

Data Management



John Trujillo
City of Newark
Stormwater Utility

Minimum Control measures

- Public Education
- Public Involvement
- Illicit Discharge Detection and Elimination
- Construction Site Runoff Control
- Post Construction Runoff Control
- Pollution and Good Housekeeping

Data

- Field inspection for illicit discharges
- System mapping
- Construction site inspections
- Brochures
- Inlet cleaning
- Street sweeping
- Planning meetings
- Etc...

Many Data Collection Points

- Many different individuals from many different departments are involved in the process of implementation.
- That means there are varied methods used to collect information ranging from word of mouth, paper, spreadsheets, and homegrown databases (Word, Excel, Access)

Issues

Varied data collection methods can lead to:

- Missed inspections
- Outfalls, Illicit Discharges, Construction Sites, etc
- Missing documentation
- Who was enforced upon, Who received public education materials, etc
- Difficulty in reporting
- Missing data
- How do I combine paper notes, spreadsheets, Word documents and databases into a seamless report?

Solutions

- An Integrated Data Management System that:
- Holds all program information
- BMPs and related work activities
- Outfalls, construction sites, illicit discharges, inspection activities, maintenance activities, public education activities, etc
- Works across departments/ levels/ organizations
- Allows multiple users
- Manages inspection activities
- Generates reports

Old System - ASIST

Minimum Control Manager - Plan

File View Edit Tools

Plans

- Newark Small MS4 Plan
 - Public Education and Outreach
 - 1.A.1 Develop Plan to Educate the General Public and Stakeholders
 - 1.A.2 Conduct Community-Wide Public Meeting
 - 1.B.1.C Develop/Compile and Distribute Public
 - 1.C.1.A Other Public Outreach Efforts
 - 1.B.1.A Develop/Compile and Distribute Public
 - 1.B.2 Develop School Curriculum Outreach M
 - 1.C.1.B Other Public Outreach Efforts
 - 1.B.1.B Develop/Compile and Distribute Public
 - Public Participation/Involvement
 - Illicit Discharge Detection and Elimination
 - Pollution Prevention/Good Housekeeping
 - Post-Construction Runoff Control
 - Monitoring Program
 - Construction Site Runoff Control

Linked Documents (1)

BMPs	Schedule	Labor (1)	Non-Labor (1)	Reviews (1)	Milestones (4)
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BMP Name: 1.A.1 Develop Plan to Educate the General Public and Stakeholders

BMP Description:
PY01 - Complete Community-Wide Water Quality Education Plan (WQEP) specifying specific materials to be developed, activities to be performed, interim products, staffing and schedule. This plan will also include public involvement.

Select the name of the person responsible for this BMP:

Responsible Party: Kim Lancaster

Title: Public Information Specialist

REFRESH

Great Planning/Tracking tool

The screenshot displays the 'Minimum Control Manager - Plan' software interface. The window title is 'Minimum Control Manager - Plan'. The menu bar includes 'File', 'View', 'Edit', and 'Tools'. The toolbar contains icons for navigation and editing. The main area is divided into two panes. The left pane, titled 'Plans', shows a hierarchical tree structure under 'Newark Small MS4 Plan'. The right pane, titled 'Activities', shows details for the selected activity '1.A.1 Develop Plan to Educate the General Public and Stakeholders'. The activity details include a subject, date, responsible party, title, and a comments section. A 'REFRESH' button is located at the bottom left of the window.

Plans

- Newark Small MS4 Plan
 - Public Education and Outreach
 - 1.A.1 Develop Plan to Educate the General Public and Stakeholders
 - Training - Design of Stormwater Management
 - Printed Materials Information Gathering
 - Water Quality Education Plan
 - Public Education - Building Permit Program
 - Water Quality Education Plan
 - Hold a meeting with RDEI
 - 1.A.2 Conduct Community-Wide Public Meeting
 - 1.B.1.C Develop/Compile and Distribute Public
 - 1.C.1.A Other Public Outreach Efforts
 - 1.B.1.A Develop/Compile and Distribute Public
 - 1.B.2 Develop School Curriculum Outreach Materials
 - 1.C.1.B Other Public Outreach Efforts
 - 1.B.1.B Develop/Compile and Distribute Public
 - Public Participation/Involvement
 - Illicit Discharge Detection and Elimination
 - Pollution Prevention/Good Housekeeping
 - Post-Construction Runoff Control
 - Monitoring Program
 - Construction Site Runoff Control

Activities | Expense | Linked Document (3)

1.A.1 Develop Plan to Educate the General Public and Stakeholders

Subject: Water Quality Education Plan

Date: 11/20/2003

Resp. Party: Kim Lancaster Title: Public Information Specialist

Comments:

Draft Water Quality Education Plan was produced by Lashlee, Slattery, Cansler, Baker and Lancaster. This document is under final edit for publication in the Spring of 2004. Recommended items from this plan are being implemented.

Link this Activity to a BMP milestone: <None>

REFRESH

Problems

- Developer left company, program unsupported
- Data and program housed locally, not properly backed up, server crashed.
- Updates difficult to implement with many different machines, XP, Vista, Win98, Win 7.
- Updates crash system, buggy program.

New Program MS4 Web

The screenshot displays the MS4web web application interface. The top navigation bar includes the MS4web logo and a series of menu items: Questions Setup, Departments Setup, Lists Setup, CustomField Setup, Reset Flags, Periodic Email Setup, AR Settings, and MS4 Information. Below the navigation bar, there are three buttons: Save, Cancel, and Report. The main content area is titled "MS4 Information" and contains a form with the following fields:

MS4 Information	
MS4 Name	City of Newark
Entity Type	Municipality
Executive Officer	Mayor
Signatory Officer	Service Director
E-Mail Address	
Population	48000
Permit #	4GQ00005*BG
Mailing Address	40 West Main Street
Physical Address	
City	Newark
State	OH
Postal Code	43055
Phone #	740-670-7762
Fax #	740-349-6794

The left sidebar contains a tree view of the application's settings, with "MS4 Information" selected under the "Settings" category. Other categories include Users & Permission, SWMP, BMP Data, Outfalls, Slit Discharges, Facilities, Citizen's Reports, Construction Sites, Post Construction, Training Records, Rep. Monitoring, Reporting, and Log Off. The bottom right corner of the browser window shows a zoom level of 100%.

Benefits

- Data is housed in a secure location.
- All updates are completed in the system, not at the end user.
- Access is available on any machine.
- Usability is good, many tools available.
- Great Support.

Plan Elements

The screenshot displays the MS4web Minimum Controls Measures interface. The top navigation bar is orange and contains the MS4web logo and the text "MS4 PERMIT MANAGER". The main header is light blue and reads "Minimum Controls Measures". Below this, a dropdown menu is set to "Public Education and Outreach". A table lists various BMPs with "Select" links in the first column. At the bottom, there are tabs for "BMP Details", "Implementation Tasks", "Responsibility Chart", and "BMP Data Types & Report Schedules". Below the tabs are "Save" and "Cancel" buttons, and two input fields labeled "BMP Title" and "BMP Description".

MS4web
MS4 PERMIT MANAGER

MS4Web Permit Manager

Settings

SWMP

Control Measures

BMPs

SWMP Report

BMP Data

Outfalls

illicit Discharges

Facilities

Citizen's Reports

Construction Sites

Post Construction

Training Records

Reg. Monitoring

Reporting

Log Off

Control Measure: Public Education and Outreach

Add New Delete

Select	BMP
Select	BMP
Select	1.01 Stormwater Pollution Prevention Educational Pamphlets
Select	1.02 Maintain Stormwater Utility Webpage
Select	1.03 Stormwater Education Curriculum for Area Schools
Select	1.04 Stormwater Education/Training for Non-Formal Educators
Select	1.05 Stormwater Pollution Prevention Education Booth
Select	1.06 Storm Drain Marking Program
Select	1.07 Signage to Identify Major Stream and Rivers
Select	1.08 Stormwater Awareness Banner

BMP Details Implementation Tasks Responsibility Chart BMP Data Types & Report Schedules

Save Cancel

BMP Title

BMP Description

Construction Inspections



Construction Site Inspection Detailed Report

Construction Site ID:	BE	Construction Site:	Channel St./Postal Ave.
Site Address:		Owner:	City of Newark
Inspection ID:	41	Inspection Date:	01/23/13
Inspector:	Ed Clark		
Site is Active:	<input checked="" type="checkbox"/> Yes	Waste Management:	<input checked="" type="checkbox"/> Yes
Site is Permitted:	<input type="checkbox"/> No	Outfall Velocity Controls:	<input checked="" type="checkbox"/> Yes
SWPPP is On-Site:	<input checked="" type="checkbox"/> Yes	Maintenance Acceptable:	<input checked="" type="checkbox"/> Yes
Records Acceptable:	<input checked="" type="checkbox"/> Yes	Non-Stormwater Controls:	<input checked="" type="checkbox"/> Yes
Erosion Control Acceptable:	<input checked="" type="checkbox"/> Yes	Local Controls Acceptable:	<input checked="" type="checkbox"/> Yes
Stabilization Controls Acceptable:	<input checked="" type="checkbox"/> Yes	Return Inspection Not Needed:	<input checked="" type="checkbox"/> Yes
Structural Controls Acceptable:	<input checked="" type="checkbox"/> Yes		
Tracking Controls Acceptable:	<input checked="" type="checkbox"/> Yes		
Conversation:	Spoke with Jim Harble/Job Supr. about installing sediment barriers on curb-inlets to prevent erosion into city storm lines.		
Comment:			
Enforcement:			
Date Resolved:	01/23/13		
Corrective Actions:	Sediment barriers needed on curb-inlets to prevent sediment entering city storm lines.		
Next Inspection:	02/02/13		

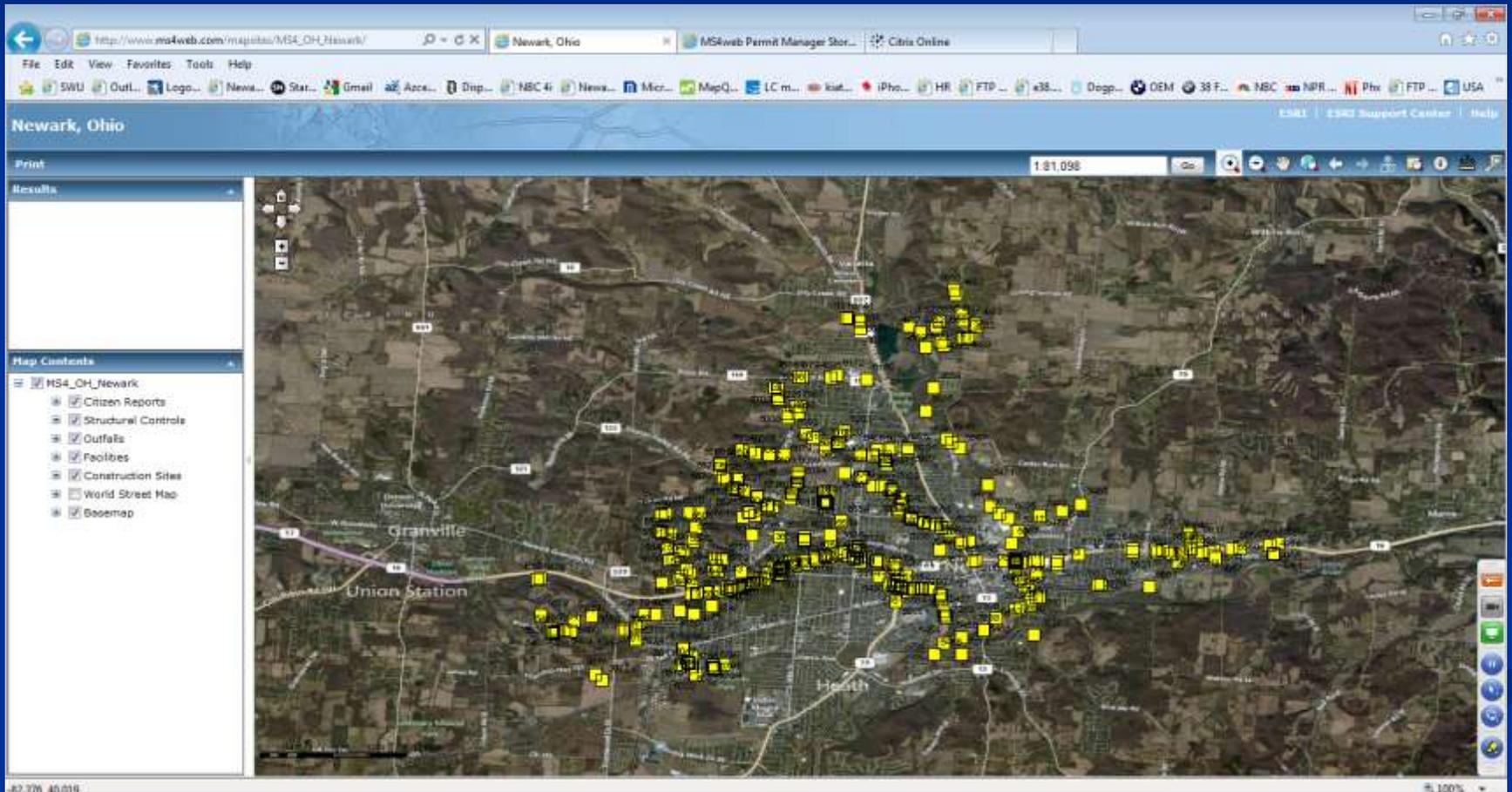


Construction Site Inspection Detailed Report

1/23/2013

Are all slopes and disturbed areas not actively being worked properly stabilized?	Pass
Are natural resource areas (trees, wetlands, streams) protected with barriers or similar BMP's?	Pass
Is the construction entrance/exit preventing sediment from being tracked into the street?	No true construction entrance/exit. All work being done is either in road and/or right-of-way
Are washout facilities (concrete) clearly marked and maintained?	N/A
Are vehicle fueling areas properly protected and maintained?	Pass
Are materials that are potential stormwater contaminants stored inside or under cover?	N/A
Are non stormwater discharges (wash water, dewatering) properly controlled?	N/A
Is a sedimentation basin required on-site and properly maintained?	N/A
Are perimeter controls and sediment barriers installed and properly maintained?	Silt Fence is properly installed and maintained. Sediment barriers/dandy bags not installed at Maple Ave or Hollander St. this part of inspection fails.
Are discharge points and receiving waters free of any sediment deposits?	Pass
Name of person and/or company a copy of this inspection report has been left with.	Jim Harble - Underground Utilities Inc.
Ed Clark - EPA Certified Erosion Sediment and Stormwater Inspector, (CESSWI) #715	Inspection passes but sediment barriers needed at intersections of Maple and Hollander on existing curb inlets that are not currently involved in construction. - Ed Clark

GIS



Illicit Discharge - Outfalls

Lucity 7.3 - City of Newark - [Storm Structure Inspection - Unnamed Filter Set]

System General Sewer Storm Transportation Water Electric Gas Trees/Parks Equipment Facility Refuse/Recycling Work Inventory Mobile View Window Help

Structure # 5218 Date Inspected 11/22/2012 : AM Most Recent Inspection

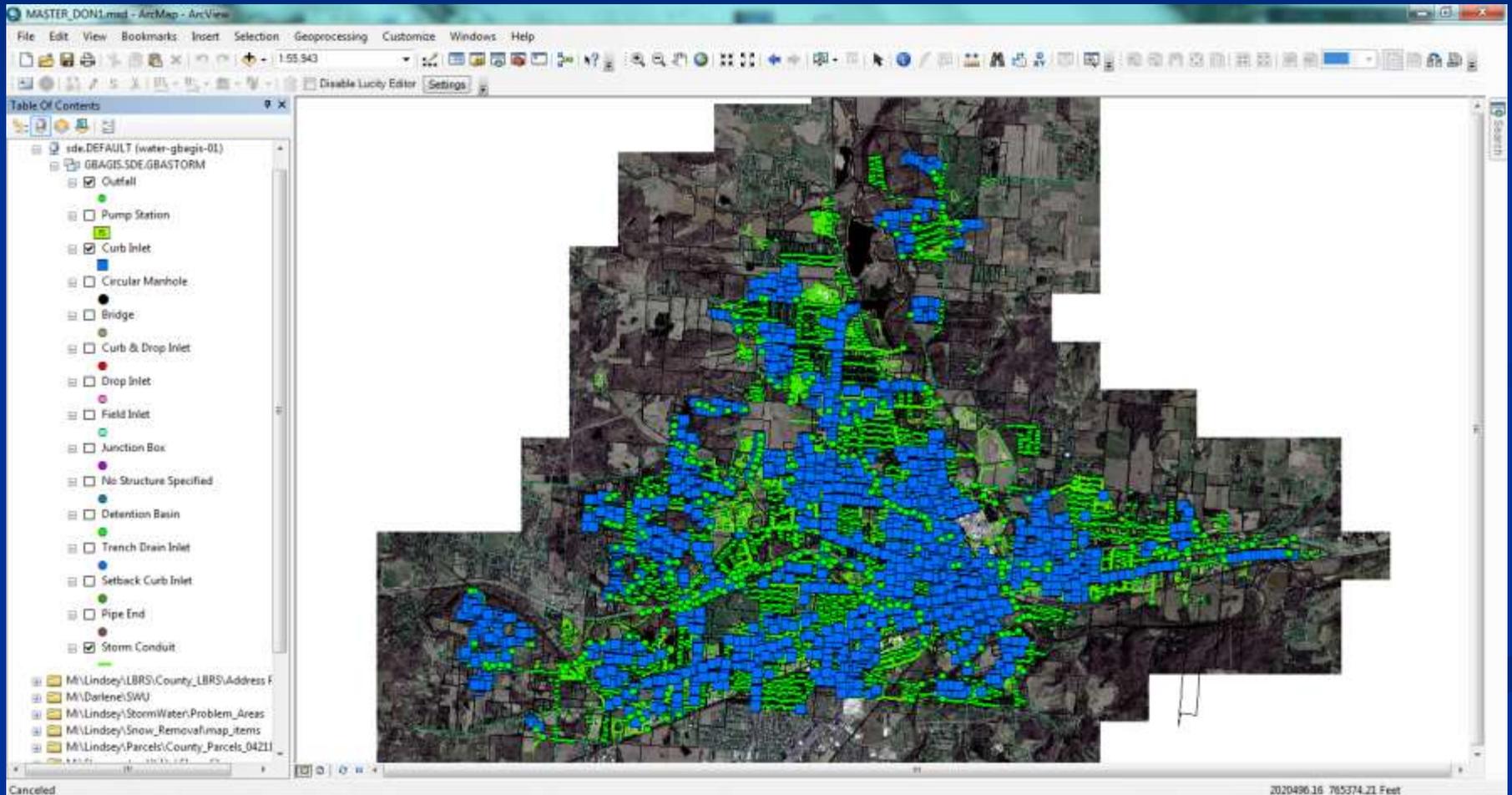
Basin Total Structural # 0

General 1 | General 2 | Inlet Inspections | Custom | Comments

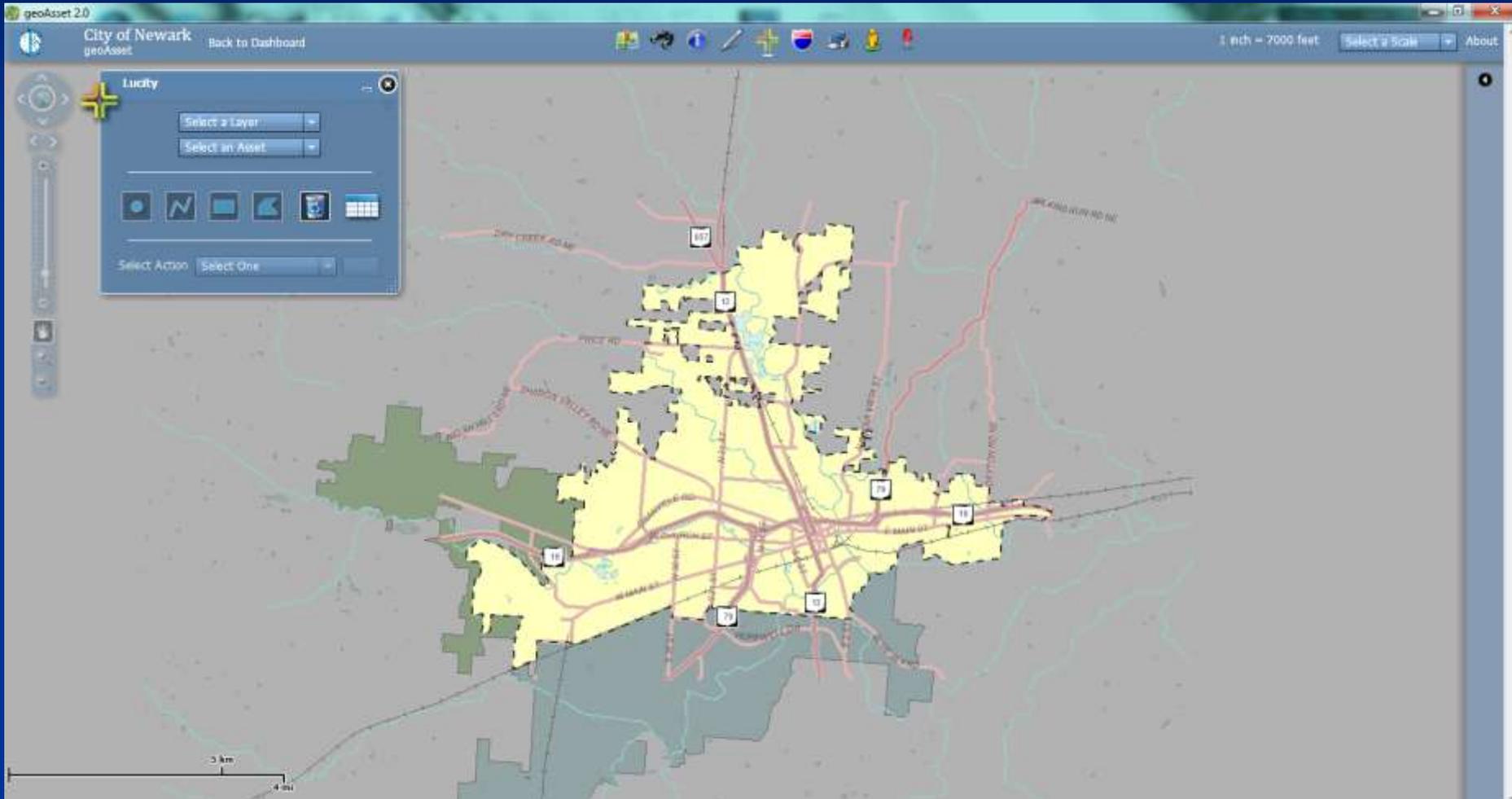
Inspected By	Ed Clark	Dry Weather Flow	8	Backwater Influenced
Inspected By		Next Inspection Date	/ /	
Address				
Cross Street				
Gen. Location	South side of <u>Everet Ave.</u> bridge / North Fork Licking River			
Lot Location		Cover Type	0	N/A
Location	14	Streamway		
Owner	1	City of Newark		
Structure Type	19	Outfall		
Surface Type				
		Inside Length (in)		
		Inside Width (in)	84.00	
		Wall Thick (in)		
		End Treatment	1	Headwall - No Wingwalls

Record 1 of 27 View Mode Ready...

GIS Data



More GIS Data



Annual Report

BMP Data Report

MCM 1 - Public Education and Outreach on Stormwater Impacts

Details of BMPs and major accomplishments for this reporting period

1.01 Stormwater Pollution Prevention Educational Pamphlets

Reporting Period: 01/01/2011 - 12/30/2011

Measurable Goal

Develop and distribute educational pamphlets to the community regarding the importance of stormwater pollution prevention. Distribute at least 2,000 pamphlets per year with a different theme represented each year.

Major Accomplishments

Produced a new Stormwater Info Brochure for 2011 based on a Federal EPA brochure. Ordered and issued a quantity of 500 to give to area residents. Reprinted the Stormwater Construction Brochure. Ordered and issued a quantity of 500 to give to area business. Ordered and issued 1000 activity books for children.

Effective?: Yes

1.02 Maintain Stormwater Utility Webpage

Reporting Period: 01/01/2011 - 12/30/2011

Measurable Goal

Maintain a stormwater link on the City website to provide stormwater-related educational materials and current and upcoming events. Log at least 1,000 visits per year to the stormwater utility home page.

Major Accomplishments

Target Audience: General Public

1609 Website Hits

Summary of Results: The goal was 1000 website hits was exceeded by 1609. This was a total of 161 % of the stated goal.

Contact Info

John Trujillo

City of Newark

Stormwater Utility

40 West Main

Newark, Ohio 43055

jtrujillo@newarkohio.net

740-670-7762

www.newarkohiowater.net/stormwater

Ty Garmon, LEED AP

CBI Systems, Ltd

Tel: (409) 835-3095 x105

Cell: (409) 658-9340

Fax: (409) 833-0317

<http://www.ms4web.com/cbisystems/>