

Sauk River Dam at Cold Spring – Feasibility Study

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HOUSTON engineering, inc.

Feasibility Study

Rock Arch Rapids have been successfully used at other sites

No preferred location or design has been selected

Maintaining water levels / hydraulic function is a primary requirement

Feasibility Study Scope

- Public Outreach and Input
- Field Data Collection
- Concept Design of 4 Potential Alternatives
- Evaluation and Comparison of Alternatives
- Preferred Alternative Recommendation, if Feasible
- Report
- 30% Preliminary Design and Cost Estimate
- Draft Feasibility Report
- Final Public Meeting
- Final Feasibility Report



Collect



Develop



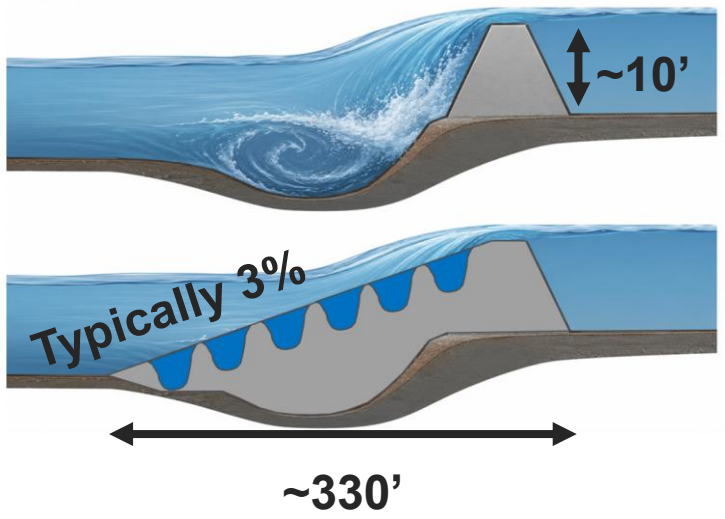
Evaluate

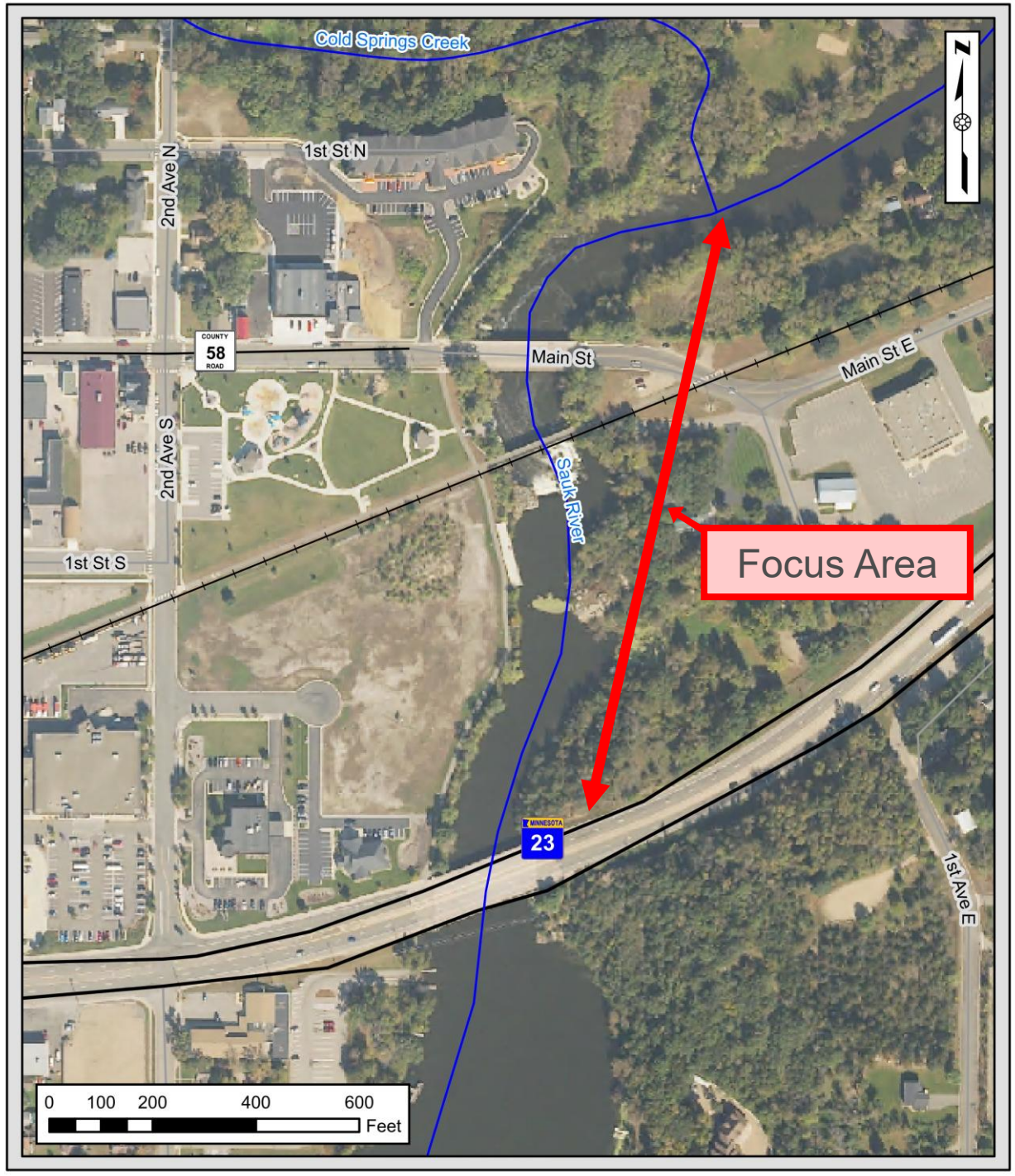


Recommend

Alternative Locations

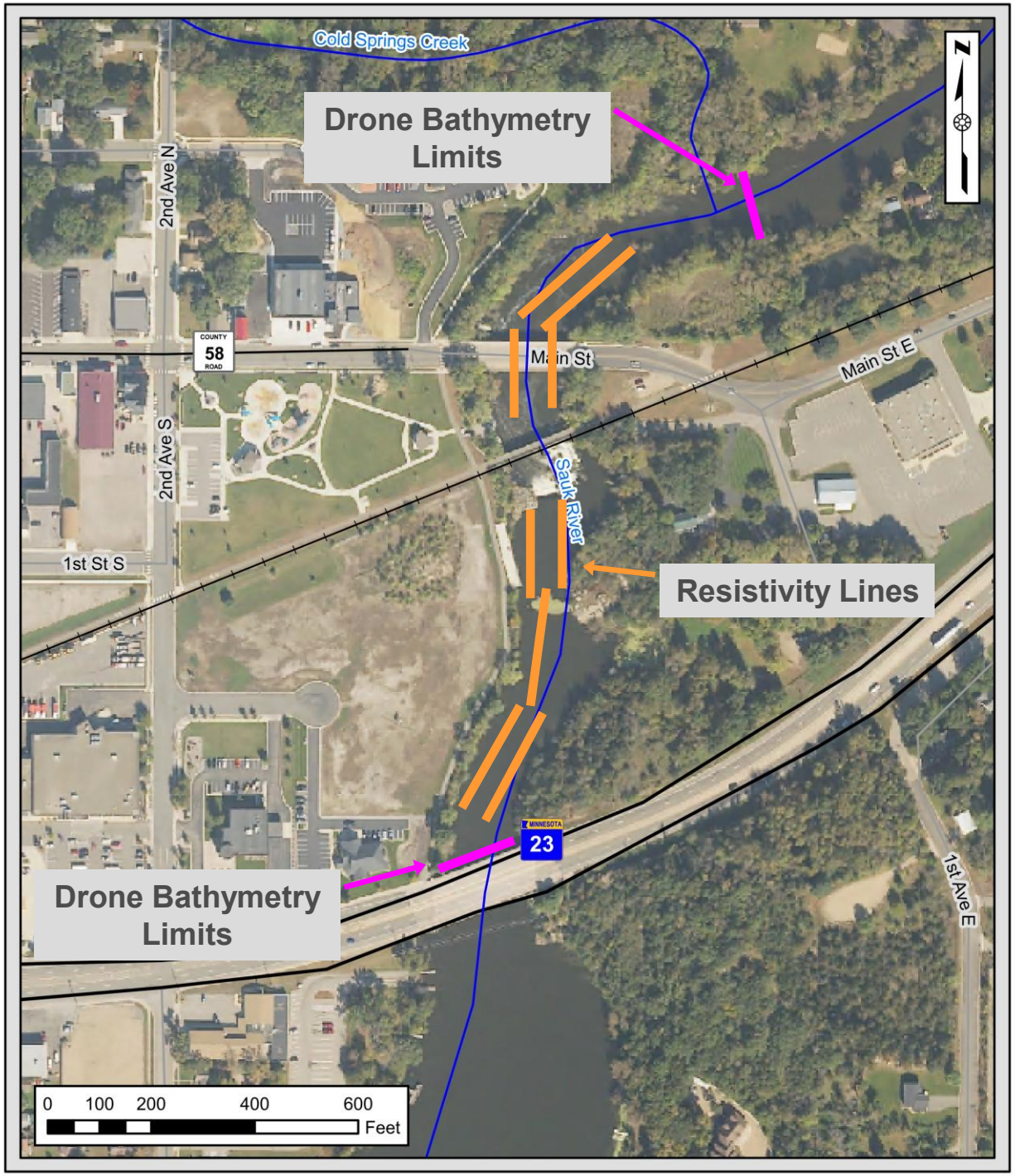
- Existing Dam ~ 10’ High
- Potential Ramp Length ~ 300-350’
- Focus Area extends between MN23 and Cold Spring Creek / Brewery Creek
- Natural and built constraints will help define potential locations





Data Collection

- Topographic Survey
- Aerial Drone Imagery
- Drone Boat Bathymetric Survey
- 2D Electrical Resistivity Survey
  - Including Soil Borings
- Cultural Resources Desktop Review
- Federally Listed Threatened and Endangered Species Review



Feasibility Evaluation

Does it Work?

- Hydraulic Performance
  - Maintain water levels and hydraulic function
- Fish Passage Function

Can It Fit and Be Constructed?

- Bedrock and Subsurface Conditions
- Infrastructure and Bridge Considerations
- Construction Access and Staging
- Preliminary Cost Estimate

Can It Be Permitted?

- DNR Public Waters and Dam Safety
- USACE Section 404
- MPCA Section 401
- Wetland Conservation Act
- FEMA No-Rise
- Cultural Resources Review

30% Preliminary Design

General Location and Alignment

Plan and Profile

Structure Configuration

Preliminary Cost Estimate

Visual Renderings

Completed for the preferred alternative, if a feasible alternative is identified.

Feasibility Study Timeline

Public Informational Meeting
- October 2026

Data Collection
- October / November 2026

Conceptual Design of 4 Alternatives
- Fourth Quarter 2026

30% Preliminary Design
- First Quarter 2027

Final Feasibility Report & Presentation
- First Quarter 2027

Beyond the Scope of the Feasibility Study



Future Funding



Final Design & Permitting



Construction



Operation and Maintenance

Frequently Asked Questions

Has a preferred location been selected?
At least 4 alternatives will be developed and compared.

Is this a dam-removal project?
The current study is a dam modification feasibility study.

Will lake levels change?
Maintaining the existing lake-level function is a primary requirement. Hydraulic modeling will be used to confirm performance.

Is construction included?
Funding, final design, permitting, construction would be later steps if a feasible alternative is identified.

PUBLIC PARTICIPATION

HOUSTON engineering, inc.

English



Cold Spring Dam Feasibility Study

The Feasibility Study will evaluate and compare alternative locations for a rock arch rapids fish passage structure and identify a preferred location.

About the Project

The Cold Spring Dam Feasibility Study will evaluate and compare alternative locations for a potential dam modification to a rock ramp fish passage structure. The structure must improve aquatic connectivity while maintaining the hydraulic function currently provided by the dam. The study will support the Sterns Conservation District, Minnesota DNR, and project partners in determining if there is a feasible location for a dam modification.

Document Library

Test Item
PDF (478.40 KB)

Key Items

- No preferred location or design has been selected
- Maintaining water levels and hydraulic function is primary requirement

Open

Feedback

Have comments to help inform the feasibility study?

Leave your comment

You have 255 characters remaining

Timeline

- **Public Informational Meeting (October 2026)**
- **Data Collection (November 2026)**
- **Conceptual Design of 4 Alternatives (Q4 2026)**
- **30% Preliminary Design (Q1 2027)**
- **Final Feasibility Report and Presentation (Q1 2027)**

See less

Project Partners

STEARNS CONSERVATION DISTRICT

Study Website

https://engage.hei.mysocialpinpoint.com/cold-spring-dam-feasibility-study

https://bit.ly/ColdSpringDam