

FEASIBILITY REPORT & PLAN OF WORK

for a

WATERSHED PLAN

FOR

CROOKED CREEK WATERSHED

Prepared for:
Sargent County Water Resource District

Lead Federal Agency:



June 2022



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1.0 Introduction

The Sargent County Water Resource District (SCWRD), in cooperation with the United State Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), is initiating a watershed planning process for the Crooked Creek Watershed under funding from the NRSC Watershed Operations Program, authorized by Public Law 83-566 (PL566), as amended. PL-566 allows the Secretary of Agriculture to provide both financial and technical assistance to local units of government for flood protection within identified watersheds. The SCWRD requested NRCS assistance to evaluate options for flood damage reduction, recreation, and watershed protection improvements. This Feasibility Report was completed, as required by the National Watershed Program Manual (NWPM), to document the following:

- Preliminary purpose and need for the project.
- Summary of existing studies and information available for the watershed
- Identification of resources that will need to be considered in development of the Environmental Assessment or Environmental Impact Statement for the planning effort
- Feasibility of PL-566 project meriting taxpayer investment in a watershed planning effort

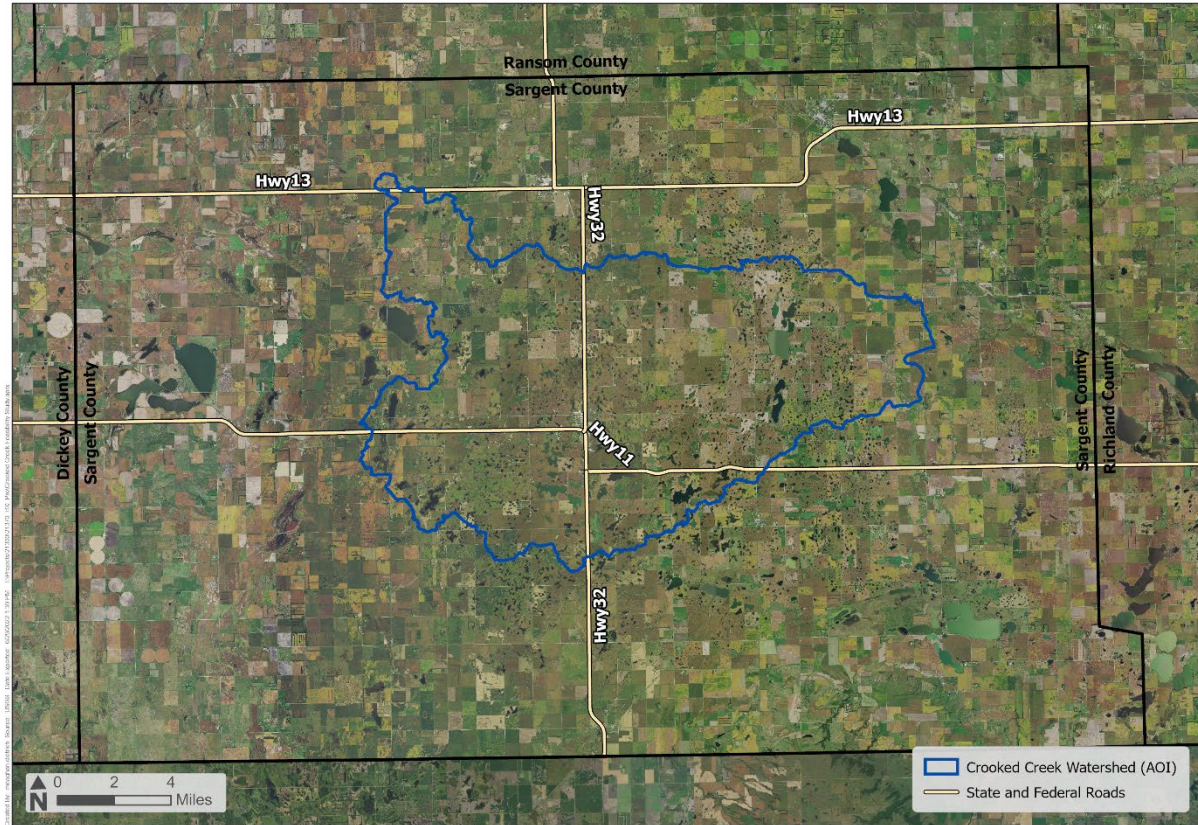
The SCWRD has a history of successful partnerships with the NRCS to implement the PL-566 Watershed Program. The SCWRD currently operates and maintains three flood control dams and 11.7 miles of channels in the Tewaukon Watershed, completed through Watershed PL-566 in 1958. In addition, the SCWRD is in the final stages of their PL-566 Watershed Plan for the Shortfoot Creek Watershed. The SCWRD is anticipating support for the Crooked Creek Watershed planning effort from the Red River Retention Authority, the Red River Joint Water Resource District, and the NDSWC as these groups supported the initial study of the Wild Rice River Watershed Comprehensive Detention Plan (December 2013) and the Shortfoot Creek Watershed Regional Conservation Partnership Program (RCP) effort. These funding sources will aid in the planning process, design, and implementation of preferred alternative for the Crooked Creek Watershed. Local landowners in this planning area have sought problem solving options for many years. A public participation plan, which includes public meetings to gather input, has been completed as of October 13, 2021 and will guide discussions about the PL-566 Watershed Program funding and the need for solutions.

Project Location

Sargent County is located in the southeastern part of North Dakota. The county is 864 square miles with a total of 547,200 acres. The County consists of 523,815 acres of farmland, which includes 2,108 acres of North Dakota Department of Game and Fish land, and 10,485 acres owned by the U.S. Fish & Wildlife Service. There are 271 miles of county roads, 835 miles of township roads, and 97 miles of state highways (Sargent County, 2022).

Crooked Creek Watershed is located entirely within central Sargent County. The Watershed is approximately 158 square miles and contains the towns of Forman and Cogswell, with the towns of Gwinner, Cayuga, and Rutland just outside the boundary of the Watershed. Crooked Creek Watershed is within the Western Wild Rice Subbasin, within the Upper Red River Basin, Red River Subregion. The Watershed contains numerous prairie pothole wetlands and land use consists primarily of cultivated cropland and pasture/hayland, with periodic areas of grassland communities.

Figure 1. Project Location



Project Location

Crooked Creek Watershed Protection Plan - Feasibility Study

Figure 1

Sargent County Water Resource District (SCWRD)



Planning Framework

The NRCS PL-566 watershed planning process is governed by numerous federal policies but is also intentionally led by Local Sponsor(s) (in this case the SCWRD) with input from the public and local, state, and federal agencies. Planning work may be terminated at any time, at the request of the SCWRD or NRCS, if issues arise that indicate the plan will not be feasible to implement. The SCWRD chose to hire a consulting firm to provide technical support to the planning effort, through joint funding from NRCS and SCWRD, with final review and approval of technical work completed by NRCS.

Public Law 83-566, the Watershed Protection and Flood Prevention Act of 1954, as amended, authorizes the Natural Resources Conservation Services (NRCS), under the US Department of Agriculture, to plan and implement watershed projects. Policies for planning and implementation of watershed projects under PL-566 are set forth in 7 CFR Part 622 and outlined in Title 390, National Watershed Planning Manual (NWPM). PL-566 sets forth the following general purposes for the program:

- Preventing damage from erosion, floodwater, and sediment
- Furthering the conservation, development, utilization, and disposal of water
- Furthering the conservation and proper utilization of land

Each project must contain benefits directly related to agriculture, including rural communities. Agriculture and rural communities must account for at least 20 percent of the total benefits of the project. It is anticipated that any flood damage reduction, watershed protection, and/or recreation project in the Crooked Creek Watershed would easily meet the 20% threshold for benefits to agriculture and/or rural

communities. In addition, PL-566 authorities limit the contributing watershed to less than or equal to 250,000 acres (390.6 square miles) and no single flood control structure may be capable of containing more than 12,500 acre-feet (ac-ft) of floodwater detention or more than 25,000 ac-ft of total capacity. These limitations will be observed during the planning process for Crooked Creek.

In addition to Public Law 83-566, several other federal laws, regulations, executive orders, and NRCS policies will govern the Crooked Creek watershed planning effort. The following is a partial list of some of the key policies involved in development of the watershed plan:

- Principles, Requirements, and Guidelines for Water and Land Related Resources Implementation Studies (PR&G) specifies that federal water resources investments shall reflect national priorities, encourage economic development, and protect the environment by seeking to maximize sustainable economic development; seeking to avoid the unwise use of floodplains and flood-prone areas and minimizing adverse impacts and vulnerabilities in any case in which a floodplain or flood-prone area must be used; and protecting and restoring the functions of natural systems and mitigating any unavoidable damage to natural systems.
- PL 91-190 the National Environmental Policy Act, PL 92-500 the Clean Water Act, PL 93-205 the Endangered Species Act, EO 11988 Floodplain Management, EO 11990 Protection of Wetlands, and EO 13186 Migratory Birds will be followed in evaluating the environmental impacts of alternatives developed under this plan. An Environmental Assessment (EA) or Environmental Impact Statement (EIS), as appropriate, will be developed and go through formal agency and public review at conclusion of planning. Based on other projects in ND, it is anticipated a project in Crooked Creek would be covered by an EA unless it were to involve significant drainage (such as a new/enlarged legal drain), which would trigger the need for an EIS.
- PL 89-665 the National Historic Preservation Act, EO 13007 Indian Sacred Sites, EO 13175 Consultation with Tribal Governments, SO 3206 American Indian Tribal Rights will be followed in ensuring consultation with all Tribes with historic presence in the area as well as the ND State Historic Preservation Society.
- Watershed planning will be conducted in accordance with the Secretary of Agriculture's equal opportunity initiatives and in compliance with Executive Order 12898. This ensures elimination of any program practices that result in inequitable treatment of groups protected by the Civil Rights Act and equal access to the benefits of the Watershed Program.

The PL-566 watershed planning is a locally led, inter-agency, inter-disciplinary, and public process. The SCWRD, as the Sponsoring Local Organization for the plan, will be the ultimate decision maker within the framework of applicable federal, state, and local laws and policies. Although subject to changes and additions, as the plan proceeds, the following organizations comprise the interagency team for the project:

Category	Entity	Representatives
Sponsoring Local Organization	Sargent County Water Resource District	Luke Siemieniowski, Chairman Bruce Speich, Manager Todd Stein, Manager Michael Wyum, Manager Roger Zetocha, Manager Wendy Willprecht, Administrator
Lead Federal Agency	Natural Resources Conservation Service	Mary Podoll, ND State Conservationist Christi Fisher, ND State Conservation Engineer Jacob Johnson, Forman District Conservationist
Cooperating Federal Agencies	U.S. Army Corps of Engineers, Omaha District	Patricia McQuery, Senior Regulatory Project Manager
	U.S. Fish and Wildlife Service	Drew Becker, ND Ecological Services Supervisor

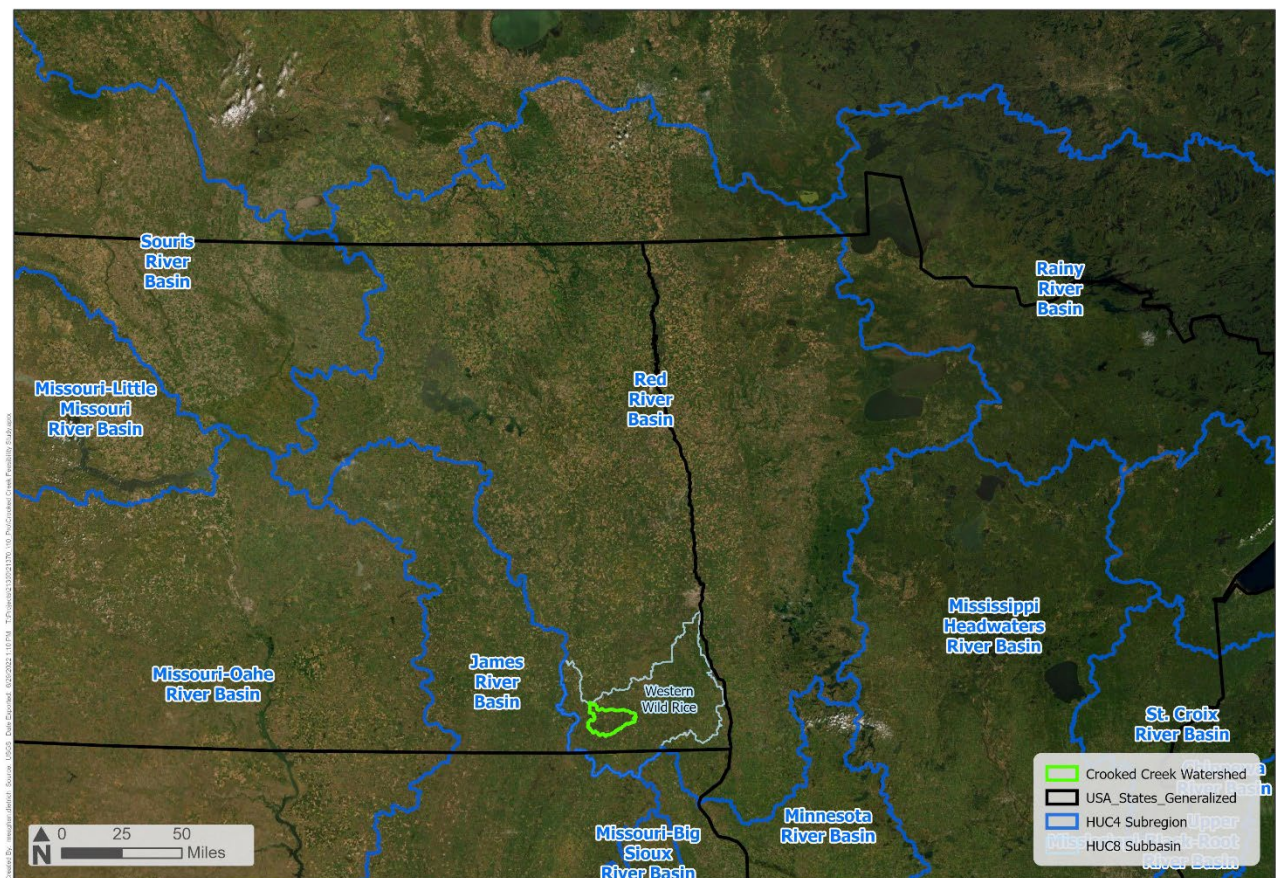
		Patrick Fitzmorris, Tewaukon NWR Manager
Other Federal Agencies	Environmental Protection Agency	Laura Margason, EPA Region 8 NEPA
	Department of Energy, Western Area Power Administration	Jim Bach, Upper Great Plains Regional Rep
	Federal Emergency Management Agency	Nancy Dragani, Region 8 Administrator
State Agencies	ND State Water Commission	John Paczkowski, Interim State Engineer
		Aaron Carranza, Regulatory Division Director
		Jon Kelsch, Water Development Division Director
		Randy Gjestvang, Red River Engineer
	ND Game and Fish	Bruce Kreft, Conservation Biologist
	ND Dept of Environmental Quality	Karl Rockeman, Water Quality Division Director
	ND Dept of Emergency Services	Eric Jensen, Communications Chief
	ND Dept of Transportation	Chad Orn, Project Development Director
	ND Forest Service	Tom Claeys, State Forester
	ND Geological Survey	Jeff Person, Paleontologist
	ND Parks and Recreation	Kathy Dutenhefner, Coordinator
	State Historical Society of ND	Bill Peterson, SHPO Officer
Local Agencies	Wild Rice Soil and Water Conservation District	Eric Delahoyde, Chairman Mathew Olson, 319 Coordinator
	Sargent County Commission	Lyle Bopp, Chairman
	Sargent County Sheriff's Office	Travis Paeper, Sheriff
	Sargent County Road Department	Tim Faber, Superintendent
	Sargent County Emergency Management	Wendy Willprecht, Emergency Manager
Organizations	Red River Retention Authority	Keith Weston, Executive Director
	Red River Joint Water Resource District	Gary Thompson, Chair
Tribal Organizations	Spirit Lake Tribe of Fort Totten	Douglas Yankton, Sr., Chairman Kenneth Graywater, Jr., THPO
	Turtle Mountain Band of Chippewa Indians	Jaimie Azure, Chairman Jeffrey Desjarlais, THPO
	Red Lake Band of Chippewa Indians	Darrell Seki, Sr, Chairman Kate Ferris, THPO
	Sisseton-Wahpeton Oyate of the Lake Traverse Reservation	Delbert Hopkins, Jr. Chairman Diane Desrosiers, THP

In addition to the interagency team noted above, landowners in the watershed as well as interested members of the public are critical members of the planning team. Please see the Crooked Creek Watershed Public Participation Plan for additional information on how the public will be engaged in the planning process.

2.0 Planning History

Due to its topography and climate, the Red River Basin (Basin) has always been one of the most flood prone areas of North America. The Basin has now experienced the effects of climate change, in the form of increased precipitation and associated flooding, at one of the fastest rates in the country, which has resulted in flood damage to cropland, public and private infrastructure, and high rates of nutrient delivery from inundated cropland. Between 2009-2011, there were over 300 state, county and township roads damaged within the Crooked Creek Watershed. Eutrophication impacts to downstream Lake Winnipeg are of such concern they are being addressed through the international treaty organization. Additionally, continued loss of critical wetland habitat in the Prairie Pothole Region is a priority natural resource issue.

Figure 2. Red River Basin and Subwatersheds



Red River Basin and Subwatersheds

Crooked Creek Watershed Protection Plan - Feasibility Study

Figure 2

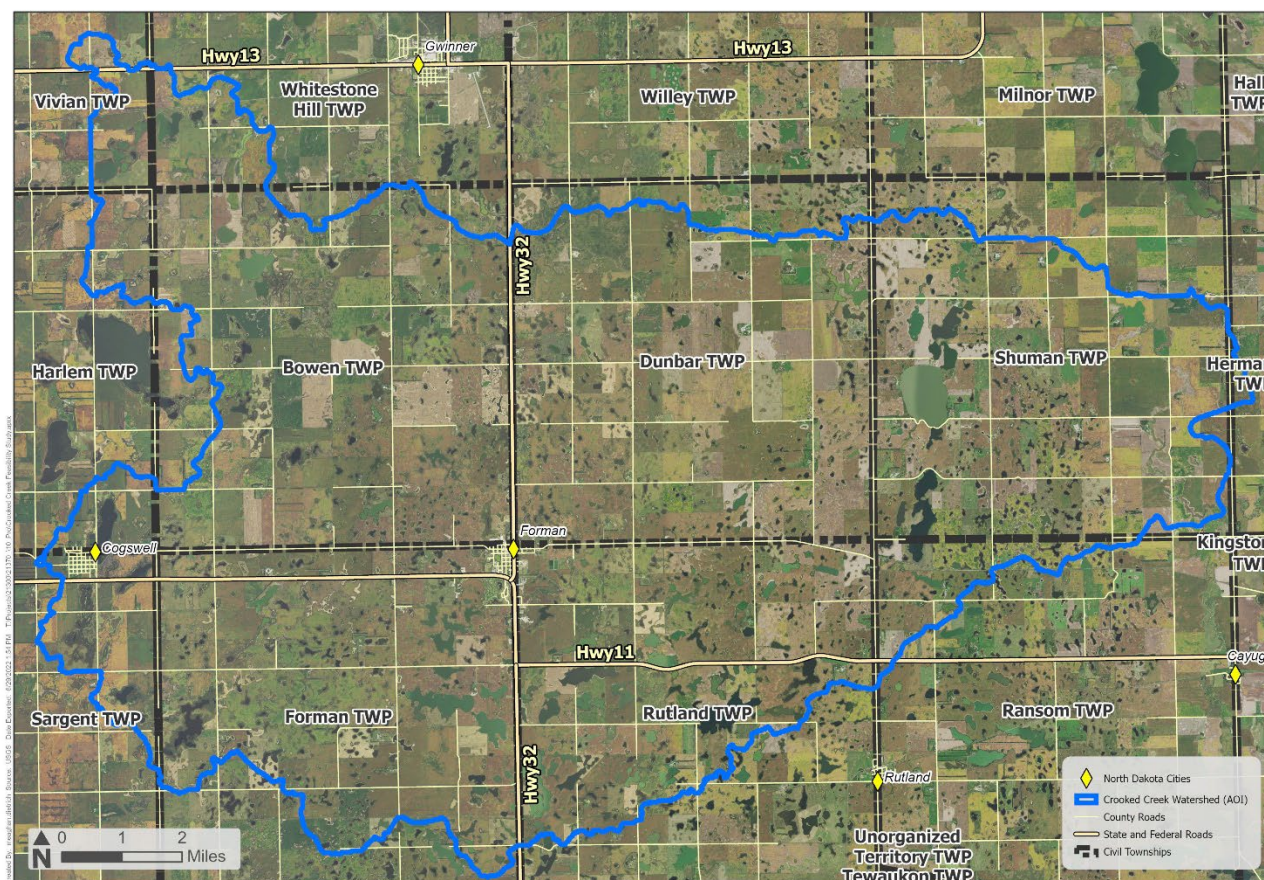
Sargent County Water Resource District (SCWRD)



The SCWRD previously completed several studies on the Wild Rice River Watershed to identify flood reduction measures. The most recent large-scale study is the Wild Rice River Detention Study, completed in 2013 by the Richland-Cass Joint Water Resource District. This study identified potential impoundment alternatives throughout the Wild Rice River Watershed to reduce flood damages in the watershed. The study identified 26 retarding dams, two of which are in the Crooked Creek Watershed. The SCWRD has utilized this study to further define smaller watersheds to focus local benefits. An example is the Shortfoot Creek Regional Conservation Partnership Program (RCPP) planning effort that is currently ongoing.

Two cursory dam review was identified in the Crooked Creek Watershed, known as the Area of Interest (AOI), but nothing has been built to date. Site 1CC had a contributing area of 45 square miles with a max dam height of 23.5 feet and total volume at the top of the dam of 9,049 Ac-ft. The second site identified was Site 8. This site had a contributing drainage area of 51.9 square miles. This site would have required diversions to divert water into the site and required approximately eight miles of embankment. had a max dam height of 21 feet with a storage capacity at the top of dam 18,273 ac-ft. Both sites were located just west of Buffalo Lake but had different configurations.

Figure 3. Area of Interest (AOI)



Area of Interest - Crooked Creek Watershed
Crooked Creek Watershed Protection Plan - Feasibility Study

Figure 3
Sargent County Water Resource District (SCWRD) moore engineering, inc.

3.0 Resource Information

The watershed planning approach will include onsite evaluations, data collection, modeling, and analysis to assess both the positive and negative impacts on natural resources of various structural and nonstructural alternatives. The collection of data below is the baseline of readily available information in the Crooked Creek Watershed.

3.1 Climate

The state of North Dakota is located in the Great Plains region, in the transition zone between the wetter Midwest region and drier Arid West. The Great Plains region itself experiences highly variable precipitation and weather patterns throughout its extent. The Crooked Creek Watershed is located at the eastern extent of the Great Plains, which experiences a humid continental climate with extensive flooding in the Red River

Valley (Conant, 2018). Average winter temperatures range from 4° F in the northeast and 18° F in the southwest, with summer average temperatures between 65° F and 72° F, respectively. Temperatures in North Dakota have risen more than 2.6° F since the beginning of the 20th century (Frankson, 2022).

Precipitation also ranges from northeast to southwest from less than 16 inches per year to approximately 24 inches per year (Frankson, 2022). Frequency of 2-inch extreme precipitation events has increased. While total annual precipitation varies across the state, it has been at or near average since 1990. Overall, North Dakota is highly prone to both flood and drought (Frankson, 2022).

3.2 Land Use

Most of the land in North Dakota is held in private ownership with a vast majority of that being used for the production of agriculture. According to the Sargent County Website, land use within the County is approximately 96% agricultural by area (Sargent County, 2022). A query of the USDA National Agricultural Statistics Service (NASS) Cropland Data indicates that the majority of the AOI produces crops such as corn, soybeans, and small grains such as spring wheat, and contains areas of grassland and pasture. Non-cropland areas are dominated by herbaceous wetlands and developed areas comprising the cities of Forman and Cogswell.

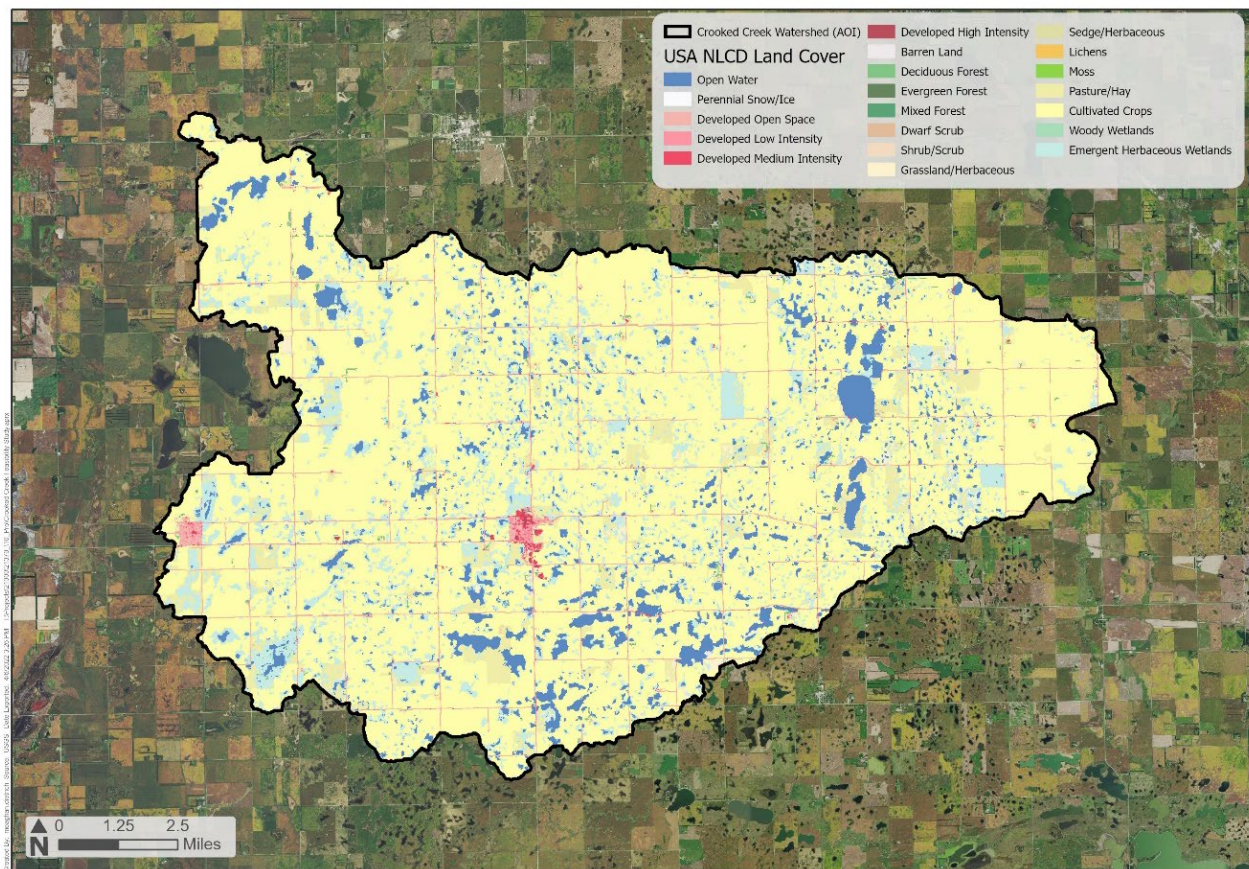
A query of land use and crop data within the Watershed (AOI) was obtained using the USDA NASS Cropland Data Layer for 2021. Table 1 below provides a summary in acres of the land use within the AOI. Analysis of these data indicate that approximately 65% of the AOI is used as agricultural land, with approximately 24% of the total land area consisting of wetlands and open water.

Table 1. Crop and Land Use Data within the Watershed (AOI)

Land Use or Crop Type	Acres in AOI
Soybeans	37501.7
Corn	24236.3
Herbaceous Wetlands	18455.9
Grass/Pasture	7157.1
Open Water	6279.8
Spring Wheat	2574.2
Developed/Open Space	2553.8
Developed/Low Intensity	699.9
Alfalfa	513.7
Deciduous Forest	440.8
Developed/Medium Intensity	229.1
Rye	121.9
Other Hay/Non Alfalfa	67.6
Developed/High Intensity	52.3
Dry Beans	48.7
Fallow/Idle Cropland	43.4
Barren	40.7
Woody Wetlands	39.1
Sugarbeets	18.2
Sunflowers	14.7
Mixed Forest	13.6
Barley	11.6
Winter Wheat	9.6
Evergreen Forest	3.6
Canola	3.3
Shrubland	2.4
Oats	2.2
Sorghum	2
Other Crops	1.8

Millet	0.7
Potatoes	0.4
Sod/Grass Seed	0.4
Radishes	0.2

Figure 4. Land Use



Land Use

Crooked Creek Watershed Protection Plan - Feasibility Study

Figure 4



Sargent County Water Resource District (SCWRD)

3.3 State and Federal Lands

Much of the AOI consists of privately owned lands. However, U.S. Fish and Wildlife Service (USFWS) easement data indicate that there are a significant number of USFWS easements and fee title lands within the AOI. Specifically, the AOI is located in the USFWS Tewaukon Wetland Management District, which manages over 14,000 acres of Waterfowl Production Areas across Ransom, Sargent, and Richland Counties and contains over 35,000 acres of wetland and grassland easements (USFWS, 2022a). The AOI contains 14 WPA Easement Units (fee title land) within the Sargent County Waterfowl Production Area totaling approximately 1,300 acres. The AOI also contains an additional approximate 32,000 acres of USFWS easements. According to the USFWS, wetland easements cover certain existing wetland basins within the property, though the remainder may be farmed or used for agriculture (USFWS, 2022b). There are no other federal lands present within the AOI according to available geospatial data. Table 2 below provides a summary of state and federal land within the AOI.

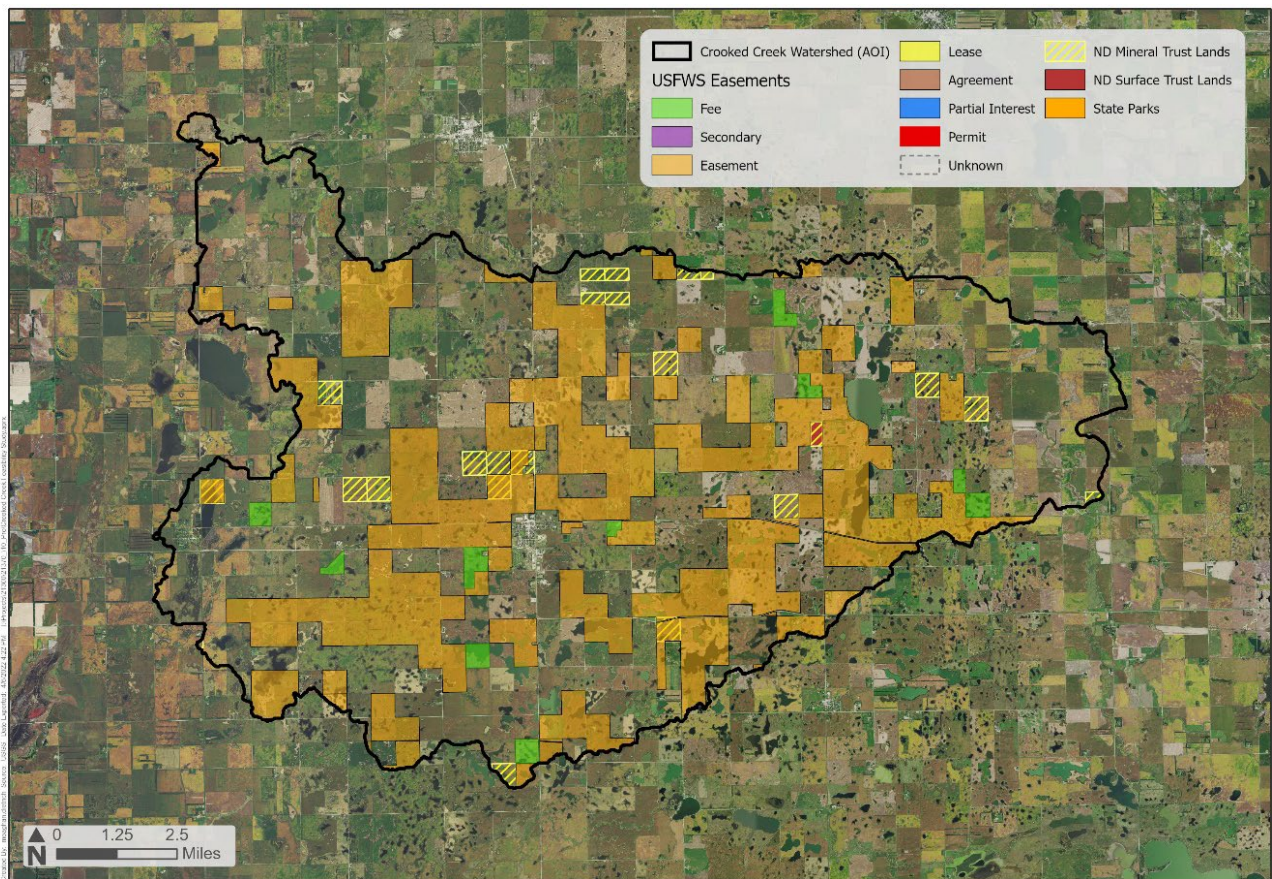
Table 2. State and Federal Land Summary

Ownership Type	Acres in Watershed
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USFWS Fee Title Land (Waterfowl Production Area)	1,298.93
USFWS Easement Land	31,769.86
ND Surface Trust Lands	80
ND Mineral Trust Lands	4,530.56

A query of the North Dakota GIS Data Hub geospatial service indicates that there are no state park or state forest lands within the AOI. However, there is one 80-acre Surface Trust Land parcel within the AOI. The Surface Division manages 706,600 acres in trust for institutional use; the predominant source of income on these lands comes from agricultural leases, most often grazing (North Dakota Department of Trust Lands, 2019). Surface trust lands have restrictions on temporary or permanent improvements as they are intended to generate income for school trusts. Public access is typically allowed on surface trust lands for recreational purposes (North Dakota Department of Trust Lands, 2019).

Figure 5. State and Federal Owned Lands and Easements



State and Federal Lands and Easements

Crooked Creek Watershed Protection Plan - Feasibility Study

Figure 5

Sargent County Water Resource District (SCWRD)



3.4 Soils

According to 2021 Soil Survey Geographic Database (SSURGO) data, soils throughout the Crooked Creek Watershed were predominantly formed in glacial till, which is unsorted material randomly deposited by gravity as the glacier retreated. Till soil materials are more poorly sorted than those deposited by wind or water and represent the random mix of materials stored within the glacier. Soil surface textures are generally loamy to clayey, with dense, low-permeability substrata that may include a significant percentage of rocks. Localized deposits of sand and gravel formed by glacial meltwaters may be present. Dominant soil map units within the AOI are presented in Table 3.

Table 3. Dominant Soil Map Units

Map Unit Name	Acres in Watershed	Percent of Watershed
Forman-Aastad-Parnell complex	36,538.29	36.13%
Aastad-Forman-Parnell complex	21,879.04	21.63%
Aastad-Forman loams	14,435.82	14.27%
Forman-Aastad loams	7,634.28	7.55%

3.5 Wetlands

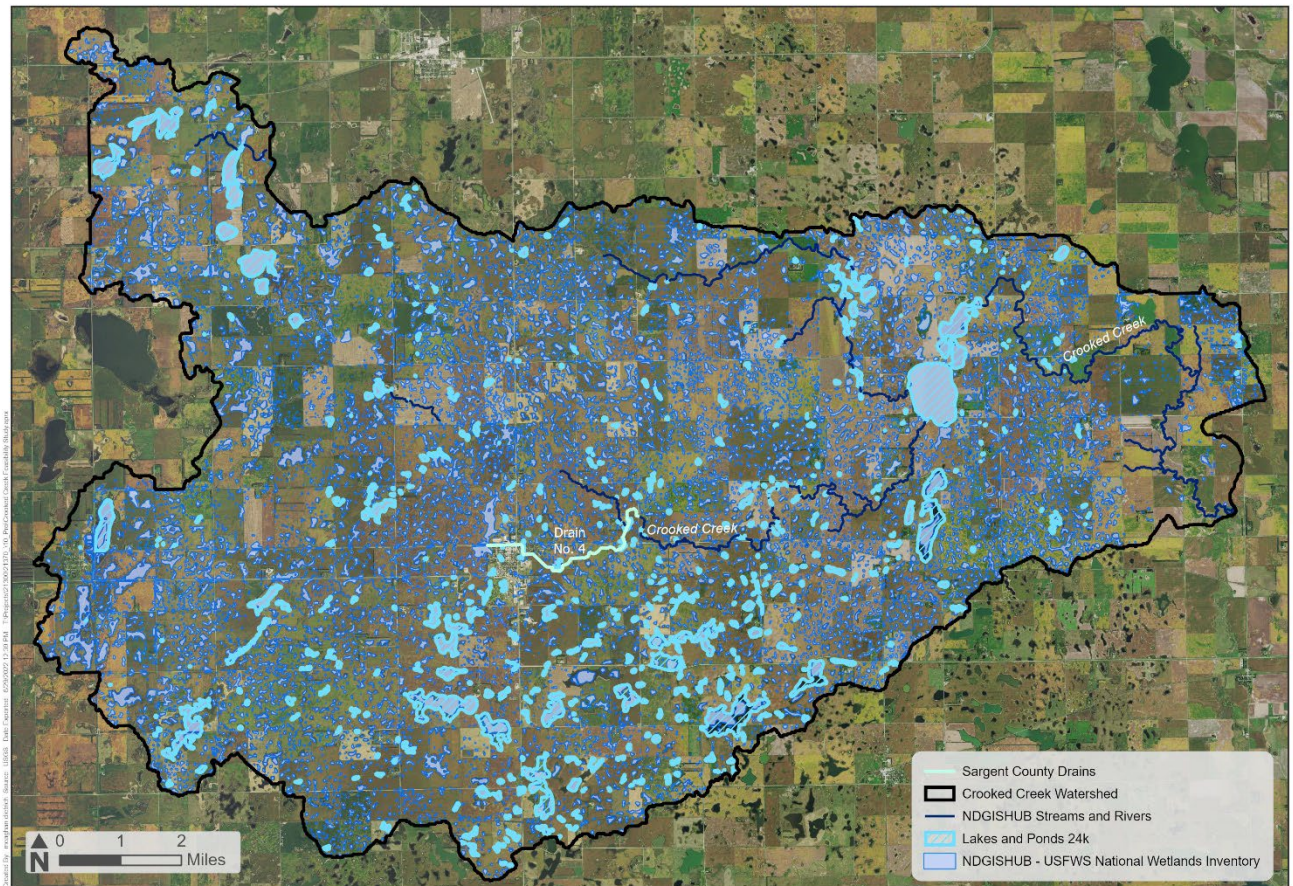
An estimate of wetlands within the AOI was obtained using USFWS National Wetlands Inventory (NWI) data, which identifies wetlands from the remote analysis of high-altitude imagery, vegetation, visible hydrology and geography. The AOI consists of 11,305 mapped wetlands totaling approximately 16,700 acres or 16% of the AOI, according to the NWI. Of the 11,305 NWI wetlands mapped within the AOI, the majority are palustrine wetlands. Wetlands are consistently present throughout the entire AOI, though are slightly concentrated towards the center of the AOI. Many of the palustrine wetland classifications include disturbance modifiers which indicate farming, ditching, and excavation in many of the basins. Wetland type summaries are presented in Table 4.

Table 4. Wetland Types

Wetland Type ¹	Acres in AOI
Freshwater Emergent Wetland	15,702
Freshwater Forested/Shrub Wetland	54
Freshwater Pond	142

¹ Wetland types and acreages obtained from USFWS NWI geospatial data

Figure 6. Water Resources



Wetlands and Water Resources

Crooked Creek Watershed Protection Plan - Feasibility Study

Figure 6

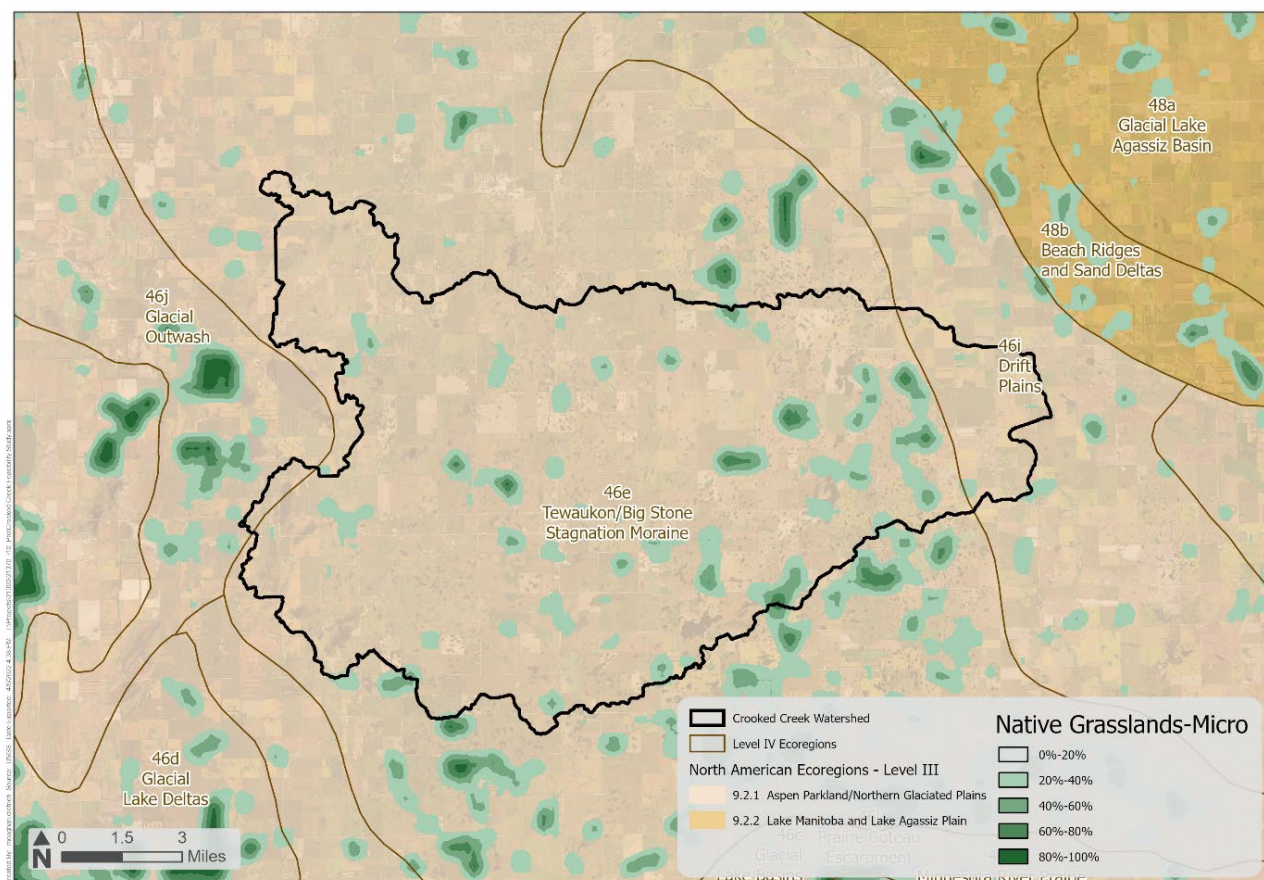
Sargent County Water Resource District (SCWRD)



3.6 Ecoregions and Habitats

North Dakota Game and Fish habitat data indicate that the AOI falls within the Eastern Mixed-Grass Prairie (Drift Prairie) habitat, which serves as a transition on the landscape between the shortgrass prairies of western North Dakota and the wetter tallgrass prairies to the east (NDGF, 2019). This area is part of the Prairie Pothole Region, which is characterized by numerous shallow lakes and emergent wetlands. The North Dakota State Wildlife Action Plan (Dyke et al., 2015) further describes this habitat type as dominated by warm and cool season grasses with a rich variety of forbs. The Prairie Pothole Region has experienced significant historic land conversion to agriculture and other uses, including a significant reduction in wetlands from pre-settlement levels. The Prairie Pothole Region's numerous shallow lakes and marshes provides important habitat to more than 50 percent of North American migratory waterfowl. It is estimated that roughly 40 to 50 percent of pre-settlement wetlands still exist today. As a result, many plant and animal species have become state conservation priorities as a result of loss of habitat. The North Dakota Game and Fish (NDGFD) has developed the 2015 State Wildlife Action Plan (SWAP) to serve as a strategy for preserving state wildlife resources and providing a mechanism to safeguard declining species in North Dakota.

Figure 7. Habitat and Ecoregions



Habitat and Ecoregions

Crooked Creek Watershed Protection Plan - Feasibility Study

Figure 7

Sargent County Water Resource District (SCWRD)



3.7 Water Quality

The North Dakota Department of Environmental Quality (NDDEQ) is responsible for implementing Section 303(d) of the Clean Water Act of 1972 (CWA), which requires states to report on surface water quality through a biennial State Water Quality Assessment Report (Section 305(b)). States are required to implement Total Maximum Daily Load (TMDL) levels for waters that are classified as impaired under Section 303(d), specifically outlining the amount of a particular pollutant that is allowable under the state water quality standard. Table 5 below provides a list of 303(d) waters in the AOI.

Table 5. 303(d) Impaired Waters in the AOI

Assessed Waterbody Name	Assessment ID	Impairment	Designated Use	Assessed Unit Size
Unnamed Tributaries to Wild Rice River/Crooked Creek	ND-09020105-017-S_00	E. coli	Recreation	43.5 miles
Buffalo Lake	ND-09020105-006-L_00	Nutrient/ Eutrophication Biological Indicators	Fish and other aquatic biota, recreation	534 acres

Source: North Dakota 2018 Integrated Section 305(b) Water Quality Assessment Report and Section 303(d) List of Waters Needing Total Maximum Daily Loads

4.0 Significant Issues

The Project Team will focus the planning efforts on project alternatives and solutions for Crooked Creek. The public will be engaged for input relating to the watershed concerns and issues throughout the process. Background information will be used to aid in those conversations and meetings. In addition to the public, agency stakeholders will also be solicited for input.

The purpose of the proposed action is to implement flood prevention and other measures to:

1. reduce economic losses to agricultural producers from cropland flood inundation,
2. reduce damage to rural homes and private/public infrastructure, and
3. expand recreational opportunities,
4. improve public fish and wildlife habitat, and
5. improve water quality due to reduced inundation frequency of downstream cropland.

The needs in the watershed, that initiated the watershed planning effort, originated between 2009-2011 when over 300 state, county and township roads were damaged within the Crooked Creek Watershed. It was also identified during the scoping meeting that there was a severe lack of recreational opportunities within Sargent County. Currently, the County only has the Silver Lake Recreational area which provides opportunities for camping, fishing, kayaking among other activities. Because of its location, this recreational area is constantly full of campers and events which limits access to residents and visitors to the County.

5.0 Plan of Work

The following items are the Plan of Work identified is shown by all parties for collaboration:

1. **Initiate Planning Effort:**
A Project Team, comprised of SCWRD Board Members, local landowners, and interested members of the public will assemble to compile and analyze available relevant existing data regarding the watershed, past studies, and mapping/flood extents data. The Sponsor with assistance from the Project Team will develop a formal Feasibility Report, Plan of Work, Public Participation Plan document and Purpose and Need statements.
2. **Inventory and Analyze Resource Data**
A survey was completed of the river cross sections, roads, culverts, legal drains, potential break out flow areas, and other watershed data necessary for accurate hydraulic modeling. A calibrated hydraulic and hydrologic (H&H) model for the watershed was completed in June 2022. In addition, data compiled for the watershed-wide resource analysis will include a Class I cultural resources search, desktop wetland and soils analysis, water quality documentation, drainage issues, threatened and endangered species review, crop budgets and damage factors, demographics, and environmental justice concerns.
3. **Detailed Development and Evaluation of Final Alternative(s)**
Field investigations will be completed as necessary for each alternative. A Class III cultural resources survey at the alternative sites will take place. The Sponsor's consultants will complete onsite vegetation, fish and wildlife, and other necessary biological assessments. Additional data gathering may include onsite topographic surveys, including foundation elevations of structures within proposed downstream breach zones, geologic and geotechnical investigation work, slope stability, soil parameters, habitat, water quality improvements, economic analysis and evaluation, monetary benefits, and costs, & wetland delineation and mitigation proposals/cost estimates. Conceptual designs including any proposed recreational facilities including operation and maintenance, and real property easements or acquisitions.
4. **Solicit Input on Final Alternatives**

A series of field tours and solicitations for input with handouts and presentation materials for conceptual design and related evaluations will be provided.

5. Assemble Draft Plan/EA

A Plan/EA will be assembled including typical watershed project alternatives.

6. Finalize Plan/EA

The draft Plan/EA will be submitted for review comments. A Final Plan/EA will be submitted for final authorization.

A chart illustrating the schedule of the watershed plan can be found on Exhibit 1.

6.0 Conclusion and Recommendations

Results of the scoping meeting indicate that the assessment and planning process should go forward to address these long-standing issues and concerns in the watershed. Primary topics of interest from the scoping meeting included flood damage reduction, recreation opportunities, water quality, and fish and wildlife habitat. There have been very minor measures implemented over the years, and lingering resource issues and concerns still exist in the watershed and should be addressed.

7.0 Reference

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Exhibit 1 - Crooked Creek Watershed Plan Schedule

