

Project: 9011-008 Walnut Creek Watershed Improvement Project
Project Sponsor: Poweshiek County Soil and Water Conservation Districts

Length of Project: January 1, 2010 – June 30, 2013

Financial Accountability

| Summary: Watershed Improvement Review Board Funds | | | | |
|--|--|--|--------------------------------------|---------------------------------|
| Grant Agreement Budget Line Item | Total Funds Approved (\$) | Total Funds Approved As Amended(\$) | Total Funds Expended (\$) | Available Funds (\$) |
| Water & Sediment Control Basins ** | \$39,000 | \$69,770 | \$54,527.17 | \$15,242.83 |
| Grade Stabilization Structures* | \$63,000 | \$15,870 | \$0 | \$15,870 |
| Grassed Waterways* | \$99,500 | \$69,310 | \$55,900.39 | \$13,409.61 |
| Terraces | \$9,500 | \$9,500 | \$7,254.14 | \$2,245.86 |
| Prescribed Grazing* | \$2,000 | \$660 | \$648.10 | \$11.90 |
| Salary and Benefits** | \$0 | \$47,890 | \$26,996.81 | \$20,893.19 |
| | | | | |
| Totals | \$213,000 | \$213,000 | \$145,326.61 | \$67,673.39 |
| Difference | | | | \$67,673.39 |

* See Attachment 1, Budget Amendment Request 9011-008-01

** See Attachment 2, Budget Amendment Request 9011-008-02

Water and Sediment Control Basins: Our district had a three year period between 2008-2010 with heavy rains that clearly demonstrated the potential value of water and sediment control basins; therefore, resulting in greater than expected landowner signups for this practice.

Grade Stabilization Structures: The district tried to promote grade stabilization structures; however, building these structures to Natural Resources Conservation Service (NRCS) specifications can be expensive. Therefore, landowners preferred to use basins, terraces, and waterways to control gully erosion because these practices were more cost effective. Some applications for grade stabilization structures were submitted, but a few were not eligible due to inadequate upland treatment. A few landowners had thought that they could put in recreational ponds, but did not have a resource concern to protect, so they were not eligible. One landowner had an approved project and NRCS Environmental Quality Incentive Program (EQIP) contract, but canceled due to lack of money. After initially working with NRCS technicians, another landowner decided to build a grade stabilization structure on his own. He eventually preferred to repair an existing structure, instead of building in a new site, which is not eligible for cost share.

Grassed Waterways: In the first two years of this project there was a lot of interest in establishing waterways (10 practices completed); however, in the last year drier conditions have reduced landowner interest in this practice (2 practices completed) because the need wasn't as apparent as wetter years.

Prescribed Grazing: We had less interest in this practice then originally predicted. There were only a few landowners that were actually interested in doing the prescribed grazing practices as specified. One farmer completed all of his managed grazing between the time of the Walnut Creek Iowa Department of Agriculture & Land Stewardship – Division of Soil Conservation (IDALS-DSC) Development Grant and the beginning of the Implementation grant. There were two prescribed grazing projects that installed livestock waterline. One installed 2,660 feet, and the other had 1,870 feet of waterline.

Salary and Benefits: An amendment request was approved effective November 4, 2011 to add a salary line item in order to maintain a coordinator position. In June 2011, the Environmental Protection Agency (EPA)/Department of Natural Resources (DNR) funded 319 portion of the project which mainly funded salary ended, and the coordinator took leave from June 15 to August 15, 2011. The amendment with additional funds from the Little Bear Creek IDALS-DSC Development Grant provided funds for a full-time coordinator again. However, in May 2012 the coordinator vacated his position and his responsibilities were absorbed by a part-time employee and other staff. Due to an increased interest in water and sediment control basins an amendment on November 2, 2012 was approved to move \$8,000 from the salary line item to the water and sediment control basins line item.

Unspent Balance: There was a lot of interest at the beginning of the project in completing practices, but in the last year there appeared to be less interest. Weather, contractor availability, and availability/timing of NRCS EQIP funds likely reduced the number of applicants during the duration of the grant. It is also believed that some landowners chose to complete projects without cost-share assistance due to having more cash available as the result of high crop prices. In the last year of the grant, those wanting to participate had already completed projects. The timing of the full-time coordinator vacating his position likely affected the number of applicants in the last year as well. And unspent salary funds resulted from the full-time watershed coordinator being replaced by a part-time coordinator.

| Summary: Total Project Funding | | | | | | |
|--------------------------------|----------------------------------|-------------|----------------------------------|-------------|----------------------------------|-------------|
| Funding Source | Cash | | In-Kind Contributions | | Total | |
| | Approved Application Budget (\$) | Actual (\$) | Approved Application Budget (\$) | Actual (\$) | Approved Application Budget (\$) | Actual (\$) |
| WIRB | 213,000 | 145,326.61 | 0 | 0 | 213,000 | 145,326.61 |
| WSPF | 332,460 | 159,838.05 | 0 | 0 | 332,460 | 159,838.05 |
| 319 | 170,461 | 86,292.80 | 0 | 0 | 170,461 | 86,292.80 |
| EQIP | 666,570 | 84,392.28 | 0 | 0 | 666,570 | 84,392.28 |
| IFIP | 0 | 360.00 | 0 | 0 | 0 | 360.00 |
| Landowner | 334,785 | 162,789.88 | 0 | 0 | 334,785 | 162,789.88 |
| Totals | 1,717,276 | 638,999.65 | 0 | 0 | 1,717,276 | 638,999.62 |

| | | |
|--|------------------------------|------|
| Watershed Improvement Fund Contribution: | Approved application budget: | 12 % |
| | Actual (amended): | 23 % |

During the 2009 NRCS EQIP ranking there were nine applications that did not receive EQIP funds even though they were eligible; therefore, the SWCD applied for this WIRB grant. The approved WIRB application budget outlined that 50% EQIP funds would be combined with 25% IDALS-DSC Watershed Protection Fund (WSPF) funds, unless EQIP funds were not available, then 50% WIRB funds would be used with 25% WSPF funds to provide 75% cost share to landowners.

An amendment was approved on November 4, 2011 that increased the WIRB contribution from 12% to 26%. In June 2011, the EPA/DNR 319 portion of the project, which mainly funded salary ended, so a salary line item was added to the budget. The IDALS-DSC WSPF portion, which funded practices, also ended but was extended to utilize \$10,300 of obligated funds until December 2011. WIRB funds were moved from the grade stabilization structure, grassed waterway, and prescribed grazing line items to provide a salary line item and provide more funds for water and sediment control basins. Even with these changes, the amendment request form showed that the environmental benefits goals remained similar to what the original agreement had, when corrected. Also, the amendment provided the flexibility to use WIRB funds to pay cost share up to 75%, if EQIP and IDALS-DSC Iowa Financial Incentive Program (IFIP) funds were not available (Attachment 1).

An amendment approved on November 2, 2012 allowed the modification of the water and sediment control basin budget goals. A total of \$8,000 was moved from the salary to the water and sediment control basins line item, in order to get closer to our sediment delivery reduction goals and complete the project (Attachment 2).

EPA/DNR Section 319 funds were mainly used for salary, training, supplies, and information and education, but some funds provided cost share for a prescribed grazing practice. EQIP was utilized to provide cost share for Best Management Practices (BMPs), together with money from Section 319, IFIP, WSPF, landowners, and/or WIRB. EQIP made up 15% of the total cost share for BMPs, WSPF 29%, Section 319 < 1%, IFIP < 1%, landowners 30%, and WIRB 26%. IFIP provided money for a summer construction incentive. The combined use of EQIP, WSPF, Section 319, WIRB, and IFIP, allowed the SWCD to get the greatest number of conservation practices on the ground within the time frame provided.

The approved WIRB amount was not entirely spent due to the time constraints of this agreement, time constraints of other cost share funds to provide a combined rate of 75%, and lower landowner participation than anticipated in the last year of the project. With additional time and more information/education activities, the SWCD may have been able to get more practices completed.

Environmental Accountability

The 2 major goals for the Walnut Creek watershed were:

- Reduce sediment delivery by **3,205 tons**.
- Develop an Information and Education program directed at landowners, operators, and residents.

The 4 project objectives were:

- Administer the Walnut Creek Watershed Improvement Project to ensure all objectives and activities planned are implemented.
- Install conservation practices on areas where 50% or more of the land has 1 ton/year soil loss or more.
- Reduce sediment delivery to Walnut Creek by **1,015 tons** of sediment per year **as amended** (Attachment 1&2).
- Continue an Information and Education Program to increase awareness and knowledge of Walnut Creek water quality issues to watershed residents, and the local community.

*Progress: Due to a lower than expected participation in cost share programs to install conservation practices, amendments were made to reduce the number of practices and the sediment delivery goal was adjusted to **1,015 tons** of sediment per year. Even with the amendments, the environmental benefit goals remained similar for the practices that were completed. We got close to our amended sediment goal by obtaining an estimated **949 tons** per year for completed practices.*

Proposed Information and Education Activities:

- Develop an IOWATER volunteer water monitoring program in the watershed. Results will be posted on the IOWATER database and data will be analyzed for trends in water quality.
- Three field days will be sponsored by the Poweshiek SWCD for landowners and residents within the watershed. One field day will be held annually. Topics may include grazing management systems, buffer programs, and benefits of various BMPs in relation to water quality and soil erosion.
- Six newsletters will be developed and distributed to residents and landowners within the watershed. Topics will include cost share programs available for BMP installation, volunteer monitoring information, benefits of BMPs, highlights of specific landowner practices, and sediment loading reductions achieved among other things.
- One-on-one contact with landowners owning high priority land, cow/calf operators, eligible buffer acres, and open feedlot owners.

9011-008 Walnut Creek Watershed Improvement Project Final Report

Practices and Activities:

Summary: Practices and Activities

| Practice or Activity | Unit | Approved Application Goal | Approved Goal As Amended | Accomplishments | Percent Completion |
|---|------|---------------------------|--------------------------|---|-----------------------------|
| Newsletters / Media Articles | No. | 6 | | 7 | 117 |
| Field Days/ Informational Public Meetings | No. | 3 | | 3 – Includes IOWATER Training in Oct. 2012 where a presentation was given | 100 |
| One-on-One Contacts | No. | | | 104 | 100 |
| Water & Sediment Control Basins** | No. | 32 | 47 | 50 | 106 amended 156 original |
| Grade Stabilization Structures* | No. | 9 | 2 | 0 | 0 |
| Grassed Waterways* | Ac. | 33 | 60 | 54.4 | 91 amended 165 original |
| Terraces | Ft. | 4500 | | 2975 | 66 |
| Prescribed Grazing* | Ac. | 90 | 80 | 52 | 65 amended 58 original |

* See Attachment 1, Budget Amendment Request 9011-008-01

** See Attachment 2, Budget Amendment Request 9011-008-02

Descriptions of Information and Education Activities:

- On February 17, 2010 a news release was sent to all local papers, and flyers were also displayed at farm stores, implement dealers, gas stations and elevators in Brooklyn, Malcom, and Grinnell.
- On March 15, 2010 a public presentation on Walnut Creek Watershed projects was given in Pella at the county's annual contractor's meeting.
- Four Walnut Creek Watershed boundary signs were put up along two main highways that go through the watershed to raise awareness of the creek.
- On December 15, 2011 a public meeting was held where four Walnut Creek farmers attended.
- A public meeting was held on April 5th, 2012 at Grinnell College with Mary Skopec (IOWATER Program Coordinator) and Jennifer Kurth (Technical Development and Biological Impairments) giving presentations on Monitoring and Assessment, and on the Stressor Identification for Walnut Creek, with 19 people in attendance.
- Seven news releases were printed in local newspapers on February 17th, April 22nd, June 16th, and December 13th in 2010; on February 28th and November 16th in 2011; and on August 17th in 2012.
- An IOWATER Introductory Workshop was held on October 6, 2012 at Grinnell College and the watershed coordinator gave a brief presentation on the importance of continued

monitoring on Walnut Creek and showed maps of the watershed with established monitoring sites.

Practice Load Reductions:

The following table is from the WIRB ledger. The pre-project total estimated sediment delivery in the watershed was 23,224 tons per year. Prior to the WIRB grant, before January 2010, the watershed implemented practices with an estimated 352.5 tons per year sediment reduction. During the duration of the WIRB grant the watershed implemented practices with an estimated 949 tons per year sediment reduction. There was a total estimated 1,301.5 tons per year sediment reduction.

| Pollutant | Cumulative Loading Reductions | |
|------------|-------------------------------|------------|
| Sediment | 949 | tons/year |
| Nitrogen | n/a | lbs./year |
| Phosphorus | 1,233.8 | lbs./year |
| Other | n/a | units/year |

Water Quality Monitoring:

Eight Walnut Creek sites were monitored utilizing the IOWATER volunteer water monitoring program. A SWCD employee monitored 8 Walnut Creek sites in 2008. Three volunteers conducted IOWATER monitoring and collected water samples to send to the State Hygienic Lab in 2009 and 2010. Iowa Department of Natural Resources (IDNR) provided a person to collect water samples for State Hygienic Lab testing on 10 different days, about every 2 weeks in 2011. A SWCD employee, SWCD summer intern, and 2 volunteers conducted monitoring on 3-8 sites in 2012. An IOWATER Introductory Workshop was held on October 6, 2012 at Grinnell College, and 2 volunteers were recruited to monitor sites in the spring of 2013. Walnut Creek graphical summaries of the State Hygienic Lab's water monitoring results for March 2009 through September 2011 are attached (Appendix, A7-A16). The University of Iowa Hygienic Lab analyzed samples for nitrogen, E. coli bacteria, ammonia nitrogen, total phosphorus, orthophosphate, and total suspended solids.

An IDNR Stressor Identification Report for Walnut Creek is attached, which you can review for more information (Attachment 3). The report concludes that increased peak flow frequency and magnitude, decreased macro-habitat complexity, decreased in-stream cover and epifaunal micro-habitat, and increased suspended and deposited fine sediments are the primary stressors that are capable of causing the biological impairment in the Walnut Creek watershed. The identified stressors are all related to the channelization of the majority of the stream, and are not pollutants. Therefore, a Total Maximum Daily Load (TMDL) is not needed to address this impaired waterbody.

Even though a TMDL is not required to address the stressors identified for Walnut Creek, continued monitoring is necessary to track the effectiveness of improvements made through

BMPs within the watershed. Continued monitoring is important to assess the status of water resources and historical trends of the creek. Also, there are currently hog confinements proposed within Chester Township, the headwaters of Walnut Creek, and continued monitoring will be beneficial to monitor the effects of these confinements, if they are approved.

Program Accountability/Challenges:

The Walnut Creek Watershed Improvement Project successfully reduced sediment delivery to Walnut Creek by providing cost share to install conservation practices on land with sediment delivery greater than 1 ton per acre per year. The project did not meet the sediment delivery reduction goal of 3,205 tons per year, which was in the application. However, it was discovered that the original sediment delivery calculations incorrectly included the waterway drainage area as treated, instead of the seeded area (Attachment 1). With this considered, the adjusted sediment delivery goal of 1,015 tons of sediment per year was nearly achieved by the amount of conservation work done (Attachment 2). During the WIRB grant sediment was reduced by 949 tons per year, which is 93% of the amended goal. The SWCD's amended goals and achievements were only 1/3 of the original goal, but the SWCD will be returning approximately 1/3 of the dollars back to WIRB. Also, prior to the WIRB grant, before January 2010, watershed implemented practices provided an estimated 352.5 tons per year sediment reduction as well, for a total sediment reduction of 1,301.5 tons per year.

It was determined that most of the landowners were well educated about conservation methods, and had gotten a lot of conservation information from neighbors and contractors. The news releases discussed conservation practices, but mainly reported the status of the Walnut Creek Watershed cost share and water quality monitoring. Most landowners were willing to help improve the condition of Walnut Creek by doing their part on their land. Although landowners were willing to participate, and were aware of the watershed project's cost share, they needed time to incorporate their conservation project into their budget. Sometimes contractors were so busy that they had to put landowners on a waiting list. Some landowners, who were interested during the assessment survey, had completed their conservation work when they were able, before the implementation grant began.

The combination of funding sources worked well to fund the Walnut Creek Watershed project. The EPA/DNR 319 administrative and practice funds were utilized well together with the IDALS-DSC WSPF and NRCS EQIP practice funds. The addition of WIRB practice funds allowed approval of multi-funded applications throughout the year, instead of waiting for the NRCS EQIP ranking. The WIRB grant required more accounting and reporting, but the SWCD was able to get more conservation work done. It was very helpful for the SWCD to use office space at the NRCS office. Landowners and farmers could view watershed posters and contact the project coordinator when they came for other business at the USDA Service Center.

The search for water monitoring volunteers uncovered a lot of local support and interest. High school biology teachers were willing to help, but said that it was impractical to schedule monitoring within a class period. Grinnell College advertised on campus about the watershed project, and three students were found that volunteered for water monitoring in 2010. Two Grinnell College students helped complete IOWATER biological assessments in the summer of 2012. An IOWATER Introductory Workshop was held on October 6, 2012 at Grinnell College,

and two volunteers were recruited to monitor sites in the spring of 2013. College students at the workshop volunteered to monitor sites on Little Bear Creek, because this creek is closer to campus. The two Walnut Creek volunteers are from a Grinnell Community Action to Restore Environmental Stewardship (CARES) group that are opposing hog confinements proposed within Chester Township, the headwaters of Walnut Creek watershed.

The Walnut Creek Watershed Project also directed an Information and Education Program towards all area landowners and farmers about the importance of conservation efforts, and was encouraged by the positive response. While it is evident that much more conservation work still remains to be done, the residents of the Walnut Creek Watershed have shown that they will strive to conserve natural resources.

The IDNR Stressor Identification Report (Attachment 3) suggests stream channel reconstruction, runoff detention basins, cover crops and no-till agriculture, and riparian vegetation buffers, as BMPs that could be used to help restore the habitat in Walnut Creek. However, some of these practices are expensive or are not favored by landowners.

This project was challenged to spend the entire grant award on high priority land during the term of the contract because of weather, contractor availability, availability/timing of NRCS EQIP funds, adequate time for landowners to budget for practices, and landowners completing BMPs on their own. Also, the cost of BMPs was an obstacle to getting more practices on the ground for some landowners. The high expense of construction within Poweshiek County, had landowners paying more than 25% cost share because construction costs were greater than the EQIP average cost amounts. Hopefully by addressing these challenges, the Poweshiek SWCD can continue to help landowners implement BMPs with the Walnut Creek watershed.

Appendix Items & Attachments:

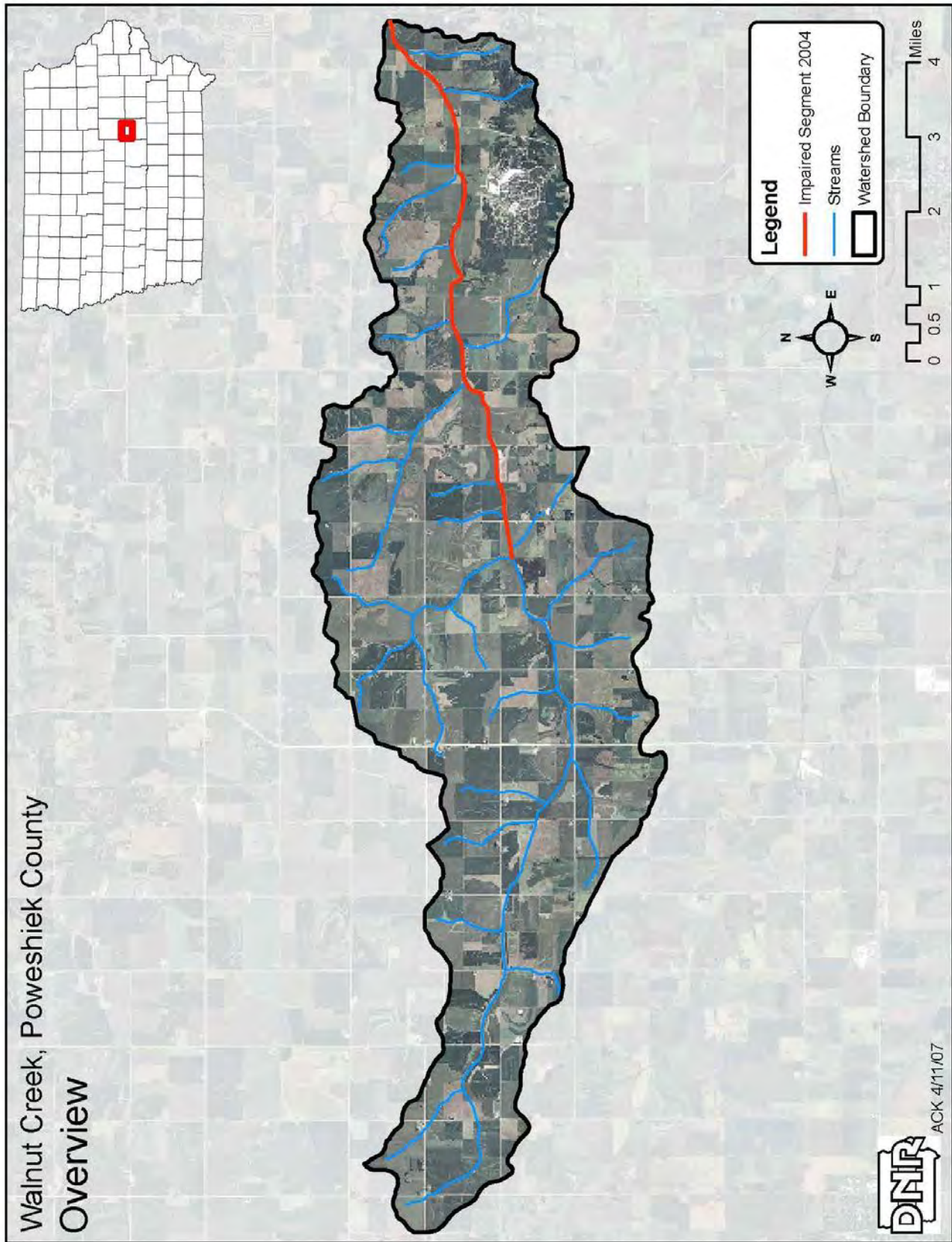
Walnut Creek Watershed Improvement Project Amendments, University of Iowa Hygienic Lab water monitoring data, IDNR Stressor Identification report, BMP photos, maps, flyers, newsletter /articles, WIRB financial ledger, and final funding request form.

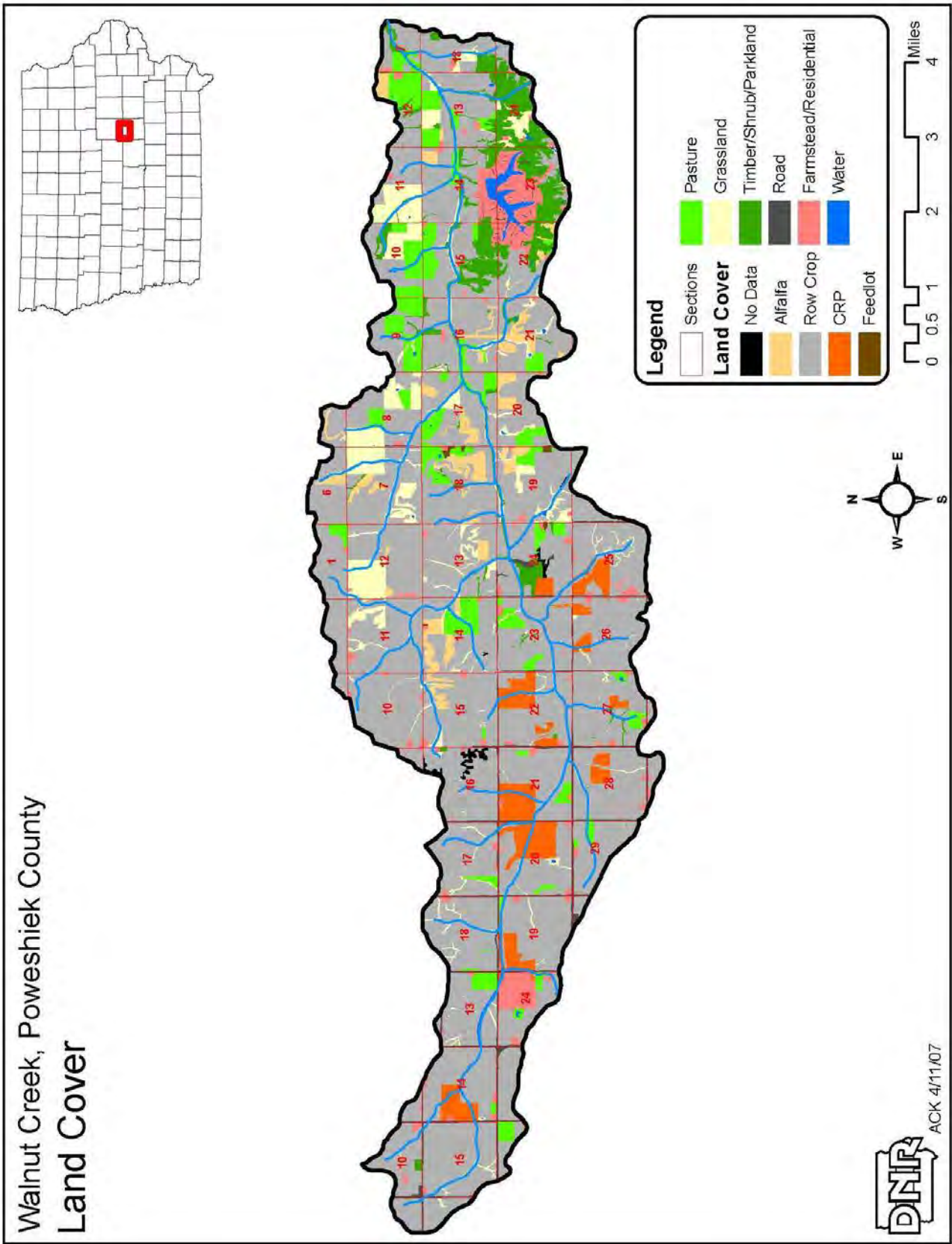
APPENDIX

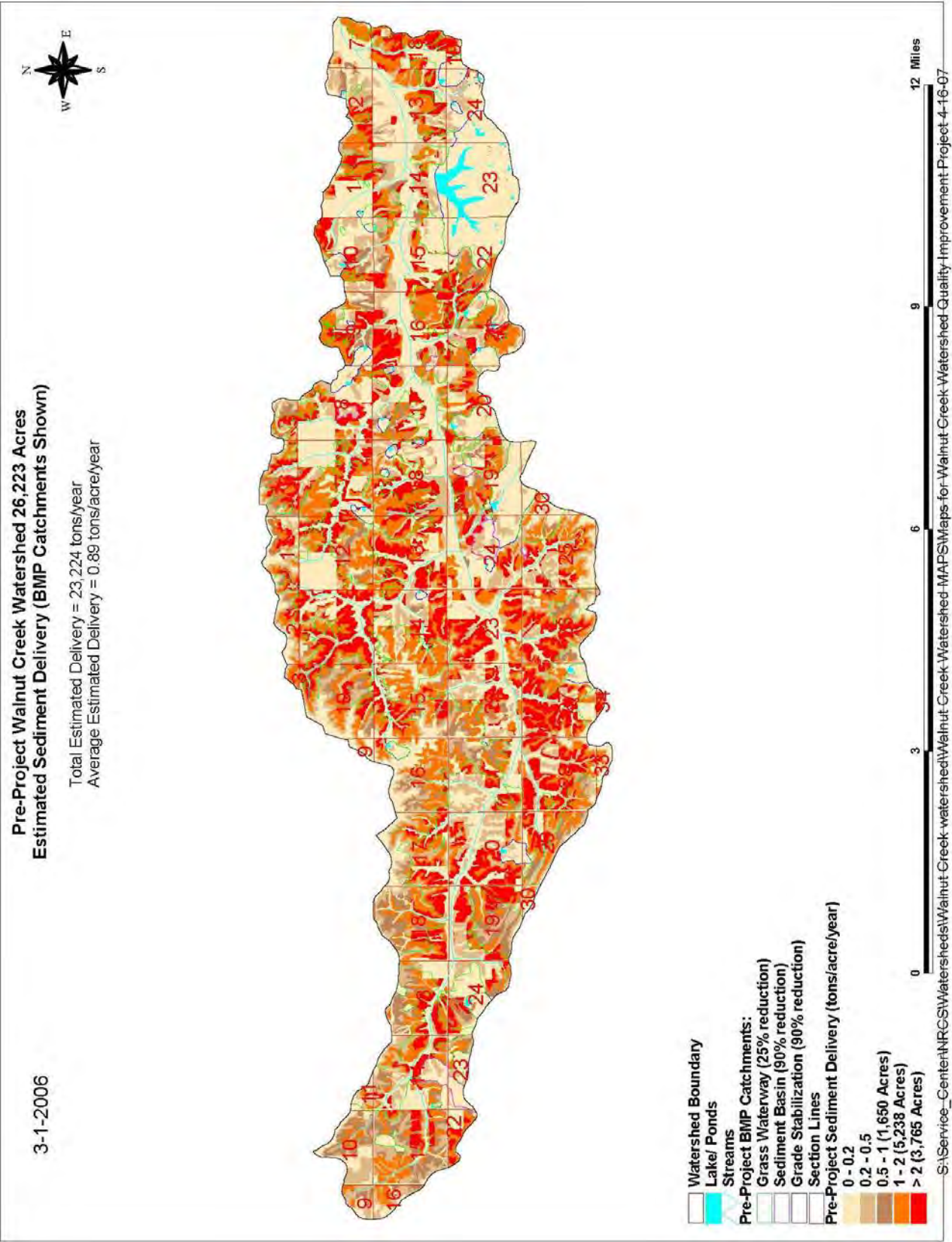
| | |
|--|---------|
| Walnut Creek Overview Map..... | A2 |
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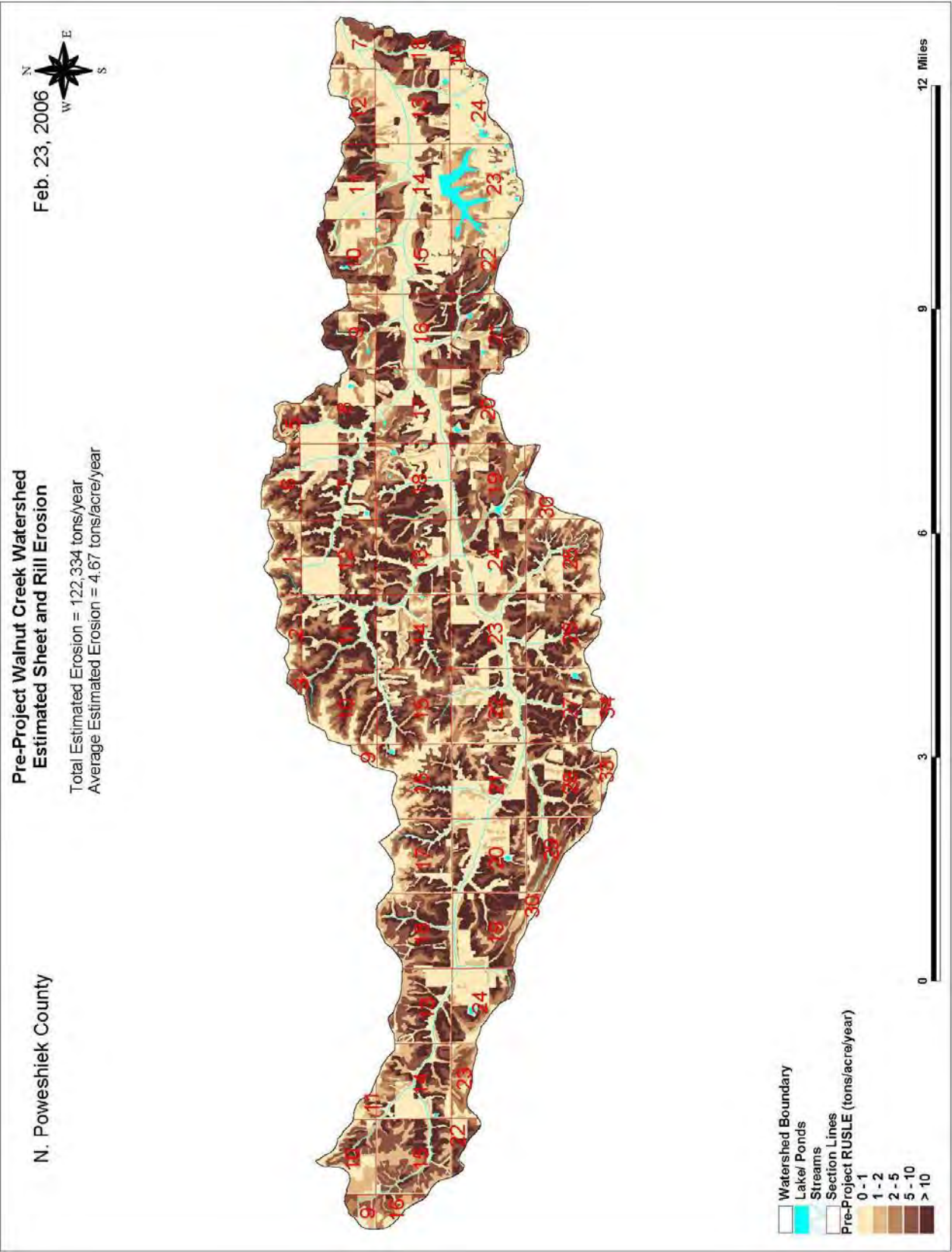
Attachments

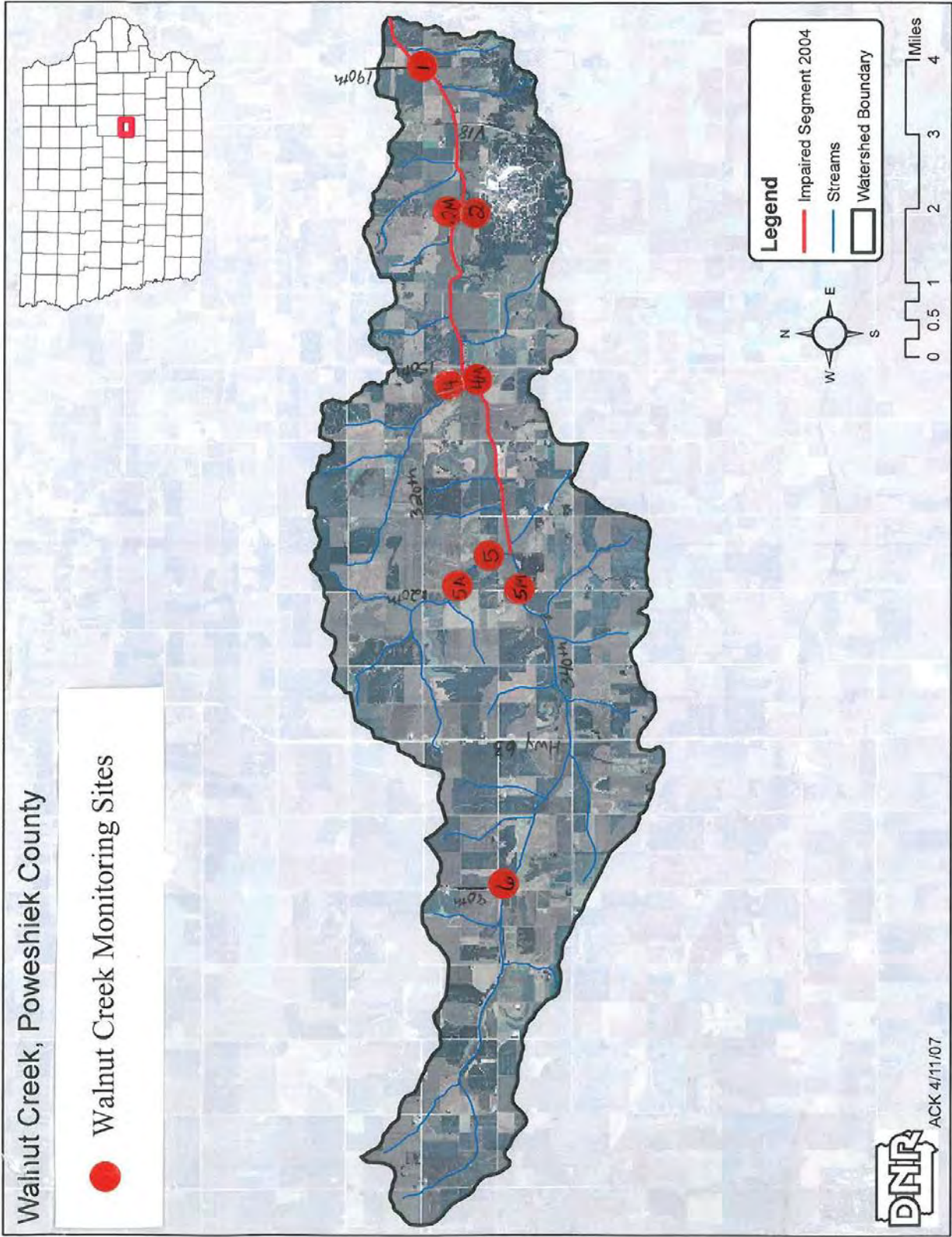
- Attachment 1 – Budget Amendment Request 9011-088-01
- Attachment 2 – Budget Amendment Request 9011-088-02
- Attachment 3 – IDNR Stressor Identification Report
- Attachment 4 – WIRB Ledger
- Attachment 5 – Final Funding Request Form



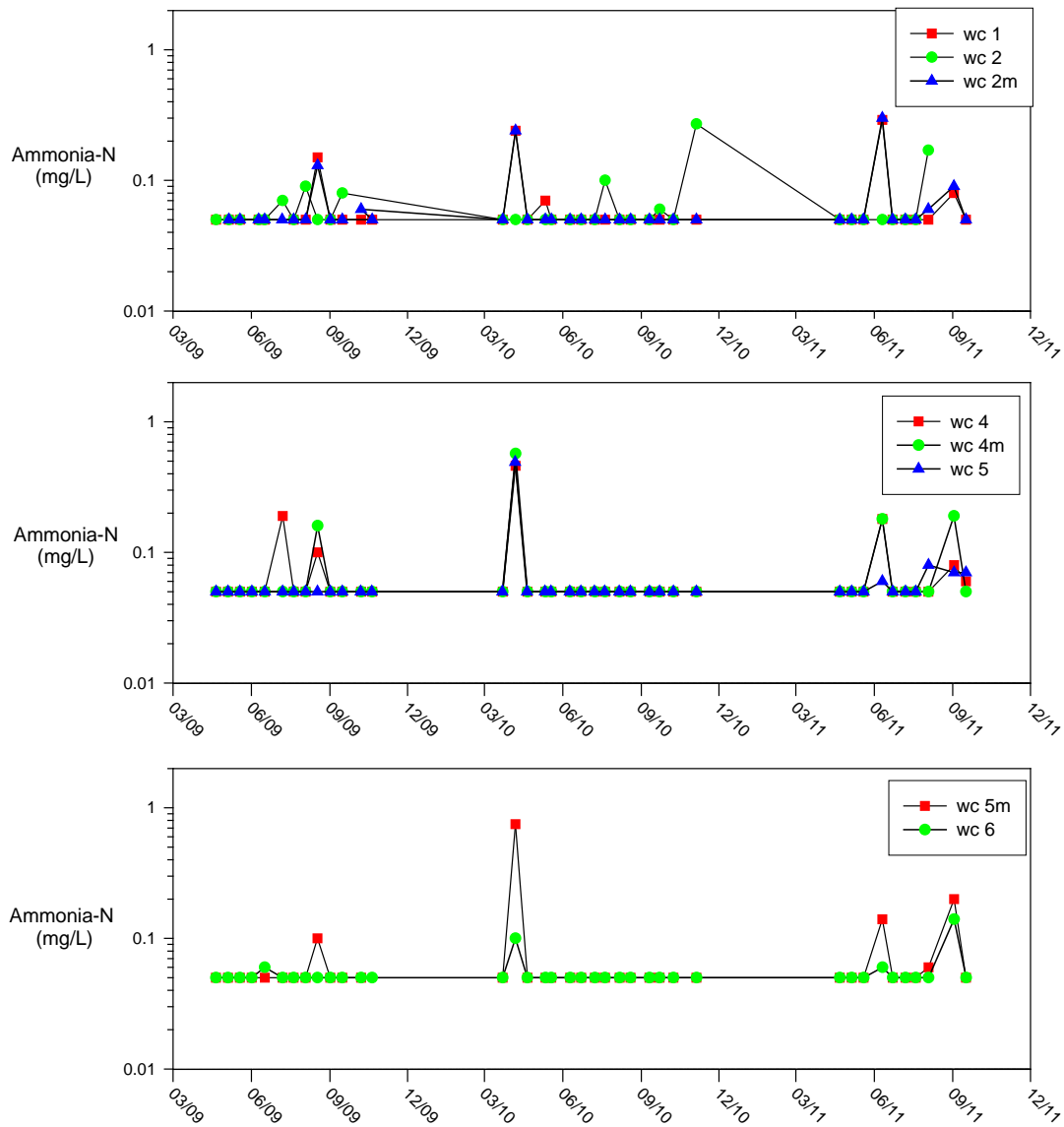




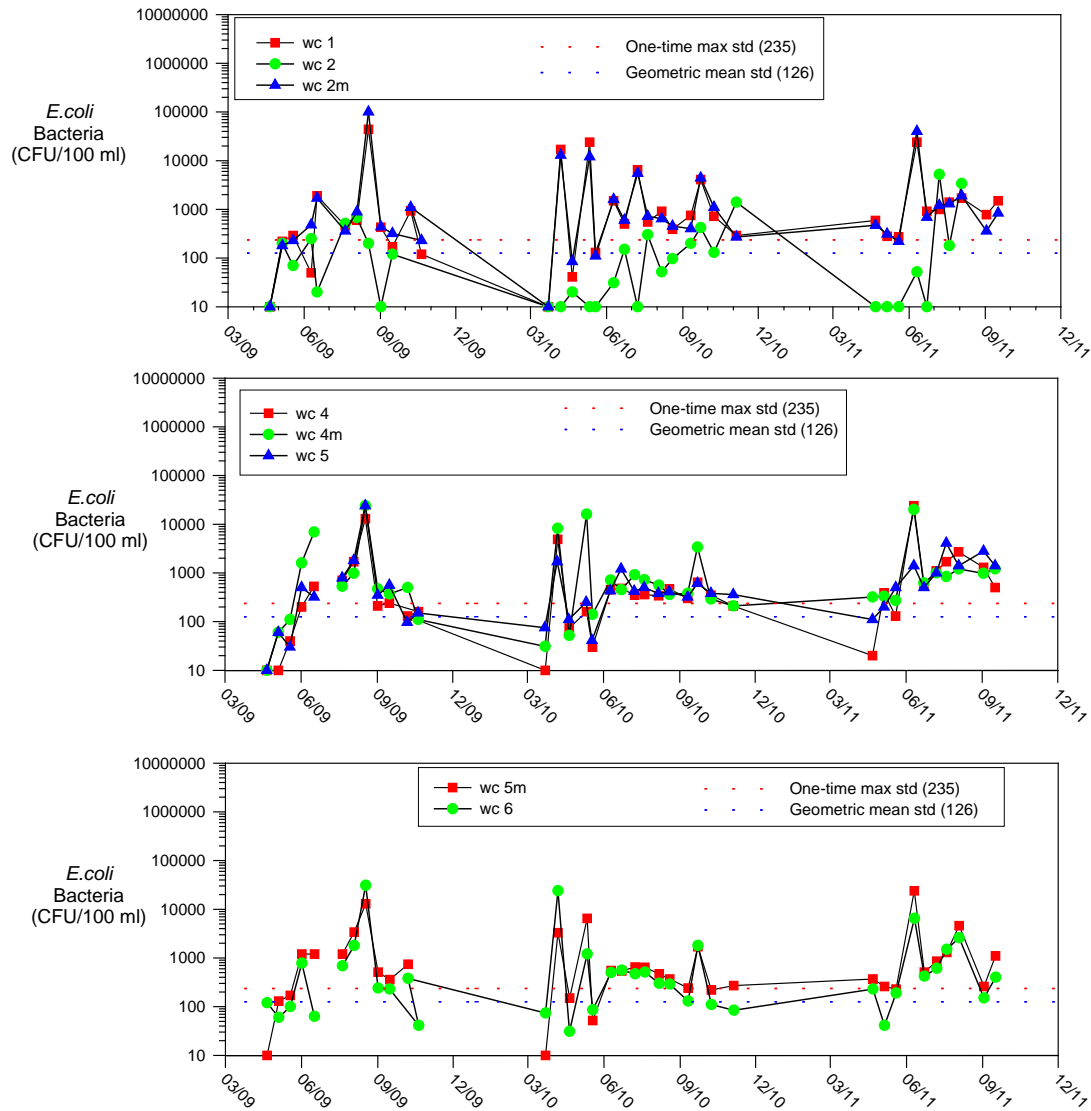




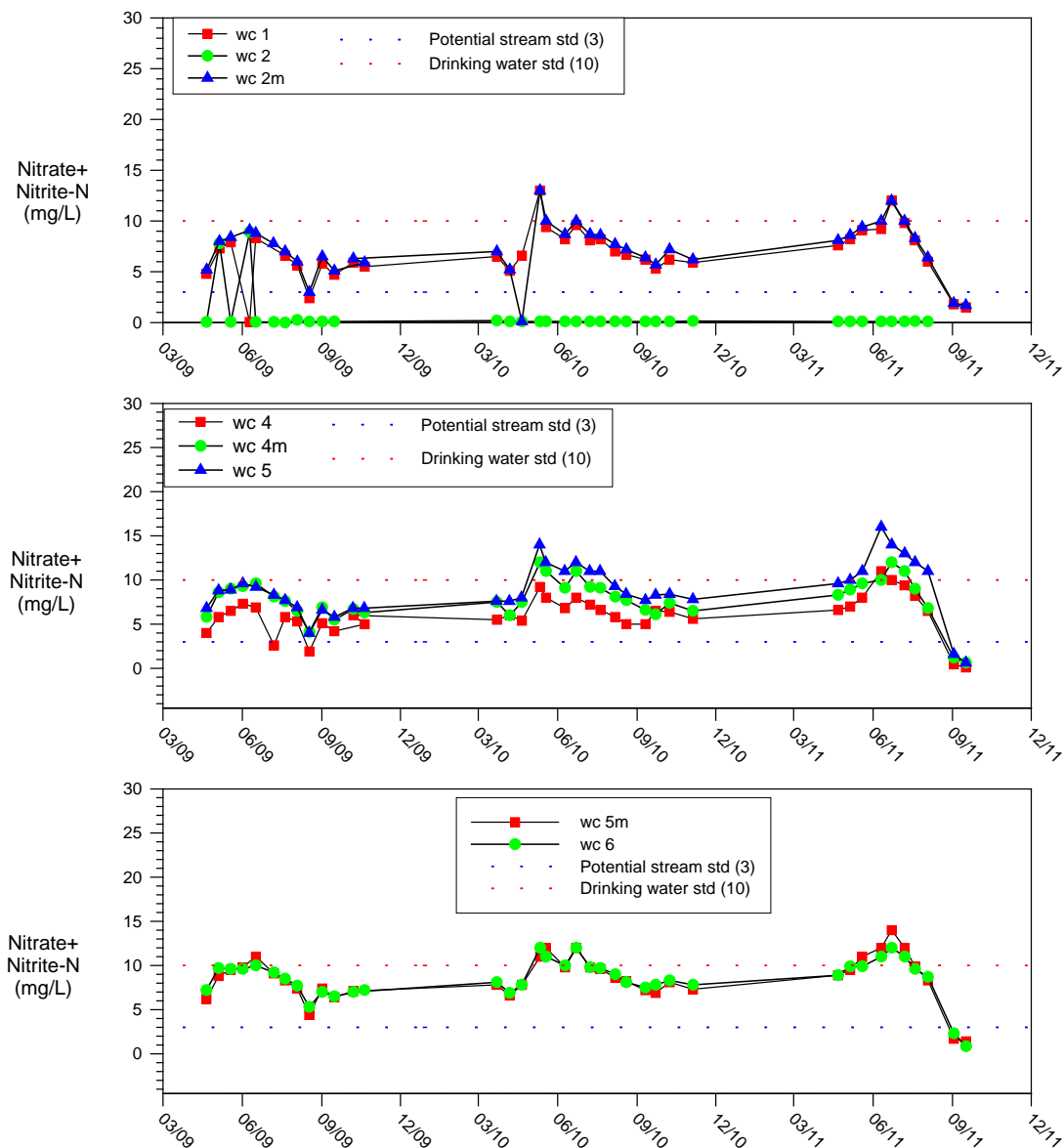
Walnut Creek Results March 2009 through 2011



Walnut Creek Results March 2009 through 2011

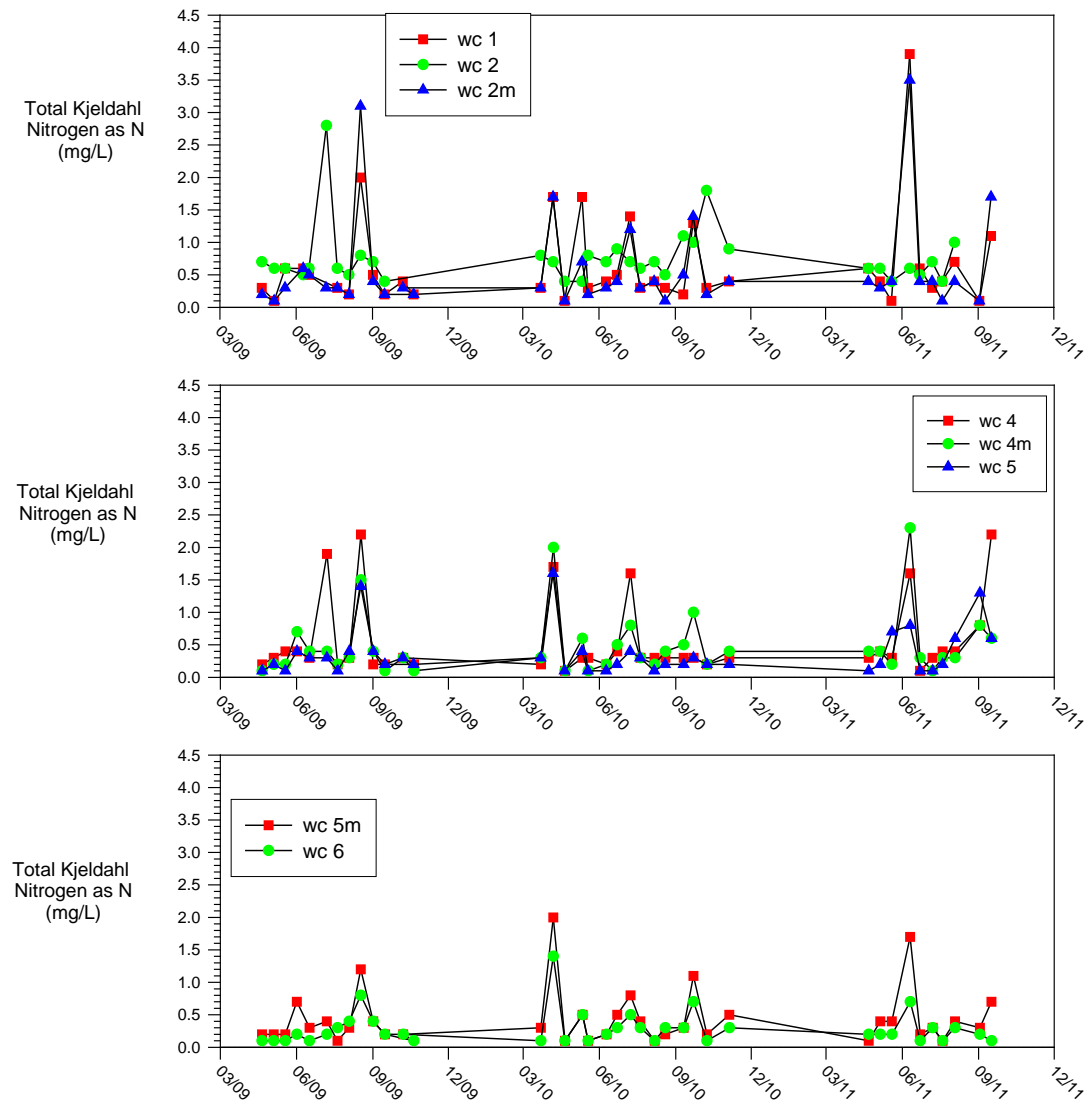


Walnut Creek Results March 2009 through 2011

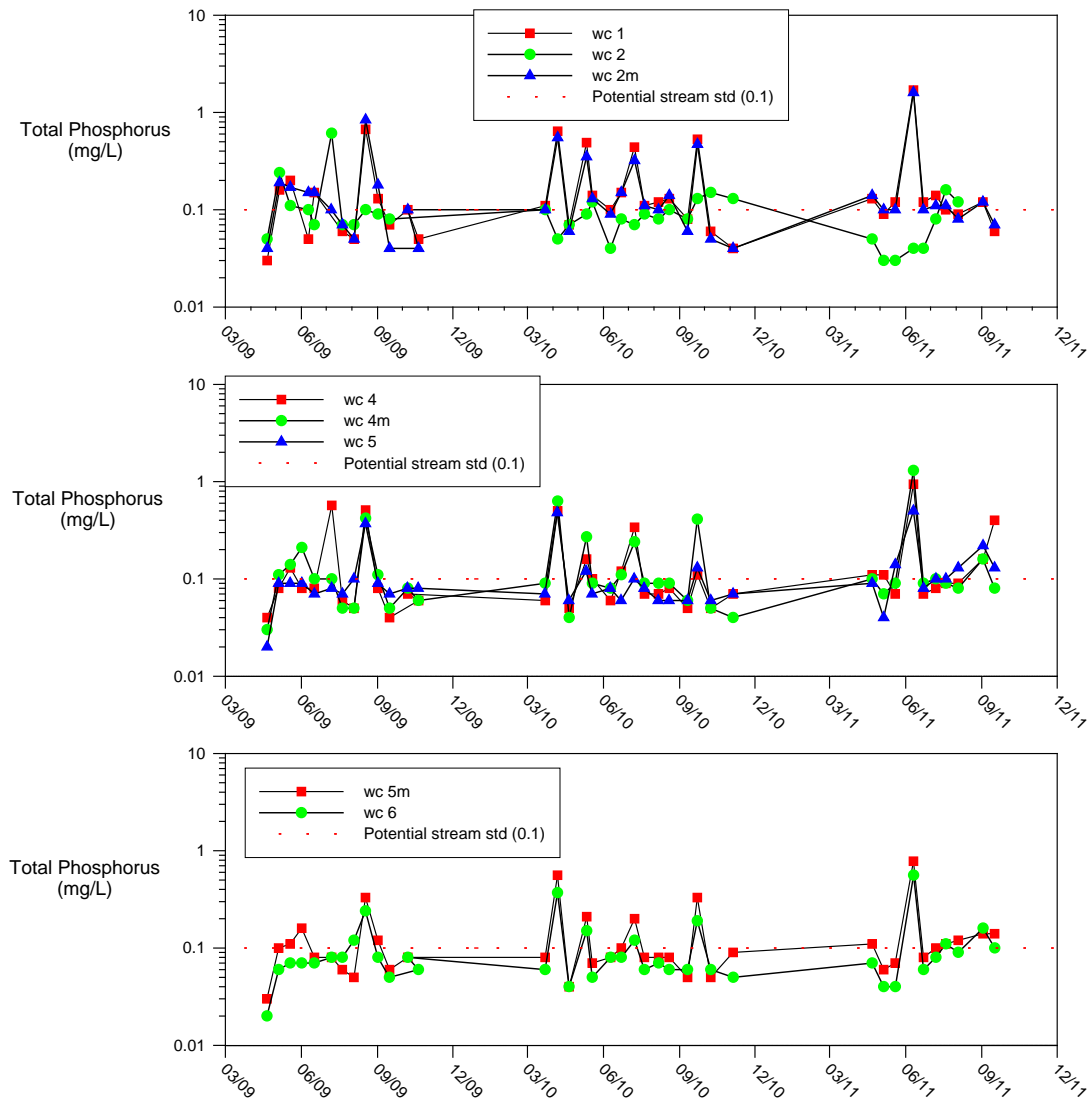


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Walnut Creek Results March 2009 through 2011

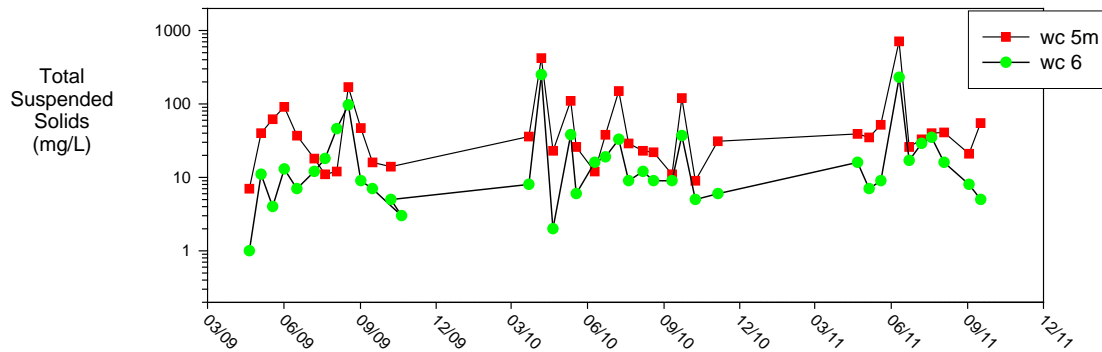
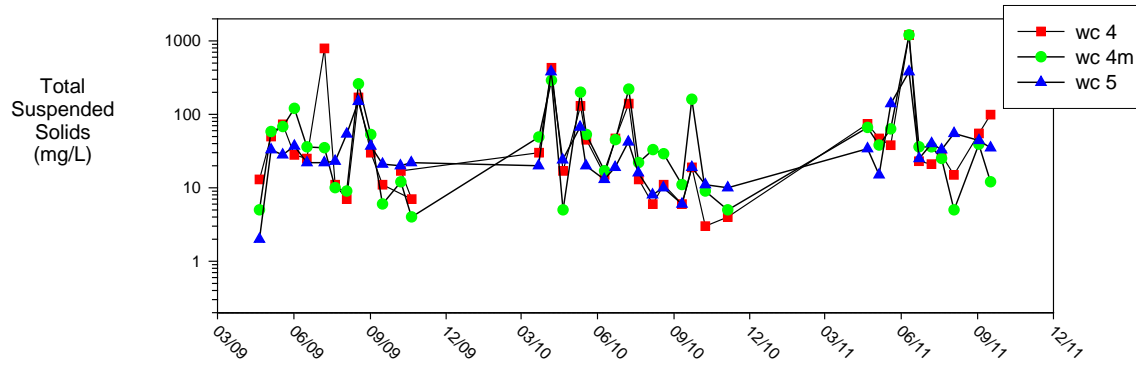
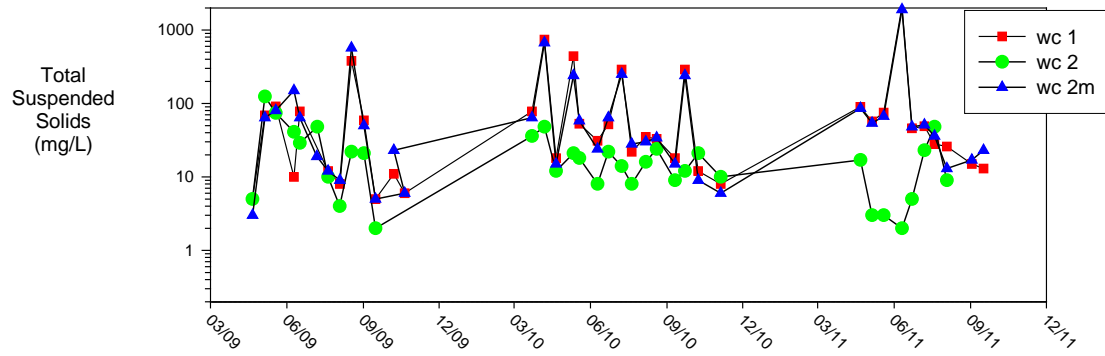


Walnut Creek Results March 2009 through 2011

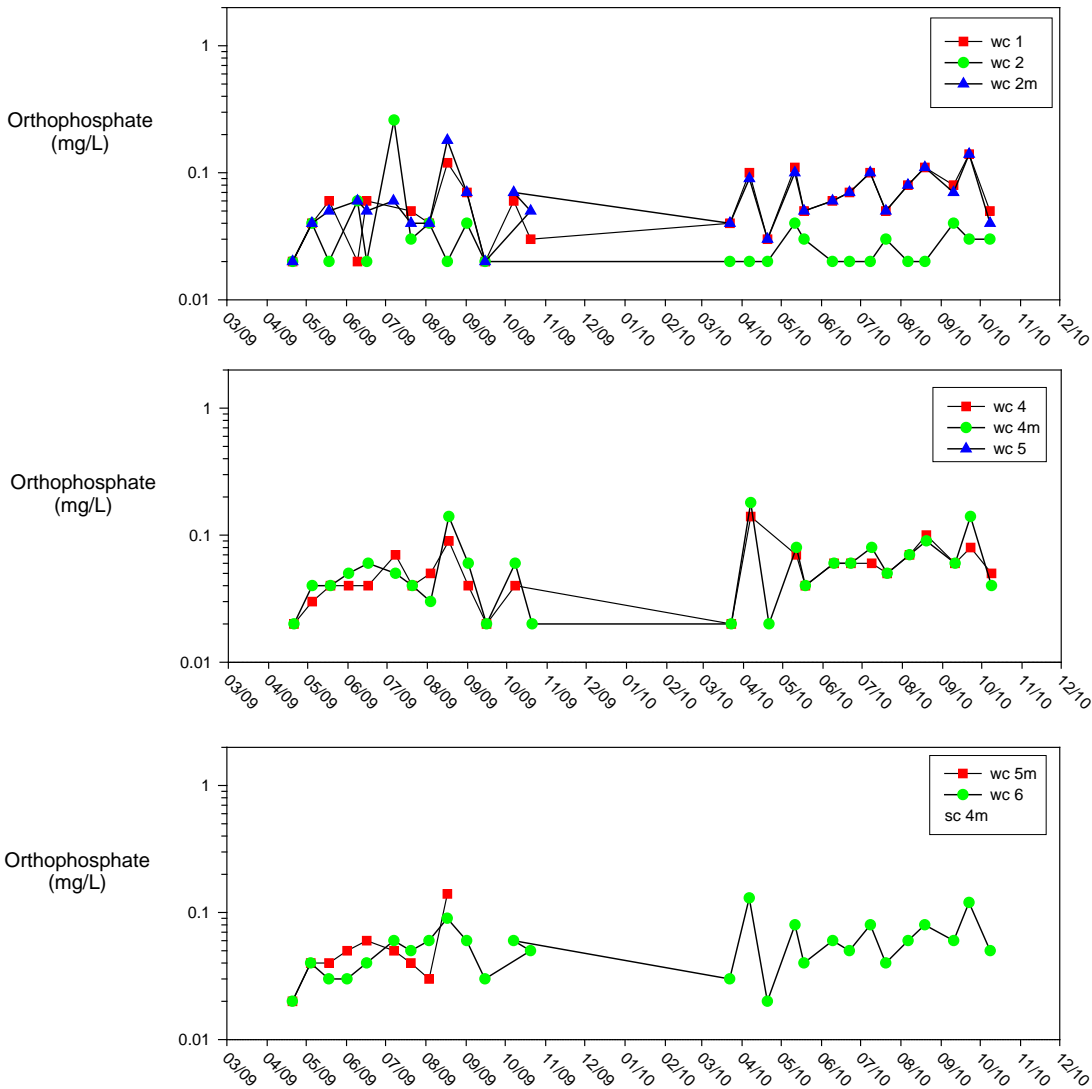


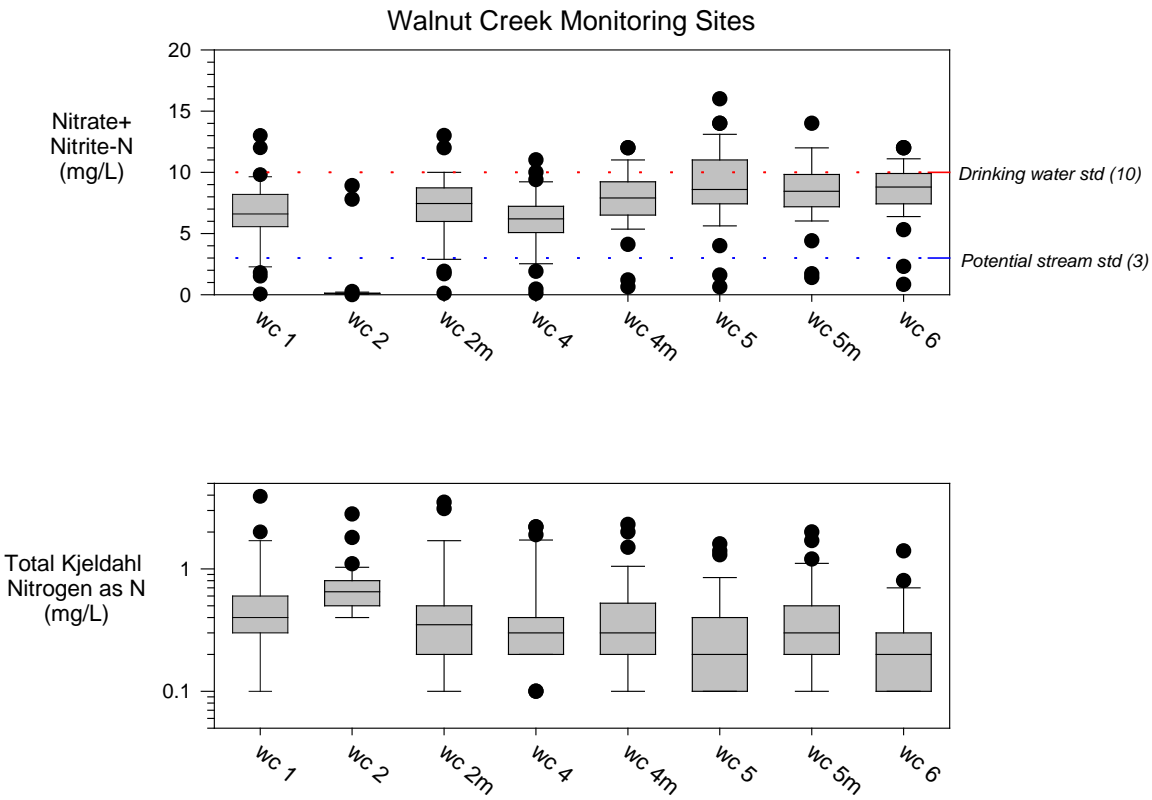
Appendix - 9011-008 Walnut Creek Watershed Improvement Project Final Report

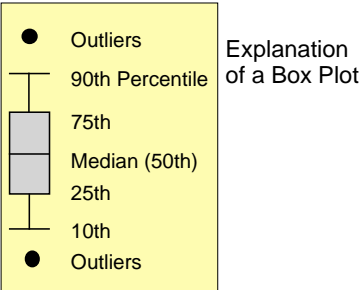
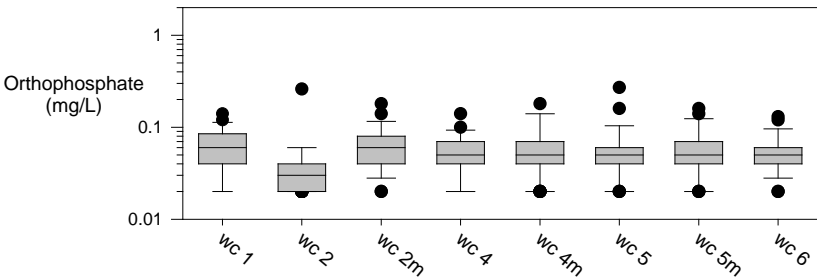
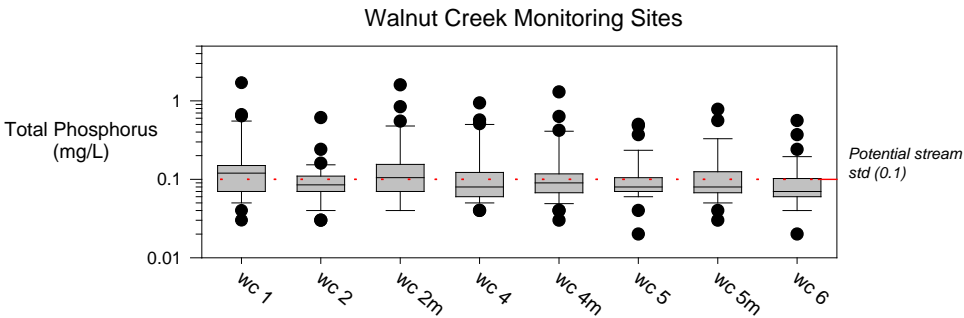
Walnut Creek Results March 2009 through 2011



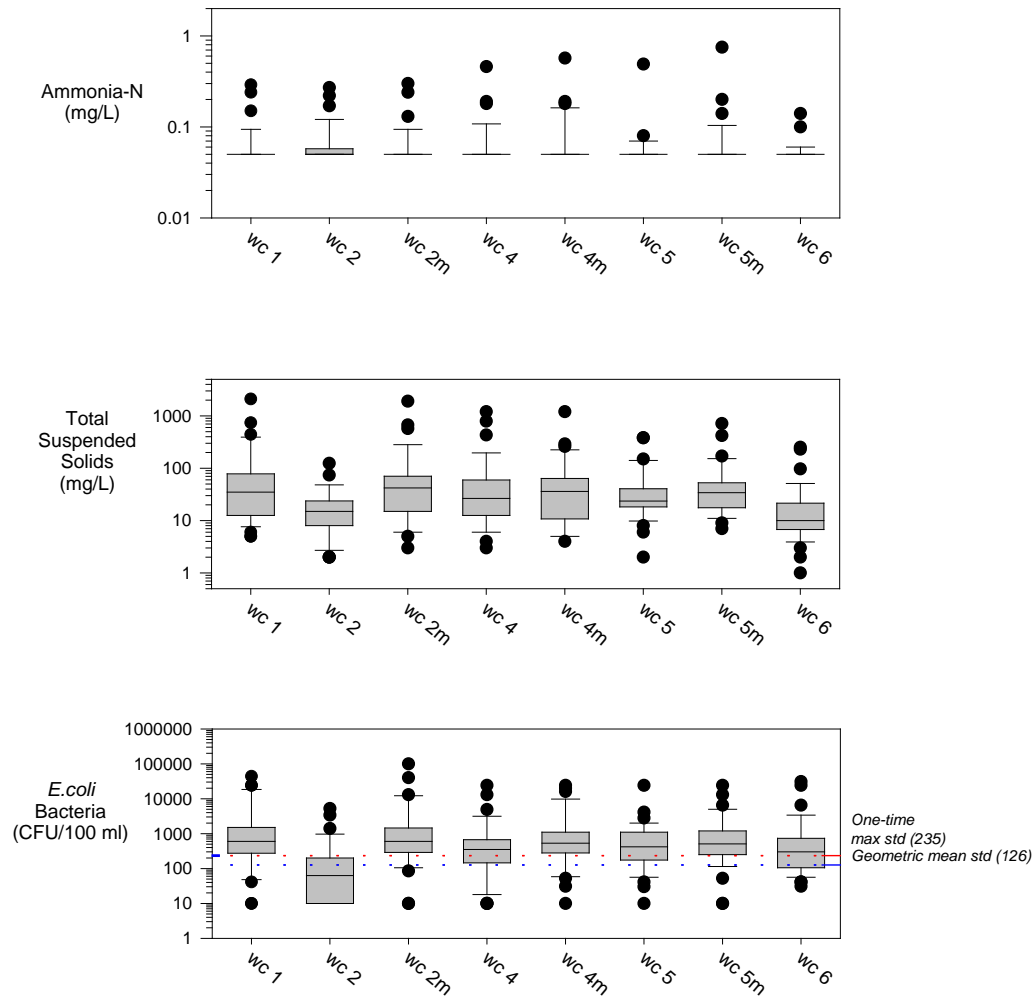
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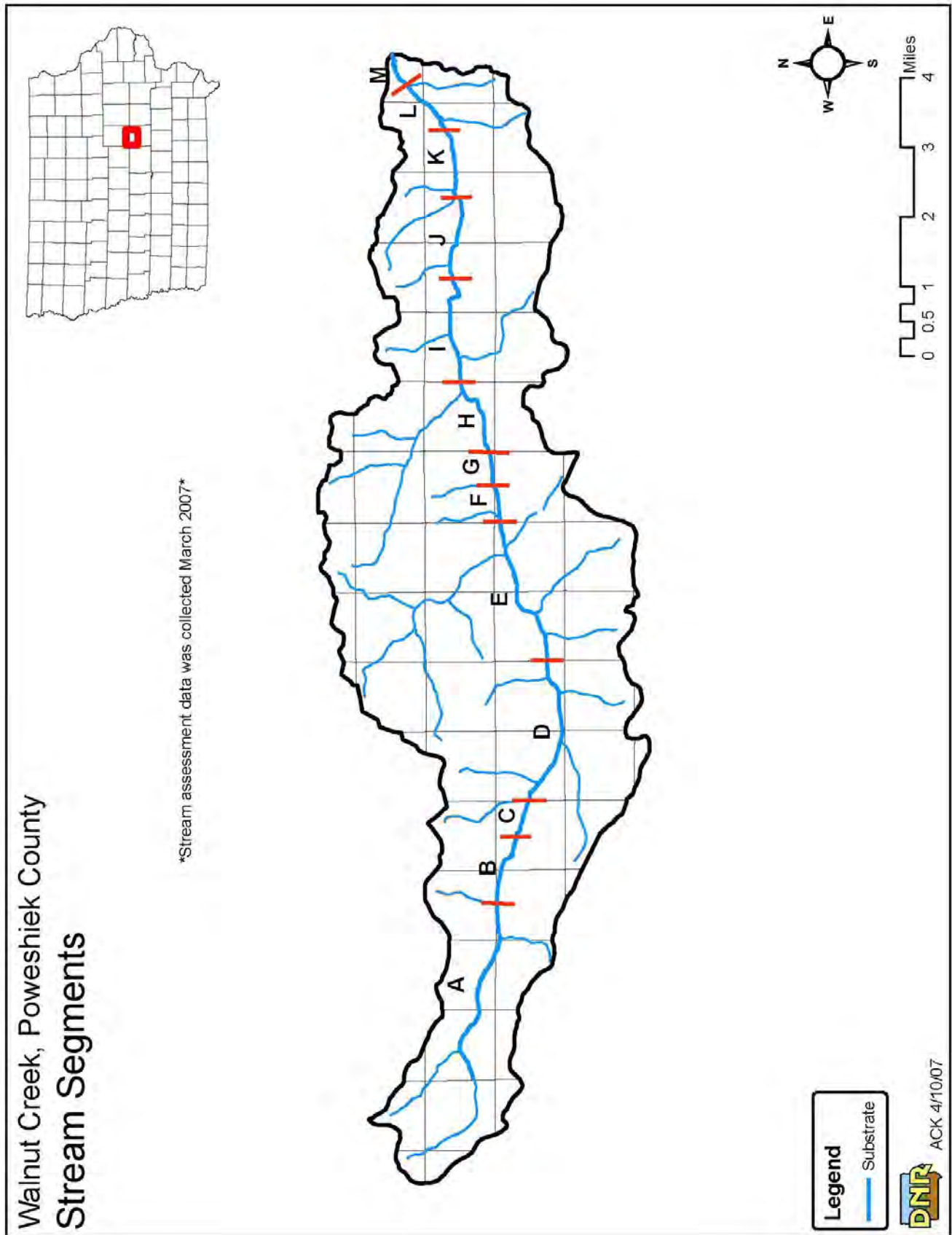






Walnut Creek Monitoring Sites





4/11/07

Walnut Creek Watershed Quality Improvement Project

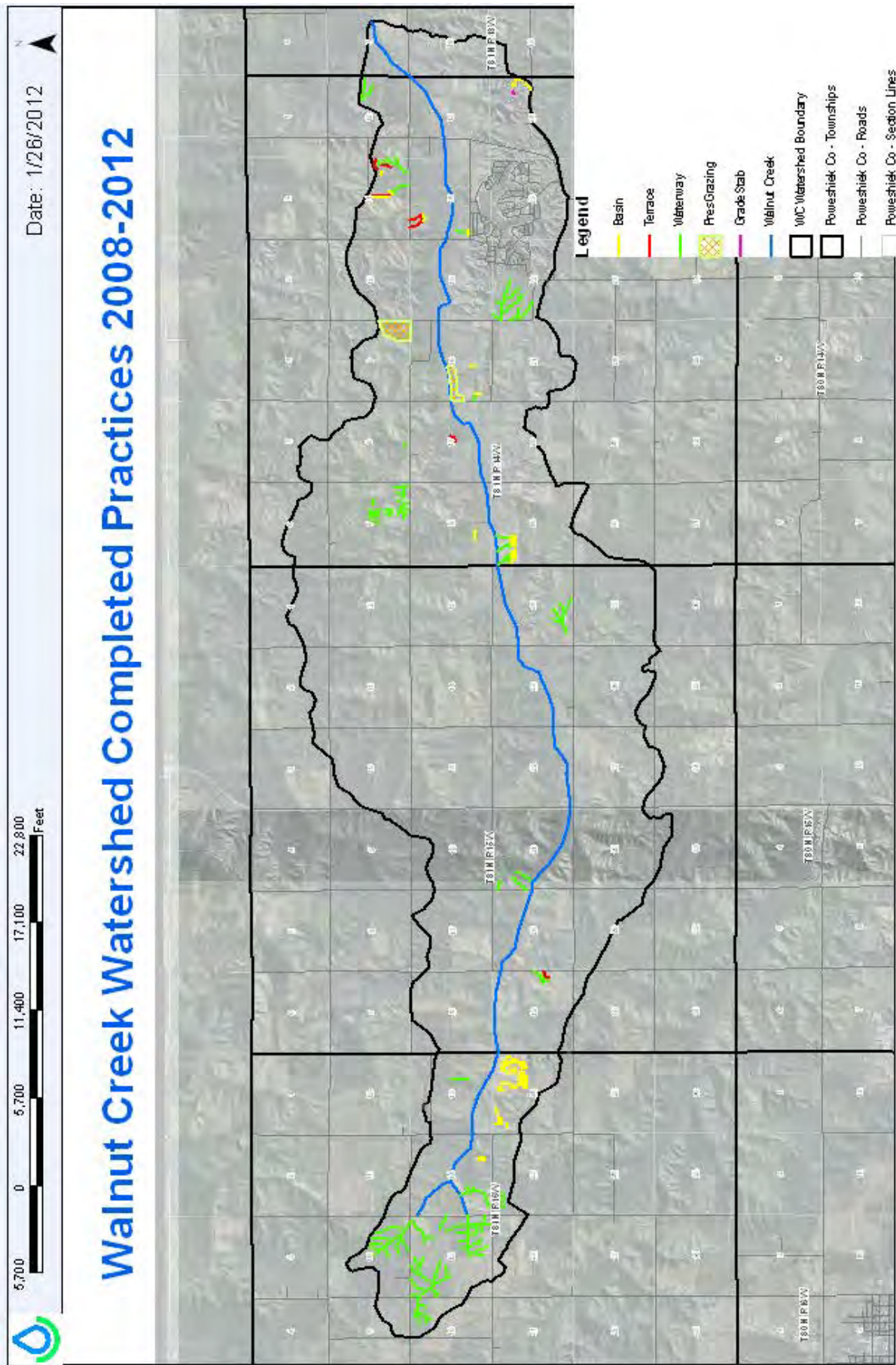
Walnut Creek Stream Segments Description

| Old Letter | New Letter | Upland Sediment Contribution | Bank Stability Issues | Substrate | Right Adequate Buffers | Left Adequate Buffers | Bank Height | Livestock Access | Trib Influences |
|------------|------------|------------------------------|-----------------------|---------------|------------------------|-----------------------|-------------|------------------|-----------------|
| A | A | Yes | | Silt/Mud/Clay | | | low | No | |
| B | A | Yes | | Silt/Mud/Clay | | | low | No | |
| C | A | Yes | | Silt/Mud/Clay | | | med | No | |
| D | B | Yes | | Silt/Mud/Clay | N | N | med | No | |
| E | C | Yes | | Silt/Mud/Clay | | | med | No | |
| F | C | Yes | | Silt/Mud/Clay | | | high | No | |
| G | D | Yes | | Silt/Mud/Clay | N | N | high | No | Yes |
| H | E | Yes | | Gravel/Sand | N | N | high | No | Yes |
| I | E | Yes | | Gravel/Sand | N | N | high | No | Yes |
| J | E | Yes | | Gravel/Sand | N | N | high | No | Yes |
| K | E | Yes | | Gravel/Sand | N | N | high | No | Yes |
| L | F | Yes | | Silt/Mud/Clay | | | high | No | Yes |
| M | G | Yes | | Gravel/Sand | N | N | high | No | Yes |
| N | H | Yes | PT | Gravel/Sand | N | N | high | Yes | Yes |
| O | I | Yes | | Gravel/Sand | N | | low | No | Yes |
| P | I | Yes | PT | Gravel/Sand | | | high | No | |
| Q | J | Yes | Yes | Gravel/Sand | N | | high | No | |
| R | J | Yes | | Gravel/Sand | N | | high | No | |
| S | K | Yes | | Gravel/Sand | N | N | high | Yes | |
| T | K | Yes | | Gravel/Sand | N | N | high | Yes | |
| U | L | Yes | PT | Gravel/Sand | N | N | high | Yes | |
| V | L | Yes | Yes | Gravel/Sand | N | N | high | Yes | |
| W | M | Yes | Yes | Gravel/Sand | N | N | high | No | Yes |

PT: Potential Treatment

Proposed Best Management Practices for Walnut Creek Stream Segments

| Stream Segment | Upland Treatment | Bank Stabilization | Grazing Management | Buffer/Filter Strip |
|----------------|------------------|--------------------|--------------------|---------------------|
| A | YES | | | |
| B | YES | | | YES |
| C | YES | | | |
| D | YES | | | YES |
| E | YES | | | YES |
| F | YES | | | |
| G | YES | | | YES |
| H | YES | POINT | YES | YES |
| I | YES | POINT | | YES |
| J | NO | YES | | YES |
| K | YES | | YES | YES |
| L | YES | YES | YES | YES |
| M | YES | YES | | YES |





14925 Waterway



15156 Waterway



19700 Waterway



20101 Waterway



15350 Basin



WIRB #12-8 Basin



WIRB # 12-7 Terrace (above) & WIRB #12-8 Basins



WIRB # 12-9 Basin



WIRB # 12-9, 6 Basins



WIRB # 12-10 Waterway



WIRB #12-11 Terrace



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Nonpoint source pollution

Stormwater

Water Quality Improvement Plans

Publications and Reports

Other Links

DNR Water Quality

DNR Lake Restoration

DNR Water Quality Assessments

IDALS Division of Soil Conservation

Iowa NRCS

EPA

NRCS Farm Bill

Iowa Farm*A*Syst

Iowa Water Quality Project Directory,*.pdf



About the Walnut Creek Watershed Project

- [What's the problem with Walnut Creek?](#)
- [What's being done to help Walnut Creek?](#)
- [What can you do to help?](#)
- [What is the future of Walnut Creek?](#)
- [Meet the project coordinator](#)

What's the problem with Walnut Creek?

Walnut Creek was placed on Iowa's impaired waters list in 2002 due to its inability to support aquatic life, such as fish and insects. This problem has been traced to excess soil and nutrients in the water. Each year, erosion causes 30,000 pounds of phosphorus to wash into Walnut Creek. It also washes in enough sediment each year to fill a line of dump trucks seven miles long. Livestock can also contribute to the erosion of the streambank, and their waste may lead to high levels of bacteria and ammonia. Large amounts of ammonia can be lethal to aquatic life.

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What's being done to help Walnut Creek?

The Walnut Creek Watershed Project has been underway since January 2008. The project is working with landowners to install conservation practices such as:

- **Terraces**-Terraces built around a hillside either slow runoff and guide it to the bottom of the hill, or collect runoff and store it until the runoff can be absorbed by the ground.
- **Grade stabilization structures**- These artificial or natural structures (like ponds or dams) built across water channels reduce water flow and slow gully erosion.
- **Water and sediment control basins**- Basins constructed across gullies trap sediment and pollutants and keep them from reaching the stream.
- **Grassed waterways**- The vegetation in these natural or artificial water channels slows the speed of surface water, protecting the land around streambanks from erosion.
- **Livestock management**-Limiting livestock access to the stream through fences and rotational grazing results in fewer pollutants reaching the streams and less streambank erosion.
- **Buffers and Filter strips**- Strips of grass or other vegetation trap sediment and pollutants and slow water runoff to reduce rill and gully erosion.
- **Streambank stabilization**- Structures, such as rocks or vegetation planted along the creek's edge, counter streambank erosion.

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What can you do to help?

Landowners can partner with the Walnut Creek Watershed Project to use conservation practices on their land. Jeremy Saugstad, project coordinator, can help landowners decide which projects would work best for their land and the creek. [Financial assistance](#) may be

IOWA FARM BUREAU SPOKESMAN ■ MARCH 3, 2010 ■ 11

POWESHIEK

Page Editor: Barbara A. Nangle • poweshiek.county@ifb.org • P.O. Box 517 • Brooklyn, IA 52211-0517 • p. [641] 522-9227

DOT postpones implementation

March 3, 2010

Help Walnut Creek by becoming a volunteer water monitor

If cabin fever is getting the best of you this harsh winter, now's the time to make plans to get out into nature this spring by becoming a volunteer water monitor.

Poweshiek County residents looking for a way to help improve water quality and spend some time outside can work as a volunteer water monitor with the Walnut Creek Watershed Project.

Volunteers need only to donate their time and effort, as the watershed project will provide equipment and training. Volunteers will gather data and water samples from nine established monitoring sites.

"We want local residents to be a part of our water quality improvement effort," said Mindy Sieck, assisting with the watershed project. "This would be a fun project for a science or environment club, scouting troops or youth groups, but it's a great opportunity for anyone to learn more about our creek and help make changes in water quality."

Walnut Creek landed on Iowa's impaired waters list in 2002 due to its inability to properly support aquatic life, such as fish and insects. The watershed project has traced this problem to excess soil and nutrients in the water. Each year, erosion causes 30,000 pounds of phosphorus to wash into Walnut Creek. It also washes in enough sediment each year to fill a line of dump trucks seven miles long — about the distance between Malcom and Brooklyn.

The water monitoring will be a part of the IOWATER program, which looks at the creek from chemical, physical and biological angles. The water samples will help track changes in the creek's water quality over time.

To become a volunteer water monitor on Walnut Creek, please contact Jeremy Saugstad with the Walnut Creek Watershed Project. Call (641) 528-2065, ext. 3, or stop by the Poweshiek Soil and Water Conservation District office at 405 Montezuma St. in Malcom. For more information on the Walnut Creek Watershed Project visit: http://watershed.iowadnr.gov/projects/wis_walnut.pdf.

Hoffert earns

On Tuesday, March 9, there will be a Corn College Planter Clinic held at the MJM Community Center in Brooklyn. The clinic will run from 7:30 a.m. to 5 p.m.

This premiere hands-on Planter Clinic can change how you put your crop in the ground — and help lock in top yields. Draw from the extensive field experience of Farm Journal field agronomists Ken Ferrie and Missy Bauer to learn how to get your crop off to a strong start.

This day is packed with practical information you can take home and apply to your planter and your fields. All leading planter brands will be included. Register at www.regonline.com/builder/site/Default.aspx?eventid=801109&printable=1.

CALENDAR

Wednesday, March 24
Brooklyn Home Show.

County fair swine weigh-in reminder

The first county fair swine weigh-in will be on Saturday, March 20, from 7-10 a.m. at the Montezuma Community School Ag Shop. All derby pigs must be weighed and tagged on March 20. Maximum weight is 55 pounds. Exhibitors may identify a total of 15 pigs which includes five derby pigs.

A second weigh-in is scheduled for April 24 from 8-10 a.m. Non-derby pigs will have no weight limit and can be weighed on either date.

Legislative forum set

On Saturday, March 6, at 9 a.m. there will be a legislative forum in Grinnell. It will be held at the Grinnell City Council Chambers.

Extension offering certified handlers program March 10

Poweshiek County will offer the Certified Handlers Continuing Instructional Course (CIC) Wednesday, March 10. The program will be shown across Iowa through the Iowa State University Extension Pest Management and the Environment program (PME).

The local attendance site is the Poweshiek County Extension Office at 114 South 3rd in Montezuma. Registration begins at 8:30 a.m., and the course runs from 9 to 11 a.m. The registration fee is \$35 on or before March 3 and \$45 after March 3. To register or obtain additional information about the CIC, contact the Poweshiek County Extension Office by calling (641) 623-5188 or (800) 769-9986.

The course will provide continuing instructional credit for certified commercial pesticide handlers. Topics to be covered include safe handling and storage of pesticides, interpreting pesticide labels, laws and regulations, and PPE.

Additional information and registration forms for this and other courses offered by the PME program can be accessed at www.extension.iastate.edu/PME/.

GET OUTDOORS THIS SPRING, HELP WALNUT CREEK BY BECOMING A VOLUNTEER WATER MONITOR

MALCOM — If cabin fever is getting the best of you this harsh winter, now's the time to make plans to get out into nature this spring by becoming a volunteer water monitor. Poweshiek County residents looking for a way to help improve water quality and spend some time outside can work as a volunteer water monitor with the Walnut Creek Watershed Project. Volunteers need only to donate their time and effort, as the watershed project will provide equipment and training. Volunteers will gather data and water samples from nine established monitoring sites.

"We want local residents to be a part of our water quality improvement effort," said Mindy Sieck, assisting with the watershed project. "This would be a fun project for a science or environment club, Scouting troops, or youth groups, but it's a great opportunity for anyone to learn more about our creek and help make changes in water quality."

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washes in enough sediment each year to fill a line of dump trucks seven miles long – about the distance between Malcom and Brooklyn.

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Make a Difference in Walnut Creek!



Join your neighbors in improving Walnut Creek for future generations by volunteering in water monitoring this spring.

For more information:

Jeremy Saugstad
Walnut Creek Project Coordinator
(641)528-2065 ext. 114
Jeremy.Saugstad@ia.nacdn.net

Walnut Creek flows for 16 miles through Poweshiek County. Since 2002, the creek has been on Iowa's impaired waters list as sediment and nutrient problems make it difficult for the stream to support aquatic life. Improving water quality in the stream is also important for swimming, fishing and canoeing.

Above flier distributed locally to public schools, Grinnell College, and stores.

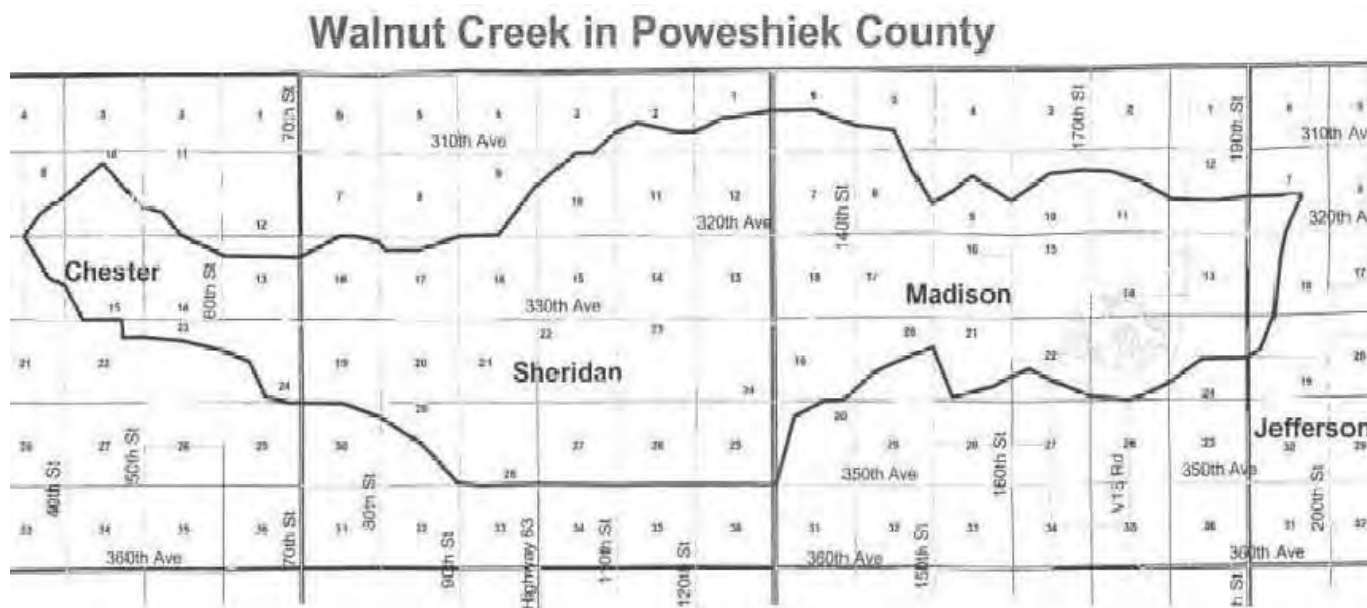
Feb. 28, 2011

Help Reduce Soil Loss in Walnut Creek Watershed

The Poweshiek County Soil & Water Conservation District (SWCD) has cost share funds available for the Walnut Creek Watershed project in the northern part of the county. The SWCD has money available from the Iowa Watershed Improvement Review Board (WIRB), that is approved to be used for 50% cost share by itself, or that can be used with money from the Iowa Financial Incentives Program cost share funds. When used together, this allows the landowner to receive up to 75% cost share to install eligible conservation practices such as: **Terraces, Basins, Grade Stabilization Structures, and managed Grazing Systems.**

Biologically, Walnut Creek has a problem with the lack of fish habitat. This is likely from the following: 1. Channel straightening which has led to increased peak water flow during rainstorm events. 2. Excess sediment both from the watershed and from streambank erosion. 3. Lack of riparian vegetation. 4. Loss of good habitat - due to sedimentation, lack of woody debris/in-stream cover (both from loss of riparian vegetation and from increased peak flows which blows out what woody debris there is. What this means for the watershed project is that we need conservation projects that prevent sediment from reaching the stream, we need more riparian buffers along the stream, we need some streambank stabilization, and possible in-stream habitat restoration.

Previously the watershed has paid an average 72% cost share to landowners. All farmers can also apply for low interest loans for any of their conservation projects. More information about low interest conservation loans is at <http://www.iowaagriculture.gov/FieldServices/waterQualityLoanFund.asp> Farmers throughout Poweshiek County are also encouraged to contact the SWCD about interest for future conservation projects, to determine the possibility of developing watershed projects and local cost share funding.



To apply for Watershed Grant funds, and all conservation cost share, contact the Malcom USDA / NRCS office at: **641-528-2065 ext 3**, or e-mail: Jeremy.Saugstad@ia.nacdn.net. The USDA is an equal opportunity provider. We all live in a watershed, what we do on our land affects the health of our lakes, streams and rivers - whether a backyard, farm, small business or factory site - Clean water starts with each of us. Farmers are also encouraged to consider the benefits of cover crops in their crop & soil management: soil is looser and absorbs water better; water runoff slows down; soil erosion and nitrogen leaching is limited; soil organic matter and soil quality improves. Also, spring plantings keep early weeds in check; cash crops grow roots deeper in looser soil.

Nov. 2011

Reduce Soil Loss, Improve **Walnut Creek Watershed**

The Poweshiek County Soil & Water Conservation District (SWCD) **now has more cost share funds available** for the Walnut Creek Watershed project in the northern part of the county. The SWCD has money available from the Iowa **Watershed Improvement Review Board (WIRB)**, that can be used for 50% cost share by itself, or may be used with money from the **Iowa Financial Incentives Program** or the federal Environmental Quality Incentive Program. When used together, the landowner may receive up to 75%, cost share to build eligible conservation practices such as: **Terraces, Basins, Grade Stabilization Structures, Prescribed Grazing Systems, and some waterways.**

The federal **EQIP cut off for 2012 applications is Dec. 15, 2011**, so anyone interested needs to complete an application before then. The watershed project needs conservation projects that reduce soil erosion, and prevent sediment from reaching the stream. The Poweshiek Co. SWCD is also striving to get landowners to sign up riparian buffer areas along the stream.

Previously the watershed has paid an average 72% cost share to landowners. All farmers can also apply for low interest loans for any of their conservation projects. More information about low interest conservation loans is at <http://www.iowaagriculture.gov/FieldServices/waterQualityLoanFund.asp> Farmers throughout Poweshiek County are also encouraged to contact the SWCD about interest for future conservation projects, to determine the possibility of developing watershed projects and local cost share funding.

We all live in a watershed, what we do on our land affects the health of our lakes, streams and rivers - whether a backyard, farm, small business or factory site – Conservation involves each of us. To apply for Watershed Grant funds, and other conservation cost share, contact the Malcom USDA / NRCS office at: **641-528-2065 ext 3**, or e-mail: Jeremy.Saugstad@ia.nacdnet.net. The USDA is an equal opportunity provider.



NEWS RELEASE

United States Department of Agriculture • Natural Resources Conservation Service •
1211 Old 6 Road, Malcom, IA 50157 • Phone: (641) 528-2065 X3

Poweshiek County Soil and Water Conservation District
405 Montezuma St. Malcom, IA 50157 (641) 528-2065 Ext. 3

For Immediate Release

Cost Share Available for 2012

You may contact the local office at 641-528-2065 with any questions.

Submitted by Greg Townley, District Conservationist

USDA is an equal opportunity provider, employer, and lender.
-30-

March 29, 2012

Poweshiek Co. Soil & Water Conservation office

People of Poweshiek County

What's in Your water? Do you think about what you drink? Where are the fish? What can we do to help our local environment? Find out on **Thursday, April 5th from 7-9pm in room 209, on the 2nd floor of the Joe Rosenfield Center, on the Grinnell College campus.** In cooperation with the Poweshiek County Soil and Water conservation office, Grinnell College will host a public presentation and discussion of local stream conditions, and findings from two Iowa Department of Natural Resources (IDNR) employees:

Jen Kurth
Natural Resources Biologist
Watershed Improvement Section

Mary Skopec
Stream Monitoring Coordinator
B.S. and M.A. degrees in Geography
Ph.D. in Environmental Science

The Poweshiek County Soil Conservation office has provided local assistance to farmers in the Walnut Creek Watershed to install soil and water conservation structures, and livestock grazing-management programs. IDNR staff and local volunteers have monitored 8 sites in the 15 mile watershed to provide some physical and chemical data. This data will be reviewed, and interpreted at this public meeting. A discussion is invited as to what the data means. "So Then What?": Local Volunteers are needed to monitor the stream conditions in Poweshiek County THIS year. If not you, then Who?

For more information about the volunteer opportunity, please contact Jeremy or Greg at the Poweshiek Co. Soil & Water Conservation office: (641) 528-2065 ext. 114, or ext. 3, or email: Jeremy.Saugstad@ia.nacdn.net



NEWS RELEASE

United States Department of Agriculture • Natural Resources Conservation Service • PO Box 216 • Malcom, IA 50157
• Phone: (641) 528-2065 X3 • Web: <http://www.ia.nrcs.usda.gov>

For next available release:

May 29, 2012

Cost Share Available – Water Quality Volunteers Needed in Local Watersheds

The Poweshiek County Soil & Water Conservation Office (SWCD) still has up to 75% cost share funds available for Walnut Creek Watershed conservation projects that can be completed by the end of December. The eligible conservation practices include: **Terraces, Basins, Grade Stabilization Structures, and managed Grazing Systems.**

The Walnut Creek Watershed project received money from the Iowa Watershed Improvement Review Board to continue through 2012. These funds are used to provide cost share to farmers as an incentive

to help reduce soil erosion on farmland, and therefore to reduce soil entering Walnut Creek. Less soil in the creek means a cleaner stream, and improved water quality. Buffers along the creek are also a great way to conserve topsoil and promote wildlife habitat. Walnut Creek Watershed is generally located between 50th Avenue and 190th Ave., and between 320th Street and 340th St. in northern part of Poweshiek County.

Little Bear Creek is hoped to be the next watershed project area in Poweshiek County. The Poweshiek SWCD has started a list of interested landowners. If you are interested in doing conservation work in the Little Bear Creek Watershed in the next few years, please contact the soil conservation office to get on the list, if you have not already done so. This list will be used to show the amount of local interest when an application for cost share is put together. Little Bear Creek starts around NE Grinnell and flows by Malcom and Brooklyn.

How are the creeks? Volunteers are still needed for water quality monitoring this summer. Volunteers would measure chemical and physical information in Little Bear Creek and Walnut Creek to determine the quality of the water and note any seasonal changes. Contact the Poweshiek County Soil & Water Conservation office at (641) 528-2065 ext. 3 if you are interested in the outdoors and water data.

The Iowa Department of Natural Resources has helped Poweshiek County efforts with water monitoring, equipment, supplies, and training. Volunteers and staff have monitored 8 Walnut Creek sites since 2008. The information obtained in the first few years will be used to provide a base to compare to later conditions. So far the information is not clear enough to be conclusive. Water Quality data indicates the possibility of a slight increase in water quality, or that water quality is about the same, which means, either way, that the water quality is not worse. The Poweshiek Soil & Water Conservation hopes to show a definite improvement from the additional conservation work completed since 2008. To know for sure, more volunteers are needed to collect data for 2012 and 2013. Thank you to all the farmers and landowner who have done conservation work and projects in the Walnut Creek Watershed, and throughout the county.

To apply for Watershed Grant funds, and all conservation cost share, contact the Malcom USDA / NRCS office at: **641-528-2065 ext 3**. The USDA is an equal opportunity provider. We all live in a watershed, what we do on our land affects the health of our lakes, streams and rivers - Clean water and healthy soil starts with each of us. Let's work together to make our future resources better.

News Release

Conservation Practice WIRB Funds Ending Soon!

Malcom, IA, Aug 17, 2012 — Farmers interested in receiving cost-share assistance to complete conservation projects on their farm may apply for federal funding through a grant received from the Watershed Improvement Review Board (WIRB). Property owners in the Walnut Creek watershed are eligible to install Best Management Practices (BMPs) until December 31st. The Watershed Improvement Funds were appropriated from the Iowa legislature for the first time in 2005; since then, the self-governing, independent WIRB committee distributes funds to improve water quality or flood prevention within a given watershed.

In 2007, the Natural Resource Conservation Service (NRCS) requested roughly \$600,000 for 5 year project to improve the Walnut Creek watershed. The watershed is located in northern Poweshiek County and includes parts of Chester,

Appendix - 9011-008 Walnut Creek Watershed Improvement Project Final Report

Madison, Jefferson, and Sheridan Townships. The NRCS still has funds available for 75% cost-share for Walnut Creek landowners until December 31st. Typically, the NRCS only offers 50% cost-share for BMPs. Practices available for cost-share include terraces, basins, and grassed waterways and must be installed by December 31st, 2012. For more information please contact the Poweshiek County NRCS Office at 641-528-2065 X3 or stop by the Malcom NRCS office at 1211 Old 6 Rd.