

From Your Stormwater
Manager:

*Beckley Sanitary Board
will transition to stormwa-
ter fees based on impervi-
ous areas for non-single
family residential proper-
ties in third quarter of 2008*

Per the Beckley Stormwa-
ter Ordinance, Beckley
Sanitary Board is in the
process of transitioning
stormwater fees for com-
mercial, institutional and
multifamily residential
properties to fees based
upon the amount of imper-
vious surface on the prop-
erty.

Impervious surfaces are
defined as land area cov-
ered by buildings, pave-
ment, gravel or other mat-
erial that significantly inhib-
its stormwater from pene-
trating the soil. Examples
include roofs, concrete and
asphalt parking lots and
sidewalks, as well as com-
pacted gravel surfaces.

Over the next few months,
the MS4 service area will
be mapped and impervious
areas measured. Stormwa-
ter fees will be calculated
using a rate of \$1.25 per
1,000 square feet of imper-
vious surface.

Beckley Sanitary Board
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HYDROLOGIC

CITIZENS GUIDE TO STORMWATER POLLUTION PREVENTION

www.beckleysanitaryboard.org

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Stormwater Utility Completes 1st Year

The Beckley Stormwater Utility recently completed its first year of operation. We are proud of the progress that we made this year to both improve the operation and performance of critical storm sewer infrastructure, while at the same time working to fulfill our permit obligations to protect our water environment from pollution from stormwater runoff. In the year ahead, we will be working on a number of additional capital improvement projects and addressing our list of open work orders. While we hope, our customers see the progress we are making with the stormwater utility, we remind you that improving our aging infrastructure will take a sustained long term effort.

Construction Commences on Osprey Road Storm Sewer Improvements

BSB recently completed design and begins construction this month of a storm sewer improvement to alleviate flooding of two structures on Osprey Road. This longstanding problem has been occurring for over 10 years. The approximately 500 linear foot project involves replacing an undersized, incorrectly installed stormsewer system with new pipe of additional capacity.

Stormwater Staff earns Certifications

Beckley Stormwater Program staff recently earned national certifications. Doug King, an Stormwater Utility Tech III with the Beckley Sanitary Board, passed the exam to become a Certified Erosion and Storm Water Inspector (CESSWI). Mr. King inspects construction sites within the Beckley MS4 for compliance with the construction site runoff regulations. Jeremiah Johnson, BSB Operations Manager, passed the exam to become a Certified Professional in Storm Water Quality (CPSWQ). Mr. Johnson administers the Beckley Stormwater Program and is responsible for MS4 permit compliance. Mr. King and Mr. Johnson became the first professionals in West Virginia to earn these certifications.

STORMWATER DOLLARS AT WORK

- ◆ Completed 222 stormwater work orders (40 additional remain open)
- ◆ Replaced 1,383 ft. of storm sewer pipe
- ◆ Constructed 1,010 ft. of drainage swales
- ◆ Cleaned 3,245 ft. of storm sewers
- ◆ Performed video inspection of 769 ft. of storm sewer
- ◆ Installed 21 new storm sewer drop inlets.
- ◆ Repaired 15 storm sewer drop inlets
- ◆ Inspected/cleaned over 80 drop inlets
- ◆ Performed 647 utility line locates
- ◆ Mapped over 13 miles of storm sewer infrastructure
- ◆ Hosted a construction site run-off program
- ◆ Partnered to build WV's 2nd rain garden demonstration area
- ◆ Funded a portion of the design study to correct flooding on Robert C Byrd Dr.



Ewart Avenue Storm Sewer Improvement Phase I Completed

BSB recently completed Phase I of a much needed storm sewer/sanitary sewer project on Ewart Avenue. This project involved replacing 500' of 36" storm sewer, 500' of sanitary sewer and constructing a 500' secondary overflow swale to prevent flooding of the roadway and homes along Ewart Avenue. Improvements at the intersection of the Exhibition Coal Mine and Ewart Avenue where made to improve the ability of surface runoff to enter the storm sewer system. This project is Phase I of additional improvements to the Ewart Avenue storm sewer. The project also will prevent over 4 million gallons a year of runoff from entering the sanitary sewer system. This infiltration/inflow contributes to sanitary sewer system overflows at manholes along Ewart Avenue.

Storm Sewers on Lyons/Hubbard Street replaced

BSB recently replaced 530' of 18" storm sewer on Lyons Street in an unincorporated area off of Rural Acres Drive. The existing storm sewer was in poor condition with sink holes and standing water in many rear yards.

WV DEP Completes New River TMDL

The TMDL (Total Maximum Daily Load) was recently completed by WV DEP for the New River. What is a TMDL? A TMDL is basically a first step to a water quality improvement plan. As a technical document a TMDL prescribes allowable waste load and load allocations necessary for an impaired stream to meet water quality standards. The water quality of the Lower New River is currently considered impaired because of fecal coliform (bacteria) pollution. Within the Beckley MS4, Cranberry Creek is impaired from metal and bacteria pollution, and an aquatic biological impairment. Little Whitestick Creek is impaired because of bacteria. Whitestick Creek is impaired because of bacteria and an impaired biological community.

The TMDL's wasteload allocation for the Beckley MS4 will require a significant reduction in fecal coliform and iron loading. The TMDL also includes provisions that limit the amount of acreage that can be disturbed because of construction at any one time to 1.5% of the watershed land area or approximately 180 acres within the MS4. The TMDL now must be approved by US EPA. Once approval occurs at the federal level, a watershed based plan will be completed to implement TMDL requirements. In the next few years, BSB in collaboration with the Piney Creek Watershed Association will work on completing the watershed based plan. Upon completion, the watershed will become eligible for a number of federal grants to improve water quality. A link to the New River TMDL is available on the BSB website. If you would like to be involved in the watershed based plan, please contact Mandy at our office.

Stormwater Utility Partners Build Demonstration Rain Garden, which is visited by national stormwater expert

BSB personnel recently partnered with the Piney Creek Watershed Association, USDA Appalachian Farming System Research Laboratory and New River Master Gardeners to construct a demonstration rain garden at the Exhibition Coal Mine. A raingarden is a bioretention facility that functions to control the rate at which stormwater flows off of developed sites, while also filtering pollutants such as lead, zinc, suspended solids, bacteria, oil and grease out of the runoff. Bioretention is an emerging method used on development sites to manage stormwater pollution. The ECM raingarden, the second one in the state of WV, will be used by our program to demonstrate to developers how bioinfiltration works. PCWA obtained funding for the rain garden through state grants and generous support of the Beckley Area Foundation. USDA researchers specified the constructed soil medium and will be completing research projects on the garden. New River Master Gardeners and PCWA volunteers planted the space with native plants. BSB was honored to recently have Dr. Allen Davis, a national bioretention expert, visit the site while meeting with the USDA in Beaver. Besides Dr. Davis, professionals from throughout the region have toured the ECM raingarden.

WV Municipal Separate Storm Sewer System (MS4) General NPDES permit up for reissuance

The general NPDES permit for MS4 programs like Beckley's is now up for reissuance. After the first 5 year permit period, WV DEP is in the process of drafting the new terms and conditions of the MS4 permit. At reissuance, Beckley stormwater program staff anticipates additional new permit requirements that our program will be charged with implementing over the next five years. The draft permit will be released for public comment within the next few months. If you would like to be notified when the state's comment period on this permit opens, please contact Mandy Kneeland at mandyww@beckleysanitaryboard.org or call her at our office.

