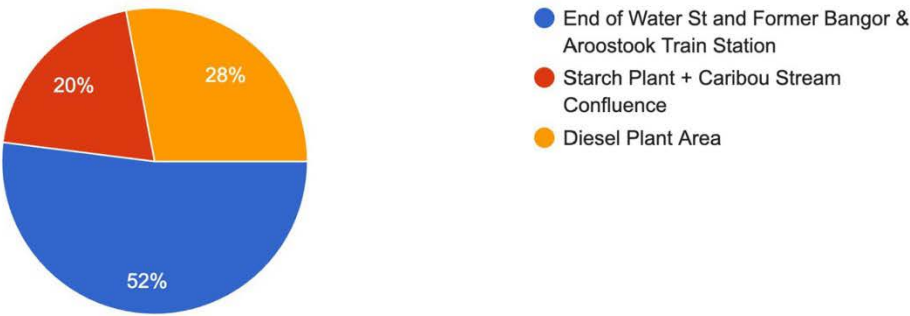


### How far from the river do you live?

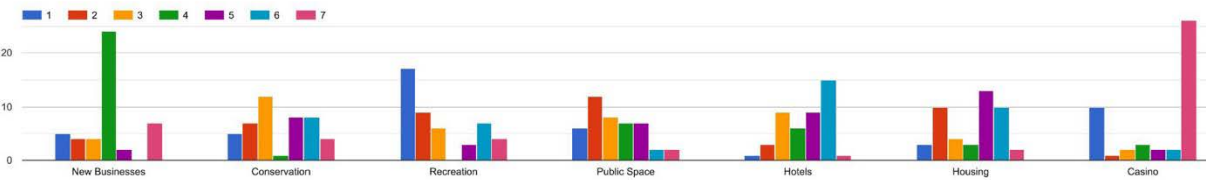
51 responses



Which of the priority should the city focus its resources on?  
50 responses

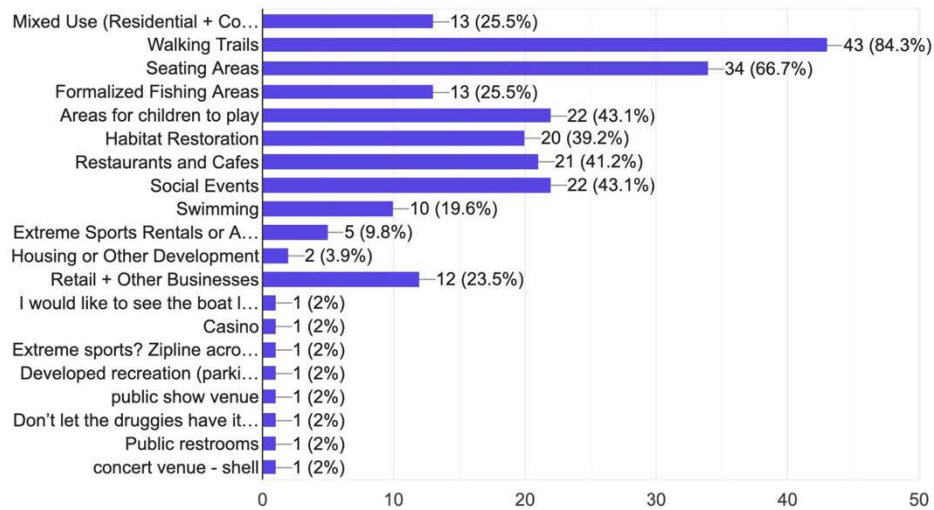


Rank potential uses along the riverfront (with 1 being the highest priority and 7 being the lowest)?



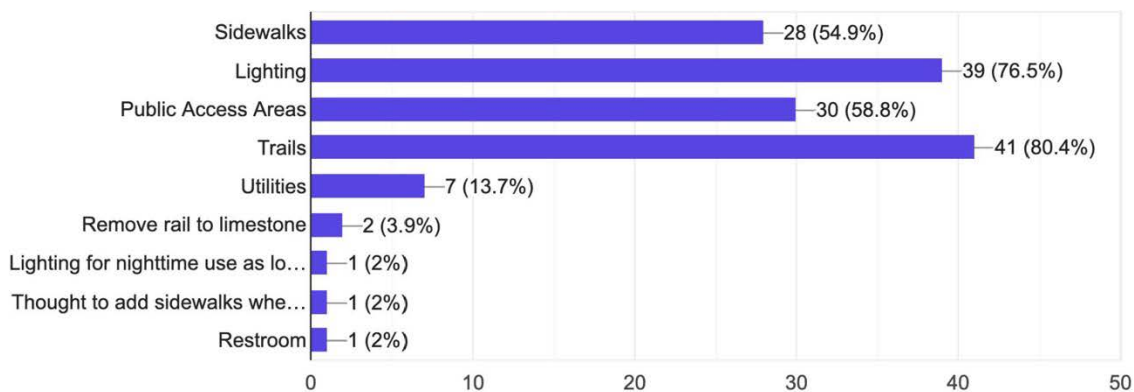
### What would you like to see more of at the river?

51 responses



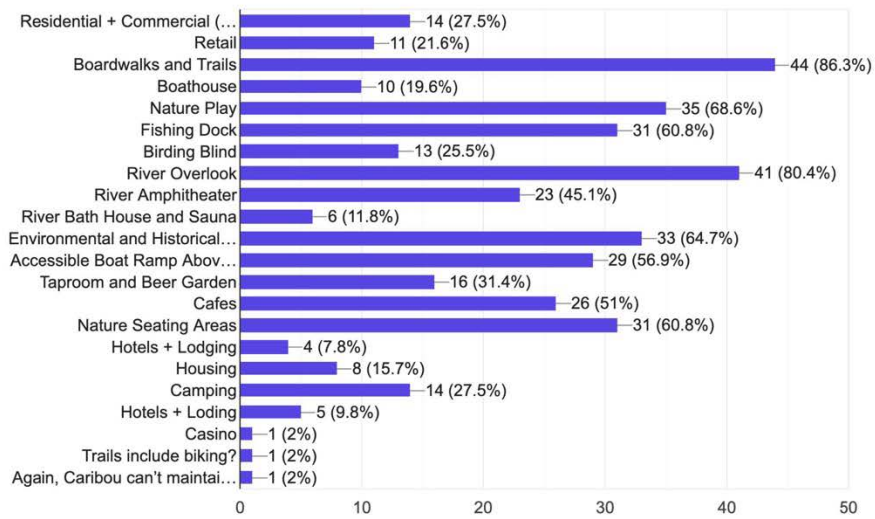
### What type of infrastructure improvements would you like to see?

51 responses



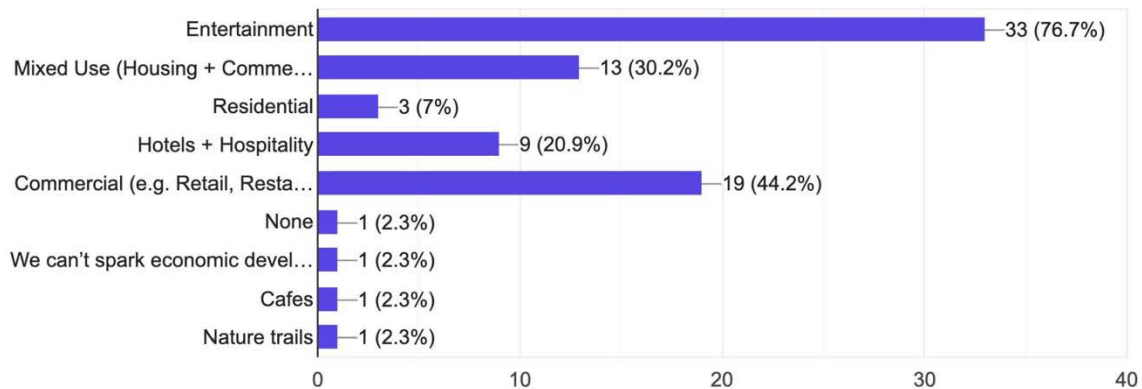
Select the type of features you would like to see along the river (select as many as you'd like)

51 responses



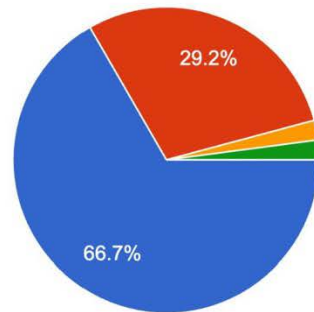
What types of economic development would you like to see along the waterfront?

43 responses



How important is it that new trails and paths along the riverfront connect to other townwide and region wide trail systems?

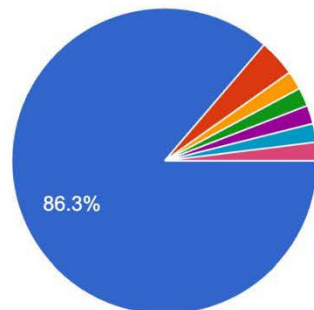
48 responses



- Important
- Not Important
- Depends. What are the safety issues with traffic, blind curves, shoulder width and conditions, as well as distance from one to another?
- I would prefer that they did, but it is not a big deal if they don't.

Should small trailheads and parking areas be created along the riverfront in order to provide access to different types of uses and locations?

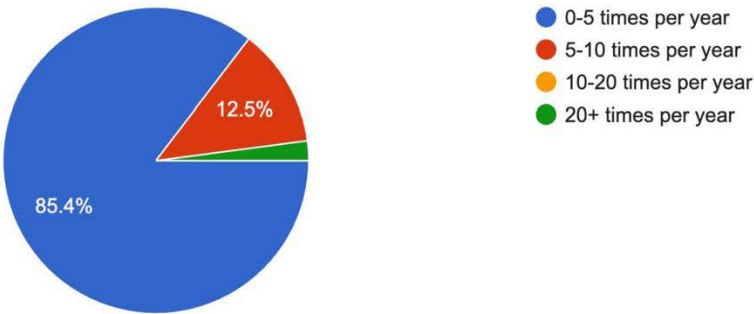
51 responses



- Yes
- No
- Yes on parking areas with picnic areas. Trailheads to where? Along the river?...
- These would need to be maintained, we struggle with that
- Maybe depends
- There is a trailhead less than a mile away
- yes, but not directly on the river, don't...

How often do you launch a boat at either of the boat launches?

48 responses



What is your biggest concern about developing the riverfront?

48 responses



## 2.3 Existing Ownership, Zoning, Trails, and Natural Resources

**Figures 13 through 15** depict ownership patterns throughout the study area. The city owns consolidated parcels in Area 1 and Area 2 that will enable a vision for the riverfront to be realized through strategic investments, phasing, and partnerships with abutters such as State of Maine, Dead River, and Atlantic Salmon for Northern Maine.

In Area 1, approximately 25 acres, the city owns 3.88+/- acres, mainly comprised of the train station and the starch plant. The city also owns the Water Street ROW in this area, and this piece of land can be reutilized to create more opportunities.

In Area 2, approximately 20 acres, the city owns 3.4 acres +/- . These lands in addition to the State of Maine parcels to the south, the railroad corridor, and the Atlantic Salmon for Northern Maine parcels to the north and east create a unique opportunity to realize a revitalized vision for the riverfront.

The State of Maine railroad corridor, running the length of the 4.5-mile study area, is central to the vision of creating connectivity the length of the riverfront, but the development of Areas 1 and 2 can proceed even if the State does not decide to allow the corridor to be used for recreation and access in the near term.

Area 1 is zoned R-2 Residential Mixed Housing and I-2 Industrial, and Area 2 is Zoned I-2 Industrial. It is recommended that Focus Area 1 be rezoned RF-1 and RF-2 as proposed. Area 2 should be rezoned a mix of RF-1 and RF-2 instead of RF-4.

Area 1 and Area 2 are both zoned for Shoreland General Development, except for an area around the Fort Street Bridge zoned Limited Residential. The State of Maine parcel south of the city-owned steam plant parcel is zoned Resource Protection. The river setback is 25' in the General Development district and 75' in the Resource Protection district. I

The city is considering the following zones for the riverfront (RF-1, RF-2, RF-3, RF-4, RF-5, and RF-6). The proposed definitions:

**RF-1 Riverfront Parks and Open Space District.**

Areas appropriate for active transportation and recreation compatible with shoreland and conservation applications and enhance the attractiveness of the neighborhood in the Riverfront Development District.

**RF-2 Riverfront Commercial District.**

Primarily for Commercial uses to which public a require free and easy access centrally located to encourage a concentration of commercial activity to the mutual advantage of the customers and merchants compatible with the Shorefront Development District.

#### RF-3 Riverfront Residential District 1

Low density single-family dwelling residential development located within convenient reach of business facilities and commercial districts intended to take advantage of the smaller lot sizes available with appropriate road frontage compatible with the Shorefront Development District and to enhance the attractiveness of the neighborhood.

#### RF-4 Riverfront Residential District 2

High density residential development located within convenient reach of business facilities and commercial districts containing older and historic single-family and multi-family dwellings in the Shorefront Development District intending to retain-and enhance the attractiveness of the neighborhood.

#### RF-5 Riverfront Rural Recreational District

Areas appropriate for active transportation and conservation applications with enhanced access to the Aroostook River and natural areas in the Riverfront Development District.

#### RF-6 Riverfront Rural Residential District.

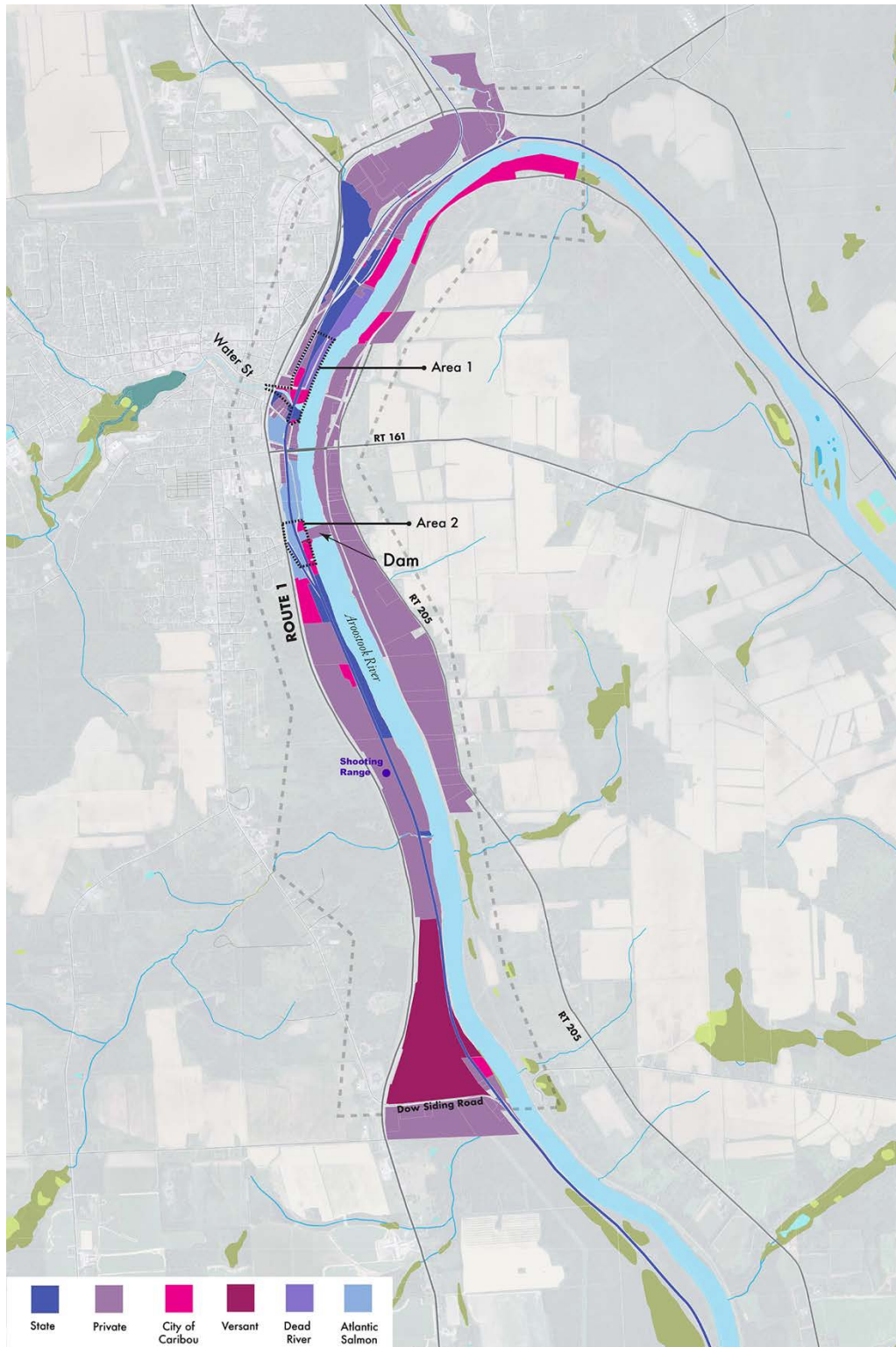
Areas outside of the urban center of the city suitable for low density single and multi-family dwelling residential development with mix of agricultural and commercial with larger lot sizes compatible with the Shorefront Development District and to enhance the attractiveness of the neighborhood.

The existing trail network is depicted on **Figure 16**. The existing trail network, primarily serving ATV's and snowmobiles, extends from the north at the Otter Street access parking then south to the dam site and then west back into town under Route 1. The existing network does not extend south beyond the dam and only in a few locations aligns with the Maine DOT railroad right of way.

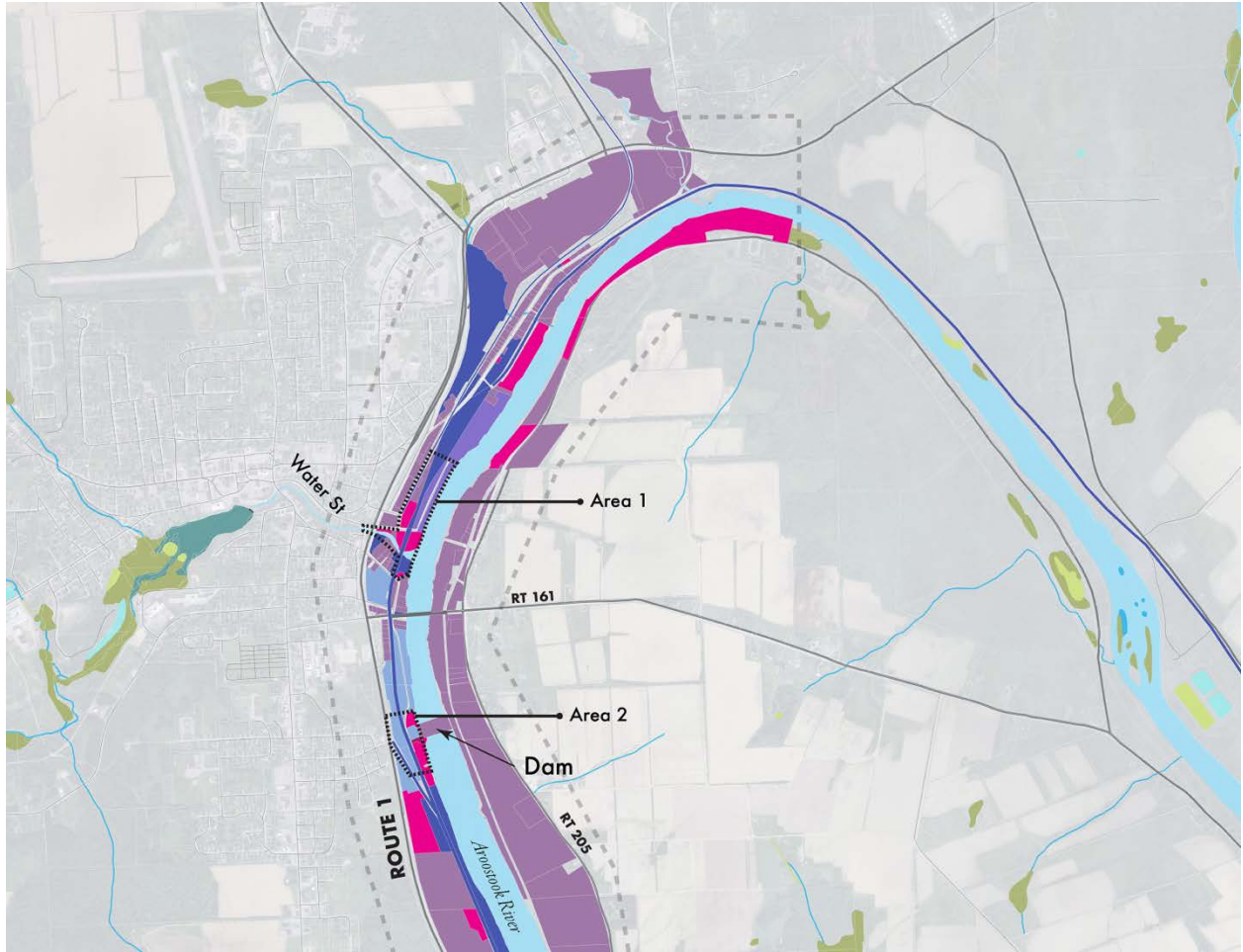
There is an ATV trail running along the eastern side of Aroostook River. This trail begins in Presque Isle and runs north crossing over to the western side of the river at Fort Street on the Aroostook River Bridge.

The existing trail network is key to unlocking the potential for recreational and public access throughout the study area because it is an existing access framework that can be expanded and strengthened in strategic phases. While economic development opportunities such as housing, businesses, and restaurants will emerge along the river over time, the trail network will be the framework encouraging and enhancing economic opportunities. There is no downside to expanding the trail network for a range of users prior to any specific economic development project happening.

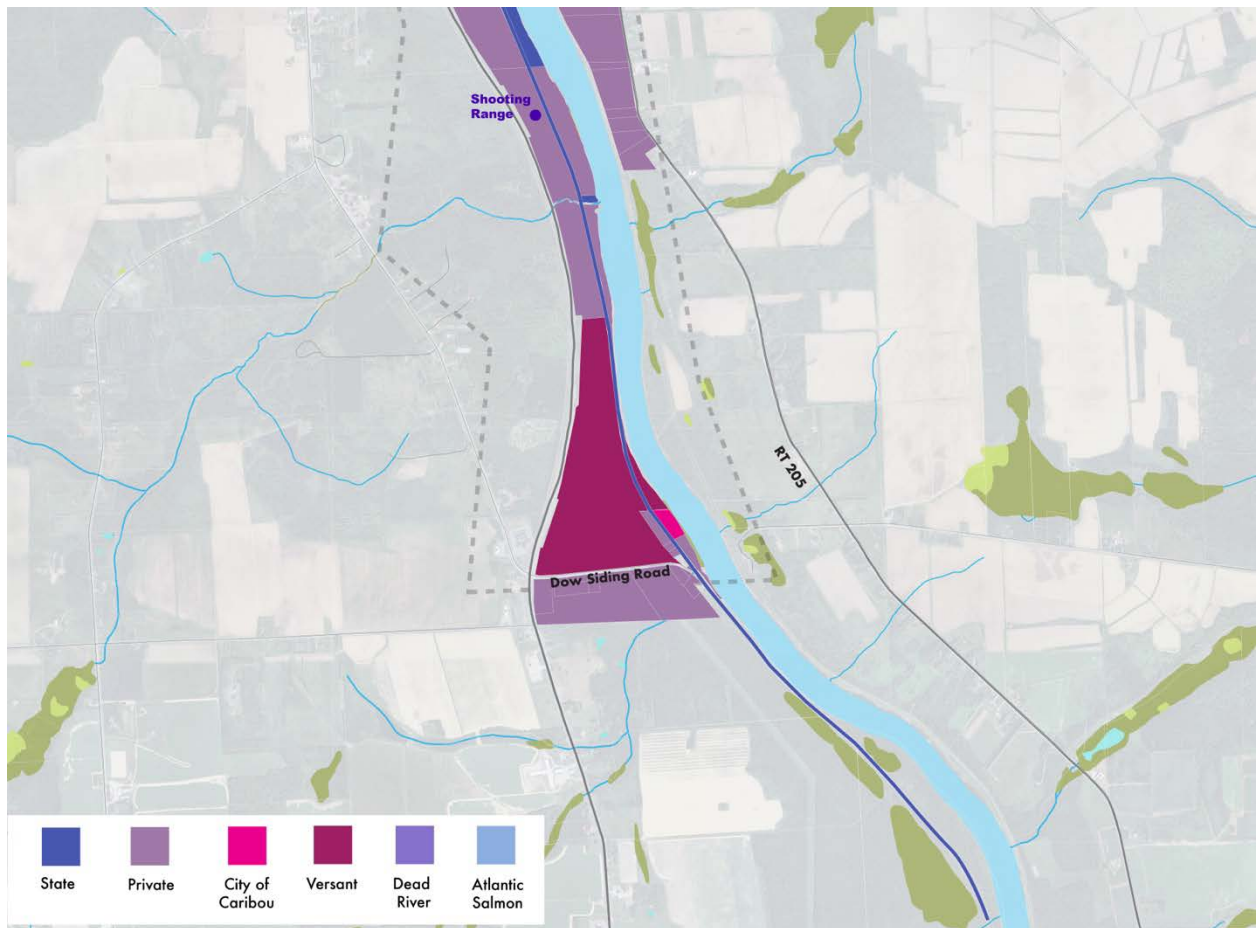
The Aroostook River and confluences with streams such as Otter Brook and Caribou Stream provide the ecological framework for the master plan. Providing visual and physical access to the river is a central goal of the master plan for recreation, economic development, and quality of life issues. Area 1, Area 2, and Otter Brook provide distinct opportunities for experiencing the history and ecology of the river.



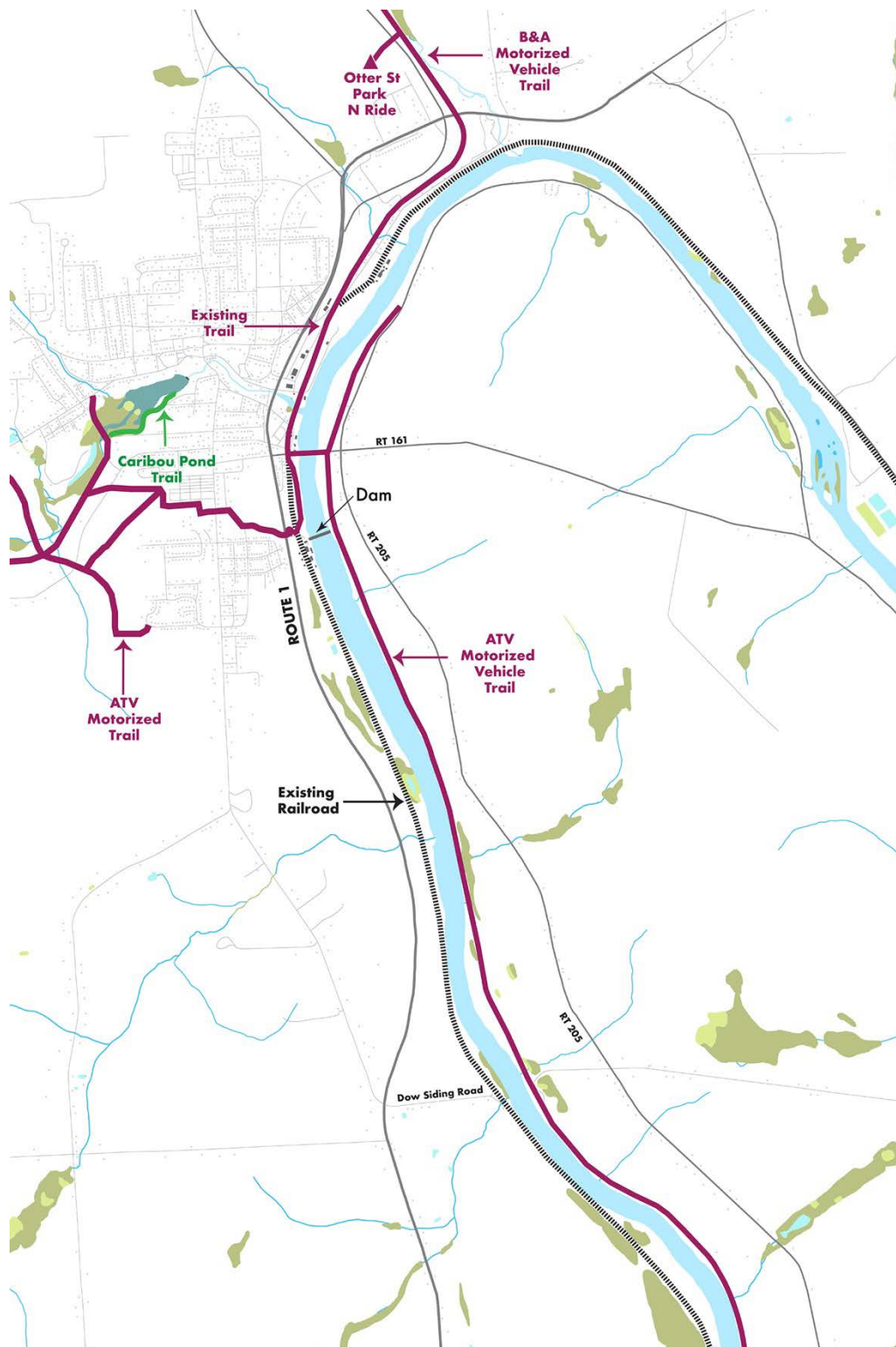
**Figure 13:** Existing Ownership Patterns – Full Study Area



**Figure 14:** Existing Ownership Patterns - North



**Figure 15:** Existing Ownership Patterns - South



**Figure 16:** Existing Trail Network

## 2.3 Market Analysis

The potential impact of this master plan will depend on the ability of the recommended public investments in infrastructure, recreational facilities, and building improvements to stimulate private investments in the rehabilitation of buildings and the opening of businesses. This section summarizes market opportunities and challenges and identifies key considerations for the City of Caribou as it works to recruit private investors in the riverfront area.

### Recap of Economic Opportunity Findings

- Aging population will create modest demand for modern housing developments catering to seniors
- Demand for better entertainment, dining, and shopping options are being driven by rising income levels in the local population and by visitor spending
- Workforce housing is needed to support future business growth in the region

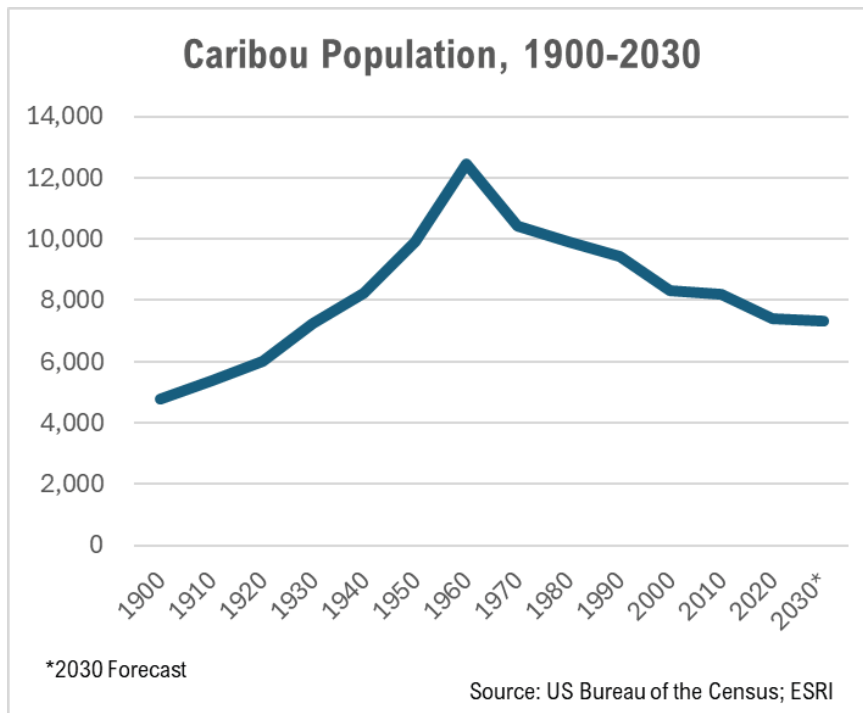
### Key Findings

- Local and regional population has declined sharply for decades and is down to early 20<sup>th</sup> Century levels
- Aging population and rising housing costs are severely limiting the regional labor force
- Rising income levels are driving additional retail and housing demand
- Tourism brand is good, but visitors need more shopping and dining options
- Commercial opportunities will largely be tied to the ability to attract more residents and visitors to the riverfront area.

Housing demand will almost entirely be driven by retirees and older households – this should drive demand for modern apartment and condominium units.

There are opportunities for restaurant, retail, and entertainment businesses from both rising local spending power and demand from visitors to the surrounding region

Workforce housing is needed to support future business opportunities, as younger workers can't afford to live here



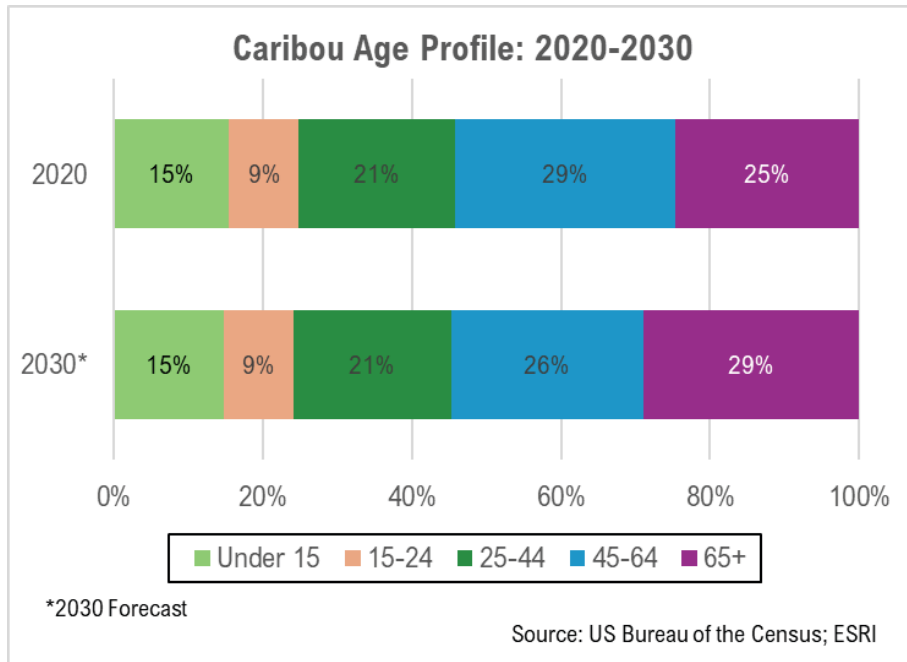
#### Population at Early 20<sup>th</sup> Century Levels

City's 2020 population of 7,396 is roughly equal to 1930 population of 7,248

City population peaked at 12,464 in 1960

County population also peaked in 1960 with 106,064; 2020 population of 67,105 is below 1910 level of 74,664

Rate of decline has slowed; population is projected to be flat through 2030



### Population Getting Older

Median Ages:

Caribou: 48.4

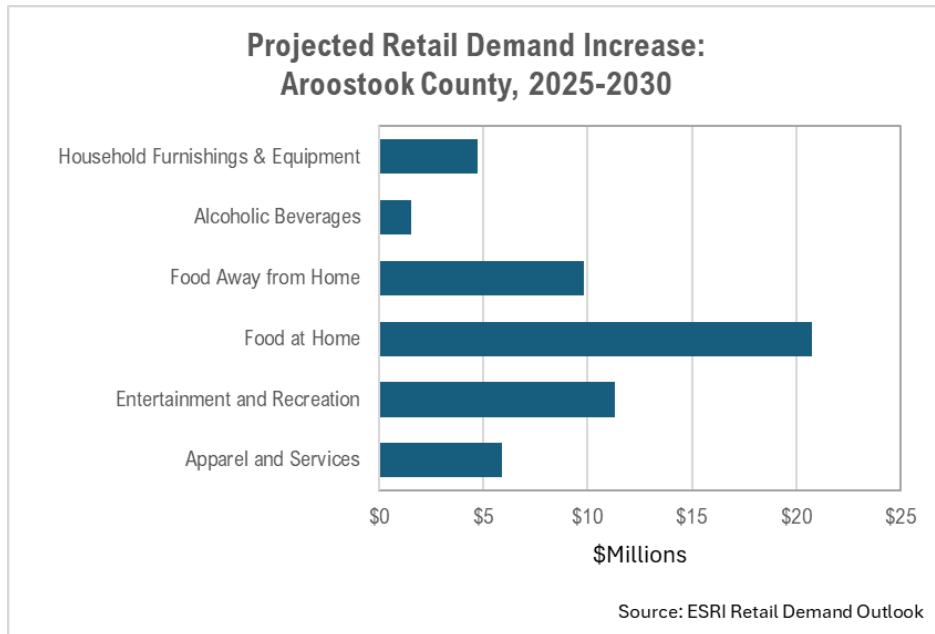
Aroostook County: 48.9

Maine: 44.8

US Total: 38.8

All age cohorts are declining except for Age 65+

Aging population has led to smaller household sizes: Average size declined from 2.26 in 2010 to 2.08 in 2025



### Strong Income Growth is Driving Demand

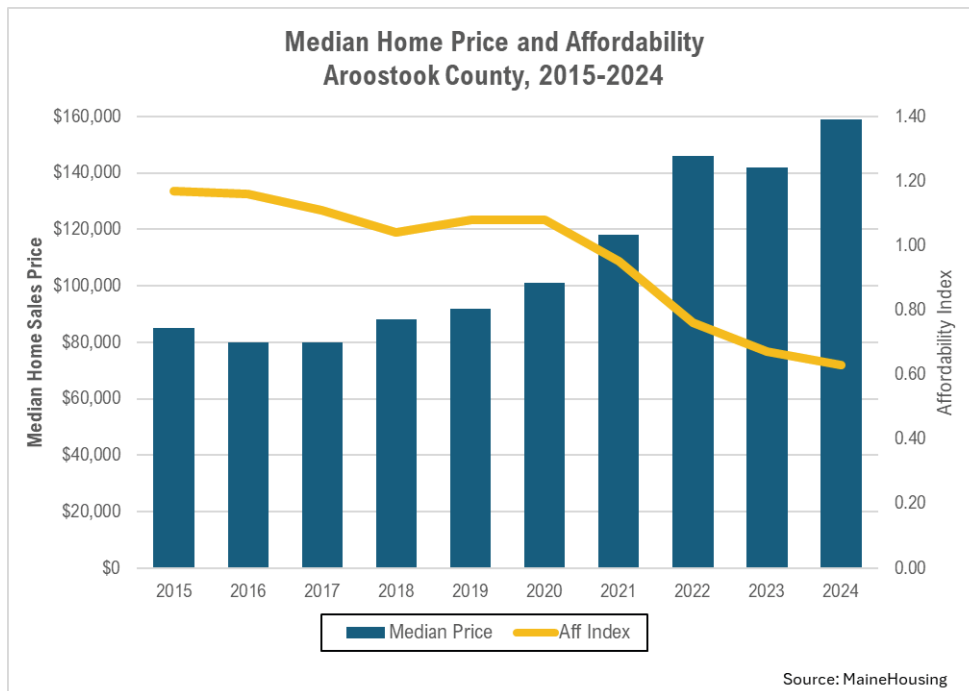
#### Maine DOL Data:

Total jobs in Caribou declined from 3,463 in 2014 to 3,300 in 2024; 5% loss is same as County

2024 average salary of \$49,140 is up 44% from 2014 average of \$34,216

2025 Median Household income is \$58,000, forecasted to increase to \$67,000 by 2030

Retail Spending in the County is forecasted to increase 13.5% from 2025 to 2030, led by spending on food and entertainment / recreation



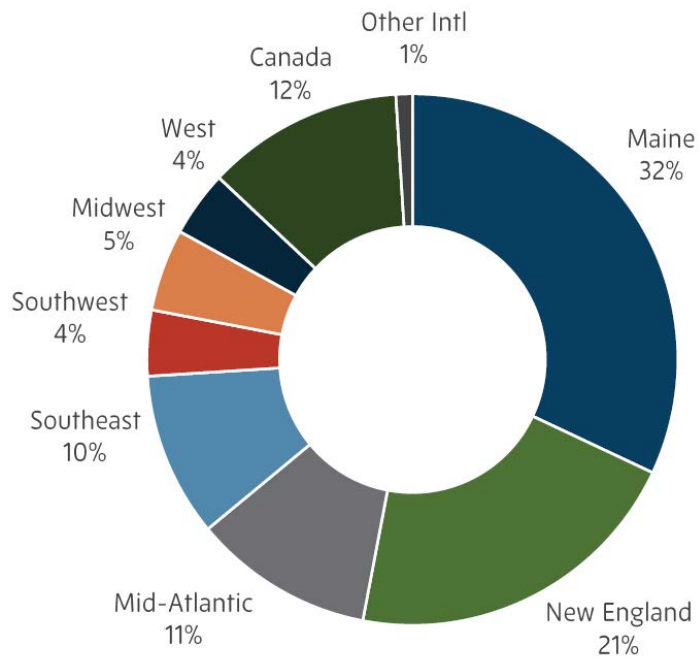
### Strong Housing Demand, But Higher Prices

Median home sale price in Aroostook County increased 87% from 2015-2024

2024 median of \$159,000 is 60% below statewide median of \$390,000

Affordability has declined sharply since the pandemic – median earning household can no longer afford median priced home

State forecasts demand for 2,200 units in Aroostook County to 2030



Source: Maine Office of Tourism

Tourists are Looking for More Things to Do

Top visitor motivators: snow activities and visiting friends & relatives (VFR)

Most visitors are from Maine or nearby states & provinces

Lodging market is weak: 47% occupancy, down significantly from 2021-23 peak of pandemic-driven outdoor travel, and now more in line with prepandemic

High visitor satisfaction but strong demand for better shopping and dining options

## 2.4 Comprehensive Plan and Aroostook County Hazard Mitigation Plan Implications

### Caribou 2024–2034 Comprehensive Plan: Implications for Riverfront Master Planning

The riverfront threads through nearly every chapter of the Comprehensive Plan.

**Governance and timing.** A dedicated **Caribou Riverfront Redevelopment Committee (CRRC)**, established 2020, is leading the **Riverfront Master Plan**, funded by an NBRC 2023 grant and expected to be completed around 2025, which will be added to this Comp Plan once finished.

**Study area.** The designated **Riverfront Redevelopment District (RF zone)** runs from Dow Siding north to Otter Brook along the Aroostook River, with current effort concentrated in the more developed stretch from Otter Brook south to the old steam plant — essentially the downtown-adjacent riverfront.

#### Site conditions / opportunities:

- Former **diesel power plant** and **steam plant** brownfields are mid-cleanup (EPA Brownfields grants, 2023–ongoing).
- The historic **1899/1926 low-head dam** (Caribou Generation Station, FERC license to 2043) still operates at low capacity; owner is exploring restarting hydropower.
- **Caribou Mill (Collins) Pond** is undergoing a \$4.4M dredging/restoration project (new dam, fish passage, water quality) — designed as a central recreational/aesthetic anchor.
- City is pursuing purchase of two key parcels — the old train station and former starch factory — to secure river access and cultural preservation.
- **Atlantic Salmon for Northern Maine** plans a fish-rearing facility with an educational/interpretive park — a potential riverfront design anchor.
- An abandoned **railroad bed** runs the length of the district — flagged repeatedly as a trail spine (Dow Siding to Otter Brook), with potential for interpretive kiosks (solar farm, salmon rearing, historic sites, utilities).

#### Programmatic wish list from public input:

- Riverfront Park: parking, trails, benches, picnic tables, covered pavilions
- Aroostook River swimming/beach access (currently no swimming access in Caribou)
- Fishing access/deck at the power plant brownfield site
- Canoe/kayak/tubing access, possible private outfitter concession
- Pontoon boat concession upstream of the dam
- Water Street corridor connecting downtown to riverfront, with a pocket park and possible **whitewater feature** on Caribou Stream between Mill Pond and the river
- Bike/ped connectivity (Caribou currently scores 15/100 walkability, 19/100 bikability — very car-dependent)
- Rail-to-trail conversion, coordinated with MaineDOT (unresolved Loring rail issue)

### Constraints to design around:

- **Floodplains** are extensive along the river; the city has good FEMA-style flood mapping, but it dates to 1980 and needs updating with LiDAR.
- Portions of the river (segment near the former water intake and downstream to the Canadian border) are **impaired for aquatic life (pH)** — relevant to any water-adjacent recreation features.
- **Shoreland Zoning** and **Resource Protection Zone** regulations apply and restrict structures in the floodplain.
- Zoning/land use ordinances are expected to be updated *following* the Riverfront Master Plan, so current RF zoning is transitional.

**Strategic framing:** the plan repeatedly ties riverfront redevelopment to economic development (mixed-use — commercial, residential, recreational), historic preservation (railroad, hydropower, potato-starch industry heritage), and community identity/anti-out-migration goals — so a master plan pitch that foregrounds heritage interpretation alongside recreation will align well with what's already been publicly endorsed.

*Above summary created with assistance from Claude.*

### Aroostook County Hazard Mitigation Plan (2021): Implications for Caribou Riverfront Planning

This document is county-wide, but it contains Caribou-specific hazard data that should directly shape any riverfront master plan. Key takeaways:

**Flooding is the dominant hazard, and it's riverine.** Riverine/riparian overbank flooding (spring runoff, ice jams) is identified as the major flood type in Aroostook County, and Caribou's own flood-prone area listing is explicitly the **Aroostook River and tributaries**, including Grimes Road and **Main Street–Collins Bridge** — i.e., the downtown riverfront core itself.

**Ice jams are a specific, named risk for the Caribou riverfront.** The plan separately flags **ice jams on the Aroostook River at Grimes Road** as a winter-storm hazard for Caribou. Ice-jam flooding has caused some of the region's worst disasters (Fort Fairfield 1994, Fort Kent 2008), including fatalities and dike/levee construction elsewhere in the county — this is a credible, not theoretical, risk pattern for river-edge structures and park infrastructure.

**Caribou's regulatory flood maps are outdated — confirmed here, not just in the Comp Plan.** The NFIP table shows Caribou's current effective FIRM map date is still **08/01/1980**, the original adoption date, with no update since. This corroborates the Comprehensive Plan's call for new floodplain mapping (LiDAR) and means any riverfront design should not rely on the official flood zone lines as accurate — a hydraulic/hydrologic restudy is warranted before locating permanent structures, especially anything with public occupancy (pavilions, interpretive centers, fish-rearing facility).

### Known local flood-damage locations to design around:

- **River Road** — transportation loss, estimated \$156,000/event
- **Farnham Brook** — flooding damage estimated \$150,000/event (this is the brook near Flora-Dale Park/Roosevelt Ave mentioned in the Comp Plan as a potential interpretive/historic site — worth flagging as a genuine flood-exposure area, not just an amenity site)
- **Limestone Street** — transportation vulnerability (cost TBD)

**Dam considerations.** Notably, the **Caribou hydroelectric dam is NOT listed among the county's 12 High Hazard or 6 Significant Hazard dams** — it falls into the "Low Hazard" category (38 unlisted dams), meaning a failure would be expected to damage mainly the owner's property rather than threaten life/downtown safety. That's a reassuring data point if the master plan considers public gathering space near the dam, though it doesn't eliminate need for a site-specific engineering assessment given the dam's age (1899/1926) and deteriorating flashboards (per the Comp Plan's Mill Pond discussion).

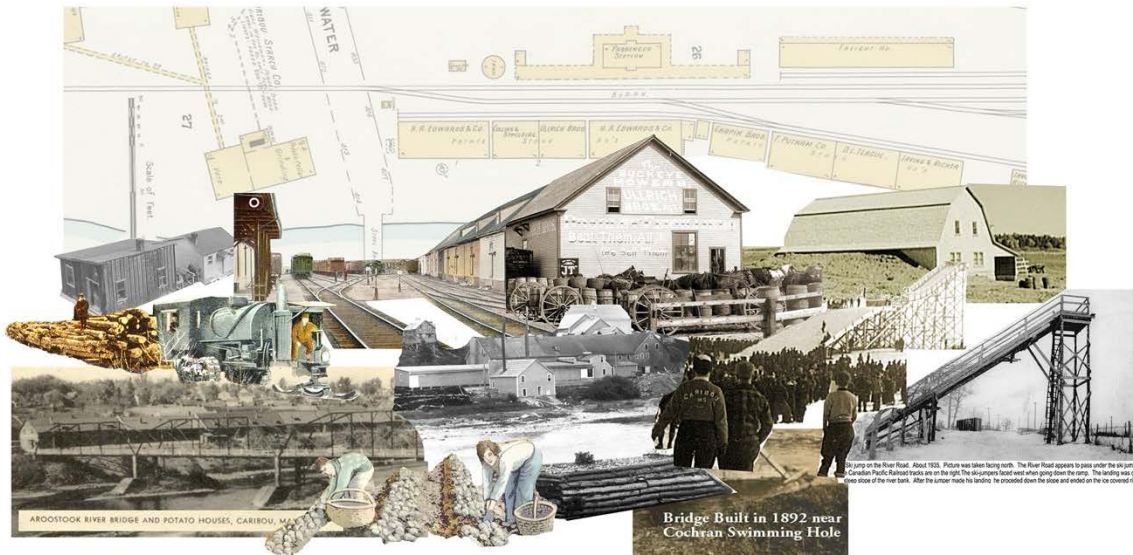
**Winter/power resilience.** Caribou's severe winter storm exposure is citywide, with **\$8.9M in estimated electric/telephone infrastructure exposure** and widespread power-outage risk — relevant if the riverfront plan includes lighting, pump stations, heated restrooms, or other powered infrastructure that needs backup/resilient design.

### Design and planning implications

1. **Site permanent structures (pavilions, interpretive center, restrooms) outside the 100-year floodplain, or elevate them**, and don't treat the 1980 FIRM lines as final — commission updated hydrology before locating anything with public occupancy.
2. **Design river-access infrastructure (docks, fishing decks, boat launches) to tolerate ice-jam events** — expect seasonal ice loading and potential debris impact near Grimes Road/dam vicinity.
3. **Any grading, dredging, or channel work at Mill Pond or along Caribou Stream should account for spring ice-out dynamics**, not just normal flow.
4. **Treat Farnham Brook, Grimes Road, and the Main Street/Collins Bridge corridor as flood-sensitive zones** requiring extra scrutiny in design (permeable surfaces, setbacks, elevated walkways where feasible).
5. **Power resilience** (solar, battery backup, or manual-fallback lighting/pump systems) is worth building into riverfront park infrastructure given the region's outage history.
6. **This plan is due for its next update cycle** (5-year FEMA cycle would put a new version around 2026) — worth checking if a newer county HMP or a Caribou-specific update exists, since it would carry more current mitigation actions tied to the ongoing riverfront redevelopment.

*Above summary created with assistance from Claude.*

### 3.1 Overview

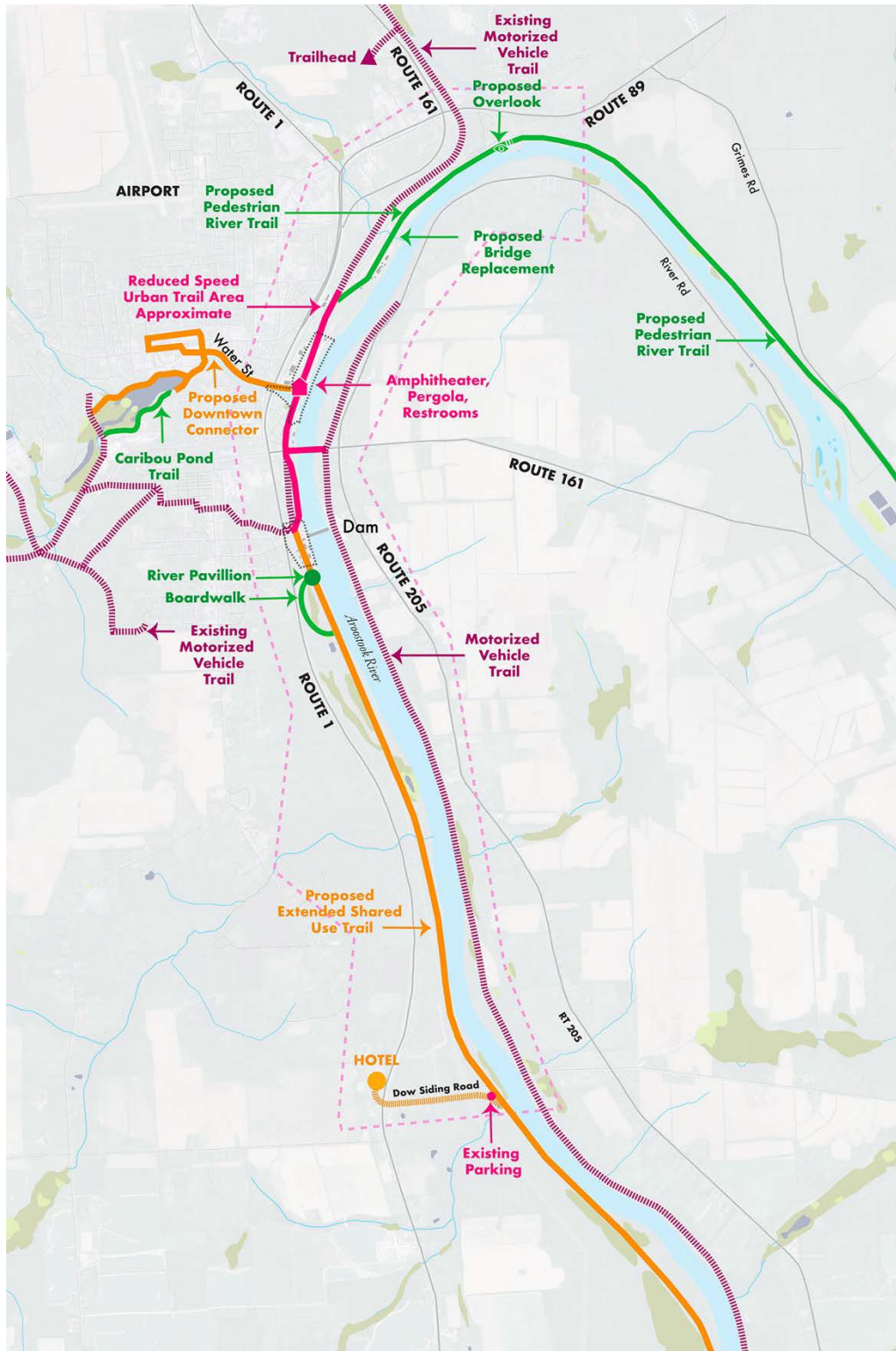


Historic photos of Caribou as inspiration for future character of development.



Proposed images of uses as inspiration for future riverfront development.

## Proposed Trail Network



**Figure 17:** Proposed Trail Network

## 3.2 Focus Area 1

### 3.2.1 Overview of Concept Plan

This historic location at the confluence of the Caribou Stream and the Aroostook River includes the Train Station, Starch Plant, and the Dead River parcels. The State of Maine railroad corridor bisects the site. The area is on a bluff overlooking river. The focus is on visual access of the river rather than physical access. **See Figures 18 through 24.**

The site is easily accessible from downtown and Route 1.

The key design moves include redeveloping the train station site as a mixed-use development parcel and redeveloping the Starch Plant site as a riverfront amphitheater. The Water Street right-of-way between these two locations is repurposed as public park space creating a unified development scheme.

The park plaza leading from Water Street to the amphitheater includes spaces for food trucks and a riverfront pavilion that can be used by the community or rented for events.

The amphitheater can hold hundreds of people and is ADA accessible.

The remaining Dead River land adjacent to the park pavilion is suitable for mixed-use development, however a riverwalk should be maintained between any development and the river.

### 3.2.2 Seven Goals

1. Identify specific actions the city can pursue to develop a vibrant riverfront area, including gaps in Caribou's community development.

Specific actions include implementation of passive and active recreation amenities, strategic land development, phasing of work, and the identification of ideal locations within the study area for a range of economic development activities including multi-family housing, glamping, commercial development, cultural performance spaces, all-season outdoor recreation, and trail development.

Gaps in community development include:

- Limited funding for public investments
- Declining and aging population
- Low-income levels leads to lack of disposable income in the local market
- Few willing entrepreneurs to start businesses
- Limited access to capital for private investors
- Lack of available labor to support business growth
- Difficulty in recruiting potential workers to fill new jobs in the region
- Tourism potential is highly seasonal and dependent on weather

Gaps in community development regarding development opportunities include:

- Multi-family housing along Broadway
- Redevelopment of the Train Station site
- Redevelopment of the Starch Plant site as an amphitheater
- Relocation of the Dead River driveway to create a consolidated site
- Food trucks
- A community pavilion
- Trailhead and services for a future recreation trail on the railroad corridor
- Redevelopment of the train trestle for recreational uses
- Future development site owned by Dead River adjacent to the park

2. Identify potential investment areas in the riverfront that will create a healthy and well-functioning commercial and recreational riverfront area.

The Train Station site and the reconfigured Dead River site create future mixed-use development opportunities.

3. Identify areas suitable for private investment and development in the riverfront to attract visitors and residents to Caribou.

The locations include the Train Station site and the Dead River parcel.

4. Visualize the potential for recreational and mixed-use development through conceptual renderings.

Plans and illustrative images of the potential for the area are included in the Plan.

5. Incorporate previous informal planning efforts into this new Riverfront Master Plan.

The Plan incorporates components of the Comprehensive Plan, the VPI Downtown Study, and the Aroostook Hazard Mitigation Plan as well as input from the CRRC.

6. Provide development ideas that may benefit existing riverfront businesses with job creation/retention from economic development planning.

The riverfront area presently lacks established businesses with growth potential. Any future job creation in the area must therefore be driven by attracting new businesses to the riverfront.

7. Create a plan that will consider expected climate and weather hazards, as documented in the 2021 Aroostook Hazard Mitigation Plan.

The Plan considers climate and weather conditions such as flooding, ice jams and scouring, and rising temperatures. Additional trees will help with urban heat island effect, reducing temperatures and providing shade. Creating pavilion and shade trees scattered across the amphitheater will provide shade for users of the park.

### **3.2.3 Zoning Considerations**

The area should be rezoned a mix of RF-1 and RF-2 as proposed:

The existing General Development Shoreland District with a 25' setback is appropriate.

### **3.2.4 Ownership Considerations**

Ongoing conversations are required with the State of Maine regarding rights to use the railroad corridor for recreational purposes. The State of Maine train trestle crossing the Caribou Stream at the location is ideal for future recreational use. The Caribou Steam crossing is the most significant crossing in the study area and the trestle is an important piece of riverfront connectivity.

This concept requires that Dead River move their access from the end of Water Street to Broadway. Dead River maintains a key parcel along the riverfront that could include future development enhancing the area and the use of the park. This Plan does not show a concept for redevelopment on the Dead River parcel, but a placeholder “meadow.” If Dead River develops this site, they should maintain space for a riverwalk between the building and the river.

### **3.2.5 Environmental Considerations**

The lower part of the amphitheater is in the Shoreland Zone, and the FEMA flood zone as noted by the solid red and blue lines. The development parcels along Water Street and Broadway are not impacted by these environmental conditions.



**Figure 18:** Area 1 Master Plan



**Figure 19:** Area 1 Bird's Eye Overview



**Figure 20:** River Wetland Seasonal Boardwalk Floats.  
Floats to be removed during the winter and spring.



**Figure 21:** Improved Train Station Concept



**Figure 22:** Existing Railroad Bridge at Caribou Stream.  
This City does not own this bridge or have access. Access/use discussions for the bridge and the rail corridor to continue with the State of Maine.



**Figure 23:** Concept Railroad Bridge at Caribou Stream



**Figure 24:** Concept Railroad Bridge at Caribou Stream

## 3.3 Focus Area 2

### 3.3.1 Overview of Concept Plan

This area is above the dam where water levels are relatively consistent throughout the summer and fall creating unique opportunities for boating and swimming. The area is at the end of a long dead-end road and defined by FEMA flood zones limiting future development capacity. Whereas Area 1 is more about visually accessing the river, Area 2 allows for both physical and visual access.

The focus of the area is outdoor recreation and related hospitality with a boat launch, community boathouse, glampground, and swim beach. The existing boat launch beach is to be redeveloped as a secure swim area defined by seasonal floats and docks. A sauna can be located in this area adding to the wellness benefits. The adjacent wetlands provide birding opportunities. Repurposing the three oil tanks across the railroad corridor as birding and viewing platforms allows the postindustrial heritage to be incorporated into a vision for the future based in the outdoor experience economy. Other uses include a natural playground, food trucks, trails, and river outlooks. **See Figures 25 through 33.**

### 3.3.2 Seven Goals

1. Identify specific actions the city can pursue to develop a vibrant riverfront area, including gaps in Caribou's community development.

Specific actions include implementation of passive and active recreation amenities, strategic land development, phasing of work, and the identification of ideal locations within the study area for a range of economic development activities including multi-family housing, glamping, commercial development, cultural performance spaces, all-season outdoor recreation, and trail development.

Gaps in community development include:

- Limited funding for public investments
- Declining and aging population
- Low-income levels leads to lack of disposable income in the local market
- Few willing entrepreneurs to start businesses
- Limited access to capital for private investors
- Lack of available labor to support business growth
- Difficulty in recruiting potential workers to fill new jobs in the region
- Tourism potential is highly seasonal and dependent on weather

Gaps in community development regarding development opportunities include:

- Ongoing sympathetic use and vision for the Atlantic Salmon for Northern Maine parcels
- Creation of a formal boat launch above the dam
- Community boathouse supporting all age and ability river access and partnering potential with an outdoor outfitter. The boathouse can also be rented for private events

- Glampground sites. Unique riverfront opportunity to partner with glampground company to create new outdoor recreation hospitality needed in the Caribou market
- Food trucks
- Birding within wetlands, forests, and meadows
- Trailhead and services for a future recreation trail on the railroad corridor
- Creation of designated and safe swimming location
- Utilize dam for power generation
- Walking trails are in demand by the community

2. Identify potential investment areas in the riverfront that will create a healthy and well-functioning commercial and recreational riverfront area.

The glampground and community boathouse create partnering opportunities for potential investment. The Steam Plant site could also support a multi-unit residential building outside of the FEMA zone.

3. Identify areas suitable for private investment and development in the riverfront to attract visitors and residents to Caribou.

Because the site is located on a dead-end road and restricted by Shoreland Zoning and FEMA flood zones, commercial / retail / restaurant opportunities are limited, but multi-family housing is potentially appropriate.

4. Visualize the potential for recreational and mixed-use development through conceptual renderings.

Plans and illustrative images of the potential for the area are included in the Plan.

5. Incorporate previous informal planning efforts into this new Riverfront Master Plan.

The Plan incorporates components of the Comprehensive Plan, the VPI Downtown Study, and the Aroostook Hazard Mitigation Plan as well as input from the CRRC.

6. Provide development ideas that may benefit existing riverfront businesses with job creation/retention from economic development planning.

The riverfront area presently lacks established businesses with growth potential. Any future job creation in the area must therefore be driven by attracting new businesses to the riverfront.

7. Create a plan that will consider expected climate and weather hazards, as documented in the 2021 Aroostook Hazard Mitigation Plan.

The Plan considers climate and weather conditions such as flooding, ice jams and scouring, and rising temperatures. Additional trees will help with urban heat island effect, reducing temperatures and providing shade.

### **3.3.3 Zoning Considerations**

The area should be rezoned a mix of RF-1 and RF-2 and not RF-4 as proposed to encourage the envisioned range of uses.

The existing General Development Shoreland District with a 25' setback is appropriate; however, the General Development zone should be extended to the proposed beach.

### **3.3.4 Ownership Considerations**

The Steam Plant site is owned by the city. The redevelopment potential of this parcel is greatly enhanced by potential sympathetic uses of Atlantic Salmon for Northern Maine parcels to the north and west and the State of Maine parcel to the south in the location of the proposed glampground and the beach. The abandoned oil tanks across the railroad corridor owned by Atlantic Salmon for Northern Maine would make excellent viewing platforms and postindustrial gardens.

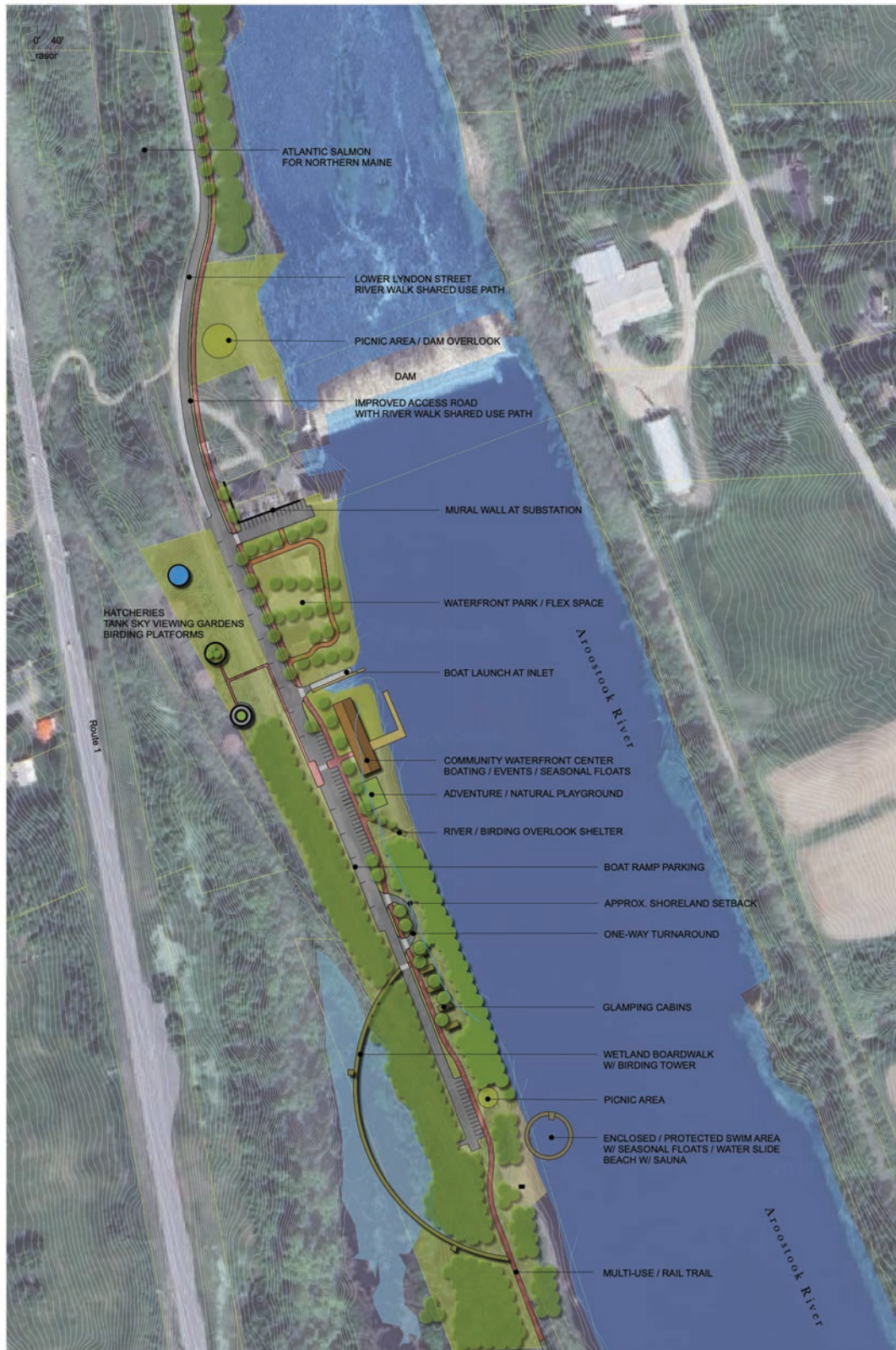
The State of Maine railroad corridor bisects the site. This linear corridor running the length of the entire study area is key to unlocking the recreational and community development opportunities of the riverfront.

A use agreement or transfer of ownership for the State of Maine parcel should be established. A right of first refusal for the Atlantic Salmon for Northern Maine lands should be established.

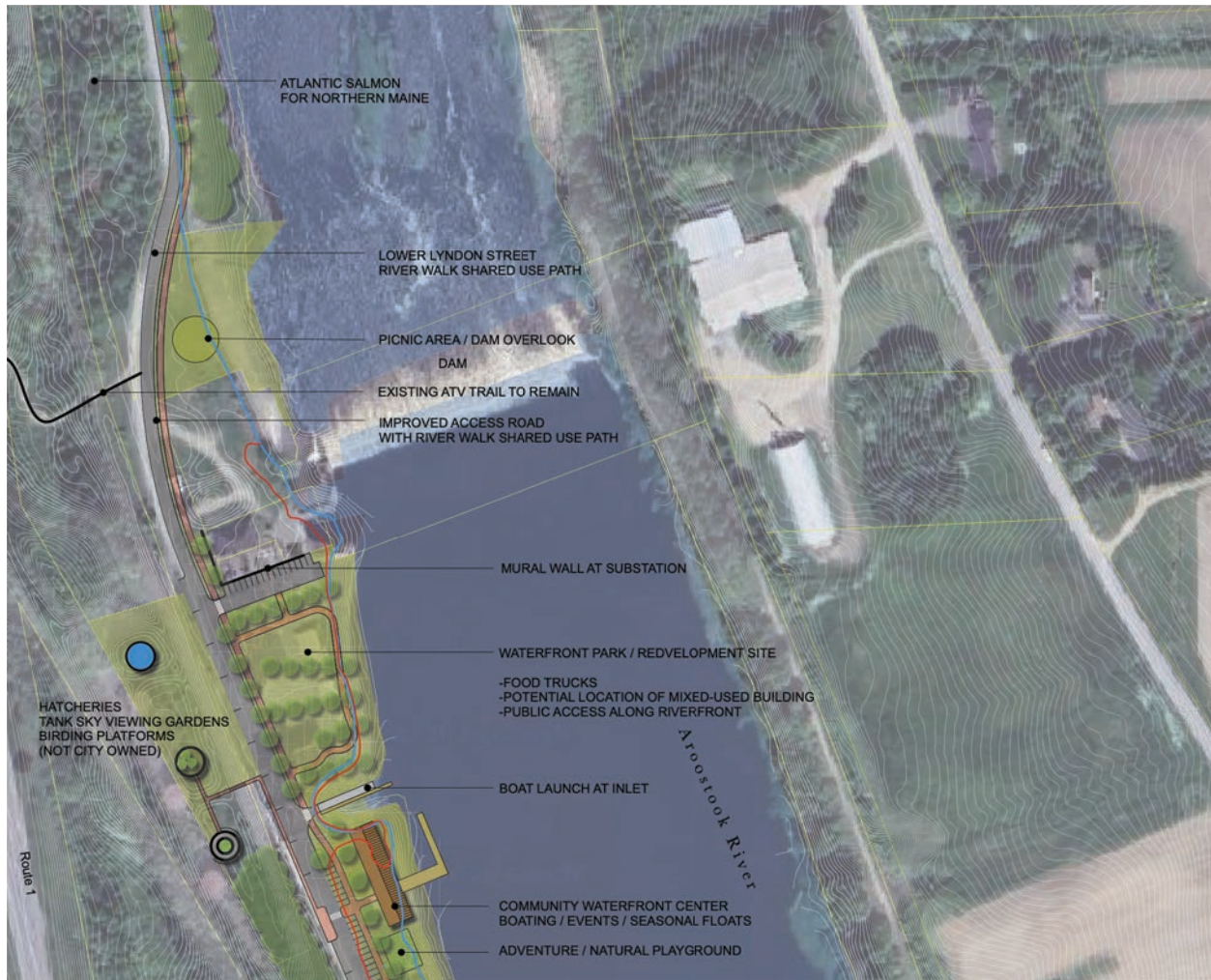
If an agreement cannot be made between the city and the State of Maine regarding recreational use of the railroad corridor, alternative routes for connecting the site to Dow Siding Road should be explored such as the utility line. The area between the river and the utility line is comprised of wetlands making this area difficult for access routes.

### **3.3.5 Environmental Considerations**

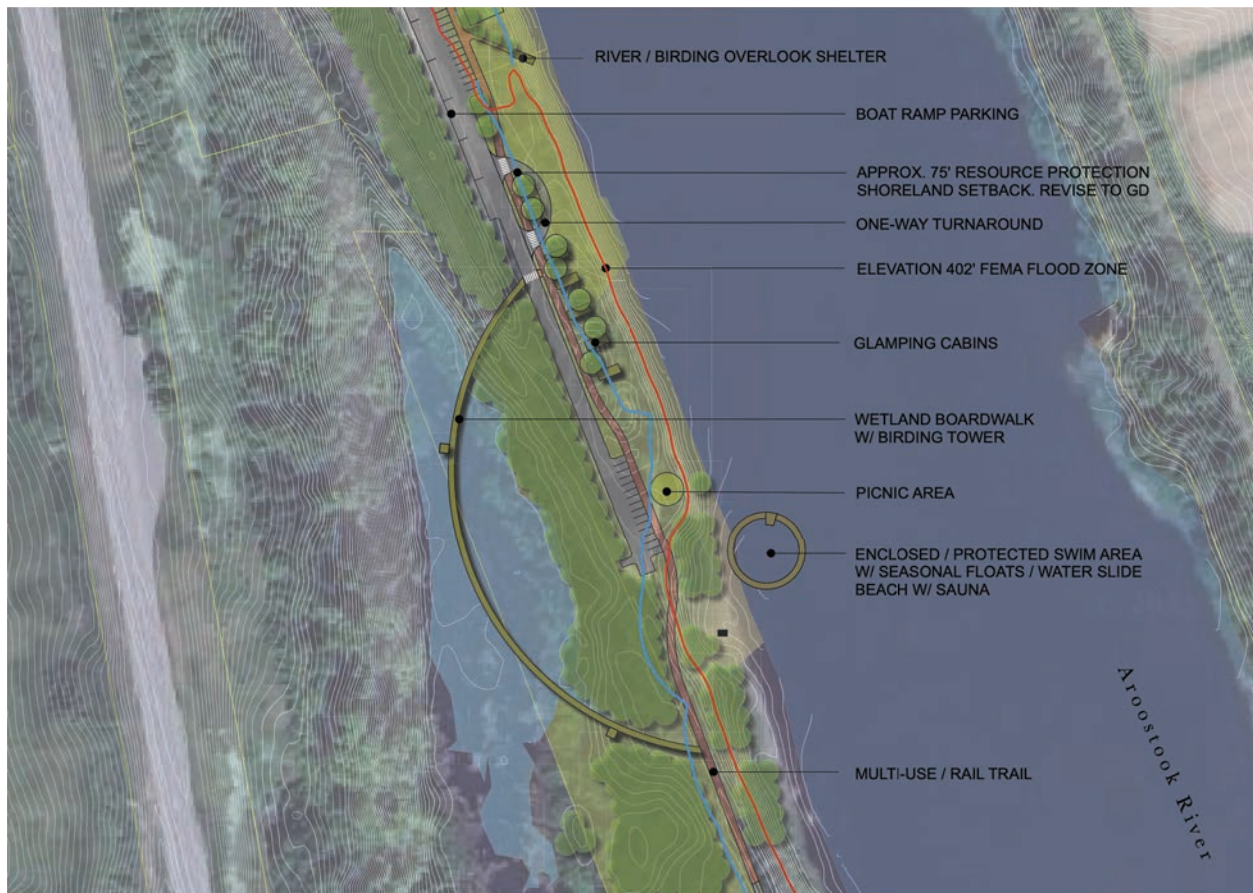
As noted by the solid red and blue lines, Shoreland Zoning and FEMA flood zones impact the development potential between the river and the railroad corridor. Any future redevelopment must address these issues in terms of use and the ability to permit and insure the projects.



**Figure 25:** Area 2 Master Plan



**Figure 26:** Area 2 Master Plan – North Portion



**Figure 27:** Area 2 Master Plan – South Portion



**Figure 28:** Area 2 Bird's Eye Overview of Concept  
Further detail design required.



**Figure 29:** Beach Concept with Protected Swim Area.  
Floats to be removed in the winter and spring.



**Figure 30:** Tank Farm Reuse Concept. The tanks are not owned by the city.



**Figures 31 and 32: Area 2 Pedestrian Experience Concepts**



**Figure 33:** Lower Lyndon Street Improved Access Concept  
This Concept requires a widening of the road and possible easement.

### 3.4 Otter Brook

#### 3.4.1 Concept Plan Overview



**Figure 34:** Otter Brook Improvement Concept

## 4. Market Evaluation of Development Concepts and Opportunities

### Focus Area 1:

- Accessibility to downtown and US Route 1 makes this an attractive location for riverfront mixed-use developments
- The larger development at a reconfigured Water Street ROW and Dead River parcel line is suitable for a luxury multifamily housing project. Product should be geared towards the following market profiles:
  - Empty Nesters: local homeowners in the 45-65 age range looking to sell their homes and live a lower maintenance lifestyle
  - Affluent seniors: age 65-80 local residents who may be homeowners or renters looking for a higher quality multifamily community than can currently be found in the local market
  - Snowbirds: those splitting time between Maine and warmer locations looking for a seasonal unit.
  - Second homeowners/Short-term rental investors: These units could be designed for out-of-state residents and/or those looking for short-term rental investments. These units could also help add quality lodging options without taking the risk of building a new hotel in a weak market.
- Smaller site at the City-owned train station parcel is suitable for smaller scale dining, retail, and office businesses but the following issues will need to be considered for this development to succeed:
  - Mixed-use development with multi-family residential will be critical to the success of this development, particularly for restaurants
  - The mix of businesses should primarily cater to local residents, as the tourism market in the region is volatile and can be affected by external factors such as weather and currency exchange rates.
  - Leases made by the City to developers should be structured to minimize upfront risk to restaurant and retail tenants, given the soft market conditions. The recommended approach is a percentage rent structure, in which the tenant pays a share of their gross receipts to the landlord, rather than a fixed rental amount.
  - First-floor space should be reserved for active uses even if there is stronger demand from office businesses. It is important for the success of the project to ensure that the ground level is activated.
  - These spaces are likely to be filled by local entrepreneurs that may not have experience at this scale of operations, so financial and organizational support will need to be provided through NMDC and other partners.
- The train station site is not likely to be able to support a commercial operation in the short term, as this will compete with the mixed-use development. A support use for visitor operations is a better and less risky short-term option. If the overall project succeeds, this site could be appropriate for a brewpub or similar larger scale use in the future.

### Focus Area 2

- Access to this site is limited, so its market potential will be entirely tied to destination uses. It is not an attractive location for housing or locally serving commercial uses.

- The riverfront location just above the dam makes it an excellent location for water oriented outdoor recreation and tourism uses. Depending on the scale of the recreation opportunities, this location could support some modest commercial uses such as an outfitter, a small restaurant, or a glamping/tourist cottage operation.
- This site could also be suitable for a use that highlights local culture or history and provides career development opportunities. For example, a traditional boatbuilder could have a workshop where they train high school students, showcase their products, and rent their boats to visitors for daily use.

Note regarding housing for Focus Areas 1 and 2. Multi-family housing is appropriate in both focus areas, but single-family homes should not be allowed as this type of use tends to privatize and limit access to the riverfront.

## 5. Probable Costs

### 5.1 Focus Area 1- Caribou Confluence: Probable Cost

|                                                    |                       |
|----------------------------------------------------|-----------------------|
| Pavilion @ \$125 SF:                               | \$325,000.00          |
| Overlook:                                          | \$75,000.00           |
| Amphitheatre (walls, landscape, railings):         | \$400,000.00*         |
| Train Station Site Redevelopment and Parking:      | \$400,000.00          |
| Convert Trestle to Rail Trail:                     | \$100,000.00          |
| 10' Wide Asphalt Path 1,757 LF @ \$130 LF:         | \$228,410.00          |
| Rail to Trail Conversion for                       |                       |
| 10' Wide Asphalt Path 720 LF @ \$75.00 LF:         | \$54,000.00           |
| Decorative Railing at River: 160 LF x \$150.00 LF: | \$24,000.00           |
| Retaining Wall at River: 160 LF x \$240 LF:        | \$38,400.00           |
| Pedestrian Lights: 10 @ \$2,400 each:              | \$24,000.00           |
| Trees: 25 @ \$1,500:                               | \$37,500.00           |
| Benches: 8 @ \$1,000.00 Each:                      | \$8,000.00            |
| Drainage allowance:                                | \$30,000.00           |
| Floating Seasonal Dock: 140 LF @ \$140 LF:         | \$19,600.00           |
| Misc. Site Prep:                                   | \$40,000.00           |
| Misc. Electrical / Water:                          | \$20,000.00           |
| ADA Dome: 8 @ \$1,500 each:                        | \$12,000.00           |
| Subtotal:                                          | \$1,835,910.00        |
| 25% Contingency:                                   | \$458,977.50          |
| Subtotal:                                          | \$2,294,887.50        |
| 10% Design and Permitting:                         | \$229,488.75          |
| <b>Total</b>                                       | <b>\$2,524,376.25</b> |

\*Assumes recycled materials can be used for amphitheater terracing. Assumes demolition of starch plant will leave site ready for redevelopment as terraced amphitheater

## 5.2 Area 2 – Dam Site: Probable Cost

|                                                           |                                              |
|-----------------------------------------------------------|----------------------------------------------|
| Boathouse 6,400 SF @ 150 SF:                              | \$960,000.00                                 |
| Boathouse Seasonal Floats: 180 LF @ \$140 LF:             | \$23,400.00                                  |
| Concrete Decking Boat Launch and Site Prep:               | \$250,000.00                                 |
| Diesel Plant Site Landscape:                              |                                              |
| Site Prep: \$15,000.00                                    |                                              |
| 25 Trees: \$30,000.00                                     |                                              |
| 5 Pedestrian Lights: \$12,000.00                          |                                              |
| 6 Benches: \$6,000.00                                     |                                              |
| 5' Wide Stone Dust Paths: \$15,000.00                     |                                              |
| Loam and Lawn: \$30,000.00                                |                                              |
|                                                           | = \$108,000.00                               |
| 10' Wide Asphalt Path: 4,207 LF @ \$130 LF:               | \$546,910.00 (Existing Boat Launch to Beach) |
| Rail to Trail Conversion for                              |                                              |
| 10' Wide Asphalt Path 4,500 LF @ \$75.00 LF =             | \$337,500*                                   |
| Improved Asphalt Road and Parking from Lower Lyndon       |                                              |
| to Beach 93,040 SF @ \$12 SF @:                           | \$1,116,480.00                               |
| Wetland Boardwalk: 720 LF @ 120 LF:                       | \$86,400.00                                  |
| Pedestrian Lights: 30 @ \$2,400 each:                     | \$24,000.00                                  |
| Trees: 25 @ \$1,500:                                      | \$37,500.00                                  |
| Benches: 8 @ \$1,000.00 each:                             | \$8,000.00                                   |
| Nature Playground:                                        | \$40,000.00                                  |
| Drainage allowance:                                       | \$30,000.00                                  |
| Floating Seasonal Dock for Swim Area: 300 LF @ \$140 LF = | \$42,000.00                                  |
| Misc. Site Prep:                                          | \$40,000.00                                  |
| Misc. Electrical / Water:                                 | \$20,000.00                                  |
| Conversion of Oil Tanks to Viewing Platforms:             | \$75,000.00                                  |
| ADA Dome: 8 @ \$1,500 each =                              | \$12,000.00                                  |
| Subtotal:                                                 | \$3,757,190.00                               |
| 25% Contingency                                           | \$939,297.50                                 |
| Subtotal:                                                 | \$4,696,487.50                               |
| 10% Design and Permitting                                 | \$469,648.75                                 |
| <b>Total</b>                                              | <b>\$5,166,136.25</b>                        |

\*The rail to trail conversion cost may be redundant if the shared use path along Lower Lyndon and through park is constructed

### 5.3 Otter Brook Probable Cost

|                                |             |
|--------------------------------|-------------|
| Improvements to Parking:       | \$30,000.00 |
| Overlook                       | \$75,000.00 |
| Misc. Landscape and Amenities: | \$24,000.00 |

### 5.4 Overall 4.5-Mile Maine DOT Right of Way Rail to Trail Conversion

|                                                            |                        |
|------------------------------------------------------------|------------------------|
| 10' Wide Shared Used Asphalt Path: 23,842 LF @ \$75.00 LF: | \$1,788,150.00         |
| Misc. Site Prep:                                           | \$100,000.00 allowance |
| Trestle and Culverts:                                      | \$300,000.00 allowance |
| Subtotal:                                                  | \$2,188,150.00         |
| 25% Contingency                                            | \$547,037.50           |
| Subtotal:                                                  | \$2,735,187.50         |
| 10% Design and Permitting                                  | \$273,518.75           |
| <b>Total</b>                                               | <b>\$3,008,706.25</b>  |

## 6. Appendices and Meeting Notes – *in process*

Caribou Riverfront Master Plan 11.6.25 / 11.7.25 Public Meeting Notes and Stakeholder Interviews

### Meeting and General Notes

Other communities have created parks and trail systems that are used by residents and attract visitors. Economic development and quality of life.

Be careful to not overburden taxpayers with associated costs when redeveloping the riverfront  
Make sure the riverfront work complements efforts to revitalize the downtown and does not compete with these efforts. Frame the redevelopment of the riverfront as part of the overall downtown redevelopment

Keep in mind the neighbors when looking to redevelop the train station for a new use

The river used to be very polluted, but is now clean and a great asset for recreation, economic development, and conservation

Inventory potential materials from site and building demolition to be potentially reused in the park.

Coordinate this work with the City and contractor. Identify a good location to store materials

There are two river conditions - above the dam is more like a lake and below the dam is more like a natural river

The proposed uses of the adjacent parcels by Atlantic Salmon for Northern Maine will be a great addition to the waterfront and the riverfront master planning work should incorporate their master plan and proposed program of hatchery, education, access, and outfitters.

The pump house, intake pipes, and related building to remain at the Steam Plant site. The substation is to also remain. There is also the possibility that the dam can be used for generation in the future, and this should be kept in mind.

The City owns a parcel near the end of Dow Siding Road and this could be used as a trailhead and small parking lot to access the southern end of the study area and may be a walking trail along the edge of the rail line.

May not be a need to run an ATV/Sled trail south of the Steam Plant site and boat launch along the railroad alignment as the Aroostook Valley Trail is on the other side of the river providing regional connectivity.

### Breakout Group Stick Notes on Plans

#### Group 1

Sporting goods store along Riverfront

Add a narrow-gauge railroad

Walking paths and overlook at dam

Concert venue as part of Steam Plant area redevelopment

Mixed use building with first floor restaurant and upper floor condos overlooking river

New walking paths along river

Lodging / hospitality: hotel, cabins, campground

Scenic overlook and kayak / canoe launch at end of Water Street

New hotel or condos as part of Starch redevelopment

Train station ideas: ATV / snowmobile welcome center / rentals, tap room, museum, or restaurant

## Group 2

Zip line on Steam Plant

Use riverfront for real estate development: housing

Skate park, food trucks at the end of Water Street

Ridenorth could redevelop the train station

New police station in train station. Build new garage for storage

## Group 3

Create Route 1 access to steam plant site

Fiddlehead foraging along gravel road to boat launch above the dam.

Restaurant in train station

Connect riverfront to existing town walking trails

Kayak / canoe launch at Caribou Stream confluence

Starch plant redevelopment should include venue for entertainment

A safe walking path is needed along the riverfront

Benches along the river

Access from Route 1 to Steam Plant

Include portage at park at dam

## Group 4

Little park and with benches at dam

Local housing and condos at Steam Plant site (like Hilltop)

Boardwalk and trails at Caribou Confluence

Walking path along riverfront

Amphitheater at Starch Plant. Seconded!

Restaurant at train station

Businesses and shopping along Limestone. Live work.

## Site Tour Notes and Observations with Ken Murchison of the CRRC

Possible portable bathrooms along trail

Possible warming huts along trail

Scenic view pull offs on Route 1 no longer have river view due to tree growth

Route 1 is a limited access highway and could be difficult to create a new curb cut accessing the riverfront in this stretch

The Reach is a part of the river by northeast paving plant towards Presque Isle that is a great flat water destination above the dam.

Fly fishing hole has short term rental fly fish guide

Valley Trail peters 3 miles out past the fort bridge, going north. South goes all the way to Presque Isle

Beaver signs at a few spots along riverfront

Urban compact area signage along southern part of study area. No hunting basically from the boat launch above the dam to the northern extent of the study area.

Atlantic salmon and trout fly fishing in the river.

Scouring along Lower Lyndon shoreline

Lyndon Street Boat Launch has been improved, but the water is often low here below the dam and this stretch of the river can be tricky to navigate unless you know the channels and deeper areas. at canoe race in spring

People come down the Lyndon Street launch for lunch and to sit in car to relax and watch the river  
Folks to interview: Dan Jarosz plumbing contractor mass and Atlantic Salmon for Northern Maine  
Cold storage

Halfway brook by train table

Look at creating a safe bike / ped route from the northern portion of the study area along Route 89 to the park and ride for ATV's and sleds. This could create a loop out of the riverfront and the Aroostook Bangor Trail.

Trails behind Cary connect to the park ride otter st

The retaining wall as part of the Starch Plant building currently holds up the adjacent railroad and demolition of this building will have to carefully consider this retaining wall. Engineering review required. The retaining wall could be incorporated into a future park / amphitheater area

The river does flood the lower areas / basement of the Starch Plant and this needs to be considered as part of a future resilient park design.

The old abutment at the end of Water Street could be incorporated into a new access way / steps down to the river

Look at creating a new entrance from the Dead River Facility further north along Broadway reducing traffic volumes and conflicts at the end of Water Street

The train trestle was removed at the confluence of Otter Brook and the Aroostook. This area has been ecologically restored and is favorite fly fishing spot. There is a small parking area / overlook spot with informal access down to the water.

## **Stakeholder Interviews with Atlantic Salmon for Northern Maine and Incline Solutions**

The dam needs a 16' x 16' pad for future services if the dam is to resume operations. This should be fenced. Approximate location between the dam and the substation or just north of the fence line in the Atlantic Salmon parcel.

Area along the western shore just above the dam scours with ice every spring. This area needs to remain clear.

Concerns about vandalism in the area, but this might change with investments

Floats are placed above dam, but recreational boating above the dam always a concern, but not off limits

Water levels below dam often very low in the summer

Fish ladder is operational

Current work on partially collapsed wall at intake location for turbines

Vision to reuse three large tanks above site as salmon hatcheries. Water from these tanks could then flow north to the parcel to be treated in wetlands and an educational fishing pond north of the barn. This would then discharge back to the river downstream from the dam, but south of where the ATV trail connects with the road alignment.

Plans to use two wells at site as water supply, but not the intake pipes and pump house. Water district has right of first refusal for intake pipes and pump house.

Concerns with PFAS in river, particularly downstream below Loring where there are elevated levels.

Site is in Zone 3 USDA Hardiness Zone

Plan to demo old water treatment building north of substation but restore old barn building along Lower Lyndon.

Potential synergies between redeveloping site as mixed use / recreation area with Atlantic Salmon vision for restoration and access

Archeological sites along river

Otter Brook confluence good fishing spot

Concerns about ongoing vandalism