

Chelsea Mill Creek

ABOUT

Chelsea's Mill Creek faces several pressing issues that demand attention and concerted efforts for resolution. **Pollution** from various sources, including **stormwater runoff** and industrial discharges, threatens water quality and the health of aquatic life in the creek.

- **Urban development** in the surrounding area has led to habitat loss
- **Habitat loss** has diminished the creek's ecological diversity
- Erosion along the creek's banks is a significant concern
- **Erosion** has resulted in sedimentation and altered flow patterns
- These challenges require **community involvement** and coordinated action
- The goal is to **protect and restore** Chelsea's Mill Creek



City of Chelsea

Massachusetts



WPI



Chelsea Mill Creek: Broadway Bridge



Chelsea Mill Creek: view from 101 Broadway facing East

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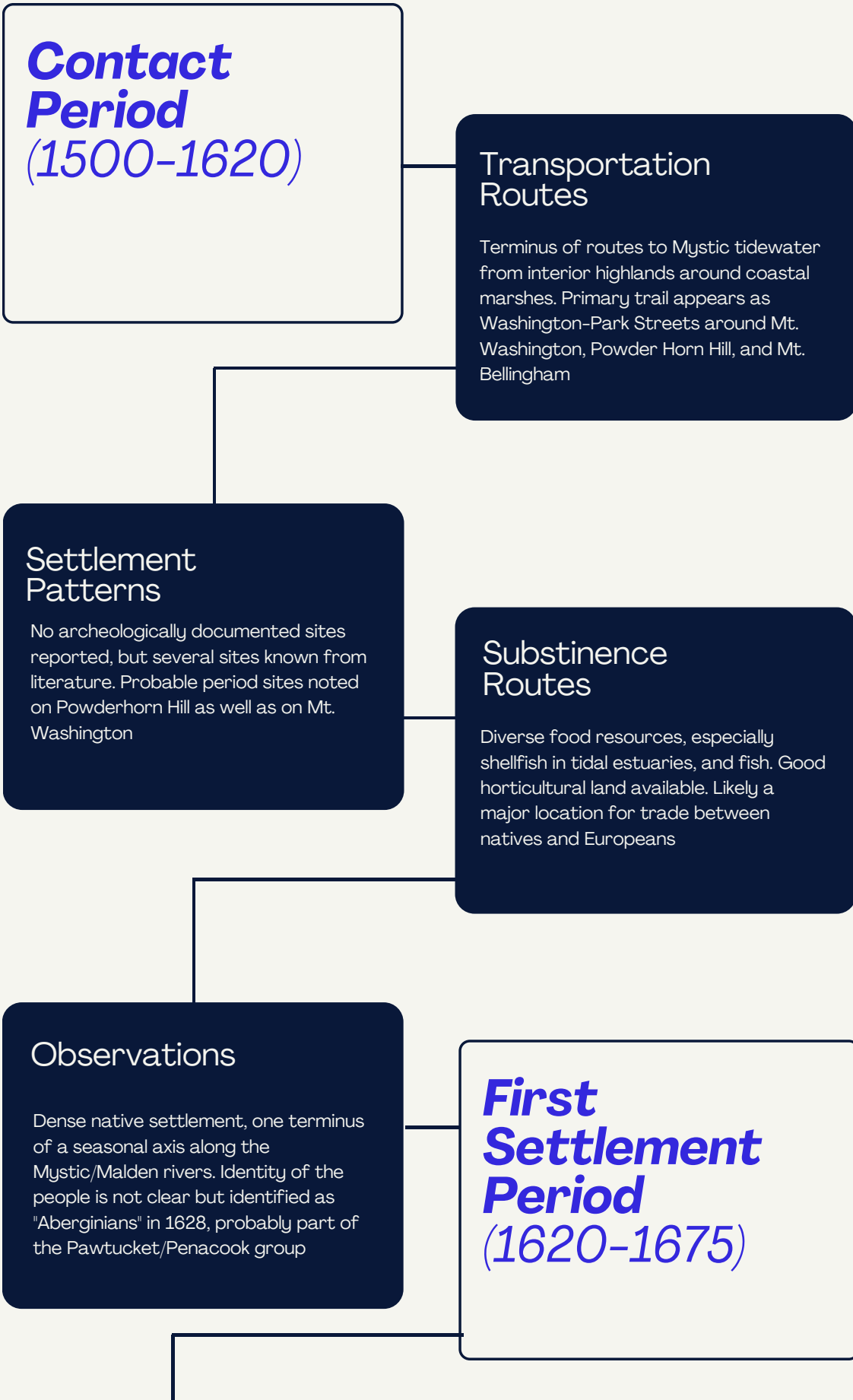
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TIMELINE



Transportation Routes

Native trails improved as local highways with primary route from Lynn and Malden as Washington Street to early ferry landing (1631) as Winnisimet Street from Park Street

Population

Earliest settlement by 1625, with four farms established by the end of the period.

Settlement Patterns

Early English trading post by Samuel Maverick on Mystic River tidelands by 1625. Winnisimet ferry to Boston created landing site around Maverick Farm during the 1630s

Economic Base

Establishment of the first ferry from Boston around 1630

Colonial Period

Transportation Routes

Local highways remain from the 17th century to Winnisimmet ferry landing as Washington-Park Streets

Population

No identified population growth, likely remained at a relatively low level

Settlement Patterns

Bellingham estate farms remain along Washington Street axis, and tidemill established on Mill Creek (1734)

Economic Base

Economy likely limited to farming and some fishing

Early Industrial Period

Transportation Routes

Continued improvement of Boston access across Mystic with steam ferry (1831) and omnibus service over Chelsea bridge to Ferry Village

Population

Population expanded rapidly with the establishment of the steam ferry to East Boston

Settlement Patterns

Operation of steam ferry to Chelsea during the 1830s prompted subdivision of Bellingham estate. Secondary focus around Pratt Farm on Washington Avenue at the head of Mill Creek by the early 19th century

Economic Base + Architecture

Growth of various industries, including rubber, paints, varnishes, linseed oil, etc.

Residential and institutional structures built during this period

Late Industrial Period

Transportation Routes

Expansion of streetcar service and railroads

Population

Significant demographic change with a rapid increase in population, driven by industrialization and immigration

Settlement Patterns

Expansion of residential development,
industrial areas, and commercial
centers

Economic Base + Architecture

Expansion of various industries,
including shoemaking, rubber, paints,
varnishes, and more

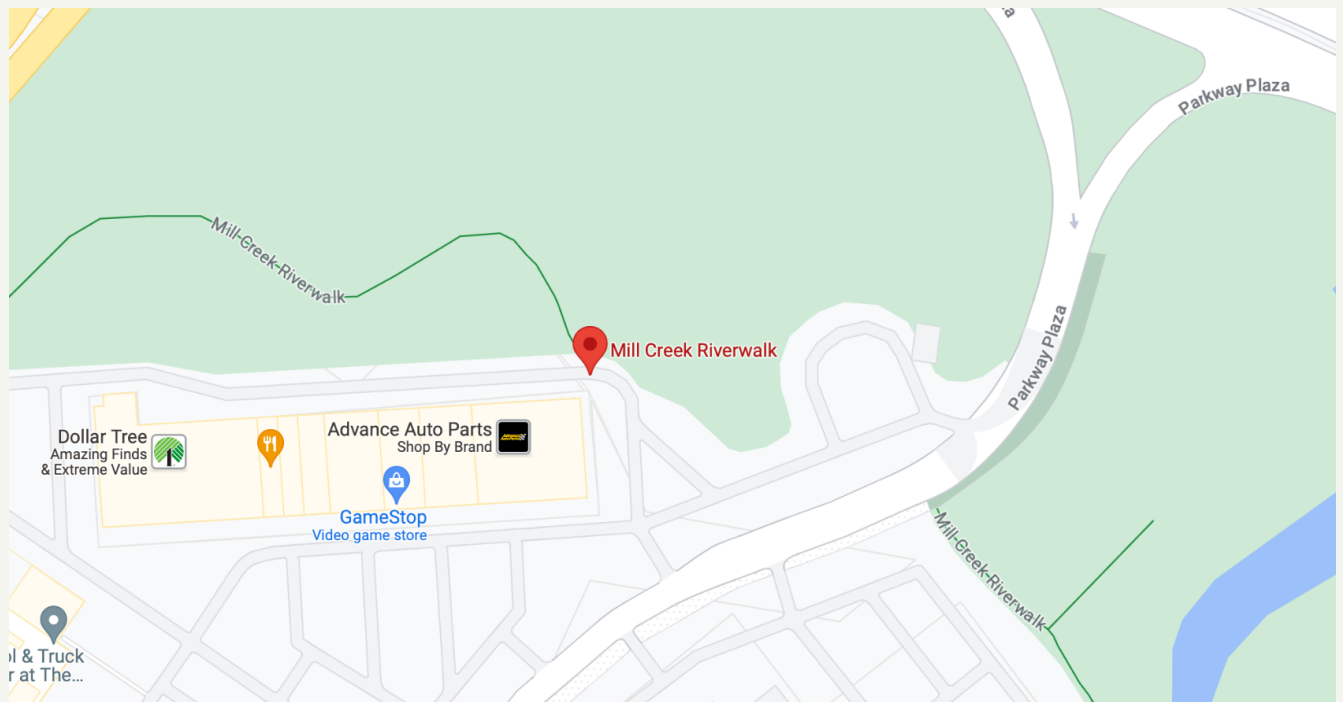
Construction of residential, institutional,
commercial, and industrial buildings

Timeline content credit: [Massachusetts Historical Commission
Reconnaissance Survey Report](#)

PROJECTS

Past Projects

- Restoration of Mill Creek began in the early 2000s
- Early studies for potential redevelopments initiated the project
- Chelsea Creek Water Plan in 2007 explored opportunities in Chelsea and Revere
- Goals included financial benefits for nearby communities, increased public access, and improved river quality
- Plan aimed to reduce non-industrial uses and create a network of public access and open spaces
- Restoration efforts involved removing invasive plant species
- Efforts to reduce stormwater runoff were part of the plan
- Increasing tidal flow was a strategy to improve water quality



Mill Creek Riverwalk: image sourced from Google Maps

Projects in Progress

Project: Boardwalk

- **Description:** The City is planning to build a boardwalk along a stretch of Mill Creek.
- **Timeline:** Currently in the design and permitting phase. Construction expected to start in 2025 and complete in 2026.

Project: New park at 88 Clinton Street

- **Description:** The City recently acquired a vacant lot and is transforming it into a park.
- **Timeline:** Finalizing design and permitting this fall, with construction to finish in June of the following year.

Project: Berm Removal

- **Description:** Investigating the removal of a berm in Mill Creek to improve tidal flow and water quality.
- **Timeline:** Design and permitting over the next 24 months, followed by construction concluding in the fall of 2026.

Project: IDDE study (Illicit Discharge Detection and Elimination)

- **Description:** A study to identify the causes of poor water quality in Mill Creek.
- **Timeline:** The study is commencing in September 2023

Project: Vegetation management and shore stabilization

- **Description:** Addressing invasive species encroachment and bank erosion along the riverbank.
- **Timeline:** Study period scheduled to end in the fall of 2024, with funding sought for implementing the preferred solution thereafter.

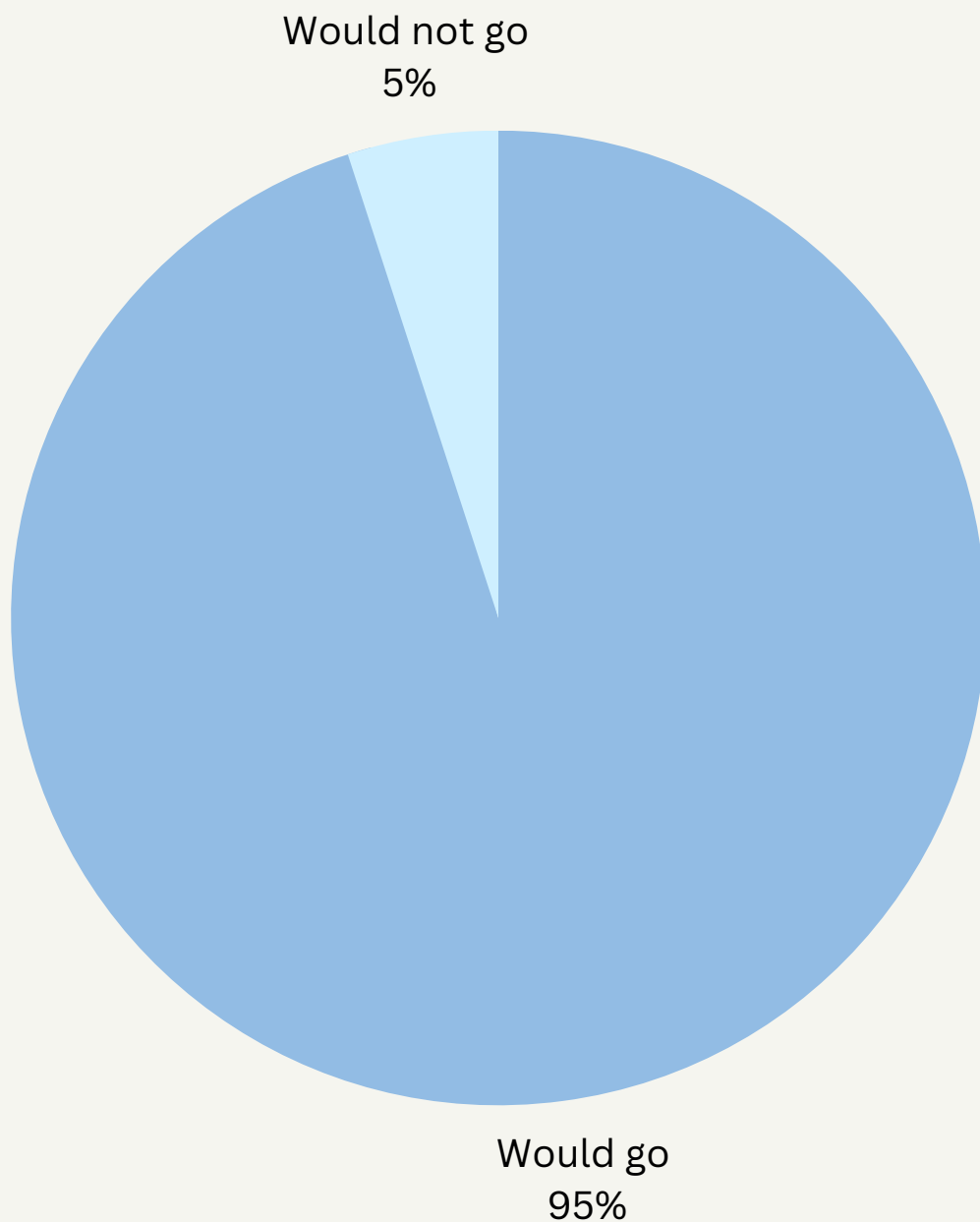
RESIDENT RESPONSES

Survey Review

The intended audience for this survey was people who live around Mill Creek and the Mystic River, as well as those who are directly involved with current and past restoration and preservation efforts. To increase community participation, we distributed the survey in both English and Spanish. Addressing the issue of human ethics with this mode of research, all responses were anonymous and no names or personally identifiable information of the subjects were disclosed in the research process unless there was informed consent given. No identifiable information was on the deliverable and final reports as well. The team distributed flyers with a link to the survey around the Chelsea area for responses. In summary, the survey consisted of 10 questions that relate to accessibility, community engagement with the river and creek, water pollution and quality, and the current level of public interest.

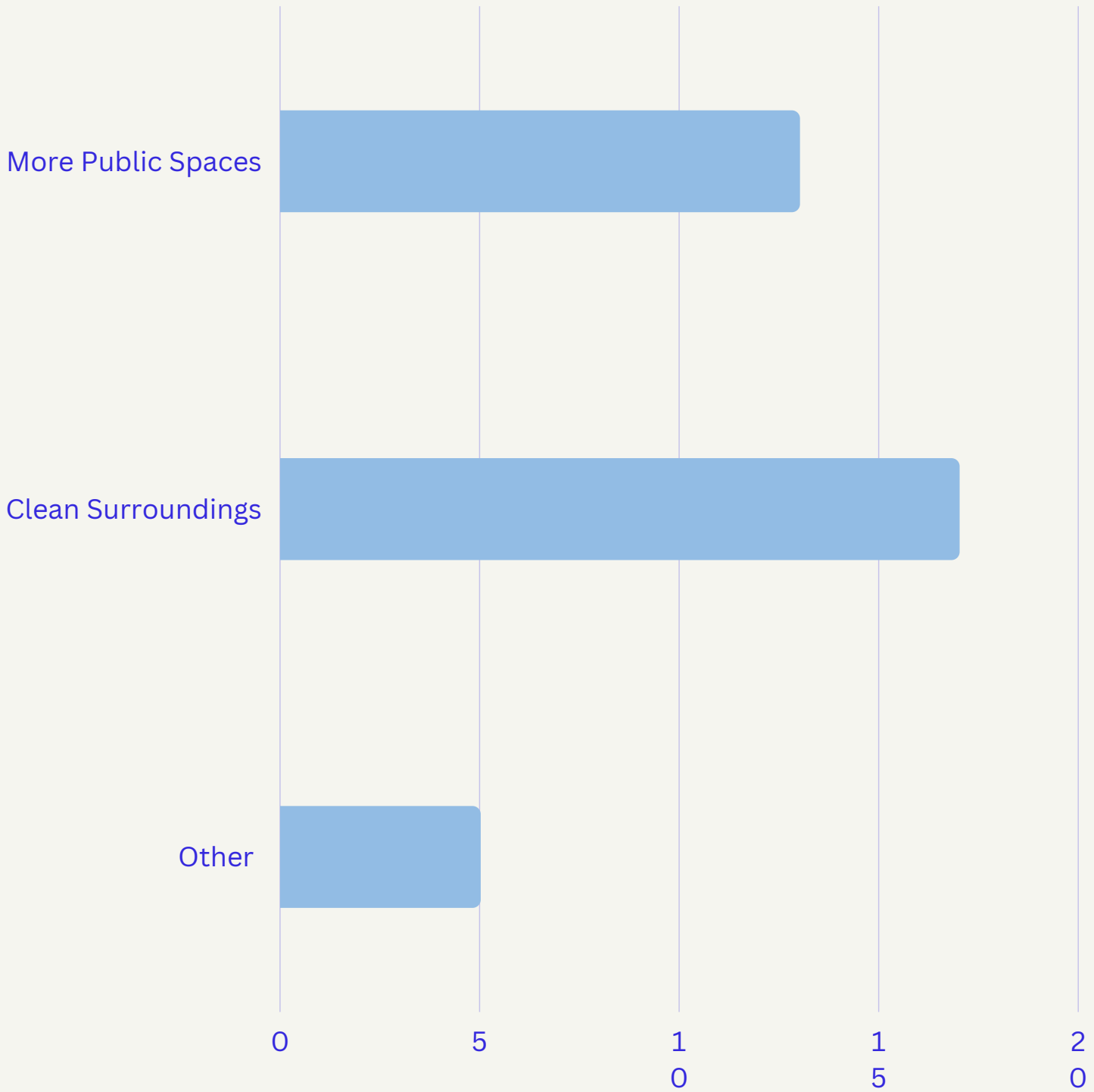
Survey Findings

When asked “Would you go to the river more often if there are more public spaces?”

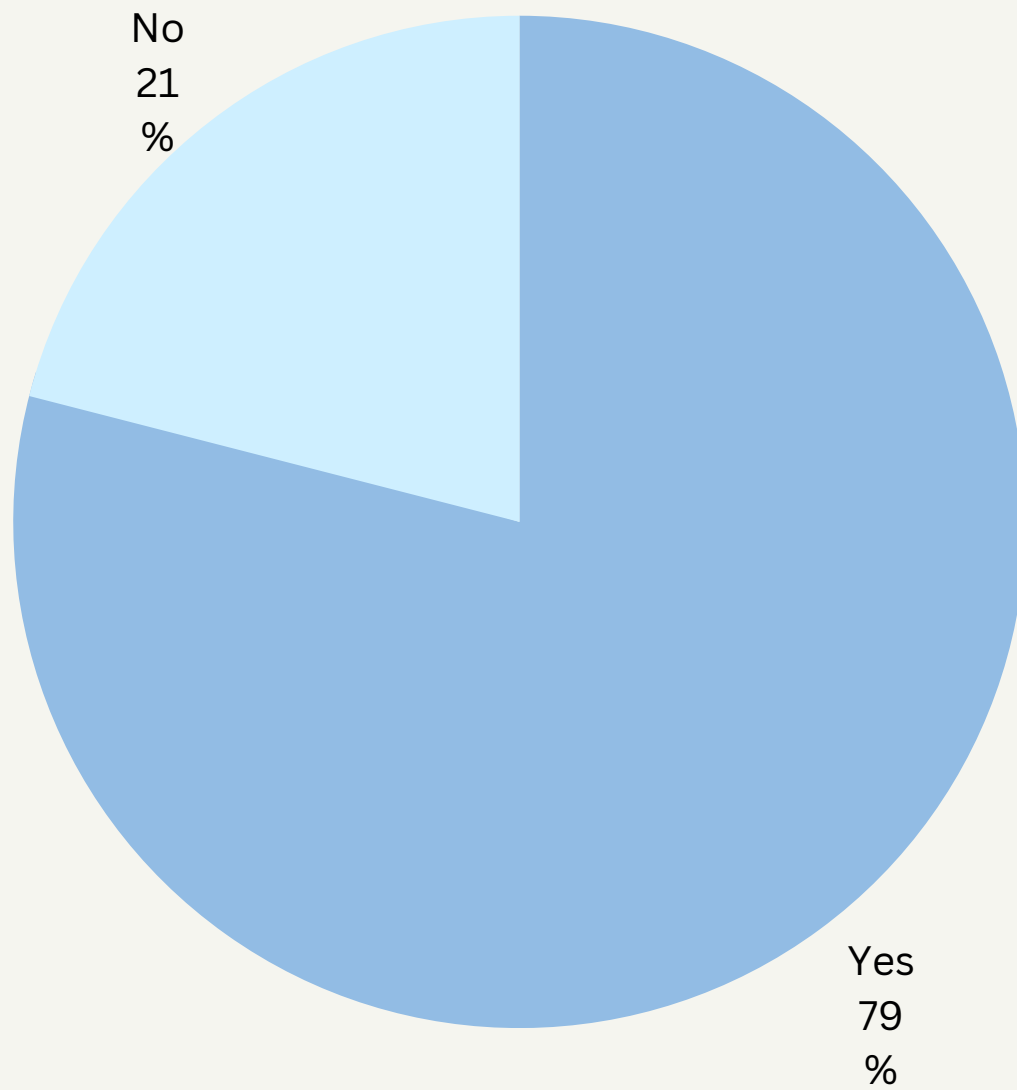


Survey from September 2023

When asked “What would make you go to the river more often?”



When asked “Has any road, house, or land that you know of been damaged near the river by natural causes (flooding, erosion, etc.)?”



When asked “Why do you think the water quality is so poor? “

“This is an urban city-so, poor quality open spaces is expected.”

-Anonymous

“All the trash and sewage thrown into the creek. You can see it at low tide.”

-Anonymous

“All the petrol products for the airport the largest airport this part of the USA goes on that river.”

-Anonymous

“There are still paint cans out there. The herons and other birds that eat the baby flounders hatching there probably get sick.”

-Anonymous

“It’s dirty and you can fish a sock out of there.”

-Anonymous

STUDENT INVOLVEMENT

Interactive Qualifying Project Student Team

Project Overview

The overall goal of the team for this project was to engage and educate residents on the history and conservation efforts to preserve the creek.

Furthermore, the conclusions drawn from this project were used to influence future technical restoration initiatives and to promote a broader understanding of the restoration methods around Chelsea.

Over the course of the project, the team researched and identified the geographical and ecological significance of Mill Creek, delineated its historical degradation, and delineated ongoing restoration endeavors aimed at rejuvenating its salt marsh ecosystem. The team also underscored the significance of community engagement and public education initiatives within Chelsea in their technical research paper.

Team Members



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City of Chelsea

Massachusetts



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