

Outdoor Heritage Fund Grant Application

The purpose of the North Dakota Outdoor Heritage Fund is to provide funding to state agencies, tribal governments, political subdivisions, and nonprofit organizations to:

Directive A. Provide access to private and public lands for sportsmen, including projects that create fish and wildlife habitat and provide access for sportsmen;

Directive B. Improve, maintain, and restore water quality, soil conditions, plant diversity, animal systems and to support other practices of stewardship to enhance farming and ranching;

Directive C. Develop, enhance, conserve, and restore wildlife and fish habitat on private and public lands; and

Directive D. Conserve natural areas for recreation through the establishment and development of parks and other recreation areas.

Exemptions

Outdoor Heritage Fund grants may not be used to finance the following:

- A. Litigation;
- B. Lobbying activities;
- C. .
- D. The acquisition of land or to encumber any land for a term longer than twenty years; or
- E. Projects outside this state or projects that are beyond the scope of defined activities that fulfill the purposes of Chapter 54-17.8 of the North Dakota Century Code.

Application Deadline

Applications for the first grant round cycle are due on **December 2, 2013 at 5:00 p.m. CST.** All information, including attachments, must be submitted by that date. See instructions below for submission information.

Instructions

It is our intent to have this form available on line. However, until that on-line form is available we are asking that you submit your application as a Word document. Please download this Word document (available on the Industrial Commission/Outdoor Heritage Fund Program website at <http://www.nd.gov/ndic/outdoor-infopage.htm>) to your computer and provide the information as requested. You are not limited to the spacing provided except in those instances where there is a limit on the number of words. After completing the application, save it and attach it to an e-mail and send it to outdoorheritage@nd.gov .Then submit the Word document as noted in the following paragraph.

Attachments in support of your application may be sent by mail to North Dakota Industrial Commission, ATTN: Outdoor Heritage Fund Program, State Capitol – Fourteenth Floor, 600 East Boulevard Ave. Dept. 405, Bismarck, ND 58505 or by e-mail to outdoorheritage@nd.gov . The application and all attachments must be received or postmarked by the application deadline. You will be sent a confirmation by e-mail of receipt of your application.

You may submit your application at any time prior to the application deadline. Early submission is appreciated and encouraged to allow adequate time to review your application and ensure that all required information has been included. Incomplete applications may not be considered for funding. Any item noted with an * is required.

Oral Presentation. Please note that you will be given an opportunity to make a ten-minute Oral Presentation at a meeting of the Outdoor Heritage Fund Advisory Board tentatively scheduled for the week of January 13, 2014. These presentations are strongly encouraged.

Open Record. Please note that your application and any attachments will be open records as defined by law and will be posted on the Industrial Commission/Outdoor Heritage Fund website.

Name of Organization *

South McLean County Soil Conservation District
Turtle Creek Watershed Project
Water & Habitat Initiative

Federal Tax ID# *

45-0331529

Contact Person/Title *

James Jahnz
Watershed Coordinator

Address *

South McLean County Soil Conservation District
24 2nd Avenue E.
PO Box 537

City *

Turtle Lake

State *

North Dakota

Zip Code *

58575

E-mail Address *

James.Jahnz@nd.nacdnet.net

Web Site Address (Optional)

sites.google.com/site/turtlecreekwatershed

Phone *

701-448-2378

Fax # (if available)

List names of co-applicants if this is a joint proposal

MAJOR Directive: (select the Directive that best describes your grant request)*

Choose only one response

Directive A. Provide access to private and public lands for sportsmen, including projects that create fish and wildlife habitat and provide access for sportsmen;

Directive B. Improve, maintain, and restore water quality, soil conditions, plant diversity, animal systems and to support other practices of stewardship to enhance farming and ranching;

Directive C. Develop, enhance, conserve, and restore wildlife and fish habitat on private and public lands; and

Directive D. Conserve natural areas for recreation through the establishment and development of parks and other recreation areas.

Additional Directive: (select the directives that also apply to the grant application purpose)*

Choose all that apply

Directive A. Provide access to private and public lands for sportsmen, including projects that create fish and wildlife habitat and provide access for sportsmen;

Directive B. Improve, maintain, and restore water quality, soil conditions, plant diversity, animal systems and to support other practices of stewardship to enhance farming and ranching;

Directive C. Develop, enhance, conserve, and restore wildlife and fish habitat on private and public lands; and

Directive D. Conserve natural areas for recreation through the establishment and development of parks and other recreation areas.

Type of organization: (select the category that describes your organization)*

State Agency

Political Subdivision

Tribal Entity

- Tax-exempt, nonprofit corporation, as described in United States Internal Revenue Code (26 U.S.C. § 501 (c))

Project Name*

Turtle Creek Watershed Project Water & Habitat Initiative

Abstract/Executive Summary. An Executive Summary of the project stating its objectives, expected results, duration, total project costs and participants.* (no more than 500 words)

The purpose of the Water and Habitat Initiative of the Turtle Creek Watershed Project is to incentivize and facilitate implementation of nonpoint source management best management practices (BMP's) approved by the North Dakota Department of Health that either 1) mitigate the potentially devastating impact of animal feeding operations on the 38.2 square miles of aquatic ecosystems located within the Turtle Creek watershed, 2) create additional non-aquatic habitat in addition to improving water quality of surface waters in the watershed, or 3) preserve the integrity of existing or newly established riparian ecosystems within the Turtle Creek watershed. Funds awarded to the Water & Habitat Initiative will be used to provide half of the non-federal match for BMP's that meet the above criteria, or 20% of the total project costs while existing or future 319 funds are available. In the event that 319 funds run out, remaining funds in the Water & Habitat Initiative will be used to provide a 70/30 cost share for the specified BMP's, where the producer is responsible for 30% of BMP costs.

In addition to being administered by the watershed coordinator at the South McLean Soil Conservation District, the Water & Habitat initiative will benefit from the previously established Turtle Creek Watershed Project outreach program, accounting assistance from the district clerk at the South McLean Soil conservation District, and assistance in finding federal funding for projects where applicable from the NRCS district conservationist. By incentivizing producers select 319 cost-shared best management practices that fit the directives of the Outdoor Heritage funds, existing 319 funds and producer buy in will combine for a four-fold match on projects funded by the Water & Habitat Initiative while 319 funds remain. By working with the NRCS to find federal funding opportunities, the impact of funds awarded by the outdoor heritage fund will be stretched even further. Success of the project will be judged by the improvement of water quality as determined by water sample analysis.

Amount of Grant request \$138,000

Total Project Costs \$* \$1,263,072

Note: This figure was calculated by adjusting our current budget with 319 funds to account for new funds from the outdoor heritage fund. This figure does not assume any 319 funds in addition to those already awarded to the South McLean County Soil Conservation District. You may download the final 319 project proposal and the budget from the final 319 project proposal in appendix A.

Amount of Matching Funds \$

If applicable

Please indicate if the matching funds will be in-kind, indirect or cash.

Total Matching Cash: \$285,858 (319 funds and estimated producer cash match)

Total Matching In-Kind: \$19,714

Matching Indirect: \$1,010,672 (includes estimated BMP's from federal programs as facilitated in part by the Turtle Creek Watershed Project)

Note: The primary purpose of the Water & Habitat Initiative is to provide cost-share. All expenses that do not figure into the cost-share scheme for BMP implementation is listed as indirect, including all of the services provided by the South McLean SCD. In-kind costs consist of estimated in-kind by producers in the BMP implementation process.

Source(s) of Matching Funds

South McLean County Soil Conservation District

Environmental Protection Agency 319 Funds

North Dakota Department of Health

Producer BMP match

Certifications *

I certify that this application has been made with the support of the governing body and chief executive of my organization.

I certify that if awarded grant funding none of the funding will be used for any of the exemptions noted on Page 1 of this application.

Narrative

Organization Information – Briefly summarize your organization's history, mission, current programs and activities. *

Include an overview of your organizational structure, including board, staff and volunteer involvement. (no more than 300 words)

The Turtle Creek Watershed Project is project run by the South McLean County Soil Conservation District (SCD), a non-profit entity based in Turtle Lake, ND. The Turtle Creek Watershed Project was made possible by the procurement of an EPA section 319 grant by the South McLean County SCD. The South McLean Soil Conservation works closely with the USDA NRCS to help area crop and livestock producers act as good stewards of the land while improving their quality of life.

The watershed coordinator (James Jahnz) is responsible for planning and implementation of the project. Financial book keeping, financial reporting, and administrative duties are performed by

Donna Murphy, the district clerk at the South McLean SCD. The daily activities of the watershed coordinator are supervised by Jim Kraft, the South McLean district manager. The watershed coordinator reports progress of the Turtle Creek Watershed Project to the board of the South McLean Soil Conservation District, a group comprised of three elected members and two appointed members. Progress will also be reported to the general public via public meetings, mailers, and on our website. Guidance and other help will be provided by Jim Collins of the North Dakota Department of Health Division of Water Quality and Dave Hendrickson, a soil conservationist with the United States Natural Resource Conservation Service.

Purpose of Grant – Describe the proposed project identifying how the project will meet the specific directive(s) of the Outdoor Heritage Fund Program *

Identify project goals, strategies and benefits and your timetable for implementation. Include information about the need for the project and whether there is urgency for funding. Please indicate if this is a new project or if it is replacing funding that is no longer available to your organization. Identify any innovative features or processes of your project.

Project Description

Objectives

1. To encourage, facilitate, and guide crop and livestock producers operating in the Turtle Creek watershed to adopt conservation practices that 1) mitigate the potentially devastating impact of animal feeding operations on the 38.2 square miles of aquatic ecosystems located within the Turtle Creek watershed, 2) create additional non-aquatic habitat in addition to improving water quality of surface waters in the watershed, or 3) preserve the integrity of existing or newly established riparian ecosystems within the Turtle Creek Watershed.
2. To raise public awareness regarding the complimentary relationship between wildlife, water quality, and the future of our hunting and fishing traditions in McLean and surrounding counties. Public outreach is a critical to recruiting participants for our cost-share program and for creating a culture of stewardship surrounding our lakes, streams and wetlands in the Turtle Creek Watershed.

Water & Habitat Initiative

Wildlife habitat and water quality go hand in hand; many of the practices that have the greatest positive impact on water quality result in additional habitat in private lands. In this spirit, the Turtle Creek Watershed Project has a great many overlapping interests with the Outdoor Heritage Fund. Funds awarded to the Water & Habitat Initiative will be used establish the new Water & Habitat Initiative, a program that provides cost share for a limited set of best management practices (BMP's) that either 1) mitigate the potentially devastating impact of animal feeding operations on the 38.2 square miles of aquatic ecosystems located within the Turtle Creek watershed, 2) create additional non-aquatic habitat in addition to improving water quality of surface waters in the watershed, or 3) preserve the integrity of existing or newly established riparian ecosystems within the Turtle Creek Watershed. As long as 319 funds are available, funds awarded to the Water and Habitat Initiative will

provide half of the non-federal match for producers who choose to implement the selected BMP's. Cost share rates for 319 funds require a 40% non-federal match; 20% of BMP costs will be covered by the producer, 20% will be covered by funds awarded by the Outdoor Heritage Fund, and 60% of BMP costs will be covered with 319 funds. If 319 funds become depleted, funds awarded to the Water & Habitat Initiative will be used to provide a 70/30 cost share for the selected BMP's until such time that additional 319 funds are acquired, where the producer is responsible for 30% of BMP costs. It is estimated that a total of \$207,000 of existing 319 funds will be used to cost share BMP's. BMP's to be cost-shared through the Water & Habitat initiative are limited to the practices listed in tables 1-3 below. Please see appendix A for full guidelines for BMP as published by the North Dakota Department of Health.

Table 1: Habitat creating BMP's eligible for cost share under the Water & Habitat Initiative of the Turtle Creek Watershed Project. Together with BMP's aimed at protecting riparian ecosystems and BMP's used to mitigate pollutant input from existing animal feeding operations, these BMP's are eligible for 20% non-federal match from funds awarded by the Outdoor Heritage Fund. As the producer or land owner will be responsible for only 20% of the total project, or half of their responsibility for BMP's that are eligible for cost share using federal 319 funds but which are not included in the Water & Habitat Initiative.

Code	Habitat Creating BMP's	Limitation	Planning Rate
656	Constructed Wetland	None	Engineer Estimate
393	Filter Strip Planning & Establishment	None	\$125.00/ac
412	Grassed Waterway	None	\$25/lnft
512	Pasture & Hayland Planting (forage & biomass planting)	None	\$35/ac
378	Pond	None	Engineer Estimate
391	Riparian Forest Buffer	Riparian forest buffer will be implemented only after consultation with representatives of the North Dakota Department of Fish & Wildlife or U.S. Department of Fish & Wildlife.	\$350/ac
390	Riparian Herbaceous Buffer	None	\$300/ac
601	Vegetative Barrier (establishment only)	None	\$125/ac
658	Wetland Creation	None	Engineer Estimate
657	Wetland Restoration	None	Engineer Estimate
550	Range Planting	None	\$40/ac
422	Hedgerow Planting	None	\$20/hlnft
386	Field Border (seed cost)	None	\$20/ac
340	Cover Crops (seed cost)	None	\$20/ac

058	Riparian Easement on Cropland	None	CRP non-irrigated rates
059	Riparian Easement on Pasture/Range	None	CRP marginal pasture rates

Table 2: Habitat creating BMP's eligible for cost share under the Water & Habitat Initiative of the Turtle Creek Watershed Project. Together with BMP's that create new habitat and BMP's used to mitigate pollutant input from existing animal feeding operations, these BMP's are eligible for 20% non-federal match from funds awarded by the Outdoor Heritage Fund. As the producer or land owner will be responsible for only 20% of the total project, or half of their responsibility for BMP's that are eligible for cost share using federal 319 funds but which are not included in the Water & Habitat Initiative.

Code	BMP's for mitigating livestock impact on riparian zones	Limitation	Planning Rate
004	Solar Pumps	To be used as a component of an off stream livestock watering system.	\$3100/number
057	Exclusion Fencing for Riparian Area	To be used to control livestock access to riparian areas.	\$1.35/ft
066	Portable Wind Break	To be used as part of a rotational grazing plan or to help manage livestock movement with respect to riparian areas.	\$45/ft
067	Electric Fence energizer	To be used to control livestock access to riparian areas or as part of a rotational grazing plan.	\$400/number
056	Alternative Power Source	To be used to control livestock access to riparian areas or as part of a rotational grazing plan.	Lowest Price Quote
614	Trough & Tank	To be used as a component of an off stream livestock watering system.	Local rate per tank
516	Pipelines	To be used as a component of an off stream livestock watering system.	\$3/ft
528	Prescribed Grazing	Pasture and range lands that border Turtle Creek or at least one tributary.	\$5/ac
472	Access Control/Use Exclusion	To be used to control livestock access to riparian areas.	\$20/ac
382	Fencing (barbed, woven wire, single electric, multiple electric)	To be used as part of a rotational grazing plan or to help manage or exclude livestock movement with respect to riparian areas.	Barbed: \$1.35/ft Woven Wire: \$1.65/ft Single Electric: \$0.51/ft Multiple Electric: \$0.67/ft

Table 3: BMP's used to mitigate pollutant input from existing animal feeding operations eligible for cost share under the Water & Habitat Initiative of the Turtle Creek Watershed Project. Together with BMP's aimed at protecting riparian ecosystems and habitat creating BMP's, these practices are eligible for 20% non-federal match from funds awarded by the Outdoor Heritage Fund. As the producer or land owner will be responsible for only 20% of the total project, or half of their responsibility for BMP's that are eligible for cost share using federal 319 funds but which are not included in the Water & Habitat Initiative.

Code	AFO runoff mitigation BMP's	Limitation	Planning Rate
634	Waste Transfer	To be used to manage pollutant runoff and leeching from animal feeding operations and waste systems.	Engineer Estimate
350	Sediment Basin	To be used to manage pollutant runoff from animal feeding operations and waste systems.	Engineer Estimate
587	Structure for Water Control	To be used to divert water and manage pollutant runoff from animal feeding operations and waste systems.	Engineer Estimate
312	Livestock Manure Management System	To be used to manage pollutant runoff and leeching from animal feeding operations and waste systems.	**
635	Waste Water Treatment Strip	To be used to manage pollutant runoff from animal feeding operations and waste systems.	\$125/ac
633	Waste Utilization	To be used to manage pollutant runoff and leeching from animal feeding operations and waste systems.	\$2/ton
638	Water and Sediment Control Basin	To be used to manage pollutant runoff from animal feeding operations and waste systems.	Engineer Estimate
558	Roof Runoff Structure	To be used to manage pollutant runoff from animal feeding operations and waste systems.	Engineer Estimate
362	Diversions	To be used to divert water from animal feeding operations and waste systems.	\$1.90/cuyd

Reason for the Project

The Turtle Creek Watershed Project is an existing project that was made possible by funds awarded to the South McLean SCD in accordance with section 319 of the Clean Water Act. The primary purpose of the Turtle Creek Watershed Project is to improve water quality in Turtle Creek and throughout the Turtle Creek watershed.

The Water and Habitat initiative will be aimed at further incentivizing solutions which meet the goals of the Turtle Creek Watershed Project while providing new habitat, protecting new or existing riparian ecosystems, or significantly improving existing aquatic for native wildlife. Because the Turtle Creek watershed is dominated by land devoted to crop and livestock production, efforts to improve water quality are focused on BMP's aimed at non-point source pollution associated with agricultural practices.

Watershed producers and landowners are under no mandate to implement BMP's or to participate in the Watershed Project in any way; we seek only to provide financial and technical resources that were previously unavailable to producers operating in the Turtle Creek watershed. Because producers have a new opportunity to help pay for practices which benefit their operations there is much to be gained and nothing to be lost for the agricultural community.

By incentivizing 319 cost-share participants to select best management practices best suited to significantly improve aquatic habitat, create new non-aquatic habitat, we will be an important resource for producers, sportsmen, and all those who reside in or visit the Turtle Creek Watershed.

How we will maximize the impact of funds awarded to us

The Turtle Creek Watershed Project and the Outdoor Heritage Fund have a major overlapping interest; to improve the quality of surface water is to improve habitat in the 38.2 square miles of open water in the Turtle Creek watershed. Our existing 319 funds (federal) give us great flexibility regarding the number of management practices we may cost share at a 60/40 rate, where 60% of a project is paid for by federal 319 funds, and 40% must be non-federal match. Funds awarded by the Outdoor Heritage fund will be used to pay for half of the non-federal match for the practices listed above, effectively paying for 20% of each project cost-shared in this way. The producer will then be responsible for 20% of the project, or half of what they would pay for a BMP not associated with the Water and Habitat Initiative.

This strategy will effectively incentivize cost-share participants to select BMP's that represent significant benefits for native wildlife and sportsmen. It also maximizes the effect of money from the outdoor heritage fund; by supplying 20% of the funds needed to implement BMP's and incentivizing BMP's that strongly benefit regional wildlife, existing 319 funds and producer cost-share funds will be directed toward that create, preserve, and/or significantly improve existing habitat. Put differently, outdoor heritage fund money awarded to the Water and Habitat Initiative of the Turtle Creek Watershed Project will be used to incentivize projects worth 500% of your contribution.

In addition to encouraging producers to participate in cost share implementation directly through the Turtle Creek Watershed Project, it is our goal to facilitate enrollment in other programs when 1) the producer may get better financial support by enrolling in or would simply prefer to enroll in other programs such as programs run by the United States Natural Resource Conservation Service (NRCS) and other federal agencies, or 2) the producer is eligible for financial assistance from other sources in addition to funding provided by the Turtle Creek Watershed Project. This strategy not only optimizes the financial support which the producer ultimately succeeds, but by facilitating enrollment in other cost share systems to implement watershed conservation practices within the watershed, management practices supported by the Turtle Creek Watershed Project will be implemented without any spending by the Watershed Project itself. This enables the Watershed Coordinator to preserve funding for additional future participants in the program, to implement a greater number of BMP's, and to have a greater overall impact on surface water quality throughout the watershed. The South McLean Soil Conservation District shares an office with members of the NRCS; our proximity and close working relationship will prove to benefit our efforts in this area immensely.

The Water & Habitat Initiative of the Turtle Creek Watershed Project will benefit from the services of a full time watershed coordinator and the full support of the South McLean Soil Conservation District and indirect support from members of the USDA NRCS, the Water and Habitat Initiative will benefit from exposure through the existing outreach infrastructure of the Turtle Creek Watershed Project. Our outreach campaign includes monthly mailers, newspaper coverage, public meetings, presence at public events, and a website, and the South McLean Soil Conservation District newsletter. Though this is the first year of the Turtle Creek Watershed Project, we have already sent out our first monthly mailer to 237 area producers, worked with representatives of area newspapers to get an article published detailing our program and the watershed problems we're addressing, and hosted a public meeting that was attended by 43 area residents and producers. Please see the public outreach section below for more detailed information about our outreach plan.

Public Outreach

As part of the Turtle Creek Watershed Project, the Water and Habitat Initiative will rely on an already developed and previously funded outreach program. The success of this project depends on the participation of producers. It is crucial that producers within the watershed are made aware of the project and that the Turtle Creek Watershed Project is available to assist them in implementing practices designed to improve water quality within the watershed. As such, public outreach is an important aspect of this project. Because different producers respond best to different forms of communication, a multi-faceted approach to public outreach will be taken. It is through outreach that we will generate interest in cost-share opportunities made available through the Water and Habitat Initiative, and to ensure that watershed residents continue to value the importance of water quality and biodiversity into the distant future.

Educational documents

Other printed materials aimed at assisting with hurdles facing producers within the Turtle Creek watershed in implementing practices known to benefit local water quality will be on an ad-hoc basis, with an eye on the seasonal operations of producers. Such materials will take the form of small pamphlets/fliers. When it is suspected that more information may be needed by producers, the printed pamphlet will contain a summary including instructions on how to acquire detailed information (through our website, by mail through the South McLean SCD, in person at the South McLean SCD office, etc.).

Local Media

Many residents who live within, or who have interests within the Turtle Creek watershed, regularly read local newspapers. An important component of our public outreach initiative is to regularly interact with representatives from local newspapers to see that articles and announcements are released as issues emerge, events occur, and milestones are reached. As of 3/27/14, one such article has run in the McLean County Independent. Titled '*Unfit for Recreational Use?*', this article features documented water quality problems, a call to action, and it announces the first Watershed Community Meeting, which will take place at the South McLean SCD office at 10:00 a.m. on 3/25/14. Please see appendix A to view this article.

Community Meetings

Watershed community meetings will occur twice annually, before each planting season and during or after harvest season each year. The goal of these meetings will be to provide general education regarding watershed and water quality concepts, to explain some common of BMP's, to communicate services provided by the Turtle Creek Watershed Project, and other topics which may be addressed as deemed important by community producers, South McLean SCD representatives, and the Turtle Creek Watershed Project watershed coordinator.

The Turtle Creek Watershed Project held its first watershed community meeting drew over 40 area producers, many of which were highly engaged with watershed issues. Presentations were given by Jim Collins of the North Dakota Health Department Division of Water Quality, and James Jahnz, the Turtle Creek Watershed Coordinator. This meeting took place at the South McLean SCD office at 10:00 a.m. on 3/25/14. The next meeting will occur during the autumn of 2014.

Turtle Creek mailer

Mailings will occur on a monthly basis from the month prior to production season (March) through the conclusion of production season (November). The mailer will be aimed at 1) encouraging participation, 2) making opportunities for funding of such project known, 3) recognizing the efforts of participating producers, 4) sharing general and season-specific advice for maintaining watershed integrity, and 5) providing contact information for the Turtle Creek Watershed Project so that interested producers may schedule a consultation with the watershed coordinator. The mailer will also include a mail-in form by which individuals may easily request educational and other supplemental information. Please see appendix B for an example of our mailer. The first of these monthly pamphlets was mailed on 3/3/14. Please see appendix A to view a digital copy of the first monthly mailer.

Website

Like the monthly mailer, the Turtle Creek Watershed Project website will include much of the same material. In addition to this content the website will contain links to further technical and financial resources available to producers, as well as contact information for those who may help in implementation, technical assistance, or financial assistance. Please see appendix A for a link to the Turtle Creek Watershed Project website.

Presence at Public Events

Events will serve as venues where the watershed coordinator or other representatives of the Turtle Creek Watershed Project are given opportunities to interact face to face with producers and other members of the public. The Turtle Lake Watershed Project plans on maintaining a booth at the Washburn Farmers Market throughout the summer. This will provide a consistent venue where area producers and members of the public may meet face to face with members of the watershed program. The Turtle Creek Watershed Project will also maintain a booth at the McLean County Fair, and at Washburn and Garrison Ag days. These individual events will serve as venues for events/contests aimed at developing enthusiasm and otherwise gaining publicity for the Turtle Creek Watershed Project.

Direct Consultation

Direct consultation with the watershed coordinator will occur before watershed management plans are implemented on the producer level or before any cost share is agreed upon. Practices to be implemented will depend on the land parcels being considered as well as the needs and preferences of the producer, as it is the producer who will be ultimately responsible for implementation of the selected BMP's.

Outdoor Heritage Fund Directives Met

“Provide access to public and private land for sportsmen, including projects that create fish and wildlife habitat plus provide access for sportsmen.”

In cases where significant undeveloped lands exist on the property of a producer we are in contact with, enrollment in the Conservation Private Land Open To Sportsmen (PLOTS) program administered by the North Dakota Game and Fish Department, as well as the Voluntary Public Access and Habitat Incentive Program (VPA-HIP) administered by the U.S. Farm Service Agency will be encouraged as a way to help promote conservation while providing compensation to producers.

Enrollment in both PLOTS and VPA-HIP require producers to provide access to their lands by sportsmen. Note that enrollment in PLOTS and VPS-HIP will only be suggested when it meets the needs and preferences of the individual producer.

“Improve, maintain, and restore water quality, soil conditions, plant diversity, animal systems, and to support other practices of stewardship to enhance farming and ranching.”

The Turtle Creek Watershed Project is explicitly aimed at improving the water quality of Turtle Creek and its tributaries. In order to do that, most or all of the practices implemented will effectively improve or maintain soil conditions by preventing erosion and/or contribute to plant diversity and provide habitat for animals in the case of various types of buffers. How the Turtle Creek Watershed Project will meet each of these goals is discussed individually below.

- Water Quality: It is the explicit purpose of the Turtle Creek Watershed Project to improve and maintain the quality of waters within the Turtle Creek watershed. Every BMP to be implemented has been approved by the North Dakota Department of Health as ways to reduce nonpoint source pollution of surface waters.
- Support Practices of Stewardship to Enhance Farming and Ranching: Water quality goals will be met primarily by means of recruiting and assisting producers in implementing practices of stewardship aimed at improving or maintaining water quality within the watershed. By focusing on public outreach as well as BMP facilitation, we will address current watershed issues by improving current land management while ensuring that Turtle Creek watershed residents appreciate mutual dependent relationship with our waters in the future. As a voluntary program, all BMP's will be selected by the very people who are best positioned to know what practices will enhance their farming and ranching operations.
- Soil Conditions: Many of the practices that will be suggested to producers improve long term soil quality in addition to maintaining the integrity of the water by preventing erosion, fixing applied nutrients in the soil, maintaining or creating soil biodiversity, etc. All of BMP's listed in tables 1-3 are known to improve soil quality, prevent soil erosion, or prevent soil degradation.
- Plant Diversity: Some of the practices which will be suggested to producers necessarily provide habitat for a variety of native plant and animal species. All native species will be used for riparian buffers, grassed waterways, wetland creation/restoration, hedgerow plantings, range/pasture plantings, filter strips, and all other BMP's that require plantings with the exception of cover crops. Cover crops also serve to enhance biodiversity by preventing year round monoculture crop practices.
- Animal Systems: By decreasing sediment, nutrient, and bacterial input into the Turtle Creek watershed, habitat for many native aquatic species will be improved. All BMP's listed in table 1 create additional habitat for non-aquatic species. All BMP's listed in table 2 are aimed at preserving riparian habitats. All BMP's listed in table 3 are aimed at preventing severe contamination of aquatic habitats from animal feeding operations.

“Develop, enhance, conserve, and restore wildlife and fish habitat on private and public lands.”

As stated in the second directive, the Turtle Creek Watershed Project is explicitly aimed at restoring and maintaining water quality, thereby improving habitat for fish and aquatic invertebrates. All approved BMP's will be aimed at improving water quality, thereby improving fish habitat. 5.6% of the Turtle Creek watershed is covered with surface water; to decrease pollutant loads discharged to these waters will mean 38.2 square miles of improved aquatic habitat. All funds awarded to the Water & Habitat Initiative of the Turtle Creek Watershed Project will be used to cost-share BMP's which either 1) mitigate the potentially devastating impact of animal feeding operations on the 38.2 square miles of aquatic ecosystems located within the Turtle Creek watershed, 2) create additional non-aquatic habitat in addition to improving water quality of surface waters in the watershed, or 3) preserve the integrity of existing or newly established riparian ecosystems within the Turtle Creek Watershed.

Watershed conservation practices implemented in the Turtle Creek watershed will be of immediate importance in the management of protected species and former candidate species which find habitat in the Turtle Creek watershed. The North Dakota Game and Fish Department lists the Least Tern (*Sterna antillarum*) and Whooping Crane (*Grus americanus*) as endangered species which have breeding range and migratory range within Turtle Creek watershed respectively. Sprague's Pipit (*Anthus spragueii*) and the Piping Plover (*Charadrius melodus*) are respective candidate and threatened species with have breeding range within the watershed. The Turtle Creek watershed may also be home to two species of butterfly candidate species (*Hesperia dakotae*, *Oarisma Poweshiek*) in addition to the Western Prairie Fringed Orchid (*Platanthera praeclara*), a threatened flowering species. To provide additional habitat to these species would be welcome assistance in efforts to preserve make sure these species survive well into the future. Further information regarding endangered, threatened, and candidate species in North Dakota may be found at the North Dakota Game and Fish website listed in Appendix A.

“Conserve natural area for recreation through the establishment and development of parks and other recreation areas.”

The Turtle Creek Watershed Project has no immediate plans to establish parks. It does, however, explicitly aim at increasing area available for sportsmen and other recreational uses. It has been noted that Turtle Creek is currently classified as impaired with respect to recreational uses because of high E.coli levels. What's more, Turtle Creek has been identified as in need of a TMDL study to determine acceptable Nitrogen and Phosphorus levels so that it can be determined if it may be classified as impaired in other ways. By improving water quality standards through the funding and implementation of BMP's known to positively impact water quality we hope to improve the condition of the water in Turtle Creek such that it is no longer considered to be impaired in any way by the EPA. If this goal is met, it will mean that sportsmen can once again safely Turtle Creek for recreational purposes.

A secondary way that recreational areas may be made available is if, upon discussing a variety of options with the Watershed Coordinator, a producer chooses to enroll in the Conservation Private Land Open To Sportsmen (PLOTS) program administered by the North Dakota Game and Fish Department, as well as the Voluntary Public Access and Habitat Incentive Program (VPA-HIP) administered by the U.S. Farm Service Agency. Both programs guarantee access to private lands for sportsmen in exchange for financial compensation awarded to the producer. It should be noted that these programs will be suggested only in cases where they meets the needs of the individual producer. This is not the primary goal of the project and we cannot guarantee that producers will decide to sign up for these programs.

Management of Project – Provide a description of how the you will manage and oversee the project to ensure it is carried out on schedule and in a manner that best ensures its objectives will be met.*

Include a brief background and work experience for those managing the project.

The watershed coordinator is responsible for seeing that the project proceeds in a timely fashion. The 2014 timeline of events for the Turtle Creek Watershed Project is displayed in table 4. Timelines for years beyond 2014 will occur as described in the remarks section of table 4. Detailed descriptions of each action listed as a milestone may be found earlier in this document.

Table 4: Milestones for the Turtle Creek Watershed Project for year 2014. All goals will continue until completion of the project. Implementation dates beyond 2014 will occur as described in the remarks section with the exception of the website launch, which is a non-recurring event.

Milestone	Completion	Remarks
First monthly watershed mailer	<i>Completed:</i> 3/4/14	To be mailed at least 3 weeks before first public meeting. Mailings will occur on a monthly basis from March to November.
Website launch*	<i>Completed:</i> 1/9/14	To be running upon first edition of TC mailer
Public Watershed Meeting: Spring	<i>Completed:</i> 3/25/14	To be completed before 2014 planting season. Spring meetings will then occur every March/April as to precede planting.
First weekly water sampling and rapid geomorphic assessment.	4/7/15 or 4/7/16	Actual dates depend on seasonal variability. Sampling season is April to November. To occur each April every year thereafter.
Farmer’s market booth	6/5/14	Washburn Farmer’s Market is on Thursdays June-October. Presence to be maintained each year so long as it is deemed effective by the watershed coordinator and the SCD.
Rapid Geomorphic Assessment	7/25/2015 or 7/25/2016	To occur each July thereafter.
Conservation plans for 42,000 Acres	12/31/14	Yearly acreage goal will remain the same until project completion.
Last monthly mailer	11/4/14	Mailings to begin again prior to the following spring meeting as described above.
Sampling Completion & rapid geomorphic assessment	11/20/15 or 11/18/16	Sampling to begin again the following spring as described above. Actual dates depend on seasonal variability. To occur each November every year thereafter.
Public Watershed Meeting: Fall	11/25/14	To be completed during or after the 2014 harvest season. Fall meetings will then occur every October/November as to follow or coincide with harvest season.
2014 Annual Report	12/31/14	May vary depending on timeliness of water sample analysis. To occur on an annual basis.

Progress regarding implementation of agreed upon BMP’s will be tracked by using a BMP tracking database provided by the ND Health Division of Water Quality. This database has also been programmed such that it is used to create contracts that document responsibilities of both the individual producer and the Turtle Creek Watershed Project as agreed upon by the producer and the watershed coordinator.

A BMP implementation guide will be kept for each individual operation or set of operations facilitated by the Turtle Creek Watershed Project. This document will be used to track progress and

indicate the next step in the implementation process. The document found at the second link below provides a basic outline detailing the BMP selection process. Specific BMP's to be funded will be decided by the watershed coordinator after consultation with the producer and may vary from the selection guide based on site and producer specific factors at the discretion of the watershed coordinator. Note that BMP's eligible for cost share assistance from the Water & Habitat Initiative are limited to BMP's and conditions summarized in tables 1-3. Please see appendix A to download the BMP selection guide and the BMP progress tracker.

The Turtle Creek Watershed Project is executed the James Jahnz, the watershed coordinator. Having earned a B.S. in both Geology and Geography from the University of Wisconsin and a M.A. in Geography from the University of Kentucky, James has a strong background in hydrologic, erosional, and watershed processes. The watershed coordinator is responsible for planning and implementation of the project. Financial book keeping, financial reporting, and administrative duties are performed by Donna Murphy, the district clerk at the South McLean SCD. The daily activities of the watershed coordinator are supervised by Jim Kraft, the South McLean District Manager. The watershed coordinator reports progress of the Turtle Creek Watershed Project to the board of the South McLean Soil Conservation District, a group comprised of three elected members and two appointed members. Guidance and other help will be provided by Jim Collins of the North Dakota Department of Health Division of Water Quality and David Henderson, a soil conservationist with the United States Natural Resource Conservation Service.

Evaluation – Describe your plan to document progress and results. *

How will you tell if the project is successful? Please be specific on the methods you will utilize to measure success. Note that regular reporting, final evaluation and expenditure reports will be required for every grant awarded.

Criteria for success

Water Quality Monitoring

Success of the project will be determined by analysis of measured Nitrogen, Phosphorus, suspended sediment, and E.coli levels in water samples, especially those samples attained at the site located nearest the mouth of Turtle Creek. This site was selected as the primary way to gauge success because the entirety of the Turtle Creek drainage basin drains to the mouth of Turtle Creek; it represents the net effect of all watershed inputs. Results from these samples will be compared to the following standards: (1) water quality goals reported in *Water Quality Monitoring Results for the Turtle Creek Watershed Assessment Project* (see table 5) published by the North Dakota Department of Health Division of Water Quality in May of 2012 and documenting samples taken during 2010 and 2011, and (2) measured Nitrogen, Phosphorus, suspended sediment, and E.coli levels compared to the immediately preceding year, or compared to pollutant levels reported in *Water Quality Monitoring Results for the Turtle Creek Watershed Assessment Project* for the first year of sampling. Goal (1) was chosen because it represents water quality standards consistent with needs associated with recreational use and health of aquatic species. Goal (2) will be evaluated on a yearly basis and was chosen because it shows whether the watershed is improving, degrading, or remaining the same with respect to the measured pollutants. Results from other sampling sites will be used to identify relative pollutant contributions throughout the watershed; areas identified to strongly affect water quality will inform the Turtle Creek Watershed Project which localities will be targeted for increased attention.

Table 5: Overview of the four pollutants which will be monitored as criteria for success for the Turtle Creek Watershed Project. Descriptions of sources and impairments are not comprehensive but are instead meant to serve as examples of common scenarios.

Pollutant	Common Sources	Impairments
Phosphorus	Excessive or inappropriate application of manure to agricultural fields.	Eutrophication and oxygen depletion in standing waters.
Nitrogen	Excessive or inappropriate application of nitrates to agricultural fields.	Eutrophication and oxygen depletion in standing waters.
E.coli	Runoff from livestock feedlots or inappropriate access of livestock to streams.	Disease and health concerns.
Sediment	Soil erosion from agricultural fields and/or livestock grazing fields, in-stream erosion due to destabilized stream banks.	Pollutant concentration point, altered morphology, altered substrate habitat.

Stream Morphology Monitoring

Upon the first watershed sampling, photo point monitoring and a geomorphic assessment will be performed on each of the three sites used by the North Dakota Department of Health in the initial project proposal of the Turtle Creek Watershed Project. A rapid geomorphic assessment based on a simple ranking schema will be performed, including a photo point monitoring scheme which will allow visual comparison of changes in morphology and riparian vegetation. Rapid geomorphic assessment will be performed each April, July, and November so that both long term and seasonal trends may be observed.

Sampling sites and frequency

Sampling sites were chosen so that (1) new water quality data may be compared to water quality data from previous studies, and/or (2) so that changing watershed conditions at various locations upstream and downstream may be compared and inferences regarding different inputs may be drawn.

Each site will be sampled on a weekly basis starting April 2015 or 2016 depending on the number of BMP's that are fully implemented before that time. Sampling will continue through November, or as is realistic. In the case of inclement weather, sampling will be postponed on an ad hoc basis until sampling can be done safely. If there is no water flow at the time of a site visit, the absence of running water will be noted and no sample will be taken.

Public Survey

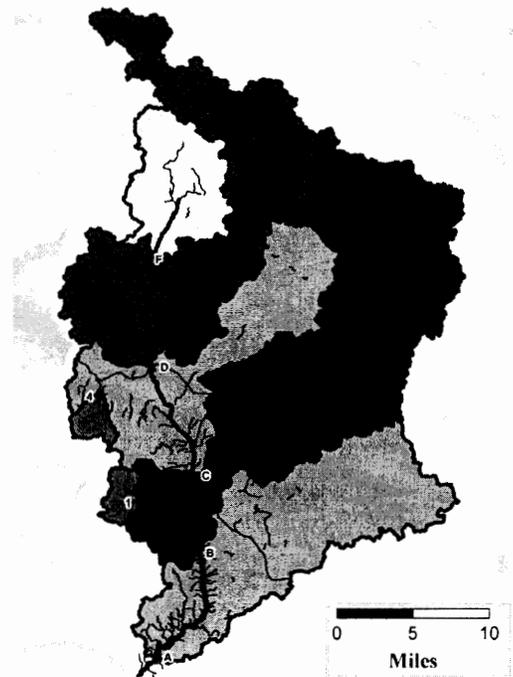


Figure 1: Water quality sampling will take place at 5 locations along Turtle Creek. Of these 5 sites, A, C and D are at the same location that samples were taken and analyzed for a previous study documenting the condition of the Turtle Creek watershed. Sites B, C, and D are at locations previously used by the USGS and for which some historic water quality or flow data is available.

An annual survey will be conducted in order to gauge progress with respect to public outreach and to provide insight as to how we can best meet the needs of residents of McLean County living in the Turtle

Creek watershed. To encourage participation, the survey is meant to be concise and intuitive. For consistency, many or all of the survey questions will remain from year to year. Success of public outreach will be evaluated on a yearly basis and it may be achieved in one of two ways; either achieving a mean and median response falling within the 'agree' or 'strongly agree' range or by showing improvement of the mean response from responses from previous year based on the ranking system. Please see appendix A to download the questionnaire.

Pollutant	Goal
Nitrogen	1.0 mg/L
Phosphorus	0.1 mg/L
E.coli	<10% exceeding 409 CFU/100 mL
TSS	<25 mg/L

Table 6: Benchmark water quality goals to be used by the Turtle Creek Watershed Project. Nitrogen and Phosphorus goals are recommended maximum levels as determined by the North Dakota Department of Health. The E.coli goal is based on state standards according to which Turtle Creek is currently deemed to be impaired with respect to recreational uses. The Total Suspended Sediment (TSS) goal is the threshold by which TSS concentrations under which sediment concentrations have no harmful effect on fisheries.

Financial Information

ATTACHMENT: Project Budget – Using the standard project budget format that is available on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm> , please include a detailed total project budget that specifically outlines all the funds you are requesting.*

The project budget should identify all matching funds, funding sources and indicate whether the matching funds are in the form of cash or in-kind services. As noted on the standard project budget format, certain values have been identified for in-kind services. Please utilize these values in identifying your matching funds. **NOTE: No indirect costs will be funded.**

X I certify that a project budget will be sent to the Commission*

Sustainability – Indicate how the project will be funded or sustained in future years. *

Include information on the sustainability of this project after all the funding from the Outdoor Heritage Fund has been expended and whether the sustainability will be in the form of ongoing management or additional funding from a different source.

How the project will be sustained after funding

The funds distributed to the South McLean SCD Turtle Creek Watershed Project will be used to cost-share BMP's listed in tables 1-3. When the Watershed Project has used all of the funds awarded by the outdoor heritage fund, funding for all of these BMP's will continue, albeit under a different cost-share structure that does not prioritize BMP's that provide habitat over other BMP's. The Watershed Coordinator will continuously seek funding from outside sources so that the project may be sustained for the foreseeable future; complete restoration of surface water quality is necessarily a long-term endeavor. It has been suggested that when our current allotment of 319 funds is used, we will have a strong case for additional 319 funds, and this is an avenue we will certainly explore. In a worst case scenario, the project can sustain itself as long as there is enough funding available to pay for the watershed coordinator position; facilitation of enrollment in federal programs and public outreach may continue while further funding sources are pursued.

Partial Funding – Indicate how the project will be affected if less funding is available than that requested. *

In the event of partial funding

If the amount awarded to the Turtle Creek Watershed Project is less than the requested amount but greater than or equal to \$69,000, BMP's cost shared beyond existing 319 funds will not be cost shared and fewer overall BMP's will be implemented, resulting in less new habitat, less improvement in surface water quality in the 38.2 square miles of aquatic habitat in the Turtle Creek watershed, and less protection of riparian habitats. We also anticipate availability of further availability of 319 funds upon use of existing funds. If such additional funds are awarded we will lack funds to continue incentivizing the selected BMP's listed earlier in this grant proposal.

If the amount awarded to the Turtle Creek Watershed Project is less than \$69,000, we may have not have enough funds cover 20% of the non federal match for existing 319 funds. Fewer producers will select BMP's that necessarily meet the directives of the Outdoor Heritage Fund, and a smaller allotment of 319 funds will be directed toward projects that meet your directives.

Scoring of Grants

All applications will be scored by the Outdoor Heritage Fund Advisory Board after your ten-minute oral presentation. The ranking sheet(s) that will be used by the Board is available on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm> .

Awarding of Grants

All decisions on requests will be reported to applicants no later than 30 days after Industrial Commission consideration. Applicants whose proposals have been approved will receive a contract outlining the terms and conditions of the grant. Please note the appropriate sample contract for your organization on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm> that set forth the general provisions that will be included in any contract issued by the North Dakota Industrial Commission. Please indicate if you can meet all the provisions of the sample contract. If there are provisions in that contract that your organization is unable to meet, please indicate below what those provisions would be. *

Responsibility of Recipient

The recipient of any grant from the Industrial Commission must use the funds awarded for the specific purpose described in the grant application and in accordance with the contract. The recipient cannot use any of the funds for the purposes stated under Exemptions on the first page of this application.

If you have any questions about the application or have trouble submitting the application, please contact Karlene Fine at 701-328-3722 or kfine@nd.gov

Appendix A: Links to online material

Article Published in Local Papers:

<https://drive.google.com/file/d/0ByJ7NCI-t1jIa3duN3AwZGJpbUU/edit?usp=sharing>

BMP Implementation Guide & Progress Tracker:

<https://drive.google.com/file/d/0ByJ7NCI-t1jIXzZ6blloUU55YVU/edit?usp=sharing>

BMP Selection Guide:

<https://drive.google.com/file/d/0ByJ7NCI-t1jIS09Na2d0d1czcGM/edit?usp=sharing>

Budget From Final 319 Grant Application:

<https://drive.google.com/file/d/0ByJ7NCI-t1jlcVRfcFd4N2dqUWc/edit?usp=sharing>.

Final 319 Project Proposal:

http://www.ndhealth.gov/WQ/SW/Z1_NPS/OnlineTaskForceBinder/Final_ProjectProposals/FY2013/TurtleCrkFY13FinalPIP_Jan2013.pdf

March 2014 Monthly Mailer:

<https://drive.google.com/file/d/0ByJ7NCI-t1jIX0VvS3BuZiIkems/edit?usp=sharing>.

ND Health Department BMP Cost Share Guidelines:

http://www.ndhealth.gov/WQ/SW/Z1_NPS/OnlineBinder/BMPs/BMPCostGuides_June2013.pdf

North Dakota Game and Fish Threatened & Endangered Species:

<http://www.gf.nd.gov/wildlife/fish-wildlife/threatened-and-endangered-species>

Public Outreach Survey:

<https://drive.google.com/file/d/0ByJ7NCI-t1jIVnNuemxQTHRqUGM/edit?usp=sharing>

Turtle Creek Watershed Project Website:

<https://sites.google.com/site/turtlecreekwatershed/>

Budget Standard Form

Please use the table below to provide a detailed total project budget that specifically outlines all the funds you are requesting and the matching funds being utilized to fund this project. Please note if the matching funds are in the form of cash, indirect costs or in-kind services. The budget should identify all other committed funding sources and the amount of funding from each source. Match can come from any source (i.e. private sources, State and Federal funding, Tribal funding, etc.) Note a minimum of 25% match funding is strongly encouraged. An application will be scored higher the greater the amount of match funding provided. (See Scoring Form.)

Please feel free to add columns and rows as needed. Please include narrative to fully explain the proposed budget.

Note that NO INDIRECT COSTS will be funded from the Outdoor Heritage Fund. Also by law several items are ineligible for funding -- see Exemptions in the Application Form. Effective January 29, 2014 the following guidelines were approved by the Industrial Commission:

NO CONSIDERATION:

In addition to those specific items in law that are ineligible for funding, in the absence of exceptional circumstances, the following projects will NOT receive consideration for funding:

- Projects that are already completed;
- Projects that are on-going (Phased projects would be considered);
- Staffing;
- Feasibility studies;
- Annual maintenance;
- Paving projects for roads and parking lots;
- Swimming pools;
- Non-permanent equipment (such as snowmobiles, tractors);
- Research;
- Projects where the applicant is not directly involved in the project.

Project Expense	OHF Request	Applicant's Match Share (Cash)	Applicant's Match Share (In-Kind)	Applicant's Match Share (Indirect)	Other Project Sponsor's Share
BMP cost-share	\$138,000				\$207,000
Personnel, support, administration				\$110,400	\$165,600
Outreach & Education				\$3,600	\$5,400
Estimated BMP's facilitated by federal programs					\$514,000
Producer's portion of cost share (estimated cash contribution)					\$78,858
Producer's portion of cost share (estimated in-kind contribution)					\$19,714

ND Dept. of Health Lab Costs					\$19,500
Sampling Costs				\$400	\$600
Total Project Costs	\$138,000	\$0	\$0	\$114,400	\$1,010,672

DRAW TEXT BOX FOR DETAILS HERE

In-kind services used to match the request for Outdoor Heritage Fund dollars shall be valued as follows:

- Labor costs \$15.00 an hour
- Land costs Average rent costs for the county as shown in the most Recent publication of the USDA, National Agricultural Statistics Services, North Dakota Field Office
- Permanent Equipment Any equipment purchased must be listed separately with documentation showing actual cost. (For example: playground equipment)
- Equipment usage Actual documentation
- Seed & Seedlings Actual documentation
- Transportation Mileage at federal rate
- Supplies & materials Actual documentation

More categories will be added as we better understand the types of applications that will be submitted. We will use as our basis for these standards other State and Federal programs that have established rates. For example the North Dakota Nonpoint Source Pollution Management Program has established rates. If your project includes work that has an established rate under another State Program please use those rates and note your source.

Approved by OHF Advisory Board: October 17, 2013
 Approved by Industrial Commission: October 22, 2013
 Revised by OHF Advisory Board: January 22, 2014
 Approved by Industrial Commission: January 29, 2014