

COTTONWOOD 21-A SUPPLEMENTAL WATERSHED PLAN-EA

PROJECT BACKGROUND

The Lower Platte North Natural Resources District (LPNNRD) has entered into an agreement to develop a supplemental watershed plan and environmental assessment document (Watershed Plan-EA) for the rehabilitation of floodwater retarding structure Cottonwood 21-A in Saunders County, Nebraska, under the Natural Resources Conservation Service (NRCS) Watershed and Flood Prevention Operations (WFPO) program.

Cottonwood 21-A is a high hazard dam located near a rural community. The structure, located on County Road P, was assessed in March 2022 as part of on-going efforts to monitor flood damage reduction structures. During this assessment, deficiencies in the structure were identified. A key responsibility of the LPNNRD is to maintain vital infrastructure in their district. The identification and implementation of alternatives is needed to address the structure's deficiencies and meet current design standards.

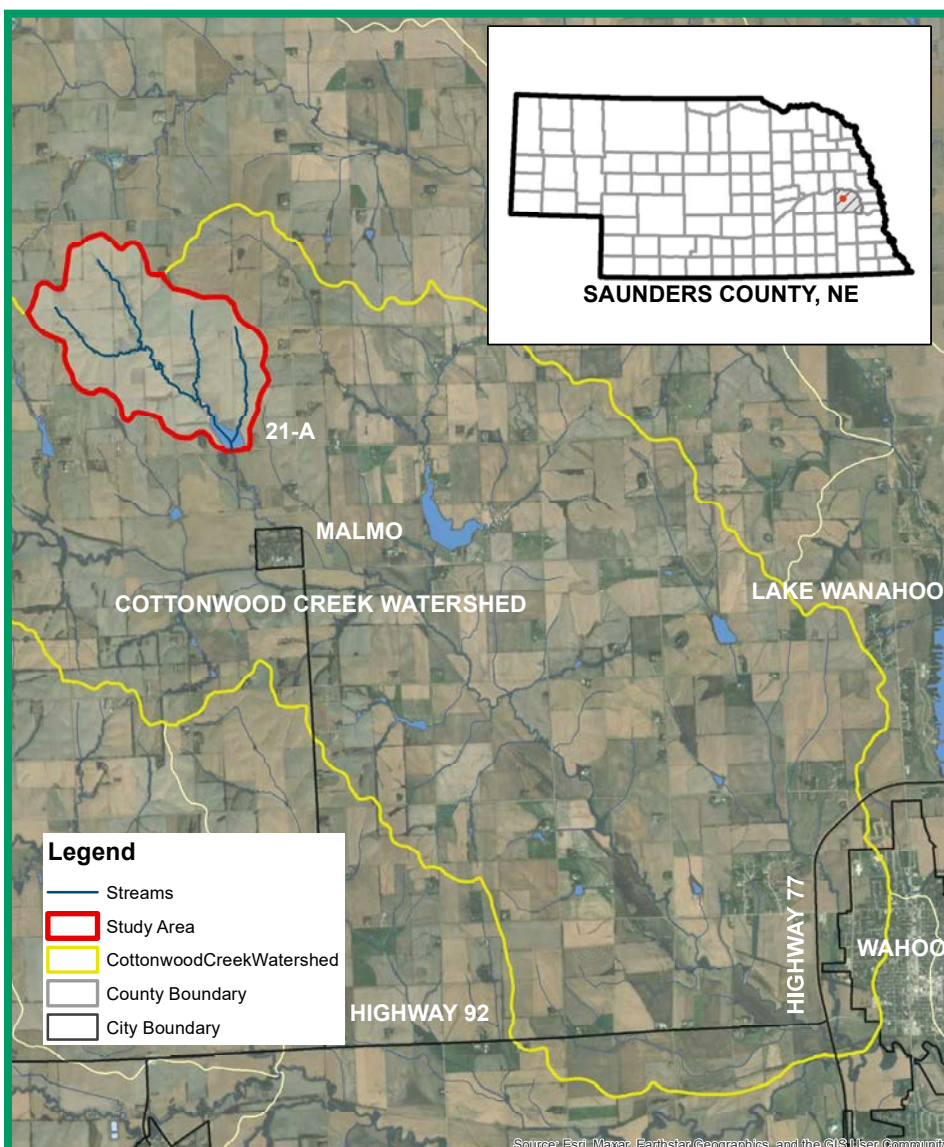
PROJECT GOAL

The overall goal of this project is to rehabilitate the Cottonwood 21-A Dam and provide alternatives for consideration that would address identified deficiencies in the structure.

This project is being evaluated in accordance with the National Environmental Policy Act (NEPA). The NEPA process includes a written record of the analysis of potential impacts on the environment resulting from the proposed project. Impacts on both the natural and socioeconomic environment are evaluated.

PROJECT AREA

Cottonwood 21-A is located in northwest Saunders County, Nebraska. The structure has a drainage area of 1,427 acres and a conservation pool that covers approximately 32 acres. The rural community of Malmo is found approximately one mile downstream from the structure, near Highway Spur 78E/County Road 22 and County Road O.



Source: Esri, Maxar, Earthstar Geomatics, and the GIS User Community

WHY IS THE PROJECT NEEDED?

During the recent assessment of Cottonwood 21-A, the Nebraska Department of Natural Resources (NDNR) Dam Safety identified deficiencies in the dam, including inadequate auxiliary spillway capacity, minor wave erosion on the upstream slope, and potential uncontrolled seepage on the downstream right half of the dam structure embankment. The project is needed to reduce the potential risk to public safety due to the identified deficiencies.

IMPACTS

A wide spectrum of resources will be evaluated including floodplains, fish and wildlife (including threatened or endangered species) habitat, water quality, recreation, public safety, infrastructure and the built environment, socioeconomic resources, Section 4(f) properties, cultural resources, noise, and air quality. Impacts may vary depending on the design elements of the project. Potential impacts will be determined as planning activities continue.

WHAT TYPES OF ALTERNATIVES ARE BEING CONSIDERED?

LPNNRD will be looking at multiple alternatives to address the existing deficiencies and meet current design standards. Alternatives for evaluation include

- Adding seepage drains
- Modifying the principal and auxiliary spillways
- Property buyouts
- Relocation
- Purchase of expanded easement area
- Flood-proofing or elevating existing homes to reduce the downstream flood hazards
- Safely decommissioning the dam with a controlled breach (removal) of the structure.

PROJECT SCHEDULE



CONTACT INFORMATION

If you have any comments or questions about this project, contact:

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LOWER PLATTE NORTH
Natural Resources District