



**APPLICATION FOR NONPOINT SOURCE IMPLEMENTATION GRANTS**

Use this form to apply for **Section 319(h) Nonpoint Source Implementation Grants**.  
 This application **must** be typed and **must** be submitted on this form or an identical copy.  
 Every element must be filled in for full ranking.

1.	NAME OF PROJECT  <b>Keep title short but descriptive.</b>													
2.	NAME OF ORGANIZATION SPONSORING THE PROJECT													
3.	ADDRESS OF SPONSOR													
4.	SPONSOR'S TAXPAYER ID NUMBER (ATTACH DOCUMENTATION OF 501(C)(3) STATUS IF APPLICABLE)  <b>IRS Letter required prior to final approval of application (Example in Training Packet).</b>													
5.	TYPE OF ORGANIZATION (SUCH AS MUNICIPALITY, COUNTY, STATE, UNIVERSITY, CONSERVATION DISTRICT, NONPROFIT, ETC)													
6.	PRIMARY CONTACT PERSON (NAME, AFFILIATION AND ADDRESS)	CONTACT TELEPHONE, FAX AND E-MAIL												
7.	PROPOSED START DATE  <b>Allow 18 months to start.</b>	PROPOSED END DATE  <b>Max. 4 years.</b>												
8.	WATERSHED TO BE ADDRESSED BY PROJECT AND HYDROLOGIC UNIT CODE  <b>EPA Surf Your Watershed:</b> <a href="http://cfpub.epa.gov/surf/locate/index.cfm">http://cfpub.epa.gov/surf/locate/index.cfm</a> <b>C.A.R.E.S.:</b> <a href="http://maproom.missouri.edu/atlas.html">http://maproom.missouri.edu/atlas.html</a> <b>MDC Rivers and Watersheds:</b> <a href="http://www.mdc.mo.gov/fish/watershed/">http://www.mdc.mo.gov/fish/watershed/</a> <b>MDNR Watershed Webpage:</b> <a href="http://www.dnr.mo.gov/env/wpp/watersheds/index.htm">http://www.dnr.mo.gov/env/wpp/watersheds/index.htm</a> <b>Know Your Watershed:</b> <a href="http://www.ctic.purdue.edu/KYW/KYW.html">http://www.ctic.purdue.edu/KYW/KYW.html</a> <b>MoWIN:</b> <a href="http://www.mowin.org">http://www.mowin.org</a>													
9.	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">TOTAL SECTION 319 FUNDS REQUESTED:</td> <td style="width: 10%; text-align: center;">\$</td> <td>To figure match take 40/60 = .6667</td> </tr> <tr> <td>MATCH FUNDS INCLUDING IN-KIND SERVICES: [40% OR MORE OF TOTAL PROJECT COST]</td> <td style="text-align: center;">\$</td> <td>(Request) \$250,000 x .6667 = \$166,675 (match)</td> </tr> <tr> <td>OTHER CONTRIBUTIONS (E.G., OTHER FEDERAL FUNDS)</td> <td style="text-align: center;">\$</td> <td></td> </tr> <tr> <td style="text-align: right;">TOTAL PROJECT COST:</td> <td style="text-align: center;">\$</td> <td></td> </tr> </table>		TOTAL SECTION 319 FUNDS REQUESTED:	\$	To figure match take 40/60 = .6667	MATCH FUNDS INCLUDING IN-KIND SERVICES: [40% OR MORE OF TOTAL PROJECT COST]	\$	(Request) \$250,000 x .6667 = \$166,675 (match)	OTHER CONTRIBUTIONS (E.G., OTHER FEDERAL FUNDS)	\$		TOTAL PROJECT COST:	\$	
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10.	<b>PROJECT AUTHORIZATION</b>													
	SIGNATURE OF SPONSORING ORGANIZATION'S AUTHORIZED REPRESENTATIVE	DATE												
	NAME OF THE REPRESENTATIVE (PRINT OR TYPE)	TITLE												
	TELEPHONE NUMBER													

11.	<b>BUDGET:</b> (See Attachments A and B for guidance.)		
	<b>EXPENSE ITEM</b>	<b>319 GRANT</b>	<b>MATCH (Non-Federal)</b>
	Salary		
	Fringe Benefits		
	Travel		
	Equipment > \$5,000 (Itemize Below)		
	Supplies		
	Contractual		
	Other		
	Indirect Costs ( %)*		
	<b>TOTAL PROJECT COSTS</b>		

\*Indicate indirect rate. The rate cannot exceed 13%.

**ITEMIZE EQUIPMENT:** (Include only equipment costing \$5,000 or more per item.)

<b>EQUIPMENT DESCRIPTION</b>		<b>COST</b>

12. **Detailed Budgets:**  
 1. Attach budget detail for each budget category identified in item 11.  
 2. Attach another budget that identifies cost by activity. See Attachment C for further guidance.

13. Is the proposed project a Clean Lakes activity for a classified lake or reservoir?  YES  NO  
 (See Request for Proposals for explanation of these terms.)  
 If so, what type of activity is it?  LWQA  Phase I  Phase II  Phase III  Other Activity

**MDNR Water Quality Standards (Page 32):**  
<http://www.sos.mo.gov/adrules/csr/current/10csr/10c20-7b.pdf>

14. Is the watershed on Missouri's 303(d) priority listing?  YES  NO  
 If yes, include the information from the 303(d) list (waterbody name; miles/acres affected; pollutant; and priority for restoration).  
 If your watershed is not included on the listing, describe your reasons for considering it a priority.

**MDNR Water Protection Program:** <http://www.dnr.mo.gov/env/wpp/waterquality/303d.htm>

15. Has a Watershed Management Plan been completed for this watershed?  YES  NO  
 If yes, when and by whom?  
**Ongoing Missouri Watershed Projects:**  
<http://www.mowin.org/Training/WQMP/localplans.html>  
 If no, will this project produce a Watershed Management Plan using the EPA's 9 elements?  YES  NO  
 (See Attachment F.)

16. **Watershed Characteristics:** (Include a map of the watershed.) Size of watershed (in acres), and information on outstanding resource waters or drinking water sources, if applicable.

**Biotic Assessment of Missouri Basins - Prepared by the Missouri Department of Conservation -**  
<http://www.cares.missouri.edu/mowiap/biotic.htm> - **Biological impairments**

**Section 303(d) Waters State of Missouri:** <http://www.dnr.mo.gov/env/wpp/waterquality/303d.htm>  
**- impairments, sources of impairments, priority for restoration (low, medium high)**

**Watershed Restoration Schedule:** <http://www.cares.missouri.edu/mowiap/apndx4.html>

**Missouri's Rivers and Watersheds:** <http://mdc.mo.gov/fish/watershed/>

**Stream Team Site:** <http://www.mostreamteam.org/>

**EPA Enviromapper:** <http://maps.epa.gov/enviro/emef/>

**USGS Science in Your Watershed:** <http://water.usgs.gov/wsc/index.html>

**(Example)\***

Green County SWCD Watershed Protection Project

Sac River Watershed (HUC 10290106) - 1,260,095 Acres

303(d) List of Impaired Waters within Basin:

Little Sac River, 27 miles, Fecal Coliform, Pt. & Nonpoint Sources, Waterbody ID# 1381 - Medium Priority.

Fellows Lake, 820 Acres, Nutrients, Ag & Suburban NPS, Waterbody ID# 7237 - Low Priority

Fellows Lake, 820 Acres, Mercury, Atmospheric Deposition, Waterbody ID# 7237 - Medium Priority

McDaniel Lake, 300 Acres, Nutrients, Ag & Suburban NPS, Waterbody ID# 7236 - Medium Priority (**Approved TMDL**)

Moderate biological impairment: Damming, Riparian Degradation, Channel Alterations, Urbanization, Flow Alterations, Sedimentation, Point Source Pollution, Nonpoint Source Pollution. High density of Natural Heritage sites. Three public drinking water intakes. 100% of hydrologic unit in public drinking water watersheds. Large public drinking water population. High potential for groundwater quality problems. High total animal unit density.

The Sac River Basin encompasses an area of 1,981 square miles in southwest Missouri. Counties that are partially or entirely within the basin are Barton, Cedar, Christian, Dade, Greene, Hickory, Lawrence, Polk, St. Clair, and Vernon. The basin is divided between the Osage Plains and Ozark Plateau physiographic regions. Most of the basin is located in the Springfield Plateau region of the Ozark Plateau. Caves, springs, and losing streams are found primarily in the southern areas of the watershed due to the soluble bedrocks (limestone and dolomite) that underlay that portion of the basin. The streams found in the basin range from clear with predominantly chert gravel/cobble streambeds to turbid with silt, sand, and gravel streambeds. The Sac River is a sixth order stream where it enters Truman Reservoir.

The Sac River basin is primarily rural. Land use is primarily pasture/grazing, with smaller amounts distributed among forest, row crop, and urban land practices. Animal agriculture is a major enterprise in the basin with beef cattle and dairy production being predominant. Nonpoint source pollution in the basin comes from various sources including urban development and runoff, mining, land conversion from forest to pasture, livestock with free access to streams and riparian corridors, channelization, road construction, and septic tanks.

\*This example represents a large HUC 8 watershed basin. Many of the projects will focus efforts on HUC 14 basins or smaller sub-basins. Applicants are encouraged to use a holistic watershed approach and therefore may be more successful if the geographical scope of their project is limited to these smaller areas. Refer to application instructions in packet for further information.

17. **Water Quality Problem:**

**MDNR TMDL Website:** <http://www.dnr.mo.gov/env/wpp/tmdl/index.html>

**Example for a implementation project**

The total area of the James River watershed addressed by this TMDL is 987 square miles. The James River headwaters begin in the eastern part of Webster County about 30 miles east of Springfield. It flows in a westerly direction for about 40 miles before turning southward to flow into Table Rock Reservoir about 40 miles below the mouth of Wilson's Creek. Below Galena, the river starts to be influenced by the backwaters of Table Rock Lake. Streams in this basin are typical Ozark streams with gravel substrate, clear water and representative Ozark flora and fauna. Stream habitat quality is fair to good throughout most of the basin.<sup>1</sup>

There are three impaired segments in the James River: from the headwaters to Lake Springfield Dam; from Lake Springfield Dam to the confluence with Finley Creek; from Finley Creek to Table Rock Lake. For the purposes of this TMDL, the river was divided into four sub-watersheds (Figure 1). These sub-watersheds were based on the location of gaging and water quality data sites. The three main tributaries to the impaired segments include Pearson Creek, Wilson Creek and Finley Creek. The city of Springfield, located in Greene County, is the largest urban area with a population of approximately 140,500. Due to the explosive increase of tourism in recent years, several smaller communities have also experienced rapid development. These include the communities of Ozark and Nixa located in Christian County.

Land uses in the watershed include urban development, agricultural use and forest. The urban area is estimated to be approximately 4% of the total watershed with the Wilson Creek basin being most heavily urbanized. The Springfield area is a shopping, industrial, medical, and educational center for the region. The Springfield area also offers a variety of tourist attractions including the Wilson's Creek Battlefield and the Bass Pro Shop. It is also in close proximity to the popular tourist destination, Branson, Missouri. Tourism has a tremendous impact on the local economy in the James River and Table Rock Lake Basins.

**Example for an info/ed or demo project**

The Ozarks Trails Council, Inc of the Boy Scouts of America recently opened a new office in Springfield, Missouri. The facility is in the Pearson Creek watershed, which feeds into the James River. Both waterbodies are listed on the current 303(d) list for impairment. The site sits on eight acres, and has been retrofitted with trails, native plantings, and other interpretive features. The property contains a stormwater detention basin built to protect the Pearson Creek watershed. The pond was built deeper than necessary to hold water at all times. There is a need in the Springfield area to show how stormwater detention basins, which usually have no other uses, and reduce property values, can be modified into a multiple-use, watershed friendly addition to the property. By combining an educational component of the demonstration project, the pond can show how the watershed functions as a connected unit.

18. List the specific pollutant(s) that will be addressed in the project and the proposed method to quantify load reductions: Examples include sediment, nutrients, fecal coliform bacteria, pesticides, etc. These can be quantified by using RUSLEII, STEPL, Monitoring, or other methods.

**EPA Site:** <http://www.epa.gov/owow/nps/categories.html>

**STEPL (Spreadsheet Tool for Estimating Pollutant Loads):** <http://it.tetrattech-ffx.com/stepl/>

19. List the name and number of the nonpoint source pollutant that will be addressed in this project. (See Attachment D.) [in Training Packet](#)

**Nonpoint Source Category and Subcategory:** <http://www.epa.gov/owow/nps/categories.html>

Primary (list one):

Secondary (list as many as you wish):

20. List the name and number for all of the activities that will be implemented during this project to reduce nonpoint source pollution. (See Attachment E.) [in Training Packet](#)

Primary (list one):

Secondary (list as many as you wish):

Is this an implementation project that will address the 303(d) listed nonpoint source impairment?

YES  NO

21. **Executive Summary:** Include a brief statement of the problem, description of the project, objectives, methods employed\*, products and partners. (\*See application instructions.)

(Example)

Osage Fork Animal Waste and Nutrient Management Implementation 319 Project

**PROJECT DESCRIPTION**

The Osage Fork project area, HU 10290201030 and 10290201040, lies within Laclede, Webster, and Wright counties with designated stream uses of warm water aquatic life protection and fishing, and livestock and wildlife watering. The Osage Fork has 6 miles of losing stream segments and is a tributary to the Upper Gasconade River. Based on the 2002 Missouri Farm Facts, Wright (1), Webster (2) and Laclede (4) are in the top four Missouri counties for dairy cattle numbers, with over 197,000 total dairy and beef cows in the three county areas. Nonpoint source pollution in the form of sediment from erosion and organic wastes from livestock contribute to excessive algal production in watershed streams.

**OBJECTIVES**

1. To construct 8 animal waste systems for dairies in the watershed to manage approximately 141,912 lbs of nitrogen, 22,075 lbs of phosphorus and 81,993 lbs of potassium from uncontrolled release to waterbodies.
2. To develop comprehensive nutrient management plans for all dairies with animal waste systems in the watershed.
3. To promote riparian buffer/vegetative filter strip establishment along 10 miles of stream.
4. To demonstrate manure transfer with six or more producers through cost-share on permanent underground pipe as a way to follow a comprehensive management plans
5. To control nutrients in lagoon effluent and educate producers about proper lagoon storage capacities and nutrient value of manure through rental of lagoon pumping equipment.
6. To demonstrate the benefits to water quality by improving manure distribution and by maintaining vegetative cover for reduction in erosion through implementation of 5 planned grazing systems.
7. To reduce streambank erosion by excluding livestock from riparian areas which will result in reduction of streambank erosion by 100,000 lbs/year.

**METHODS EMPLOYED**

This project follows two previous projects (Brush Creek AgNPS SALT and Osage Fork 319 Demonstration) in the area that generated interest in animal waste systems. Waste systems are cost prohibitive to many producers who cannot qualify for state or federal Farm Bill funding to construct an animal waste facility. This 319 project will help to fill the gaps within this watershed to control nonpoint source water pollution from area dairies through education and cost-share assistance on animal waste facilities, timely manure transfer from lagoons by demonstration of permanent underground pipe and rental of pumping equipment, planned grazing systems and protection of riparian corridors.

**PRODUCTS**

Internet website providing educational information about 319 project; 3 or more tours to showcase animal waste systems and permanent underground pipe for manure transfer; Powerpoint presentation that is continually updated as the project progresses; Comprehensive Nutrient Management Plans (CNMPs) for 8 or more dairy farms; Animal Waste System for 8 or more dairy farms; planned grazing system for 5 farms; load reduction information on nutrient delivery to the Osage Fork of the Gasconade River; quarterly and a final report that will document progress and identify challenges to the project.

**COOPERATING AGENCIES**

Laclede, Webster and Wright County Soil and Water Conservation Districts; Natural Resources Conservation Service; Missouri Department of Conservation, University Outreach and Extension, Missouri Department of Natural Resources, local producers and farm organizations.

22. **Project Plan and Objectives:**

Be **S.M.A.R.T.** when writing your objectives

1. Is the objective **SPECIFIC**? What problem will be addressed?
2. Is the objective **MEASURABLE**? How much, how many, how well can the problem or need be resolved?
3. Is the objective **ACTION-ORIENTED**? (**ACHIEVABLE**) Use action verbs.
4. Is the objective **REASONABLE**? (**RELEVANT** and **REALISTIC**) Can the result be achieved in the given time frame with the resources available?
5. Is the objective **TIME-BOUND**? When will the objective be accomplished?

See EPA's logic model at:

<http://yosemite.epa.gov/R10/ECOCOMM.NSF/webpage/measuring+environmental+results>

(Examples)

1. To provide a training facility in the Springfield area that will accommodate at least 200 installers/inspectors in a three-year period; and track correct installation, maintenance and inspection of on-site septic systems through post participation surveys.
2. To prevent potential nonpoint source pollutants from entering groundwater by educating residents about failing and un-maintained septic systems, through the use of septic system maintenance cost-share for 100 local on-site systems, and track the participant willingness to continue maintenance within 3 months.

23. **Schedule of Milestones:** (Project Start Date:

<b>Task</b>	<b>Responsible Party</b>	<b>Expected Completion Date</b>
Select a project manager	Sponsoring Organization	January 2009
Establish steering committee	Project Manager	January 2009
Develop QAPP	Monitoring committee	February 2009
QAPP approved by DNR	Project Manager	April 2009
Collect soil samples, conduct other background sampling	Field Technician	May 2009
Prepare/Physically set up Demonstration site(s)	Contract Construction Crew	June 2009
Signs – Developed and approved by DNR	Project Manager	June 2009
Draft news releases/ advertising upcoming events – approved by DNR	Project Manager	Ongoing throughout project and prior to each public event
Conduct field days (3)	Project Manager	July 2009, 2010, 2011
Compile photo journal of site development, sample collection, and field days	Project Manager	Ongoing throughout project
Submit Quarterly Reports	Project Manager	Quarterly
Submit Annual Reports		September 2009, 2010, 2001
Submit Final Report		November 2008

24. **Project Evaluation:** (Include an evaluation measure for each objective.)

Evaluation involves gathering evidence about a program and judging this information against measures of success or performance that have been set for the project.

**Before you start the evaluation process, ask yourself these questions:**

Where do you want to be by the end of the project?

What will the project accomplish? (Goals)

**Now that you know where you want to be by the end of the project, ask yourself...**

What steps do you need to take to get to these goals? (Objectives)

**Next, how will you know when you have accomplished the project objectives?**

What are the proposed outcomes of your objectives?

What results or changes will this project bring about?

**And last, how do you measure these results or changes?**

Some tools commonly used for evaluation

Pre and Post Surveys

Pre and Post Tests

Monitoring reduction (amount of nutrient P reduced due to filter strips)

Changes in product buying habits

Changes in other habits (lawncare, fertilizing, etc)

Photographic journals

Load Reduction Reporting: Spreadsheet Tool for Estimating Pollutant Load (STEPL)

<http://it.tetrattech-ffx.com/stepl/default.htm>

STEPL Data Worksheet: (also included in packet) [http://it.tetrattech-ffx.com/stepl/STEPLmain\\_files/STEPL%20Field%20Data%20Entry%20Sheets.pdf](http://it.tetrattech-ffx.com/stepl/STEPLmain_files/STEPL%20Field%20Data%20Entry%20Sheets.pdf)

Other Available Models: [http://it.tetrattech-ffx.com/stepl/models\\$docs.htm](http://it.tetrattech-ffx.com/stepl/models$docs.htm)

25. **Products Generated:** (Provide a numbered list of the products such as newsletters, field days, publications, etc. that will be produced as part of the project.)

**(Examples)**

Newsletters/Informational Brochures  
Demonstration Sites  
Field Days  
Media (Videos, Radio PSA's, Presentations)  
BMP's  
Clean-Up Events  
Quarterly Reports  
Annual Report  
Final Report  
QAPP  
Signs  
Photo Journals

For more examples, see EPA website: <http://www.epa.gov/owow/nps/toolbox/>

**(See Other Examples in Training Packet)**

26. **Public Involvement:** (Describe public involvement and attach letters of commitment detailing the role partners will play in this project.)

(See letter of **commitment** examples in Training Packet)

27. **Comments/Miscellaneous:**

Additional sources of information:

319 Grant Application Packet

<http://www.dnr.mo.gov/env/wpp/nps/319nps-proj-req.htm>

Missouri's Nonpoint Source Management Plan

<http://www.dnr.mo.gov/env/wpp/nps/mgmtplan/index.html>

Staff Contacts/E-mail addresses for Watershed Protection Staff:

Greg Anderson -	<a href="mailto:greg.anderson@dnr.mo.gov">greg.anderson@dnr.mo.gov</a>
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