# Municipal Separate Storm Sewer System (MS4)

Environmental Quality & Public Works

Committee

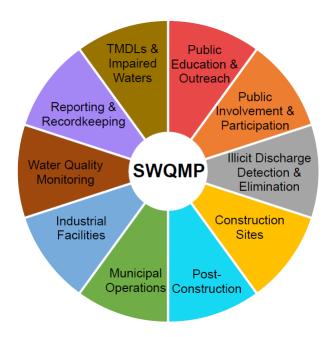
October 20, 2015

Environmental Quality & Public Works

Division of Water Quality

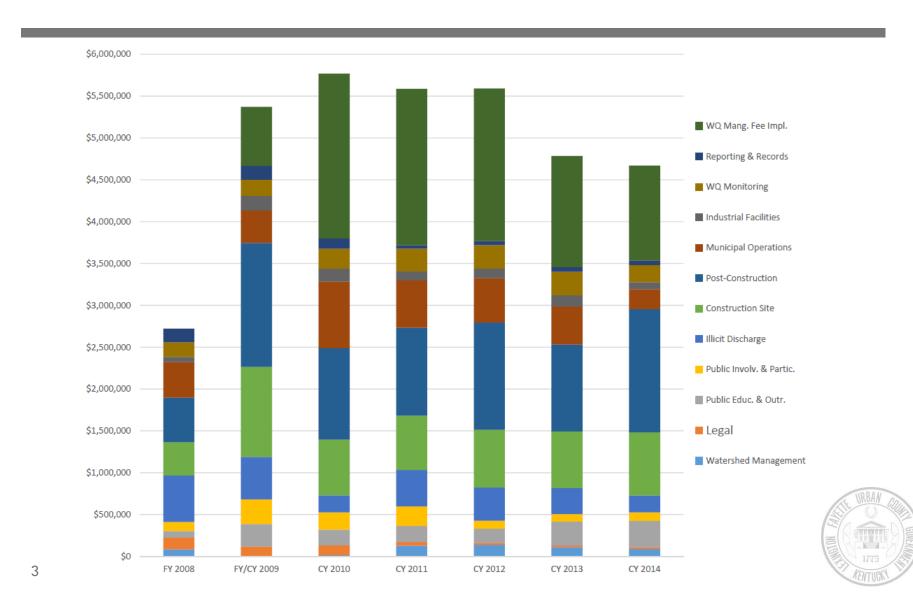
## Purpose

 Our MS4 Permit requires an annual training session for elected officials regarding the Stormwater Quality Management Program.



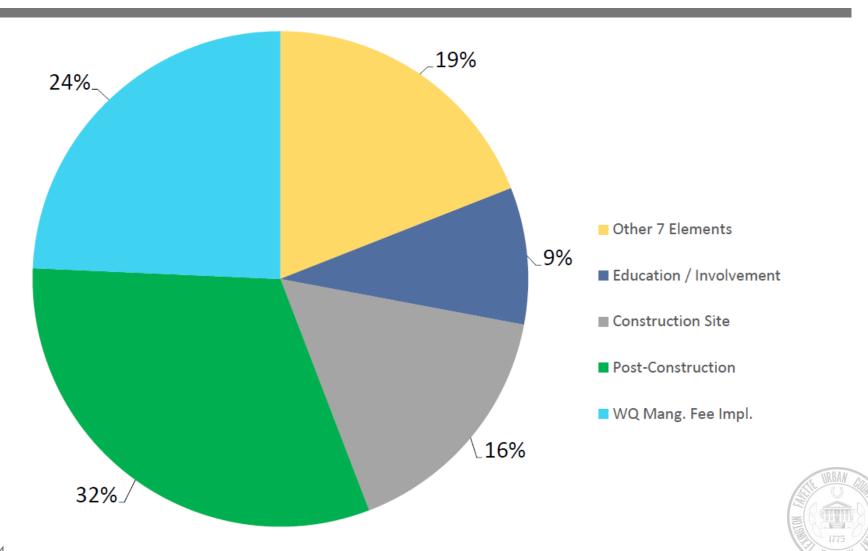


## **Expenditures by Year**

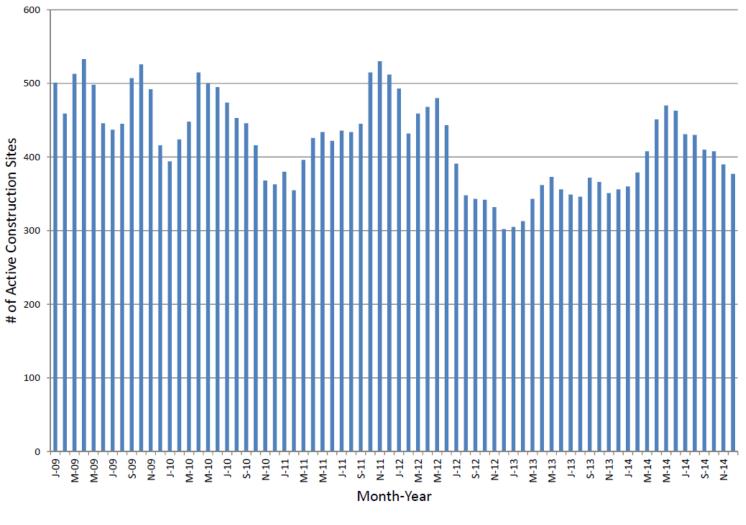


## CY2014 Expenses by Prog. Element

(~\$4.7M)

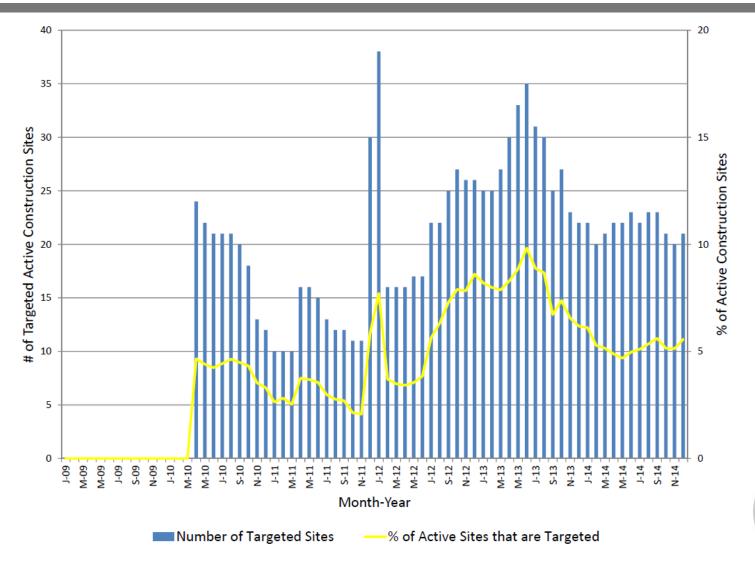


## Active Construction Sites by Month



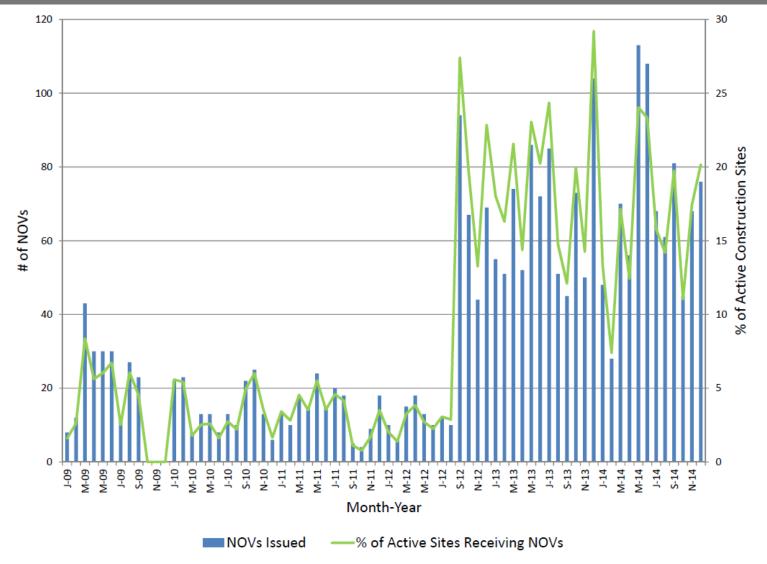


## Targeted Active Construction Sites



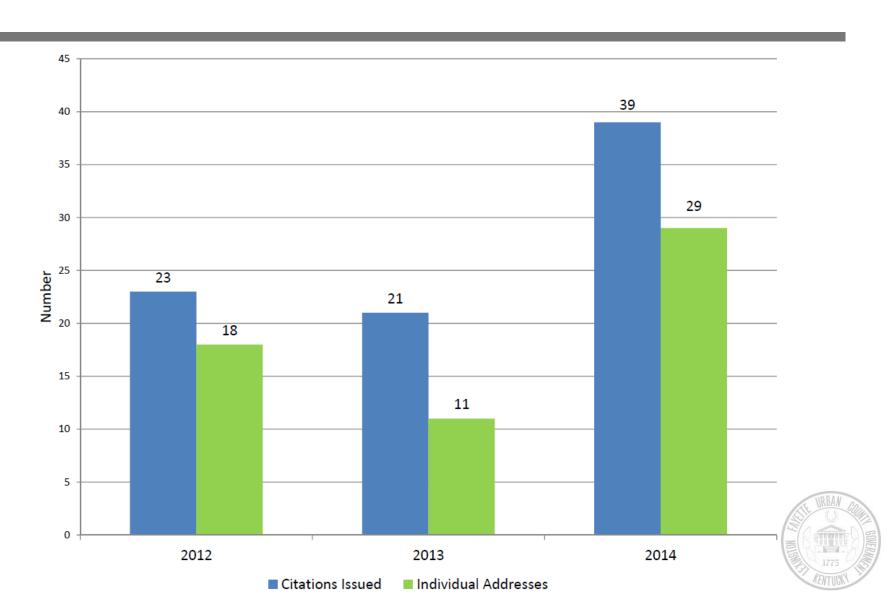


#### Active Construction Site Enforcement

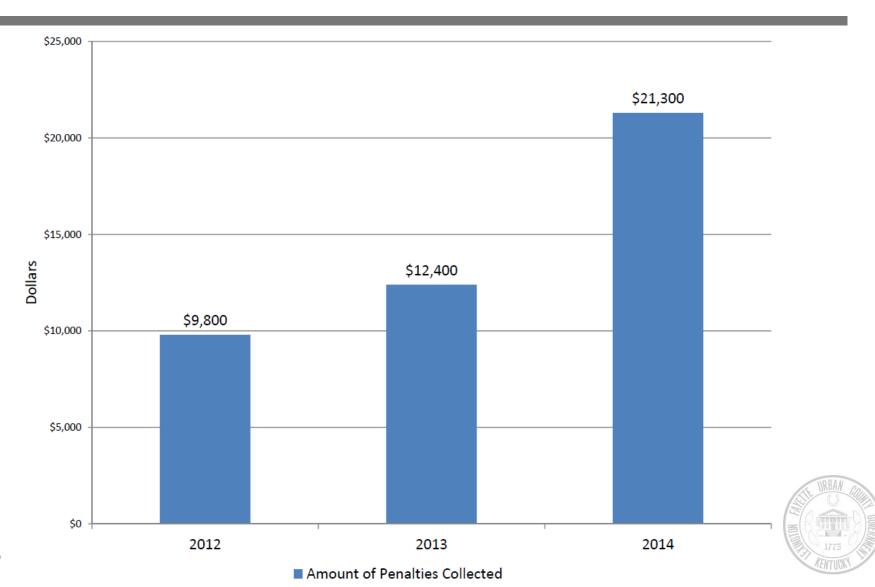




#### Active Construction Site Enforcement



#### Active Construction Site Enforcement



## Industrial & High-Risk Commercial

- Industrial Facility Inspections:
  - >90% every 2-years 2009-2014
  - Inventory ranged from 57 to 84 facilities
- High-Risk Commercial Inspections:
  - 100% over the permit cycle 2009-2014
  - Inventory ranged from 11 to 22

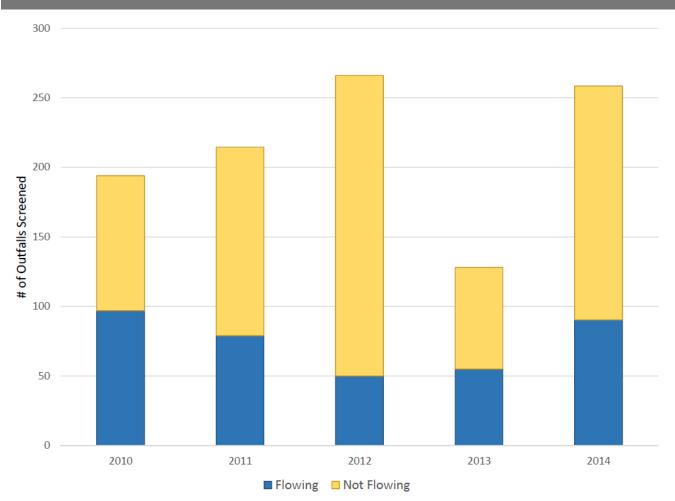


#### Visual Stream Assessments

Watershed	Stream Miles Walked	Outfalls Located	Flowing Outfalls	Utility Crossings	Severe Erosion	Stream Crossings	Litter / Dump Sites
Cane Run	16.6	174	16	43	10	116	35
East Hickman	24.4	207	22	33	0	96	7
North Elkhorn	23.8	202	27	113	9	107	3
South Elkhorn	28.9	546	43	270	37	298	19
Town Branch	10.9	239	45	77	12	82	11
West Hickman	27.8	653	113	127	15	360	19
Wolf Run	13.5	264	15	53	18	114	19
TOTAL	145.9	2,285	281	716	101	1,173	113

## Screening of Major Outfalls

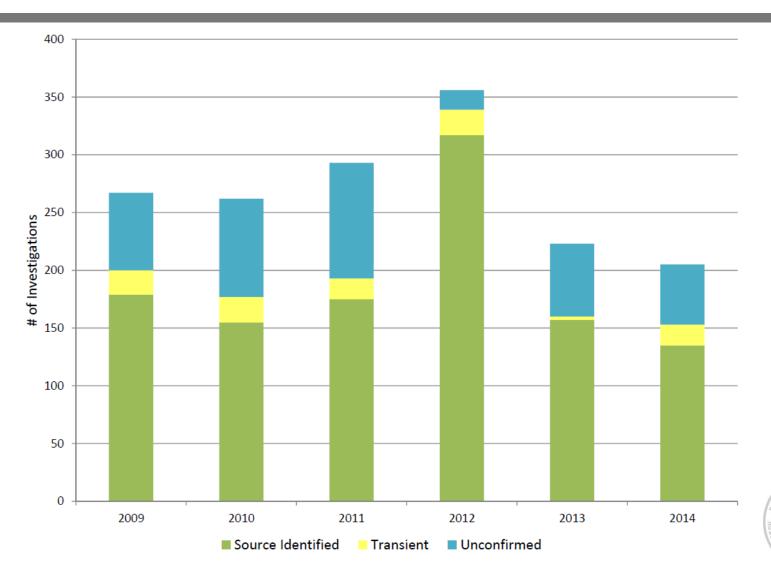
(361 in inventory)



Watershed	# of Major Outfalls		
Cane Run	53		
East Hickman	45		
North Elkhorn	35		
South Elkhorn	63		
Town Branch	53		
West Hickman	80		
Wolf Run	32		
TOTAL	361		

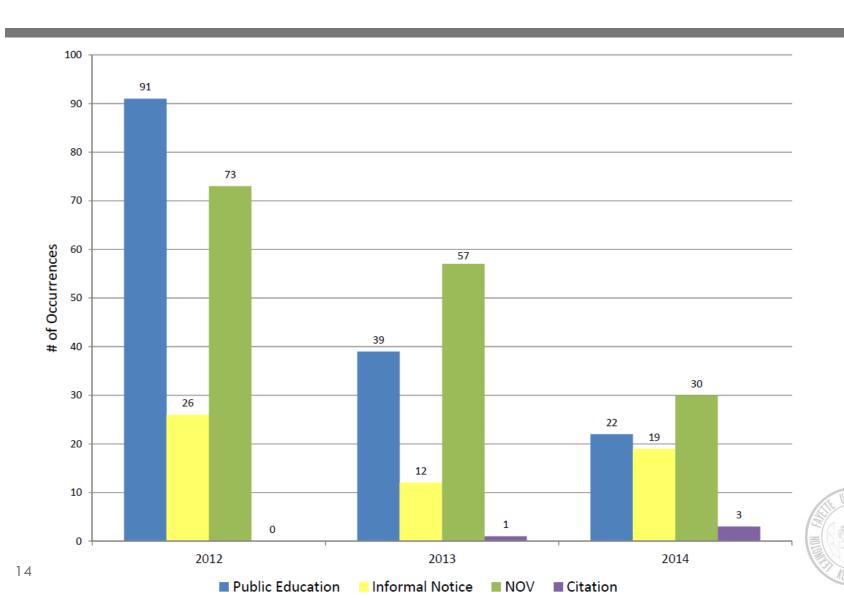


## Illicit Discharge Investigations

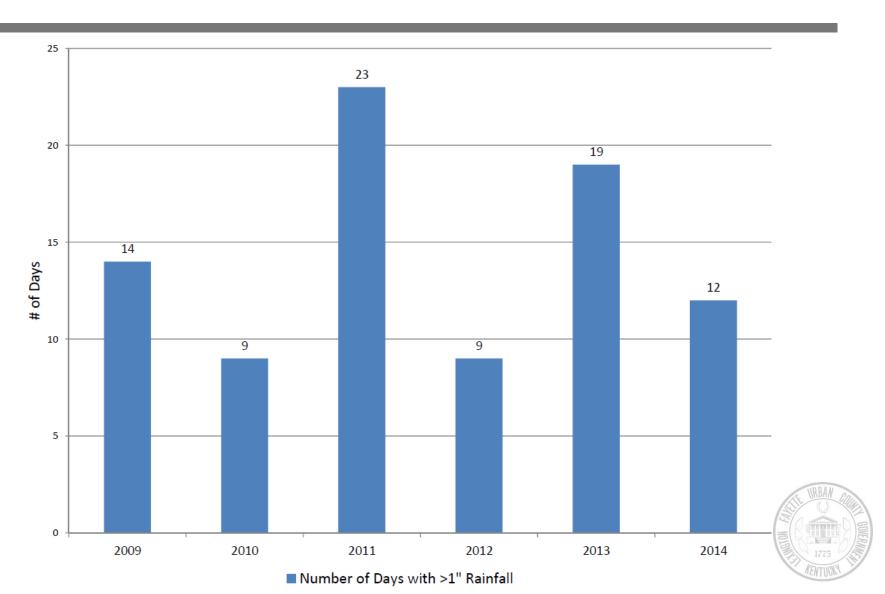




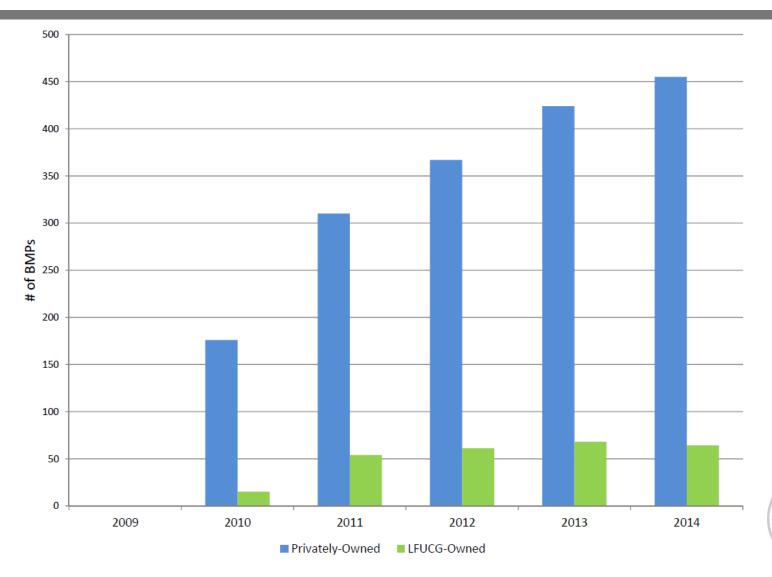
## **IDDE Compliance & Enforcement**



# Critical Culvert Inspections



# Water Quality Controls





#### Stormwater Controls

- Retention Pond Inspections:
  - 100% every month 2009-2014
  - Inventory ranged from 98 to 111 ponds
- Detention Basin Inspections:
  - 100% twice per year 2009-2014
  - Inventory ranged from 1,162 to 1,212



## Programs of Potential Concern

- Detention Basins / Retention Ponds
  - Clarifying maintenance responsibilities
- Illicit Discharge Detection and Elimination
  - Drainage way inspection program
  - Quantifying eliminated loads to support implementation of Total Maximum Daily Loads



## Near-Term Permit Requirements

- Stormwater Quality Management Program
- Watershed-Focused Monitoring Program
- Stormwater Design Manual
- Pilot Watershed Report Card Webpage



# Questions?