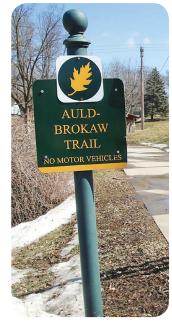
Auld-Brokaw Maintenance and Recreational Trail System and Marne Creek Bank Stabilization





what is this project?

The City of Yankton, in cooperation with the Federal Emergency Management Agency (FEMA) and SD Emergency Management is completing a study to determine the best option for the reconstruction of the Auld-Brokaw Maintenance and Recreational Trail System and stabilization of the banks of Marne Creek that were affected by the March 2019 blizzard and rapid snowmelt.

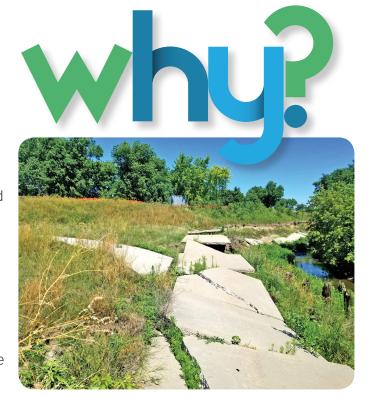
what is the Auld-Brokaw trail system?

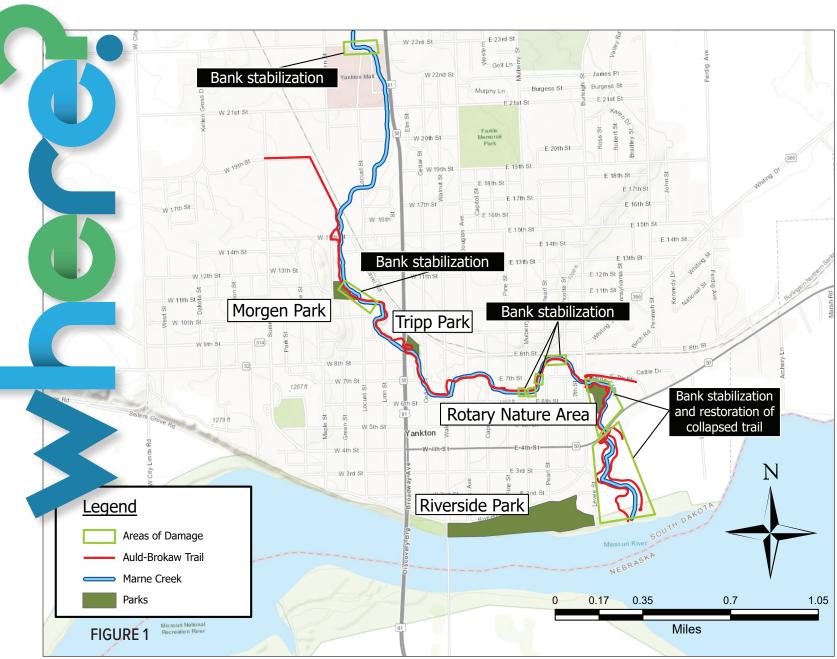
The Auld-Brokaw Maintenance and Recreational Trail System came to existence as a community flood mitigation project in the Marne Creek Greenbelt. Tom and Meredith (Auld) Brokaw were in Yankton on June 28, 2001, for the dedication ceremony and ice cream social held to celebrate the beginning of the recreational improvements. The Brokaw's generous contribution of \$250,000, along with other contributions from project supporters, allowed for the community to build a first-rate trail with amenities along the banks of the Marne Creek. The trail provides an access route for the City to maintain their properties and a recreational opportunity for the City's residents.

why is this project needed?

The Auld-Brokaw Maintenance and Recreational Trail System along Marne Creek sustained severe damage during the March 2019 blizzard and subsequent rapid snowmelt. The trail system links amenities such as schools, parks, Rotary Nature Area, Outdoor Classroom, picnic areas, and Historic Homes District. Once flooding subsided, an evaluation of the damage along Marne Creek within the City limits revealed eroded and sloughed banks, exposed and damaged storm sewer, water line, and bridge foundations, displaced riprap, failed gabion baskets and collapsed portions of the Auld-Brokaw Trail. Marne Creek is continuing to erode its banks and is starting to encroach onto public and private property.

Through coordination with FEMA and the SD Emergency Management Office, the City of Yankton received funding to restore Marne Creek and the Auld-Brokaw Maintenance and Recreational Trail System to pre-flood conditions.





where does the trail system need to be reconstructed? what reaches of Marne Creek need to be stabilized?

The trail has areas of severe collapse in Rotary Park and further south towards Paddlewheel Point. The remainder of the trail is safe and usable, however recent flooding has caused some creek banks to become unstable. To prevent any future loss of trail, sections of Marne Creek's banks will be stabilized in residential areas near E 8th Street, near Webster Elementary School, in Morgen Park off W 10th Street and Green Street, and near Yankton Mall on W 23rd Street. See Figure 1 for more detail.



Auld-Brokaw Maintenance and Recreational Trail System and Marne Creek Bank Stabilization



project kick off

- Initial Agency
 Coordination
- Identify goals, objectives, priorities
- Discuss target project construction budget



data gathering

- Topographic DataGIS Data
- FEMA Effective Map and
- Other Flood Studies

 Field Investigation
- Environmental Studies



design

- Hydrology and Hydraulics
- Conceptual Design and Alternative Analysis
- Public Outreach
- Cost Analysis



stakeholder and public outreach

- Show results of conceptual design
- Gather comments and input



selected alternative final design & permitting

- Permitting
- Final Design
- Construction

what will be done for bank stabilization and reconstruction of the trail?

The partners will work through a step-by-step process to determine the best bank stabilization for each reach of Marne Creek. The following explains the steps:

- **project kick off** Coordination with City, FEMA and bank stabilization specialists to discuss the project and goals of the project.
- data gathering Information such as the terrain, if wetlands are present, and the areas that floodplain is designated will be gathered to get a better idea of the project areas.
- design Our specialists will note the potential options for each reach of Marne Creek and will determine pros and cons of each to allow the City and FEMA to make decisions on what bank stabilization design should be applied to each reach of the creek.
- **public and stakeholder outreach** This project sheet is part of this outreach. Coordination will occur with the City's Department of Parks & Recreation and two additional project information sheets will be completed to update the public.
- selecting an alternative After the information is gathered and the pros and cons of each design is considered, a design for each reach that is the best option will be selected.



for further information please contact:

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who are the partners for this project?

The City of Yankton is leading this project with SD Emergency Management and FEMA. The City has hired a consultant team that specializes in this work, Banner Associates and RESPEC, to provide solutions for the reconstruction of the trail and bank stabilization of Marne Creek.





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