ATTACHMENT A-1

TERMS OF AGREEMENT

I. SUBGRANT AWARD

The Missouri Department of Natural Resources, Division of Environmental Quality, Water Protection Program, and the City of Wentzville agree to the plan of work and administrative procedures outlined herein for the Dry Branch Watershed: Clear Stormwater and Green Parks Project.

A. The Missouri Department of Natural Resources (the Department or DNR) agrees to pay the subgrantee an amount not to exceed $748,015 during the budget period April 15, 2011 through April 14, 2015 for tasks specified in the Scope of Services and Schedule of Milestones.

B. The City of Wentzville will ensure the completion of tasks described and reporting required. The City of Wentzville will provide match in the amount of $500,000 for the budget period of April 15, 2011 through April 14, 2015.

C. Conditions set forth in Attachment C, Special Conditions, and in Attachment D, General Terms and Conditions, shall be required and will govern the performance of this agreement.

D. A Quality Assurance Project Plan (QAPP) must be updated and approved by the Department's Project Manager prior to the first date of sampling.

II. BACKGROUND

In 2008 the City of Wentzville established ordinances that preserve riparian corridors (25' to 100' buffers) and require all new developments to treat storm water to improve water quality. Staff and volunteers conduct annual stream cleanups, but continue to observe large amounts of trash, oil, tires, etc., entering the creeks from transportation corridors and commercial areas built before water quality requirements were in place. In addition, sediment from streambank erosion and agricultural and residential areas continues to be a source of water quality degradation. To date, no watershed plans have been developed.

Wentzville's Clear Stormwater and Green Parks project encompasses the tributaries of the Dry Branch watershed (HUC #07110008071003, McCoy Creek-Dry Branch Tributary, 7,096 acres), a sub-watershed of McCoy Creek and Cuivre River. With dolomite and limestone bedrock, soils are mostly clay till and poorly drained in upland areas (Armster-Mexico-Hatton association), and loamy alluvium (Dockery-Haymond-Sensabaugh association) in lower-lying floodplains. The project area includes large-scale commercial/industrial corridors along Wentzville Parkway, I-70 and Highway 61; many recent and older residential developments; as well as interspersed agricultural areas. Nestled in the developed commercial areas, the Parks Department

plans to develop Heartland Park, a 28-acre tract complete with soccer/football fields, playgrounds, shelters and trails. The City will have invested $2.2 million for the park's approximate five acre lake that provides flood control for roughly 500 acres of upstream large-scale commercial development near I-70 and Wentzville Parkway. This serves as a unique opportunity to establish a watershed management plan, provide green infrastructure park enhancements, and retrofit stormwater infrastructure on five highly visible properties.

Section 319 funding will not be spent on activities required by the City of Wentzville's National Pollutant Discharge Elimination System (NPDES) permit; project activities go above and beyond the best management practices (BMPs) outlined in Wentzville's five-year plan.

III. OBJECTIVES

1. To assess and improve water quality in the Dry Branch Watershed, and to make storm water cleaner and clearer;
2. To beautify parks, subdivisions, municipal and other private property while saving money on maintenance;
3. To show the community better alternatives to fescue, concrete and pipes;
4. To develop a nine-element watershed management plan (WMP) that identifies nonpoint source pollutants, sources, and prioritizes solutions in year one and two of the project; and
5. To evoke change by increasing community awareness of water quality issues through service learning projects, web-based education, public tours, groundbreaking ceremonies, and water quality-based contests.

The project will target the following audiences:

Existing business/industry owners – this project will teach them how to better treat storm water on their property while improving aesthetics. The education/demonstration component of the project also gives them a 'green' marketing edge to promote to customers (both inside the business and out).
Developers – the City receives many complaints from developers who do not want to invest money to make water quality improvements. This project will educate developers on the benefits of treating storm water runoff, see how sites can be more aesthetically pleasing (and thus, marketable), and lower long-term maintenance costs.
Residents – significant staff time is spent on responding to trustee and homeowner concerns when grass is not manicured in common ground areas, brush along streambanks is not cut, or water is standing in detention basins creating habitat for snakes, mosquitoes, birds, and other vermin. The goal of this project is to inspire property owners to incorporate native plant species in their landscaping, retrofit common ground areas with water quality features, and restore riparian buffers.
Anyone who drives or rides in a vehicle – the majority of litter in and along creeks is coming from fly-away litter and parking lots. Litter is a cost burden on taxpayers and a detriment to the community. This project intends to improve the education of the citizens in this watershed on the water quality issues associated with litter.

IV. PROJECT DESCRIPTION

The Dry Branch Watershed: Clear Stormwater and Green Parks Project will assess the watershed and develop a nine-element watershed management plan that identifies nonpoint source (NPS) pollutants, sources, and prioritizes solutions during the first two years of the project. During year one, the project will integrate green infrastructure and NPS pollution education components at the existing Law Enforcement Center (LEC) detention basin. By year four, this same goal will be developed at Heartland Park. By year three, this project plans to make storm water cleaner and clearer by quantifying and reducing priority pollutants (i.e., trash, oil, sediment, etc.) by 50% from two commercial properties and one residential subdivision by implementing stormwater retrofits. This project intends to evoke change by increasing community awareness of water quality issues by hosting a groundbreaking ceremony, a stream naming contest, public tours of water quality features, developing a web-based tour, and designing and implementing service learning projects. This plan will be the basis for water quality enhancements at Heartland Park, the 28-acre tract the City is developing, as well as retrofits to storm water infrastructure on four other properties. Some of the BMPs planned are a wetland forebay, bio-filter zones between athletic fields, permeable pavement demonstration areas, native riparian lake buffers, and a wetland and boardwalk with educational signage at Heartland Park. All of these improvements will be utilized to educate the public on NPS pollution issues.

The Wentzville Storm Water Advisory Committee will provide roughly 90 hours of planning assistance for the watershed study and plan development, technical assistance with storm water retrofit projects, and assist facilitation of public education outreach programs. The Advisory Committee will identify stakeholders in the watershed and assist in developing a Dry Branch Watershed Planning Team.

The St. Charles County Soil and Water Conservation District (SWCD) will partner with the City of Wentzville to gather public input from stakeholders and help educate residents about the value of native plants, riparian buffers, lawn care, and other ways to improve water quality. In addition, the SWCD will provide technical assistance to farmers and landowners on federal/state funding opportunities for watershed improvement. The SWCD will also publish two newsletter articles promoting the project goals and accomplishments. In collaboration with the City, the SWCD will conduct workshops for homeowner associations to promote the project and demonstrate better alternatives to property management. These workshops will also be used to solicit possible retrofit sites.

Greenway Network, Inc. will assist with service learning volunteer recruiting and supervision, in addition to educational program development.

Friends of Wentzville Parks will volunteer manpower to perform litter pickups, park plantings and conduct visual observations. This group will also engage and educate residents and other stakeholders through their website, social marketing media, and monthly meetings.

Local middle and high schools will also be recruited to help with litter pickups, water monitoring, public awareness projects (based on watershed study findings), and the stream naming contest. The City currently works with Barat Academy High School and Wentzville Middle School annually on service learning and civic action projects. Wentzville School District commits 18,000 hours of

volunteer service, and Barat Academy will provide an additional 1,440 hours of service.

Business and residential property owners will be solicited to partner in the commercial and residential retrofit projects. These owners will negotiate MOUs for retrofitting their existing development, offer project considerations and limitations, and contribute to the Dry Branch watershed study and plan development by offering stakeholder input.

Municipal staff time and equipment will be used on any in-house design and construction of retrofit projects, contract administration and oversight, water quality monitoring, and grant reporting. As mentioned above, volunteers and partnering organizations will provide technical assistance for retrofit options, service learning projects, help to plan and promote the stream naming contest, and serve as liaisons for stakeholders throughout the watershed study and plan development efforts. Matching municipal funds will provide for construction of green infrastructure at Heartland Park, such as a biofilter for athletic fields, riparian landscaping, rain garden and pervious pavement demonstration areas, parking lot bioswales, and interpretive trail and wetland boardwalk. Additionally, the City's match will help fund native plantings and educational signage at the Law Enforcement Center. The City, with the project partners, will develop a marketing plan that will incorporate the following strategies:

A. Create and publish/distribute press releases and articles in the Vision Community newsletter, partner newsletters, to local papers and/or radio stations, and online to garner public interest in the watershed public forums and retrofit projects. These outreach efforts and materials will include project goals and accomplishments and simple steps for stormwater improvements.
B. Provide public education and outreach communications through websites, Facebook pages and partner's meetings. The City's storm water website will provide a venue for stakeholders to view project updates and generate ideas and suggestions. The website will also list opportunities for public participation such as; public tours, litter cleanups, monitoring events, stream naming, groundbreaking, and other volunteer projects.
C. Conduct a public tour at Heartland Park and possibly the project retrofit sites to showcase green infrastructure.
D. Create community signage, in partnership with Barat Academy High School and Wentzville Middle School, to promote the project goals, storm water retrofit practices, and accomplishments. Students will produce a web-based video tour of the project accomplishments.

Water Quality Monitoring

Water quality concerns in the Dry Branch Watershed include, but are not limited to, trash, oil and grease, tires, sediment, nutrients and NaCl. In the commercial districts along Interstate 70, Wentzville Parkway, and Highway 61, staff and volunteers routinely observe substantial amounts of litter, as well as oil and other automotive fluids entering the creek from upstream parking lots. In residential areas, most properties have intensely manicured turf grass and heavy fertilizer use; many people mow their lawns up to stream edges. Detention facilities built before the adoption of the City's water quality treatment requirement lack measures to control trash and sediment. It is relatively common for the City to receive requests to pipe natural drainage ways and concerns about "unkempt" natural growing areas.

Water Quality Monitoring Goals

1. Locate, quantify, and prioritize pollutants and sources found in the Dry Branch Watershed;
2. Assist in the selection of retrofit opportunities (i.e., determine the effectiveness of a specific design at reducing priority pollutants, evaluate the long term cost, etc.);
3. Guide volunteer opportunities, stakeholder training, and marketing strategies to reduce priority pollutants;
4. Create a baseline to assist other stakeholders to determine target pollutants, identify cost effective BMP measures for new and redeveloped projects, and measure pollution reduction; and,
5. Evaluate the project's effectiveness at removing or eliminating priority pollutants identified in the WMP.

Water quality data will be collected and tracked over several years during this project. Data collected will assist in:

- Deciding the scope of the marketing and outreach plan;
- Determining what storm water retrofits will be most beneficial for the project and in the future, what pollutants should be targeted, and the retrofit locations that will have the most impact in the watershed;
- Determining which green infrastructure practices to incorporate into other park properties; and,
- Evaluating future park and LEC maintenance issues related to the green infrastructure.

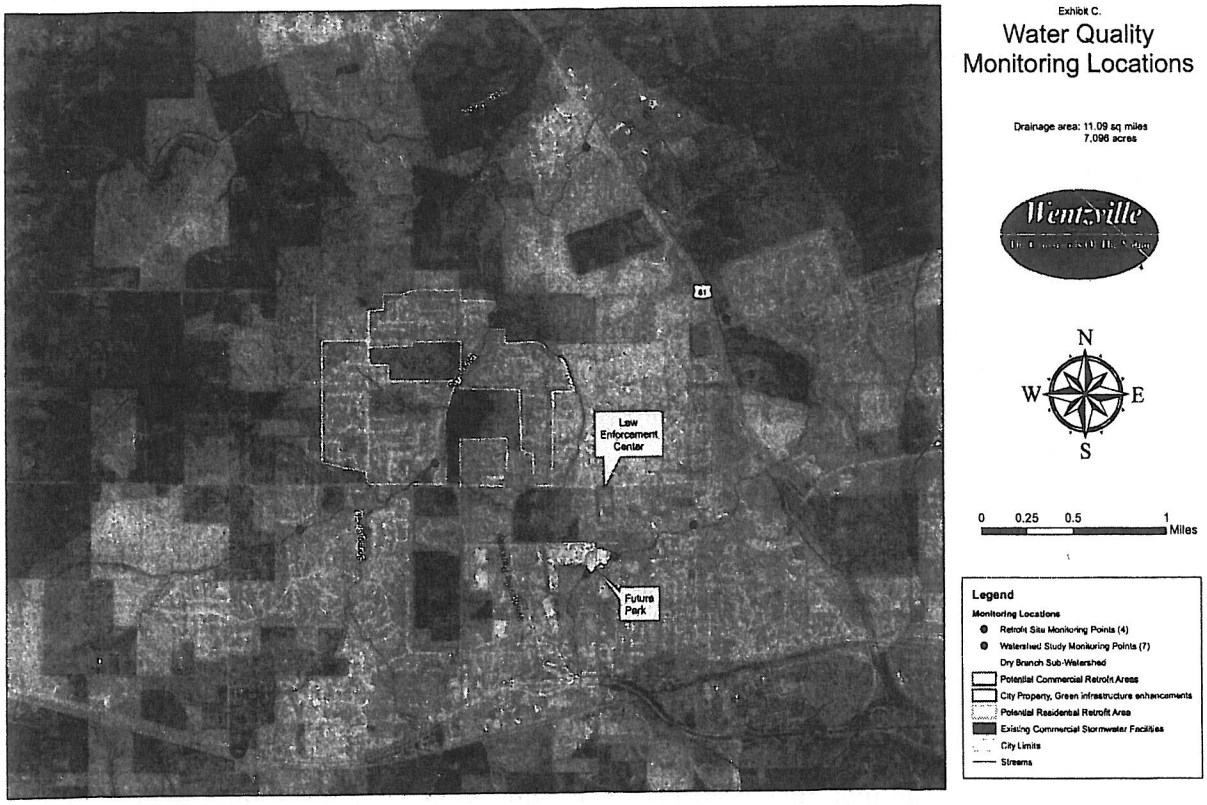
If monitoring shows that retrofits are improving water quality, the City will consider retrofitting other municipal properties, as well as other residential and commercial areas.

Drainage areas exhibit a wide variability of flows. In order to obtain a representative sample for water quality analysis a composite stormwater sampler with rain gauge and flow sensor will be used. The following chemical parameters will be used: oil and grease, total suspended solids and/or turbidity, conductivity, salinity, total dissolved solids, nitrogen, pH, temperature, semi-volatiles, volatiles, and dissolved oxygen. BOD, COD, metals and bacteria may be periodically tested to identify if septic tanks, sanitary sewer overflows or leakages, or other pollutants are significant problems. In addition, visual observations including estimated quantity of trash, tires, sheen, etc. will be recorded. These parameters and frequencies may be revised based on data collected.

Water quality information will be acquired through field sampling and testing, visual observation reports from volunteers and other staff, and from any Stream Team monitoring reports submitted by QA/QC staff or volunteers. A Quality Assurance Project Plan (QAPP) will be developed at the onset of the project to review and solidify control efforts and protocols. Chain of custody reports will be recorded and kept on file for three years after the end of the project. Standard Methods for Examination of Water and Waste Water, 21st edition, will be used for testing protocols, unless revised by the QAPP. The City's Stormwater Coordinator will analyze data for trends, hot spots, seasonal variations, and BMP effectiveness. Conclusions for water quality data collected in the Watershed Study will be summarized and reported in the Dry Branch Watershed Management Plan. These conclusions will also be submitted to the Department in the form of quarterly reports as well as being

included in the City's annual NPDES report. The Watershed Management Plan will be distributed to the Board of Alderman, stakeholders, and made available to the public at workshops, training sessions, and on the City's website.

Water quality data for the watershed study will be gathered monthly at seven locations along all major tributaries to Dry Branch.



The City will collect a grab sample monthly at each of these points. In addition, four locations have been chosen to assess the stormwater retrofits' effectiveness in reducing priority pollutants. Composite sampling on a weekly basis will be conducted upstream and downstream from the forebay (see additional information regarding the forebay below). Global Water WS750 composite samplers with optional Stormwater Kit, or similar model, will be purchased for sampling and measuring rainfall at the wetland forebay. Weirs or other sampling equipment may be used to measure flows. Hach and Oakton calibrated field kits will be used for calculating nitrogen, dissolved oxygen, pH, conductivity, salinity, temperature, and total dissolved solids. Nalgene Imhoff Cones will measure total suspended solids. An independent certified lab will be responsible for any additional testing as well as bacteria, BOD, COD, metals, semi-volatiles, and oil and grease. Grab sampling will be taken downstream from the Law Enforcement Center (LEC) and the residential retrofit site. Tests at these locations will occur quarterly after installation to account for seasonal variation in pollutant loads. The location and frequency of sampling will be reviewed and adjusted as necessary based on results obtained throughout the project. Most grab sampling and parameter measurements will be made by City staff. Rainfall data will be taken from local weather monitoring stations.

Field monitoring and visual inspection will be adequate to determine pollutant source reductions and improvements in water quality. If monitoring results are inconclusive, the City may continue monitoring on the projects after the grant is complete. Data acquired for the watershed study and plan development will be compared to published QA/QC Stream Team data to access accuracy, and concerns recorded from public listening sessions. To evaluate retrofit effectiveness, chemical and visual water quality data will be collected from upstream and downstream of the retrofit locations, as well as compared to other reaches of the stream.

The installation of the water quality features in this project, both new and retrofit, will also provide a unique opportunity within the City of Wentzville to observe treatment of stormwater runoff. Existing City facilities do not currently incorporate any green infrastructure components. The water quality features and educational components planned at Heartland Park and LEC will set a new standard for park and municipal facility design in Wentzville. Heartland Park will offer athletic field bio-filters, rain garden and pervious pavement demonstration areas, and native riparian buffers around the lake in addition to interpretive signage, shelters, and wetland boardwalk. A forebay will also be constructed in the headwaters of the Heartland Park lake to trap sediment, collect trash and remove pollutants. This forebay will treat the runoff of approximately 500 acres of commercial/industrial development. Riparian buffers will be created along the Heartland Park lake and wetland forebay perimeter to treat storm water pollutants as well as trap trash and debris before entering the watercourse. Fescue in the LEC detention basin will be graded and converted to a rain garden setting that incorporates native prairie plants, river gravel, rock outcrops, erosion control and educational signage.

Commercial and residential storm water facility retrofits will be completed to improve water quality, treat pollutants, and/or reduce peak storm volumes. The existing facilities are predominately dry detention basins vegetated with fescue. Retrofits may include adding water quality volumes by converting the dry basins to shallow wetlands or wet ponds using native vegetation. Proprietary BMPs such as drop-in inlet protection may also be used to collect trash and trap sediment as well as filter out pollutants.

The project will also engage the public, increase awareness, and change behavior by using volunteer service learning, social marketing outlets, stream naming contest and litter pickups.

This project will produce the following products:

1. Dry Branch 9-element Watershed Management Plan
2. Web-based video tour
3. Four web pages
4. Quality Assurance Project Plan (QAPP)
5. Drainage area Geographic Information System (GIS) shapefiles
6. Watershed Inventory GIS shapefiles and notes (priority pollutant data and concern areas)
7. Four Vision Community Newsletter articles (reaches ~29,000)
8. Four news releases to local media and partners
9. Eight public education signs at Heartland Park, LEC, and retrofit locations
10. Fifteen quarterly reports to MDNR project manager
11. Five annual reports to MDNR project manager
12. Five MBE/WBE reports to MDNR project manager
13. One final report draft to MDNR project manager 30 days prior to the ending date of the

project (by March 15, 2015)
14. One final report to MDNR project manager by April 14, 2015

V. SCOPE OF SERVICES

The project manager will:

1. **Coordinate the acquisition of land, maintenance easements, contracts and Memorandums of Understanding (MOU).**

2. **Coordinate, with the Parks Director, the design and construction of green infrastructures** in park development.

3. **Coordinate, with the City Engineer, the management of contract procurement and implementation;** the in-house and contracted design and construction at Heartland Park, as well as construction implementation.

4. **Coordinate, with the Stormwater Coordinator, oversight of the contract for the watershed plan;** green infrastructure, improvements at the Law Enforcement Center, GIS integration of watershed study and retrofit information, education and outreach components of the project, service learning projects, and complete grant reporting.

5. **Oversee the consultants contracted with to perform the watershed study and plan development;** construct retrofits at the residential and commercial sites, and assist in the design and construction of park features.

6. **Coordinate, with the City, the development, distribution, collection and evaluation of results of all surveys described.**

7. **Prepare invoices, progress reports (including survey results, monitoring data, quarterly/annual reports) and financial reports and submit quarterly to the Department.**

8. **Prepare and submit final project report to the Department.**

VI. SCHEDULE OF MILESTONES

Task Description	Responsible Party	Projected Completion Date
Year 1		
Publish watershed updates	City of Wentzville	Spring/Summer 2011
Produce RFP for Dry Branch 9-element WMP	City of Wentzville	Spring/Summer 2011
Produce RFP for QAPP and water quality monitoring	City of Wentzville	Spring/Summer 2011
Establish Dry Branch Watershed Planning Team	City of Wentzville	Summer 2011

Task Description	Responsible Party	Projected Completion Date
Conduct pre-stakeholder survey	City of Wentzville	Summer/Fall 2011
Conduct monthly mtgs for Planning Team	City/Planning Team	Spring/Summer 2011
Award bid for Dry Branch 9-element WMP	City/Planning Team	Spring/Summer 2011
Award bid for QAPP	City/Planning Team	Summer 2011
Award bid for water quality monitoring	City of Wentzville	Spring/Summer 2011
Request bid for LEC retrofit	City of Wentzville	Spring/Summer 2011
Create web pages for City of Wentzville website	City of Wentzville	Spring/Summer 2011
Create web pages for City of Wentzville storm water website	City of Wentzville	Spring/Summer 2011
Submit quarterly reports to MDNR project manager	City of Wentzville	Aug 1, Nov 1, 2011
Submit annual reports to MDNR project manager	City of Wentzville	October 15, 2011
Submit quarterly invoices to MDNR fiscal staff	City of Wentzville	Aug, Nov 2011
Award LEC bid	Planning Team	Fall 2011
Identify stakeholders in watershed	City/Service Groups	June 2011
Submit QAPP for review/approval	City/Consultant	Winter 2011
Host public meeting for stakeholders to identify concerns & determine interest in retrofit projects	City of Wentzville	October 2011
LEC construction	Contractor	October 2011
Conduct pre-survey for service learning participants throughout grant	City/Planning Team	On-going through grant
Research available baseline water quality data	Contractor	November 2011
Submit articles for Vision Community Newsletter, webpage updates and local media	City/Service Groups	November 2011
Plan and produce annual home owners association workshop	City/Consultant	December 2011
Conduct pre-retrofit partner survey to assess awareness & identify potential partners	City of Wentzville	December 2011
Year 2		
Submit draft of WMP to MDNR for review	City of Wentzville	March 2012
Submit completed Dry Branch 9-element WMP to MDNR	City/Consultant	May 2012
Incorporate Dry Branch 9-element WMP data into existing GIS database	City of Wentzville	May 2012
Evaluate & select storm water facility retrofit projects	City/Planning Team	June 2012
Pre-test/post-test water quality monitoring of selected sites and/or park	City/Consultant	April & October 2012
Begin monitoring of runoff events	City /Consultant	April & October 2012
Submit quarterly reports to MDNR project manager	City of Wentzville	Feb 1, May 1, Aug 1, and Nov 1
Submit quarterly invoices to MDNR fiscal staff	City of Wentzville	Feb, May, Aug, and Nov
Submit annual reports to MDNR project manager	City of Wentzville	October 15, 2012
Public viewing of LEC retrofit	City/Planning Team	May 2012
Collect indirect data to assess water quality	City/Service Groups	May & October 2012
Conduct post-Service Learning survey	City/Service Groups	June 2012

Task Description	Responsible Party	Projected Completion Date
Conduct stream naming contest	City/Planning Team	September 2012
Draft MOU w/partners	City of Wentzville	November 2012
Design storm water facility retrofit projects	City of Wentzville	December 2012
Submit articles for Vision Community Newsletter, webpage updates & local media	City of Wentzville	November 2012
Plan & produce annual home owners association workshop	City/Planning Team	December 2012
Schedule Watershed Planning Team meetings	City of Wentzville	Ongoing
Year 3		
Request for bids for Heartland Park construction	City/Consultant	January 2013
Request for bids for stormwater facility retrofits	City/Consultant	January 2013
Award bid for Heartland Park construction	City of Wentzville	February 2013
Award bid for storm water facility retrofits	City of Wentzville	February 2013
Conduct public meeting to present park design elements	City/Planning Team	March 2013
Set up pre- & post-test for water quality monitoring of selected retrofit sites/park	City/Consultant	April & October 2013
Begin monitoring of runoff events	City/Consultant	April & October 2013
Submit quarterly reports to MDNR project manager	City of Wentzville	Feb 1, May 1, Aug 1, and Nov 1
Submit quarterly invoices to MDNR fiscal staff	City of Wentzville	Feb, May, Aug, and Nov
Submit annual reports to MDNR project manager	City of Wentzville	October 15, 2013
Collect indirect data to assess water quality	City/Service Groups	May & October 2013
Storm water facility retrofit construction	City/Contractor	September 2013
Conduct pre-Service Learning survey	City/Service Groups	October 2013
Revise, if needed, 9-element Dry Branch WMP, submit to MDNR for review	City/Planning Team	October 2013
Submit articles for Vision Community Newsletter, webpage updates & local media	City of Wentzville	November 2013
Plan & produce annual home owners association workshop	City/Planning Team	December 2013
Construct wetland forebay	City/Contractor	December 2013
Schedule Watershed Planning Team meetings	City of Wentzville	ongoing
Year 4		
Set up pre- & post- test water quality monitoring of selected retrofit sites/park	City/Consultant	April & October 2014
Monitor runoff events	City/Consultant	April & October 2014
Submit quarterly reports to MDNR project manager	City of Wentzville	Feb 1, May 1, Aug 1, and Nov 1
Submit quarterly invoices to MDNR fiscal staff	City of Wentzville	Feb, May, Aug, and Nov
Submit annual reports to MDNR project manager	City of Wentzville	October 15, 2014
Submit draft final report to MDNR project manager	City of Wentzville	March 15, 2015
Submit final report to MDNR project manager	City of Wentzville	April 14, 2015
Web-based video tour with follow-up public survey	City/Service Groups	May 2014
Storm water facility retrofit field day	City of Wentzville	May 2014

Task Description	Responsible Party	Projected Completion Date
Conduct post-retrofit Partner survey	City of Wentzville	May 2014
Collect indirect data to assess water quality	City/Service Groups	May & October 2014
Conduct post-Service Learning survey	City/Service Groups	June 2014
Submit articles for Vision Community Newsletter, webpage updates & local media	City of Wentzville	September 2014
Complete park construction	Contractor	December 2014
Conduct public tour of park	City of Wentzville	March 2015
Conduct Public survey	City of Wentzville	March 2014
Collect post-Stakeholder Survey	City of Wentzville	October 2014
Collect post-construction water quality data/submit to MDNR	Consultant	February 2014
Continue Watershed Planning Team meetings	City of Wentzville	Ongoing
Submit final reports (annual, MBE/WBE) for 10/1/14-4/14/2015 to MDNR Project Manager	City of Wentzville	April 14, 2015

Measures of Success:

Through this project, and the development of the nine-element WMP, a better understanding of the NPS pollutants, sources and priorities in the Dry Branch Watershed will be developed. This project anticipates a 50% reduction in pollutant loading at the residential and commercial retrofit sites. City property will become "greener" by filtering parking lot runoff, providing erosion control, decreasing stormwater volume, and reducing maintenance at the LEC and the park. There will be an increased awareness by the stakeholders about NPS pollutants and sources. Public perception will change; stormwater features will be amenities rather than eyesores. Along with perception, public behavior will change, reducing the amount of pollutants coming into the retrofit sites. Summaries of all findings will be reported to the Department.

Water quality monitoring through routine sampling/testing of priority pollutants will be used to measure the effectiveness of water quality improvements. Photographs and video will be taken periodically throughout the project at selected sites to document gross pollutants (such as litter, trash, etc.) erosion, sedimentation, and other visual changes. Pollutants such as litter and trash will be quantified by the number of bags collected during the volunteer stream cleanup events.

Evaluation/Feedback Mechanisms:

A. Pollutant load modeling will be conducted on the wetland forebay to be constructed upstream from the five acre park lake. Modeling will also be used for the LEC and the proposed commercial and residential retrofits. This modeling will be used in conjunction with the watershed study to determine the best BMP or combination of BMPs to be used at each location to maximize pollutant load reductions while staying within budget constraints.

B. EPA's STEPL model will be used by the City's engineering staff. Prior to any construction work being undertaken, water quality sampling at all stormwater facilities to be retrofitted will be conducted to determine actual pollutant loading and removal efficiencies. Upon completion of the retrofits sampling will be conducted to determine actual removal

efficiencies gained by the implementation of the BMPs at each location

C. A survey will be conducted at the beginning and end of each school year to assess educator, student and parent volunteer's changes in awareness of water pollution and sources, and changes in behaviors that impact water quality.

D. The Watershed Planning Team, City of Wentzville Stormwater Advisory Committee, Friends of Wentzville Parks, SWCD, and other partners will be given a pre-and post-project Stakeholder Survey. The first survey will be conducted in Year One to assess the baseline awareness of pollutants and sources, and perceptions of stormwater features. A follow up survey will be conducted in Year four to evaluate any changes in these areas as well as obtain feedback on public sentiment and overall reaction to the project.

E. Similar to the stakeholder survey, a Retrofit Partner Survey will be given in Years One and Four for feedback from those businesses and subdivisions that participate in the grant retrofit projects.

F. A Public Survey will be administered in Year Four to those individuals who completed the web-based tour, tour project sites, and/or use Heartland Park for recreation. This survey will gauge the general public's changes in perception of stormwater features, awareness of nonpoint source pollutants and sources, and behaviors that impact water quality.

G. Visual observations of drainage areas by City staff and volunteers will also help assess source reduction in trash and other pollutants.

VII. PROJECT BUDGET

Dry Branch Watershed: Clear Stormwater and Green Parks Project

April 15, 2011-April 14, 2015

Total Federal Contribution	$ 748,015
Total Nonfederal Contribution	500,000
Total Project Cost	$1,248,015

(See Attachment B for budget breakout.)

VIII. PAYMENT SCHEDULE

A. Reimbursement to the subgrantee for the tasks described in the Scope of Services will be made according to the following schedule:

MAXIMUM EXPENSES	REIMBURSEMENT SCHEDULE	SUBMIT TO	PROJECT PERIOD	INVOICE FORMAT
$748,015	Quarterly	DNR Fiscal Account Clerk	4/15/2011 – 4/14/2015	Attachment A-2