

Data Management



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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 Pu
 - 1.A.2 Conduct Community-Wide Public Meetin
 - 1.B.1.C Develop/Complie and Distribute Public
 - 1.C.1.A Other Public Outreach Efforts
 - 1.B.1.A Develop/Complie and Distribute Public
 - 1.B.2 Develop School Curriculum Outreach Ma
 - 1.C.1.B Other Public Outreach Efforts
 - 1.B.1.B Develop/Complie 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.

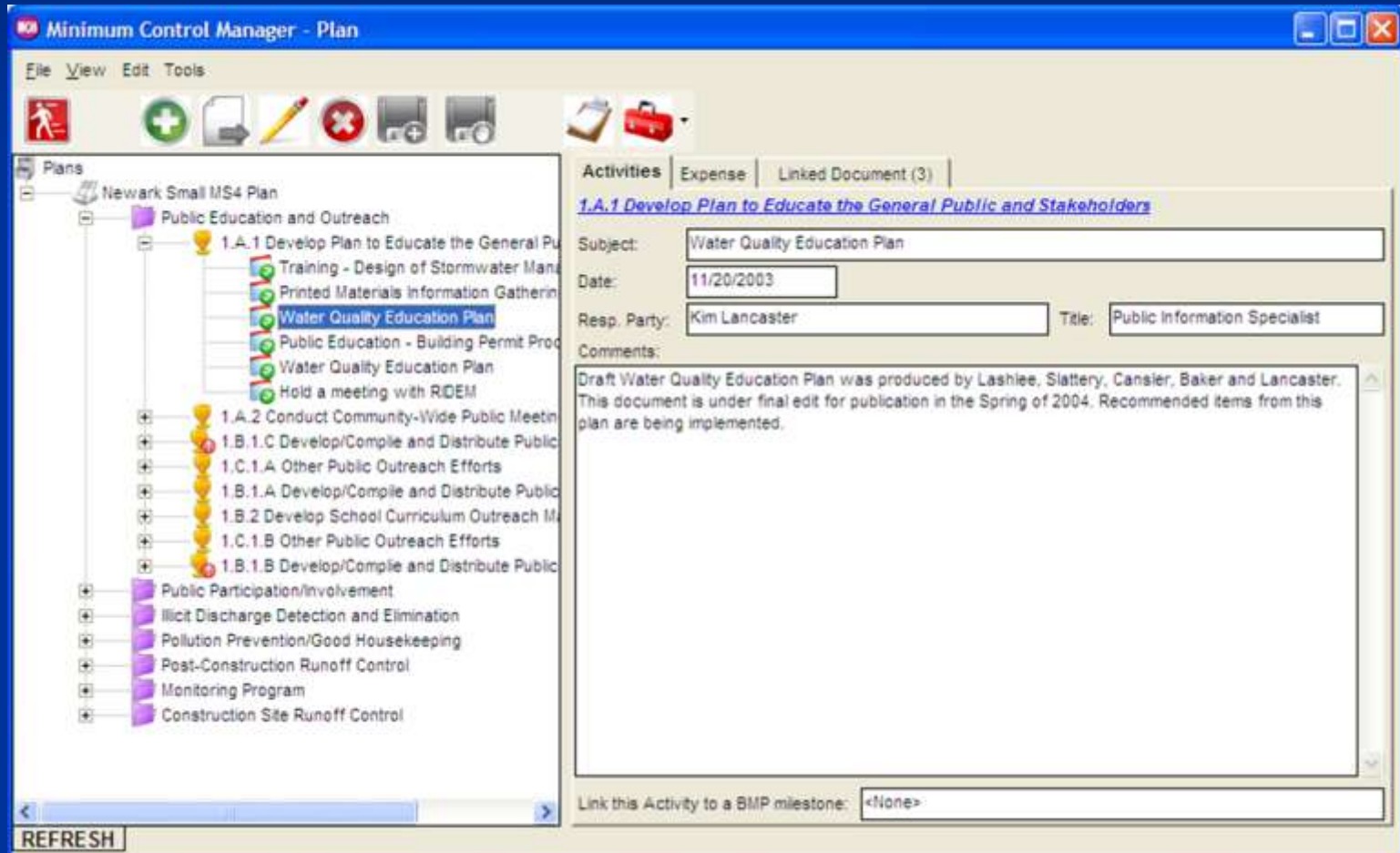
Select the name of the person responsible for this BMP:

Responsible Party: Kim Lancaster

Title: Public Information Specialist

REFRESH

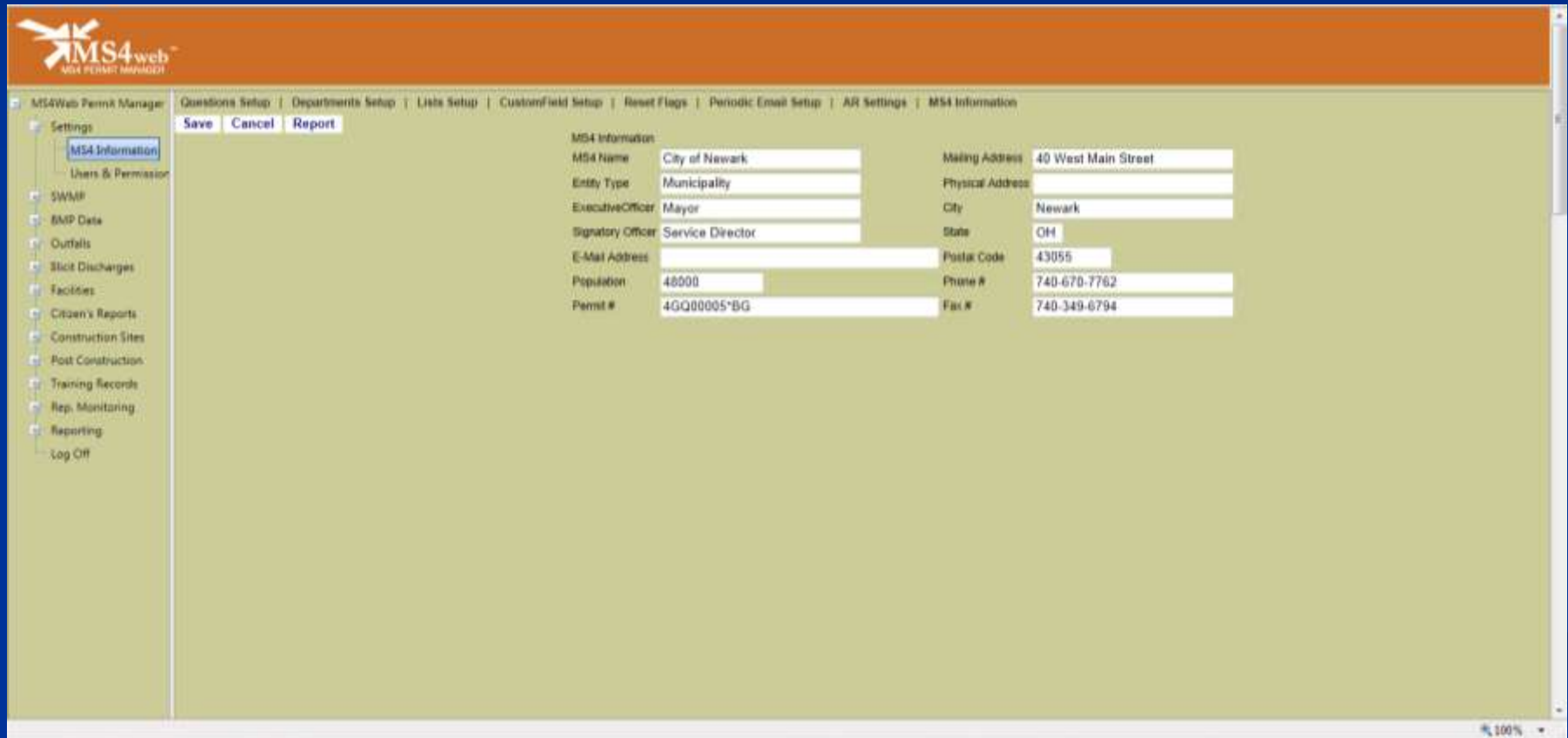
Great Planning/Tracking tool



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 MSA PERMIT MANAGER web application. The interface features a top navigation bar with the MS4web logo and a series of tabs: Questions Setup, Departments Setup, Lists Setup, CustomField Setup, Reset Flags, Periodic Email Setup, AR Settings, and MS4 Information. The MS4 Information tab is currently selected, and it contains sub-tabs for Save, Cancel, and Report. On the left side, there is a vertical menu with options: Settings (selected), MS4 Information (highlighted), 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 main content area displays the MS4 Information form, which includes fields for MS4 Name, Entity Type, Executive Officer, Signatory Officer, E-Mail Address, Population, Permit #, Mailing Address, Physical Address, City, State, Postal Code, Phone #, and Fax #. The form is populated with the following data:

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

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 shows the MS4web Minimum Controls Measures interface. The left sidebar contains a navigation menu with the following items: MS4Web Permit Manager, Settings, SWMP, Control Measures (selected), BMPs (selected), SWMP Report, BMP Data, Outfalls, illicit Discharges, Facilities, Citizen's Reports, Construction Sites, Post Construction, Training Records, Reg. Monitoring, Reporting, and Log Off. The main content area is titled 'Minimum Controls Measures' and features a 'Control Measure:' dropdown menu set to 'Public Education and Outreach'. Below this are 'Add New' and 'Delete' buttons. A table lists various BMPs, each with a 'Select' link and a description. At the bottom, there are tabs for 'BMP Details', 'Implementation Tools', 'Measureable Goals', and 'BMP Data Types & Report Settings'. Below the tabs are 'Save' and 'Cancel' buttons, followed by input fields for '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

Minimum Controls Measures

Control Measure: Public Education and Outreach

Add New Delete

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 Tools Measureable Goals BMP Data Types & Report Settings

Save Cancel

BMP Title

BMP Description

Construction Inspections



Construction Site Inspection Detailed Report

Construction Site ID:	88	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:	Yes	Waste Management:	Yes
Site is Permitted:	No	Outfall Velocity Controls:	Yes
SWPPP is On-Site:	Yes	Maintenance Acceptable:	Yes
Records Acceptable:	Yes	Non-Stormwater Controls:	Yes
Erosion Control Acceptable:	Yes	Local Controls Acceptable:	Yes
Stabilization Controls Acceptable:	Yes	Return Inspection Not Needed:	Yes
Structural Controls Acceptable:	Yes		
Tracking Controls Acceptable:	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		

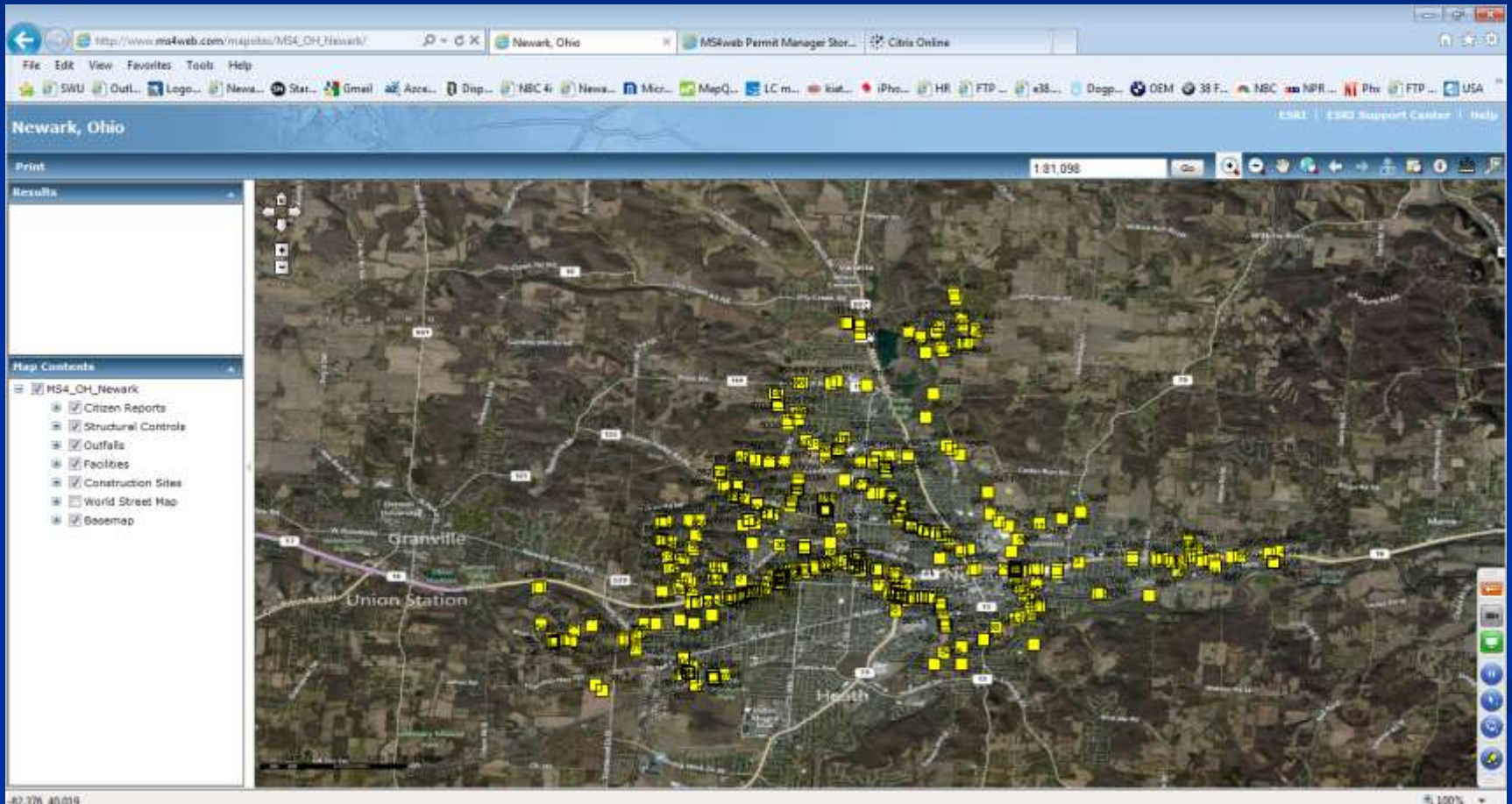


Construction Site Inspection Detailed Report

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 ☒

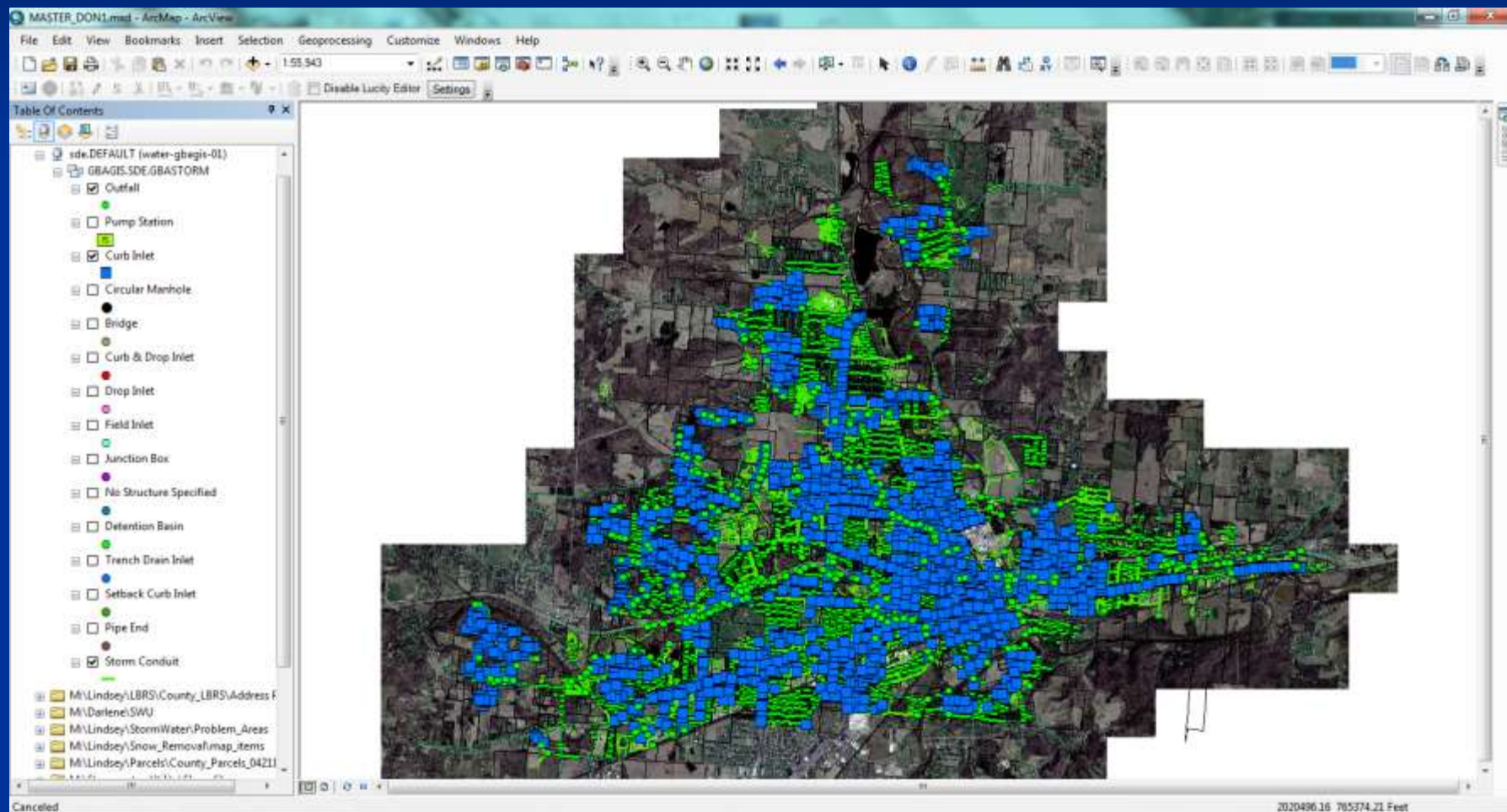
Basin Total Structural # 0

General 1 General 2 Inlet Inspections Custom Comments

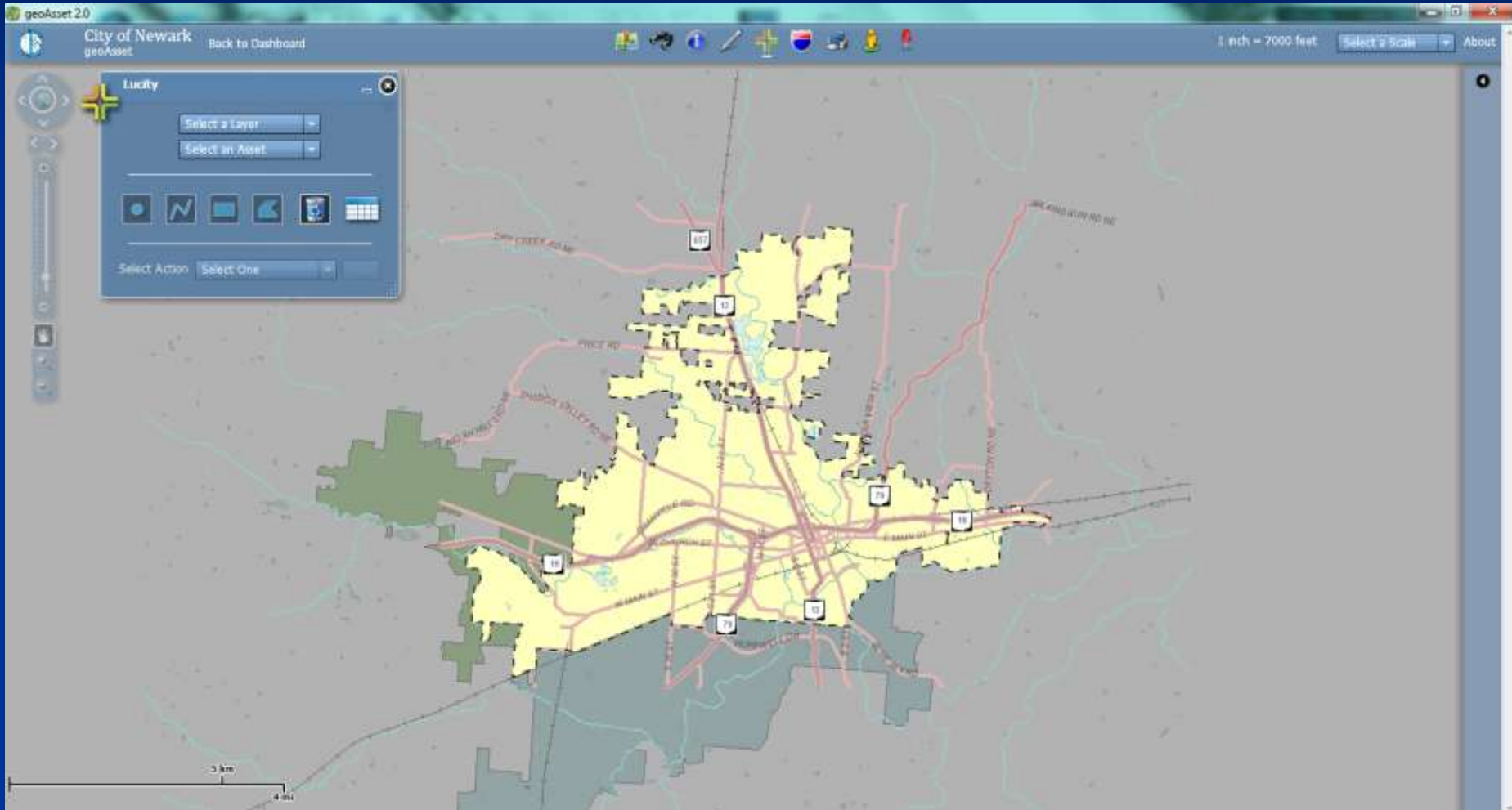
Inspected By	Ed Clark	Dry Weather Flow	8 Backwater Influenced
Inspected By		Next Inspection Date	/ /
Address			
Cross Street			
Gen. Location	South side of <u>Everet Ave.</u> bridge / North Fork Licking River		
Lot Location			
Location	14 Streamway	Cover Type	0 N/A
Owner	1 City of Newark	Inside Length (in)	
Structure Type	19 Outfall	Inside Width (in)	84.00
Surface Type		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

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