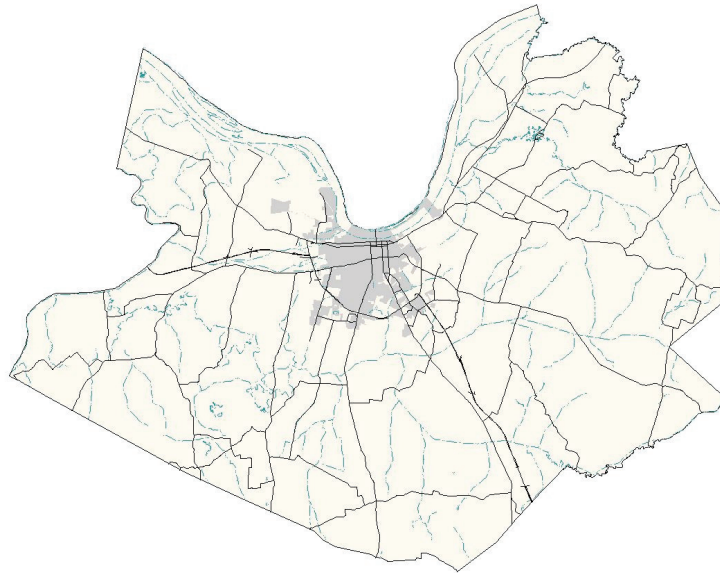


OWENSBORO STORM WATER QUALITY MANAGEMENT PLAN



**Co-Permittee:
Daviness County**

2013 Annual Report

April 2014

Prepared by:



Green River Area Development District





Owensboro Storm Water Quality Management Plan

2013 Annual Report

Table of Contents

General Permit Annual Compliance Report	Page 2
Measurable Goals Table	Page 17
Appendices	Page 29
MCM #1 Public Education and Outreach	Page 30
MCM #2 Public Involvement/Participation	Page 76
MCM #3 Illicit Discharge Detection and Elimination (IDDE)	Page 100
MCM #4 Construction Site Storm Water Runoff Control	Page 105
MCM #5 Post Construction Storm Water Management in New Development and Redevelopment	Page 124
MCM #6 Pollution Prevention/Good Housekeeping for Municipal Operations	Page 138
Storm Water Monitoring Results	Page 148

Kentucky Division of Water

GENERAL PERMIT ANNUAL COMPLIANCE REPORT.

Phase II Stormwater MS4

Kentucky Division of Water

NOTE:

- In order to comply with KPDES sMS4 permits, annual reports must be submitted to the Kentucky Division of Water.
- **Please type or print in ink.**
- Please answer all questions **thoroughly** and return the form by the due date.
- Return this form and any required addenda to the KDOW MS4 Coordinator at the address listed in the box on the upper-right.
- **Due April 15, 2014.**

For questions regarding this form, contact:

Abigail Rains

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL
PROTECTION

Division of Water

200 Fair Oaks Lane, 4th Floor

Frankfort, KY 40601

Phone: (502) 564-8158, Extension 4891

**REPORTING
YEAR
(Check one)**

☐ 2010

☐ 2011

☐ 2012

☒ 2013

☐ 2014

PART A: GENERAL INFORMATION – MS4 OPERATOR

1. Report Completed

By:

City of Owensboro

(MS4 Operator — i.e., name of permit holder)

2. Permit Number:

K

Y

G

2

0

0

0

1

8

3. AI # 69139

4. Mailing Address: P.O. Box 10003 Owensboro KY 42301

Street Address: 1410 W 5th St Owensboro, KY 42301

☒ City

☐ County

☐ Other

Of:

Owensboro

Zip:

42301

County:

Daviess

PART B: GENERAL INFORMATION – CONTACT PERSON

5. Contact Person Name (please print): Joseph G. Schepers

6. Contact Person Title: City Engineer

7. Phone Number: 270-687-8641

8. Facsimile Number (if applicable): 270-687-8327

9. E-mail Address (if applicable): schepersjg@owensboro.org

PART C: CONTROL MEASURE ACTIVITIES

10. For the following items, please provide a summary of control measure activities related to SMS4 performed during the previous year. List any updated measurable goals from the Stormwater Quality Management Plan (SWQMP), compliance activities, Best Management Practices (BMP) installed or initiated, and updated or developed regulatory mechanisms with effective dates.

A. Public Education and Outreach

Describe your public education efforts for the last 12 months:

BMP- Activity Description	Measurable Goal/ Quantifiable Products	Targets/ Measures of Success	Year 4 PY 13-14 Accomplishments
Develop Materials for a public education campaign	Create brochures and order cups and pens with the City's environmental logo to distribute throughout the community	Year 1-Finish brochure, order cups and pens, and distribute; Years 2 and 3-Increase distribution; Years 4 and 5-Develop and distribute new education materials	The City of Owensboro, Daviess County Fiscal Court, and SWQAC members participated in public events to handout the educational materials and to talk to citizens about stormwater quality issues. We are also working on increased public education with the assistance of GRADD.
Formulating a strategy to get public education materials to the public in a more effective way	Utilize environmental events and other public events to distribute education materials; Place "point of sale" education flyers at retail stores that sell paint, oil, and other potential pollutants; Educate illicit discharge violators through sending brochures on water quality along with the Notice of Deficiency letter.	Year 1 and 2- Set up a station at three events to hand out education materials, start developing "point of sale" flyers, and begin sending an educational brochure to illicit discharge violators; Year 3 thru 5- Continue to attend 3 events per year to hand out education materials, start posting "point of sale" flyers, and continue sending brochures to illicit discharge violators.	In 2013, The City of Owensboro, Daviess County Fiscal Court, and SWQAC members participated in 1 public event to hand out educational materials and to talk to citizens about stormwater quality issues. The MS4 permittee also updated the brochures to be sent to illicit discharge violators. Additionally, next year GRADD will be assisting in more public education events.
Utilize Public Service Announcements (PSAs) to inform the public about storm water issues and related community activities	Utilize the statewide educational opportunities.	Years 1 thru 5- continue to track the educational efforts by the KYTC.	KYTC with our MS4 and partner communities utilize several approaches to public education. The most pronounced is a mass media play via radio and television. We also utilize a website tied in with the radio and television spots. KYTC in a combined effort with the MS4 communities manages the Adopt-A-Highway program. KYTC also utilizes our Kentucky Engineers Exposure Network (KEEN) to promote stormwater issues in community schools.
Utilize the Storm Water Quality Exhibit at the Owensboro Museum.	Use the Museum as a way to educate the public about water quality issues and a way to distribute education materials and conduct surveys.	Year 1 -- Plan the design and come up with funding; Year 2 --oversee the construction and Develop a plan to distribute materials and conduct survey; Year 3 thru 5- oversee the effectiveness of the exhibit	The Owensboro Museum of Science & History has opened the Origins exhibit, which will include a watershed education display. Additionally the Science Museum also had the traveling Riverworks Discovery exhibit on display. This exhibit emphasizes the importance of stormwater quality and conservation. The City of Owensboro also passed a municipal order for \$250,000 towards a River Heritage History exhibit for the museum.

Create opportunities to educate younger children about the importance of water quality.	With the help of KYTC's Keen coordinators, conduct presentations to local schools about storm water quality at least once per year	Year 1 thru 5-- Do presentations about storm water quality once per year to local schools.	No school presentations were completed in 2013, but the Owensboro Science and History museum featured multiple stormwater focused events at the museum.
Use the City of Owensboro website as a tool for educating the public	Create a web page for water quality education, along with other information about the City's stormwater management program	Year 1- Start planning and developing the page; Year 2- activate the site for the public to see; Year 3 thru 5- Continue to update the web page	In 2013, the City of Owensboro launched their stormwater management site. This site has been live throughout 2013. The site has all 6 MCMs explained, as well as information for how to contact the City MS4 coordinator. The site also lists all Post-Construction documents that passed this year.

Describe your method of outreach:

The KYTC Media Outreach Program (MOP), in conjunction with our partner MS4 communities, contracted with the Kentucky Broadcasters Association (KBA) to air a video spot and six audio spots in 2013. The 30 second spots have been aired statewide as a public education initiative to inform the general population about stormwater issues. The ads messages were developed after the statewide survey conducted in 2008 identified that half of the population is unaware that storm drains discharge directly to waters of the Commonwealth without treatment. The ads can be viewed on stormwater.ky.gov. The TV and radio plays combined totaled 76,301 plays statewide in 2013 for a total value of \$1,381,352.

KYTC initiated a committee of five MS4 representatives and the DOW representative in 2009 to work with our consultant, New West, to develop the ads. The members are Abby Rains – DOW, Suzie Bradley – Campbellsville, Randy Stambaugh – MSD, Vicki Brackett – Hardin County, Jamie Holtzapfel – SD1 and Jack Wright – Plum Springs Warren County Joint Storm Water Sewer Agency. A mix of general information and specific item ads were developed. The resulting work of the committee was the six audio spots and the one video spot. In 2012 the committee was called together again to develop a new TV advertisement for the stormwater program. The new ad began airing in December 2012. KBA distributes the ads to 230 stations in 132 communities. The KBA receives certified reports from the member stations verifying the number of times the spots are played. Since the inception of the Media Outreach Program there have been 275,332 plays for a total value of \$5,216,562.

The 2013 summary of ad play is as follows:

72,533 radio Spots with a value of \$1,152,123

3,768 television plays with a value of \$229,239

TV and radio plays combined totaled 76,301 plays statewide for a total value of \$1,381,352.

A new website URL was secured and a new website prepared to help launch the MOP and provide a statewide resource for the KYTC and our partner MS4 communities to promote stormwater issues. The website was designed to address both the public and those involved with the MS4 program either as a permitted community, construction contractor or KYTC. It provides basic information regarding what is stormwater and stormwater pollution, who to contact if more information is needed or a concern needs to be reported, and technical information for MS4 communities and contractors. The website had 995 visits in 2013 and 3,852 page views. Kentucky has participated in the International Adopt-A-Highway Program since 1988. The Commonwealth has one Statewide Adopt-A-Highway Coordinator in central office and 12 Adopt-A-Highway District Coordinators throughout the state. The Adopt-A-Highway program involves community groups to organize and pick up litter. The Transportation Cabinet participates in Adopt-A-Highway meetings as agreed upon by the Local Community and KYTC. There are over 800 groups that manage more than 5,100 miles of roads throughout the state.

The Members of KYTC's KEEN organization held a total of 32 presentations on stormwater at 12 schools across Kentucky in 2013.

BMP- Activity Description	Measurable Goal/ Quantifiable Products	Targets/ Measures of Success	Year 4 PY 13-14 Accomplishments
Address the views and concerns of all sectors of the community, including minorities and traditionally disadvantaged groups	Invite a diverse group of individuals to serve on the SWQAC and achieve 75 percent member attendance by Year Five	Years 1 thru 5- Continue the schedule of regular quarterly meetings and encourage involvement of all sectors within the local community	In 2013, the City of Owensboro and Daviess County Fiscal Court advertised the Storm Water Quality Advisory Committee (SWQAC) through the local newspaper, The Messenger Inquirer, as well as through local radio, and on the City's website. In 2013, the SWQAC met four times. The meeting minutes can be found in the Public Involvement and Participation section of the attachments.

B. Public Involvement and Participation:

Do you have a Stormwater Advisory Committee (SWAC)?

Yes the City and County participate in the Stormwater Quality Advisory Committee (SWQAC)

Describe any events or activities facilitated by or sponsored by the MS4 in the last 12 months:

BMP- Activity Description	Measurable Goal/ Quantifiable Products	Targets/ Measures of Success	Year 4 PY 13-14 Accomplishments
Encourage public participation in all storm water-related activities	Issue press releases prior to all SWQAC meetings and activities	Years 1 and 2- Continue schedule of regular quarterly meetings; Years 3 thru 5-Organize SWQAC presentations for the Neighborhood Alliances	The Storm Water Quality Advisory Committee met 4 times in 2013 and issued press releases prior to all meetings.
Continue efforts related to the Storm Water Quality Advisory Committee (SWQAC)	Ensure that the SWQAC meets at least quarterly and achieve 75 percent member attendance by Year 5	Years 1 thru. 3- Continue schedule of regular quarterly meetings with emphasis on public education and outreach; Years 4 and 5-Direct the SWQAC in addressing other MCMs	The Storm Water Quality Advisory Committee met 4 times in 2013. Also the City hosted 4 Neighborhood Alliance Clean up Events. These events allow free curbside pick-up of items such as furniture and appliances. These events also request residents to pick up litter around their areas to help beautify and conserve Owensboro.
Get volunteers involved in projects to improve water quality and promote water quality awareness	Utilize various groups and organizations to mark 200 storm drains each year	Year 1 thru 5- provide funding and mark 200 storm drains each year	The MS4 sponsored one storm drain marking project in 2013. The storm drain marking project was completed by a Western Kentucky University (Owensboro Campus) Geography class. This project resulted in an additional 100 storm drains being marked with environmental messages. Additionally all new storm drains for all projects are required to have the only rain down the drain stamp. The City also received 1 request by the public for additional drain markings. The drains were marked, and this area will be focused on for next year's drain marking event.

C. Illicit Discharge Detection and Elimination:

Have you passed IDDE Ordinance?

Yes, the City of Owensboro passed a Stormwater Ordinance which addresses Illicit Discharge.

Does the ordinance include escalated enforcement procedures?

Yes, the Stormwater Ordinance includes enforcement procedures as follows:

NOD – All improvements must be made within 7 days

NOVI – All improvements must be made within 3 days

NOVII – A stop work order is filed until improvements are made

NOVIII – Fines / Penalties on remaining deficiencies are enforced in accordance with the City Ordinance

Do you have an IDDE Plan in place?

Yes, the City has an IDDE Plan in place.

Have you completed the mapping of major outfalls?

Yes all major outfalls have been mapped; in 2014 we will be looking at our outfall and watershed map for updates due to construction projects.

Have you dry-screened your major outfalls?

Due to the updates for the outfall maps, no outfalls have yet been dry screened by the MS4 coordinator. The City's stormwater crew which maintains all ditches and basins are aware to alert the Engineering department if any illicit discharge is visible.

All outfalls will be screened in 2014.

Did you have any illicit discharges in the last 12 months, if so, describe discharge and resolution?

#	Date	Type of IDDE	Address of IDDE	Violation	# of Violations	Re-inspection
I-13-001	3/14/13	Sediment	940 W. 9th St. Owensboro, KY 42301	NOD	2	In Compliance
I-13-002	4/23/13	Sediment	2200 Venetian Way Owensboro, KY 42301	NOD	1	In Compliance
I-13-003	5/24/13	Sediment / Dumping	1100 Burlew Blvd Owensboro, KY 42303	NOD	1	In Compliance
I-13-004	6/7/13	Leaves	2218 Scherm Rd Owensboro, KY 42301	NOD	1	In Compliance
I-13-005	7/23/13	Sediment	2822 Daviess St Owensboro, KY 42303	NOD	1	In Compliance
I-13-006	8/14/13	Dumping	2744 Frederica St Owensboro, KY 42301	NOD	1	In Compliance
I-13-007	9/5/13	Grass	2840 Wayside Dr W Owensboro, KY 42301	NOD	1	In Compliance
I-13-008	9/5/13	Grass	1009 Standish Pl S Owensboro, KY 42301	NOD	1	In Compliance
I-13-009	9/5/13	Grass	909 Piedmont Dr Owensboro, KY 42301	NOD	1	In Compliance
I-13-010	9/24/13	Dumping	2222 Turnbury Cove Owensboro, KY 42301	NOD	1	In Compliance
I-13-011	10/11/13	Sediment	3342 Shadewood Trce Owensboro, KY 42303	NOD	1	In Compliance
I-13-012	10/11/13	Dumping	708 Parkway Dr Owensboro, KY 42303	NOD	1	In Compliance

D. Construction Site Stormwater Run-off Control:

Have you passed the Construction Site Stormwater Runoff Control (EPSC) Ordinance?

Yes, the City of Owensboro passed a Stormwater Ordinance which addresses Construction Site Stormwater runoff.

Does the ordinance include escalated enforcement?

Yes, the Stormwater Ordinance includes enforcement procedures as follows:

NOD – All improvements must be made within 7 days

NOVI – All improvements must be made within 3 days

NOVII – A stop work order is filed until improvements are made

NOVIII – Fines / Penalties on remaining deficiencies are enforced in accordance with the City Ordinance

Are you requiring proof of the receipt of KYR10 permit?

Yes, proof of receipt of the KYR10 permit is required.

Do you give the developer a permit from you, the MS4?

Yes, along with our new Stormwater Ordinances that were passed in 2013, a cut and fill permit is now required of all developments from the Engineering Department. This will allow the Engineering Department to track all MS4 developments.

How often are you inspecting active construction sites?

All active construction sites are inspected at least once a month for compliance. If a NOD is issued, the site is re-inspected as the escalated enforcement schedule requires. A copy of the inspection schedule and results can be found in the appendix.

E. Post-construction Stormwater Management in New Development and Redevelopment:

Have you passed Post-Construction Ordinance?

Yes, the City of Owensboro passed a Stormwater Ordinance which addresses Post-Construction Stormwater Runoff.

Does the ordinance include escalated enforcement?

Yes, the Stormwater Ordinance includes enforcement procedures as follows:

NOD – All improvements must be made within 7 days

NOVI – All improvements must be made within 3 days

NOVII – A stop work order is filed until improvements are made

NOVIII – Fines / Penalties on remaining deficiencies are enforced in accordance with the City Ordinance

Have you started rewriting the ordinance to include the 80% stormwater treatment standard to send to the DOW for approval?

Yes, the MS4 updated the City Ordinance and the local Public Improvement Specifications to include the stormwater treatment standard. The ordinance passed in September 2013, and the PI Spec in January 2014.

Have you reviewed your city's ordinance (i.e. subdivision regulations, planning and zoning) to see what impediments there are to green infrastructure?

Yes, the MS4 has completed the Water Quality Scorecard to see what impediments there are to green infrastructure. The score card was submitted to the Division of Water in 2011.

Per the KYG20 Permit on Part Page II-9 - The permittee shall demonstrate compliance with the requirements for post-construction controls by summarizing the following in the annual report. A summary of the number and types of projects that the permittee reviewed for new and redevelopment considerations and the types of BMPs installed including green infrastructure and buffers.

i. A summary of management practice maintenance inspections conducted by the permittee(s), including a summary of the number requiring maintenance or repair, and the number of enforcement actions taken.

A summary of the public stormwater controls that were inspected and maintained in 2013 are attached to this report in the Post Construction Stormwater Management section of the appendix. Additionally all ditches, and basins are maintained and cleaned by the City stormwater crew at least twice a year.

No private management practice maintenance inspections were conducted in 2013, because the MS4 had not yet passed the revised Ordinance which included the new treatment standard.

ii. A summary of any changes to local ordinances to accommodate green infrastructure alternatives.

The new post-construction BMPs were added to the local ordinance as well as the new PI Spec. Additional of BMPs, the Public Improvement Specification gives credits towards LID practices and planning. Credits up to 30% can result because of open-space preservation beyond required amounts, trees, shrubs, and vines above required amounts, and preserving existing trees with 18" or greater caliper.

iii. MS4 staff must be trained in the fundamentals of long-term stormwater-quality treatment management practices and in how to review such practices on construction plans and how to inspect practices for long-term protection, operation and maintenance. Please describe the training of staff in the last 12 months.

Staff has current certification in the following: NPDES inspector training, KEPSC Inspector training, & SWPPP Prep.

Additional 2013 training included the following webinars & training:

- Soil's Role in Processing Pollutants for Air and Water – Case Studies of Green Infrastructure & Carbon Sequestration
- KY Floodplain Management 101
- KY – TN WEA Watershed Management Webinar
- MS4 Monitoring Training
- Urban Stormwater & MS4 Compliance
- Combining Green and Gray in Combined Sewer Watersheds

MS4 staff also took advantage of the KSA quarterly meetings. Descriptions and certificates for training can be found in the Good Housekeeping for Municipal Operations Appendix.

F. Pollution Prevention and Good Housekeeping for Municipal Operations:

Per the KYG20 Permit Part II Page II-9 –

The permittee must develop and implement an Operation and Maintenance (O & M) program that includes a training component with the goal of preventing or reducing pollutant runoff from municipal operations. Please describe the O & M Program that you have developed and implemented within the last twelve (12) months.

The MS4 O&M program includes:

- Annual training for Public Works staff which includes a training video of spill prevention and safely storing potential pollutants on site.
- Sending notices to the public regarding our yard waste and leaf pick up provided for free
- Stormwater crew maintaining all city ditches and basins at a minimum 2 times a year. Also alerting the Engineering department of any illicit discharges detected while maintaining these facilities.
- Monitoring non CSS facilities which are maintained by the City of Owensboro.
- RWRA (Regional Water Resource Agency) completing cleanings of the stormwater infrastructure throughout the City. Inspection and Maintenance reports are in the attached appendix.

PART D: MISCELLANEOUS INFORMATION

11. Provide any data regarding the following indicators (if applicable). Attach separate sheets as necessary, and indicate, as appropriate, the rationale behind not using a listed indicator.

1) Number or percentage of citizens that aware of storm water quality issues

The number of citizens aware of stormwater quality issues has grown in 2013. With the passing of both the new stormwater quality ordinance and public improvement specifications we had increased public awareness through TV, newspaper, and media announcements. According to a new survey poll listed on our Stormwater Management website 73% of people are aware of stormwater quality issues in our community, but only 18% would know who to contact if dumping was occurring. This number needs to be increased as we are looking into new ways to market our City Action complaint line.

2) Number and description of meetings, training sessions, and events conducted to involve citizens

Four SWQAC meetings were conducted in 2013 (the meeting minutes are attached in the Public Involvement & Participation section of the attachments). The committee continues to address CSO issues and implement new ways to educate and involve the public in stormwater quality issues.

Four Home Builders Association / PI Spec Committee meetings were hosted in 2013 to go over and revise the Stormwater Quality Ordinance and PI Spec additions. These meetings allowed the builders to give suggestions and feedback prior to any changes.

Four Neighborhood Alliance cleanup events were hosted by the MS4. These events allow free bulk trash pickup including appliances and furniture. These events also encourage cleanup of the neighborhood areas around home owner's properties.

One storm-drain marking event was funded and planned by the MS4. This event was performed by the Western Kentucky University – Owensboro campus which marked 100 additional storm drains in the MS4.

3) Number or percentage of citizens that participate in storm water quality improvement projects

Relatively few people work on actual construction improvement projects. There are several hundred people who actively deal with the maintenance of our projects, or help promote the storm water quality of our MS4.

4) Number and location of storm drains marked

In April 2009, the Owensboro Metropolitan Planning Commission (OMPC) approved the placement of storm drain markers on all newly constructed curb inlets. In 2013, all new inlets were constructed with the stamped environmental message. One storm drain marking project was funded and planned by the MS4 resulting in an additional 100 drains marked by volunteers. This storm drain marking event is planned yearly in the hopes of marking all older inlets not stamped with the environmental message. An additional inlet was marked by the MS4 after a call from a citizen requesting the inlet be marked to detour dumping. The locations of these drains that were marked can be found in the Public Involvement and Participation section of the attachments.

5) Estimated linear feet or percentage of MS4 conveyances mapped

The MS4 has mapped all conveyances within the MS4 boundary of the City. We are still verifying the conveyances against as built plans and against the data of the CSS that RWRA has for the City.

6) Number and location of MS4 area outfalls mapped

All 21 outfalls are mapped. Locations of the outfalls are provided on the attached map located in the Illicit Discharge Detection and Elimination section of the attachments. In 2014, this map of outfalls will be reviewed for changes due to construction and CSS separation projects.

7) Number and location of MS4 area outfalls screened for illicit discharges

In 2013 the outfalls were not screened by the Engineering Department of the MS4, but as in compliance with the NPDES requirements outfalls will be inspected in 2014.

8) Number and location of illicit discharges detected

#	Date	Type of IDDE	Address of IDDE	Violation	# of Violations	Re-inspection
I-13-001	3/14/13	Sediment	940 W. 9th St. Owensboro, KY 42301	NOD	2	In Compliance
I-13-002	4/23/13	Sediment	2200 Venetian Way Owensboro, KY 42301	NOD	1	In Compliance
I-13-003	5/24/13	Sediment / Dumping	1100 Burlew Blvd Owensboro, KY 42303	NOD	1	In Compliance
I-13-004	6/7/13	Leaves	2218 Scherm Rd Owensboro, KY 42301	NOD	1	In Compliance
I-13-005	7/23/13	Sediment	2822 Daviess St Owensboro, KY 42303	NOD	1	In Compliance
I-13-006	8/14/13	Dumping	2744 Frederica St Owensboro, KY 42301	NOD	1	In Compliance
I-13-007	9/5/13	Grass	2840 Wayside Dr W Owensboro, KY 42301	NOD	1	In Compliance
I-13-008	9/5/13	Grass	1009 Standish Pl S Owensboro, KY 42301	NOD	1	In Compliance
I-13-009	9/5/13	Grass	909 Piedmont Dr Owensboro, KY 42301	NOD	1	In Compliance
I-13-010	9/24/13	Dumping	2222 Turnbury Cove Owensboro, KY 42301	NOD	1	In Compliance
I-13-011	10/11/13	Sediment	3342 Shadewood Trce Owensboro, KY 42303	NOD	1	In Compliance
I-13-012	10/11/13	Dumping	708 Parkway Dr Owensboro, KY 42303	NOD	1	In Compliance

9) Number and location of illicit discharges eliminated

All 12 illicit discharges listed above were eliminated.

10) Number of, and amount of material collected from, hazardous household waste (HHW) collections

At this time no formal HHW event are conducted in Daviess County although the Owensboro Sanitation Department does collect certain HHW materials. In 2013 1,272 lead acid batteries, 3,912 gallons of motor oil, and 1,947 tons of sewage sludge were collected. In addition various sites around the MS4 allow free legal disposal of many HHW items. Automotive stores allow free old battery and oil collection, Home Depot allows free CFL disposal, and Best Buy allows cell phone, battery, printer cartridges, and other electronic disposal.

11) Number and location of citizen drop-off centers for automotive fluids

Nearly all automotive care / service locations in the area accept motor oil. Some locations impose restrictions on quantities. Only a limited number of locations accept other kinds of automotive fluids. Examples include 2 O'Reilly's Autos, 2 Advanced Autos, and 3 AutoZones. All of these automotive stores promote environmental responsibility with automotive fluid disposal.

12) Number or percentage of citizens that participate in HHW collections

89%

13) Number of construction sites permitted for storm water quality

In 2013 there were 33 active construction sites.

14) Number of construction sites inspected

The 33 active construction sites were inspected a total of 234 times in 2013, not including the additional inspections for NOD or NOV citations.

15) Number and type of enforcement actions taken against construction site operators

In 2013, 21 Notice of Deficiencies (NOD) were issued, and 1 Notice of Violation 1 (NOV 1) was issued to active construction sites. A list of all inspections and citations is included in the Construction Site Stormwater Runoff Control Attachments.

16) Number of public informational requests received related to construction sites

No public information requests were received in 2013.

17) Number, type, and location of structural BMPs implemented

Detention or retention basins are required for every construction site that generates increased runoff by more than one cubic foot per second, per the Owensboro Metropolitan Planning Commission. Other BMPs are as follows:

- Chautauqua Park had a Rain Garden and Bioretention Cell built on the site. This project resulted in 3.32 acres of retention, in an area of the CSS.
- The Omega St Extension started construction in 2012, and has now been completed. This project built approximately 22 houses and extended Omega St through another block of the neighborhood. This project included 3 rain gardens which have resulted in 8,092.1 SF of retention. In addition, 2,025 SF of permeable pavers have been installed. This project is also in an area of the CSS.
- The Hobo Estates residential development included a 2' by 4' infiltration trench to the basins

18) Number, type, and location of structural BMPs inspected

All detention / retention basins as well as ditches are maintained and inspected by the MS4 stormwater crew. Inspection and maintenance of the structural conveyance systems is periodic. The 2013 reports are attached in the Post Construction attachments.

19) Number, type, and location of structural BMPs maintained, or improved

All public detention basins are cleaned and mowed on a rotating schedule. Goetz ditch structural BMPs, which consisted of a detention basin, Suntree stormwater treatment unit, and stormwater wetlands, were maintained in 2013. Harsh Ditch structural BMPs were also maintained and are functional in 2013.

20) Type and location of nonstructural BMPs utilized

Erosion and sediment control measures are implemented and maintained at all construction sites. The erosion and sediment controls that are typically used are: minimizing the disturbed area, phasing construction activities, seeding and mulching as soon as possible, protecting slopes, perimeter controls, temporary sediment traps or rock check dams, and stabilized construction exits. These sites are inspected regularly for compliance whether a public or private site.

The City of Owensboro reviews all construction plans to minimize impervious area and promotes open spaces to improve stormwater quality and quantity impacts on receiving streams. The MS4 permittee uses vegetated conveyances when practicable to promote infiltration and increased travel time to the discharge point. The MS4 has added the post construction stormwater requirements to the Public Improvement Specification, which includes incentives for additional green space, preserving existing trees, and installing trees and shrubs beyond those required.

21) Estimated acreage or square footage of open space preserved and mapped

The City has 25 public parks for a combined 953 acres of open space.

22) Estimated acreage or square footage of mapped pervious and impervious surfaces

Based on GIS map derivation, there are an estimated 9,439 acres inside the bypass. Of this, 3,925 acres are impervious.

23) Number and location of retail gasoline outlets or municipal, state, federal, or institutional refueling areas with implemented BMPs

There are 21 gasoline outlets or refueling areas that have implemented BMPs. Oil-Water separators are required at all developed or redeveloped gasoline outlets.

24) Number and location of entities that have containment for accidental releases

There are approximately 20 known industries in the area and they are all required to have protocols in place for accidental releases.

25) Estimated acreage or square footage and location where pesticides, herbicides and fertilizers are applied by the entity

There are approximately 380 acres in the area where pesticides and herbicides are used. This includes our 2 golf courses.

26) Estimated linear feet or percentage and location of unvegetated swales and ditches that have an adequately sized vegetated filter strip

There are no known unvegetated swales and ditches that have adequately sized vegetated filter strips in the MS4 area.

27) Estimated linear feet or percentage and location of stormwater sewer cleaned or repaired

It is estimated that 1,691 feet of stormwater sewer were either cleaned or repaired at multiple locations across the city and county with the largest amount being completed in the Wrights Acre Subdivision (located off of KY 405). Additionally, there were 9 repairs for inlets, catch basins, and manholes in the combined sewer system and 52 inlet and manhole repairs completed for the separate storm sewer system.

28) Estimated linear feet or percentage and location of roadside shoulders and ditches stabilized

It is estimated that 22,215 feet of roadside shoulders and ditches were stabilized at multiple location across the county with the largest amount of work being completed on Boston Laffoon Rd.

29) Number and location of storm water outfall areas remediated from scouring conditions

In 2013, no outfall areas were remediated from scouring conditions.

30) Number and location of de-icing salt and sand storage areas covered or otherwise improved to minimize storm water exposure

There are currently 3 locations, one on Fairview Dr (KYTC), one on KY81 (county), and one on W 5th St (City).

31) Estimated amount, in tons, of salt and sand used for snow and ice control

In 2013, the city of Owensboro used 500 tons of salt and Daviess County used 800 tons of salt for snow and ice control.

32) Estimated amount of material collected from catch basin, trash rack, or other structural BMP cleaning

It is estimated that 1,113 tons of material were collected.

33) Estimated amount of material collected from street sweeping

Street sweeping collected 535 tons of material. Additionally, the City's free leaf pick up service collected 1,700 tons of leaves in 2013.

34) Number or percentage and location of canine parks sited at least 150 feet away from a surface water body

Neither Owensboro nor Daviess County have a canine park.

35) Other

N/A

12. On-Going Water Quality Characterization Activities

a) Monitoring Data (submit summary of appropriate results):

See attachment in the Pollution Prevention/Good Housekeeping for Municipal Operations Appendix. Data provided by Water Watch Kentucky.

b) Other:

N/A

13. Discuss any problems encountered during this period (include any BMP changes in response to problems encountered).

There have been 11 Illicit Discharges, 21 Notice of Deficiencies, and 1 Notice of Violation 1.

14. Identify any new funding source(s) for implementing this permit.

No new funding sources have been identified at this time.

15. Provide a summary of complaints received and the follow-up actions taken in reference to storm water quality issues.

The only complaints included some of the Illicit Discharges. Whether it was the neighbor calling in the illicit discharge, or the home owner who didn't understand why it was illegal to, for example, discharge his leave pile into the inlets. These illicit discharges are described in the appendix.

16. Implementation status:

- a. Are the six minimum control measures being implemented within the compliance schedule and SWMP timetables?

☒ Yes ☐ No*

* If no, explain:

b. Do you foresee any problems which may affect full implementation of all the measures?

☐ Yes ☒ No*

* If yes, explain:

c. Are the six minimum control measures meeting percent reduction goals specified in the SWMP?

☒ Yes ☐ No*

* If no, explain:

17. TMDL – Do you have a TMDL in your MS4? For which stream segments? What is the impairment?

At this time there are no TMDLs in the MS4.

PART E: CERTIFICATION AND SIGNATURE

► The individual completing this report, listed in "PART A: GENERAL INFORMATION – MS4 OPERATOR" must sign the following certification statement:

"By signing this annual report, I hereby certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Type or Print Name:

Joseph G. Schepers

Signature:

Joseph G. Schepers

Date:

04/04/2014
(mm/dd/year)

**Owensboro Storm Water Quality Management Plan
2013 Annual Report
Measurable Goals Table**

SWQMP Measurable Goals Table					
Task	BMP- Activity Description	Measurable Goal/ Quantifiable Products	Targets/ Measures of Success	Responsible Parties	Year 4 PY 13-14 Accomplishments
1. MCM1 PUBLIC EDUCATION AND OUTREACH					
Local MS4 Activities					
Education	Develop Materials for a public education campaign	Create brochures and order cups and pens with the City's environmental logo to distribute throughout the community	Year 1-Finish brochure, order cups and pens, and distribute; Years 2 and 3-Increase distribution; Years 4 and 5-Develop and distribute new education materials	MS4 Operator SWQAC	The City of Owensboro, Daviess County Fiscal Court, and SWQAC members participated in public events to handout the educational materials and to talk to citizens about stormwater quality issues. We are also working on increased public education with the assistance of GRADD.
Education	Formulating a strategy to get public education materials to the public in a more effective way	Utilize environmental events and other public events to distribute education materials; Place "point of sale" education flyers at retail stores that sell paint, oil, and other potential pollutants; Educate illicit discharge violators through sending brochures on water quality along with the Notice of Deficiency letter.	Year 1 and 2- Set up a station at three events to hand out education materials, start developing "point of sale" flyers, and begin sending an educational brochure to illicit discharge violators; Year 3 thru 5- Continue to attend 3 events per year to hand out education materials, start posting "point of sale" flyers, and continue sending brochures to illicit discharge violators.	MS4 Operator SWQAC	In 2013, The City of Owensboro, Daviess County Fiscal Court, and SWQAC members participated in 1 public event to handout educational materials and to talk to citizens about stormwater quality issues. The MS4 permittee also updated the brochures to be sent to illicit discharge violators. Additionally next year GRADD will be assisting in more public education events.

Education	Utilize Public Service Announcements (PSAs) to inform the public about storm water issues and related community activities	Utilize the statewide educational opportunities.	Years 1 thru 5- continue to track the educational efforts by the KYTC.	MS4 Operator SWQAC	KYTC with our MS4 and partner communities utilize several approaches to public education. The most pronounced is a mass media play via radio and television. We also utilize a website tied in with the radio and television spots. KYTC in a combined effort with the MS4 communities manages the Adopt-A-Highway program. KYTC also utilizes our Kentucky Engineers Exposure Network (KEEN) to promote stormwater issues in community schools.
Education	Utilize the Storm Water Quality Exhibit at the Owensboro Museum.	Use the Museum as a way to educate the public about water quality issues and a way to distribute education materials and conduct surveys.	Year 1 -- Plan the design and come up with funding; Year 2 --oversee the construction and Develop a plan to distribute materials and conduct survey; Year 3 thru 5- oversee the effectiveness of the exhibit	MS4 Operator SWQAC	The Owensboro Museum of Science & History has opened the Origins exhibit, which will include a watershed education display. Additionally the Science Museum also had the traveling Riverworks Discovery exhibit on display. This exhibit emphasizes the importance of stormwater quality and conservation. The City of Owensboro also passed a municipal order for \$250,000 towards a River Hertiage History exhibit for the museum.
Education	Create opportunities to educate younger children about the importance of water quality.	With the help of KYTC's Keen coordinators, conduct presentations to local schools about storm water quality at least once per year	Year 1 thru 5-- Do presentations about storm water quality once per year to local schools.	MS4 Operator KYTC	No school presentations were completed in 2013, but the Owensboro Science and History museum featured multiple stormwater focused events at the museum.

Education	Use the City of Owensboro website as a tool for educating the public	Create a web page for water quality education, along with other information about the City's stormwater management program	Year 1- Start planning and developing the page; Year 2- activate the site for the public to see; Year 3 thru 5- Continue to update the web page	MS4 Operator SWQAC	In 2013, the City of Owensboro launched their own stormwater management site. This site has been live throughout 2013. The site has all 6 MCMs explained, as well as information for how to contact the City MS4 coordinator. The site also lists all Post-Construction documents that passed this year.
Outreach	Utilize Public Service Announcements (PSAs) to inform the public about storm water issues and related community activities	Utilize the statewide PSAs being used across Kentucky and track the number of PSAs aired in the MS4 area.	Years 1 thru 5- continue to track the PSAs being aired in the MS4 area	MS4 Operator SWQAC	Kentucky MS4 communities, in conjunction with the Kentucky Transportation Cabinet aired a video spot and six audio spots in 2013. The 30 second spots have been aired statewide as a public education initiative to inform the general population about stormwater issues. The ads can be viewed on stormwater.ky.gov. The TV and radio plays combined totaled 76,301 plays statewide in 2013 for a total value of \$1,381,352.

Outreach	Address the views and concerns of all sectors of the community, including minorities and traditionally disadvantaged groups	Invite a diverse group of individuals to serve on the SWQAC and achieve 75 percent member attendance by Year Five	Years 1 thru 5- Continue the schedule of regular quarterly meetings and encourage involvement of all sectors within the local community	MS4 Operator SWQAC	In 2013, the City of Owensboro and Daviess County Fiscal Court advertised the Storm Water Quality Advisory Committee (SWQAC) through the local newspaper, The Messenger Inquirer, as well as through local radio, and on the City's website. In 2013, the SWQAC met four times. The meeting minutes can be found in the Public Involvement and Participation section of the attachments.
2. MCM2 PUBLIC INVOLVEMENT/PARTICIPATION					
Local MS4 Activities					
Participation	Encourage public participation in all storm water-related activities	Issue press releases prior to all SWQAC meetings and activities	Years 1 and 2- Continue schedule of regular quarterly meetings; Years 3 thru 5-Organize SWQAC presentations for the Neighborhood Alliances	MS4 Operator SWQAC	The Storm Water Quality Advisory Committee met 4 times in 2013 and issued press releases prior to all meetings.

Involvement	Continue efforts related to the Storm Water Quality Advisory Committee (SWQAC)	Ensure that the SWQAC meets at least quarterly and achieve 75 percent member attendance by Year 5	Years 1 thru. 3- Continue schedule of regular quarterly meetings with emphasis on public education and outreach; Years 4 and 5-Direct the SWQAC in	MS4 Operator SWQAC	<p>The Storm Water Quality Advisory Committee met 4 times in 2013.</p> <p>Also the City hosted 4 Neighborhood Alliance Clean up Events. These events allow free curbside pick up all all items such as furniture and appliances. These events also request residents to pick up litter around their areas to help beautify and conserve Owensboro.</p>
Participation	Get volunteers involved in projects to improve water quality and promote water quality awareness	Utilize various groups and organizations to mark 200 storm drains each year	Year 1 thru 5- provide funding and mark 200 storm drains each year	MS4 Operator SWQAC	<p>The MS4 sponsored one storm drain marking project in 2013. The storm drain marking project was completed by a Western Kentucky University (Owensboro Campus) Geography class. This project resulted in an additional 100 storm drains being marked with environmental messages. Additionally all new storm drains for all projects are required to have the only rain down the drain stamp.</p> <p>The City also received 1 request by the public for additional drain markings. The drains were marked, and this area will be focused on for next year's drain marking event.</p>

3. MCM3 ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)					
Local MS4 Activities					
Reporting	Identify major sources of illicit discharges	Advertise the City Action Line as a tool for reporting illicit discharges and evaluate the number of calls that report such actions; Conduct dry weather screening of representative outfalls	Year 1-Advertise City Action Line and start developing a plan to inspect outfalls; Year 2 thru 5-Use City Action line, track reports, and conduct inspections of 5 outfalls per year	City of Owensboro MS4 Operator Daviess County Fiscal Court	The City Action Line was advertised in 2013. Also, a plan was developed to inspect Owensboro's stormwater outfalls. Outfall Inspections will be conducted in Spring / Summer 2014.
Mapping	Update and improve the storm sewer outfall maps	Map the remaining 25% of the MS4 area at a rate of 10% per year	Years 1 thru 5-Map 10% of the remaining MS4 area each year	City of Owensboro	The City of Owensboro GIS staff continue to update the MS4 stormwater conveyance system as new development occurs. The City of Owensboro GIS staff has also started to redo previous mapping data of both the MS4 and CSO conveyances by going through plans year by year for the most accurate data. All new development is mapped as developed.
Regulation	Prohibit illicit discharges throughout the MS4 area	Enforce city and county ordinances that specifically address illicit discharges and track the results of enforcement	Year 1 thru 5- enforce the city ordinance on	City of Owensboro MS4 Operator Daviess County Fiscal Court	In 2013, the City of Owensboro continued to enforce the Stormwater Ordinance pertaining to Illicit Discharges. Twelve (12) illicit discharges were detected in 2013 and all were eliminated. See the locations and types in the Illicit Discharge attachment to this report.

Education	Educate the public about the hazards associated with illicit discharges and about the reporting of spills and other discharges	Distribute brochures and other materials to illicit discharge violators, along with the general public and businesses	Years 1 thru 3- Continue mailing out leaf collection postcards, distribute education materials to the general public and illicit discharge violators; Years 4 thru 5-Coordinate with the public education efforts of the SWQAC	MS4 Operator SWQAC	Leaf collection pamphlets were mailed to all residents in 2013. Also, the MS4 participated in 4 public events to handout educational materials and to talk to citizens about stormwater quality issues. The MS4 operator also distributed educational materials to all Illicit Discharge violators
Education and Regulation	Promote the awareness of illicit discharge through storm drain marking	Promote storm drain marking projects to citizens, organizations, and neighborhood alliances; and ensure all newly constructed inlets are stamped by enforcing the Public Improvement Specs	Years 1 thru 5- Coordinate with community groups to organize storm drain marking events and enforce the PI Specs to ensure that 100% of all new inlets are stamped and upgrade existing inlets to ensure they are stamped	City of Owensboro MS4 Operator	In 2013, all new inlets installed were stamped with environmental messages, per the requirements of the Public Improvement Specifications. Also, volunteers marked 100 storm drains through storm drain marking projects, and the City marked an additional 5 inlets.

4. MCM4 CONSTRUCTION SITE STORM WATER RUNOFF CONTROL					
	Local MS4 Activities				
Regulation	Develop a program to reduce pollutants from construction activities that disturb (more than or equal to) one acre	Inspect, on a regular basis, all sites that require permit coverage, enforce all violators of the City's ordinance, and track all inspections and enforcement procedures	Years 1 thru 5- Continue construction site inspection and track enforcement	City of Owensboro MS4 Operator	There were thirty-three (33) active construction sites in 2013. All sites were inspected on a regular monthly basis. See the Inspection log spreadsheet in the Construction Site Runoff section of the Attachments.
Regulation	Review city and county ordinances to ensure that proper erosion and sediment controls and controls on waste at construction sites are in place	Change current ordinances and create new ordinances (as necessary) to guarantee erosion and sediment controls	Year 1- Update city and county ordinances, as necessary, to comply with the KYR10 permit; Years 2 thru 5- Track the implementation of local ordinances	City of Owensboro MS4 Operator	The City of Owensboro and Daviess County continue to look at local ordinances for revisions. In 2013 the new Post-Construction ordinance was added and implemented.
Qualification	Standardize procedures for site plan review, site inspection and enforcement, and public input	Adopt a measure by the end of Year One to ensure that all inspectors and engineers are qualified through an accredited inspection program, such as KEPSC or approved equal, and reach 100 percent compliance by Year Five.	Years 1 thru 5- Continue sponsoring KEPSC and other trainings whenever possible	Daviess County Fiscal Court	In 2008, the City of Owensboro adopted an ordinance requiring all inspectors and engineers to be KEPSC qualified . Currently, all City of Owensboro engineering staff are qualified through the KEPSC program.

Training	Provide appropriate educational materials for construction site operators and developers	Ensure that construction site operators and developers are trained through KEPSC or approved equal and educate operators and developers during site inspections	Years 1 thru 5- Continue sponsoring KEPSC trainings; Years 3 thru 5- Develop additional training materials and research other training programs for operators and developers	City of Owensboro MS4 Operator Daviess County Fiscal Court	The city continues to provide KEPSC training whenever possible, and encourages contractors as well when they receive any notice of deficiencies.
----------	--	---	--	--	--

5. MCM5 POST-CONSTRUCTION STORM WATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

Local MS4 Activities					
Regulation	Consider the implementation of strategies for a combination of structural and nonstructural best management practices	Require contractors to submit nonstructural, site-specific Storm Water Pollution Prevention Plans (SWPPPs) for all development plans	Years 1 and 2-Work on establishing the requirements for contractors at the city and county levels; Years 3 thru 5- Implement the requirements and assess the effectiveness	City of Owensboro MS4 Operator Daviess County Fiscal Court	The City of Owensboro implements requirements for contractors through an ordinance passed in 2008.

Regulation	Assess existing ordinances, policies, and programs that address storm water runoff quality	Research ways to promote and implement green infrastructure into new development and redevelopment	Year 1-asses existing city and county ordinances; Years 2 thru 5- implement a green infrastructure project in the City of Owensboro	City of Owensboro Daviess County Fiscal Court	In 2011-2013, the City and County hired a consultant to revise our existing stormwater ordinance and Public Improvement Specs to include a stormwater treatment standard. The consultant is also providing opportunities for Low Impact development, through revising the local ordinances and codes. Also, RWRA has implemented a LID at Chautauqua Park to be used as both a NPS pollution control and as a learning opportunity for the community.
Regulation	Develop and implement a program to address stormwater runoff quality from new development and redevelopment	Develop and implement a stormwater runoff quality standard that requires new development projects to implement controls to manage runoff through water-quality control structures	Year 1 and 2-update existing city and county ordinances to accommodate the new standard; Years 3 thru 5- enforce this standard on all new development	City of Owensboro MS4 Operator Daviess County Fiscal Court	The City, along with our consultant, finished revising the local codes and ordinances to include a stormwater treatment standard. These ordinances and Public Improvement Specifications are both implemented.
6. MCM6 POLLUTION PREVENTION/GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS					
Local MS4 Activities					
Training	Reduce the discharge of pollutants from streets, salt/sand storage areas, waste transfer stations, etc.	Implement consistent measures and practices that reduce pollutants	Years 1 thru 5-Start and continue an annual training program (at the city and county levels) for public works employees, to be conducted during the winter shutdown period	City of Owensboro Daviess County Fiscal Court	An annual training program for Public Works staff is in place. All Public Works staff are required to watch a training video annually, which consists of spill prevention and safely storing potential pollutants on-site.

Outreach	Collect leaves, yard waste, and trash and dispose at transfer station or county landfill	Continue and work to improve the City of Owensboro collection program every fall	Years 1 thru 5-Continue to distribute notices to residents regarding the collection program; Years 3 thru 5-Develop additional outreach measures and coordinate efforts with the SWQAC	City of Owensboro MS4 Operator	Notices regarding the collection program were distributed in 2013. See attached flyers in the appendix. The City collected 1700 tons of leaves and our street sweeping program collected 535 tons of trash.
Training	Train employees to prevent and reduce storm water pollution that might occur as a result of certain employee duties	Provide training for all public works employees on an annual basis and ensure that all public works employees have received at least a year of training by the end of Year Three	Years 1 thru 5-Begin and maintain a training program for city employees; Years 2 thru 5-Develop and maintain a training program for DCFC and RWRA employees	City of Owensboro Davies County Fiscal Court	The City of Owensboro employee training program is in place. This program includes training, bulletins, and informative meetings.
Inspection	Inspect facilities on a regular basis	Maintain an inspection schedule and strive to improve it on an annual basis	Year 1-Begin an inspection program in the city; Years 2 thru 5-Enhance the program on an annual basis through scheduling and additional programs	City of Owensboro	All basins and ditches are maintained and inspected at a minimum 2 times a year. Next year we will begin to look at facilities that are outside the CSS and inspect regularly.
Maintenance	Continue the program of catch basin cleaning	Maintain and enhance the program on a 3-year cycle in the CSS and as needed in the MS4	Years 1 thru 5-Meet on an annual basis to discuss the program and possibilities for improvement	City of Owensboro RWRA	RWRA continues to complete the cleanings. The inspection and cleaning reports are attached in the Post Construction section of the attachments.

**Owensboro Storm Water Quality Management Plan
2013 Annual Report
Appendices**

**Owensboro Storm Water Quality Management Plan
2013 Annual Report
MCM #1 Public Education and Outreach**

- Public Events Participation Pg 31
- Public Education Handout Material Pg 32
- Storm Water in the News Pg 66



Fax (502) 687-8585

CITY OF OWENSBORO KENTUCKY

101 E. 4th Street
P.O. Box 10003
Owensboro, KY 42302-9003
Phone (502) 687-8550

MEDIA RELEASE

March 28, 2013

Public Information / Community Representative Abby Shelton at 270-687-8557 or
sheltonam@owensboro.org.

NEIGHBORHOOD ALLIANCES TO HOST NEIGHBORHOOD CLEANUPS

Four alliances will hold their annual cleanups in the upcoming months. All residents in the cleanup areas are invited to help beautify the neighborhood by picking up litter along sidewalks and streets on their cleanup day! The City Sanitation Department will provide **free curbside pickup** for junk furniture, appliances and other items to its residential customers in this neighborhood alliance area. Items **MUST BE** brought curbside by 6 a.m. the day of the cleanup. If you have items to be picked up, please call the City Action Line at 687-4444 by the Wednesday before the cleanup. Smaller items must be bagged or boxed. The crews cannot pick up construction debris/materials, yard waste, paint or any type of liquid.

MIDTOWN EAST NEIGHBORHOOD ALLIANCE - APRIL 13

The Midtown East Alliance extends from Parrish Avenue to Byers Avenue, between Frederica and Breckenridge Streets. The north boundary is 14th Street in the J.Z. Moore neighborhood, between J.R. Miller and Frederica. The alliance meets at Buena Vista Baptist Church at 5:00 p.m. on the first Thursday of every month.

APOLLO AREA ALLIANCE - APRIL 20

The Apollo Area Alliance represents neighborhoods between Carter Road and Frederica Street, between the U.S. 60 Bypass and Southtown Boulevard. The alliance area also includes Twin Lakes subdivision, south of Southtown, and neighborhoods south of Tamarack Road. The alliance meets on the fourth Tuesday of every month at 6:00 p.m. at Century Christian Church.

WESLEYAN-SHAWNEE NEIGHBORHOOD ALLIANCE - APRIL 27

The Wesleyan-Shawnee Neighborhood Alliance extends from Booth Avenue to Tamarack Road, between Frederica Street and Lewis Lane. It also includes residents west of Lewis Lane to the U.S. 60 Bypass, between Tamarack and Scherm Roads. The neighborhood alliance meets at 6:00 p.m. on the fourth Tuesday of the month at Kentucky Wesleyan College's Winchester Center.

DUGAN BEST NEIGHBORHOOD ALLIANCE - MAY 18

The Dugan Best neighborhood area includes neighborhoods between Dublin Lane and Ewing Road, from the Ohio River to McFarland Avenue. South of Fourth Street, the boundary extends west to Carter Road and Danberry Street. The alliance meets on the fourth Tuesday of every month at the Dugan Best Recreation Center.

###

For more information about the City of Owensboro, visit us on the web at www.owensboro.org.

This book belongs to:

Display
Only



RiverWorks Discovery

**A Journey of Exploration and Imagination
on America's Waterways™**

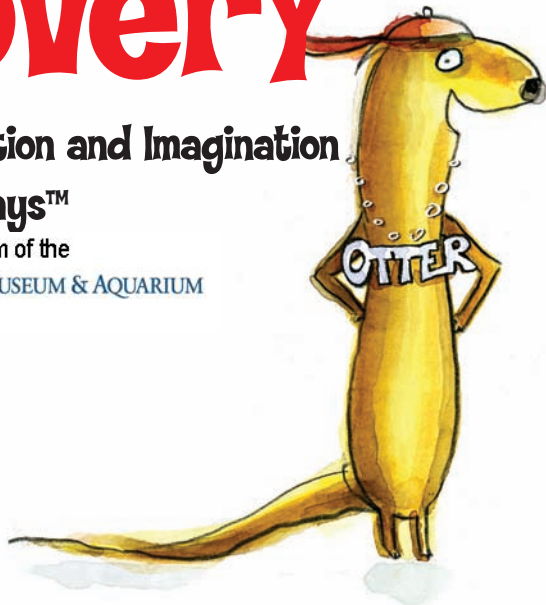
A National Outreach Program of the



NATIONAL MISSISSIPPI RIVER MUSEUM & AQUARIUM

IN ASSOCIATION WITH THE SMITHSONIAN INSTITUTION

Ohio River



Wheelhouse Logbook



Discovery is
the journey;
understanding is
the destination.
Imagine!

“Beyond all competition,
the most beautiful river in the universe....”

—The Navigator, a Guide for Travelers, by Zadock Cramer 1801

The Ohio River begins in Pittsburgh, Pennsylvania, where the Monongahela and the Allegheny Rivers meet. It flows west-southwest for 981 miles, touching six states. Hundreds of rivers, creeks, and streams join the Ohio forming its watershed. The river pours into the Mississippi at Cairo, Illinois. Carrying waters from as far away as upper New York and Alabama, it contributes one fourth of the water that flows into the Gulf of Mexico.

Over the years, human-made changes in the Ohio River have made the river more navigable for commercial vessels. Commerce and navigation continue to be important work on the Ohio River. The river is nationally important for commerce, and it is internationally significant as a highway for barges carrying products to and from worldwide markets.

RiverWorks invites you to join us on a voyage of discovery on one of our nation's greatest rivers. Climb into the wheelhouse of the Motor Vessel Riverworks (M/V Riverworks) towboat. Prepare yourself to travel through time. Explore alongside famous Americans, travel with a family as it floats downstream on a flatboat to a new home in Kentucky, decipher secret code as a slave escapes to freedom, and watch as the Army Corps of Engineers clear snags and debris out of your way. Prepare to lock through McAlpine lock, near Louisville, Kentucky, once the site of the treacherous “Falls of the Ohio,” smell the smoke from the burning wood powering mighty steamboats down the river, and hear the music from the calliope.

Listen as we tell some of the stories the river has to share. Shut your eyes and imagine.



My River Field Trip Log

Location:

Date:

Day:

Time:

Season:

Temperature:

Sky:

Wind direction and speed:

Precipitation:

Weather conditions:

River observations:

What is a watershed?



A watershed (also called a drainage basin) is an area of land where all the small creeks and streams drain into a larger body of water, such as a river. Many smaller watersheds make up the vast area drained by the Ohio River. In turn, the Ohio River watershed drains into the Mississippi River and becomes part of the Mississippi watershed.

No matter where you live, your home lies in a watershed connected to other watersheds. What you do in your own backyard has an impact on rivers a long way from your home and on the plants and animals that live there. Thus, keeping America's major watersheds free from pollution begins with the small creeks and streams in your own neighborhood.

River of Discovery

Early Explorers of the Ohio River

Native peoples used the Ohio River for transportation and trade centuries before Europeans arrived. The first European to claim discovery of the Ohio River was French explorer Robert Cavelier (better known as LaSalle). In 1669, LaSalle and his party traveled overland from Lake Ontario and found a river they believed to be the Ohio. Unfortunately, during his lifetime, a fire destroyed LaSalle's journals and maps, so he was unable to prove his claim.

Regardless of who discovered the Ohio River, newcomers to America realized the potential of this great waterway. Many famous Americans are associated with its history. As a young man, George Washington worked in the Ohio River Valley as a surveyor. On an extended canoe trip, he kept a detailed diary of the land, its resources, and native inhabitants. Later in life, he bought and sold property along the Ohio River.

Davey Crockett and Daniel Boone are two famous frontiersmen who explored the Ohio River valley in the late 18th and early 19th centuries. Another frontiersman, George Rogers Clark, settled on the Ohio River in Southern Indiana. It was at this home in Clarksville, Indiana, in 1802, that Meriwether Lewis picked up William Clark (George's brother) and his servant York, who was a slave. Many people believe that the Lewis and Clark Expedition officially began from here on the Ohio River.



Davey Crockett



Daniel Boone



young George Washington



York



Meriwether Lewis



William Clark

River of Pioneer Adventure

The Dewees family traveled from Philadelphia to Kentucky in 1787 to 1788. The first leg of their adventure was by wagon to Pittsburgh where they obtained a flatboat and continued down the Ohio River. In Mary Dewees' writing, she described some of their traveling adventures.

During the day, travelers floated downstream on the river. At night, they would pull up on the banks and camp overnight, or they would continue on the river in the dark, which could be dangerous. If there was a town or a house along the way, they had an opportunity to buy or trade for eggs and milk.

River of Pioneer Adventure

The Ohio River valley has some of the most fertile soil in the world. People said that the dirt was so rich that you could plant a bare stick and it would break out in leaves. Many pioneers moved out west because owning such land meant a better life. Today, this area is a part of the breadbasket of the world.

The river had hidden dangers. Sometimes flatboats would become stuck on a sandbar. When this happened, other people traveling on the river would usually stop and help, setting the boat on its way again. Hitting a sunken stump could put a hole in the boat. The flatboaters needed to act quickly to save their boat and keep their belongings dry.

One universal truth is that children helped with chores. Some of these were ordinary chores, such as cooking and cleaning up after meals and feeding and cleaning up after the animals. Other chores were new, such as acting as lookouts for snags and sandbars in the river and fishing off the boat. Even cats and dogs had important jobs to do. Cats caught rats, and a good watchdog could help hunt. Many children also found time to play along the banks.

Throughout her writings, Mary Dewees expresses the breathtaking beauty of the river. At end of the journey, she was pleased with her new cabin and closed her writing with this:

"I have my little family together and am in full expectations of seeing better days."

Yours &c
MD
Feby. 11th: 1788

October, 19th 1787

The water very low, I am much afraid we shall have a tedious passage our boat is 40 foot long our room 16 by 12 with a comfortable fireplace, our Bed room partitioned off with blankets, and far preferable to the Cabins we met with after we crossed the Mountains, we are clear of fleas which I assure you is a great relief for we were almost devoured when on shore,
- Mary Dewees

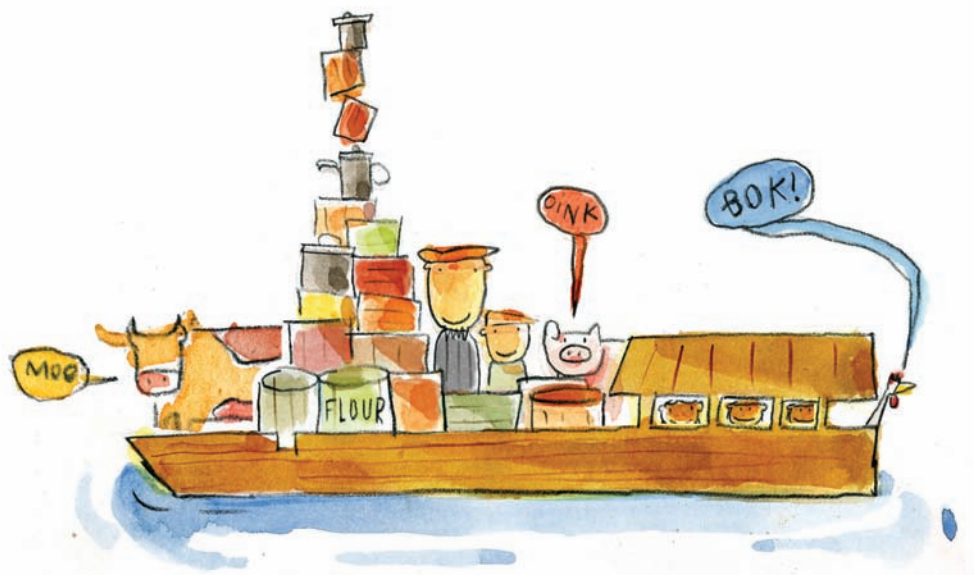
By the Numbers

Traveling by Flatboat

Imagine yourself on a flatboat 200 years ago. Everything you need for a new life is aboard. You might have some livestock, such as a cow, a horse, a mule, a pig, and chickens. You will need your equipment for farming, tools, pots and pans, candles, food for people and your animals, blankets, clothing, weapons for hunting and protection, and a host of other things. You will need a place to sleep and to cook your meals. You must pack all of this onboard a single boat.

Estimate the square footage of a flatboat that is 40 feet by 12 feet (40' x 12'). Pace it off in the area around you, one adult pace is equal to about three feet.

Now imagine everything from your house fitting in the same space. Remember a space for your car.



River of Trade

Humans have always lived near rivers. We use the water in rivers for drinking, cooking, bathing, generating electricity, watering crops, and for traveling upon. The rivers are important for commerce. Commerce is the buying, selling, or trading of goods. As people began new settlements to the West, tradesmen saw an opportunity to make money by providing goods and services that were hard to find on the frontier.

Flatboats ran from Pittsburgh, Pennsylvania, to New Orleans, Louisiana, stopping to sell their goods or services as they traveled downstream. Some boats provided a service such as a gristmill to grind grain into flour or as a sawmill to cut lumber. Other boats were outfitted as general stores. If money was short, as it often was on the frontier, tradesmen would barter with farmers and settlers for farm and forest goods.

When the tradesmen arrived at a large city, they would sell the goods they received in barter, break up their boats to sell for lumber, and walk home. These floating stores operated for a short time as towns became more established and steamboats made exchanging goods upstream and downstream easier.

Today commerce on the Ohio River is on a much larger scale. Towboats haul bulk goods such as coal, grain, cement, chemicals, and fuel products. Barges are picked up and dropped off at various ports along the river.

Think about how a bad growing season might affect trade on the river.

Example: It has been a poor growing season and the amount of corn is only half of last year. Can farmers get a higher price for their corn?

Why or why not?

River of Senses

Imagine you are living 200 years ago and your family has chosen to move to the wilderness to start its own farm. Remember, living in the wilderness means no cars, school buses, or electricity. Take a few minutes to look at the land and the river around you. How would it be different? Close your eyes and listen. What sounds can you hear? Become aware of the scents surrounding you. What might a traveler experienced from long ago? What would be the same as today? What would be different?

In the boxes, draw a picture of then and now at the river.



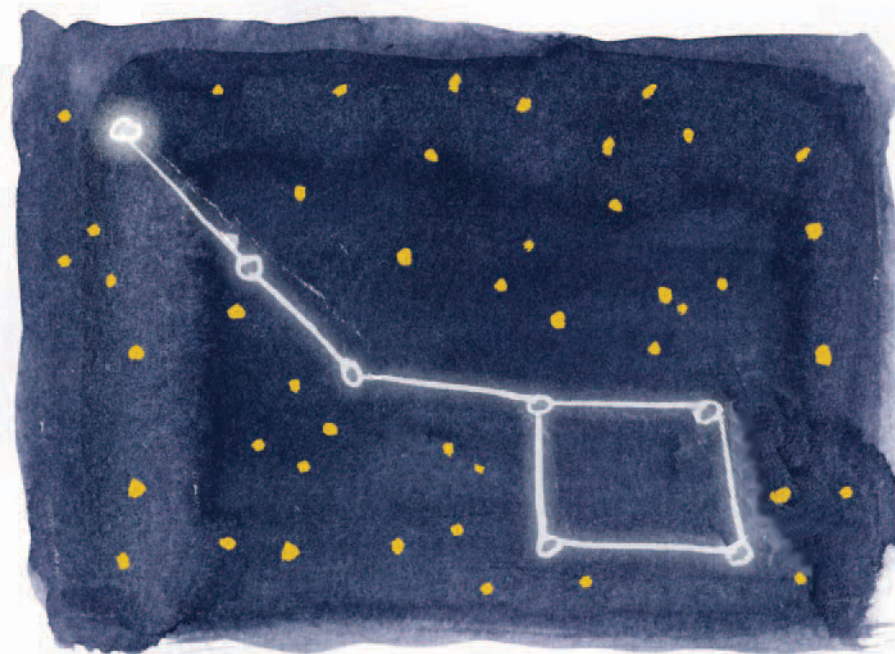
River of Freedom

A river journey meant different things to different people. To some it meant freedom. The Ohio River was the boundary line between Slave States and Free States. Although helping the slaves was illegal, many people wanted to do it. One problem they had was how to get information about escape routes to those held in slavery in the South.

Slaves were not allowed to read or write. However, they knew about their environment. Parents taught their children how to find the North Star in the night sky. The North Star is a part of a constellation that looks like a little dipper or a drinking gourd.

The song "Follow the Drinking Gourd" is attributed to a man named Peg Leg Joe who worked as a traveling carpenter in the South. This song contains hidden information. It tells escaping slaves when to leave for their journey to freedom and what route they should take.

Joe taught this song to slaves on the plantations in Alabama and Mississippi where he worked. Even though many escape routes exist, this is the only example of a song that is thought to survive. We will never know if songs like this assisted anyone in escaping slavery or if they are just folklore. We do know that many people crossed the Ohio River in their quest for freedom.



Follow the Drinking Gourd

When the sun comes back and the first quail calls,
Follow the drinking gourd.
For the old man is a-waiting for to carry you to freedom,
If you follow the drinking gourd.

The riverbank makes a very good road,
The dead trees show you the way,
Left foot, peg foot, traveling on
Follow the drinking gourd.

The river ends between two hills,
Follow the drinking gourd.
There's another river on the other side,
Follow the drinking gourd.

Where the great big river meets the little river,
Follow the Drinking Gourd.
For the old man is a-waiting to carry you to freedom
If you follow the Drinking Gourd.



Activity

Look around you and pick a destination. Do not tell anyone what it is. Map a route using words with only references from nature, e.g., turn at the tree with the crooked trunk. What other clues would be appropriate to give people following the directions so they would know if they are on the right path? How could the route be followed at night, with limited sight or visual clues?

Trade clues with other members of your group, can you find your way to the destination?

Imagine you were writing your clues in secret code contained within a poem or a song. Set the poem/song to music. Use a tune from a simple song everyone knows.

The decoded song directs the escapee to leave in the early spring and to follow the banks of the Tombigbee River. The "other river" also runs north and south and is just north of the Tombigbee. Can you find this river? See if you can trace the escape route on the map

River of Change

Humans have attempted to tame rivers by preventing flooding along their banks and to assure that the river is navigable for boats and barges.

Levees

Levees are earthen embankments whose purpose is to furnish flood protection. Levees help make rivers deeper by concentrating the flow of the water into a main channel.

Snag Boats

One of the most common obstacles to navigation on our rivers are snags. Snags are trees or branches that become embedded in rivers lakes or streams. In 1824, the US Army Corps of Engineers began the removal of snags and other obstructions on the Ohio and the Mississippi Rivers. Snag boats are still at work today.

Wing Dams

Wing Dams help direct water to the middle of the river channel making the water swifter and deeper for barge traffic.

Dredging

Rivers carry sediment such as gravel, sand, and silt. The faster the water is moving, the more sediment it can carry. The flow of rivers constantly changes. As the river slows, the larger and heavier pieces of sediment fall to the bottom of the stream. When sediment accumulates, it makes areas of the channel too shallow. Large boats called dredges are used. Dredges vacuum or scoop up water from the bottom of the river, strain out the gravel and sand, and return the water to the channel.



Snag boat



Wing Dam



Clamshell Dredge



Dustpan Dredge



Levee

Locks & Dams

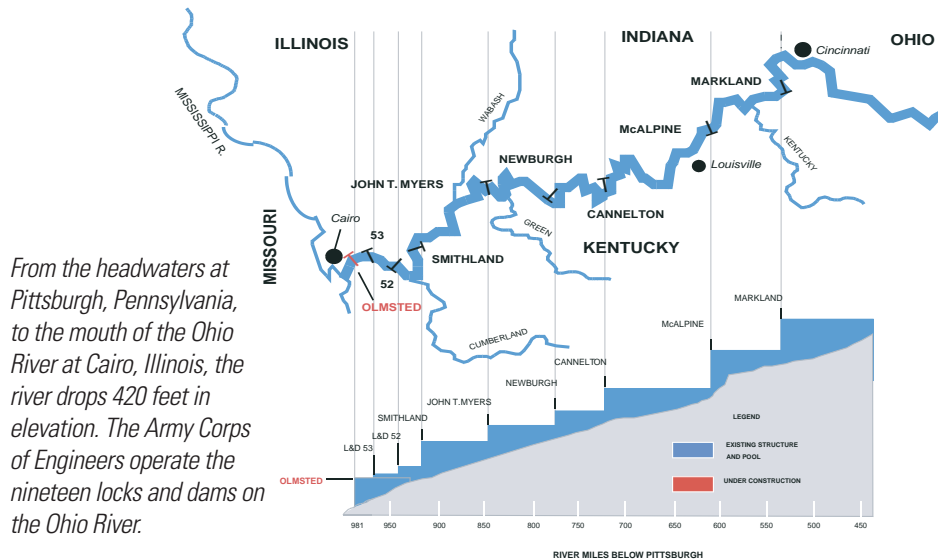
Traveling on the Ohio River could be a hazardous journey. The falls of the Ohio at Louisville, Kentucky, were particularly treacherous even in high water, smashing many boats against the huge rocks. Here, the river fell 22 feet over a two-mile run. During high water, boats experienced few problems, but when the water was lower, the boats had only one route over the falls. It lay between two giant rocks and was only fifteen feet wide. When water was very low, navigation was impossible, wasting millions of dollars of cargo.



Local surveyors, with the help of the U.S. Army Corps of Engineers, mapped out the best route for a canal to bypass the treacherous falls. They determined the safest course of navigation over the falls in high water. Completion of the canal and safer routes of navigation temporarily improved the situation. In 1872, a lock and dam opened on this site, the largest of its kind in its day.

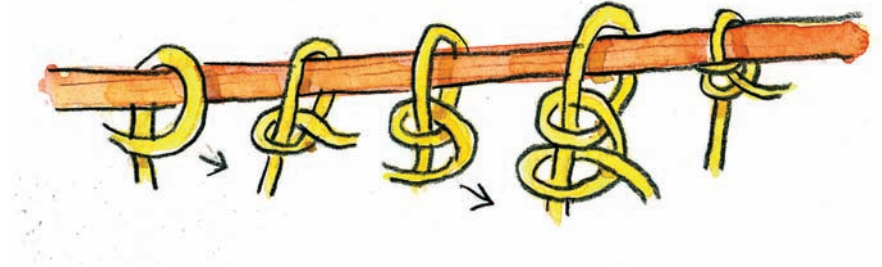
A natural river has an uneven sloping bottom, with areas too shallow for navigation and areas of deeper pools. Dams are wall-like structures that span the entire width of the river. Dams hold enough water to keep the main channel of the river at an appropriate depth for barge travel. The dam system maintains a "stairway" of these pools.

Locks are enormous chambers built beside the dam that act like elevators by lifting or lowering boats to allow navigation of the river. The water level in the locks is raised or lowered by gravity so boats and barges can travel up and down the river using this "stairway."



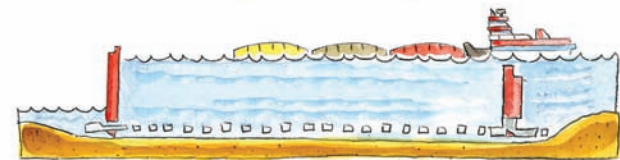
Half Hitch

Mariners commonly use knots called half hitches when locking through. Use your pencil and a piece of string or your shoelace to see if you can tie this knot



Locking Through

1. barge entering lock



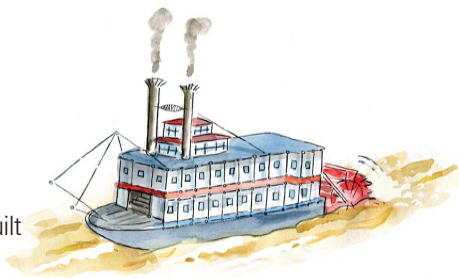
2. barge in lock



3. barge leaving lock



Steamboats



At Pittsburgh Pennsylvania, in 1811, Robert Fulton built the first steamboat to navigate western waters. The boat, named the New Orleans, sailed down the Ohio River to the Mississippi River and on to the port of New Orleans. A passage aboard cost \$30.

The steamboats operating on the rivers promoted commerce and the settlement of the Western United States. Cargoes included cotton, sugar, other agricultural goods, industrial supplies and products, and of course, people. Sometimes the steamboats would tow another un-powered boat called a barge that was filled with cargo.

Today, people can get a glimpse of the grandeur of a 19th century steamboat by cruising the inland waterways on modern boats made to imitate the steamboat style.

The maiden voyage of the New Orleans was far from uneventful. Soon after leaving the Ohio River, the boat was caught in the series of the New Madrid earthquakes, the strongest earthquakes to ever occur in the United States east of the Rocky Mountains. The quakes caused submerged trees to rise in the waters complicating navigation. Caving of the riverbanks made tying up on shore impossible. The crew of the New Orleans reported mooring to an island only to awake in the morning and find that the island had disappeared below the waters of the Mississippi River.

The New Orleans survived this perilous journey and went on to make regular trips between Natchez and New Orleans. It sank in 1814 after hitting a stump.



Activity - How Large Is a Barge?



Each barge is 195 feet long and a typical tow can stretch a quarter of a mile.

Towboats and Barges

The vessels on the River have changed over time. When diesel engines came along the steamboats were replaced by smaller more powerful towboats built to push barges instead of carrying cargo themselves.

Today, a towboat carries a small crew consisting of a captain, pilot, mate, engineer, deckhands, and a cook. Each position has important duties and responsibilities. Safety is everyone's concern because the work can be dangerous. Crews work six-hour shifts in fair weather and in foul with no days off for 28 days, but they have the next 28 days off.

Today's barges come in many types and sizes. Covered hopper barges carry products such as grain or fertilizer, have watertight hatches to protect contents from the weather. Open hopper barges have no tops. They carry cargo such as coal and sand. Tank barges transport petroleum and other liquids.

Towboats carry a small craft called a yawl. Two common types of yawls are johnboats and skiffs.



Johnboat



Skiff

A yawl is used for the following:

- To drop off or pick up crew members on shore.
- To pick up supplies.
- To carry a mooring line to the bank.
- Many other assorted chores that would be impossible with to do with a tow.



In a large area, divide your group in two. Have the groups stand back to back. Have each group pace off 200 paces, turn around, and wave to each other. This is approximately the length of a tow. Imagine the skill required to steer such a large vessel. How long might it take one to stop?

Navigating on the River

Towboat captains must spend several years learning about river navigation. They must be able to keep their tow safe in the main river channel. To do this, they must learn every twist and turn, every lock and dam, bridge, and buoy on the Ohio River. They must be on constant watch for snags and other obstacles in the river.

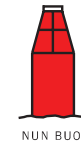
This is an example of buoys that mark the navigational channel. As you look downstream, the red nuns will be on your left. The green cans will be on your right. The main channel is between them.



Nine examples of standard marine navigational markers as seen traveling down mainstream.

Port Side - Red

(These markers are to your left as you head downstream.)



NUN BUOY



LIGHTED CAN BUOY



PASSING DAYMARK

Starboard Side - Green

(These markers are to your right as you head downstream.)



CAN BUOY
(BLACK OR GREEN)

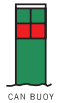


LIGHTED CAN BUOY



PASSING DAYMARK

All Waters



CAN BUOY



222.1
MILE BOARD

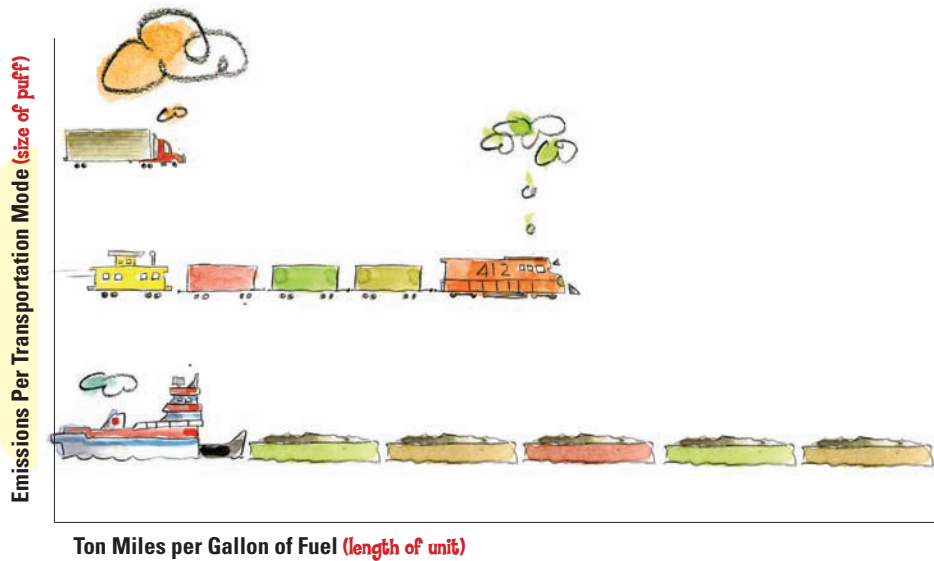


ANCHORAGE

Barge Works

Over 230 million tons of cargo is transported on the Ohio River each year. Seventy percent of that is coal and other energy products. Barge transportation of goods is the single most efficient, economical, and environmental choice for transporting freight.

One gallon of fuel can move one ton of cargo 522 miles by barge. That same gallon of fuel would move that same ton of cargo 386 miles by rail and only 59 miles by truck. Because shipping by barge requires less fuel to move cargo, it creates less pollution.



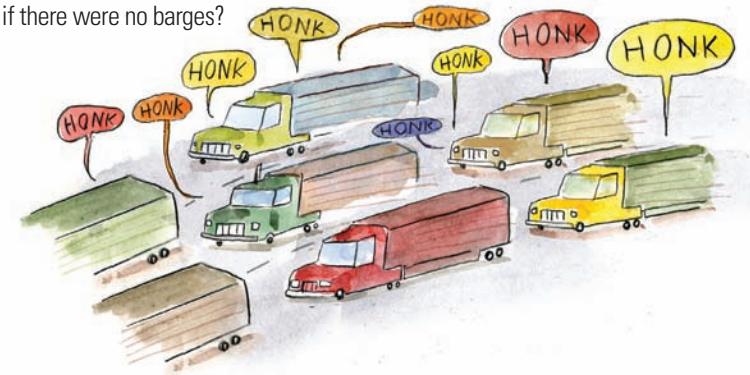
Compare Cargo Capacity



Equivalent Units



Whew! That's not to mention all of the added traffic on the road. Can you **imagine** how long it would take to get ANYWHERE on the highway if there were no barges?



Barges by the number: **Imagine** you are the owner of a large widget company. There is serious need for your widgets. You have 6,000 tons of widgets to move. (One ton is approximately equal to the weight of an average car) Find the right transportation choice for your product.

Number of barges needed: _____

Number of semi-trucks needed: _____

Number of train cars needed: _____

Restoring the River

"Water is the most critical resource issue of our lifetime and our children's lifetime. The health of our waters is the principal measure of how we live on the land."

Luna Leopold, Hydrologist



At the turn of the 20th century, many navigational improvements had been made on the Ohio River. However, intensive use of the river and waterway system over the years resulted in serious pollution problems.

Clean Water Act

In 1972, Congress passed the Clean Water Act. Its purpose was to repair the damage to America's rivers and restore them to their natural state as nearly as possible. Today, many groups of concerned citizens are working toward those goals on the Ohio River. The American barge industry is one of those groups.

Barge companies are playing a vital role in keeping America's rivers safe and clean. The American Waterways Operators, an association of the tugboat, towboat, and barge industry, and the U.S. Coast Guard has established a Responsible Carrier Program to promote "safe, efficient, and environmentally responsible transportation."

We invite you to do all you can to keep the river safe and clean. You may start by signing a **KIDS FOR CLEAN RIVERS PLEDGE CARD.**

"Anything else you're interested in is not going to happen if you can't breathe the air and drink the water. Don't sit this one out. Do something. You are by accident of fate alive at an absolutely critical moment in the history of our planet."

Carl Sagan, astronomer

"In the end, we will conserve only what we love."

— Baba Dioum, 21st century Senegalese farmer

Kids for Clean Rivers

It has been proven time and again, that one person can make a difference. **Imagine** that person is you!

Sign the Kids for Clean Rivers pledge.

Beginning today, I, _____, promise to be a person who makes a difference in my environment by more closely observing the natural world around me. I also promise to protect our waterways by doing at least two of the following actions:

- ☐ Learn all I can about the importance of rivers. Educate others.
- ☐ Get involved in planting trees, shrubs, or other plants on hillsides to keep soil in place.
- ☐ Keep oil, gasoline, and chemicals out of storm drains, sinks, and toilets. Take those products to a recycling facility.
- ☐ Reduce the amount of water I use.
- ☐ Get involved in river clean-up activities in my area.
- ☐ Be a smart shopper. Choose products with minimal or recyclable packaging.
- ☐ Clean up after my pets, so the animal waste doesn't pollute storm water runoff.
- ☐ Protect wildlife. Don't dispose of fishing lines, nets, or plastic items in or near the water.
- ☐ Always put trash in its place.
- ☐ When possible, make sure to reduce, reuse, and recycle.



My Signature _____ Today's Date _____

Witness' Signature _____

For a free copy of this logbook and other cool stuff, go to

www.RiverWorksDiscovery.org
www.rivermuseum.com

RiverWorks Discovery

**A Journey of Exploration and Imagination
on America's Waterways™**

A National Outreach Program of the



NATIONAL MISSISSIPPI RIVER MUSEUM & AQUARIUM
IN ASSOCIATION WITH THE SMITHSONIAN INSTITUTION

For more information contact
Errin Howard at 513-403-9312
errin@riverworksdiscovery.org

Boelhauf,

Kerry Smith

I Wonder Where All That Stuff Ends Up...



Excess Lawn Fertilizer
can be washed away in heavy
rains and end up in your
streams! Learn why it's a
problem and how you can be
a part of the solution.

www.inyourwater.org



If it's on the ground,
It's in your water.

Commonwealth Water Education Project

This work was funded in part through a grant from the U.S. Environmental Protection Agency to the Kentucky Division of Water and University of Louisville to Western Kentucky University

For questions about pollution or for
reporting of spills call:

Owensboro's City Action Line
(270)-687-4444



litter (lit'ər)**n.** Trash that has not been disposed of properly. Examples include items thrown from car windows such as cans, bottles, wrappers and cigarette butts.

stormwater (stôrm' wôt ə)**n.** Rainwater that flows from streets, parking lots, and other city surfaces into streams and lakes. Also transports litter into streams and lakes.

You can help redefine the condition of Owensboro's stormwater.

Don't Litter!



Volunteer to apply drain markers to storm drains in your neighborhood.



Also, consider adopting a street to remove litter from our roadways and reduce water pollution.

For volunteering information contact Bailey Bennett at:
bennetteb@owensboro.org



City of Owensboro

The myth is that stormwater carries trash, oil, and other pollutants from the street to a storm drain where it gets treated before going to our streams and rivers.

THIS IS NOT TRUE !!

Learn more about this problem and how you can become a solution to pollution at
www.inyourwater.org

Call Owensboro's City Action Line for reports of spills or any other pollution problem.

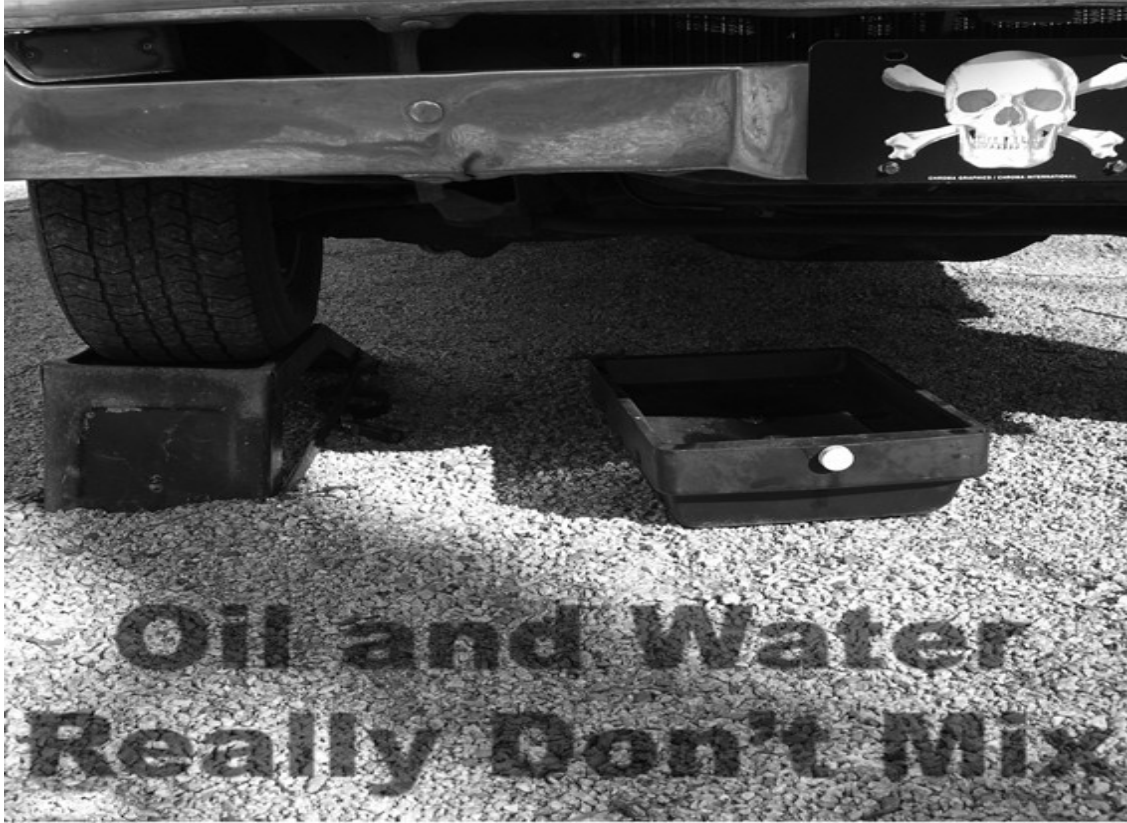
(270)-687-4444

H₂Owensboro

ONLY RAIN

Down the Drain





Don't dump used motor oil into storm drains, because they lead directly to streams and rivers. Please bring used motor oil to one of these free oil recycling centers:

O'Reilly Auto parts
Advance Auto parts
Autozone Auto parts
Walmart Supercenter



For questions or reports of illegal dumping?
Call City Action Line at
(270)-687-4444



Culprit.

Not all water pollution comes from big factories – it’s also caused by little household chores. Like washing off paint, cleaning with products that contain chlorine bleach, using drain cleaners, and disposing of solvents such as stain removers or turpentine in the sink.

So please, dry off excess paint with a paper towel before rinsing. Avoid cleaning products marked “Poison” and “Danger,” choosing environmentally friendly products instead. And drop off toxic chemicals at your local hazardous waste center.

Your rivers are closer than you think – thanks for keeping them safe.



To find out more go to
www.inyourwater.org
Or call the City Action Line
(270)-687-4444



YOUR TRASH AND CIGARETTES

- Put your cigarette butts and other trash in the garbage, not on the ground.
- Do not empty ash trays in parking lots or waterways.
- When boating, put your trash in bags and dispose of it when you come ashore.
- Never litter out of your car or boat.



ILLEGAL DUMPING

- Never dump oil or other fluids in storm drains, culverts, ditches, or waterways.
- Empty portable toilets at pump stations, not into waterways.
- What is dumped or spilled on roads and in parking lots will eventually reach KY's lakes, rivers or streams.



H₂Owensboro ONLY RAIN

Down the Drain



THE CITY OF OWENSBORO AND DAVIESS COUNTY ARE WORKING TOGETHER TO PROTECT CLEAN WATER IN KENTUCKY. THE GOAL OF THE STORMWATER MANAGEMENT PLAN IS TO PREVENT THE POLLUTION OF STORMWATER RUNOFF TO THE MAXIMUM EXTENT PRACTICABLE.

For additional information about the City of Owensboro's and Daviess County's Stormwater Management Program,

Contact:

City of Owensboro

Engineering Department

Phone: 270-687-8641

Email:

bennetteb@owensboro.org

To report a spill or violation call:

270-687-4444



Stormwater Pollution Prevention



**What you can do
to help**

H₂Owensboro ONLY RAIN



STORM WATER RUNOFF

can be rain or snowmelt. It flows over roofs, lawns, and pavement and is then carried by pipes, culverts and ditches to rivers and streams.



CONTAMINATED RUNOFF CAN HARM PLANTS, ANIMALS AND PEOPLE

OIL and OTHER CHEMICALS like pesticides,

fertilizers, paints and motor oil can poison fish and other plants and animals that live in the water.

People and animals that drink this water or eat the fish can become sick.

DEBRIS such as plastic bags, six-pack rings and cigarette butts that reach waterways can choke or suffocate ducks, fish, turtles or birds.



WHAT CAN I DO?

You can prevent stormwater pollution by:

YOUR CAR

- Routinely check your car for leaks.
- Do not leave tires or other car parts on the side of the highway.
- Dispose of used motor oil properly.



BACTERIA and PATHOGENS

from pet waste or failing septic systems can reach rivers, streams, and lakes. This is a health hazard and often causes closure of these facilities for recreation purposes.



THIS RUNOFF CAN BECOME POLLUTED

by the litter, dirt, chemicals and oils it picks up along the way, and it often flows into the water used for swimming, fishing, and drinking.



YOUR LAWN

- Keep grass clippings and leaves out of the street and the curb and gutter.
- Do not use an excess amount of lawn fertilizer.



- Dispose of household chemicals properly.

YOUR PET

- Always pick up your pet's waste.
- Do not dispose of pet waste in storm drains, culverts, ditches,



NUTRIENTS from fertilizers or detergents stimulate the growth of algae. When these algae die and decompose, this depletes the supply of oxygen for fish.

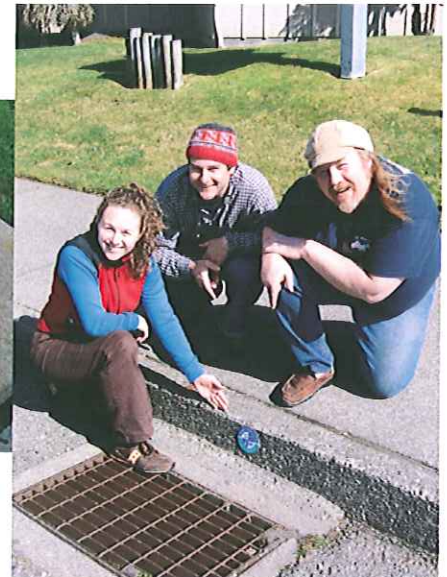


SEDIMENT from soil erosion clouds water, destroying places where plants and aquatic animals live.



Storm Drain Marking Program

The City of Owensboro has recently launched a new storm drain marking program. 75% of Kentuckians think that storm water receives treatment before it is released into local bodies of water. Actually, it flows from the street, down the storm drains and directly into those bodies of water, without ever being cleaned up! One quart of oil can cause a slick the size of two football fields! Every year people pour hazardous chemicals, paints, pesticides, antifreeze and used motor oil down storm drains. Most of them don't realize that those drains dump waste materials directly into the river and ground water. These materials damage the water quality and affect fish, wildlife, and recreational opportunities.



Here's what you can do!

Mark your storm drains. Storm drain marking is a visual reminder that storm drains are for stormwater only. Marking involves people in the community, educates residents, and increases awareness about the importance of the river and the environment. Its also a great opportunity to work with friends and neighbors or earn community service hours.

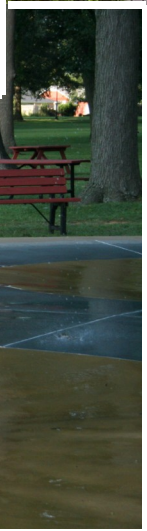
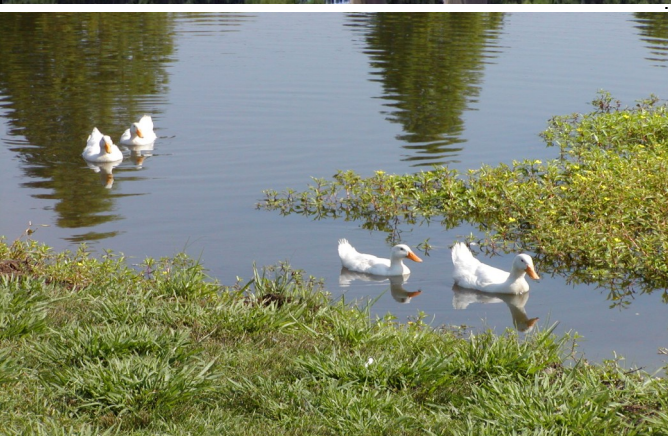
How To Get Started

1. Contact the City of Owensboro at 270-687-8641 or send an email to bennet-teb@owensboro.org to reserve the marking kits.
2. Organize your neighbors, church group, scout troop, club, or student classroom.
3. Pick a day when the weather is dry and the temperatures are between 40-100 degrees.



H₂O wensboro

ONLY RAIN
DOWN THE DRAIN



According to the Environmental Protection Agency, the primary cause of water quality problems in the U.S. today is not from factories or waste water treatment plants, but rather something called "nonpoint source pollution." Nonpoint source pollution is runoff from rainfall, snowmelt, or irrigation that picks up soil and contaminants as it runs over land or under ground, eventually depositing them into surface water or introducing them into ground water.

Healthy lakes, rivers, and streams directly impact property values and the quality of life we enjoy. Each of us has a responsibility to be a part Of Owensboro's pollution solution by controlling what we purposefully or inadvertently put down our storm drains. This responsibility begins By understanding where pollutants come from. For example, many Common household products - - such as oven cleaners, paint and paint Removers, cleaning fluids, and motor oils contain toxic ingredients that can become a threat to public health and the environment if not properly used or discarded. Wash water contains detergents, oil, grease, metals, dirt, and other pollutants released by the washing process. Fertilizers and pesticides washing off our lawns

can deplete lakes and rivers of oxygen needed by aquatic life and wildlife. Even waste from the family pet can contain bacteria and viruses that contaminate waterways.

The City of Owensboro and Daviess County both face unique challenges with respect to storm water management. Inside the City limits, there is very little relief in the ditches. This means that the City is so flat, the water does not run off very fast. It takes larger pipes and ditches to carry the same amount of water as it would take

in Cities with steeper systems. Also, the City of Owensboro is one of 17 cities in Kentucky that has what is called a Combined Sewer System, or CSS. This is a system where the sanitary sewage and the storm water are combined in one pipe. When there is flooding in the streets in these areas, there is raw sewage combined with the storm water. Also, a large portion of the undeveloped land in Daviess County is in the floodplain, which introduces numerous concerns about the quality of water.

All of these issues are being addressed with the Phase II efforts.

Improving the Environment Together



What is storm water runoff?

Storm water runoff occurs when precipitation from rain or snowmelt flows over the ground. Impervious surfaces like driveways, sidewalks, and streets prevents storm water runoff from naturally soaking into the ground.

Why is storm water runoff a problem?

Storm water can pick up debris, chemicals, dirt, and other pollutants and flow into a storm sewer system or directly into a lake, stream, river, wetland, or coastal water. Anything that enters a storm sewer system is discharged untreated into the water bodies we use for swimming, fishing and providing drinking water.

The effects of pollution

Polluted storm water runoff can have many adverse effects on plants, fish, animals and people.

Sediment can cloud the water and make it difficult or impossible for aquatic plants to grow. Sediment also can destroy aquatic habitats.

Excess nutrients can cause algae blooms. When algae die, they sink to the bottom

and decompose in a process that removes oxygen from the water. Some fish and other aquatic organisms can't exist in water in low-dissolved oxygen levels.

Bacteria and other pathogens can wash into swimming areas and create health hazards, often making beach closures necessary.

Debris - plastic bags, six-pack rings, bottles and cigarette butts washed into waterbodies can choke, suffocate, or disable aquatic life.

Household hazardous wastes such as insecticides, pesticides, paint, solvents, used motor oil, and other auto fluids can poison aquatic life. Land animals and people can become sick from eating diseased fish and shellfish or ingesting polluted water.

Polluted storm water often affects drinking water sources. This, in turn, can affect human health and increase drinking water treatment costs.





Small MS4 Storm Water Program:

Polluted storm water runoff is often transported to municipal separate storm sewer system (MS4s) and ultimately discharged into local rivers and streams without treatment. The EPA's Storm Water Phase II Rule establishes an MS4 storm water management program that is intended to improve the nation's waterways by reducing the quantity of pollutants that storm water picks up and carries into storm sewer systems during storm events. Common pollutants include oil and grease from roadways, pesticides from lawns, sediment from construction sites, and carelessly discarded trash, such as cigarette butts, paper wrappers, and plastic bottles. When deposited into nearby waterways through MS4 discharges, these pollutants can impair the waterways, thereby discouraging recreational use of the resource, contaminate drinking water supplies, and interfere with the habitat for fish, other aquatic organisms, and wildlife.

What is a Phase II Small MS4?

A small MS4 is any MS4 not already covered by the Phase I program as a medium or large MS4. The Phase II Rule automatically covers, on a nationwide basis, all small MS4s located in "urbanized area" (UAs)

as defined by the Bureau of the Census (unless waived by the Natural Pollutant Discharge Elimination System (NPDES) permitting authority), and on a case-by-case basis those small MS4s located outside of UAs that the NPDES permitting authority designates.

On March 10, 2003, the City of Owensboro submitted its Phase II permit to the Kentucky Division of Water.



What are the Phase II Small MS4 Program Requirements?

Operators of regulated small MS4s are required to design their programs to:

- Reduce the discharge of pollutants to the "maximum extent practicable" (MEP);
- Protect water quality; and
- Satisfy the appropriate water quality requirements of the Clean Water Act.

Implementation of the MEP standard will typically require the development and implementation of Best Management Practices (BMPs) and the achievement of measurable goals to satisfy each of the six minimum control measures.

The Phase II Rule defines a small MS4 storm water management program comprising six elements, that when Implemented in concert are expected to result in significant reductions in pollutant discharge into receiving water bodies.

The six Phase II minimum control measures are outlined below.

◆ Public Education and Outreach

Distributing educational materials and performing out reach to inform citizens about the impacts polluted storm water runoff discharges can have on water quality.

◆ Public Participation/Involvement

Providing opportunities for citizens to participate in program development and implementation, including input from public through public meetings and activities such as cleanup and monitoring.

◆ Illicit Discharge Detection and Elimination

Development and implementing a plan to detect and eliminate illicit discharges to the storm sewer system (includes developing a system map and informing the community about hazards associated with illegal discharges and improper disposal of waste).

◆ Construction Site Runoff Control

Developing, implementing, and enforcing erosion and sediment control program for construction activities that disturb one or more acres of land (controls could include silt fences and temporary storm water detention ponds).

◆ Post-Construction Runoff Control

Developing, implementing, and enforcing a program to address discharges of post-construction storm water run off from new development and redevelopment areas. Applicable controls could include preventative actions such as protecting sensitive areas (e.g., wetlands) or the use of structural BMPs such as grassed swales porous pavement or water quality devices.

◆ Pollution Prevention/Good Housekeeping

Developing and implementing a program with the goal of preventing or reducing pollutants in runoff from municipal operations. The program must include municipal staff training on pollution prevention measures and techniques (e.g., regular street sweeping, efficient usage of pesticides and street salt or frequent

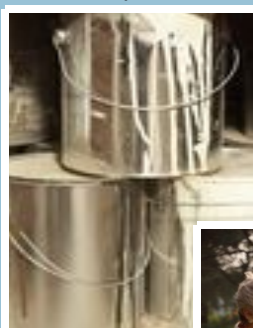




Minimizing Storm Water Pollution: What You Can Do?

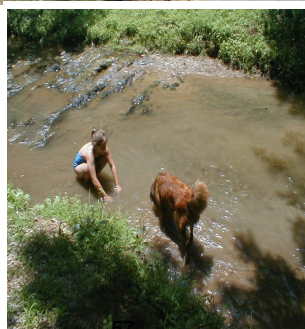
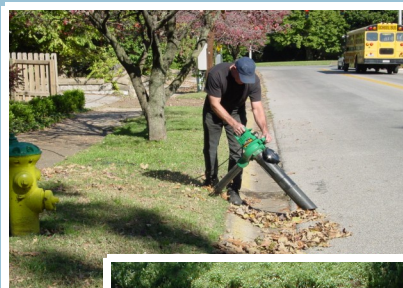
Around the Home

- ◆ Use house hold cleaners that are labeled nontoxic and biodegradable, and use the smallest quantity possible.
- ◆ Properly use and store all toxic products, including cleaners, solvents and paints. Clean up spills immediately. Follow label directions regarding container disposal or take to a local collection site.
- ◆ Recycle reusable materials and throw litter into trash cans that are tightly covered.



In the Yard

- ◆ Use pesticides, herbicides, and fertilizers sparingly, and in accordance with label instructions. Do not apply if rain is expected or near ditches, gutters, or storm drains. Use products labeled nontoxic, biodegradable, or water-soluble when possible.
- ◆ Go "natural" by using natural fertilizers such as compost, bone meal and natural insect repellants, such as marigolds (for nematodes and white flies), soapy water from dishes (for flowers and roses), or spearmint gum (for moles).
- ◆ Do not over irrigate – this can cause sediment to wash into storm drains.
- ◆ Do not blow, sweep, or rake leaves or grass clippings into gutters, ditches, or storm drains. Compost yard waste or bag and dispose using solid waste collection programs.
- ◆ Divert rainspouts and garden hoses from paved surfaces onto grass.
- ◆ Pick up animal wastes and dispose in garbage cans or by flushing down toilets.



Vehicle and Boat - Related Activities

- ◆ Take used motor oil to a participating oil recycling center.
- ◆ Properly maintain your car or boat to reduce the leakage of oil and other fluids.
- ◆ Wash cars on lawns or ground rather than paved surfaces to minimize runoff, and use biodegradable, non-phosphate soap.
- ◆ Use marine sanitation devices or pump out facilities to get rid of boat sewage.
- ◆ When spills occur, use kitty litter, sawdust, or wood chips to soak up fluid and dispose in garbage can.



For questions about pollution or for reporting of spills call:

Owensboro's City Action Line
(270)-687-4444

City of Owensboro Storm Water Program

P.O. Box 10003
101 East 4th Street
Owensboro, KY 42302—9003
www.owensboro.org



StormWater



Get
Water
Wise!




This coloring book belongs to:

H₂Owensboro

ONLY RAIN

Down the Drain





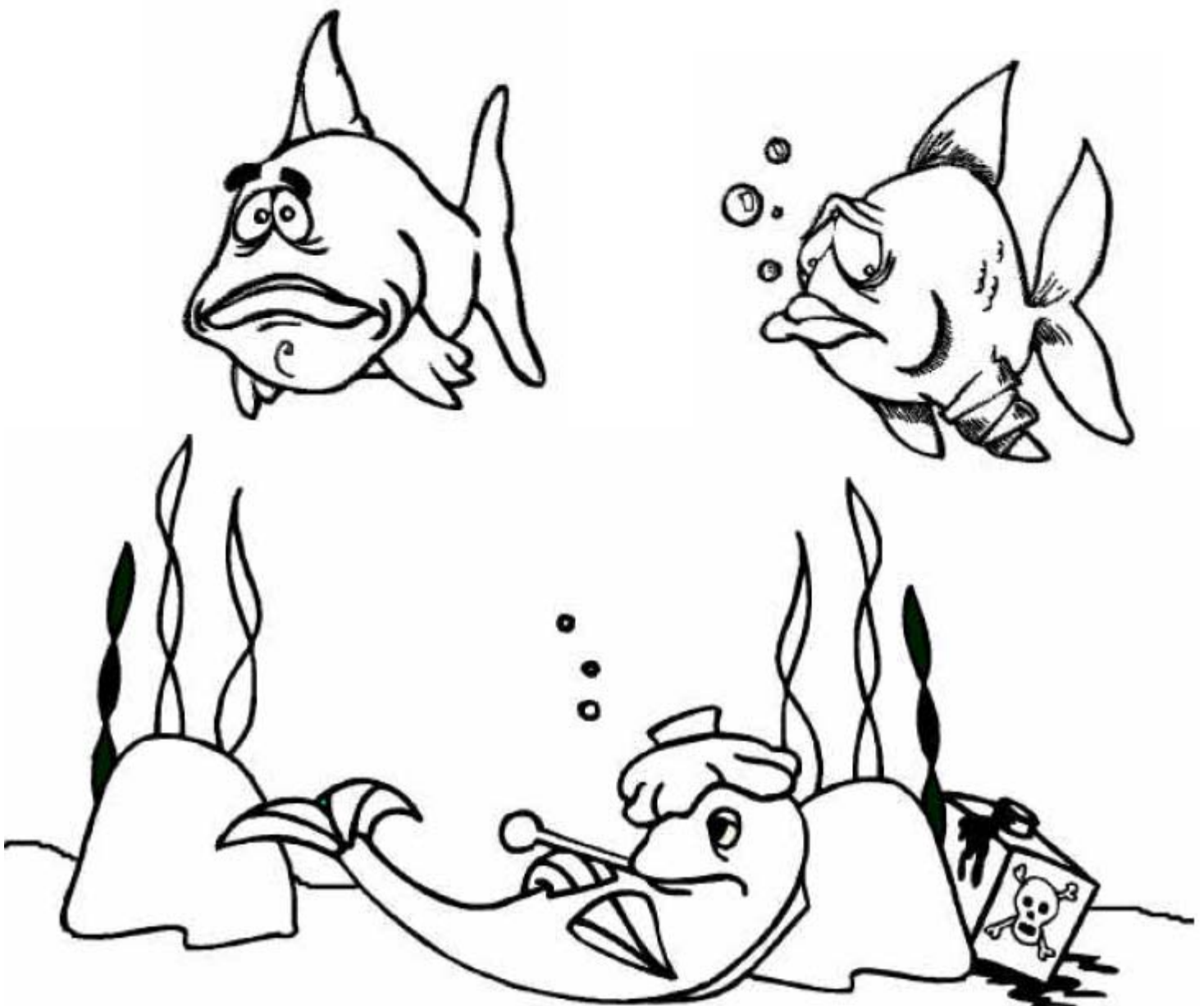
What's Wrong
with the
water?

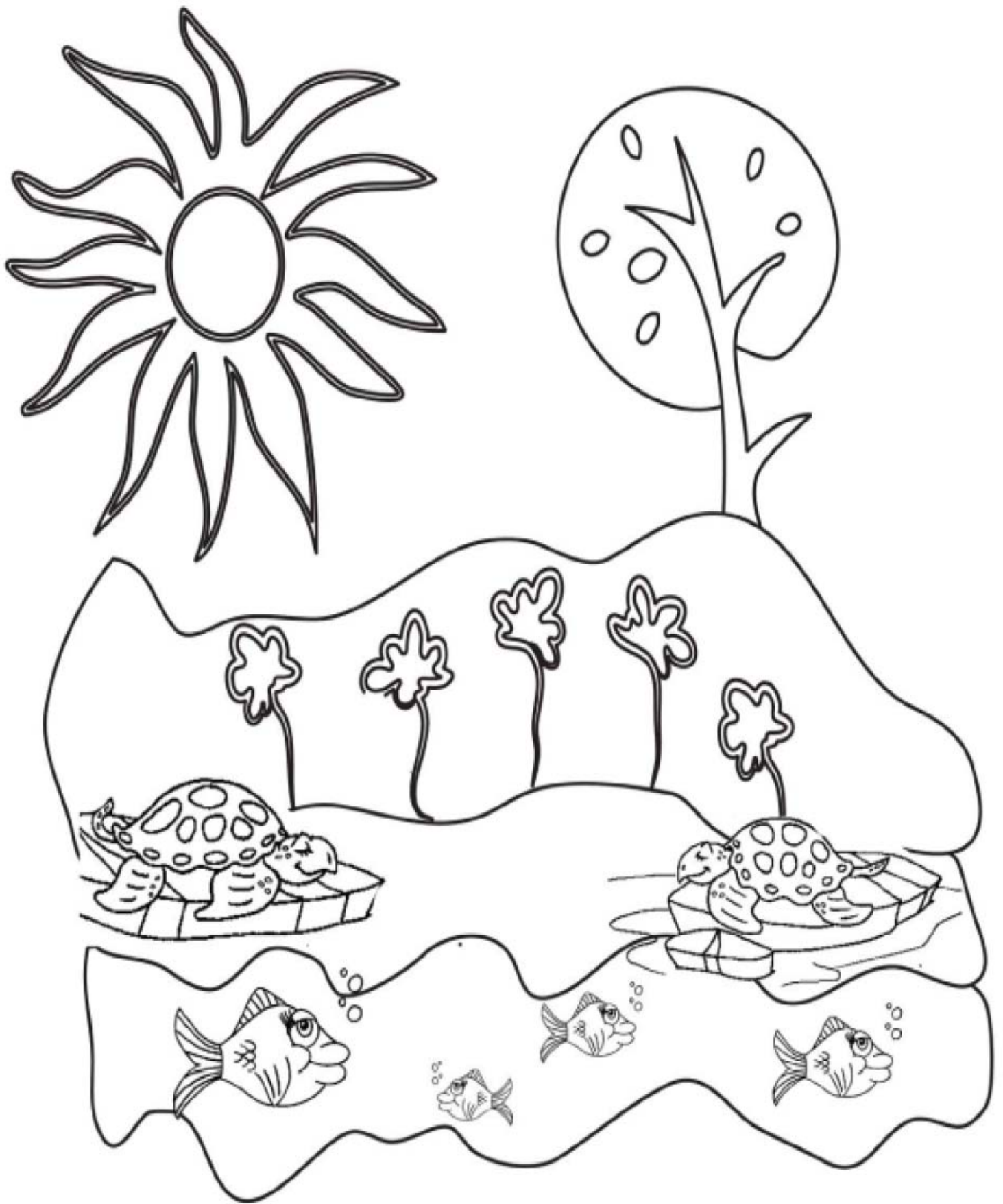
Why are the animals sick or moving out? The water may be polluted. One cause of water pollution is **STORM WATER POLLUTION**. This happens because water becomes contaminated with stuff like trash, dirt, oil, and sewage chemicals.



How does the water become polluted?

We cause pollution. When it rains, the water that flows over the streets and in drainage ditches picks up pollutants such as trash, dirt, pet waster, chemicals and more and carries them, untreated, into our rivers, streams and lakes.





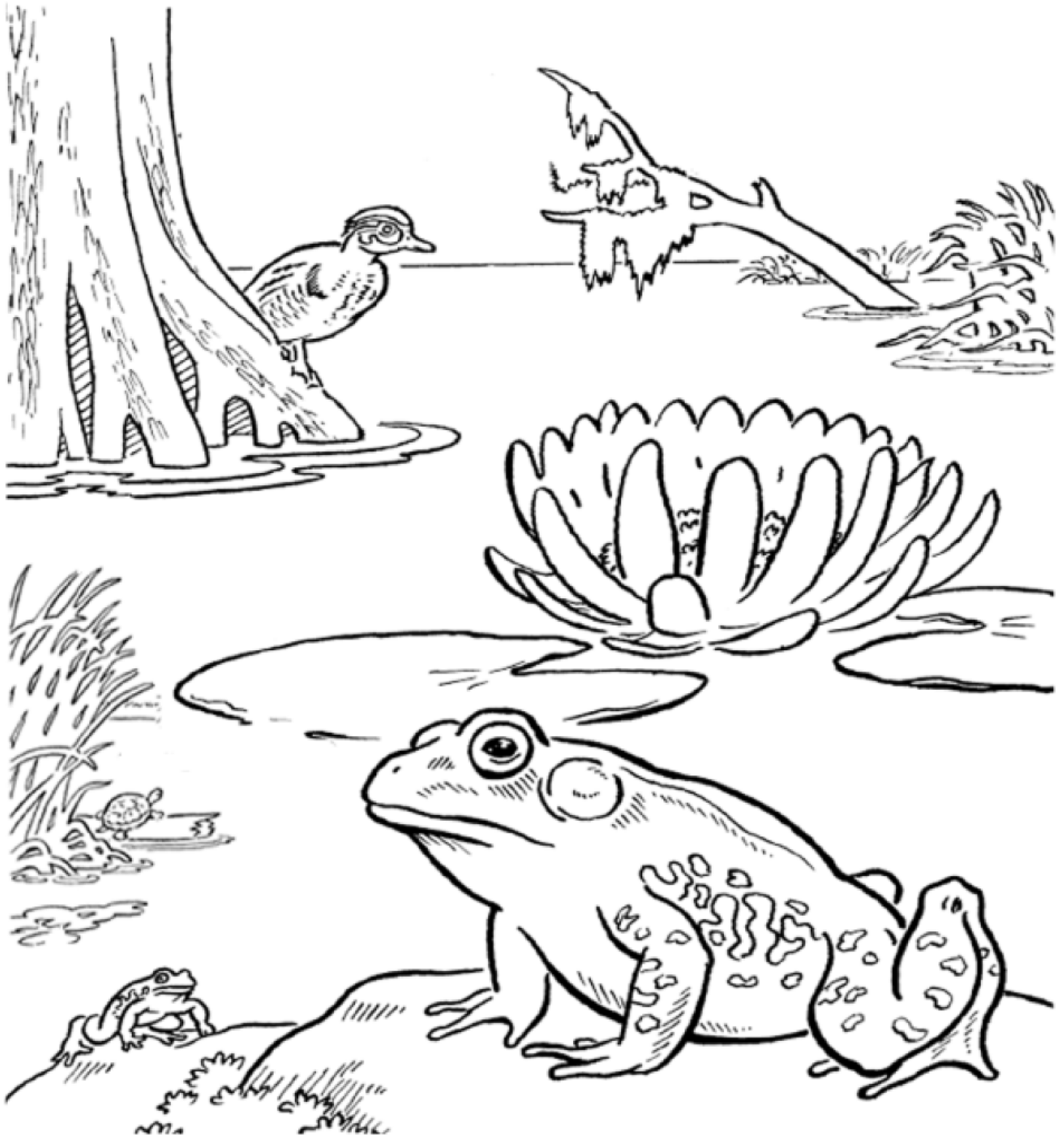
Give our water a hand! Do not dump trash into our rivers or canals. Let our plants, fish and turtles have a clean, healthy place to live.



What you drop means a lot! Help protect clean water by keeping litter and pollution out of storm drains.



Use care about what is poured on the ground. Things that should not be dumped onto the ground include: leftover paint, paint thinner, motor oil and all kinds of substances that are used to kill weeds and bugs.(small amounts of pesticides are not considered a major problem.)



All life forms depend on clean water. Wetlands are essential, natural, living entities that must be protected for the common good—the good of the people and the good of the huge variety of animals, fish and plants that survive in these unique habitats.

Some Water Facts:

- ♦ About 80% of the earth's surface is water. However, 97% of the earth's water is salt water found in the seas and oceans and not fit for drinking. Another 2% of the earth's water is frozen at the North and South poles. Consequently, only 1% of all the water on earth is drinkable.
- ♦ Human bodies are 66% water.
- ♦ Elephants are 70% water.
- ♦ An ear of corn is 80% water.
- ♦ A tomato is 95% water.
- ♦ An average home needs nearly 300 gallons of water each day for such things as drinking, taking showers, washing dishes and clothes, and brushing teeth.

Clearly, water is precious. We must protect it and NOT waste it!



Faces in the Crowd

OHS contingent among hundreds of thousands
at presidential inauguration/Region, B1

MESSENGER-INQUIRER

Vol. 139, No. 25

FRIDAY, JANUARY 25, 2013

Owensboro, Ky. • 75¢

'Bottom line, can we do better?'

Mayor's business panel gets its marching orders

BY STEVE VIED
MESSENGER-INQUIRER

Owensboro Mayor Ron Payne gave the "Mayor's Committee on Business Development" its marching orders Thursday, tell-

ing the nine members of the panel seeking to make the community more business friendly that local government has invested more than \$100 million to spur economic development.

Now the community is looking to the private sector to follow government's lead, Payne said.

"One thing I want to ensure is we do everything possible to promote that economic activity," Payne said. "Bottom line, can we do better? I don't expect this committee to blame anyone for anything. Just, can we do a better job? Let's listen to this community and its concerns. I think

this could be a very, very important piece of work here. We're in a growth spurt. I'm excited about the potential of this community.

"The last thing I want is a reputation that we are a community where it's hard to do business."

Thursday's meeting of the committee in the Owensboro Police Department's Community Room was its first, and follow-

ing Payne's brief remarks, Chairman Alan Braden and his fellow members spent the better part of the next hour and a half discussing how the committee would go about its work. In the end, it was decided that a brief questionnaire will be prepared and sent to hundreds of local developers and business owners, seeking their

SEE PANEL/PAGE A2

OPS submits facilities plan

BY MEGAN HARRIS
MESSENGER-INQUIRER

A hiccup at the Kentucky Department of Education late last week temporarily stalled progress with Owensboro Public Schools' amended district facilities plan, the document slated to outline the ultimate fate of OPS' newest purchase — the current home of Texas Gas at 3800 Frederica St.

"They got it confused," said OPS Superintendent Larry Vick. "KDE thought we didn't send the name of our (local planning committee) members or get them trained. But we didn't have to. We reconvened the same committee we used in 2010, so not only did they have the names but their training dates, too."

The KDE approved the sale of Riverfront Jam LLC's Frederica Street property — the current home of Texas Gas — to OPS for \$3 million in September. The state has yet to approve the site for use as a school.

The district will take possession of the property no sooner than July 2, one year from the day that Riverfront Jam took ownership from Boardwalk Pipeline Partners. Riverfront Jam developers are building a new facility for Texas Gas in downtown Owensboro.

SEE OPS/PAGE A2

Raising the roof



John Dunham, Messenger-Inquirer/jdunham@messenger-inquirer.com, 926-0123

Rod Cimino of Cookeville, Tenn., climbs to the other side of the rafters to install hurricane clips Thursday morning at Owensboro Public Works' building at 1410 W. Fifth St. Cimino works for National Barn Co. of Portland, Tenn. The pole barn is under construction to store equipment for the street department.

City buys property for flood basin

Purchase part of east side project

BY STEVE VIED
MESSENGER-INQUIRER

With the recent purchase of a lot on Old Hartford Road, the city of Owensboro has taken another step in its efforts to reduce flooding and separate storm water from the sewer

system on the city's east side.

The property at 800 Old Hartford Road, bought at a cost of \$465,000 late last year, will be used for a flood retention basin, City Engineer Joe Schepers said Thursday. It will eventually be one component of an overall \$3 million drainage improvement project that promises to ease problems in the area of East 27th Street, including the areas

north to East 21st Street, which includes Hathaway and Breckenridge streets.

As part of the larger project, a \$670,000 project will divert storm water from about 35 acres comprising Elmwood Cemetery, which will mean that the cemetery will no longer contribute to flash flooding in areas north of the cemetery. An additional basin will be required near Glenn Funer-

al Home to handle that flow, Schepers said. The property at 800 Old Hartford Road is west of Center Street, just west of the funeral home.

In mid-August, Schepers told the Owensboro City Commission that the \$670,000 project was planned to partially relieve flash flooding for some east Owensboro residents and

SEE FLOOD/PAGE A2

Mud run racers get down, dirty

BY KEITH LAWRENCE
MESSENGER-INQUIRER

Diamond Lake Resort is building one tough mudder of a race course.

Brian Smith, co-owner of the resort in western Daviess County, told a meeting Thursday that western Kentucky's first mud run course will open April 20-21 with "Up, Down and Dirty for a

Cure," a 5K extreme run "over hill and dale through unimproved land with whatever trail conditions exist, over a dozen military obstacles, wading two lakes and sliding down a 65-foot Slip N Slide."

The race will benefit the American Cancer Society's Relay for Life, he said.

Mud runs have exploded in

popularity in the past decade with hundreds of courses in the country.

The Los Angeles Times reported last year that more than 1 million people participated in mudders in 2011.

That story says that "the mud race concept dates to the

SEE MUD/PAGE A2



Brian Smith, co-owner of Diamond Lake Resort in western Daviess County, announced Thursday the construction of western Kentucky's first mud run course, which will include a dip in the resort's old swimming lake.

Gary Emord-Netzley, Messenger-Inquirer



6 57211 77777 3



facebook.com/
MessengerInquirer

CONTACT US

CIRCULATION: 684-5261 • (800) 633-2008
ADVERTISING: 926-0123, CLASSIFIEDS: 926-6161
NEWS TIPS: 691-7306, SPORTS: 691-7314
REPORT AN ERROR: 691-7292

Astrology/Venue, D4
Classified/Sports, C3-5
Comics/Venue, D5
Crossword/Sports, C5
Dear Abby/Venue, D4

INSIDE

Lotteries/Venue, D4
Markets/A4
Movies/Venue, D2
Records/Region, B2-3
Television/Region, B5



38 High
20 Low
Details, Page A6

\$ 130 MILLION
DRAWINGS WED & SAT

KENTUCKY'S
POWERBALL
POWERPLAY

Let The
Dreams Begin



kylottery.com

KENTUCKY'S
MEGA
MILLIONS
with MEGAPLIER

\$ 89 MILLION
DRAWINGS TUE & FRI

Digest
Daviness Fiscal Court

At its meeting Thursday at the Daviess County Courthouse, Daviess Fiscal Court took the following action:

- Conducted a public hearing on discontinuing maintenance of a portion of Rockport Ferry Road. No one spoke.
- Presented checks of \$141.50 each to five area nonprofits that collected admission for the 2012 Christmas at Panther Creek light show.
- Approved advertising for seasonal park attendants and grounds maintenance workers for the parks department.
- Approved an agreement with the Daviess County Youth Soccer Association for the use of Horse Fork Creek Park for the next two years.
- Approved a lease agreement with the Daviess County Board of Education for the use of facilities at Beacon Central, Burns, Country Heights, Highland, Meadow Lands, Sorgho and Southern Oaks for 2013.
- Approved a lease agreement with Thruston Playground Association for the use of the Thruston playground through Jan. 31, 2016.
- Approved an alarm monitoring agreement with Level 5 Systems LLC

for the Daviess County Operations Center, Courthouse and animal shelter for the next 12 months.

- Approved raising the rate for the Court Displaced Worker Program with St. Joseph Peace Mission and the Mary Kendall Home from \$46.10 to \$60 per participant per day.
- Approved an order to pay the people appointed to view the portion of Rockport Ferry Road being considered for closure.
- Approved the reappointment of John Stevenson to a sixth term on the Regional Water Resource Agency board for a term ending Feb. 1, 2017.
- Approved the reappointment of Peggy Gardner for a second term on the Owensboro-Daviess County Regional Airport board, for a term ending Feb. 8, 2017.
- Heard first reading of an ordinance closing a portion of Rockport Ferry Road.
- Agreed to move the next meeting to 9 a.m. on Feb. 5 because Fiscal Court members will be attending the Kentucky Association of Counties convention on the regular Feb. 7 meeting day.

PANEL
FROM THE FRONT PAGE

opinions and concerns regarding the policies and practices of local regulatory agencies.

Plans were also discussed to hold open forums to hear concerns and suggestions from the public, even though some worried that people in the business community may be reluctant to speak publicly about problems they may have experienced dealing with regulatory agencies.

“If we have it all out in the open, some groups or individuals won’t talk,” committee member Reid Haire said.

It was later suggested that individuals be given the opportunity to meet privately with as few as two committee members, and that their input be brought back to the full committee for consideration.

“One-on-one contact with individuals could serve us well,” member Fred Reeves said.

Member John Kazlauskas suggested that regulatory agencies be given

the opportunity to provide an overview of what they do, and Terry Woodward said it might be better to gather some information before hearing from those agencies.

Woodward, who is currently developing a downtown property for retail and residential use, gave the committee an example of what a developer can encounter. “I wanted to knock 20 feet off the back of that building,” he said. “I had to meet with five agencies. I shouldn’t have to meet with five agencies.”

Haire suggested and others agreed that enlisting the help of the Greater Owensboro Chamber of Commerce to distribute the committee’s survey questions throughout the business community was a good idea, and Braden said the survey would also be made available on the city’s website.

Gary Noffsinger, executive director of the Owensboro Metropolitan Planning Commission, attended the meeting and defended the work of his agency.

“Since I’ve been director of the OMPC, we’ve streamlined our processes

and worked to make people feel comfortable,” he said.

Noffsinger said it was a concern to him if anyone thought that by criticizing the planning commission it would open them up to some kind of retaliation.

“I can tell you I don’t operate that way,” he said. “I won’t tolerate it on my staff.”

Noffsinger said the OMPC has for years sent out surveys to people who’ve had dealings with the agency, seeking suggestions about how it could improve its services.

“I want to be a resource to you,” Noffsinger said. “There is a wealth of information on our website.”

Noffsinger challenged the committee to examine the way similar agencies in other communities do business.

“I stand behind our agency,” he said.

Ward Pedley, an OMPC member and chairman of the government affairs committee of the Owensboro Home Builders Association, said he intends to ask that group to host a meeting of the business committee. He said mistakes made in the

Beshear supports local sales tax amendment

BY THE ASSOCIATED PRESS

LOUISVILLE — Gov. Steve Beshear has joined municipalities across the state in backing a constitutional amendment that would allow local-option sales taxes.

The Courier-Journal reports Beshear said the proposal “makes sense” during a luncheon Wednesday sponsored by Greater Louisville Inc., which serves as the chamber of commerce for the Metro Louisville region.

The idea to create an alternative for funding local projects was recommended by a tax reform commission appointed by Beshear. It has also received support from the Kentucky League of Cities, Greater Louisville Inc. and county and city officials

from across the state.

Previously, Beshear had said only that he was reviewing recommendations from the tax reform commission.

Louisville Mayor Greg Fischer and Lexington Mayor Jim Gray have called since last spring for counties to be allowed to increase the 6 percent state sales tax and earmark those funds for needed local projects. Fischer has said \$90 million a year could be raised with a 1-cent tax in Jefferson County.

“With all the needs we have with our roads and sidewalks and infrastructure, that could take care of it pretty quickly because our general fund cannot,” Fischer said. “So the governor’s voice in this effort

is really big.”

The proposal under discussion would require voters to cast ballots on any tax, which would have a sunset provision.

“This gives people the freedom to vote on investments,” Fischer said. “It’s only new revenue if people want to vote it in on specific projects.”

Beshear said he doesn’t think the proposal would hurt any municipality that seeks state funding for projects.

“I think the legislature would continue to look at individual projects that come down the road,” Beshear said. “My guess is you’d be doing a lot bigger things with a local-option sales tax than what we usually fund from the legislative standpoint.”

MUD
FROM THE FRONT PAGE

20-year-old Camp Pendleton Mud Run.”

Smith told the meeting of the Owensboro-Daviess County Convention & Visitors Bureau’s Festivals & Events Committee, that he’s expecting up to 1,000 runners for the inaugural run on the course.

“We hope to have more events throughout the year,” he said.

The entry fee is \$55. Details are available at OwensboroMudRun.com.

Smith said there will be plenty of places for spectators to watch runners scale the obstacle course.

“It’s very, very fun,” he said. “I can barely navigate the course with 4-wheel drive.”

Several bands will be performing both days, Smith said.

Diamond Lake is also adding bumper boats this summer and planning a tractor and golf cart show on June 15, he said.

Runners at Diamond Lake will be getting muddy.

But another race this year will add color to the runner’s lives.

Tim Ross, the city’s director of public events, told the committee that Owensboro’s Color Blast on March 23 is a 5K run from

English Park through downtown and back to the park.

Runners will wear white and be “blasted with color at three locations,” he said. “When it’s over, they’ll look like they’ve been tied-dyed.”

Proceeds will benefit six nonprofits that work with disability awareness, Ross said.

Dr. Terry Tyler said Western Kentucky Botanical Garden has scheduled its first Orchid Show in the garden’s Conservatory from Feb. 9 through March 12.

“It will give people a chance to see something beautiful in the cold of winter,” he said.

Admission is \$5. For seniors, it’s \$3 and for youths, \$1.

The garden will have a Bee Mine Valentine Party for children from 10 a.m. to 2 p.m. on Feb. 9.

A St. Valentine’s Candlelite Dinner is scheduled at 6 p.m. on Feb. 14. Tickets are \$50 per person. Reservations are required.

Tyler said hot-air balloons will return to the garden during the Dazzling Daylily Festival June 21-23, and David Rogers’ “Big Bugs,” large wooden sculptures of insects, will return in September and October.

Keith Lawrence, 691-7301, klawrence@messenger-inquirer.com

OPS
FROM THE FRONT PAGE

Architect Craig Thomas of RBS Design Group resubmitted the district facilities plan — slated to include converting the iconic home of Texas Gas into a 6-7-8 Center, combining Hager Preschool and an employee day care center in Owensboro Middle School’s south campus, expanding Foust Elementary School to include the current Hager building, establishing a new elementary school at the site of OMS-North and retaining fifth-graders at elementary schools districtwide — to the KDE

on Thursday.

A time frame for the state’s approval of the district facilities plan was not immediately available.

Vick didn’t promise a rosy outcome.

“We’re up about 500-600 students in the last five years, and we’ve documented that, but the state may still have some reservations about letting us use this property the way we’ve planned,” Vick said. “We can project we’re going to need more space based on our enrollment trends, but whether they agree with that, we’ll just have to see.”

The deed requires that OPS use the property for educational purposes for its first 10 years of ownership. Riverfront Jam has a

first right of refusal for an additional 30 years, during which the corporation may buy back the property before OPS can take public bids to sell it.

“If they put it on the market,” Vick said, “I wouldn’t be a bit surprised if they brought in between \$4 million and \$7 million in revenue. I don’t foresee it ever being for sale — we’ll never get 30 acres in this district again — but if enrollment declines, and they really believe they’ll never use it, students would benefit to the tune of, say, \$7 million.”

At a board of education luncheon Tuesday, board members debated listing Texas Gas for demolition in the final plan they sub-

mit to the state later this year. Clearing the property for new construction could increase state-provided construction dollars in the form of unmet need.

Board chairwoman Nancy Eskridge, on telling Owensboro residents they plan to demolish Texas Gas, said Tuesday, “Yeah, that would go over like a ton of bricks, literally.”

If the cost to renovate Texas Gas is more than 75 percent of the state’s baseline estimate for new construction, including the cost of demolition, the KDE would not approve the renovation, Vick said.

Megan Harris, 691-7302, mharris@messenger-inquirer.com

FLOOD
FROM THE FRONT PAGE

businesses, and a contract for a project to redirect storm runoff from Elmwood Cemetery into the new Harsh Ditch flood retention basins near Owensboro Christian Church was expected to be awarded sometime this winter.

The project is known as Harsh Ditch Phase II-A. While Phase II of the project reduced flooding south of 27th Street, areas to the north have yet to be connected to the improvements. The next phase of the project is designed to make that connection and improve drainage and flood control north to the Ohio River. Diverting runoff from Elmwood Cemetery will

help that effort, Schepers has said.

The area targeted for relief has been plagued by flash flooding for years. Last summer, a 1.5-inch downpour over two hours caused severe flooding in the East 21st Street, Breckenridge Street and surrounding areas, flooding streets, stranding motorists and sending water into basements and businesses.

“It’s a big project,” Schepers said of the estimated \$3 million expenditure. “We will put in a pipe network from Old Hartford Road to 18th Street and from Breckenridge to Triplett streets, taking in Pearl, Center and Hathaway streets. We will take that entire area off the combined sewer system and put it on a sepa-

rate storm system. The \$670,000 is our estimate to only do the cemetery street part.”

The basin on Old Hartford Road will hold 25 acre feet of water, or about 8.1 million gallons. The structures bringing the water to the basin will be a combination of open ditches and buried box culverts, Schepers said. The water will eventually empty into the basins near Owensboro Christian Church.

“I hope to bid the entire project in March or April, and start work in June,” Schepers said.

The project will finish about a year after it starts, Schepers said.

The money to pay for the project comes from a \$23 million low-interest loan from the Kentucky Infrastructure Authority (KIA) 67

the city acquired several years ago to build drainage projects on the Harsh, Goetz, Scherm and Devins ditch systems. Runoff from the Harsh Ditch system drains south to Horse Fork Creek and eventually to Panther Creek

With the completion of Harsh Ditch Phase II-A project next year, the KIA loan-financed projects will be finished, Schepers said.

Steve Vied, 691-7297, svied@messenger-inquirer.com

To report an error

Contact Executive Editor Matt Francis at **691-7292** or news@messenger-inquirer.com

MESSENGER-INQUIRER

(USPS 341-660)

Published seven days a week by the Owensboro Messenger-Inquirer Inc. at 1401 Frederica Street, Owensboro, KY 42301.

Periodical postage paid at Owensboro, KY 42301; telephone (270) 926-0123. POSTMASTER: Send address changes to: MESSENGER-INQUIRER, P. O. Box 1480, Owensboro, KY 42302-1480.

CIRCULATION		SUNDAY ONLY	
SUBSCRIBER SERVICES:		IN KY. & SO. INDIANA	
Call 684-5261 or (800) 633-2008 .	Business hours are 8 a.m. - 5 p.m. Monday-Friday. If you get an answering machine during non-business hours, leave your name, address, telephone number and tell us the purpose of the call. We check our messages often.	\$104.00	\$52.00 \$26.00 \$8.70
		OTHER STATES	
		\$104.00	\$52.00 \$26.00 \$8.70

DELIVERY PROBLEMS?

If you are having difficulty receiving home delivery call our Circulation Department at 684-5261 or (800) 633-2008. Redelivery is available in Owensboro and limited areas until 11 am each day.

CARRIER ROUTE RATES		Publisher	Bob Morris...691-7210
DAILY & SUNDAY		Executive Editor	Matt Francis...691-7292
1 Year \$233.30	6 Months \$119.70	3 Months \$59.85	1 Mo. \$20.45
AUTOPAY			
Have your subscription deducted monthly from your checking or savings account and SAVE!			
Daily & Sunday			
\$17.45			
Daily without Sunday			
\$14.35			
Weekends (Fri.-Sun.)			
\$12.50			
DAILY WITHOUT SUNDAY			
\$191.75	\$98.10	\$49.05	\$16.85
WEEKEND (FRI.-SUN.)			
\$155.50	\$84.00	\$42.00	\$14.00
Weekend delivery includes the following holidays: New Year's, Martin Luther King Day, January 17, Presidents' Day, April 18, Memorial Day, Independence Day, July 18, Labor Day, Columbus Day, October 17, Veteran's Day, Thanksgiving and Christmas. An alternate will be selected if a holiday falls on a weekend.			
MAIL RATES			
(Mail delivery available only outside carrier delivery areas.)			
DAILY AND SUNDAY			
IN KY. & SO. INDIANA			
\$262.20	\$131.10	\$65.55	\$21.85
OTHER STATES			
\$270.00	\$135.00	\$67.50	\$22.50
DAILY WITHOUT SUNDAY			
IN KY. & SO. INDIANA			
\$213.00	\$106.50	\$53.25	\$17.75
OTHER STATES			
\$217.80	\$108.90	\$54.45	\$18.15


ADVERTISING

To place a classified ad, call 926-6161 between 7:30 a.m. and 5:30 p.m. weekdays. For retail advertising, call 926-0123 or (800) 633-2008 between 8 a.m. and 5 p.m. weekdays.

NEWS INFORMATION

926-0123 or (800) 633-2008

- News tips and comments on our coverage - Call City Editor Robert Bruck 691-7306.
- Photo ideas - Call 691-7205.
- Photo reprints - Call our operator.
- Sports tips and comments - Call Sports 691-7311.
- To report sports results call 691-7315.
- Obituary information 691-7291
- Letters to the editor, tours - Call Suzi Bartholomy 691-7293.
- Weddings, engagements, anniversaries, calendar of events - Call Cathie Varble 691-7309.
- To announce activities or events - Mail a news release or fact sheet in advance to our Community News Desk. Include your name and daytime phone number.
- News for weekly newspaper, COMMUNITY - Call Cathie Varble 691-7309.

 Printed in part on recycled newsprint

© M-11

Register for Great
Wedding and
Shower Gifts
THE BAKERS RACK
FREDERICA ST. • WESLEYAN PARK PLAZA • 684-6130
FOR 38 YEARS, "THE PERFECT GIFT!"



Rainscaping: Answer to storm runoff problems

BY DEAN FOSDICK
ASSOCIATED PRESS

Stormwater runoff can quickly drain a homeowner's wallet. The flooding erodes yards, soaks basements, pollutes streams and wastes a precious resource.

But rainscaping — an integrated system of directed water flow and settling basins — can convert those losses into gains by providing new wildlife habitat, beautifying properties and in some cases providing food for the dinner table.

"It's becoming a pattern of capture and reuse rather than simply moving the water off," said Pat Sauer, Rainscaping Iowa Program administrator. "There are more options out there than just rain gardens. We're looking more comprehensively at what can be done on the landscape."

Numerous state and local groups are holding workshops and providing rebates for residents who add such refinements to their properties as rain barrels, cisterns, permeable paving, settling ponds, green roofs and berms.

"Iowa is providing training for professionals — certified rainscapers — who are designing some of those programs," Sauer said.

"Many of these agencies also build large-scale infiltration systems projects on public lands," said Cleo Woelfle-Erskine, who along with Apryl Uncapher wrote "Creating Rain Gardens."

Landscapers often merge art with science. "In Portland, Ore., many parking lots and curb strips sport swales (depressions) and retention basins, often decorated with sculptures of leaping fish," Woelfle-Erskine said.

Rainscaping, though, can be expensive and complicated. So why bother?

"A rain garden is not only a beautiful, low-maintenance, water-saving garden, but can additionally provide habitat and forage for local fauna, sustain select edibles for harvest, reduce pollution, flooding and erosion to nearby rivers and become a daily reminder of the importance of water conservation," Uncapher said.

Yards vary, and rainscaping designs must be site specific. Some suggestions:

— Perk. Conduct a soil test to see if your yard will percolate (drain) rainwater, Sauer said. "If it doesn't perk, then all you'll be left with is standing water. If your yard is hard, like concrete, you'll have to improve the soil."

— Plant native. Prairie plants and woodland seedlings with deep roots help soak up stormwater, filter pollutants and recharge groundwater levels, Sauer said. "Using native plants also helps ensure they'll survive their new setting."

— Installing a residential rain garden, which is a saucer-like depression in the ground that captures rain from a downspout, driveway or patio, is the simplest



Associated Press

In this Feb. 11 photo, art complements science on this settlement pond in Seattle's Northgate neighborhood. Sediment ponds slow the flow of storm water, allowing particles and pollutants to settle out. The accumulations are removed every five years or so by Seattle Public Utilities crews, leaving cleaner and clearer water to flow downstream.



Associated Press

In this photo, rainscaping features can be expensive and complicated or simple and cheap, like this rain barrel capturing water from a downspout on a rural home on April 19, 2009, in northern Belgium. The gardener simply dips a spray can into the surplus when she wants to water her plants.

and least expensive way to retain stormwater, Woelfle-Erskine said. But here's his kicker: "They won't work if your yard is uphill from your house."

— Use permeable materials like bricks, paving blocks or gravel on driveways and walkways, with spacing that allows water to seep into the soil.

— Edibles. Berries, asparagus, fiddlehead ferns, fruit trees, winter squash, Brussels sprouts, and culinary and tea herbs can be creative additions in the right rain garden sites, but use them with care. "Be aware of where the water is flowing into your rain garden from," Uncapher

said. "Rain gardens serving to intersect runoff from potentially polluted surfaces are not ideal for edibles unless soil and water nutrients are tested and monitored."

Rain gardens and related rainscaping features give homeowners a chance to be part of the stormwater and pollution solution, while serving aesthetic and functional purposes, said Bob Spencer, RainWise program manager for the City of Seattle.

"Not only are the gardens attractive landscaping, they are protecting our water bodies and the creatures that live there," he said.

RWRA, city experiment with rain gardens

BY BETH NOFFSINGER
MESSENGER-INQUIRER

Rain gardens and bioretention cells are being used in Owensboro to help control stormwater runoff.

The city of Owensboro has two rain gardens in the Mechanicsville neighborhood that were recently completed, and the Regional Water Resource Agency is in the process of building a bioretention cell and rain garden in Chautauqua Park.

"It's a different way of processing and dealing with water," said Dean Behnke, director of engineering for RWRA, noting that, instead of adding pipes, rain gardens and bioretention cells keep water at the site.

Rain gardens and bioretention cells are depressed areas with porous backfills (material used to refill an excavation) under a vegetated surface, according to the Environmental Protection Agency's website. "These areas often have an underdrain to encourage filtration and infiltration, especially in clayey soils," the website states. "Bioretention cells provide groundwater recharge, pollutant removal and runoff detention. Bioretention cells are an effective solution in parking lots or urban areas where green space is limited."

The major construction, dirt work and shaping of the area have been completed for the bioretention cell at Chautauqua Park, said Bryan Henderson, an engineering technician for RWRA, who was the project manager for the Chautauqua Park project. The plants being grown for the bioretention cell are being shipped in the middle of April. It will include many native plants, including switch grass, orange coneflower, gray goldenrod and smooth blue aster.

"Purple coneflower (is) one a lot of people will recognize," Henderson said. "Blue lobelia is another that is really popular."

Native plants are preferred because they often have deep roots and tend to work the soil better, he said.

Bioretention cells are more elaborate than a rain garden, Henderson wrote in an email. The bioretention cell is excavated deeper than the finished product, then refilled with an engineered soil mix consisting of soil, sand and compost, he wrote.

"It also has a perforated pipe underdrain system that will take the excess water from the soil and discharge it to an overflow structure," Henderson wrote. "They are more of an engineered system to treat a specific runoff pollutant and retain a set amount of water. Ours is designed to take a 1-inch rainfall from the entire property."

Rain gardens are not that elaborate or complicated, he wrote. They are usually a shallow depression that are planted more like a flower garden and are made more for the size the homeowner would like to maintain or fit to the space available.

There is no overflow structure, just a spillway that allows water to flow out of the rain garden and away from the house when it is full, Henderson wrote.

Rain gardens are seen as a way for municipalities to save money since they help take the water and give it a different route that doesn't

add to sewer system, Behnke said. It's being done in a manner so RWRA can monitor it over time and see if the water is working the way it should, he said, adding it will take a 3½-acre water shed and reduce what goes into the combined sewer system.

The bioretention cell and rain garden are at the front left side of the main building at Chautauqua Park.

RWRA plans to host a rain garden workshop for the public when it digs the rain garden at the park later this spring or summer. Rain gardens should be close enough to a house to get rain from the gutter, but need to be far enough away so that they don't get too close to the home's foundation, Henderson said.

The rain gardens in Mechanicsville on Omega Street between McFarland and Westwood avenues were just installed, and the plants aren't yet tall enough to determine if the gardens are successful, City Engineer Joe Schepers said. They city wanted to see how well rain gardens worked before telling developers to dig them.

"The rain gardens are a relatively inexpensive way for us to start handling and treating the storm water," Schepers said.

Beth Noffsinger, 691-7307, bnoffsinger@messenger-inquirer.com

Owensboro: All-America

City wins national honor for first time since 1952

BY STEVE VIED
MESSENGER-INQUIRER

Owensboro is once again an All-America City. The prestigious honor was bestowed on Owensboro on Sunday night in Denver at the National Civic League's All-

America City competition — 61 years after Owensboro last won the award. Twenty other cities were in the competition. Owensboro and nine other cities made the grade. All the cities performed a 10-minute presentation, with Owensboro's contin-

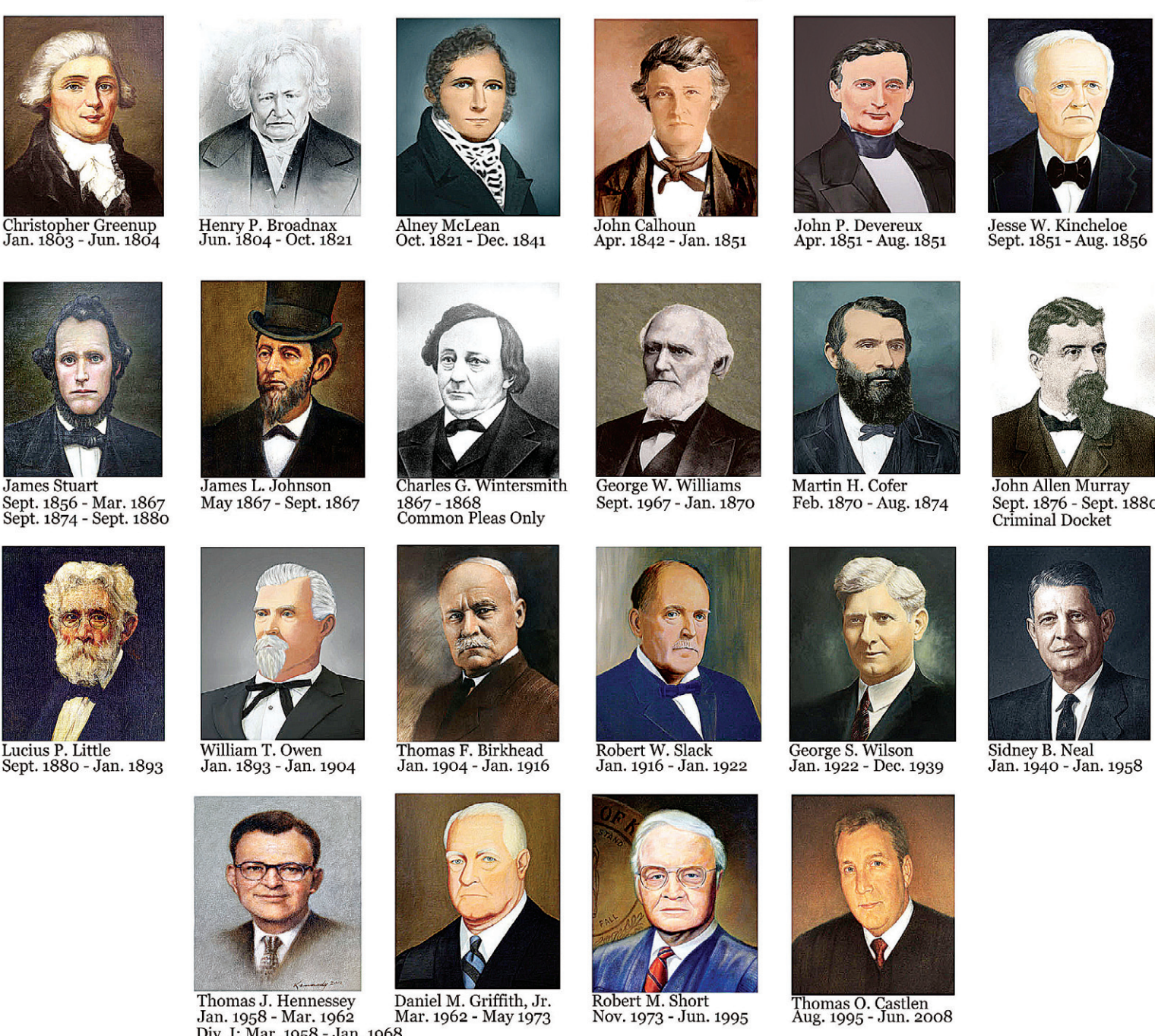
gent hitting the stage at 12:40 p.m. Saturday. When Owensboro's presentation — led by the ever-glib Kirk Kirkpatrick accompanied by his familiar "Good News Phone" — was over, the judges were highly complimentary, and

they seemed pleased with the answers to their follow-up questions. Sunday night, the judges made it official, and Owensboro was among the 10 winners. "We won! Everybody in Owensboro should be proud,"

said a pleased Mayor Ron Payne. "We told their story. It gets the message out across the country that this is an exciting place to live and work. ... We've had people come up to us and say they can't wait to visit us." Payne said being named an All-America City is an affirmation

SEE HONOR/PAGE A2

Daviess Circuit Court Judges



This composite shows judges' portraits featured in Judge Joe Castlen's courtroom at the Morton J. Holbrook Judicial Center. photo submitted

Judges' portraits return to court

They'd been scattered when old courthouse was razed in 1960s

BY JAMES MAYSE
MESSENGER-INQUIRER

When the Daviess County Courthouse was demolished in the early 1960s, more than the building was lost. Another piece of county history disappeared as well. A series of portraits depict-

ing all of the circuit court judges who had served all the way back to before Daviess County existed were removed from the courthouse and placed in storage. One by one, the portraits disappeared. "Some people called folks and said, 'if you want to pro-

tect your ancestor's portrait, come and get it,'" Daviess Circuit Court Judge Joe Castlen said last week. "Others were stolen — word was they liked the frames rather than the portraits." About 10 years after the courthouse demolition,

Daviess Circuit Judge Robert Short launched an effort to either find the lost portraits or replace them with new ones. But it wasn't until this year that all of the judges' portraits were replaced. There are 22

SEE COURT/PAGE A2

Iraq war colors White House policy in Syria

BY LARA JAKES
AP NATIONAL SECURITY WRITER

WASHINGTON — The Obama administration, trying to avoid getting drawn deeper into Syria's civil war, has pointed to the U.S.-led invasion of Iraq in 2003 as a symbol of what can go wrong when America's military wades into

Middle East conflicts. But experts say the White House is looking at the wrong Iraq war, especially as the U.S. reluctantly considers a no-fly zone over Syria to stop President Bashar Assad from continuing to use his air power to crush rebel forces or kill civilians.

A no-fly zone is a territory over which warring aircraft are not allowed to fly. The U.S. and international allies have enforced them in several military conflicts over the past two decades. When he took office in 2009, President Barack Obama promised to end the U.S. war

in Iraq as an example of refocusing on issues that had direct impact on Americans. By the time the U.S. military withdrew from Iraq in 2011, almost 4,500 American soldiers and more than 100,000 Iraqis had died. The war toppled Saddam

SEE POLICY/PAGE A2

Storm water data sought

Experts seek accounts of flood damage

BY KEITH LAWRENCE
MESSENGER-INQUIRER

If your property in Daviess County has had flood damage in the past 25 years or so, HRG Surveying and Engineering would like to hear from you. The Owensboro company and URS Corp.'s Louisville office are working on a storm water master plan for Daviess County. And to do that, the companies are creating a comprehensive review of past floods in the county. "The 1937 flood is pretty well documented," Jim Riney, the "R" in HRG, said last week. "We're mostly looking for records from the past couple of decades, say from the 1980s on." He said, "we have extensive information from (Federal Emergency Management Agency) reviews on flooding in the county. But if anybody has documentation on flooding on their property, we would like to have copies of it. What we need is documentation, not hearsay." Riney said, "One farmer we talked to had records of the river crests and stages for years." On Jan. 29, 1937, the Ohio River crested at its all-time high in Owensboro at 54.8 feet. Only three more floods since then have come close to that mark — March 11, 1945, when it reached 49.7 feet; March 15, 1964, when it reached 49.5 feet; and March 9, 1997, when it reached 49. The 1997 flood, which Riney said "approached a 100-year flood," came after 7.75 inches of rain fell in one day. It wasn't just the Ohio River that caused problems then. The Green River and Panther Creek also poured out of their banks, covering an estimated 85,000 acres of the county. Panther Creek was 5 feet deep across Frederica Street where Home Depot is today. Panther Creek, the county's main drainage basin, snakes 46

SEE WATER/PAGE A2

‘Days’ scores 2nd Emmy in 40 years

BY BETH HARRIS
ASSOCIATED PRESS

BEVERLY HILLS, Calif. — “Days of Our Lives” won drama series honors for just the second time in 40 years at the Daytime Emmys in a rough-hewn ceremony that included more upsets and an envelope mix-up on Sunday night.

The NBC soap opera that began in 1965 beat out defending champion “General Hospital” and former three-time winner “The Bold and the Beautiful,” among others.

The category included the only four remaining soaps still airing on the broadcast networks in addition to “One Life to Live,” which has found new life on the Internet after being canceled.

The only other series win for “Days” was in 1978.

The show claimed one other trophy: Chandler Massey as outstanding younger actor.

Doug Davidson of “The Young and the Restless” and Heather Tom of “The Bold and the Beautiful” won lead acting honors.

“It suddenly occurs to me that the presenters are younger than my tux,” Davidson said.

Tom of “B&B” won for her role as Katie Logan, who struggled with post-partum depression and abandoned her baby in a major story line.

CBS claimed eight trophies during the telecast, giving the network a leading 21 wins including those from last week’s creative arts ceremony. PBS was second with 14 wins.

The show had its unexpected moments, including Corbin Bernsen uttering

two expletives during the in memoriam tribute that included his late mother Jeanne Cooper of “The Young and the Restless.”

The ladies of “The Talk” presented outstanding talk show informative and when Aisha Tyler opened the envelope she quickly realized it was the wrong one.

“Oh, this is interesting,” she said. “This winner is not in this category.”

The audience in the International Ballroom of the Beverly Hilton gasped at the error.

“There better be a cocktail waiting on my table,” Tyler said before being handed the correct envelope from the wings.

Tyler then announced “The Dr. Oz Show” as the winner.

In another surprise, Scott Clifton of “The Bold and the Beautiful” and Billy Miller

of “The Young and the Restless” tied for supporting actor in a drama series.

Julie Marie Berman of “General Hospital” won supporting actress honors. She has since left the ABC soap.

Kristen Alderson of “General Hospital” won the younger actress category.

In an upset, first-time nominee “CBS Sunday Morning” beat out heavyweights “Good Morning America” and the “Today Show” for outstanding morning program.

Ben Bailey of “Cash Cab,” which is no longer being produced, picked up his third win as outstanding game show host. “The Price is Right” won game show honors.

“The Ellen DeGeneres Show” earned its seventh trophy as outstanding talk show entertainment.

HONOR

FROM THE **FRONT PAGE**

of everything that is happening in Owensboro. The win should boost economic development, he said.

“Our team did a wonderful job,” Payne said. “Kirk Kirkpatrick was the star, and he did a phenomenal job.”

The fast-paced, high-energy presentation seized on Owensboro’s recent successes, with particular attention to downtown revitalization and the private investment it has generated, a new hospital, neighborhood redevelopment, drainage improvements, the repainting of the Glover Cary Bridge and plans for an I-67 interstate, to name a few. Throughout the presentation, as Kirkpatrick highlighted the city’s many traditions, Winnie Lin interrupted again and again to tell the

judges “We have a festival for that!”

When it was his turn, Payne told that judges that Owensboro’s success has been “primarily home-grown.” And when a judge asked for details about Owensboro’s self-financing plan for downtown revitalization, it was a ready-made question for the mayor, its chief architect.

“A lot of this has happened in the last five years,” Payne said. “When I was elected, I talked to the county judge and others. It was time to move forward. We had had town hall meetings. We had a plan. We did it by passing a tax right in the middle of the recession. We knew we were taking a risk. But when I ran for re-election, I ran without opposition. ... We have a 1,000-member Chamber (of Commerce). There’s more excitement in our city than we have had since 1952, when we were last an All-America City.”

The judges seemed impressed with the number of volunteers that serve on local appointed boards (about 300), as well as the city’s neighborhood redevelopment program that mixes limited public funds and private investment to raise home ownership rates in distressed areas by building scores of new homes and renovating even more.

“It’s been wonderful seeing you, and the 300 volunteers is pretty amazing,” one of the judges remarked. “Thank you. It was fabulous.”

Owensboro was named among the 20 cities and communities as finalists in the All-America City Awards in April. The list of finalists included Fort Lauderdale, Fla., Dubuque, Iowa, and Colorado Springs, Colo., in the running for one of the 10 awards.

The other nine winners were Birmingham, Ala.; Peoria, Ill., Dunn,

N.C.; Montrose, Colo.; Garner, N.C.; Norfolk, Va., Downey, Calif.; Thomasville, N.C.; and Dubuque.

Owensboro’s application stressed three areas: downtown revitalization, the Mechanicsville Neighborhood Redevelopment project and storm water improvements.

Lin, Payne and Kirkpatrick were joined by city commissioners Debbie Nunley, Pam Smith Wright, Jeff Sanford and Bob Glenn, City Manager Bill Parrish, City Engineer Joe Schepers, Chief of Police Art Ealum, Community Development Director Keith, Kenny Lin, Gabrielle Gray and several spouses for the presentation.

A video of Owensboro’s stage presentation in Denver can be viewed at: <http://www.ustream.tv/recorded/34403451>

Steve Vied, 691-7297, svied@messenger-inquirer.com

WATER

FROM THE **FRONT PAGE**

miles across Daviess County, taking rainfall from 374 square miles of Daviess, McLean, Ohio, Hancock and Breckinridge counties and dumping it into the Green River at Curdsville.

It drains about 400,000 acres in Daviess County.

April 2011 saw the worst flooding in the county since 1997, with 10.69 inches of rain falling in Owensboro over several days and more falling in parts of the rural areas of the county.

An estimated 20,000 to 35,000 acres were under-

water then.

Riney said, “Pictures may help substantiate the water levels. We don’t need a lot of pictures, but they could be helpful. We’d like to see them.”

He said, “We’ll be finishing the report by the end of the year and make the final report to the county in early January.”

County Engineer Mark Brasher said the engineering report is just Phase I of the storm water master plan.

“URS and HRG are looking at the major creeks in the county,” he said. “They’ll tell us how much we need to do to the ditches and creeks for a 10-year flood, a 25-year flood and so on. It will be

a very broad perspective.”

Fiscal Court, he said, “will then decide which level of service we do the rest of the master plan for. They’ll have to decide how much Daviess County can afford to spend to improve drainage.”

The engineers, Brasher said, “will give us enough information to make a choice. The next phase will plan the types of improvements we need to make, the specific designs of the drainage basins and where they should be located.”

Fiscal Court earlier approved a storm water plan that calls for the county to monitor Panther Creek, Panther Creek North Fork, Panther

Creek South Fork and Pup Creek regularly.

Brasher said he plans to visually inspect those creeks three or four times a year.

Rhodes Creek, Yellow Creek, Knoblick Creek, Horse Fork Creek, Big Ditch (Carter Road), Harsh Ditch (outside U.S. 60) and Goetz Ditch were designated “primary waterways” in the plan.

The county will clear blockages in those creeks and ditches, but they will not be monitored under the plan.

HRG can be reached at 683-7558.

Keith Lawrence, 691-7301, klawrence@messenger-inquirer.com

COURT

FROM THE **FRONT PAGE**

portraits in all, and 13 of them were found between 2005 and 2013.

Today, Castlen’s courtroom in the Morton J. Holbrook Judicial Center is filled with portraits of judges leading up to 1958, when Circuit Court was split into two divisions. Castlen’s courtroom contains all of the Division II judges, while portraits of Division I judges hang in Judge Jay Wethington’s courtroom.

Recovering the portraits — and tracking down biographical information on each of the judges — was a process that involved research and the help of painters, historians and photography experts. The process also required a bit of luck — a photo that was used to recreate a portrait was found, dirty and faded, in the closet of a relative, Castlen said.

“You could barely tell it was (the judge), it was so

dirty,” he said.

Castlen even took on the artist’s role himself at one point. When artist Tom Kennedy was unable to finish the portrait of Judge John Devereux because of an illness, Castlen took up with paint brushes himself.

Castlen said Kennedy will do a replacement portrait of Devereux for the courthouse in the future. Castlen said some haven’t been impressed with his skill as a painter.

“My nephew said, ‘they’re all pretty decent — except for this one,’” he said, referring to his Devereux portrait.

The portraits were originally collected between 1905 and 1919. Earlier this year, the portrait of Judge Charles Wintersmith, who served from 1867 and 1868, was the last to be hung. Judge Kelly Easton, the chief regional Circuit Court Judge in Elizabethtown, was able to track down the missing portrait of Wintersmith, Castlen said.

When Short took the bench in 1973, he attempt-

ed to track down the lost portraits — he located five of them and repainted four others himself.

“I wouldn’t say it was a job (to Short),” Castlen said. “It was a mission.”

According to information about the portrait restoration project, when Short retired he said, “When this courthouse is torn down in the future, if some county judge lets these get ‘lost,’ I will personally come back and hang him.”

Castlen said nine other portraits have been located since Short’s retirement, and four more were repainted. Portraits and photos were found in places outside of Daviess County — such as in McLean County and in a Masonic lodge in Louisville.

The portraits tell the history of the county, from the time that what is now Daviess County was part of Ohio County and the city was known as Yellowbanks. There are too many stories to mention, but the judge’s histories contain tales of Confederate sympathizers who had

to flee the country before returning and being elected judge, of future judges who pulled knives in courtroom battles and judges who overcame obstacles from crippling childhood illnesses to combat in World War II to reach the bench.

The history of each of the judges was researched and compiled by Jerry Long in the Daviess County Public Library’s Kentucky Room. Castlen said he has enjoyed learning about his predecessors while helping acquire the portraits.

“It has been interesting. I have learned so much about Daviess County” while working on the project, Castlen said. “I was going to put the various (judges’) stories on the wall, but I don’t have room.”

Castlen said he hopes to someday compile the stories into a history of courts in the “Green River Country” region.

James Mayse, 691-7303, jmayse@messenger-inquirer.com

POLICY

FROM THE **FRONT PAGE**

Hussein but also sparked widespread sectarian fighting and tensions that still simmer.

But when considering a no-fly zone, experts point to 1992, a year after the Gulf War. That’s when the U.S. imposed a weakly-enforced no-fly zone over southern Iraq and could not prevent Saddam, a Sunni Muslim, from persecuting and killing hundreds of thousands of Shiites whom he viewed as a political threat.

That failure is now being used as a case in point of why the U.S. should or shouldn’t police the Syrian sky to prevent Assad from accelerating a two-year death toll that last week reached 93,000.

The White House is undecided on whether it will impose a no-fly zone over Syria, as some have demanded. Egypt’s president, Mohammed Morsi, on Saturday called for a U.N. endorsed no-fly zone.

“We’ve rushed to war in this region in the past. We’re not going to do it here,” Obama’s chief of staff, Denis McDonough, said Sunday on CBS’ “Face the Nation.”

Vali Nasr, a Middle East expert and dean of the John Hopkins’ School of Advanced International Studies, argued for a no-fly zone “to prevent Assad from completely dominating this war for all practical purposes. And we need to create a no-fly zone to create a safe zone for refugees that Assad can’t reach.”

Nasr, who held a senior State Department job during the first two years of the Obama administration, said in an interview Friday that there are risks, “but perhaps the risks are exaggerated. And what it showed in Iraq is that it does not have to be a slippery slope into a larger war.”

On the flip side, said retired Navy Adm. William Fallon, “there’s no way to do this in a stand-off — We’re just here to help, not going to get our hands dirty.”

Fallon, the former head of U.S. Central Command who helped draw up and carry out the 1992 no-fly-zone in Iraq, said the challenge “is that you’d better be prepared for escalation and expansion of mission.”

“The likely expansion will be providing air support for guys on the ground,” said Fallon, now on the board of directors at the American Security Project, a non-partisan think tank started by Secretary of State John Kerry when Kerry was a senator.

Last Thursday, the White House deputy national security adviser Ben Rhodes announced the Obama administration has agreed, after months of hesitation, to start supplying the rebels with upgraded military aid. That decision came as a result of stronger intelligence indicating that Assad has used chemicals weapons against his people multiple times this year.

Rhodes would not detail the type of aid. But military officials and experts said it probably would include small-arms weapons, shoulder-fired anti-tank grenades and ammunition.

That would mark the White House’s first lethal shipment to Syria. Until now, the administration has mostly supplied the rebels with military equipment, such as body armor and communications devices, and humanitarian aid to the Syrian people.

Obama has not ruled out imposing a no-fly zone in Syria, Rhodes said.

But, Rhodes said, “people need to understand that not only are there huge costs associated with the no-fly zone; not only would it be difficult to implement, but the notion that you can solve the very deeply rooted challenges on the ground in Syria from the air are not immediately apparent.”

Supporters of a no-fly zone in Syria point to the one that was established by NATO over Libya in 2011. It overwhelmed Moammar Gadhafi’s air defenses and attacked tanks and military vehicles that threatened civilians.

But European nations have shown little appetite for getting directly involved in Syria, where Assad’s forces possess an air defense system made far more robust with Russian-bought weapons than what Gadhafi had.

Last month, Russia acknowledged it has agreed to sell Syria advanced S-300 air-defense missiles, which are considered to be the cutting edge in aircraft interception technology.

MESSENGER-INQUIRER

(USPS 341-660)

Published seven days a week by the Owensboro Messenger-Inquirer Inc. at 1401 Frederica Street, Owensboro, KY 42301.

Periodical postage paid at Owensboro, KY 42301; telephone (270) 926-0123. POSTMASTER: Send address changes to: MESSENGER-INQUIRER, P. O. Box 1480, Owensboro, KY 42302-1480.

CIRCULATION		SUNDAY ONLY	
SUBSCRIBER SERVICES:		IN KY. & SO. INDIANA	
Call 684-5261 or (800) 633-2008.		\$104.00	\$52.00 \$26.00 \$8.70
Business hours are 8 a.m. - 5 p.m. Monday-Friday. If you get an answering machine during non-business hours, leave your name, address, telephone number and tell us the purpose of the call. We check our messages often.		\$104.00	\$52.00 \$26.00 \$8.70

DELIVERY PROBLEMS?
If you are having difficulty receiving home delivery call our Circulation Department at 684-5261 or (800) 633-2008. Redelivery is available in Owensboro and limited areas until 11 am each day.

All mail subscriptions are payable in advance.

CARRIER ROUTE RATES			
DAILY & SUNDAY			
1 Year	6 Months	3 Months	1 Mo.
\$233.30	\$119.70	\$59.85	\$20.45

AUTOPAY	
Have your subscription deducted monthly from your checking or savings account and SAVE!	
Daily & Sunday	\$17.45
Daily without Sunday	\$14.35
Weekends (Fri.-Sun.)	\$12.50

DAILY WITHOUT SUNDAY			
\$191.75	\$98.10	\$49.05	\$16.85
WEEKEND (FRI.-SUN.)			
\$155.50	\$84.00	\$42.00	\$14.00
Weekend delivery includes the following holidays: New Year's, Martin Luther King Day, January 17, Presidents' Day, April 18, Memorial Day, Independence Day, July 18, Labor Day, Columbus Day, October 17, Veteran's Day, Thanksgiving and Christmas. An alternate will be selected if a holiday falls on a weekend.			
MAIL RATES			
(Mail delivery available only outside carrier delivery areas.)			
DAILY AND SUNDAY			
IN KY. & SO. INDIANA			
\$262.20	\$131.10	\$65.55	\$21.85
OTHER STATES			
\$270.00	\$135.00	\$67.50	\$22.50
DAILY WITHOUT SUNDAY			
IN KY. & SO. INDIANA			
\$213.00	\$106.50	\$53.25	\$17.75
OTHER STATES			
\$217.80	\$108.90	\$54.45	\$18.15

Printed in part on recycled newsprint

New downtown signs on the way

13 Aug 2013 — *Messenger-Inquirer*

[Tweet](#)

[Share](#)

New downtown signs on the way

Messenger-Inquirer

By Steve Vied

Messenger-Inquirer

Today's noon work session of the Owensboro City Commission at City Hall is scheduled to begin with a presentation of a proposed system of pedestrian signs designed to point the way to downtown landmark locations, including the Owensboro Convention Center, Smothers Park, cultural centers and hotels.

The first phase of the "Wayfaring Pedestrian Signs" program will place signs at 14 downtown intersections, with two signs per intersection, with the idea that the signs will be important for placemaking efforts and tourism. They will point people to nearby public parking facilities, and two directory signs will provide maps and directions to a long list of private businesses.

The funding source for the signs is a \$35,000 gift to the Downtown Development Corp. for public art from the estate of Charles Ralph.

Initially, signs will be placed along Second Street at its intersections with Walnut, Cedar, Locust, St. Elizabeth, Frederica, St. Ann, Allen and Daviess streets; on Third Street at Frederica and Allen streets; on Fourth Street at Frederica, St. Ann and Allen streets and at Fifth and Frederica streets. Later, signs will be placed at intersections farther south.

To save money, the signs will be made by the city's Public Works Department and are scheduled to be in place by the time the Owensboro Convention Center opens in January.

Also today, the commission will hear a report on proposed changes to the city's storm water ordinance and progress on various city projects. The regular monthly project report includes a note this month that the convention center is 70 percent complete, with the pouring of the concrete floor of the main exhibition hall set for this week.

Steve Vied, 691-7297, svied@messenger-inquirer.com

Version: 2End:

"New downtown signs on the way" [Messenger-Inquirer](#) 13 Aug 2013: A1

'Another diamond in our crown'

Holiday Inn adds to downtown optimism



Gary Emord-Netzley, Messenger-Inquirer
Owensboro Convention Center general manager Dean Dennis was all smiles as he took to the podium at a groundbreaking ceremony for the new 123-room Holiday Inn and Suites hotel Tuesday next to the convention center. "You made my day today. This adds a tool to the toolbox to sell Owensboro. This is a game changer," Dennis told the crowd of about 100 people.

BY STEVE VIED
MESSENGER-INQUIRER

Optimism and excitement about the future was the theme Tuesday morning at the ceremonial groundbreaking for the \$15 million Holiday Inn Owensboro Riverfront hotel between Walnut and Elm streets in downtown Owensboro.

The five-story, 123-room hotel being built by LinGate Hospitality in partnership with Riverfront JAM will overlook the Ohio River on the west side of the Owensboro Convention Center, which is nearing completion.

"We think the Holiday Inn will be a landmark hotel for Owensboro and be a hub of activity," said Jack Wells, a partner with Matt Hayden in Riverfront JAM. "It will be another dia-

mond in our crown. You want to be associated with a quality group, and LinGate certainly is."

About 100 people — city and county officials and many business leaders among them — gathered on First Street for the brief ceremony, while workers to the east attached exterior wall panels to the west facade of the convention center. Meanwhile just to the southeast, the new headquarters building for Boardwalk Pipeline Partners/Texas Gas — another Riverfront JAM project — was being readied for occupation.

Wells noted that the groundbreaking for the Texas Gas was held

almost exactly one year ago.

Mayor Ron Payne reminded everyone of what Wells said a year ago ("Downtown is hot, Ron!").

"It's just gotten hotter," Payne said. "Thank you to you and lots of other people. It's hard to believe that only five years ago we began replacing the Executive Inn. Who would believe in that short time, we would have a convention center with hotels on either side of it. Many people had questions about us moving forward on this, but those questions have dissipated with our success. Of all the partnerships forged,

LinGate officials said the Holiday Inn will take about 14 months to build.

SEE **DIAMOND/PAGE A2**

Marker at Pleasant Ridge church to be dedicated

BY ANGELA OLIVER
MESSENGER-INQUIRER

After more than a year of preparation by the congregation, a local church will be recognized as a part of Daviess County history.

The Kentucky Historical Society will dedicate a historical marker at 3 p.m. Sunday at Pleasant Point Missionary Baptist Church, 3723 Kentucky 764, Pleasant Ridge. Sunday is also the church's 139th anniversary.

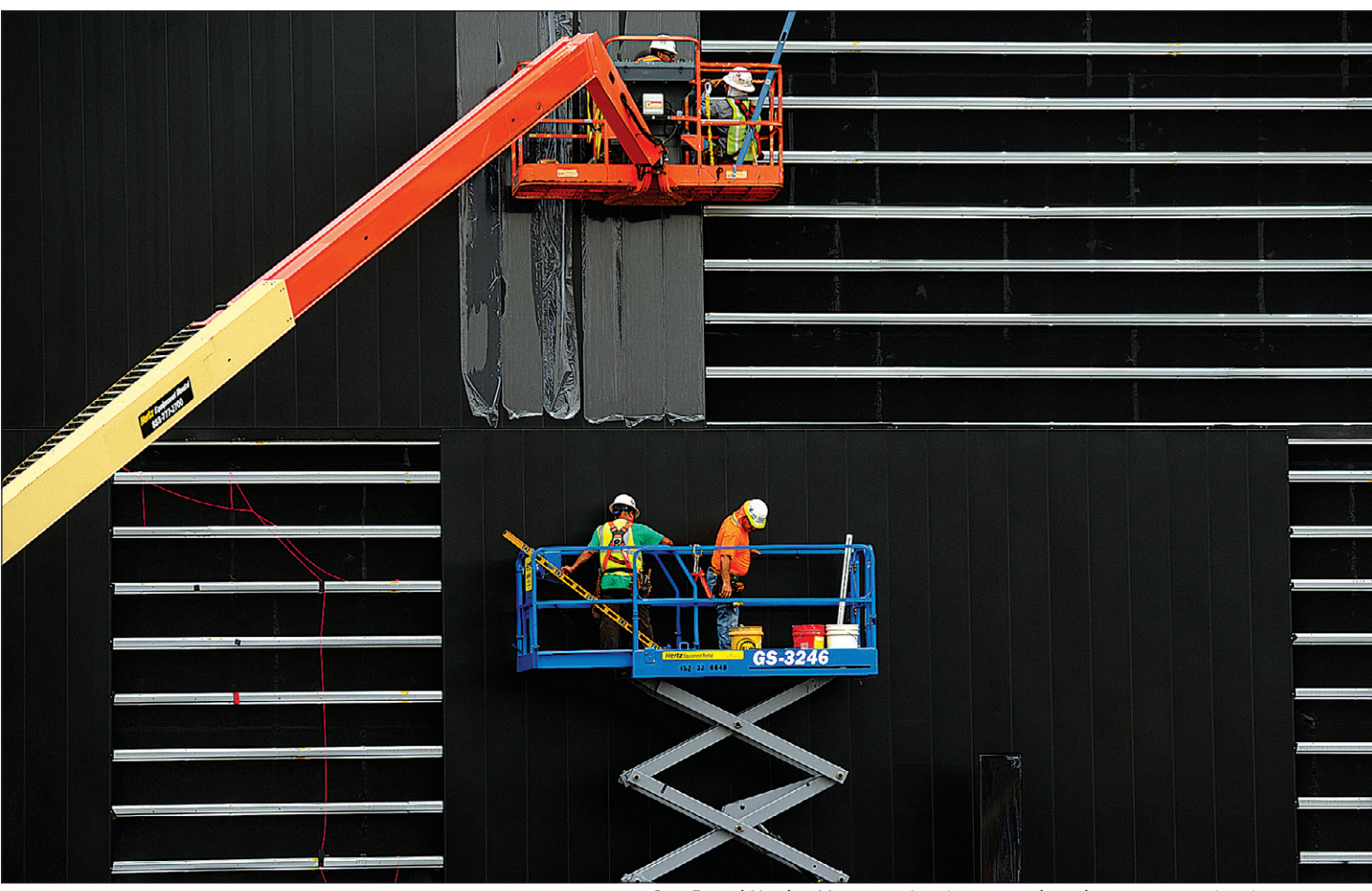
The Rev. Rhondalyn Randolph said the church is ready for the celebration.

"What we're most looking forward to is being able to share this with the community, because it's the people, not the building, that make up the church," she said.

Pleasant Point was officially organized in 1874. It was approved for KHS' Historical Marker Program in January.

Criteria for the approval includes having services in the same building for more than 100 years and having hosted a prominent national figure.

SEE **MARKER/PAGE A2**



Gary Emord-Netzley, Messenger-Inquirer, gemord-netzley@messenger-inquirer.com, 691-7318
Construction workers attach black anodized aluminum panels to the facade of the Owensboro Convention Center's west wall Tuesday afternoon. City Manager Bill Parrish said the center is 70 percent complete during a work session at City Hall.

City faces new storm-water rules

Projects must add post-construction management systems

BY STEVE VIED
MESSENGER-INQUIRER

New development projects in Owensboro will soon have to add systems to capture and treat the "first flush" of storm water off impervious surfaces under federal Environmental Protection Agency requirements the city must adopt, the City Commission was told Tuesday.

City Engineer Joe Schepers outlined the needed changes to the city's storm-water drainage ordinance to the City Commission during a commission work session at City Hall and requested that

the amended ordinance come up for first consideration later this month.

Schepers said cities with populations of less than 100,000 must adopt what he called post-construction storm-water management systems — either structural (such as filtration boxes) or nonstructural (such as detention basins, rain gardens or flower/vegetation areas) to filter out contaminants.

In Owensboro's case, such systems must be big enough to handle the first five-eighths of an inch (0.64 inch) of rain,

which typically washes away most surface contaminants. The rule applies to all residential and commercial developments of an acre or more in size that increase impervious area by one-quarter of an acre, with waivers available in certain situations.

Each new development must have a storm-water management plan and an enforceable operations and maintenance agreement that sets out exactly

The program is not retroactive to existing development, Schepers said.

SEE **RULES/PAGE A2**

Senior Celebration focuses on vitamins' benefits, shortcomings

BY RICH SUWANSKI
MESSENGER-INQUIRER

Dr. Dirck Curry told Senior Celebration attendees Tuesday morning at Owensboro Christian Church that vitamins and supplements are beneficial for a healthy life.

However, Curry, who practices osteopathic medicine at the

Owensboro Health Primary Care, said there's no substitute for eating healthy food and well-balanced meals, getting exercise and the right amount of rest.

"It doesn't matter how many nutritional or vitamins you take if you don't do that, too," Curry said.

Curry said vitamins, minerals and

nutritionals are a multi-billion-dollar business, but a single multivitamin may be all some people need. And gulping down more pills doesn't mean a person will be more healthy.

"I've had people come into the clinic with a bag full of nutritional items, and I told them, if you can't put them all in your mouth at one time and

swallow them at once, you're probably taking too many things," Curry said. "Some of them shouldn't be taken in combination. You don't want to overwhelm the body with the same substance."

First of all, when people start taking

SEE **SENIOR/PAGE A2**



SENIOR

FROM THE **FRONT PAGE**

over-the-counter products — even if it's a vitamin — they should tell their primary care physician and any specialist they may have so that the pills don't compete with any other medicine they're on.

“If people who are on coumadin are also taking a multivitamin with vitamin K, that might be the reason the physician struggles so hard at trying to control your blood thinning,” Curry said. “These nutritional should not be taken lightly when taken with other medications.”

Curry said some of the most commonly ingested vitamins are calcium, magnesium and vitamins A, C, E and B complex. Calcium helps keep bones strong but should be taken with vitamin D, particularly vitamin D3.

“When calcium is taken by itself, it does not go into the bone freely,” Curry said. “It requires vitamin D to help get it into the bone.”

Curry said the best source of vitamin D is sunlight, about 10 to 15 minutes a day on the face, neck, arms and calves. But on days without sun, or during the dreary winter, a vitamin D tablet can be taken.

“Vitamin C is needed for building connective tissue, and it's required for strengthening ligaments, tendons and covering the muscles and cartilage,” he said.

Vitamin C is available in orange juice and oranges, and other fresh fruit such as strawberries and blueberries.

“Strawberries and blueberries have antioxidants in them, which help in cancer prevention, and retard other disease processes,” Curry said.

Curry said that about 20 years ago, vitamin E

was thought to help fight cardiovascular disease, but that has since been replaced by fish oil.

He also recommended that while it's convenient to take all one's vitamins at once, it's better to ingest them throughout the day.

“If the body sees you're getting 1,000 milligrams of a vitamin C tablet and you're getting vitamin C in a multivitamin, you won't get the full benefit because the body only uses what it needs and eliminates the rest,” he said.

Also, if water-soluable vitamins are ingested on an empty stomach, they will pass though a person more quickly. Labels on certain vitamin bottles say which ones should be taken with food so the vitamins stay in the system longer.

“Multivitamins can help a person fight heart disease, cancer and chronic diseases,” Curry said.

Curry said vitamin B complex, which fights memory loss, and glucosamine mixed with chonroitin is a “building block” for cartilage to build up joints in the knees, hips, elbows, shoulders and wrists.

“But if you take it for six months and don't notice considerable change, it's not going to help,” he said.

Curry also recommended echinacea and zinc to boost the immune system when a person feels a cold or flu coming on, but not to use it daily because then it become less effective.

“Don't skip two meals and eat a big one later in the day,” Curry said. “And get seven to eight hours of sleep a night, but don't drink caffeine after 6 p.m. and don't eat a heavy meal a few hours before going to bed.”

He also said a nap late in the afternoon or in the evening may disrupt nighttime sleep.

“Taking a nap after lunch is OK,” Curry said.

Rich Suwanski, 691-7315, or rsuwanski@messenger-inquirer.com

Pessimism surrounds Mideast talks

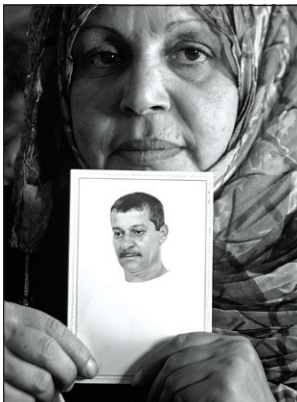
BY JOSEF FEDERMAN AND KARIN LAUB
ASSOCIATED PRESS

JERUSALEM — The same negotiators, the same issues, a familiar venue: The sense of deja vu is overwhelming as Israelis and Palestinians start Wednesday on their third attempt in 13 years to draw a border between them.

But they face even longer odds than in the last round, which ended in 2008.

Since then, at least 40,000 more Israelis have settled in areas the Palestinians want for a state, making it even harder to partition the land. The chaos of the Arab Spring has bolstered Israeli demands for ironclad security guarantees, such as troop deployments along Palestine's future border, widening a dispute that seemed near resolution five years ago.

The talks come after months of prodding by U.S. Secretary of State John Kerry, who made six visits to the region since taking office in his bid to bring together Palestinian President Mahmoud Abbas and Israeli Prime Minister



Associated Press

Fatima Nashabat, the wife of Mohammed Nashabat, poses with his picture at her home Monday in the Bureij Refugee Camp, central Gaza Strip. Nashabat is one of the 26 Palestinian prisoners Israel agreed to release this week as a part of a U.S.-brokered deal that led to a resumption of Mideast negotiations.

Benjamin Netanyahu.

Despite U.S. cheerleading, expectations have been low on both sides. Ahead of Wednesday's talks at Jerusalem's King David Hotel, the atmosphere soured further after Israel said in a series of announcements in the past week that it is advancing plans for more than 3,000 new homes for Jews in the occupied West

Bank and east Jerusalem. “It's not just deliberate sabotage of the talks, but really the destruction of the outcome,” said senior Palestinian official Hanan Ashrawi. “Israel has transformed the negotiations into a cover and a license to steal land.”

Israel argued that it's mainly building in areas it wants to keep in any border deal. “This construction that has been authorized in no way changes the final map of peace,” said government spokesman Mark Regev.

In Israel, attention focused on anguish over the expected release Tuesday of 26 long-held Palestinian prisoners, part of a U.S.-brokered deal that persuaded the Palestinians to resume negotiations. In all, 104 veteran prisoners are to be freed in four stages, depending on progress in the border talks, for which the U.S. has allotted nine months.

Most of the prisoners have already served more than 20 years, many for deadly attacks on Israelis. Angry relatives of some of the victims spoke on TV and radio news programs, protesting the release of convicted killers in what

they considered a point-less gesture. Israel's Supreme Court on Tuesday rejected their appeal, clearing the way for the release.

The negotiators meeting Wednesday — Justice Minister Tzipi Livni and Netanyahu aide Yitzhak Molcho for Israel, and Abbas advisers Saeb Erekat and Mohammed Shtayyeh for the Palestinians — have spent countless hours with each other in previous talks and are familiar with the issues down to the tiniest detail.

The sides made progress in previous rounds, starting in 2000, and the outlines of a deal have emerged — a Palestinian state in the vast majority of the West Bank, Gaza and east Jerusalem, lands captured by Israel in 1967, with border adjustments to enable Israel to annex land where most of the more than 500,000 settlers live.

However, talks broke down each time before the two sides reached the truly explosive issues: dividing Jerusalem and finding new homes for millions of Palestinian refugees and their descendants.

MARKER

FROM THE **FRONT PAGE**

According to the church's archives, George Washington Carver visited Pleasant Ridge during the Black Chautauqua, July 16-26, 1909. The pioneer scientist also visited several farmers in the area, offering advice and demonstrations of farming techniques.

The marker will also indicate the high number of veterans buried at the church's cemetery from the Civil War to the Vietnam War.

Several people, including David Kelly, former executive director

of the Human Relations Commission, and the Rev. Larry Lewis, former pastor of Pleasant Point, wrote recommendation letters for the marker application.

In addition, the historical marker committee led the fundraising to purchase the \$2,500 marker.

“I'm elated,” said Dova Tinsley, the chairwoman of the committee and member of the church for 70 years. “It'll be nice to see the former members who are coming back for the service.”

Tinsley will give remarks on her memories of Pleasant Point and on the process of obtaining the marker.

“I've learned some history I didn't know before, since we started the research,” she said.

Lewis, who pastored the church for several years, will be the keynote speaker. Tara Leavell, a former member who now lives in Louisville, will perform.

“It's been a cooperative effort,” Randolph said. “So many people supported us in getting the marker. It shows what can be done when people work together, and that's the same spirit that was there when our church was founded.”

Angela Oliver, 691-7360, aoliver@messenger-inquirer.com,

RULES

FROM THE **FRONT PAGE**

who will maintain the systems to make sure they function properly as part of the property deed. City and county governments will write and furnish specifications for storm-water management systems to developers via a new chapter in the local Public Improvements Specifications manual.

The regulations affect storm-water drainage systems that carry only storm water, not those that carry sewage and storm water combined, of which Owensboro has both, along with a system that carries only sanitary sewage. The goal, Schepers said, is to prevent contaminants washed from the surface parking lots such as oil and grease and other

areas from entering rivers and streams when rain first starts falling.

“The vast majority of pollutants that go in streams comes from the initial rain,” he said. “This captures that first little bit that carries 90 percent of the pollutants.”

The program is not retroactive to existing development, Schepers said.

“The EPA is getting into post-construction for the first time,” Schepers said. “They are saying, ‘Let's start treating water after construction is over.’”

Owensboro already has five underground concrete filter boxes that capture storm water, and a variety of natural filtration systems, Schepers said. In recent years, Owensboro has incorporated storm-water management systems into its storm-water drainage projects financed with

Kentucky Infrastructure Authority loans.

The cost to developers to add storm-water maintenance systems is not known, Schepers said, but it will cost them, he said.

The required operation and maintenance agreements will be controversial and tough to enforce, but the city has no choice in the matter, Schepers said.

“The federal government wants to make sure something is built and then not forgotten about,” he said.

Some day, the EPA will probably start requiring that storm water be tested to see if it meets requirements for cleanliness, Schepers predicted.

Tuesday's work session also included a presentation by Joe Berry of the Greater Owensboro Economic Development Corp.

of a proposed system of pedestrian signs designed to point the way to downtown landmark locations.

The first phase of the “Wayfaring Pedestrian Signs” program will place signs at 14 downtown intersections, with two signs per intersection. They will point people to nearby public parking facilities, while two larger directory signs will provide maps and directions to a long list of private businesses.

The funding source for the signs is a \$35,000 gift to the Downtown Development Corp. for public art from the estate of Charles Ralph.

Initially, signs will be placed along Second Street at its intersections with Walnut, Cedar, Locust, St. Elizabeth, Frederica, St. Ann, Allen and Daviess streets; on Third Street at Frederica and Allen

streets; on Fourth Street at Frederica, St. Ann and Allen streets and at Fifth and Frederica streets. Later, signs will be placed at intersections farther south.

The only objection by commissioners to the project concerned the design of the logo atop the signs that depict a bridge and water beneath it. Most of the commissioners didn't think people would recognize the logo as portraying Owensboro in any way, and they asked for more Owensboro-specific logo options to consider, with Payne suggesting the city emblem as one alternative.

As usual, the monthly city project update list was presented by Parrish. It included an update on the construction of the Owensboro Convention Center, noting that the building is 70 percent finished, with the floor of the exhibition hall to be poured this week, and drywall finish work continuing on all three floors. Design of a 7.5-by-56.5-foot upper-floor window on the building's east exterior wall is 90 percent complete.

Steve Vied, 691-7297, svied@messenger-inquirer.com

DIAMOND

FROM THE **FRONT PAGE**

the operative word is ‘local.’ We as government could not do all of this. It took these partnerships. You wouldn't be here if you didn't want the community to move forward.”

LinGate officials said the Holiday Inn will take about 14 months to build. When it opens, it will join the 151-room Hampton Inn & Suites/ Downtown Waterfront hotel as anchors of downtown revitalization, with the \$39.6 million Owensboro Convention Center in the middle.

“Thank all of you, in particularly the private investors,” said Daviess County Judge-Executive Al Mattingly. “Without you we'd have a beautiful convention center but no place to put people. When I've gone to conventions ... they all say they want to come to Owensboro, but we don't have enough hotels. Well, now we have the hotel rooms, we expect you to come.”

Dean Dennis, general manager of the convention center, said the addition of a second downtown hotel makes selling Owensboro easier.

“Whew, what a great day,” Dennis exclaimed. “You made my day today.

This adds a tool to the toolbox to sell Owensboro. This is a game changer. Other cities pray for a day like today. We are very fortunate to have two hotels. When it was decided to make the convention center larger, the second hotel became even more important. Congratulations for what you are doing, and we're proud to be part of it.”

The massive Executive Inn Rivermont, once the pride of the city, is long gone, but its spirit remains, Payne said.

“The spirit of the Executive Inn is coming up from the ashes once again,” he said. “A beacon will ring out from this site. We're back in business. Matt, Jack, LinGate, you stepped up and put it on the line to make this happen.”

Lingate CEO Glenn Higdon acknowledged the role the company's employees are playing in the project and listed First Security Bank of Owensboro as the lead lender, with help from South Central Bank of Owensboro, the Bank of Ohio County and Paducah Bank.

“The Holiday Inn Owensboro Riverfront further pledges our commitment to creating a first-class hotel and riverfront experience for our community and travelers to the area,” Higdon said in a

press release.

Claude Bacon of LinGate said a franchise restaurant and bar will be announced for the hotel in about two weeks. The restaurant will be on the river side of the hotel to attract people strolling along the banks of the river from points east.

LinGate Hospitality, which is headquartered in Owensboro, has 20 hotels in six states, including the Courtyard by Marriott of Owensboro.

An agreement signed last month between the city and the developers calls for them to pay the city \$1.8 million for the hotel site. That includes the transfer of property at Second and Walnut streets worth \$800,000 from the developers to the city, building \$750,000 worth of public infrastructure and assuming any liability on the property, up to \$81,000.

The city will get \$169,000 in cash. The hotel developers will extend the 15-foot-wide Riverwalk — which begins at the RiverPark Center on Daviess Street — from the convention center to the edge of a planned condo project on Elm Street — a distance of one block.

Steve Vied, 691-7297, svied@messenger-inquirer.com

MESSENGER-INQUIRER

(USPS 341-660)

Published seven days a week by the Owensboro Messenger-Inquirer Inc. at 1401 Frederica Street, Owensboro, KY 42301.

Periodical postage paid at Owensboro, KY 42301; telephone (270) 926-0123. POSTMASTER: Send address changes to: MESSENGER-INQUIRER, P. O. Box 1480, Owensboro, KY 42302-1480.

CIRCULATION

SUBSCRIBER SERVICES:

Call **684-5261** or **(800) 633-2008**. Business hours are 8 a.m. - 5 p.m. Monday-Friday. If you get an answering machine during non-business hours, leave your name, address, telephone number and tell us the purpose of the call. We check our messages often.

All mail subscriptions are payable in advance.

CARRIER ROUTE RATES

DAILY & SUNDAY

1 Year	6 Months	3 Months	1 Mo.
\$233.30	\$119.70	\$59.85	\$20.45

AUTOPAY

Have your subscription deducted monthly from your checking or savings account and SAVE!

Daily & Sunday

\$17.45

Daily without Sunday

\$14.35

Weekends (Fri.-Sun.)

\$12.50

DAILY WITHOUT SUNDAY

\$191.75	\$98.10	\$49.05	\$16.85
----------	---------	---------	---------

WEEKEND (FRI.-SUN.)

\$155.50	\$84.00	\$42.00	\$14.00
----------	---------	---------	---------

Weekend delivery includes the following holidays: New Year's, Martin Luther King Day, January 17, Presidents' Day, April 18, Memorial Day, Independence Day, July 18, Labor Day, Columbus Day, October 17, Veteran's Day, Thanksgiving and Christmas. An alternate will be selected if a holiday falls on a weekend.

MAIL RATES

(Mail delivery available only outside carrier delivery areas.)

DAILY AND SUNDAY

\$262.20	\$131.10	\$65.55	\$21.85
----------	----------	---------	---------

OTHER STATES

\$270.00	\$135.00	\$67.50	\$22.50
----------	----------	---------	---------

DAILY WITHOUT SUNDAY

\$213.00	\$106.50	\$53.25	\$17.75
----------	----------	---------	---------

OTHER STATES

\$217.80	\$108.90	\$54.45	\$18.15
----------	----------	---------	---------

SUNDAY ONLY

\$104.00	\$52.00	\$26.00	\$8.70
----------	---------	---------	--------

OTHER STATES

\$104.00	\$52.00	\$26.00	\$8.70
----------	---------	---------	--------

DELIVERY PROBLEMS?

If you are having difficulty receiving home delivery call our Circulation Department at 684-5261 or (800) 633-2008. Redelivery is available in Owensboro and limited areas until 11 am each day.

Publisher Bob Morris...691-7210

Executive Editor Matt Francis...691-7292

Advertising Dir. Faye Murry...691-7240

Operation Mgr. Mike Weaver...691-7285

Circulation Dir. Barry Carden...691-7252

ADVERTISING

To place a classified ad, call 926-6161 between 7:30 a.m. and 5:30 p.m. weekdays. For retail advertising, call 926-0123 or (800) 633-2008 between 8 a.m. and 5 p.m. weekdays.

NEWS INFORMATION

926-0123 or (800) 633-2008

- News tips and comments on our coverage - Call City Editor Robert Bruck 691-7306.

- Photo ideas - Call 691-7205.

- Photo reprints - Call our operator.

- Sports tips and comments - Call Sports 691-7311.

- To report sports results call 691-7315.

- Obituary information 691-7291

- Letters to the editor, tours - Call Suzi Bartholomy 691-7293.

- Weddings, engagements, anniversaries, calendar of events - Call Cathie Varble 691-7309.

- To announce activities or events - Mail a news release or fact sheet in advance to our Community News Desk. Include your name and daytime phone number.

- News for weekly newspaper, COMMUNITY - Call Cathie Varble 691-7309.



Printed in part on recycled newsprint

© M-11

Stormwater Management

Engineering Department

[Engineering Staff](#)

[Contact Information](#)

[Basic Services](#)

[Current Projects](#)

[Future Projects](#)

[Stormwater Management](#)

[1. Public Educ. & Outreach](#)

[2. Public Involvement & Participation](#)

[3. Illicit Discharge Detection & Elimination](#)

[4. Construction Site SW Runoff Control](#)

[5. Post-Construction SW Management](#)

[6. Pollution Prevention & Good Housekeeping](#)

[Property Maintenance](#)

[FAQ / Definitions](#)

[Downloadable Forms](#)

[KYTC Maintained Routes](#)

[Documents / Policies](#)

Stormwater Management in Owensboro

Take our short 5 question survey about Stormwater!

[Click here to take the survey](#)

According to the Environmental Protection Agency, the primary cause of water quality problems in the U.S. today is not from factories or waste water treatment plants, but rather something called "nonpoint source pollution." Nonpoint source pollution is runoff from rainfall, snowmelt, or irrigation that picks up soil and contaminants as it runs over land or under ground, eventually depositing them into surface water or introducing them into ground water. Healthy lakes, rivers, and streams directly impact property values and the quality of life we enjoy. Each of us has a responsibility to be a part Of Owensboro's pollution solution by controlling what we purposefully or inadvertently put down our storm drains.

The City of Owensboro and Daviess County both face unique challenges with respect to stormwater management. Inside the City limits, there is very little relief in the ditches. This means that the City is so flat, the water does not run off very fast. It takes larger pipes and ditches to carry the same amount of water as it would take in Cities with steeper systems. Also, the City of Owensboro is one of 17 cities in Kentucky that has what is called a Combined Sewer System, or CSS. This is a system where the sanitary sewage and the storm water are combined in one pipe. When there is flooding in the streets in these areas, there is raw sewage combined with the storm water. Also, a large portion of the undeveloped land in Daviess County is in the floodplain, which introduces numerous concerns about the quality of water. All of these issues are being addressed with the Phase II efforts.

The Six Minimum Control Measures

The Phase II permit is designed to improve water quality from our MS4. The permit requires the City of Owensboro to address 6 minimum control measures:



[Public Education and Outreach](#)

[Public Involvement and Participation](#)

[Illicit Discharge Detection and Elimination](#)

[Construction Site Stormwater Runoff Control](#)

[Post-Construction Stormwater Management in New Development and Redevelopment](#)

[Pollution Prevention / Good Housekeeping for Municipal Operations](#)

Still Have Questions? [Click here for Frequently Asked Questions](#)

Storm Water Quality Management Plan Second Permit Cycle - Years 2010 - 2015

NPDES Annual Report Second Permit Cycle - Year 3

[Click here](#) to view our National Pollutant Discharge Elimination System Phase II - Year 3 annual report. If you have any questions please contact Joe Schepers or Bailey Bennett with the City of Owensboro at 687-8641.

[Click Here](#) to view the Owensboro / Daviess County Watersheds and Outfall Location Map



Green River Area Development District

Serving Daviess, Hancock, Henderson, McLean, Ohio, Union & Webster Counties in Western Kentucky

Think Progress. Think Tomorrow. Think GRADD.

300 GRADD Way, Owensboro, KY 42301 Phone: 270.926.4433 Fax: 270.684.0714

Google™ Custom Search

Search

[About Us](#)

[Contact Staff](#)

[Local Officials](#)

[Aging, Health & Social Services](#)

[Community & Economic Development](#)

[Transportation Planning](#)

[Workforce Development](#)

[Arts & Crafts Festival](#)

Stormwater Ordinance

The Owensboro-Daviess County Stormwater Quality Advisory Committee is working with GRADD to present a new municipal separate storm sewer system (MS4) ordinance for adoption at the August 13th Owensboro City Commission meeting.

[>> Draft ordinance](#)

[>> Stormwater management](#)

[>> What is MS4?](#)



Popular Links

- [Census & Demographics](#)
- [Government Links](#)
- [Local Media Links](#)
- [Grant & Loan Opportunities](#)
- [Community Calendar](#)
- [GRADD Reports & Archives](#)
- [GRADD Videos](#)
- [ConnectGRADD Internet](#)
- [Sister Region \(GOAL\)](#)
- [2012 CEDS Update](#)
- [Download Contractor Forms](#)
- [Employment Opportunities](#)
- [Board & Staff Log-In](#)



AmeriCorps Funded



Mayors' Conference



McLean Health Grant



KY Adventure Tourism

**Owensboro Storm Water Quality Management Plan
2013 Annual Report
MCM #2 Public Involvement/Participation**

- Storm Drain Marking Project Pg 77
- SWQAC Meeting Minutes Pg 79

2013
WKU Storm Drain Project #5



2013
Additional Storm Drains
Marked by City Per Citizen Request



Storm Water Quality Advisory Committee

Agenda

March 28, 2013

12:00 A.M. – 1:00 P.M.

At the Green River Area Development Office

- I. Review December 11, 2012 Meeting Notes
- II. PI Spec chapter 14 & Stormwater Ordinance update– Bailey Bennett
- III. Comments/questions regarding the draft Ordinance and PI Spec Ch 14
- IV. Daviess County Drainage Advisory Board- Mark Brasher
- V. Chautauqua Park Project – Bryan Henderson
- VI. MS4 Annual Report – Pete Conrad
- VII. CSO/MS4 Updates – Dean Behnke/Bailey Bennett
- VIII. Open Discussion
- IX. Adjournment

Storm Water Quality Advisory Committee

March 28, 2013

12:00 p.m.

Meeting Notes

- **Attendance**
 - There were six regular members and seven advisory members in attendance.
- **December 11, 2012, Meeting Notes**
 - Chairman Clay Horton called the meeting to order and thanked the members for attending. Chairman Horton presented the December 11, 2012, meeting minutes and asked that they be reviewed and accepted. A motion was made by Dean Behnke to accept the minutes with a second by Jim Riney. A vote was taken and the motion carried unanimously.
- **PI Spec Chapter 14 & Stormwater Ordinance Update & Comments/questions Regarding the Draft Ordinance and PI Spec Chapter 14 - Bailey Bennett**
 - Bailey Bennett explained to the group that the city had met with the Homebuilders Association and sent them copies of all of the documents to review. The time frame the city requested for those documents passed without any comments. However, the members of the Homebuilders Association made suggestions at the meeting that have either been, or are being incorporated into both documents.
 - Currently, the Operations and Maintenance (O&M) document is with the city's attorney for his final recommendation. The in lieu of fees are still being discussed, as well as the final recommendation for BMP designs is still being worked on so there is a manageable number, as well as types, in the final document.
 - Ms. Bennett explained the plan is to take the final documents to a city council work session before the end of April to get their input/approval.
 - The members had questions for Ms. Bennett about the added suggestions and the time frame of passing all these documents. She answered the member's questions to their satisfaction and thanked the members for their time.
- **Daviess County Drainage Advisory Board - Mark Brasher**
 - Mark Brasher explained the board is meeting monthly and has set up a 42 - week contract to write a storm water master plan. He explained that the final documents have not yet been signed and the county is working on defining their goals, especially when looked at in light of storm events. Mr. Brasher explained that once the final details were worked out, he expected the engineer/county to set public hearings to get the public's input into the plan.
 - The members asked Mr. Brasher questions about the possible setup of the plan, to include if it would tie in with the storm water plan previously written for the city by Quest. Mr. Brasher explained they were still working out those final details, but he expected it to be similar, as well as tying in with that plan since the city and county affect each other in this regard.

- **Chautauqua Park Project - Bryan Henderson**

- Bryan Henderson discussed the status of the Chautauqua Park 319 grant. He presented members with photos of the proposed plantings and signage that will be going up, as well as a diagram showing where the plantings are going.
- Mr. Henderson explained he has been to the site during and after rain events and all the elements have been working as they were planned. He explained they are still hoping to be completed in the next few months.
- Mr. Henderson explained that at this time there are a number of rain garden workshops planned over the summer, and he has worked with the Owensboro Museum of Science and History on an exhibit that will tie into this project.

- **MS-4 Annual Report - Pete Conrad**

- Pete Conrad explained to the members that he had been working with the city and county on the MS4 annual report since the last meeting. He completed it and sent it out earlier this week. He explained that if the members wanted to review it, he had a hard copy with him. It was going up on the GRADD website, he had provided it to RWRA to place on their website, and the city had put it up on their website.
- At this point, Mr. Conrad asked Bailey Bennett if she wanted to talk about the city's new MS4 website. Ms. Bennett explained that putting together the website was a part of one of the city's goals in the permit, but it is also a way to get the word out further. Ms. Bennett went through the different aspects of the website and showed off the features the website has. She asked if any of the members had questions, there were none.

- **CSO/MS4 Updates - Dean Behnke & Bailey Bennett**

- Dean Behnke explained a number of different projects and in which stage they are currently in, to include:
 - The final details are being worked out on the Locust pump station which will get a major upgrade.
 - The Harsh project area has been smoke tested and at this time there are 27 projects that need to be completed before the separation work starts. This project will remove 950 acres off the combined sewer, which is scheduled to be completed next year and is tied into the Fairgrounds neighborhood.
 - The Parkview project is currently being modeled and has moved up in importance due to the tennis courts project that has changed its completion timeline.
- Mr. Behnke also explained there has been staff turnover with state regulators, so RWRA is still waiting on hearing anything on enforcement issues. In addition, he spoke about EPA articles that have explained they are considering adding areas/waters impaired due to nutrients from runoff.

- **Open Discussion/Questions**

- Dale Reynolds of Kentucky Division of Water (KY DOW) asked to address the group. He explained he works with Water Watch Kentucky and he quickly

described the work they do. He further explained that currently the group is running out of funding and was asking the group if they would be willing to fund the local Water Watch basin so they can continue to test local waterways.

- The group discussed their options, and a number of members stated they were members of Kentucky Water Watch. In addition, Mr. Conrad explained the testing results from 2012 from this group had been included in the MS4 annual report, and had been since at least 2011. The consensus of the group was to ask Mr. Reynolds to return for the June meeting and bring back a formal proposal for funds to the group.
- Final questions were called for before adjournment; there were none.

- **Adjournment**

SIGN-IN SHEET

MEETING: Storm Water Quality Advisory Committee Meeting

DATE & TIME: March 28, 2013 - 12:00 P.M.

NAME	ORGANIZATION/COUNTY
1. PETE Conrad	GRAND
2. Bailey Bennett	City of Owensboro
3. Mark Bracher	DCFC
4. Dale Reynolds	KDOW
5. DEAN BETHUNE	RWRA
6. Bryan Henderson	RWRA
7. Brian Housley	OMPC
8. Clayton Hutton	Green River District Health Prod.
9. Bob Donling	Neighbor Alliance
10. JIM RINEY	HRG, PLLC
11. SEAN O'BRYAN	CITY OF OWENSBORO
12. Mike Hamilton	City of Owensboro
13. Mike O'BRYAN	Homebuilders Assoc.
14. Chris Hasky	DC Extension
15.	
16.	
17.	
18.	
19.	
20.	
21.	
22.	
23.	
24.	
25.	



P R E S S R E L E A S E

FOR IMMEDIATE RELEASE

March 21, 2013

For more information, contact:

Jiten S. Shah, Executive Director

300 GRADD Way

Owensboro, KY 42301

Phone: 270/926-4433

Fax: 270/684-0714

E-mail: jitenshah@gradd.com

**OWENSBORO/DAVIESS COUNTY
STORM WATER QUALITY ADVISORY COMMITTEE
PRESS RELEASE**

TO ALL INTERESTED CITIZENS

The Owensboro/Daviess County Storm Water Quality Advisory Committee will meet on Thursday, March 28, 2013, at 12:00 Noon, at the GRADD office, located at 300 GRADD Way, Owensboro, Kentucky. The group will discuss the Public Improvement Specifications Chapter update, the Daviess County Drainage Advisory Board, the annual report, and updates on current projects. All interested parties are welcome to attend and the Storm Water Quality Advisory Committee invites any comments regarding storm water issues in Daviess County. If you have any questions or comments, please contact Pete Conrad at (270) 926-4433.

###

MODE = MEMORY TRANSMISSION

START=MAR-21 08:11

END=MAR-21 08:14

FILE NO.=948

STN NO.	COMM.	ONE-TOUCH/ ABBR NO.	STATION NAME/EMAIL ADDRESS/TELEPHONE NO.	PAGES	DURATION
001	OK	[039]	MESSENGER INQUI	001/001	00:00:17
002	OK	[045]	GLENER	001/001	00:00:18
003	OK	[060]	E-VILLE COURIER	001/001	00:00:23
004	OK	[061]	COURIER JOURNAL	001/001	00:00:41

-G.R.A.D.D. -

***** UF-7000 v2 ***** -119

- ***** -

270 684 0714- *****



P R E S S R E L E A S E

FOR IMMEDIATE RELEASE

March 21, 2013

For more information, contact:

Jiten S. Shah, Executive Director

300 GRADD Way

Owensboro, KY 42301

Phone: 270/926-4433

Fax: 270/684-0714

E-mail: jitenshah@gradd.com

**OWENSBORO/DAVIESS COUNTY
STORM WATER QUALITY ADVISORY COMMITTEE
PRESS RELEASE**

TO ALL INTERESTED CITIZENS

The Owensboro/Daviess County Storm Water Quality Advisory Committee will meet on Thursday, March 28, 2013, at 12:00 Noon, at the GRADD office, located at 300 GRADD Way, Owensboro, Kentucky. The group will discuss the Public Improvement Specifications Chapter update, the Daviess County Drainage Advisory Board, the annual report, and updates on current projects. All interested parties are welcome to attend and the Storm Water Quality Advisory Committee invites any comments regarding storm water issues in Daviess County. If you have any questions or comments, please contact Pete Conrad at (270) 926-4433.

#

Storm Water Quality Advisory Committee

Agenda

June 19, 2013

12:00 A.M. – 1:00 P.M.

At the Green River Area Development Office

- I. Review March 28, 2013 Meeting Notes
- II. PI Spec chapter 14 & Stormwater Ordinance update– Bailey Bennett
- III. Daviess County Drainage Advisory Board- Mark Brasher
- IV. Presentation on Water Watch Kentucky – Dale Reynolds
- V. Chautauqua Park Guided Tour – Bryan Henderson
- VI. Open Discussion
- VII. Adjournment

Storm Water Quality Advisory Committee

June 19, 2013

12:00 p.m.

Meeting Notes

- **Attendance**

- There were four regular members, seven advisory members and six guests in attendance.

- **March 28, 2013 Meeting Notes**

- Chairman Clay Horton called the meeting to order and thanked the members for attending. Chairman Horton presented the March 28, 2013 meeting minutes and asked that they be reviewed and accepted. A motion was made by Jim Riney to accept the minutes with a second by Dean Behnke. The motion carried unanimously.

- **PI Spec Chapter 14 & Stormwater Ordinance Update and Comments/Questions Regarding the Draft Ordinance & PI Spec Chapter 14 – Baily Bennett**

- Baily Bennett explained that not much had been updated since the March 28 meeting of the Committee. The city attorney is still in possession of the Operations and Maintenance (O&M) document.
- No formal announcement on the plan has been made at this time.

- **Daviess County Drainage Advisory Board – Mark Brasher**

- Mark Brasher explained that the Advisory Board is planning a Stormwater Master Plan that will consider the county's stormwater assets and deficiencies on a general level and that notices have been published in the Owensboro Messenger-Inquirer for citizen input. The county is still considering the amount of funding they can dedicate to the project.
- Jim Riney followed up Mr. Brasher's comments by stating that a drive to obtain supplemental information has commenced, specifically to gather flood information. Upon asking whether sufficient information had been gathered from the 1997 flood, Mr. Riney stated that they would accept all the information they could obtain.

- **Presentation on Water Watch Kentucky – Dale Reynolds**

- Dale Reynolds of the Kentucky Division of Water (KY DOW) gave a presentation on Watershed Watch, a state program that gathers and studies samples of various watersheds. The program has 1,267 active sites statewide, with 116 active in the Daviess County area.

- Watershed Watch trains and certifies volunteers, conducts field assessments, collects samples, and discusses results of their studies at yearly public forums across the state.
 - Mr. Reynolds asked the Committee to consider supporting public funding for Water Watch Kentucky's actions in Daviess County. Chairman Clay Horton suggested the Committee make a recommendation for the Owensboro City Commission to budget for a \$1,500 donation to Water Watch Kentucky. Jim Riney made a motion to recommend this action which was seconded by Brian Howard.
- **Open Discussion/Questions**
 - Dean Behnke discussed the Environmental Protection Agency's recent request for the RWRA to return to their 2008 schedule of projects. Mr. Behnke explained that a Southwest Pump Station for Owensboro/Daviess County is in early planning stages. This station would relieve much of the stormwater that is carried to the East Station.
 - Mr. Behnke also stated that the RWRA is looking into more green infrastructure projects and is actively planning for future federal regulations.
 - With no more questions or comments, Chairman Clay Horton made a motion to adjourn, which was seconded by Dean Behnke. The meeting moved to Chautauqua Park so that the members could review the rain garden project that was implemented there.
- **Chautauqua Park Rain Garden Visit – Bryan Henderson**
 - Bryan Henderson presented the recently completed Chautauqua Park Rain Garden project. All elements of the project are still working as planned during and after rain events. Mr. Henderson explained that plans exist to create a walkway between the two gardens. Workshops are planned to showcase residential rain gardens that residents can place on personal property.

SIGN-IN SHEET

MEETING: Storm Water Quality Advisory Committee Meeting

DATE & TIME: June 19, 2013 - 12:00 P.M.

NAME	ORGANIZATION/COUNTY
1. Dale Reynolds	TLG Watershed Watch / All
2. Bryan Henderson	RWRA
3. Ed Sean O'Bryan	RWRA
4. Clayton Harkin	Green River District Health Dept.
5. Mark T. Carlson	DCFC
6. Bob Doney	Neighborhood Alliance
7. Vicki Connor	Davies Co. EMA
8. Abby Shelton	City of Owensboro
9. Lee Dew	TLG Watershed Watch
10. Rita Lemuf Jacobs	
11. Dave Appleby	OMPC
12. Brian Hansen	OMPC
13. Bailey Bennett	City of Owensboro
14. DEAN BENNETT	RWRA
15. JOSEPH MARTIN	
16. John R. Roney	HRG
17. Annette Heesdorffer	Davies Co. Cooperative Extension
18.	
19.	
20.	
21.	
22.	
23.	
24.	
25.	

week, the unit carried out practical exercises in simulated civil affairs in a foreign country, prepared by officers experienced in the particular phase of training.

• **June 19**, William L. Wilson, local attorney, received a telegram Monday inviting him to be one of a number of attorneys to consult at the White House with President Kennedy, Friday afternoon, on possible solutions to the civil rights problem facing the nation. Wilson is president of the Kentucky Bar Association. He stated that he had accepted by wire and would fly to Washington Friday morning.

• **June 20**, Owensboro observed American Dairy Month appropriately with the appearance of Miss Sandra Tibeau, the 1963 American Dairy Princess, at the Rooster Booster Club breakfast at Gabe's. Miss Tibeau stressed the importance of the dairy industry to the economy of our country. She said she was proud of her dairy background and, as dairy princess, she will have visited most of the 50 states and will have traveled more than 100,000 miles in promoting interest in the dairy industry.



NEW

Couples Golf League
Friday Nights @ 5:30
\$20 a couple
Played on the Par 3 Course

Call the Pro Shop at
687-7137 for tee times.

Storm Water Advisory Board meeting Wednesday

A meeting of the Owensboro/Daviess County Storm Water Advisory Board is at noon Wednesday.

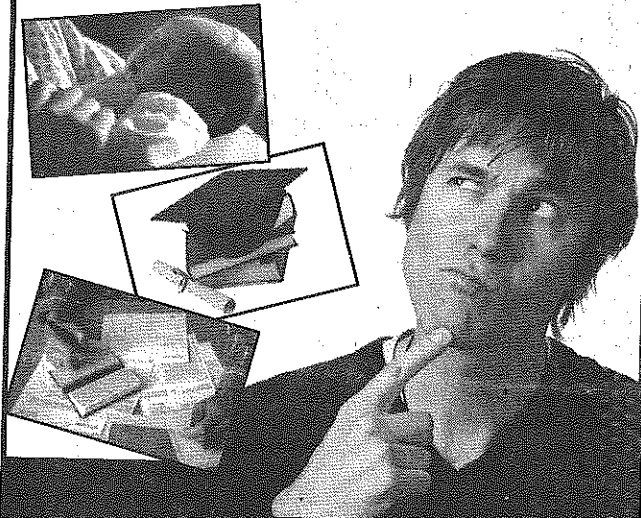
The group will meet at the Green River Area Development District office at 300 GRADD Way, and the meeting is open to the public.

The committee will discuss the Public Improvement Specifications chapter update and the Daviess County Drainage Advisory Board. A tour of the rain garden at Chautauqua Park is also scheduled.

All interested parties are invited to attend to make comments or discuss issues concerning storm water issues in Daviess County.

For more information, call Pete Conrad at 926-4433.

Special Projects got you stumped? PROJECTS MADE POSSIBLE!



INQUIRE ABOUT SIGNING BONUS!

EARN \$600-\$800 A MONTH!

* Higher earnings on motor routes.

Become an independent contractor delivering the Messenger-Inquirer to your community. Carriers can earn extra income with a few hours of work every morning.

• Early Morning Hours • Weekly Income

MESSANGER-INQUIRER

mi ONE

print. mobile. web.

For More Information 684-5261

Visit us online:

www.messenger-inquirer.com

Storm Water Quality Advisory Committee

Agenda

October 3, 2013

12:00 P.M. – 1:00 P.M.

At the Green River Area Development Office

- I. Review June 19, 2013 Meeting Notes
- II. PI Spec chapter 14 & Stormwater Ordinance update– Bailey Bennett
- III. Daviess County Drainage Advisory Board- Mark Brasher
- IV. Presentation on Water Watch Kentucky – Dale Reynolds
- V. Chautauqua Park Guided Tour – Bryan Henderson
- VI. Open Discussion
- VII. Adjournment

Storm Water Quality Advisory Committee

October 3, 2013

12:00 p.m.

Meeting Notes

- **Attendance**

- There were two regular members, seven advisory members, and four guests in attendance.

- **June 19, 2012 Meeting Notes**

- Chairman Clay Horton called the meeting to order and thanked the members for attending. Chairman Horton presented the June 19, 2013 meeting minutes and asked that they be reviewed and accepted. A motion was made by Lee Dew to accept the minutes and was seconded by Vicky Connor. A vote was taken and the motion passed unanimously.

- **PI Spec/ Ordinance Updates - Bailey Bennett**

- Bailey Bennett relayed to the committee that the Storm water Ordinance had passed on September 17, 2013.
- Bailey Bennett reported that the cut fill permit was still being held at OMPC since it is still being worked on.
- Ms. Bennett explained that the PI spec has not been passed but it is expected to be up for a vote in early December.

- **Daviess County Drainage Advisory Board - Mark Brasher**

- Mark Brasher reported that there has not been any progress of note since the last advisory board meeting. Currently, the board is determining the appropriate goals for the project. The next advisory board meeting has not yet been scheduled.

- **RWRA Updates – Dean Behnke/Brian Henderson**

- Mr. Behnke provided an update on the EPA's approval of the CSO long term control plan. Because of employee turnover at the EPA, he does not expect this review to be completed for some time.
- Dean Behnke also provided the group an update on the effort to disconnect downspouts throughout the community. Mr. Behnke explained that homeowner's who had not yet complied with the request to disconnect the downspouts may be subject to disconnection of service for water and sewer. He also mentioned that based on a survey of homes, they believe more homeowners than previously recorded had complied with the ordinance but did not report their disconnect.
- Mr. Behnke explained to the group about the direction of grease management efforts. He advised that the state is expected to model its grease management program after the city of Glasgow's. He mentioned to the group that he would upload details on the RWRA website.

- The Chautauqua Park projects are reported to be continuing along as planned. There was mention of possibly moving a meeting next year to the park during the warmer months so progress could be viewed by the committee.
- **MS4 Updates - Bailey Bennett**
 - Bailey Bennett advised the group on the KDOW TMDL email list and explained its usefulness in keeping everyone informed through newsletters and other updates regarding TDML decisions.
- **Open Discussion/Questions**
 - No topics for open discussion were presented to the group
- **Adjournment**
 - Clay Horton motioned to close after it was determined there were no more topics for discussion or questions. The motion was seconded by Dean Behnke.

SIGN-IN SHEET

MEETING: STORM WATER QUALITY ADVISORY COMMITTEE

DATE & TIME: OCTOBER 3, 2013 - 12:00 P.M.

NAME	ORGANIZATION/COUNTY
1. SEAN O'BRYAN	RWRA / DAVIESS
2. Bryan Henderson	"
3. Joe Schepers	city
4. Dale Reynolds	DOW
5. Lee Dew	Sierra Club / Watershed Watch
6. Vicky Connor	Daviess County EMA
7. Bailey Bennett	city
8. Mark Brasher	DCFC
9. Brian Hauer	OMPC
10. Clay Horton	Green River District Health Dept.
11. Jason Baker	BRYANT ENGINEERING
12. Dean Betts	RWRA
13. Carl Sims	GRADD
14.	
15.	
16.	
17.	
18.	
19.	
20.	
21.	
22.	
23.	
24.	
25.	

Storm Water Quality Advisory Committee

January 9, 2014

12:00 PM

Meeting Notes

- **Attendance**

- There were five advisory members, two guests, and one regular member in attendance.

- **October 3, 2013 Meeting Notes**

- Chairman Clay Horton called the meeting to order at 12:15 PM. Clay advised those in attendance to review the meeting minutes from October 3, 2013. Since quorum was not met, acceptance of the minutes could not be voted upon.

- **PI Spec Updates – Bailey Bennett**

- Bailey provided the committee an update on the status of the drafted PI Spec. Per Bailey, the main feature of the new spec is the addition of a new chapter (Chapter 14). The Planning Commission is set to vote on the measure tonight. Bailey also advised that the PI spec is available on the city of Owensboro's website.

Ms. Bennett gave an overview of the new cut fill permit process. She explained that the Owensboro Metropolitan Planning Commission would delegate the permit review process to the city's engineering department to ensure the applicant's compliance with city ordinances.

Ms. Bennett finished her report by answering questions from the committee.

- **Daviess County Drainage Advisory Board – Mark Brasher**

- Mark Brasher gave the committee an overview of the goals of the board's Stormwater Master Plan Phase 1. Mr. Brasher explained that the plan would research flooding and determine the appropriate actions to diminish flooding over major road ways and achieve an overall reduction of flooding in the county by 30%. The board plans on holding a public input meeting on January 15, 2014 in regards to this initiative. Once the board has compiled its research, it plans on presenting a cost estimate to the Daviess County Fiscal Court for the engineering work that would achieve the aforementioned goals.

Mark entertained questions about the plan from the committee.

- **RWRA Updates – Dean Behnke, Bryan Henderson**

- Bryan Henderson gave the group an update on the Chautauqua Park rain garden project. Bryan explained that as of late, rain events have been difficult to monitor since most have occurred at night or in otherwise adverse conditions. He also relayed that there are brochures and geo caches available on site for the public. Lastly, Mr. Henderson announced to the committee that RWRA is planning on sponsoring rain garden classes late in the spring.

Dean Behnke added to the discussion that work on rerouting water from the parking lot and roads to the garden was complete. He finished by reporting that they will continue to monitor the results of the garden's effectiveness.

Dean Behnke presented the group an update on RWRA's long term control plan. He relayed that the State had reviewed the plan and worked with RWRA to clarify and amend certain parts. RWRA now has 9 months to implement the plan.

Mr. Behnke concluded his report by summarizing the plan and the areas of the county of which they are to address. Dean also presented the group a map which represented the areas of concern in the county.

Dean additionally reported to the committee an update on RWRA's basin projects.

- **MS4 Updates – Bailey Bennett**

- Bailey explained to the group that the Kentucky Department of Water has recently sent to the city a review of the 2012 Annual Report. Per Bailey, the review included several areas of which the Department of Water hopes are better addressed for future annual reports. These areas included the subjects of illicit discharges, construction site inspections, and observation and measurement programs.

Bailey finished her update by announcing to the group that she is applying for the Kentucky Stormwater Association's MS4 Specialist review course and certification test in March.

- **Committee Bylaws Review**

- Carl Sims discussed the need for the committee to review its bylaws and make any necessary amendments. The committee also discussed the low attendance both for regular members and guests and if there were any ways to increase this number. Carl advised that regular committee members and other interested members convene before the next regularly scheduled meeting to establish a list of amendments and recommendations for the committee to vote upon.

- **Open Discussion/Questions**
 - No topics for open discussion were presented to the group.
- **Adjournment**
 - With no further discussion, Clay Horton adjourned the meeting.

MEMORANDUM

TO: File

FROM: Carl Sims

DATE: March 19, 2014

RE: January 9, 2014 SWQAC Meeting

The regularly scheduled 4th quarter meeting for the Storm Water Quality Advisory Committee was set to meet on December 18, 2013 was canceled due to low attendance. The meeting was rescheduled and took place on January 9, 2014. The minutes have been recorded and filed to represent the meeting as the Committee's 4th quarter meeting for 2013.

**Owensboro Storm Water Quality Management Plan
2013 Annual Report
MCM #3 Illicit Discharge Detection and Elimination (IDDE)**

- Stormwater Outfall Map Pg 101
- 2012 Illicit Discharge Letter Pg 102
- 2012 Illicit Discharge Violations Pg 103

Map of Greater Owensboro/Daviess County Depicting Watersheds and Outfall Locations





CITY OF OWENSBORO KENTUCKY



Engineering Department
Phone (270) 687-8641
Fax (270) 687-8579

1410 W 5th Street
P.O. Box 10003
Owensboro, KY 42302-9003

Date

Owner
Address
Owensboro, KY 42301

RE: Notice of Deficiency – Illicit Discharge

Dear Property Owners:

The City of Owensboro's Engineering Department has verified that leaves or other yard waste have been discharged into the street from the property of **Address**. The street is considered part of the public storm drainage system, and dumping pollutants into the drainage easement is illegal.

Please refer to **City Ordinance, Chapter 26, Article VII, Section 26-354 (a)** which states:

"It shall be unlawful for any person to do, permit, authorize, allow or direct another person to do, or fail to do when required, any of the following:

- (1) Deposit any concrete, steel, pollutants, building materials, or yard waste of any kind in the guttered curb of any street or alley located within public right-of-way that drains into the MS4 or CSS.
- (2) Deposit any solid waste, debris, yard waste, pollutants, waste water (sewage), concrete, building materials, tires, appliances, animal carcasses, or any other substance, material or obstruction of any kind in an open ditch, sewer, or stormwater inlet and catch basin, manhole, that is part of or drains into the MS4 or CSS."

Please remove the leaves from the curb immediately. The City of Owensboro sanitation department will begin leaf pickup October 30th on your neighborhoods appropriate day; I have included an informational pamphlet for you on this service. Consider this letter your only warning. We will keep this address in our database. If this address comes up again, the City will take further action. Failure to comply with this request may result in the City issuing fines to the property owner of up to \$1,000 for each day of the violation.

If you have questions, or if you do not own this property, please contact this office at 687-8641. Thank you for your prompt attention to this matter. Your cooperation will be greatly appreciated.

Sincerely,

E. Bailey Bennett
Engineering Technician

2013 Master Index							
Inspection #	Date	Type of IDDE	Address of IDDE	Mailing Address	Violation	# of Violations	Reinspection
I-13-001	3/14/2013	Sediment	940 W. 9th St. Owensboro, KY 42301	PO Box 926 Owensboro, KY 42302	NOD	2	In Compliance
I-13-002	4/23/2013	Sediment	2200 Venetian Way Owensboro, KY 42301	2200 Venetian Way Owensboro, KY 42301	NOD	1	In Compliance
I-13-003	5/24/2013	Sediment / Dumping	1100 Burlew Blvd Owensboro, KY 42303	731 James Garrard Dr. Owensboro, KY 42303	NOD	1	In Compliance
I-13-004	6/7/2013	Leaves	2218 Scherm Rd Owensboro, KY 42301	676 Worthington Rd Owensboro, KY 42301	NOD	1	In Compliance
I-13-005	7/23/2013	Sediment	2822 Daviess St Owensboro, KY 42303	2820 Daviess St Owensboro, KY 42301	NOD	1	In Compliance
I-13-006	8/14/2013	Dumping	2744 Frederica St Owensboro, KY 42301	2744 Frederica St Owensboro, KY 42301	NOD	1	In Compliance
I-13-007	9/5/2013	Grass	2840 Wayside Dr W Owensboro, KY 42301	2840 Wayside Dr W Owensboro, KY 42301	NOD	1	In Compliance
I-13-008	9/5/2013	Grass	1009 Standish Pl S Owensboro, KY 42301	1009 Standish Pl Owensboro, KY 42301	NOD	1	In Compliance
I-13-009	9/5/2013	Grass	909 Piedmont Dr Owensboro, KY 42301	909 Piedmont Dr Owensboro, KY 42301	NOD	1	In Compliance
I-13-010	9/24/2013	Dumping	2222 Turnbury Cove Owensboro, KY 42301	600 Locust St Owensboro, KY 42301	NOD	1	In Compliance
I-13-011	10/11/2013	Sediment	3342 Shadewood Terrace Owensboro, KY 42303	1207 Farrier Pl Owensboro, KY 42301	NOD	1	In Compliance
I-13-012	10/11/2013	Dumping	708 Parkway Dr Owensboro, KY 42303	708 Parkway Dr Owensboro, KY 42303	NOD	1	In Compliance

2013 Illicit Discharge Locations

Illicit Discharge Locations

Discharge, Year



Dumping, 2013



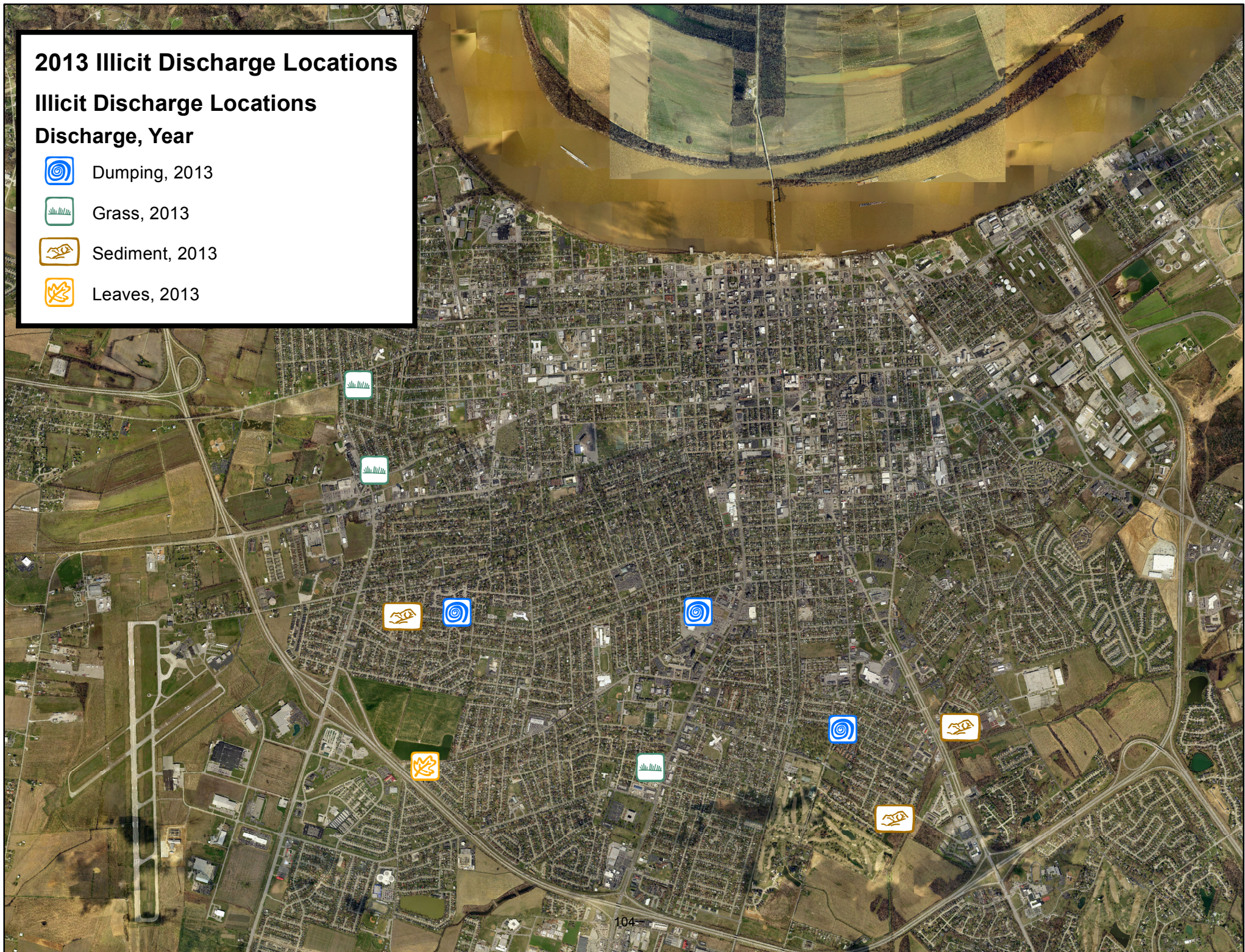
Grass, 2013



Sediment, 2013



Leaves, 2013



**Owensboro Storm Water Quality Management Plan
2013 Annual Report
MCM#4 Construction Site Storm Water Runoff Control**

- SWPPP Checklist Pg 106
- MS4 Construction Projects Contacts Pg 113
- 2013 Construction Inspections Pg 114
- Construction Inspection Form Pg 121

City of Owensboro's

SWPPP Checklist

This optional checklist is provided to assist owners and operators in preparing their KPDES Stormwater Pollution Prevention Plan (SWPPP) to meet the requirements of Kentucky's 2009 Construction General Permit. The "Descriptions" provided below do not necessarily reflect the exact wording used in the permit; rather these are stated in simplified language to provide additional guidance. (Note if any inadvertent conflict exists between this document and the permit, the permit language prevails). The "Permit Citation" column shows you where each particular requirement is found in the 2009 CGP. Use the "Location" column to note the page where the requirement is addressed in your SWPPP. Using this SWPPP checklist will help you ensure that all the permit requirements are addressed in your SWPPP and will also assist the Department in conducting a more efficient review of your SWPPP if it is required to be submitted.

Please note that your SWPPP does not have to follow the format of this checklist; the purpose of this checklist is only to ensure that your SWPPP contains all required components. While this checklist is intended for use in preparing your initial SWPPP, your SWPPP is a "living" document and it is important that it be updated to document changes in your project, best management practices (BMPs), Inspections, and other pertinent information. (Note: the City of Owensboro uses this document to review SWPPP plans in their jurisdiction).

Permit Citation	Description	Location in SWPPP & Notes	
	Contact Information and Site Description		
Part II.A.	Project Name and Location.		
Part II.A.	Construction Site SWPPP Manager(responsible for installing, implementing, and maintaining the BMPs) and their contact Information.		
Part II.A	Site Owner Name and Contact Information.		
Part II.A	Project Start and End Dates.		
Part II.A.1.c	Site Acreage and Disturbed Acreage.		
Part II.A.1.d	Name of receiving waters (how far away from the site). Or name of MS4 that it drains to.		
Part II.A.1.d	Receiving Waters Classification and Status (if applicable).		
Part II.A.1.a	Site Description- site conditions, slopes, trees, soil types, streams on-site, function of the project, and brief description of soil disturbing activities.		
Part II.A.1.b	Sequence of Major Activities that disturb soil over major portions of the site.		
Part II.A.	Potential sources of pollutants (e.g. sediment, oil/gas from fueling, concrete washout, etc.).		

Permit Citation	Description	Location in SWPPP & Notes	
Part II.A.	Describe the planned phasing or sequencing of land disturbance activities. The amount of open/disturbed dirt left open at one time should be minimized where possible		
	SITE MAP (note multiple maps may be used) All the following are to be shown on the site map or maps		
Part II.A.2.	Include a site map completed to scale		
Part II.A.2.b.	Use arrows to show the direction(s) where stormwater will flow for all areas within the project limits (This is for the period during construction, not final contours. Flow direction may change as project grading progresses; when this occurs, maps are to be updated.)		
Part II.A.2.c.	Show areas of soil disturbance and areas that will not be disturbed		
Part II.A.2.a.	Property boundary of the project. If subdivided, show all lots and indicate which lots construction activities will occur.		
Part II.A.2.d.	Locations and types of sediment control measures, erosion control measures, planned stabilization measures, and other site management practices.		
Part II.A.2.h.	Show locations of on-site material storage, waste storage or receptacles, borrow areas, equipment storage or other supporting activities		
Part II.A.2.e.	Identify any water bodies (including dry washes and wetlands) on the site. If there are no water bodies, indicate this on the map		
Part II.A.2.g.	Show locations where stormwater discharges to surface water (including wetlands, ephemeral waters and dry washes) and to municipal storm sewer systems (MS4s) (use an "X" to indicate discharge location(s)). Where surface waters and/or MS4s receiving stormwater do not fit on the map, use arrows to show the direction and indicate the approximate distance to the surface water and/or MS4		
Part II.A.2.f.	Locations of karst features such as sinkholes, springs, etc.		
Part II.A.2.i.	Location of concrete wash out areas, waste management areas, area of site ingress/egress.		
Part II.A.2.j.	Identify any areas of the site where final stabilization has been achieved		
Part II.A.2.c	Specify existing vegetated areas (trees, brush, etc.) and boundaries of environmentally sensitive areas and buffer zones that are to be preserved		
Part II.A.2.k	Other major features and potential pollutant sources.		

Permit Citation	Description	Location in SWPPP & Notes	
	Documentation of Stormwater Controls to Reduce Pollutants (Erosion Prevention/ Sediment Controls)		
Part II.A.4.a,	Identify BMPs selected for the site and describe how each will reduce pollutants in stormwater		
Part II.A.4.c.i	Plan to minimize disturbance and the period of time the disturbed area is exposed without stabilization practices(e.g. minimize disturbed area, phasing construction, and scheduling clearing and grading to reduce probability that bare soils will be exposed to rainfall).		
Part II.A.4.c.ii	Managing stormwater flows on the site to avoid stormwater contact with disturbed areas(e.g. diversion berms, conveyance channels, vegetated buffers, slope drains, etc).		
Part II.A.4.c.iii	Using energy dissipation approaches to prevent high velocity runoff and concentrated flows that are erosive(e.g. check dams, vegetative filter strips, rip-rap for pipe outlets, etc).		
Part II.A.4.c.iv	The practices to be used to minimize exposure of bare soils by covering and stabilization(e.g. vegetative stabilization w/ grasses and plants, geotextiles, straw, rolled erosion control mats, mulch, etc).		
Part II.A.4.d.i	Sediment Barriers (e.g. silt fences, fiber rolls, berms, etc)		
Part II.A.4.d.ii	Slope Protection (e.g. tread tracking, erosion blankets, slope drains, seed and mulch, etc)		
Part II.A.4.d.iii	Conduit/ Ditch Protection (e.g. inlet protection, outlet protection, etc.).		
Part II.A.4.d.iv	Stabilizing Drainage Ditches (e.g. check dams, lining deep ditches, seed and mulch, etc.).		
Part II.A.4.d.v	Sediment trapping devices used to settle out sediment eroded from disturbed areas (e.g. sediment traps, basins, etc).		
Part II.A.4.d.vi	Perimeter Controls (e.g. silt fences, berms, swales, fiber rolls, etc.).		
	Offsite Vehicle Tracking (50'X20'X6" construction entrance with #2 or larger rock and geotextile liner)		
	Inlet protection will be used to prevent polluted water from entering a storm drainage system. Type?		
	Dewatering controls (e.g. filter bags, check dam at outlet of pipe, pump to sediment trap, etc.).		
Part II.A.4.e.i	Construction materials to be handled, stored, maintained, and disposed of properly to avoid contamination of runoff to the maximum extent practicable.		
Part II.A.4.e.ii	Practices that will be implemented to manage construction and development site wastes and prevent or minimize discharges to surface water.		

Permit Citation	Description	Location in SWPPP & Notes	
Part II.A.4.i.	Describe the location(s) and how materials and equipment will be stored or staged both on-site and offsite; including overburden, soil stockpiles, and borrow areas		
	Maintenance of Stormwater Controls		
Part II.A.7.c.	Responsible person for performing maintenance on the BMPs. Qualified in Erosion Prevention and Sediment Control?		
Part II.A.5.b.	All measures will be maintained in good working order, if a repair is necessary, it will be initiated before the next storm event or as soon as possible. This information will be logged on the Inspection report.		
Part II.A.5.a.	Silt fences will be inspected for bypassing, overtopping, undercutting, depth of sediment, tears, and to ensure attachment to secure posts. Bypasses will be repaired immediately. Sediment barriers and Perimeter control devices will be maintained at no more than 1/3 capacity.		
Part II.A.5.a.	Sediment basins and sediment traps will be inspected for depth of sediment, and built-up sediment will be removed when it reaches 30% of the design capacity and at the end of the job.		
	Diversion dikes and berms will be inspected and any breaches promptly repaired. Areas that are eroding or scouring will be repaired and re-seeded/ mulched as needed.		
.	Temporary and permanent seeding and mulching will be inspected for bare spots, washouts, and healthy growth. Bare or eroded areas will be repaired as needed.		
	Construction ingress/ egress rock run-out will be maintained when needed. Mud, dirt, or other pollutants will be cleaned off the street if off-site vehicle tracking occurs.		
.	Inlet protection devices such as rock bags, sand bags, etc. will be maintained if they have been ripped open by vehicles driving over them or are not working properly.		
	Non-Stormwater Discharge Management		
Part II.A.6.	List of non-stormwater discharges that will occur during construction.		
	All non-stormwater discharges will be directed to a sediment basin, filter bag, or filter fence enclosure in a flat vegetated area prior to discharge, to remove sediment and other contaminants.		

Permit Citation	Description	Location in SWPPP & Notes	
	List of materials and substances that are expected to be present onsite during construction.		
	Description of spill prevention measures and material management practices.		
	Description of spill control and cleanup practices.		
	Inspection Procedures		
Part II.A.7.a.	Inspection Frequency (1. Once every 14 days and 24hours after a rain event of 0.5 in. or greater. 2. Once every 7 days.)		
Part II.A.7.c.	Provide name, title, and qualifications of person(s) who will be conducting inspections		
Part II.A.7.d	Inspector to conduct visual inspections to determine whether erosion prevention measures, sediment control measures, and other site management practices are properly installed, properly maintained, effective in minimizing discharges to the receiving waters, and whether excessive pollutants are entering the drainage system.		
Part II.A.7.e.i	Inspection of erosion prevention measures.		
Part II.A.7.e.ii	Inspection of sediment control measures		
Part II.A.7.e.iii	Inspection of other site management practices and points of site egress.		
Part II.A.7.e.iv	Inspection of disturbed areas		
Part II.A.7.e.v	Inspection of areas used for storage of materials exposed to precipitation.		
Part II.A.7.e.vi	Inspection of discharge points to ascertain whether erosion prevention measures, sediment control measures, other site management practices and points of site egress are effective in preventing impacts to waters of the Commonwealth.		

Permit Citation	Description	Location in SWPPP & Notes	
-----------------	-------------	---------------------------	--

	INSPECTION REPORT		
Part II.A.7.f.	Provide a copy of the inspection report form to be used to document site inspections. At a minimum, the report form must include the following information (note, an example form is provided in the permit and may be used to satisfy this permit requirement):		
	Date of inspection		
	Name and title of person(s) conducting the inspection		
	Information about weather conditions since the last inspection, including: best estimate of the beginning and end of each rain event; time elapsed since last rain event; and approximate amount of rainfall for each event (in inches)		
	Weather conditions and a description of any discharges occurring at the time of the inspection.		
	Locations where sediment and other pollutants are or were discharged from the site		
	For inspections conducted while stormwater can be observed discharging from the site, provide a description of the physical characteristics (e.g., presence of suspended sediment, turbid water, discoloration, oil sheen, etc.)		
	Location and identification of BMPs in that need to be maintained, failed to operate, or proved inadequate		
	Inspection reports shall be kept onsite and be readily available for review from the City of Owensboro, KDOW, and the EPA		

Part II.A.7.f.	Location(s) where additional BMPs are needed that did not exist at the time of inspection		
	Identification of material storage areas and evidence of or potential for pollutant discharge from such areas		
	Corrective actions required, including any changes to SWPPP necessary, and implementation dates (of corrective actions/maintenance, and SWPPP changes) Maintenance- within 24 hours Changes to SWPPP- 7 calendar days		
	Identification of any non-compliance with the conditions of this permit, or where the inspector does not identify any incidents of non-compliance, the inspection report shall contain a certification that the construction project or site is being operated in compliance with the SWPPP and permit		
	Inspection report sign and certified in accordance with the signatory requirements in 401 KAR 5:065, Section 1(11).		

Permit Citation	Description	Location in SWPPP & Notes	
	Signature, Plan Review, and Making Plans Available		
Part II.A.9.a.	The SWPPP shall be signed and certified in accordance with the signatory requirements in 401 KAR 5:065, Section 1(11)		
Part II.A.9.c.	A current copy of the SWPPP shall be readily available to the construction site from the date of project initiation to the date of Notice of Termination.		
City Requirement	Include a copy of the completed NOI form that was submitted to KDOW and the acceptance letter/email from KDOW.		
Part II.A.9.g./f	The SWPPP shall be kept onsite and be readily available for review by the City of Owensboro, KDOW, and the EPA.		
Part II.A.9.e.	If an onsite location is unavailable to store the SWPPP when no personnel are present, notice of the plan's location shall be posted near the main entrance at the construction site.		
City Requirement	Include copies of other agreements with any state, local or federal agencies that would affect the provisions or implementation of the SWPPP, if applicable (404 permits, local grading permits, etc.)		

Project	Status	NOI Holder	NOI Holder Address	Site Address	Permit #	Primary Contact	Phone #	Email
Cross Creek Subdivision	On Going	Ward Pedley	3149 Commonwealth Ct. Owensboro, KY 42303	Subdivision off Old Hartford Rd	KYR10E593, 592, 591	George Ballard	270-570-2256	AlexanderandSons@bellsouth.net
Harbor Hills	Completed	Bob Wimsatt	5435 Lee Rudy Rd. Owensboro, KY 42301	Subdivision Off Boothfield Rd	KYR106152	Bob Wimsatt		rjwimsatt@aol.com
Heartland Crossing	Completed	Heartland Crossing, LLC	115 St. Ann St. Owensboro, KY 42303	2412 E. Parrish Ave. Owensboro, KY 42303	KYR10F491	Phillip Riney Kevin Grant	270-685-2511 270-316-5965	priney@owens.twcbc.com kgrant@envisionky.com
Hunters Ridge	On Going	Ward Pedley	3149 Commonwealth Ct. Owensboro, KY 42303	Subdivision off Fairview Spur	KYR10E541, 542, 544	George Ballard	270-570-2256	AlexanderandSons@bellsouth.net
Keeneland Trace	On Going	Thompson Homes	322 Frederica Street Owensboro, KY 42301	Subdivision off Carter Rd	KYR10E435, 434, 437, 459, 468, 473, 472, 461, 466, 463, 464, 465, 462,	Nick Thompson	270-926-1740	nick@thompsonhomesinc.com
OMHS	Completed	Phillip Brothers Const	120 Insanity Lane Vine Grove, KY 40175	1201 Pleasant Valley Rd Owensboro, KY 42303	KYR10E594	Cory Redmon	270-877-6303	phillipsdirt@yahoo.com
Southtown Blvd. Widening	Completed	KY DOH	1840 N. Main St. Madisonville, KY 42431	Southtown Blvd. Owensboro, KY 42301	KYR10F966	Kevin McClearn	270-824-7080	Kevin.McClearn@ky.gov
Fifth Third Bank	Completed	ARC Construction	PO Box 2660 Evansville, IN 47728	500 Frederica St. Owensboro, KY 42301	KYR10G898	Todd Reller	812-426-0481	treller@arc-construction.com
Airpark Drive	Completed	T&C	278 S Mayo Trail Pikeville, KY 41501	Airpark Drive Owensboro, KY 42301	KYR10G368	Dennis Coffman	502-817-0357	Dennis@TCKY.biz
Boardwalk	Completed	Envision Contracting	2960 Fairview Dr. Owensboro, KY 42303	610 W 2nd St. Owensboro, KY 42301	KYR10G648	Kevin Grant	270-689-1733	kgrant@envisionky.com
Carmel Home Addition	Completed	Rusher Const	3357 Leitchfield Rd Owensboro, KY 42303	2501 Old Hartford Rd. Owensboro, KY 42303	KYR10G955	Sandra Thomas	270-684-3256	rushercci@bellsouth.net
Convention Center	On Going	City of Owensboro	1410 W. 5th St. Owensboro, KY 42301	501 W. 2nd St. Owensboro, KY 42301	KYR10G389	Bailey Bennett	270-687-8641	bennetteb@owensboro.org
Cottages of Mechanicsville	Completed	AEI	65 Aberdeen Dr Glasgow, KY 42141	Omega Street Owensboro, KY 42301	KYR10H042	Joe Watson	270-651-7220	jwatson@aei.cc
Downtown Streetscape	Completed	City of Owensboro	1410 W. 5th St. Owensboro, KY 42301	311 W. 2nd St. Owensboro, KY 42301	KYR10G550	Sean O'Bryan	270-929-1619	obryansm@owensboro.org
Fairhaven	On Going	Tom Duggins	6301 Sardis Rd. Charlotte, NC 28270	Subdivision off Fairview Dr	KYR10G735	Tom Duggins	704-301-1062	
Fiddlesticks	On Going	Thompson Homes	322 Frederica Street Owensboro, KY 42301	Subdivision off JR Miller Blvd	KYR10E449, 452, 450, 451, 446, 453, 435	Nick Thompson	270-926-1740	nick@thompsonhomesinc.com
Hampton Inn	On Going	Malcolm Bryant	920 Frederica St. Owensboro, KY 42301	401 W. 2nd St. Owensboro, KY 42301	KYR10G471	Dave Bowersox	270-316-3807 270-926-1103	dbowersox@bryantcorp.com
Omega Street	Completed	Hazex Construction	1890 Madison St. Henderson, KY 42420	Omega Street Owensboro, KY 42301	KYR10G785	Al Quisenberry	270-826-5642	AQuisenberry@hazex.com
Parking Lot A	Completed	Envision Contracting	2960 Fairview Dr. Owensboro, KY 42303	710 W. 3rd St Owensboro, KY 42301	KYR10G737	Kevin Grant	270-689-1733	kgrant@envisionky.com
Downtown Phase II	On Going	Ragle Inc.	PO Box 444 Newburgh, IN 47629	2nd St (Walnut - St. Ann) Owensboro KY 42301	KYR10H149	Hunter Fields	812-499-6920 812-853-9558	hfields@ragleinc.com
KY 54 / US 60 Interchange	Completed	KYTC	1840 N Main St Madisonville KY 42431	KY 54 / US 60 Owensboro KY 42303	KYR10H218	Kevin McClearn	270-824-7080	kevin.mcclearn@ky.gov
Dutch Banks Lots	On Going	Goetz Development	3936 Frederica St. Owensboro, KY 42301	4301-4320 Schrecker Ct & 4301-4320 Germantown Ct	KYR10H231	Michael Goetz	270-683-3766	
Hospice	Completed	Yager Materials	5001 Hwy 60 E	Old Hartford Rd Owensboro, KY 42301	KYR10G995	Cary Gaddis	270-316-4927	cary.gaddis@yagermaterials.com
US Bank	Completed	Peyronnion Construction	PO Box 3317 Evansville, IN 47732	Airpark Dr Owensboro, KY 42301	KYR10H347	Mike Schapker	812-423-6241	mikes@peyronnion.com
Ashley Furniture	On Going	Envision Contracting	2960 Fairview Dr. Owensboro, KY 42303	3250 Highland Pointe Dr Owensboro, KY 42303	KYR10H293	Stephen Bosley	270-689-1733	sbosley@envisionky.com
Norman King Electric	On Going	King Investment LLC	1646 River Rd Owensboro, KY 42301	3450 Airpark Dr Owensboro, KY 42301	KYR10H496		270-684-1886	
Holiday Inn	On Going	LinGate Hospitality	4201 Springbanks Dr Owensboro, KY 42303	701 W 1st St Owensboro, KY 42301	KYR10H679	Chris McCarthy		Chris.McCarthy@lin-gate.com
Bon Harbor Hills	Completed	Hazex Construction	PO Box 357 Henderson, KY 42420	Bon Harbor Area Owensboro, KY 42301	KYR10H625	Al Quisenberry	270-826-5642	AQuisenberry@hazex.com
Discovery Corner	On Going	Yager Materials	5001 Hwy 60 E Owensboro, KY 42303	2076 Endeavor Drive Owensboro, KY 42301	KYR10H735	Cary Gaddis	270-316-4927	cary.gaddis@yagermaterials.com
Hucks	On Going	A&K Construction	100 Calloway Ct Paducah, KY 42001	2080 Southtown Blvd Owensboro, KY 42301	KYR10H730	Beth Trimble	270-441-7752	info@akconstruction.com
Hospital Demo	On Going	Turner Construcion	811 Parrish Ave Owensboro, KY 42303	811 Parrish Ave Owensboro, KY 42303	KYR10H784	Brian Etienne		petienne@tcco.com
Saddlebrook Apts	On Going	Envision Contracting	2960 Fairview Dr. Owensboro, KY 42303	4470 Springhill Dr. Owensboro, KY 42303	KYR10H680	Stephen Bosley	270-689-1733	sbosley@envisionky.com
Academy Sports & Outdoors	On Going	Envision Contracting	2960 Fairview Dr. Owensboro, KY 42303	3051 Highland Pt Dr Owensboro, KY 42303	KYR10H797	Stephen Bosley	270-689-1733	sbosley@envisionky.com

2013 Master Index					
January	Inspection #	Project Name	Status	Date of Inspection	Re-Status
	13-001	Airpark Drive	NOD	1/9/2013	In Compliance
	13-002	Keeneland Trace	NOD	1/9/2013	In Compliance
	13-003	Southtown Blvd	In Compliance	1/9/2013	
	13-004	Fiddlesticks	NOD	1/9/2013	In Compliance
	13-005	Harbor Hills	In Compliance	1/9/2013	
	13-006	Omega Street	COMPLETED	1/9/2013	
	13-007	Cottages of Mechanicsville	In Compliance	1/9/2013	
	13-008	Boardwalk	In Compliance	1/15/2013	
	13-009	Parking Lot A	In Compliance	1/15/2013	
	13-010	Hampton Inn	In Compliance	1/15/2013	
	13-011	Downtown Streetscape	COMPLETED	1/15/2013	
	13-012	Fifth Third Bank	COMPLETED	1/15/2013	
	13-013	Cross Creek	In Compliance	1/15/2013	
	13-014	Carmel Home	NOD	1/15/2013	In Compliance
	13-015	Fairhaven	In Compliance	1/23/2013	
	13-016	Heartland Crossing	In Compliance	1/23/2013	
	13-017	Hunter's Ridge	In Compliance	1/23/2013	
	13-018	OMHS	In Compliance	1/23/2013	
February	13-019	Harbor Hills	NOD	1/28/2013	NOV I
	13-020	Cottages of Mechanicsville	NOD	2/2/2013	In Compliance
	13-021	Carmel Home	In Compliance	2/11/2013	
	13-022	Cross Creek	In Compliance	2/11/2013	
	13-023	Hunter's Ridge	In Compliance	2/11/2013	
	13-024	Fairhaven	In Compliance	2/11/2013	
	13-025	Heartland Crossing	In Compliance	2/11/2013	
	13-026	OMHS	In Compliance	2/11/2013	
	13-027	Airpark Drive	In Compliance	2/25/2013	
	13-028	Keeneland Trace	NOD	2/25/2013	In Compliance
	13-029	Southtown Blvd	In Compliance	2/25/2013	
	13-030	Fiddlesticks	NOD	2/25/2013	In Compliance
	13-031	Hampton Inn	In Compliance	2/25/2013	
	13-032	Downtown Phase II	In Compliance	2/25/2013	
	13-033	Boardwalk	In Compliance	2/25/2013	
	13-034	Parking Lot A	In Compliance	2/25/2013	

March	13-035	Carmel Home	In Compliance	3/18/2013	
	13-036	Cross Creek	In Compliance	3/18/2013	
	13-037	Hospice	NOD	3/18/2013	In Compliance
	13-038	Fiddlesticks	In Compliance	3/18/2013	
	13-039	Hunter's Ridge	In Compliance	3/18/2013	
	13-040	Fairhaven	In Compliance	3/18/2013	
	13-041	KY 54 / US 60 Interchange	In Compliance	3/18/2013	
	13-042	Heartland Crossing	In Compliance	3/18/2013	
	13-043	Cottages of Mechanicsville	NOD	3/25/2013	In Compliance
	13-044	Harbor Hills	In Compliance	3/25/2013	
	13-045	Airpark Drive	In Compliance	3/25/2013	
	13-046	Keeneland Trace	In Compliance	3/25/2013	
	13-047	Southtown Blvd	In Compliance	3/25/2013	
	13-048	Dutch Bank Lots	In Compliance	3/25/2013	
	13-049	Hampton Inn	In Compliance	3/27/2013	
	13-050	Boardwalk	In Compliance	3/27/2013	
	13-051	Parking Lot A	In Compliance	3/27/2013	
	13-052	Downtown Phase II	In Compliance	3/27/2013	
	13-053	OMHS	COMPLETED	3/27/2013	
April	13-054	Harbor Hills	In Compliance	4/10/2013	
	13-055	US Bank Call Center	In Compliance	4/10/2013	
	13-056	Airpark Drive	In Compliance	4/10/2013	
	13-057	Keeneland Trace	In Compliance	4/10/2013	
	13-058	Southtown Blvd	In Compliance	4/10/2013	
	13-059	Fiddlesticks	In Compliance	4/10/2013	
	13-060	Dutch Bank Lots	In Compliance	4/10/2013	
	13-061	Carmel Home	In Compliance	4/16/2013	
	13-062	Hospice	In Compliance	4/16/2013	
	13-063	Cross Creek	In Compliance	4/16/2013	
	13-064	Hunter's Ridge	NOD	4/16/2013	In Compliance
	13-065	Fairhaven	In Compliance	4/16/2013	
	13-066	Heartland Crossing	In Compliance	4/16/2013	
	13-067	KY 54 / US 60 Interchange	In Compliance	4/16/2013	
	13-068	Cottages of Mechanicsville	NOD	4/19/2013	In Compliance

	13-069	Boardwalk	In Compliance	4/16/2013	
	13-070	Parking Lot A	In Compliance	4/16/2013	
	13-071	Downtown Phase II	In Compliance	4/16/2013	
	13-072	Hampton Inn	In Compliance	4/16/2013	
May	13-073	Cottages of Mechanicsville	In Compliance	5/21/2013	
	13-074	US Bank Call Center	In Compliance	5/21/2013	
	13-075	Airpark Drive	In Compliance	5/21/2013	
	13-076	Keeneland Trace	NOD	5/21/2013	In Compliance
	13-077	Southtown Blvd	In Compliance	5/21/2013	
	13-078	Dutch Bank Lots	In Compliance	5/21/2013	
	13-079	Fiddlesticks	In Compliance	5/21/2013	
	13-080	Carmel Home	In Compliance	5/31/2013	
	13-081	Hospice	In Compliance	5/31/2013	
	13-082	Cross Creek	In Compliance	5/31/2013	
	13-083	Hunter's Ridge	In Compliance	5/31/2013	
	13-084	Fairhaven	In Compliance	5/31/2013	
	13-085	Ashley's Furniture	In Compliance	5/31/2013	
	13-086	Heartland Crossing	In Compliance	5/31/2013	
	13-087	KY 54 / US 60 Interchange	In Compliance	5/31/2013	
	13-088	Parking Lot A	In Compliance	5/31/2013	
	13-089	Boardwalk	In Compliance	5/31/2013	
	13-090	Downtown Phase II	In Compliance	5/31/2013	
	13-091	Hampton Inn	In Compliance	5/31/2013	
June	13-092	Harbor Hills	In Compliance	6/20/2013	
	13-093	Cottages of Mechanicsville	NOD	6/20/2013	In Compliance
	13-094	US Bank Call Center	In Compliance	6/20/2013	
	13-095	Airpark Drive	In Compliance	6/20/2013	
	13-096	Keeneland Trace	NOD	6/24/2013	In Compliance
	13-097	Southtown Widening	In Compliance	6/20/2013	
	13-098	Dutch Bank Lots	In Compliance	6/20/2013	
	13-099	Fiddlesticks	In Compliance	6/20/2013	
	13-100	Carmel Home Addition	In Compliance	6/20/2013	
	13-101	Hospice	In Compliance	6/20/2013	

Ju	13-102	Cross Creek	In Compliance	6/20/2013	
	13-103	Hunters Ridge	In Compliance	6/20/2013	
	13-104	Fairhaven	In Compliance	6/20/2013	
	13-105	Ashleys Furniture	In Compliance	6/20/2013	
	13-106	Heartland Crossings	In Compliance	6/20/2013	
	13-107	KY 54 / US 60 Interchange	In Compliance	6/20/2013	
	13-108	Downtown Phase II	In Compliance	6/20/2013	
	13-109	Hampton Inn	In Compliance	6/20/2013	
	13-110	Parking Lot A	In Compliance	6/20/2013	
	13-111	Boardwalk Office Building	In Compliance	6/20/2013	
	13-112	Heartland Crossings	COMPLETED	7/8/2013	
July	13-113	Ashleys Furniture	In Compliance	7/24/2013	
	13-114	Fairhaven	In Compliance	7/24/2013	
	13-115	Hunters Ridge	In Compliance	7/24/2013	
	13-116	Cross Creek	In Compliance	7/24/2013	
	13-117	Hospice	In Compliance	7/24/2013	
	13-118	Carmel Home Addition	In Compliance	7/24/2013	
	13-119	Fiddlesticks	In Compliance	7/24/2013	
	13-120	Dutch Bank Lots	In Compliance	7/24/2013	
	13-121	Southtown Widening	COMPLETED	7/30/2013	
	13-122	Keeneland Trace	In Compliance	7/30/2013	
	13-123	US Bank Call Center	In Compliance	7/30/2013	
	13-124	Airpark Drive	In Compliance	7/30/2013	
	13-125	Norman King Electric	In Compliance	7/30/2013	
	13-126	Cottages of Mechanicsville	In Compliance	7/30/2013	
	13-127	Harbor Hills	COMPLETED	7/30/2013	
	13-128	Downtown Phase II	In Compliance	7/30/2013	
	13-129	Hampton Inn	In Compliance	7/30/2013	
	13-130	Boardwalk Office Building	COMPLETED	7/30/2013	
	13-131	KY 54 / US 60 Interchange	In Compliance	7/30/2013	
	13-132	Parking Lot A	COMPLETED	7/30/2013	
	13-133	Bon Harbor Hills	In Compliance	8/21/2013	
	13-134	Cottages of Mechanicsville	In Compliance	8/21/2013	
	13-135	Norman King Electric	In Compliance	8/21/2013	
	13-136	US Bank Call Center	In Compliance	8/21/2013	
	13-137	Airpark Drive	In Compliance	8/21/2013	

August	13-138	Keeneland Trace	In Compliance	8/21/2013	
	13-139	Dutch Bank Lots	In Compliance	8/21/2013	
	13-140	Fiddlesticks	In Compliance	8/21/2013	
	13-141	Carmel Home Addition	In Compliance	8/21/2013	
	13-142	Hospice	In Compliance	8/21/2013	
	13-143	Cross Creek	In Compliance	8/21/2013	
	13-144	Hunters Ridge	In Compliance	8/22/2013	
	13-145	Fairhaven	In Compliance	8/22/2013	
	13-146	Ashley's Furniture	In Compliance	8/22/2013	
	13-147	KY 54 / US 60 Interchange	In Compliance	8/22/2013	
	13-148	Downtown Phase II	In Compliance	8/22/2013	
	13-149	Hampton Inn	In Compliance	8/22/2013	
	13-150	Holiday Inn	In Compliance	8/22/2013	
September	13-151	Bon Harbor Hills	In Compliance	9/24/2013	
	13-152	Cottages of Mechanicsville	NOD	9/24/2013	In Compliance
	13-153	Norman King Electric	In Compliance	9/24/2013	
	13-154	US Bank Call Center	In Compliance	9/24/2013	
	13-155	Airpark Drive	In Compliance	9/24/2013	
	13-156	Keeneland Trace	NOD	9/24/2013	In Compliance
	13-157	Hucks	In Compliance	9/24/2013	
	13-158	Discovery Cove	In Compliance	9/24/2013	
	13-159	Dutch Bank Lots	In Compliance	9/30/2013	
	13-160	Fiddlesticks	In Compliance	9/30/2013	
	13-161	Carmel Home	In Compliance	9/30/2013	
	13-162	Hospice	In Compliance	9/30/2013	
	13-163	Cross Creek	In Compliance	9/30/2013	
	13-164	Hunters Ridge	In Compliance	9/30/2013	
	13-165	Fairhaven	In Compliance	9/30/2013	
	13-166	Ashley's Furniture	In Compliance	9/30/2013	
	13-167	KY 54 / US 60 Interchange	In Compliance	9/30/2013	
	13-168	Downtown Phase II	In Compliance	9/30/2013	
	13-169	Hampton Inn	In Compliance	9/30/2013	
	13-170	Holiday Inn	In Compliance	9/30/2013	
	13-171	Holiday Inn	In Compliance	10/7/2013	
	13-172	Hampton Inn	In Compliance	10/7/2013	
	13-173	Downtown Phase II	In Compliance	10/7/2013	
	13-174	Hospital Demo	In Compliance	10/7/2013	

October	13-175	KY 54 / US 60 Interchange	In Compliance	10/7/2013	
	13-176	Academy Sports & Outdoor	In Compliance	10/7/2013	
	13-177	Ashley's Furniture	NOD	10/7/2013	In Compliance
	13-178	Saddlebrook Apts	In Compliance	10/7/2013	
	13-179	Fairhaven	In Compliance	10/8/2013	
	13-180	Hunter's Ridge	In Compliance	10/8/2013	
	13-181	Cross Creek	In Compliance	10/8/2013	
	13-182	Hospice	In Compliance	10/8/2013	
	13-183	Carmel Home	In Compliance	10/8/2013	
	13-184	Fiddlesticks	In Compliance	10/8/2013	
	13-185	Dutch Bank Lots	In Compliance	10/8/2013	
	13-186	Discovery Cove	In Compliance	10/8/2013	
	13-187	Hucks	In Compliance	10/8/2013	
	13-188	Keeneland Trace	In Compliance	10/8/2013	
	13-189	Airpark Drive	In Compliance	10/8/2013	
	13-190	US Bank Call Center	In Compliance	10/8/2013	
	13-191	Norman King Electric	In Compliance	10/8/2013	
	13-192	Cottages of Mechanicsville	In Compliance	10/8/2013	
	13-193	Bon Harbor Hills	In Compliance	10/8/2013	
November	13-194	Bon Harbor Hills	COMPLETED	11/7/2013	
	13-195	Cottages of Mechanicsville	In Compliance	11/7/2013	
	13-196	Norman King Electric	In Compliance	11/7/2013	
	13-197	US Bank Call Center	COMPLETED	11/7/2013	
	13-198	Airpark Drive	In Compliance	11/7/2013	
	13-199	Keeneland Trace	In Compliance	11/7/2013	
	13-200	Hucks	In Compliance	11/11/2013	
	13-201	Discovery Cove	In Compliance	11/11/2013	
	13-202	Dutch Bank Lots	In Compliance	11/11/2013	
	13-203	Fiddlesticks	In Compliance	11/11/2013	
	13-204	Carmel Home	In Compliance	11/11/2013	
	13-205	Hospice	COMPLETED	11/11/2013	
	13-206	Cross Creek	In Compliance	11/11/2013	
	13-207	Hunter's Ridge	In Compliance	11/11/2013	
	13-208	Fairhaven	In Compliance	11/27/2013	
	13-209	Saddlebrook Apts	In Compliance	11/27/2013	
	13-210	Ashley's Furniture	In Compliance	11/27/2013	
	13-211	Academy Sports & Outdoor	In Compliance	11/27/2013	

	13-212	KY 54 / US 60 Interchange	COMPLETED	11/27/2013	
	13-213	Hospital Demo	In Compliance	11/27/2013	
	13-214	Downtown Phase II	In Compliance	11/30/2014	
	13-215	Hampton Inn	COMPLETED	11/30/2014	
	13-216	Holiday Inn	In Compliance	11/30/2014	
December	13-217	Cottages of Mechanicsville	COMPLETED	12/30/2013	
	13-218	Norman King Electric	In Compliance	12/30/2013	
	13-219	Airpark Drive	COMPLETED	12/30/2013	
	13-220	Keeneland Trace	NOD	12/30/2013	In Compliance
	13-221	Hucks	In Compliance	12/30/2013	
	13-222	Discovery Cove	In Compliance	12/30/2013	
	13-223	Dutch Bank Lots	In Compliance	12/30/2013	
	13-224	Fiddlesticks	In Compliance	12/30/2013	
	13-225	Carmel Home	COMPLETED	12/30/2013	
	13-226	Cross Creek	In Compliance	12/30/2013	
	13-227	Hunter's Ridge	In Compliance	1/3/2014	
	13-228	Fairhaven	NOD	1/3/2014	In Compliance
	13-229	Saddlebrook Apts	In Compliance	1/3/2014	
	13-230	Ashley's Furniture	In Compliance	1/3/2014	
	13-231	Academy Sports & Outdoor	In Compliance	1/3/2014	
	13-232	Hospital Demo	In Compliance	1/3/2014	
	13-233	Downtown Phase II	In Compliance	1/3/2014	
	13-234	Holiday Inn	NOD	1/3/2014	In Compliance

Inspection # : _____

Month: _____



General Site Information

Project Name: _____

KDOW Permit #: _____

Location of Project: _____

Date of Inspection: _____

Start/End Time: _____

MS4 Inspector: _____

MS4 Inspector Title: _____

MS4 Inspector Qualifications: _____

MS4 Inspector Contact Information: _____

NOI Holder: _____

Phone #: _____

NOI Inspector: _____

Fax #: _____

Contact person: _____

E-Mail: _____

Permit and Site Information

	Yes	No	Review
Copy of Permit on Site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Copy of SWPPP?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the SWPPP up to date?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspection Reports on site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspection Reports current?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Stream Affecting _____

Watershed Affecting _____

Public Storm/CSS Affecting _____

Local Streets Affecting _____

Comments on SWPPP and/or Reports:Present phase of Construction:

Weather Information

Has there been a rain event since the last inspection? ☐ Yes ☐ No

Date/Time _____

Duration _____

Rain (in) _____

Weather during Inspection?

Temperature: _____

☐ Clear ☐ Cloudy ☐ Rain ☐ Sleet ☐ Foggy ☐ Snow ☐ Windy ☐ Other: _____Have discharges occurred since the last inspection? ☐ Yes ☐ No

If yes, describe: _____

Are there any discharges at the time of inspection? ☐ Yes ☐ No

If yes, describe: _____

MS4 Site Inspection

	BMP/Activity	Implemented?	Maintenance Required?	Corrective Action Needed & Notes
1	Are all slopes and disturbed areas not actively being worked on properly stabilized?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2	Are natural resource areas (ex. Mature trees, streams, etc.) protected with barriers or similar BMPs?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3	Are perimeter controls and sediment barriers adequately installed & maintained?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4	Are discharge points and receiving waters free of any sediment deposits?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5	Are storm drain inlets properly protected?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
6	Is the construction exit preventing sediment from being tracked into the street?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
8	Are washout facilities (ex. paint, stucco, concrete) available, clearly marked, and maintained?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
9	Are vehicle and equip. fueling, cleaning, & maintenance areas free of spills, and leaks?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
10	Are potential stormwater contaminants stored inside or under cover?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
11	Are non-stormwater discharges (ex. wash water, dewatering) properly controlled?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
12	Other:	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Non-Compliance

Describe any incidents of non-compliance not described above:

Site subject to local regulations as stated in the City Ordinance

- NOD All improvements of deficiencies made within 7 day window.
 - NOV All improvements of deficiencies made within 3 day window.
 - NOV II A stop work order is filed until improvements are made.
 - NOV III Fines/Penalties on remaining deficiencies are enforced in accordance with the City Ordinance.
-
- Changes to the SWPPP must be made by the responsible person for the site, and any change made on site must be shown on the SWPPP within 7 days.
-
- Areas that will be inactive for 21 days or more must be seeded and mulched within 14 days of reaching temporary grade.
-
- This report does not release the NOI holder from any inspections, fines, and/or penalties by any state or federal agency. This report is for use by the City of Owensboro Engineering Department.

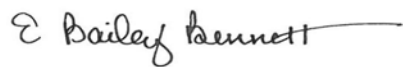
Enforcement Determination from Report:

Re-inspection Date (NODs/NOV only) :

MS4 Inspector: E. Bailey Bennett

Inspection Date: _____

Signature:



Sent Date: _____

Sent Via: _____

**Owensboro Storm Water Quality Management Plan
2013 Annual Report
MCM #5 Post Construction Storm Water Management in
New Development and Redevelopment**

- Chautauqua Park Maps Pg 125
- RWRA Storm Sewer Maintenance Pg 127

Kentucky Nonpoint Source Pollution Control Program



Chautauqua Park's Green Solution to Pollution





Regional Water Resource Agency
2101 Grimes Avenue
Owensboro, KY 42303
270.687.8450

Storm Work Order Summary Report for January 2013

Date of Invoice: 2/1/2013

Invoice Number: 2013-01 (Jan)

WO #	City WO #	Status	Status Date	Category	Main Task	Address	Actual Cost	City's Cost
11-000621	10-164	Complete	1/10/2013	Storm Structures	Structure Repair	W 5TH ST	\$9,157.28	\$9,157.28
12-000078	Solids	Complete	1/7/2013	Pipes	Drying Bed Maintenance	VARIOUS	\$28,847.26	\$10,096.54
12-000080	solids	Complete	1/7/2013	Structures	Drying Bed Maintenance	VARIOUS	\$2,583.42	\$904.20
12-002326	12-321	Complete	1/10/2013	Storm Structures	Structure Replacement	IMPERIAL PL	\$4,592.99	\$2,296.50
12-002455	solids	Complete	1/7/2013	Structures	Debris Removal from Drying Beds		\$3,093.49	\$2,010.77
12-002479	12-273	Complete	1/10/2013	Storm Structures	Structure Replacement	2402 YEWELLS LNDG S	\$5,451.30	\$5,451.30
12-002535	12-344	Complete	1/10/2013	Storm Structures	Casting Adjustment / Replacement	W 9TH ST	\$1,467.02	\$1,467.02
12-002536	CSO	Complete	1/17/2013	Pipes	CSO Sector Cleaning	SECTOR 87	\$6,814.13	\$2,384.94
12-002580	CSO	Complete	1/7/2013	Pipes	CSO Sector Cleaning	SECTOR 88	\$12,569.96	\$4,399.49
12-002645	10-163	Complete	1/10/2013	Storm Structures	Structure Replacement	VARIOUS	\$6,969.85	\$6,969.85
12-002893	Verbal	Complete	1/16/2013	Storm Structures	Casting Adjustment / Replacement	VARIOUS	\$673.09	\$673.09
12-002894	CSO	Complete	1/17/2013	Pipes	CSO Sector Cleaning	SECTOR 91	\$21,866.28	\$7,653.20
12-003141	CSO	Complete	1/17/2013	Pipes	CSO Sector Cleaning	SECTOR 23	\$11,406.53	\$3,992.28
12-003153	11-025	Complete	1/10/2013	Storm Structures	Structure Replacement	BENTTREE DR	\$24,204.63	\$24,204.63
12-003177	CSO	Complete	1/17/2013	Pipes	CSO Sector Cleaning	SECTOR 24	\$3,661.19	\$1,281.42
12-003178	CSO	Complete	1/17/2013	Pipes	CSO Sector Cleaning	SECTOR 18	\$9,895.76	\$3,463.52
12-003179	CSO	Complete	1/30/2013	Pipes	CSO Sector Cleaning	SECTOR 16	\$12,274.38	\$4,296.03
12-003211	12-427	Complete	1/17/2013	Storm Conduits	Storm Pipe Cleaning	3615 LONGFELLOW DR	\$761.85	\$761.85
12-003215	12-421	Complete	1/10/2013	Storm Structures	Leak, Seal / Caulk	2056 GRIFFITH AV	\$904.25	\$904.25
12-003216	12-330	Complete	1/10/2013	Storm Structures	Leak, Seal / Caulk	3920 BENTTREE DR	\$904.25	\$904.25
12-003217	12-409	Complete	1/10/2013	Storm Structures	Leak, Seal / Caulk	BITTEL RD	\$2,201.74	\$2,201.74
12-003220	12-409	Complete	1/17/2013	Storm Conduits	Storm Pipe Cleaning	BITTEL RD	\$829.72	\$829.72
12-003235	12-369	Complete	1/10/2013	Storm Structures	Leak, Seal / Caulk	3232 VILLA PT	\$1,473.00	\$1,473.00
12-003251	12-431	Complete	1/17/2013	Storm Structures	Structure Cleaning	LEWIS LA	\$228.56	\$228.56
12-003258	12-303	Complete	1/10/2013	Storm Structures	Structure Installation	1927 WESTVIEW DR	\$4,294.16	\$4,294.16
12-003259	BUD	Complete	1/22/2013	Storm Conduits	BUD Locate	VARIOUS	\$1,107.84	\$1,107.84
12-003265	BUD	Complete	1/16/2013	Facility Site	Supplies / Stocking - Misc		\$5,390.47	\$2,695.24
12-003268	12-432	Complete	1/17/2013	Storm Structures	Structure Cleaning	HICKMAN AV	\$304.74	\$304.74
13-000150	Adjust	Complete	1/10/2013	Storm Administration	Concrete Placement		-\$165.38	-\$165.38
13-000209	13-003	Complete	1/17/2013	Storm Conduits	Storm Pipe Cleaning	W 7TH ST	\$235.13	\$235.13
13-000226	Request	Complete	1/17/2013	Storm Structures	Call Out Response	E PARRISH AV	\$256.33	\$256.33
13-000227	Request	Complete	1/17/2013	Storm Structures	Call Out Response	VARIOUS	\$248.62	\$248.62
13-000270	email	Complete	1/16/2013	Storm Structures	Casting Adjustment / Replacement	WING AV	\$425.32	\$212.66
13-000304	13-004	Complete	1/28/2013	Storm Pump Stations	Troubleshoot	3600 W 5TH STREET RD	\$129.20	\$129.20

RWRA Total Cost \$185,058.33

City of Owensboro Invoice Total **\$107,323.93**





Regional Water Resource Agency
2101 Grimes Avenue
Owensboro, KY 42303
270.687.8450

Storm Work Order Summary Report for February 2013

Date of Invoice: 3/4/2013

Invoice Number: 2013-02 (Feb)

WO #	City WO #	Status	Status Date	Category	Main Task	Address	Actual Cost	City's Cost
12-002171	12-254	Complete	2/28/2013	Storm Structures	Structure Cleaning	1501 W PARRISH AV	\$206.02	\$206.02
12-003260	12-293	Complete	2/5/2013	Storm Structures	Structure Replacement	E 18TH ST	\$5,934.04	\$5,934.04
12-003261	12-293	Complete	2/5/2013	Storm Conduits	Pipe Replacement	E 18TH ST	\$1,772.68	\$1,772.68
12-003262	11-166	Complete	2/5/2013	Storm Conduits	Pipe Replacement	2139 CHAFFE CT	\$2,948.87	\$2,948.87
12-003263	11-189	Complete	2/5/2013	Storm Conduits	Leak, Seal / Caulk	3026 REDFORD DR	\$19,479.73	\$19,479.73
13-000063	11-024	Complete	2/22/2013	Storm Structures	Structure Replacement	W 7TH ST	\$7,717.71	\$7,717.71
13-000064	11-145	Complete	2/5/2013	Storm Conduits	Leak, Seal / Caulk	2658 STRAWBRIDGE PL	\$2,560.66	\$2,560.66
13-000065	12-417	Complete	2/11/2013	Storm Structures	Structure Replacement	1720 E 4TH ST	\$3,105.69	\$3,105.69
13-000234	CSO	Complete	2/19/2013	Pipes	CSO Sector Cleaning	SECTOR 19	\$10,080.80	\$3,528.28
13-000277	11-010	Complete	2/11/2013	Storm Conduits	Leak, Seal / Caulk	3732 ARLINGTON DR	\$4,007.26	\$4,007.26
13-000278	11-318	Complete	2/5/2013	Storm Structures	Leak, Seal / Caulk	2409 STRICKLAND DR	\$1,302.80	\$1,302.80
13-000279	12-097a	Complete	2/11/2013	Storm Conduits	Leak, Seal / Caulk	2412 DOWNING DR	\$1,679.18	\$1,679.18
13-000280	12-355	Complete	2/11/2013	Storm Conduits	Leak, Seal / Caulk	4012 CARPENTER DR	\$3,362.65	\$3,362.65
13-000288	12-296	Complete	2/5/2013	Storm Structures	Leak, Seal / Caulk	HILLBROOKE PKWY	\$924.55	\$924.55
13-000289	12-313	Complete	2/5/2013	Storm Structures	Leak, Seal / Caulk	2521 LAKE POINTE	\$428.04	\$428.04
13-000290	12-410	Complete	2/5/2013	Storm Structures	Leak, Seal / Caulk	YEWELLS LNDG E	\$416.78	\$416.78
13-000301	BUD	Complete	2/28/2013	Storm Conduits	BUD Locate	VARIOUS	\$1,544.30	\$1,544.30
13-000305	09-356	Complete	2/11/2013	Storm Structures	Structure Replacement	W 7TH ST	\$19,992.22	\$19,992.22
13-000344	09-447	Complete	2/11/2013	Storm Structures	Leak, Seal / Caulk	FRAYSER AV	\$1,584.53	\$1,584.53
13-000345	09-098	Complete	2/11/2013	Storm Structures	Structure Replacement	W 11TH ST	\$5,436.00	\$5,436.00
13-000347	10-179	Complete	2/11/2013	Storm Structures	Structure Replacement	E 8TH ST	\$7,515.63	\$7,515.63
13-000350	13-005	Complete	2/18/2013	Storm Structures	Structure Cleaning	1208 TAMARACK RD	\$1,783.52	\$1,783.52
13-000351	13-006	Complete	2/14/2013	Storm Structures	Structure Cleaning	3401 SAINT ANN ST	\$1,560.58	\$1,560.58
13-000352	13-007	Complete	2/19/2013	Storm Structures	Structure Cleaning	400 E BYERS AV	\$1,903.00	\$1,903.00
13-000364	13-008	Complete	2/14/2013	Storm Conduits	Storm Pipe Cleaning	3412 PLACID PL	\$170.60	\$170.60
13-000365	13-009	Complete	2/14/2013	Storm Conduits	Storm Pipe Cleaning	GRIFFITH AV	\$170.60	\$170.60
13-000368	13-021	Complete	2/11/2013	Storm Structures	Casting Adjustment / Replacement	W 18TH ST	\$1,473.96	\$1,473.96
13-000389	13-022	Complete	2/19/2013	Storm Structures	Structure Cleaning	E 27TH ST	\$213.95	\$213.95
13-000401	CSO	Complete	2/28/2013	Pipes	CSO Sector Cleaning	SECTOR 17	\$11,483.99	\$4,019.40
13-000550	CSO	Complete	2/28/2013	Pipes	CSO Sector Cleaning	SECTOR 13	\$3,235.10	\$1,132.29

RWRA Total Cost \$123,995.40

City of Owensboro Invoice Total \$107,875.48





Regional Water Resource Agency
2101 Grimes Avenue
Owensboro, KY 42303
270.687.8450

Storm Work Order Summary Report for March 2013

Date of Invoice: 3/28/2013

WO #	City WO #	Status	Status Date	Category	Main Task	Address	Actual Cost	City's Cost
12-000055	Rodder	Complete	3/6/2013	Facility Site	Utility Usage		\$3,506.54	\$1,227.29
12-001764	Joe S	Complete	3/7/2013	Storm Structures	Structure Inspection	E 6TH ST / CENTER ST	\$30.70	\$30.70
12-003150	50/50	Complete	3/7/2013	Facility Site	Maintenance of Dumpsite	9635 US 60 E	\$1,416.71	\$1,416.71
13-000225	12-390	Complete	3/19/2013	Storm Structures	Structure Replacement	230 TENNYSON DR	\$5,208.79	\$5,208.79
13-000346	11-022	Complete	3/19/2013	Storm Structures	Structure Replacement	1335 W 11TH ST	\$10,241.82	\$10,241.82
13-000446	13-023	Complete	3/19/2013	Storm Structures	Structure Replacement	2508 S GRIFFITH AV	\$7,784.10	\$7,784.10
13-000447	13-024	Complete	3/19/2013	Storm Structures	Structure Replacement	1727 SWEENEY ST	\$18,264.18	\$18,264.18
13-000448	13-025	Complete	3/19/2013	Storm Structures	Structure Replacement	W 2ND ST / ELM ST	\$24,522.65	\$24,522.65
13-000525	13-025	Complete	3/19/2013	Storm Conduits	Pipe Replacement	W 2ND ST / ELM ST	\$7,835.33	\$7,835.33
13-000656	13-051	Complete	3/7/2013	Storm Conduits	Pipe Inspection	HICKMAN AV / W PARRISH AV	\$605.51	\$605.51
13-000657	13-052	Complete	3/14/2013	Storm Structures	Structure Cleaning	530 CLAY ST	\$163.60	\$163.60
13-000658	13-049	Complete	3/14/2013	Storm Structures	Structure Cleaning	E 5TH ST / CLAY ST	\$156.75	\$156.75
13-000660	13-050	Complete	3/14/2013	Storm Structures	Structure Cleaning	1819 W 2ND ST	\$157.76	\$157.76
13-000661	13-053	Complete	3/21/2013	Storm Structures	Structure Cleaning	100 W 7TH ST	\$157.76	\$157.76
13-000662	13-030	Complete	3/14/2013	Storm Structures	Structure Cleaning	930 COTTAGE DR	\$163.60	\$163.60
13-000679	BUD	Complete	3/28/2013	Storm Conduits	BUD Locate	VARIOUS	\$1,522.29	\$1,522.29
13-000693	CSO	Complete	3/21/2013	Pipes	CSO Sector Cleaning	SECTOR 15	\$909.16	\$318.21
13-000826	13-082	Complete	3/27/2013	Storm Conduits	Pipe Inspection	4101 YEWELLS LNDG E	\$1,005.32	\$1,005.32
13-000827	13-084	Complete	3/27/2013	Storm Conduits	Pipe Inspection	1624 BRENTWOOD DR	\$502.66	\$502.66
RWRA Total Cost							\$84,155.22	
City of Owensboro Invoice Total								\$81,285.01





Regional Water Resource Agency
2101 Grimes Avenue
Owensboro, KY 42303
270.687.8450

Storm Work Order Summary Report for April 2013

Date of Invoice: 5/1/2013

Invoice Number: 2013-04 (Apr)

WO #	City WO #	Status	Status Date	Category	Main Task	Address	Actual Cost	City's Cost
13-000578	13-036	Complete	4/21/2013	Storm Conduits	Pipe Replacement	ALLEN ST	\$69,138.19	\$69,138.19
13-000597		Complete	4/9/2013	Storm Administration	Administrative Duties		\$492.67	\$492.67
13-000636	13-038	Complete	4/22/2013	Storm Structures	Structure Replacement	431 CEDAR ST	\$18,595.63	\$18,595.63
13-000637	13-037	Complete	4/22/2013	Storm Structures	Structure Replacement	526 CASTLEN ST	\$9,715.42	\$9,715.42
13-000739	CSO	Complete	4/22/2013	Pipes	CSO Sector Cleaning	SECTOR 9	\$8,939.15	\$3,128.70
13-000796	13-071	Complete	4/9/2013	Storm Structures	Structure Cleaning	FORD AV	\$73.88	\$73.88
13-000797	13-070	Complete	4/9/2013	Storm Structures	Structure Cleaning	ROBIN RD	\$73.88	\$73.88
13-000798	13-072	Complete	4/9/2013	Storm Structures	Structure Cleaning	S GRIFFITH AV	\$152.76	\$152.76
13-000800	13-069	Complete	4/9/2013	Storm Structures	Structure Cleaning	405 W LEGION BLVD	\$73.88	\$73.88
13-000828	13-084	Complete	4/9/2013	Storm Conduits	Structure Cleaning	101 E 2ND ST	\$157.76	\$157.76
13-000886	BUD	Complete	4/29/2013	Storm Conduits	BUD Locate	VARIOUS	\$1,419.90	\$1,419.90
13-000888	13-085	Complete	4/9/2013	Storm Structures	Structure Installation	ALLEN ST	\$131.00	\$131.00
13-001060	13-063	Complete	4/24/2013	Storm Conduits	Pipe Inspection	2219 LANDSDOWNE S	\$596.83	\$596.83
RWRA Total Cost							\$109,560.93	
City of Owensboro Invoice Total								\$103,750.49



Regional Water Resource Agency
2101 Grimes Avenue
Owensboro, KY 42303
270.687.8450

Storm Work Order Summary Report for May 2013

Date of Invoice: 6/3/2013

Invoice Number: 2013-05 (May)

WO #	City WO #	Status	Status Date	Category	Main Task	Address	Actual Cost	City's Cost
13-000848	12-208a	Complete	5/31/2013	Storm Structures	Structure Replacement	2224 SAINT JAMES CT	\$9,287.70	\$9,287.70
13-000849	12-208a	Complete	5/31/2013	Storm Conduits	Pipe Installation	2224 SAINT JAMES CT	\$3,412.98	\$3,412.98
13-000907	Admin	Complete	5/16/2013	Storm Administration	Administrative Duties		\$529.84	\$529.84
13-001070	13-099	Complete	5/22/2013	Storm Structures	Structure Cleaning	VEACH RD	\$290.20	\$290.20
13-001071	13-056	Complete	5/22/2013	Storm Structures	Structure Cleaning	2924 LEGION PARK DR	\$217.65	\$217.65
13-001129	BUD	Complete	5/30/2013	Storm Conduits	BUD Locate	VARIOUS	\$1,833.30	\$1,833.30
13-001142	13-129a	Complete	5/22/2013	Storm Structures	Dye Testing	INDEPENDENCE AV	\$200.96	\$200.96
13-001214	Callout	Complete	5/22/2013	Storm Structures	Call Out Response	917 CONWAY AV	\$211.82	\$211.82
13-001215	12-208a	Complete	5/31/2013	Structures	Structure Installation	2224 SAINT JAMES CT	\$8,440.06	\$8,440.06
RWRA Total Cost							\$24,424.50	
City of Owensboro Invoice Total								\$24,424.50



Regional Water Resource Agency
2101 Grimes Avenue
Owensboro, KY 42303
270.687.8450

Storm Work Order Summary Report for June 2013

Date of Invoice: 7/3/2013

Invoice Number: 2013-06 (Jun)

WO #	City WO #	Status	Status Date	Category	Main Task	Address	Actual Cost	City's Cost
12-002749	email	Complete	6/30/2013	Pipes	Pipe Repair	WING AV	\$5,185.70	\$2,592.85
12-003270	12-433	Complete	6/30/2013	Storm Conduits	Pipe Repair	WING AV	\$1,653.11	\$1,653.11
13-000055	AGMT	Complete	6/26/2013	Pipes	Drying Bed Maintenance	VARIOUS	\$18,505.95	\$6,477.08
13-000056	AGMT	Complete	6/26/2013	Structures	Drying Bed Maintenance		\$457.02	\$159.96
13-000058	AGMT	Complete	6/27/2013	Structures	Debris Removal from Drying Beds	2101 GRIMES AV	\$4,727.87	\$3,073.11
13-000062	AGMT	Complete	6/26/2013	Facility Site	Maintenance of Dumpsite	9635 US 60 E	\$8,127.09	\$4,063.54
13-000634	CSO	Complete	6/30/2013	Pipes	CSO Sector Cleaning	SECTOR 12	\$5,375.52	\$1,881.43
13-000694	CSO	Complete	6/25/2013	Pipes	CSO Sector Cleaning	SECTOR 14	\$4,960.86	\$1,736.30
13-000989	13-064	Complete	6/25/2013	Storm Structures	Structure Cleaning	800 JACKSON ST	\$204.75	\$204.75
13-001182	Admin	Complete	6/30/2013	Storm Administration	Administrative Duties		\$19.52	\$19.52
13-001373	BUD	Complete	6/18/2013	Storm Conduits	BUD Locate	VARIOUS	\$2,321.21	\$2,321.21
13-001377	13-132	Complete	6/13/2013	Storm Conduits	Pipe Inspection	2163 SHEFFIELD CT	\$848.92	\$848.92
13-001378	13-114	Complete	6/13/2013	Storm Conduits	Pipe Inspection	2625 COUNT FLEET LOOP	\$906.24	\$906.24
13-001379	13-123	Complete	6/24/2013	Storm Structures	Structure Cleaning	1222 HILL AV	\$383.44	\$383.44
13-001380	13-159	Complete	6/24/2013	Storm Structures	Structure Cleaning	W 9TH ST	\$230.07	\$230.07
13-001448	13-163	Complete	6/25/2013	Storm Structures	Storm Pipe Cleaning	VARIOUS	\$355.18	\$355.18
13-001461	13-179	Complete	6/30/2013	Storm Conduits	Pipe Repair	W 4TH ST	\$638.22	\$638.22
RWRA Total Cost							\$54,900.64	
City of Owensboro Invoice Total								\$27,544.92



Regional Water Resource Agency
2101 Grimes Avenue
Owensboro, KY 42303
270.687.8450

Storm Work Order Summary Report for July 2013

Date of Invoice: 8/5/2013

Invoice Number: 2013-07 (Jul)

WO #	City WO #	Status	Status Date	Category	Main Task	Address	Actual Cost	City's Cost	RWRA/City Shared Expense
13-000709	CSO	Complete	7/23/2013	Pipes	CSO Sector Cleaning	SECTOR 11	\$12,718.23	\$4,451.38	65/35%
13-000839	CSO	Complete	7/23/2013	Pipes	CSO Sector Cleaning	SECTOR 10	\$4,458.85	\$1,560.60	65/35%
13-000840	CSO	Complete	7/23/2013	Pipes	CSO Sector Cleaning	SECTOR 25	\$3,721.51	\$1,302.53	65/35%
13-001374	Supply	Complete	7/17/2013	Facility Site	Supplies / Stocking - Misc		\$7,218.54	\$3,609.27	50/50%
13-001400	Admin	Complete	7/15/2013	Storm Administration	Administrative Duties		\$28.36	\$28.36	0/100%
13-001485	BUD	Complete	7/22/2013	Storm Conduits	BUD Locate	VARIOUS	\$1,794.77	\$1,794.77	0/100%
13-001529	13-201	Complete	7/19/2013	Storm Structures	Structure Cleaning	VARIOUS	\$1,110.72	\$1,110.72	0/100%
13-001628	13-202	Complete	7/19/2013	Storm Conduits	Storm Pipe Cleaning	3545 FREDERICA ST	\$142.10	\$142.10	0/100%
13-001630	13-221	Complete	7/19/2013	Storm Conduits	Storm Pipe Cleaning	HILL AV	\$872.72	\$872.72	0/100%
13-001636	CSO	Complete	7/30/2013	Pipes	CSO Sector Cleaning	SECTOR 8	\$5,363.40	\$1,877.19	65/35%
13-001643	13-129b	Complete	7/19/2013	Storm Conduits	Pipe Repair	INDEPENDENCE AV	\$5,244.48	\$5,244.48	0/100%
13-001644	13-045	Complete	7/31/2013	Storm Conduits	Leak, Seal / Caulk	3621 DOVE LOOP S	\$2,116.49	\$2,116.49	0/100%
13-001645	11-118	Complete	7/30/2013	Storm Conduits	Leak, Seal / Caulk	146 TAMARACK RD	\$1,001.53	\$1,001.53	0/100%
13-001654	13-153	Complete	7/30/2013	Storm Structures	Structure Replacement	1714 MOUNT VERNON DR	\$6,523.39	\$6,523.39	0/100%
13-001656	13-019	Complete	7/19/2013	Storm Structures	Leak, Seal / Caulk	2004 OAK AV	\$198.86	\$198.86	0/100%
13-001811	11-343	Complete	7/31/2013	Storm Conduits	Leak, Seal / Caulk	3925 RUDY MARTIN DR	\$236.70	\$236.70	0/100%
13-001812	13-243	Complete	7/30/2013	Storm Structures	Casting Adjustment / Replacement	1601 W 4TH ST	\$1,919.42	\$1,919.42	0/100%
13-001883	13-280	Complete	7/31/2013	Storm Conduits	Pipe Replacement	1676 S PARKDALE DR	\$1,161.93	\$1,161.93	0/100%

RWRA Total Cost \$55,831.97

RWRA/City Shared Expenses: Items in red have negotiated reimbursement with the City.

City of Owensboro Invoice Total **\$35,152.41**



Regional Water Resource Agency
2101 Grimes Avenue
Owensboro, KY 42303
270.687.8450

Storm Work Order Summary Report for August 2013

Date of Invoice: 9/4/2013 Invoice Number: 2013-08 (Aug)

WO #	City WO #	Status	Status Date	Category	Main Task	Address	Actual Cost	City's Cost	RWRA/City Shared Expense
13-001647	13-130	Complete	8/28/2013	Storm Conduits	Leak, Seal / Caulk	4033 RUDY MARTIN DR	\$20,723.18	\$20,723.18	0/100%
13-001649	11-285	Complete	8/28/2013	Storm Conduits	Leak, Seal / Caulk	3500 LEGACY RUN	\$897.50	\$897.50	0/100%
13-001653	13-130	Complete	8/28/2013	Storm Structures	Leak, Seal / Caulk	4033 RUDY MARTIN DR	\$1,212.28	\$1,212.28	0/100%
13-001831	CSO	Complete	8/28/2013	Pipes	CSO Sector Cleaning	SECTOR 4	\$5,678.26	\$1,987.39	65/35%
13-001837	BUD	Complete	8/26/2013	Storm Conduits	BUD Locate		\$1,873.78	\$1,873.78	0/100%
13-001917	CSO	Complete	8/28/2013	Pipes	CSO Sector Cleaning	SECTOR 3	\$5,111.27	\$1,788.94	65/35%
13-002087	12-360	Complete	8/28/2013	Storm Structures	Leak, Seal / Caulk	3410 LEGACY RUN	\$1,302.27	\$1,302.27	0/100%
13-002138	13-327	Complete	8/28/2013	Storm Conduits	Pipe Inspection		\$674.55	\$674.55	0/100%
13-002141	13-326	Complete	8/28/2013	Storm Conduits	Pipe Inspection	E 9TH ST	\$337.28	\$337.28	0/100%
RWRA Total Cost							\$37,810.34		
City of Owensboro Invoice Total								\$30,797.16	

RWRA/City Shared Expenses: Items in red have negotiated reimbursement with the City.



Regional Water Resource Agency
2101 Grimes Avenue
Owensboro, KY 42303
270.687.8450

Storm Work Order Summary Report for September 2013

Date of Invoice: 10/1/2013 Invoice Number: 2013-09 (Sep)

WO #	City WO #	Status	Status Date	Category	Main Task	Address	Actual Cost	City's Cost	RWRA/City Shared Expense
13-001648	12-360	Complete	9/24/2013	Storm Conduits	Leak, Seal / Caulk	3410 LEGACY RUN	\$10,465.78	\$10,465.78	0/100%
13-001652	13-278	Complete	9/30/2013	Storm Structures	Leak, Seal / Caulk	VARIOUS	\$4,381.15	\$4,381.15	0/100%
13-001686	13-222	Complete	9/16/2013	Storm Conduits	Pipe Replacement	E 7TH ST	\$3,306.44	\$3,306.44	0/100%
13-002018	CSO	Complete	9/24/2013	Pipes	CSO Sector Cleaning	SECTOR 6	\$8,411.50	\$2,944.03	65/35%
13-002154	13-342	Complete	9/4/2013	Storm Structures	Casting Adjustment / Replacement	312 HILL AV	\$788.88	\$788.88	0/100%
13-002194	BUD	Complete	9/30/2013	Storm Conduits	BUD Locate	VARIOUS	\$2,397.89	\$2,397.89	0/100%
13-002196	13-344	Complete	9/9/2013	Storm Structures	Casting Adjustment / Replacement	W 3RD ST	\$569.50	\$569.50	0/100%
13-002264	CSO	Complete	9/24/2013	Pipes	CSO Sector Cleaning	SECTOR 2	\$7,415.03	\$2,595.26	65/35%
13-002305	13-350	Complete	9/30/2013	Storm Structures	Structure Replacement	W 3RD ST	\$4,147.73	\$4,147.73	0/100%
13-002321	13-350	Complete	9/30/2013	Storm Conduits	Pipe Replacement	W 3RD ST	\$6,072.57	\$6,072.57	0/100%
13-002346	13-08	Complete	9/29/2013	Storm Structures	Structure Cleaning	VARIOUS	\$1,528.94	\$1,528.94	0/100%
13-002416	13-409	Complete	9/30/2013	Storm Conduits	Pipe Inspection	CEDAR ST	\$225.52	\$225.52	0/100%

RWRA Total Cost \$49,710.91

RWRA/City Shared Expenses: Items in red have negotiated reimbursement with the City.

City of Owensboro Invoice Total **\$39,423.67**



Regional Water Resource Agency
2101 Grimes Avenue
Owensboro, KY 42303
270.687.8450

Storm Work Order Summary Report for October 2013

Date of Invoice: 11/5/2013

Invoice Number: 2013-10 (Oct)

WO #	City WO #	Status	Status Date	Category	Main Task	Address	Actual Cost	City's Cost	RWRA/City Shared Expense
13-001637	CSO	Complete	10/31/2013	Pipes	CSO Sector Cleaning	SECTOR 7	\$5,105.41	\$1,786.89	65/35%
13-001646	13-013	Complete	10/15/2013	Storm Conduits	Leak, Seal / Caulk	630 CARTER RD	\$1,410.28	\$1,410.28	0/100%
13-001651	12-436	Complete	10/28/2013	Storm Conduits	Leak, Seal / Caulk	1400 W PARRISH AV	\$5,520.54	\$5,520.54	0/100%
13-001830	CSO	Complete	10/31/2013	Pipes	CSO Sector Cleaning	SECTOR 5	\$3,364.36	\$1,177.53	65/35%
13-002146	CSO	Complete	10/31/2013	Pipes	CSO Sector Cleaning	SECTOR 2	\$8,732.56	\$3,056.40	65/35%
13-002319	CSO	Complete	10/31/2013	Pipes	CSO Sector Cleaning	SECTOR 31	\$7,533.39	\$2,636.69	65/35%
13-002320	CSO	Complete	10/31/2013	Pipes	CSO Sector Cleaning	SECTOR 33	\$5,984.14	\$2,094.45	65/35%
13-002397	13-279	Complete	10/15/2013	Storm Conduits	Pipe Replacement	E 4TH ST	\$8,102.42	\$8,102.42	0/100%
13-002455		Complete	10/31/2013	Storm Conduits	BUD Locate		\$2,104.00	\$2,104.00	0/100%
13-002515	CSO	Complete	10/31/2013	Pipes	CSO Sector Cleaning	SECTOR 32	\$6,133.55	\$2,146.74	65/35%
13-002537	13-430	Complete	10/31/2013	Storm Structures	Structure Cleaning	BOSLEY RD	\$79.28	\$79.28	0/100%
13-002538	13-419	Complete	10/21/2013	Storm Conduits	Pipe Inspection	1719 THISTLE CT	\$689.37	\$689.37	0/100%
13-002547	13-438	Complete	10/21/2013	Storm Conduits	Pipe Inspection		\$891.61	\$891.61	0/100%
13-002565	CSO	Complete	10/31/2013	Pipes	CSO Sector Cleaning	SECTOR 35	\$7,924.31	\$2,773.51	65/35%
13-002572	13-347	Complete	10/31/2013	Storm Structures	Structure Cleaning	1907 MCCREARY AV	\$230.25	\$230.25	0/100%
13-002592	13-441	Complete	10/21/2013	Storm Conduits	Pipe Inspection	1139 CONCORD TER	\$1,360.08	\$1,360.08	0/100%
RWRA Total Cost							\$65,165.54		
City of Owensboro Invoice Total								\$36,060.03	

RWRA/City Shared Expenses: Items in red have negotiated reimbursement with the City.



Regional Water Resource Agency
2101 Grimes Avenue
Owensboro, KY 42303
270.687.8450

Storm Work Order Summary Report for December 2013

Date of Invoice: 1/2/2014

Invoice Number: 2013-12 (Dec)

WO #	City WO #	Status	Status Date	Category	Main Task	Address	Actual Cost	City's Cost	RWRA/City Shared Expense
13-002564	CSO	Complete	12/30/2013	Pipes	CSO Sector Cleaning	SECTOR 34	\$3,134.50	\$1,097.07	65/35%
13-002623	CSO	Complete	12/30/2013	Pipes	CSO Sector Cleaning	SECTOR 36	\$6,152.35	\$2,153.32	65/35%
13-002661	CSO	Complete	12/30/2013	Pipes	CSO Sector Cleaning	SECTOR 37	\$9,995.00	\$3,498.25	65/35%
13-002693	CSO	Complete	12/30/2013	Pipes	CSO Sector Cleaning	SECTOR 38	\$10,392.04	\$3,637.21	65/35%
13-002700	CSO	Complete	12/30/2013	Pipes	CSO Sector Cleaning	SECTOR 141	\$7,885.85	\$2,760.05	65/35%
13-002711	CSO	Complete	12/30/2013	Pipes	CSO Sector Cleaning	SECTOR 40	\$7,572.68	\$2,650.44	65/35%
13-002712	CSO	Complete	12/30/2013	Pipes	CSO Sector Cleaning	SECTOR 41	\$6,042.54	\$2,114.89	65/35%
13-002743	CSO	Complete	12/30/2013	Pipes	CSO Sector Cleaning	SECTOR 131	\$7,579.58	\$2,652.85	65/35%
13-002830	13-503	Complete	12/11/2013	Storm Structures	Structure Cleaning	LITTLEWOOD DR	\$233.09	\$233.09	0/100%
13-002831	13-502	Complete	12/11/2013	Storm Structures	Structure Cleaning	1901 LEXINGTON AV	\$155.39	\$155.39	0/100%
13-002896	BUD	Complete	12/12/2013	Storm Conduits	BUD Locate	VARIOUS	\$2,087.74	\$2,087.74	0/100%
13-003011	Callout	Complete	12/30/2013	Storm Conduits	Call Out Response	2823 ROYAL DR	\$370.38	\$370.38	0/100%

RWRA Total Cost \$61,601.11

RWRA/City Shared Expenses: Items in red have negotiated reimbursement with the City.

City of Owensboro Invoice Total \$23,410.67

**Owensboro Storm Water Quality Management Plan
2013 Annual Report
MCM #6 Pollution Prevention/Good Housekeeping for
Municipal Operations**

- Harsh Ditch Education Panel Pg 139
- Trainings Attended By City Employees Pg 140

CITY OF OWENSBORO

HARSH DITCH WATERSHED MITIGATION / DETENTION BASIN & EDUCATIONAL SIGN INFORMATION



T+C CONTRACTING, INC.
P.O. BOX 72386
LOUISVILLE, KENTUCKY 40272-0386
HEAVY, HIGHWAY AND UTILITY CONSTRUCTION

**DIVISION OF WATER & CITY OF OWENSBORO
ENCOURAGE YOU TO HELP KEEP OUR WATERS CLEAN.**



PREVENT POLLUTION BY:

- **ELIMINATING ILLICIT DISCHARGES**
 - NO DUMPING OF PETROLEUM PRODUCTS
 - NO DUMPING OF HAZARDOUS MATERIALS
- **IMPLEMENTING PROPER SILT
CONTROL RUNOFF PROTECTION**
- **NOT LITTERING**

MAYOR	- RON PAYNE
MAYOR PRO-TEM	- CHARLIE CASTLEN
COMMISSIONER	- CANDANCE BRAKE
COMMISSIONER	- DAVID JOHNSON
COMMISSIONER	- JOHN KAZLAUSKAS

CITY MANAGER	- BILL PARRISH
CITY ENGINEER	- JOSEPH G. SCHEPERS, P.E., S.E.
PROJECT ENGINEER	- R. DAVID WEAVER, P.E., P.L.S.

H₂Owensboro



CERTIFICATE OF ATTENDANCE

E Bailey Bennett

has completed the webinar over:

Soil's Role in Processing Pollutants: Case Studies of
Green Infrastructure and Carbon Sequestration

Hosted by Watershedmg.org with Dr. Mitchell Pavao-
Zuckerman

Date: January 24, 2013

Hours of Instruction : 1.0
Professional Development Hours:
CEU .10



1 / 25 / 13

SIGNATURE

DATE

Working together towards sustainable solutions

Kentucky Association of Mitigation Managers

Regional Training Workshop


2/14/2013

Floodplain 101 and Commonwealth Hazard Assessment and Mitigation Planning System (CHAMPS)

6 Continuing Education Credits (CECs) awarded
to Certified Floodplain Managers (CFMs)

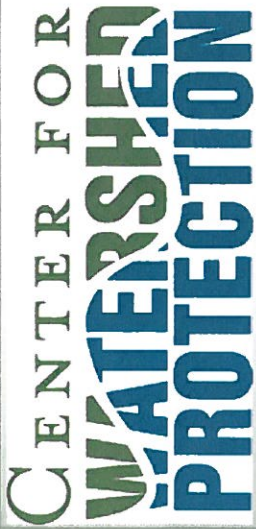
Bailey Bennett

Date: Feb. 14, 2013

KAMM 
Kentucky Association of Mitigation Managers

Stephen Noe

Steve Noe, Chair



Center for Watershed Protection Webcast
Certificate of Completion

is hereby granted to

Bailey Bennett

to certify that he/she has completed to satisfaction

a two (2) hour training on the subject of:

Combining Green and Gray Approaches
in Combined Sewer Watersheds

Granted: September 18, 2013
Hye Yeong Kwon
Executive Director

A handwritten signature in blue ink, reading "Hye Yeong Kwon", written over a horizontal line.

KSA QUARTERLY MEETING

THIS IS TO CERTIFY THAT

E Bailey Bennett

HAS COMPLETED THREE (3)
PROFESSIONAL DEVELOPMENT
HOURS FOR THE FOLLOWING MS4
TRAINING:

MONITORING FOR TMDLS:

KAREN SCHAFER, URS CORPORATION

SOURCE IDENTIFICATION PROGRAM:

MINDY SCOTT, SD1

MS4 MONITORING CASE STUDY:

JESSICA FILIATREAU, CITY OF BARDSTOWN

Chad D. McCormick

CHAD MCCORMICK, P.E.
KSA PRESIDENT

03-26-2013

DATE



KSA QUARTERLY MEETING

THIS IS TO CERTIFY THAT

E Bailey Bennett

HAS COMPLETED TWO (2)
PROFESSIONAL DEVELOPMENT
HOURS FOR THE FOLLOWING MS4
TRAINING:

MUDDY FORK OF SILVER CREEK — DRY CREEK DAM RESERVOIR PROJECT:
MICHAEL FRENCH, AMEC ENVIRONMENT & INFRASTRUCTURE

MS4 LESSONS LEARNED:
ABIGAIL RAINS, MS4 COORDINATOR, KENTUCKY DIVISION OF WATER

Chad D. McCormick

CHAD MCCORMICK, P.E.
KSA PRESIDENT

11-19-2013

DATE



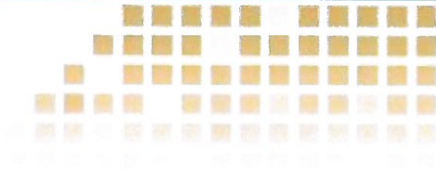

Bennett, Bailey

From: ICMA <support@peachnewmedia.com>
Sent: Friday, September 13, 2013 12:00 PM
To: Bennett, Bailey
Subject: Thank You for Attending

Categories: Stormwater

<str

(((AN ICMA UNIVERSITY WEBCONFERENCE)))



Thank you for registering for the **ICMA Web inar, "Urban Stormwater and MS4 Compliance: Learn More from MS4 Implementation Experts ,"** which was held on Tuesday, September 10th, 2013 at 1:00 PM Eastern Time.

For those of you that could not attend or would like to watch again, you can view the replay of the webinar by clicking on the link below:

[WEBINAR RECORDING](#)

We look forward to seeing you online in the future!
ICMA University

</str

Bennett, Bailey

Subject: Watershed Management Seminar
Location: East Plant

Start: Thu 3/21/2013 2:00 PM
End: Thu 3/21/2013 3:30 PM

Recurrence: (none)

Meeting Status: Accepted

Organizer: Joe Schepers
Required Attendees: Bailey Bennett; Sean O'Bryan

Categories: Stormwater



You are invited to join us for the 2nd KY-TN WEA Watershed Management Webinar! This year we are pleased to bring this informative webinar to you **free** of charge and attendees will earn 2 PDHs. However, space is limited. Please follow the link below to register now to attend the live and interactive webinar. It is less than a month away!

2013 KY-TN WEA WATERSHED MANAGEMENT WEBINAR

March 21, 2013

2:00 -4:00 PM Eastern

Once again we will bring you three dynamic speakers who will share information and ideas essential to successful management of watersheds in both Kentucky and Tennessee. We will have a regulatory update for each state. Additionally, we will have a Ms. Samantha Brown present a real-world watershed management case study focused on SD1's Stormwater Program. Our program will include:

Peter Goodman – Assistant Director – Kentucky Division of Water
State of Kentucky Regulatory Update

Following the update, Peter will be available for questions and discussion.

Samantha Brown – Environmental Engineer – SD1

Piecing Together the Storm Water Puzzle

As Northern Kentucky's regional storm water utility, SD1 is responsible for implementing Phase II MS4 storm water regulations and managing storm water infrastructure on behalf of over 30 communities. This presentation will discuss the history of Northern Kentucky's Storm Water Management Program, current responsibilities of SD1 and the associated challenges.

Dr. Sandra Dudley, P.E. – Director – TDEC Division of Water Resources

State of Tennessee Regulatory Update

Following the update, Dr. Dudley will be available for questions and discussion.

No Registration Fees....Space is Limited....Register Today

- - - [REGISTER FOR THE WEBINAR](#) - - -

291 N. Hubbards Lane | Suite B26 #164 | Louisville, KY 40207

Phone: 502-468-4772 | Fax: 502-894-9401 | Web: www.kytnwea.org

This email was sent to behnkedi@rwra.org. To ensure that you continue receiving our emails, please add us to your address book or safe list.

[manage](#) your preferences | [opt out](#) using TrueRemove®.

Got this as a forward? [Sign up](#) to receive our future emails.



**Owensboro Storm Water Quality Management Plan
2013 Annual Report
Stormwater Monitoring Results**

- Water Watch Kentucky Testing Results Pg 149

Tradewater - Lower Green Watershed Watch
Sampling Results Summary for 2013

Tab Names	Contents
Introduction	This page
May	Results from May sampling event sorted numerically by Site #
July	Results from July sampling event sorted numerically by Site #
September	Results from September sampling event sorted numerically by Site #
DC Sites	Locations of all sites (with coordinates) in Daviess County

Notes:

1. All analyses were performed by WATERS Lab
2. MPN = Most Probable Number (of colonies - as per EPA approved analytical method)
3. DO readings below 4.0 are critically low for aquatic life
4. Temperatures at or above 27^o C begin to be critically warm for aquatic life
5. NA or NULL = Not available, not provided, or not analyzed
6. MDL = Minimum Detection Limit (for analytical method)

Methods and Detection Limits			
Analyte	Laboratory Method	MDL	Units
E-coli	SM-9223B	10	MPN/100 ml
Atrazine	ELISA Kit (Abraxis)	0.1	ppb
Fluoride	SM 4110B	0.01	mg/L
Chloride	SM 4110B	0.05	mg/L
Nitrite	SM 4110B	0.05	mg/L
Bromide	SM 4110B	0.05	mg/L
Nitrate	SM 4110B	0.05	mg/L
Phosphate	SM 4110B	0.1	mg/L
Sulfate	SM 4110B	0.05	mg/L

According to this screening method, Atrazine is to be reported only within the range of 0.1-5ppt. Any reading outside of this range is listed in the comments section, but please use these values with discretion.

Kentucky Water Quality Standards					
Analyte	Description	Critical Value	Units	MDL	Basis
<i>Field Measurements</i>					
Temperature	Field Measurement	31.7 ^o C	C ^o	N.A.	Water quality std (grab)
pH	Field Measurement	<6 or >9	pH units	N.A.	Water quality std (grab)
Conductivity	Field Measurement	None	µmhos/cm	N.A.	No Surface Water Standard
Dissolved Oxygen	Field Measurement	4.0	mg/L	N.A.	Water quality std (grab)
<i>Laboratory Measurements</i>					
E-coli	SM-9223B	240 cfu/100ml	MPN/100 ml	10.0	Water quality std (grab)
Atrazine	ELISA Kit (Abraxis)	3	ppb	0.1	Water quality std (grab)
Fluoride	SM 4110B		mg/L	0.0	Water quality std (grab)
Chloride	SM 4110B		mg/L	0.05	Water quality std (grab)
Nitrite	SM 4110B		mg/L	0.05	Water quality std (grab)
Bromide	SM 4110B		mg/L	0.05	Water quality std (grab)
Nitrate	SM 4110B		mg/L	0.05	Water quality std (grab)
Phosphate	SM 4110B		mg/L	0.1	Water quality std (grab)
Sulfate	SM 4110B		mg/L	0.1	Water quality std (grab)

Note: Drinking Water (DW) standards are for potable water, not surface water.

If you see any errors, please report them to the Data Manager at:

dale.reynolds@ky.gov

TLGNW Results Report for May, 2013

TLGWR Results Report for May, 2013																								
EUSA Method MDL=0.1ppb										SM 2330.8 MDL=1NTU														
SITE	Historic	Stream Name	Location	County	Sample Date	Sample Time	Associate LN	Associate LN	D.FLOW (0-5)	RAIN (0-5)	Turbidity (0-3)	D.O.	pH	Temp	Conductivity	Date	Analysis	Analysis	ppbAnalysis	Turbidity	Flag	Laboratory	Comments	Sampler Comments
2094	T09	Copper Creek	Sentinel Copper Cr Rd	Hopkins	5/4/2013	1000	Arnold	3867	3	3	3.0	7	6	13	1480	5/13/2013			0.16	5/4/2013	70.4			Stun Color, Copper Odor
2125	T41	North Fork Panther Creek	US 231 near Massville	Dawson	5/4/2013	0915	Connor	950	4	3	2.0	4.8	7.4	15.8	390	5/13/2013			2.32	5/4/2013	48.2			
2126	T42	Parish Creek	Sentinel bridge on Hayden Bridge Rd	Dawson	5/4/2013	0820	Sullivan	1137	4	3	3.0	6	6.9	17.5	450	5/13/2013			2.1	5/4/2013	46			Water Covered With Maple Seeds
2127	T43	Parish Creek	Sentinel poplar bog bridge rd	Dawson	5/4/2013	0935	Sullivan	1137	4	3	2.0	7.2	7.1	16	390	5/13/2013			2.16	5/4/2013	19.7			
2209	T150	East Fork Knoblick Creek	Sentinel Upstream Mulligan Rd Bridge	Dawson	5/4/2013	0912	Trefler	2768	3	2	3.0	7.4	7.4	13	460	5/17/2013			46.2	5/4/2013	178			Foamy- Trash Enticing From Road Drive Time 14
2211	T152	Middle Fork Knoblick Creek	Sentinel New Cut Rd bridge	Dawson	5/4/2013	0725	Sullivan	1137	4	3	3.0	6.8	7.7	14	990	5/17/2013			12.58	5/4/2013	28.5			
2214	T155	Middle Fork Knoblick Creek	Sentinel Hwy 55 Bridge	Dawson	5/4/2013	0747	Sullivan	1137	4	3	3.0	5.8	7.9	14.5	1510	5/13/2013			1.13	5/4/2013	28.9			Ditch From East Dumping Silt into Creek
2224	T165	Cypress Creek	Sentinel Hwy 1588 bridge	McLean	5/4/2013	0855	Rector	3859	3	1	3.0	6	7.5	18	950	5/13/2013			1.65	5/4/2013	51.70			
2228	T170	Deer Creek	Sentinel Hwy 370 bridge near onton	Webster	5/4/2013	0810	Fowler	3620	4	3	2.0	4.8	6	18	940	5/13/2013			1.26	5/4/2013	23.1			
2270	T280	Piney Creek	Cool Springs Rd	Crittenden	5/4/2013		O'Hara	2474	4	3	3.0	5.4	6.5	15	210	5/13/2013			2.41	5/4/2013	14.1			78miles, 3 hours
2286	T308	Pond Drain	Sentinel Pond Drain Rd Bridge just west of sennetway off KY 81	McLean	5/4/2013	0931	Rector	3859	3	1	3.0	4	7.25	13	270	5/13/2013			4.01	5/4/2013	528			50miles and 2hrs
2295	T320	Keller Ditch	Bridge on Keller Rd	Dawson	5/4/2013	0908	Hudson	3832	4	2	2.0	7	5.5	12	420	5/17/2013			70.2	5/4/2013	204			
2318	T373	Pesimmon Ditch	North side of Owensboro at Hwy 2101 bridge	Dawson	5/4/2013	1010	Flachslam	3373	3	3	2.0	7.1	7.2	11.5	480	5/13/2013			0.42	5/4/2013	60.8			Bob not Nancy, Light rain
2320	T375	East Fork Deer Creek	Bridge at Elmwood on Slaughter-Elmwood Rd	Webster	5/4/2013	0845	Fowler	3620	4	3	2.0	3.8	6	12	680	5/13/2013			1.79	5/4/2013	148			
2323	T378	Rhodes Creek	East Junction of Lydiane Bridge Rd & Hwy 56 W near Gilles Ditch	Dawson	5/4/2013	0832	Trefler	2768	3	2	2.0	7.6	7.4	14	560	5/13/2013			4.68	5/4/2013	21.9			
2324	T379	Pesimmon Ditch	North side of Owensboro at Hwy 331	Dawson	5/4/2013	0925	Flachslam	3373	3	3	2.0	6.2	7	11.5	1420	5/13/2013			0.25	5/4/2013	70.8			Bob not Nancy, Light rain
2337	T440	Deserter Creek	Boston-Labon Deserter Cr.	Dawson	5/3/2013	1540	Mayton	1922	3	1	0.0	8	7.5	2.7	170					5/4/2013	8.44			
2351	T482	Hogan Ditch	Sentinel Bridge on Hwy 960	Dawson	5/4/2013	0920	Young	3491	3	3	1.5	6.4	6.5	15	260	5/17/2013			12.7	5/4/2013	131.00			turbid with mud, trees/brush on bank removed
2352	T483	Katie Meadows Slough	Sentinel Bridge on West Fifth Street Road,	Dawson	5/4/2013	0946	Young	3491	3	3	1.0	5	6.8	13	290									tire in water
2353	T491	Bumett Fork	South of Philpot on HWY 142	Dawson	5/3/2013	1620	Mayton	1922	3	1	1.0	9	7.5	2.4	340					5/4/2013	8.23			
2357	T504	Yellow Creek	Bridge at US 60	Dawson	5/4/2013	1005	Connor	950	4	3	1.0	5.1	7.5	16	420	5/13/2013			0.92	5/4/2013	28.1			
2362	T570	Horse Fork	50 meales upstream from Ed Brown Rd	Hancock	5/4/2013	0910	Payne	2712	3	2	1.0	7.5	7	15	90	5/13/2013			0.14	5/4/2013	58			
2383	T571	Horse Fork	50 meales upstream from Joe Powers Rd	Hancock	5/4/2013	0845	Payne	2712	3	2	1.0	7.75	7	15	120	5/13/2013			2.76	5/4/2013	26.5			
2390	T584	Unnamed	Bridge on Locktown Rd east of Graham Landfill	Mullenber	5/4/2013	0705	Gallen	3121	3	2	2.0	6.4	5	13	1050	5/13/2013				5/4/2013	26.5			
2397	T605	Canoe Creek	off Lovers Lane Bridge	Henders	5/3/2013	0920	Comer III	2998	3	0	2.0	7.6	7.5	20	600	5/13/2013			3.67	5/4/2013	26.30			total time spent: 2hr and 50mins, 88miles
2398	T606	South Fork Canoe Creek	Hwy 425 bridge,	Henders	5/3/2013	0957	Comer III	2998	3	0	1.0	6.2	7.5	18	500	5/13/2013			2.5	5/4/2013	16.8			
2885		Yellow Creek	Construction site of new hospital. Bridge on Daniels Lane	Dawson	5/4/2013	0935	Fallon	3880	3	3	3.0	6.5	7.5	14	260	5/13/2013			4.31	5/4/2013	159			supervising sampler Peter Iobela, kelly is my wife, we go together
3008		Unnamed	Just off KY 175 - into Thompson Creek	Mullenber	5/4/2013	0805	Gallen	3121	3	2	3.0	7	5	13	850	5/13/2013			<0.1	5/4/2013	306			
3009		Unnamed	Just off US 62- into Thompson Creek	Mullenber	5/4/2013	0735	Gallen	3121	3	2	2.0	6.6	6.5	14	480	5/13/2013			0.28	5/4/2013	192			
3101		Clear Creek	hwy 109 bridge	Hopkins	5/3/2013	1210	Workman	3729	4	0	0.0	3.4	7	65	1110	5/13/2013			1.26	5/4/2013	1.12			Heavy Rainfall
3102		Wells Creek	hwy 109 bridge	Hopkins	5/3/2013	1300	Workman	3729	4	0	2.0	2.6	6.5	16	450	5/13/2013			3.07	5/4/2013	12.1			Dup Alazine 4.54 Heavy Rainfall
3148		Rhodes Creek	Flits Road bridge near Ulca, KY	Dawson	5/4/2013	1040	Conrad	3850	4	3	3.0	7.8	8	11	310	5/17/2013			16.1	5/4/2013	354			Generally clean (le no oil) Man Made and natural debris present though
3149		Rhodes Creek	Sharp Road bridge west of Rte 431 near Ulca	Dawson	5/4/2013	1020	Conrad	3850	4		3.0	9.4	7.5	13	530	5/13/2013			4.73	5/4/2013	190			Generally clean (le no oil) Man Made and natural debris present though
3215		Unnamed	Graham Cypress Rd at Graham Cemetery Rd	Mullenber	5/4/2013	0825	Gallen	3121	3	2	2.0	7.6	6	13	1380					5/4/2013	45.2			

TGWW Results Report

July 2013

Lab Name: WATERS Laboratory		SW923.8 MD=1 MPN/100 mL																									
Site #	Historic	Stream Name	Location	County	Sample Date	Sample Time	Associate M	Associate D	Flow (US)	Turbidity (ft)	D.O.	pH	Temp	Conductivity	General Comments	Analysis Date	Analysis Time	E col	Flag	Temp brought in	Flag	Time brought in	Sampler Comment				
2125	T41	North Fork Panther Creek	US 231 near Maxville	Davies	no date on COC	0855	Connor, H.	950	2	0	7.5	7.5	22	510	No date on COC and missing a few red squiggly lines on names.	07/13/13	1505	109		1.6° Cupon arrival		1300					
2137	T13	Green River	Upstream from Lock 1 at public boat launch	Henderson	no date on COC	none on COC	Miller, D.	3883	4	0	3	6.5	7.1	23	260	low up 1515. Aerie view high from past runs. Mileage 52. E side to hen.	07/13/13	1505	63		1.6° Cupon arrival		1305				
2178	T15	South Fork Panther Creek	231 bridge	Davies	07/13/13	1000	Prescott, D.	4004	1	0	3	2.1	7.3	22	360	1 hour and 20 miles	07/13/13	1600	<40		1.6° Cupon arrival		1305				
2190	T114	Rhodes Creek	Bridge on KY 141 west near McLean County line	Davies	07/13/13	0955	Conrad, P.	3680	1	0	1	6.6	7.5	23	570	Clear spots were running, very low speed from Ponding spot to pond	07/13/13	1600	97		1.6° Cupon arrival		1305				
2224	T165	Cypress Creek	Serriem Hwy 1588 bridge	McLean	07/13/13	0900	Rector, P.	3869	3	0	2	4	7	24	910	41 miles and 2 hours.	07/13/13	1600	185		1.6° Cupon arrival		1305				
2228	T170	Deer Creek	Serriem Hwy 370 bridge near onion	Webster	07/13/13	0735	Fowler, R.	3620	3	0	1	0	6.5	24	760	Looks good, but my chemicals might be bad. Could not get water!	07/13/13	1518	196		1.6° Cupon arrival		1305				
2270	T200	Piney Creek	Cow Springs Rd	Crittenden	07/13/13	0905	O'Hara, M.	2494	3	0	2	3.2	6.5	24	180	78 miles and 3 hours	07/13/13	1600	63		1.6° Cupon arrival		1305				
2286	T338	Pond Drain	Serriem Pond Drain Rd Bridge just west of sawney off KY	McLean	no date on COC	1000	Rector, P.	3869	2	0	2	2	7.5	23	640		07/13/13	1606	146		1.6° Cupon arrival		1305				
2318	T233	Prestimmon Ditch	North side of Owensboro at Hwy 2700 bridge	Davies	no date on COC	1000	Flackham, R.	3373	2	0	0	4	7.5	21	730	Top 8.35-10.35. The 11.5 miles	07/13/13	1606	473		1.6° Cupon arrival		1305				
2320	T205	East Fork Deer Creek	Bridge at Elmwood on Slaghtines Elmwood Rd	Webster	07/13/13	0820	Fowler, R.	3620	3	0	1	na	7	23	1440	Sum floating on top, could not get water to change color for Oup	07/13/13	1518	118		1.6° Cupon arrival		1300				
2351	T421	Argan Ditch	Serriem Bridge on Hwy 1560	Davies	07/13/13	0855	Young, J.	3461	1	0	2	2.7	6.5	22	na	Slightly oily film in water. DO taken twice and consistent. The 60m	07/13/13	1518	275		1.6° Cupon arrival		1305				
2352	T483	Galie Meadow Slough	Serriem Bridge on West Fifth Street Road,	Davies	07/13/13	0918	Young, J.	3461	2	0	0	7	7	20	410	seemed more shallow- like more dirt in bottom. Time and miles c	07/13/13	1606	20		1.6° Cupon arrival		1305				
2356	T503	Pup Creek	Bridge on 1338 near Spica Knob	Davies	07/13/13	1000	Connor, H.	950	1	0	0	4	7.5	24	700	52 miles, 3 hours	07/13/13	1606	12		1.6° Cupon arrival		1305				
2357	T504	Yellow Creek	Bridge at US 60	Davies	07/13/13	0945	Connor, H.	950	2	0	0	3	7.2	23	440		07/13/13	1606	88		1.6° Cupon arrival		1305				
2389	T550	Thornlie Creek	KY 140 east of Ulca	Davies	07/13/13	0900	Reger, M.	4005	1	0	2	6.3	7.5	24	400	Agasson 1% surface 1 hour, 30 miles. NO (H) (D) (T) (H)	07/13/13	1606	31		1.6° Cupon arrival		1305				
2397	T605	Canoe Creek	off Lovers Lane Bridge	Henderson	07/13/13	0916	Orinorton Corner (I, N.)	2998	4	0	1	6.5	7.5	26	570		07/13/13	1606	41		1.6° Cupon arrival		1305				
2398	T606	South Fork Canoe Creek	Hwy 425 bridge	Henderson	07/13/13	0950	Orinorton Corner (I, N.)	2998	2	0	1	6.1	7.5	23	500		07/13/13	1606	181		1.6° Cupon arrival		1305				
2888		East Fork Deer Creek	bridge on KY 1088	Hopkins	07/13/13	0930	Berry, M.	3521	2	0	0	6	7.5	20	3660	bad road! 21 miles, time 1hr	07/13/13	1606	219		1.6° Cupon arrival		1305				
2902		Hickory Camp Creek	bridge on KY 1117	Buller	07/13/13	0845	Webster, P. R.	2730	1	0	1	5	7	22	520	9ns and 90 miles.	07/13/13	1518	<10		5.2° Cupon arrival		1303				
2903		Mud River	KY 70	Buller	07/13/13	0845	Webster, P. R.	2730	4	0	1	6.2	7	24	210	9ns and 90 miles.	07/13/13	1606	63		07/13/13	13.6		5.2° Cupon arrival		1303	
2904		Panther Creek	bridge on Robinsons Green Road	Buller	07/13/13	0900	Webster, P. R.	2730	1	0	1	4.8	7	23	300	9ns and 90 miles.	07/13/13	1617	74		07/13/13	11.5		5.2° Cupon arrival		1303	
3101		Clear Creek	hwy 108 bridge	Hopkins	no date on COC	0900	Workman, W.	3729	3	0	0	3.2	7	78	7.5	50 miles, 3 hours. No date on COC	07/13/13	1617	538		1.6° Cupon arrival		1305				
3102		Wine Creek	hwy 108 bridge	Hopkins	no date on COC	0905	Workman, W.	3729	3	0	0	2.2	6.5	78	250	Conductivity meter near 250, seemed to be in error. Barf! No date on	07/13/13	1617	31		1.6° Cupon arrival		1305				
3148		Rhodes Creek	Fits Road bridge near Ulca, KY	Davies	07/13/13	0955	Conrad, P.	3680	1	0	0	4.2	8	21	530	Minnows and small frogs present, grass clippings from recent mowing.	07/13/13	1617	1,364		1.6° Cupon arrival		1305				
3249		Unnamed Tributary	South of the parking lot of Pains Dance Barn, 35 Cedar Lane Hopkins	Hopkins	07/13/13	0945	Janssen, M.	4004	1	0	0		6.5	7.5 na	na	No conductivity meter. This is the last time we have done this water.	07/13/13	1617	121		1.6° Cupon arrival		1305				

SiteID	HistoricID	Stream	Location	County	Lat	Lon	Sampler	Status	WSArea(sq mi)	Comments
2088	T03	Yellow Creek	Iron bridge in Yellow Creek Park.	Daviess	37.78723	-87.03690	Dan Stallings	Active	5	
2089	T04	Rhodes Creek	Intersection of hwy 54 and 279.	Daviess	37.75691	-87.21049	Jacob Jennings	Inactive	4	
2120	T36	Deserter Creek	KY 764 at Whitesville	Daviess	37.64647	-86.88346	Sandra Broman	Inactive	12	
2125	T41	North Fork Panther Creek	US 231 near Masonville	Daviess	37.70136	-87.00075	Henry Connor	Active	1	coords wrong - on S. Fk.
2126	T42	Panther Creek	Sentinel bridge on Hayden Bridge Rd.	Daviess	37.72726	-87.25597	Michele Morek	Active	337	
2127	T43	Panther Creek	Sentinel Poplar Log Bridge Rd.	Daviess	37.62901	-86.94328	Sharon Sullivan	Active	90	
2128	T44	South Fork Panther Creek	Off 298 Jackson Flats	Daviess	37.67998	-87.08998	Steven	Inactive	148	
2129	T45	Barnett Creek	3 miles off 231E and 1/2 miles from Barnett Creek Road.	Daviess	37.73892	-87.01944	Debbie Estes	Inactive	10	coords wrong
2130	T46	Horse Fork	US 231 in Owensboro.	Daviess	37.73987	-87.09288	Laura Morris	Inactive	5	
2131	T47	Knoblick Creek	Berry Rd. bridge.	Daviess	37.71171	-87.32054	Lee Dew	Active	23	
2132	T48	Crooked Creek	Off Hwy 56 at bridge on Crooked Creek Road.	Daviess	37.72419	-87.27953	James Kamuf	Active	4	
2134	T50	East Fork Knoblick Creek	30 meters east of Brian Mulligan Rd.	Daviess	37.69168	-87.30641	Lee Dew	Active	4	
2154	T70	Burnett Fork	where is crosses KY 54.	Daviess	37.73775	-87.01924	Linda Ireland	Inactive	10	
2155	T71	Middle Fork Knoblick Creek	New Cut Rd.	Daviess	37.68381	-87.31207	Lee Dew	Inactive	4	coords wrong
2156	T72	West Fork Knoblick Creek	Possum Trot Rd.	Daviess	37.66556	-87.34125	Lee Dew	Inactive	7	same as 2212
2158	T74	Unnamed Tributary	Opposite Kroger on Parrish Ave.	Daviess	37.75470	-87.15588	Gloria Cecil	Active	0.1	
2163	T79	Blackford Creek	Bridge at 657.	Daviess	37.82650	-86.89749	Marquarete Ward	Inactive	81	
2178	T95	South Fork Panther Creek	231 bridge.	Daviess	37.64552	-87.00932	Brad Reynolds	Inactive	109	
2182	T104	Burnett Fork	Sentinel 50 feet upstream of bridge on KY 142.	Daviess	37.76881	-86.99315	Wendell Thompson	Active	4	
2183	T105	Rhodes Creek	Sentinel at Hwy 554.	Daviess	37.68034	-87.13515	Samantha Durham	Inactive	28	
2188	T112	Blackford Creek	Sentinel Hwy 334 and US 60 between Pellville and Flora.	Daviess	37.89227	-86.98927	Lydia Wethington	Inactive	5	coords wrong
2189	T113	West Fork Knoblick Creek	Knob Lick at Highway 56	Daviess	37.68176	-87.34303	Nicholas Reeder	Inactive	8	coords wrong
2190	T114	Rhodes Creek	Hwy 140 bridge	Daviess	37.59026	-87.15253	Kathy Grant	Active	0.8	
2191	T115	Knoblick Creek	middle fork at New Cut Road	Daviess	37.69578	-87.31047	Courtney Crume	Inactive	10	
2194	T120	Blackford Creek	Off US 60 between Maceo and Lewisport at the county line.	Daviess	37.90534	-86.92234	Lydia Wethington	Inactive	100	
2209	T150	East Fork Knoblick Creek	Sentinel upstream Mulligan Rd bridge.	Daviess	37.68991	-87.30448	Conrad Toefer	Active	4	
2210	T151	West Fork Knoblick Creek	Sentinel Hwy 56 bridge.	Daviess	37.68232	-87.34060	Lee Dew	Active	8	coords wrong
2211	T152	Middle Fork Knoblick Creek	Sentinel New Cut Rd bridge.	Daviess	37.66556	-87.31207	Sharon Sullivan	Active	2	
2212	T153	West Fork Knoblick Creek	Sentinel Possum Trot Rd.	Daviess	37.66556	-87.34125	Kenny Lin	Active	7	same as 2156
2214	T155	Middle Fork Knoblick Creek	Sentinel Hwy 56 bridge.	Daviess	37.69483	-87.30779	Sharon Sullivan	Active	9	
2215	T156	Knoblick Creek	Sentinel Hwy 500 bridge.	Daviess	37.70067	-87.32502	Kenny Lin	Active	0.2	
2216	T157	Knoblick Creek	Sentinel upstream Berry Rd.	Daviess	37.70921	-87.32045	Kenny Lin	Active	23	
2218	T159	Smock Creek	Sentinel bridge on Curdsville-Delaware Rd.	Daviess	37.71780	-87.37920	Eva Boone	Active	5	
2247	T192	O'Brien Ditch	Sentinel Ditch on Pond River Rd across from lagoon at O'Brien hog	Daviess	37.71261	-87.34303	Lee Dew	Active	Unknown	
2251	T199	Unnamed Tributary	Sentinel ditch on Curdsville-Delaware Rd where road south of	Daviess	37.72800	-87.34420	Lee Dew	Active	0.1	
2252	T200	Jennings Ditch	Sentinel ditch on east side of Pond River Rd between Jennings Rd	Daviess	37.71080	-87.34310	Lee Dew	Active	Unknown	
2295	T320	Keller Ditch	Bridge on Keller Rd.	Daviess	37.70900	-87.18000	Eric VanOver	Active	2	
2296	T321	Wolf Branch Ditch	Bridge on Fitts Rd off KY 554.	Daviess	37.65720	-87.15590	Eric VanOver	Active	4	
2297	T322	Pup Creek	Sauer Rd. in Maceo.	Daviess	37.84180	-86.98490	Hervey Howell	Active	30	coords wrong
2298	T323	Pup Creek	KY 1389.	Daviess	37.82350	-86.95420	Hervey Howell	Active	21	same as 2356, 2408, and 2409
2305	T354	Panther Creek	Upstream of Wayne Bridge Rd bridge.	Daviess	37.71360	-87.21200	Tammie Thomas	Inactive	326	
2306	T355	North Fork Panther Creek	Hwy 298 bridge.	Daviess	37.70150	-87.06240	Jim Naas	Inactive	88	
2307	T356	Old Panther Creek	Wayne Bridge Road 2.8 miles off of Hwy 81.	Daviess	37.70580	-87.21510	Tammie Thomas	Inactive	0.2	
2308	T357	Gilles Ditch	Upstream 279 bridge.	Daviess	37.76130	-87.21320	Monica Ellis	Inactive	4	
2315	T370	Horse Fork	bridge on US 231 by Dairy Queen.	Daviess	37.74760	-87.06900	Anna Hardison	Active	5	coords wrong
2316	T371	Horse Fork	creek at bridge 1 mile past Sports Warehouse.	Daviess	37.72420	-87.09700	Samantha Durham	Inactive	10	
2318	T373	Persimmon Ditch	North side of Owensboro at Hwy 2100 bridge.	Daviess	37.78370	-87.14090	Nancy Flachskam	Active	1	same as 2406 and 2407
2323	T378	Rhodes Creek	East of junction of Lyddane Bridge Rd and Hwy 56 W. Near junction	Daviess	37.76130	-87.22530	Conrad Toefer	Active	9	
2324	T379	Persimmon Ditch	North side of Owensboro at Hwy 331 bridge	Daviess	37.78270	-87.14360	Nancy Flachskam	Active	1	Same as 2430 and 2431
2325	T380	Delaware Creek	Bridge on Curdsville-Delaware Rd.	Daviess	37.69170	-87.38750	Ann Cecil	Active	0.1	
2329	T390	Scherm Ditch	Scherm Rd and Barron Dr bridge.	Daviess	37.73900	-87.14290	Jon Cambron	Inactive	1	
2330	T391	Carter Ditch	Bridge on Carter Rd near N York St.	Daviess	37.75390	-87.14600	Carol Maillet	Active	Unknown	
2331	T392	Geotz Ditch	Veach Rd bridge.	Daviess	37.71930	-87.07580	Lee Dew	Active	0.2	
2332	T393	Tamarack Ditch	intersection of Tamarack and Carter Rd.	Daviess	37.73350	-87.15300	Jon Cambron	Inactive	4	
2333	T394	Geotz Ditch	Bridge on U.S.60 Bypass W. of Frederica	Daviess	37.78078	-87.16897	Carol Maillet	Active	1	
2334	T400	Carpenter Lake	boat ramp on Hwy 405.	Daviess	37.84520	-86.97970	Lee Dew	Active	N. A.	
2335	T401	Old Kingfisher Lake	boat ramp on Hwy 2116.	Daviess	37.84680	-86.97440	Lee Dew	Active	N. A.	
2336	T402	New Kingfisher Lake	across from boat ramp on Hwy 2116.	Daviess	37.84500	-86.97480	Lee Dew	Active	N. A.	
2337	T440	Deserter Creek	Boston-Lafoon Deserter Cr.	Daviess	37.65833	-86.87697	Don Mayton	Active	3	
2339	T470	Pup Creek	Sentinel bridge on KY 951 north of Knottsville.	Daviess	37.79190	-86.88150	Scott Waldie	Active	4	
2340	T471	Joes Run	Sentinel bridge on Jack Hinton Rd.	Daviess	37.73160	-86.90350	Lee Dew	Active	4	
2341	T472	North Fork Panther Creek	Sentinel bridge on KY 764 South near Whitesville.	Daviess	37.71530	-86.89510	Sandra Broman	Active	28	
2347	T478	Fulkerson Ditch	Sentinel bridge on Lake Town Rd.	Daviess	37.82930	-87.24460	Lee Dew	Active	0.3	same as 2432 and 2433
2350	T481	Bryant Ditch	Sentinel bridge on Sauer-Hogan Rd.	Daviess	37.82830	-87.30440	Lee Dew	Active	5	
2351	T482	Hogan Ditch	Sentinel bridge on Hwy 960.	Daviess	37.79670	-87.26860	Julie Young	Active	5	
2352	T483	Katie Meadow Slough	Sentinel bridge on West Fifth Street Road.	Daviess	37.77570	-87.24860	Julie Young	Active	5	
2353	T491	Burnett Fork	South of Philpot on HWY 142	Daviess	37.76748	-86.99409	Don Mayton	Active	4	
2356	T503	Pup Creek	Bridge on 1389 near Spice Knob.	Daviess	37.82360	-86.95440	Henry Connor	Active	21	same as 2298, 2408, and 2409
2357	T504	Yellow Creek	Bridge at US 60.	Daviess	37.81130	-87.04460	Henry Connor	Active	14	same as 2410 & 2411
2388	T582	Shoemaker Branch	Marksberry Rd. north east of Utica.	Daviess	37.66794	-87.09278	Randy Van Metre	Active	5	
2389	T583	Twomile Creek	KY 140 east of Utica.	Daviess	37.61446	-87.06905	Randy Van Metre	Active	7	coords wrong
2394	T601	Flat Branch	Poplar Log Bridge Rd.	Daviess	37.63070	-86.97440	Brad Reynolds	Inactive	5	
2395	T602	South Fork Panther Creek	Maxwell-Red Hill Rd.	Daviess	37.64380	-87.02310	Brad Reynolds	Inactive	115	
2396	T603	Hill Ditch	2,000 feet north of junction with S Fk Panther Cr.	Daviess	37.64962	-87.00752	Brad Reynolds	Inactive	0.2	
2400	T608	Unnamed Tributary	Hills bridge near US231. UT to Katie Meadows Slough.	Daviess	37.69626	-87.06445	Carol Mark	Active	0.9	same as 2974
2401	T609	Rhodes Creek	where Lyddane Bridge and 5901 Lee Rudy Road meet.	Daviess	37.77714	-87.20937	Carol Mark	Active	0.4	
2406	T614	Persimmon Ditch	At the northwest edge of Owensboro at the Hwy 2100 bridge.	Daviess	37.78370	-87.14090	Nancy Flachskam	Dead	1	same as 2407 and 2318
2407	T615	Persimmon Ditch	At the northwest edge of Owensboro at the Hwy 2100 bridge.	Daviess	37.78370	-87.14090	Nancy Flachskam	Dead	1	same as 2406 and 2318
2408	T616	Pup Creek	East of Owensboro at Hwy 60 and Bridge on 1389 near Spice Knob.	Daviess	37.82360	-86.95440	Jill Flachskam	Dead	21	same as 2298, 2356, and 2409
2409	T617	Pup Creek	East of Owensboro at Hwy 60 and Bridge on 1389 near Spice Knob.	Daviess	37.82360	-86.95440	Jill Flachskam	Dead	21	same as 2298, 2356, and 2408
2410	T618	Yellow Creek	East of Owensboro at Hwy 60 and bridge on US 60. Duplicate of	Daviess	same as	SiteID 2357	Justin Rosemier	Dead	14	
2411	T619	Yellow Creek	East of Owensboro at Hwy 60 and bridge on US 60. Duplicate of	Daviess	same as	SiteID 2357	Justin Rosemier	Dead	14	
2414	T622	Blackford Creek	Bridge on Rt. 334. Ohio River Action site.	Daviess	37.89880	-86.98657	Henry Shillinglaw	Active	111	Same as 2415
2415	T623	Blackford Creek	Bridge on Rt. 334.	Daviess	37.89880	-86.98657	Lee Dew	Dead	111	Same as 2414
2430	T664	Persimmon Ditch	Northside of Owensboro at the Hwy 331 bridge. Duplicate of T379.	Daviess	37.78270	-87.14360	Phillip Curran	Dead	1	same as 2431 and 2324
2431	T665	Persimmon Ditch	North side of Owensboro at the Hwy. 331 bridge. Duplicate of T379.	Daviess	37.78270	-87.14360	Phillip Curran	Dead	1	same as 2430 and 2324
2432	T666	Fulkerson Ditch	Bridge on Lake Town Road. Duplicate of T478.	Daviess	37.82930	-87.24460	Lee Dew	Dead	0.3	
2433	T667	Fulkerson Ditch	Bridge on Lake Town Road. Duplicate of T478.	Daviess	37.82930	-87.24460	Lee Dew	Dead	0.3	
2461	T724	Panther Creek	at sampler's residence on Wayne Bridge Road.	Daviess	37.71838	-87.22736	Steven Dean	Active	0.4	
2462	T725	Panther Creek	bridge on Wayne Bridge Road.	Daviess	37.71669	-87.22733	Steven Dean	Active	332	
2885		Yellow Creek	Construction site of new hospital. Bridge on Daniels Lane.	Daviess	37.77450	-87.05320	Audrey Chen	Active	3	
2886		Yellow Creek	wooden bridge at parking log at Yellow Creek park. Upstream from mouth of South Fork.	Daviess	37.80051	-87.03282	Lee Dew	Active	8	
2899		Unnamed Tributary	UT to North Fork Panther Creek at the bridge on Hills Bridge Road.	Daviess	37.70209	-87.06502	Carol Mark	Active	88	
2900		Flat Lick Creek	Bridge on Wayne Bridge Road.	Daviess	37.68493	-87.22048	Mickey Franzman	Active	12	
2901		Brush Fork	Bridge on KY 554.	Daviess	37.63566	-87.23174	Mickey Franzman	Active	1	
2974		Unnamed Tributary	At Hill Bridge Road crossing. UT to North Fork of Panther Cr.	Daviess	37.69607	-87.06462	Carol Mark	Active	0.9	same as 2400
3011		Horseman Ditch	bridge on Lake Town Road North West of Stanley.	Daviess	37.84848	-87.31009	Patricia Allen	Active	2	coords wrong
3012		Cowhide Slough	Bridge on Lower River Road, North West of Owensboro.	Daviess	37.83614	-87.21352	Patricia Allen	Active	5	
3099		Crooked Creek	at Crooked Creek Road	Daviess	37.72723	-87.26554	James Kamuf	Active	4	coords wrong
3148		Rhodes Creek	Fitts Road bridge near Utica, KY	Daviess	37.65709	-87.15544	Conrad, P.	Active		
3149		Rhodes Creek	Sharp Road bridge west of Rte 431 near Utica	Daviess	37.67141	-87.13710	Conrad, P.	Active		