PROJECT APPLICATION

Dickinson County Water Quality Commission Cover Sheet

		nization Silver Lake Park In	mprovement Association (SLPIA)	
	Street address_			
	State _	IA	,	
	Zip _	51360		
	Email _	john.wills@ia.nacdnet.net		
	Phone _	712-336-3782		
	Organization co	ontact		
2.	Project title:	Silver Lake Sampling		
		Silver Lake Watershed		
3.		(if different than organizatio	on contact)	
		(· · · · · · · · · · · · · · · · · · ·		
	City			
	State			
	Zip			
	Email	-		
	Phone			
	- Inone			
4.	Application sub	mission date: <u>September 2</u>	29, 2016	
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ວ.	Brief description	1 (75 words or less) of proje	ect, including expected results:	
	silver Lake Park i	mprovement Association, a	a partner of the Silver Lake Watershed Project	<u>t:</u>
<u>to 1</u>	mprove the water	r quality of Silver Lake has	sampled the watershed of Silver Lake for 8	
yea	ars. The sample	s nelp to target working with	h landowners and homeowners within the	
wa	tersned to install	conservation practices that	t prevent pollutants from entering the lake.	
6.	Amount request	ed through this grant applic	cation * :\$3,000	
			cation * :\$3,000	
	Amount request Matching funds:		cation * :\$3,000	
	Matching funds:		cation * :\$3,000 (Anything paid for with real money)	
7.	Matching funds: Hard match _\$3	3,000	(Anything paid for with real money)	
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c. Source of public and/or private cash match (list all): Is the project a portion of a larger, overall project to be implemented over a multi-year period? Yes X No ____ If yes, describe in project narrative and include in budget form as instructed. * The Water Quality Commission will only obligate funds for current fiscal year. Any multi-year projects will be allowed to re-apply in subsequent years Type of project (select all that apply): X Public education, public awareness and information dissemination X Creation or maintenance of Best Management Practices Erection and maintenance of storm water run off facilities Bank stabilization Water treatment X Water monitoring X Watershed protection Activities to abate and remove invasive species Any other activity which will improve, protect or enhance the quality of water in the lakes in Dickinson County Estimated project dates: a. Start May 2017 b. Completion Sept 2017

Applicant's signature. Upon signing in the space provided below, the applicant agrees to conform to the requirements pertaining to:

Civil Rights Assurance of Compliance: The applicant hereby agrees that it will comply
with Title VI of the Rights Act of 1964, 1873 and the age Discrimination Act of 1975 to
the end that no person in the United States shall on the grounds of race, color, national
origin or otherwise subjected to discrimination under any program or activity for which
the Applicant-Recipient receives grant funds and hereby gives assurance that it will
immediately take any measures to effectuate this agreement.

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#FY17- 02 (For DCWQC ONLY)

This assurance is binding on the Applicant-Recipient, its successors, transferees, and assignees, and the person or person whose signature appears below are authorized to sign this assurance on behalf of the Applicant-Recipient.

Applicant's name and title Date 9/27/16

REQUIRED BUDGET FORM

See Application Guidelines for this form.

Proposed Budget for Current Grant Request Year (fill out with just the match for this year's WQC match if this is a multi-component, multi-year project, please fill out the second budget form with the entire budget and any anticipated grant dollars expected to be sought from WQC in future requests)

	Commission	Hard Match*	Soft Match*	* <u>Total</u>
1. Staff	\$	\$	\$	\$
2. Supplies and Services	\$	\$	\$	\$
3. Equipment	\$	\$	\$	\$
4. Travel	\$	\$	\$	\$
5. Water Monitoring	\$_3,000	\$_3,000	\$_1,500	\$_7,500
5. Land Acquisition	\$	\$	\$	\$
6. Land Development	\$	\$	\$	\$
7. Other	\$	\$	\$	\$
Total	\$_3,000	\$_3,000	\$_1,500	\$_7,500

^{*} Hard Match is "real money spent" toward project goal.

You must attach a letter of support for each contributor of Hard Match dollars and soft match dollars that specifies the amount of money or service being provided. If you are seeking other grants using WQC funds as a match, list those grants in the budget narrative and the timing those grant funds are to be available.

BUDGET NARRATIVE: Attach a Budget Narrative. Follow directions in Application Guidelines.

TASKS AND DELIVERABLES: Attach a list of Tasks and Deliverables following the Application Guidelines included in this packet.

^{**} Soft Match is money indirectly spent toward project goal. (This is important but not included in the dollar amount for points).

Optional Proposed Budget for Future Project Components & Years (If needed)

	Commission	Hard Match*	Soft Match*	* <u>Total</u>
1. Staff	\$	\$	\$	\$
2. Supplies and Services	\$	\$	\$	\$
3. Equipment	\$	\$	\$	\$
4. Travel	\$	\$	\$	\$
5. Water Monitoring	\$	\$	\$	\$
5. Land Acquisition	\$	\$	\$	\$
6. Land Development	\$	\$	\$	\$
7. Other	\$	\$	\$	\$
Total	\$	\$	\$	\$

^{*} Hard Match is "real money spent" toward project goal.

You must attach a letter of support for each contributor of Hard Match dollars and soft match dollars that specifies the amount of money or service being provided.

BUDGET NARRATIVE: Attach a Budget Narrative. Follow directions in Application Guidelines.

ITEMS:		COMMISSION:	HARD MATCH:	SOFT MATCH:
SUPPLIES:	Water monitoring test done in field pH, water temperature, turbidity and D.O.			\$1,500
WATER MONITORING:	8 Water Sampling Sites	\$3,000	\$3,000	

TASKS AND DELIVERABLES: Attach a list of Tasks and Deliverables following the Application Guidelines included in this packet.

- Collect water samples from eight active sample sites every three weeks.
- Analyze water sample results to locate areas of high pollutant inputs and work toward finding a solution to improve water quality within the area
- Increase public understanding of the Silver Lake water quality problems using monitoring data
- Work with local groups and organizations to educate on water quality
- Provide increased opportunities for citizens to participate directly in water quality projects

^{**} Soft Match is money indirectly spent toward project goal (this is important but not included in the dollar amount for points).

• Provide an annual report to Water Quality Commissioners

PROJECT NARRATIVE

Attach project narrative following the instructions in application guidelines, including:

STATEMENT OF PROJECT NEED:

QUALIFICATIONS OF GROUP OR AGENCY:

Silver Lake Park Improvement Association has been a local organization working toward improving water quality within Silver Lake. SLPIA has been furthering the cause of clean water in Silver Lake since 2006 and has been a key to receiving funding and completing conservation projects within the watershed. SLPIA educates the local community on water quality projects and continues to work with the Silver Lake Watershed Project to help fund various conservation practices.

STATEMENT OF PROJECT NEED:

Silver Lake is listed on the State's Impaired Waters List for sediment and water clarity impairments. A Total Maximum Daily Load (TMDL) for phosphorus has been completed by the Iowa DNR. Inorganic suspended solids and high phosphorus levels are top contributors to the poor water quality conditions documented within the lake.

Because of these high nutrient levels, Silver Lake is considered a hypereutrophic lake, and exhibits intense algal blooms in mid-late summer on an annual basis. These blooms are the cause of the "aesthetically objectionable conditions" which inhibit primary contact recreation in the lake. During these frequent blooms, recreation activities on Silver Lake plummet, often during months when recreational usage should be at its peak.

The Silver Lake Watershed Project received a grant the EPA 319/WSPF program in 2010 and received another grant in 2013 to continue on with the project. The funding from these grants provides landowners and homeowners with incentive payments on a variety of agricultural and urban practices such as CRP practices, grassed waterways, sediment basins, grade stabilization structures, conservation tillage incentives, and shoreline restorations. All 319 dollars that have been put into the project are based off the watershed management plan. Water monitoring has been a vital tool to getting funding for practices, along with showing local support from SLPIA and WQC.

On page 22 of the Silver Lake Watershed management plan, it states "To date, this data has been used to provide a baseline in evaluating the overall health of the watershed, as well as helping pinpoint critical areas which should be targeted with incentives for the implementation of BMP's."

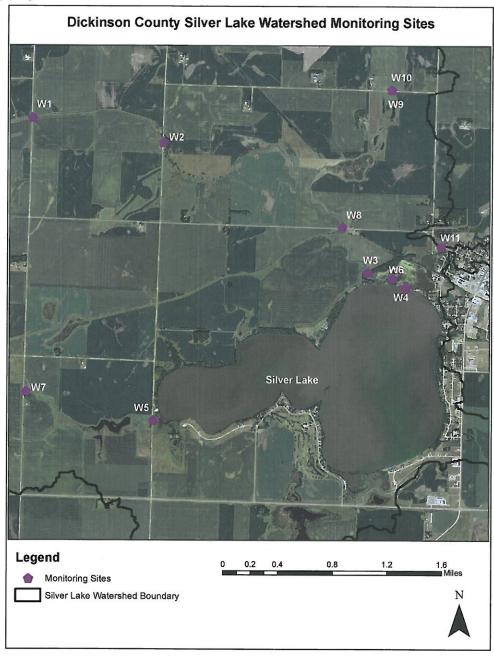
Water monitoring has been and continues to be a vital part of the conservation projects within the watershed. Since 2008, associated costs of water monitoring in the Silver Lake Watershed have been provided by the Silver Lake Park Improvement Association, Water Quality Commission, City of Lake Park and other private donors. The Silver Lake Park Improvement Association has again pledged \$3,000 for fiscal year 2016 water monitoring.

As in previous years, sampling in 2016 will take place at eight key locations within the watershed and a few other possible sites based on emergency sampling. We will continue to take samples every three weeks from the first week of May through the end of September. If

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certain locations produce high readings of certain parameters such as E. coli bacteria, total phosphorus, or total suspended solids, staff has the option to adjust these sites in order to pinpoint the source of pollution. Attached is a map of 11 identified sampling sites within the watershed. Only W1 through W8 have been consistently monitored over the course of the monitoring project.



All water samples taken from the Silver Lake Watershed that require analysis beyond what is available in the field are taken to Lakeside Laboratories. Sampling parameters officially tested at Lakeside Labs include E. coli bacteria, total suspended solids, nitrate/nitrite, and total phosphorus. Field staff also uses district equipment to record on-site readings of water temperature, pH, turbidity, and dissolved oxygen.

Water monitoring is a benefit to the watershed project because it gives the staff an idea of what location is the most beneficial to install a conservation practice to address a pollutant that is making its way to Silver Lake. It also provides before and after information of various conservation practices that have been installed to measure successes.

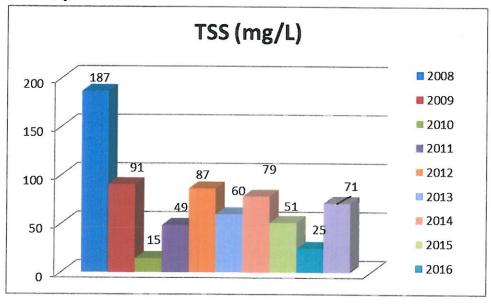
STATEMENT OF PROJECT BENEFITS TO WATER QUALITY

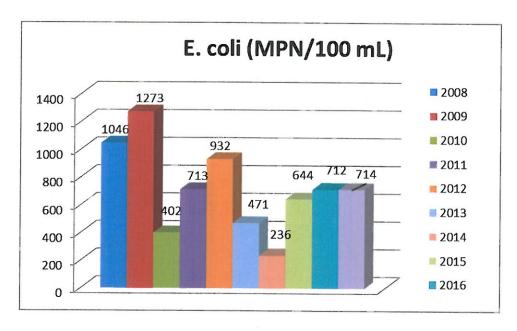
Water monitoring has taken place throughout the watershed since 2006 to show the status of water quality in various locations within the watershed. This data has given us an idea of where high priority areas are and give a better understand of high pollutant deliveries into the lake. Once these areas are identified, a conservation practice can be installed and a sample can be taken to show progress in various conservation practices. This grant would help fund another year of monitoring to continue providing valuable data.

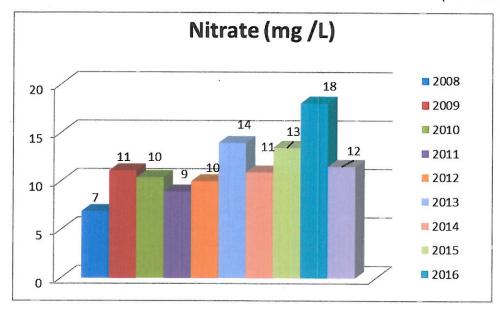
PUBLIC AWARENESS PLAN

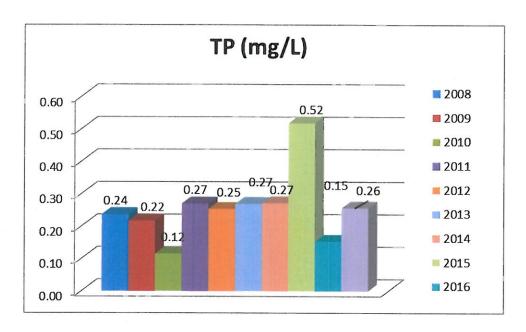
SLPIA and the Watershed Project work to educate local the local community in various ways. Signs, radio interviews, newsletters, and news articles are some examples. All completed projects in the watershed area have been followed by installing a sign that gives recognition to the conservation practice, the landowner who installed it, and the funding sources. These signs help educate the public by letting them drive by the practice and to show them how they work to improve water quality. By mentioning the landowner, this gives others in the community a chance to follow up with that landowner on success in the practice. By mentioning funding sources, it gives these sources a chance to be known and gives credit where credit is due.

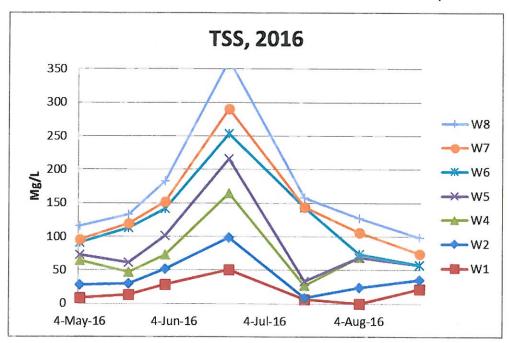
Past Project Success

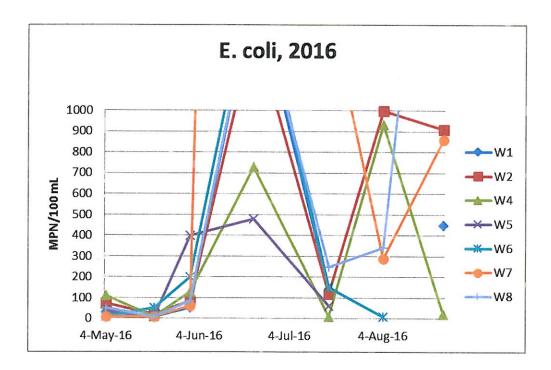


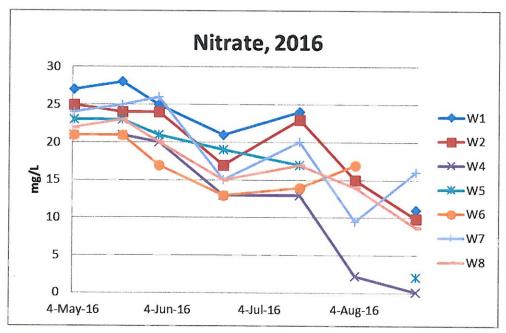


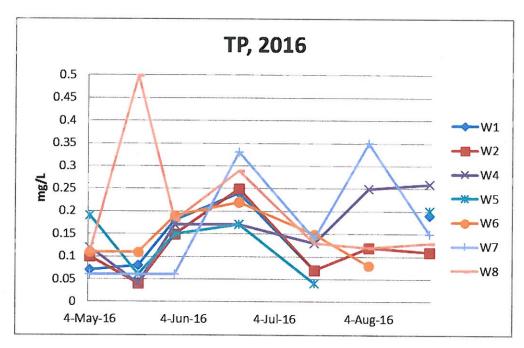














DICKINSON COUNTY CLEAN WATER ALLIANCE

27 September 2016

Scott Mitchell Silver Lake Park Improvement Association Lake Park, IA

Dear Mr. Mitchell,

The Dickinson County Clean Water Alliance fully supports the work the Silver Lake Watershed Project and the Silver Lake Park Improvement Association is doing in the Silver Lake Watershed to improve the water quality of Silver Lake and its watershed.

The Clean Water Alliance 4 goals are to coordinate, educate, communicate, and fund water quality projects within the county. This project is a worthy project that meets each of those four goals.

The Clean Water Alliance will support this project with labor directed at watershed sampling and will provide technical assistance, education, and communication as well.

Sincerely,

John H. Wills

Coordinator, Clean Water Alliance