

Hurley Creek/McKinley Lake Watershed Improvement Project

WIRB Grant # 7020-007 Progress Report

June 2008 – December 2008

*new information is in blue

- Objective 1.** Administer the Hurley Creek/McKinley Lake Watershed Improvement Project and work with all stakeholders to ensure all project objectives are implemented as scheduled.
- Objective 2.** Reduce by at least 50% the amount of annual erosion, which will help reduce sediment load, loss of property, and may improve water quality.
- Objective 3.** Reduce E. Coli levels to meet the designated use of McKinley Lake by controlling direct animal access, reducing animal waste runoff, and improving sanitary sewer systems.
- Objective 4.** More effectively manage the storm water flow rate, which may reduce erosion and flooding and may improve water quality. Reduce stormwater flow into Hurley Creek by at least 35%.
- Objective 5.** Educate the public, including civic groups, homeowners, farmers, and business owners in the Hurley Creek Watershed about Best Management Practices and establish comprehensive education and communications strategies to promote environmental awareness.

Details:

Objective 1. *Administer the Hurley Creek/McKinley Lake Watershed Improvement Project and work with all stakeholders to ensure all project objectives.*

Goals:

A. Submit progress reports, annual project reports and final project report.

ACTIONS

1. Prepare and submit Progress Reports to the WIRB by the 15th of the month following the end of the reporting period.

Responsible person:	Start Date:	End Date:	%Completion:
Mike Taylor/Leslie Goldsmith	07/2008	03/2011	17 (1 of 6 done)
Mike Taylor/Leslie Goldsmith	12/08	03/2011	33 (2 of 6 done)

Remarks:

Progress Report Check-off

Quarter	Mar–Jun 08	Jul-Dec 08	Jan-June 09	Jul-Dec 09	Jan-Jun 10	Jul-Dec 10
Date Submitted	July 11, 2008	Dec. 2008				

2. Submit Annual Reports to the WIRB by January 15th following the end of the reporting period.

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<u>Responsible person:</u>	<u>Start Date:</u>	<u>End Date:</u>	<u>%Completion:</u>
Mike Taylor	01/2009	03/2011	25%

Remarks: followed sample report

Annual Report Check-off

Year	Mar-Dec 08	Jan-Dec 09	Jan-Dec 10	Jan-Feb 11
Date Submitted	December 2008			

3. Submit Final Comprehensive Project Report to the WIRB by April 1, 2011.

<u>Responsible person:</u>	<u>Start Date:</u>	<u>End Date:</u>	<u>%Completion:</u>
Mike Taylor	02/2011	04/2011	NA

Remarks: NA

B. Obtain needed training for project manager and committee members.

ACTIONS

1. Attend WIRB sponsored project manager meetings and training.

<u>Responsible person:</u>	<u>Start Date:</u>	<u>End Date:</u>	<u>%Completion:</u>
Mike Taylor	03/2008	03/2011	Can't determine

Remarks: Mike Taylor continues to monitor training opportunities and has worked with WIRB staff to properly prepare financial information.

2. Receive training from DSC Regional Coordinator on the Sediment Delivery Calculator.

<u>Responsible person:</u>	<u>Start Date:</u>	<u>End Date:</u>	<u>%Completion:</u>
P. Goldsmith	03/2008	03/2011	100%

Remarks: Have used sediment delivery calculator for other watershed projects. Received training from Bob Waters in 2007. (Paul Goldsmith 6/24/2008)

C. Manage the Hurley Creek/McKinley Lake water quality project to maintain quality control and to maximize communication with, and involvement of, local advisors, state and local staff of participating agencies.

ACTIONS

1. Work with the Hurley Creek/McKinley Lake Committee to promote and facilitate water quality activities in the watershed. A city representative will attend 90% of the Hurley Creek/McKinley Lake Committee meetings to help promote the project.

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<u>Responsible person:</u>	<u>Start Date:</u>	<u>End Date:</u>	<u>%Completion</u>
City of Creston	03/2008	03/2011	10 of 36 Months-28%

Remarks: Creston City Manager Mike Taylor has attended all Hurley/McKinley regular board meetings.

Held a McKinley Lake / Hurley Creek Assoc meeting July 7, 2008 at 7:00 PM.

Held a McKinley Lake / Hurley Creek Assoc. meeting October 8, 2008 at 5:15 PM.

Held a McKinley Lake / Hurley Creek Assoc. meeting September 24, 2008 at 5:30 PM

Education Committee Meeting held October 14 at 9 a.m. at Extension office.

Objective 2. *Reduce by at least 50% the amount of annual erosion, which will help reduce sediment load, loss of property, and may improve water quality.*

Returned \$519.86 to IDNR from the Clear Grant on 11-5-08 with a letter/report.

Applied for a grant through SCICF for \$7589.76 on October 29, 2008.

Received letter on December 4, 2008 from SCICF with notification that we did not get a grant award

Requested a construction easement October 16, 2008 for the Gayle Sissler property – stream bank stabilization project for summer 2009.

Requested a construction easement October 14, 2008 for the Leola Kralik property – stream bank stabilization project.

Requested a construction easement October 9, 2008 for the Randy Goodrich property – stream bank stabilization project.

Ordered and Paid for 3 each = 180N MIRAFI 15' x 300' (fabric for stream bank stabilization project. 10-10-2008. \$1770.00

City council approved using WIRB funds for the Livestock crossing / fencing improvements / buffer strips for the Steve Tilley property – Sec. 1 T72N R31W Douglas Twsp. Tract 50002 Creston City Limits.

Goals:

A. Promote the establishment of Riparian Buffers along the stream channel.

ACTIONS

1. Complete a mailing to property owners along Hurley Creek with information about benefits of riparian buffers along the stream channel and the available program.

<u>Responsible person:</u>	<u>Start Date:</u>	<u>End Date:</u>	<u>%Completion:</u>
Union Co SWCD	03/2008	03/2008	100%

Remarks: Sent letter to targeted landowners for demonstrations. Four sites were selected protecting 680 ft of Hurley Creek Channel. Additionally used CRP buffer for protecting 1,940 ft of Hurley Creek Channel just above the Creston walking trail. (Paul Goldsmith 6/24/2008).

2. Obtain native grass seed mixes that could be used for riparian buffer plantings.

<u>Responsible person:</u>	<u>Start Date:</u>	<u>End Date:</u>	<u>%Completion:</u>
Union Co SWCD	03/2008	04/2008	100%

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Remarks: SWCD obtained seed packages from Pheasants Forever for Buffers 5/08. (P. Goldsmith 6/24/2008)

3. Develop contractor list of potential seeding contractors who can complete seedings of riparian buffers and rain gardens.

Responsible person:	Start Date:	End Date:	%Completion:
Union Co SWCD	02/2008	03/2008	100%

Remarks: SWCD contacted seed contractors and developed a contractor list 5/08. (P. Goldsmith 6/24/2008)

4. Assist homeowners along the stream channel with installing 1,000 ft of riparian buffers in an urban setting. (Grant Agreement Item 1)

Responsible person:	Start Date:	End Date:	%Completion:
Union Co SWCD	03/2008	05/2009	83%

Remarks: Contractor seeded riparian buffers on Lindley (180 ft near Prairie St.) Ritzman (150 ft near Elm St) They also did another 160 ft of a narrow strip, City of Creston two sites (160 ft near Cherry ct and 190 ft near Division St). This is a total of 680 ft. (P. Goldsmith 6/24/08). [Goldsmith property done, west side of McKinley Lake – 150 ft. July/August 2008.](#)

5. Assist landowners along the stream channel with installing 500 ft of riparian buffers in a rural setting. (Grant Agreement Item 2)

Responsible person:	Start Date:	End Date:	%Completion:
Union Co SWCD	03/2008	05/2009	100%

Remarks: Robert Kuhl installed 1,940 ft (6.4 acres) of CRP Riparian Buffers along Hurley Creek just above the Creston Trail. The Kuhl site is approximately 3/8 mile above McKinley Lake. (P Goldsmith 6/24/2008) [Steve Tilley has agreed to installing a 575 ft buffer to remove livestock from the stream channel. This site has been approved for funding and is in progress.](#)

B. Inventory, evaluate, and install stream channel measures to stabilize eroding stream channels along the Hurley Creek Channel.

1. Identify segments of the stream channel that are unstable and prioritize these sites for repair.

Responsible person:	Start Date:	End Date:	%Completion:
K. Kruse, City of Creston	04/2008	07/2008	100%

Remarks: 3/7/08 K. Kruse (City of Creston) & P Goldsmith looked at potential stream segments to prioritize sites for stabilizing stream channel. (P Goldsmith 6/24/2008).

2. Complete Streambank Stabilization of 400 linear ft of the Hurley Creek stream bank. (Grant Agreement Item 3)

Responsible person:	Start Date:	End Date:	%Completion:
K, Kruse, City of Creston	07/2008	08/2009	10%

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Remarks: One 150 ft site identified on Hudek/Schaller. Design completed for reshaping channel and riprapping sides and bottom of channel. Met with Marylyn Goodrich & Leola Kralik to do preliminary planning for roughly 300 ft segment of stream bank stabilization. Work set to begin soon. (P Goldsmith 6/24/2008).

4 initial sites have been surveyed and designed and should be installed in summer 2009. This will protect roughly 600 ft of stream channel. Due to summer flooding, riprap was not available until fall. City of Creston purchased 174 tons of riprap for this project, and it is presently stored at a city site awaiting this work to be done by SIRWA this spring. Plans are to go out to bid for the remaining projects.

3. Complete Stream Channel and Bank Stabilization at six sites along Hurley Creek (Grant Agreement Item 7)

Responsible person:	Start Date:	End Date:	%Completion:
K. Kruse, City of Creston	07/2008	08/2009	10%

Remarks: 4 initial sites have been surveyed and designed and should be installed in summer 2009. This will protect roughly 600 ft of stream channel. See above.

4. Place 500 sq ft of Erosion Control Matting where needed to help stabilize stream banks along Hurley Creek. (Grant Agreement Item 8)

Responsible person:	Start Date:	End Date:	%Completion:
K. Kruse, City of Creston	07/2008	08/2009	10%

Remarks: The matting has been purchased and will be placed when project work is done this spring.

Objective 3. Reduce E. Coli levels to meet the designated use of McKinley Lake by controlling direct animal access, reducing animal waste runoff, and improving sanitary sewer systems.

Goals:

- A. Identify potential sites where livestock has direct access into the stream channel and install practices to remove livestock from stream channel.

ACTIONS

1. Complete an inventory of the stream channel to identify sites with direct animal access into the stream channel.

Responsible person:	Start Date:	End Date:	%Completion:
Union Co SWCD	04/2008	05/2008	100%

Remarks: Inventory completed. Two main sites identified. Steve Tilley and Robert Vogel (P Goldsmith 6/24/2008)

2. Contact landowners with livestock that have access to the Hurley Creek channel and provide alternatives to lessen the impact of the livestock on the stream channel.

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Responsible person:	Start Date:	End Date:	%Completion:
Union Co SWCD	04/2008	07/2008	100%

Remarks: Introductory letters were sent to Tilley and Vogel on 6/20/2008 offering planning assistance and possible alternatives to livestock in the stream channel. (P Goldsmith 6/24/2008)

3. Install at least one Livestock Crossing to protect the stream channel from direct animal access. (Grant Agreement Item 4)

Responsible person:	Start Date:	End Date:	%Completion:
Union Co SWCD	07/2008	07/2009	

Remarks: [Tilley approved for fencing and buffer installation on 575 ft of buffer. Should be completed in spring 2009.](#)

B. Inventory & evaluate effectiveness of existing Sanitary Sewer System in the Hurley Creek Watershed.

ACTIONS

1. Complete an inventory of the Sanitary Sewer System in the Hurley Creek watershed to help with identifying areas needing upgrading.

Responsible person:	Start Date:	End Date:	%Completion:
City of Creston	05/2008	09/2009	33%

Remarks: In 2002 the City did a study of the trunk lines that lay parallel to Hurley Creek in which the trunk lines were televised. Also in 2007 the city televised a portion of the northeast side of town. While the vast majority of the north side of Creston lies in the Hurley Creek watershed just a small amount has been televised to date. [As a result of the 2007 study the City replaced or repaired 2,450 feet of sanitary sewer line in the northeast side of Creston in 2008. The City has plans to continue working in this area in 2009 and beyond as grants and monies are available.](#)

2. As funding allows, complete needed upgrades of Sanitary Sewer System in the Hurley Creek Watershed.

Responsible person:	Start Date:	End Date:	%Completion:
City of Creston	07/2008	09/2010	5%

Remarks: As a result of the 2002 study the City had what areas could be pressure grouted done. All other problem areas will have to be replaced with excavation or other means of pipe rehabilitation. As a result of the 2007 study City is presently replacing or repairing 2,450 feet of sanitary sewer line in the northeast side of Creston.

Additional note: Don Mosman continues to do water quality sampling at various points along the creek. This sample information is attached. [More sample information has been collected through August of 2008.](#)

Objective 4. More effectively manage the storm water flow rate, which may reduce erosion and flooding and may improve water quality. Reduce stormwater flow into Hurley Creek by at least 35%.

Hurley Creek/McKinley Lake Watershed Improvement Project

Goals:

A. Provide information and education opportunities for the installation of Rain Gardens for reducing stormwater runoff.

ACTIONS

1. Submit one news release annually to local media to discuss and promote the installation of Rain Gardens.

Responsible person:	Start Date:	End Date:	%Completion:
ISU Extension	02/2008	09/2010	33%

Remarks: Several watershed articles have been published including information about rain gardens. One such article was published in the *Creston News Advertiser*:

4/14/08 Rain Gardens - Inviting Spaces

In addition, Extension and Chamber of Commerce personnel have talked on the radio about rain gardens a number of times. [There was a press release in local papers during November regarding buffer strips and rain gardens as a part of this overall project.](#)

2. Work with local Garden Clubs to promote the installation of Rain Gardens in the watershed.

Responsible person:	Start Date:	End Date:	%Completion:
ISU Extension	02/2008	12/2010	25%

Remarks: Program focused on rain garden, purpose, site location, and appropriate plants was held March 11 for past and current Master Gardeners along with the general public. [Rain gardens were installed during July at north end of Hurley Creek at the Bob and Polly McCoy property; at the west edge of McKinley Park; at the Paul and Leslie Goldsmith property on the east side of McKinley Lake.](#)

3. Hold a public meeting for property owners in the watershed to discuss the benefits of rain gardens for runoff reduction.

Responsible person:	Start Date:	End Date:	%Completion:
S Wasteny, Educ Comm.	02/2008	04/2008	100%

Remarks: Two meetings were held in April to review specifications for participation as a demonstration site for rain gardens. Sharon Wasteny and Eldon Everhart visited potential sites to look for and discuss appropriateness for locating a rain garden. Everhart shared the wide variety of appropriate native and non-native varieties of plants for our climate range with participants.

4. Man a booth at the Home & Garden Show at the YMCA with information on rain gardens.

Responsible person:	Start Date:	End Date:	%Completion:
ISU Extension	03/2008	03/2009	100%

Remarks: Creston High School East Project students manned the EnviroScape water quality display at the Southern Prairie YMCA Home and Garden Show March 1, 2008. ISU Extension plant specialist Eldon Everhart did two programs at this event. Rain garden flyers and information were available for the nearly 500 event attendees.

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5. Work with local homeowners in the Hurley Creek Watershed to install 18 strategically placed Residential Rain Gardens. (Grant Agreement Item 5)
- 6.

<u>Responsible person:</u>	<u>Start Date:</u>	<u>End Date:</u>	<u>%Completion:</u>
ISU Extension	03/2008	03/2009	25%

Remarks: Sharon Wasteney has worked with a local garden center to order plants for initial raingarden sites. The plant types were set by ISU Extension plant specialist Eldon Everhart. Plants were grown by a nursery in Nebraska. Plants are due July 11 and will be planted that next week by site owners and volunteers. [A minimum of four sites, maximum of six sites, are being sought for the spring 2009 planting, 1-2 from the public sector and 3-4 private locations. Application is available and will first be distributed at January 22 Master Gardener meeting.](#)

B. Inventory & evaluate sites along Hurley Creek where runoff can be slowed and controlled with structures.

ACTIONS

1. Complete an inventory of potential sites for Storm Water Detention Ponds along the Hurley Creek Channel.

<u>Responsible person:</u>	<u>Start Date:</u>	<u>End Date:</u>	<u>%Completion:</u>
City of Creston	05/2008	09/2009	NA

Remarks: Because the City participates in the FEMA National Flood Insurance Program any detention ponds done in the creek area will have to be approved by FEMA and the Iowa Department of Natural Resources. To date no areas have been identified and the building of a detention pond on the creek may not be possible.

[Greater Regional Hospital installed a small pond near the new Hospice house that controls roughly 13 acres of runoff. Engineering staff has completed an inventory and evaluation of a site on Jesse & Amber Giza's for a stormwater detention structure. This site will be surveyed and designed this winter.](#)

2. Complete the installation of 2 Storm Water Detention Ponds in strategic locations to reduce storm water runoff. (Grant agreement item 6)

<u>Responsible person:</u>	<u>Start Date:</u>	<u>End Date:</u>	<u>%Completion:</u>
City of Creston	07/2008	09/2010	50%

Remarks: [A small structure was completed below the new Hospice House near Greater Regional Hospital. This site controls 13 acres of the watershed.](#)

3. Complete an inventory and evaluation of a potential site for a wetland above McKinley Lake to provide water quality benefits and slow storm water runoff.

<u>Responsible person:</u>	<u>Start Date:</u>	<u>End Date:</u>	<u>%Completion:</u>
USDA/NRCS	03/2008	08/2008	100%

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Remarks: Bruce Dake, Civil Engineering Tech with NRCS did some preliminary work on a potential wetland on the Adams St. bridge above McKinley Lake. This site is not feasible based on homeowners to the east where the basements are about 2 feet above the present water level. It just would not be physically possible to install a viable wetland with these constraints.

4. If feasible install a wetland above McKinley Lake to provide water quality benefits and slow storm water runoff.

<u>Responsible person:</u>	<u>Start Date:</u>	<u>End Date:</u>	<u>%Completion:</u>
City of Creston	01/2009	08/2010	NA

Remarks: Not feasible.

Objective 5. Educate the public, including civic groups, homeowners, farmers, and business owners in the Hurley Creek Watershed about Best Management Practices and establish comprehensive education and communications strategies to promote environmental awareness.

Goals:

- A. *Develop an education program about water quality activities for property owners and stake holders in the watershed and along the Hurley Creek Channel.*

ACTIONS

1. Submit two news releases per year to local media describing water quality activities in the watershed related to the WIRB grant.

<u>Responsible person:</u>	<u>Start Date:</u>	<u>End Date:</u>	<u>%Completion:</u>
P. Goldsmith, S Wasteny	03/2008	03/2011	33%

Remarks: 5/13/2008, Karla Horihan, Soil Conservationist met with local Kiwanis Club to discuss the benefits of Riparian Buffers and to discuss the Water Quality Activities in the Hurley Creek Watershed. *Creston News Advertiser* has covered various McKinley/Hurley Creek events. Articles were published on the following dates:

Date	Headline
4/8/08	Creston Cleanup coincides with Hurley Creek Project
4/8/08	Students pitch in
4/14/08	Rain Gardens - Inviting Spaces
6/24/08	Work continues in Hurley Creek watershed
5/9/08	Hurley Creek/McKinley Lake cleanup scheduled
11/24/08	Update on Buffers and Rain Gardens (attached)

2. Label surface storm sewer inlets in the watershed to the public recognizes where the storm sewers outlet.

<u>Responsible person:</u>	<u>Start Date:</u>	<u>End Date:</u>	<u>%Completion:</u>
S. Wasteny, Educ Comm	02/2008	04/2008	25%

Remarks: Sharon Wasteny is working with summer interns to develop the marketing message to be delivered by this project – just what will be sprayed on the storm sewers. Potential stencil makers have been contacted.

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Sharon showed preliminary stencil ideas to the Education Committee at the June 23rd meeting. The summer intern group will continue to make progress through summer months.

July/August 2008: Summer workers for Extension had stencils made and used these to paint a few storm sewers, but it was determined that stencils were not exactly what the Board was looking for, so this will be revisited.

3. Sponsor a Hurley Creek clean up day in the spring 2008 and spring 2009.

Responsible person:	Start Date:	End Date:	%Completion:
Hurley Creek Comm	03/2008	06/2009	50%

Remarks: The community had great participation on this project. It's obvious area residents are very interested in seeing this project succeed! Several groups worked on various cleanup events. Project East, Creston High School FFA and Creston High School Biology classes did a weeklong cleanup in April. Southwestern Community College Biology students also participated. This youth participation was invaluable in helping to stress the effects of littering in the watershed to younger residents.

Creston community members had to deal with a very snowy cold winter, but got the job done too. There are many pictures documenting these events and there is even a list of things collected. Creston Park Board members and City of Creston staff were essential in the success of this first year cleanup, along with other Hurley Creek/McKinley Lake project board members. Thanks to a DNR Clear grant, detailed records are available regarding what types of materials were collected from Hurley Creek/McKinley Lake.

Board members plan to request Clear Grant funds to do another cleanup in 2009.

4. Establish and keep current a website on the Hurley Creek/McKinley Lake Water Quality Project (www.crestoniowachamber.com).

Responsible person:	Start Date:	End Date:	%Completion:
Terri Hannah	02/2008	02/2011	33%

Remarks: Terry Hannah maintains the website, which is linked to the Creston Chamber of Commerce Website. There are pages for the project, Lake/watershed history, pictures, progress and more.

July – December 2008 Website continues to be updated with new information and pictures, thanks to Terri Hannah.

5. Facilitate a Rain Garden and Riparian Buffer Walk for people to view established Rain Garden's and Riparian Buffers along the Hurley Creek Channel.

Responsible person:	Start Date:	End Date:	%Completion:
ISU Extension, Union Co SWCD	05/2009	08/2009	NA

Remarks: While projects have been initiated, there is nothing established enough to show off during an event or tour yet. December 2008, installed buffers and rain gardens did well, and we look forward to doing tours in 2009.

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6. Set up a self guided field tour of the established Rain Gardens and Riparian Buffers in the Hurley Creek Watershed.

Responsible person:	Start Date:	End Date:	%Completion:
ISU Extension, Union Co SWCD	04/2009	08/2009	NA

Remarks: While projects have been initiated, there is nothing established enough yet to show off during an event or tour. This fall will be a better time to begin to show off these projects, and next spring even better. December 2008, installed buffers and rain gardens did well, and we look forward to doing tours in 2009.

For further information regarding this project please see attachments. If you have any questions about information contained in this report, contact Mike Taylor at 641-782-2000, or report preparer Leslie Goldsmith 641-202-0203, email: lgold@iowatelecom.net

There are attachments, including a financial report as requested. Please note – due to flooding in Creston during June, some of the project dates have not been met. Rip rap

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