

3.1 HARRODS CREEK

This report is an update to the *WATERS of Jefferson County Report – July 1, 1999 to June 30, 2000*. For additional information on the Harrods Creek Watershed, refer to the *WATERS of Jefferson County Report – July 1, 1999 to June 30, 2000* located on the CD in Appendix I.

Exhibit 4 illustrates several features of the Municipal Separate Storm Sewer System (MS4) and Sanitary Sewer Overflow (SSO) Programs in the Harrods Creek Watershed.

Figure 5. Harrods Creek Watershed (Jefferson County Portion Only)



3.1.1 HISTORY, DEMOGRAPHIC AND COMMUNITY INFORMATION

Refer to the *WATERS of Jefferson County Report – July 1, 1999 to June 30, 2000*.

3.1.2 HYDROLOGY AND FLOODING

There are approximately 1.4 square miles of flood hazard area (area within the 100-year Federal Emergency Management Administration (FEMA) Floodplain) and there are an estimated 219 structures located within this floodplain.

Refer to the *WATERS of Jefferson County Report – July 1, 1999 to June 30, 2000*.

3.1.2.1 Flood Prevention Measures

Refer to the *WATERS of Jefferson County Report – July 1, 1999 to June 30, 2000*.

3.1.3 STATUS OF WATER QUALITY

Refer to the *WATERS of Jefferson County Report – July 1, 1999 to June 30, 2000*.

3.1.4 WATER QUALITY IMPACTS

Water quality data collected during this reporting period and the last reporting period has been analyzed. The majority of the data was collected with minimonitors from the ambient monitoring sites. A summary of the water quality violations for all of Jefferson County can be found in the *WATERS of Jefferson County Report – July 1, 2000 to June 30, 2001 CD* located in Appendix I. Table 18 shows a summary of the water quality violations within the Harrods Creek Watershed.

Table 18. Summary of Water Quality Violations in the Harrods Creek Watershed – 3rd Qtr 1999 to 3rd Qtr 2000

	% Temp Violations*	% Acute D.O. Violations**	% Acute D.O. Violations (exclude)	% Chronic D.O. Violations**	Average Duration of Chronic D.O. (Hrs)	% of pH Violations < 6 SU	% of pH Violations > 8 SU	# of pH Violation Periods***
Harrods Creek at Covered Bridge	0.00%	4.03%	1.00%	4.62%	65	0.00%	40.07%	0

* Per Time Interval

** Per Time Interval Excluding Questionable Values

*** One Unit Change Per 24 Hours

3.1.4.1 Point Source

Table 19 summarizes point sources in the Harrods Creek Watershed.

Table 19. Summary of Point Sources – Harrods Creek Watershed

Sanitary Sewer Overflows	Combined Sewer Overflows	Storm Water Outfalls	General Permittees	Significant Industrial Users	Wastewater Treatment Plants
Recurring: 3 Investigated: 2 Eliminated: 1	NA	Year Sampled: 1998 Total: 312 Contaminated: 6 (.019%)	3	3	MSD Regional: 1 MSD small: 4 Private: 4

SSO fact sheets are located in Appendix V.

3.1.4.2 Non-Point Source

Refer to the *WATERS of Jefferson County Report – July 1, 1999 to June 30, 2000*.

3.1.4.3 Habitat and Biological Quality

During the reporting period algae and macroinvertebrates were sampled at the ambient stream monitoring locations. Algae were sampled six different times (three days at a time) at the ambient monitoring sites. Three-day growth rates, maximum carrying capac-

ity, community structure, and biomass estimates are being analyzed for each sample. The algal and macroinvertebrate samples have been processed, but the taxonomic data will not be ready until the next reporting period. All algal and macroinvertebrate data will be included in the *WATERS of Jefferson County Report – July 1, 2001 to June 30, 2002*.

3.1.5 TRACKING CHANGES IN WATER QUALITY

Refer to the *WATERS of Jefferson County Report – July 1, 1999 to June 30, 2000*.

3.1.6 MS4 PROGRAM – CO-PERMITTEES

There are four co-permittees in the Harrods Creek Watershed that are responsible for fulfilling the requirements of the MS4 Permit. The co-permittees include:

- City of Prospect
- Jefferson County
- Kentucky Transportation Cabinet, District Five
- MSD

Following are watershed-specific highlights from the co-permittees' MS4 Programs. Only those permit elements that have highlights are listed. For highlights that are not watershed-specific, refer to the MS4 Programmatic section of the *WATERS Report*. All MS4 Permit activities for each of the co-permittees is detailed in Appendix III.

3.1.6.1 City of Prospect



Refer to the *WATERS of Jefferson County Report – July 1, 1999 to June 30, 2000* for information on the City of Prospect.

Post Construction Controls, Prospect

Prospect is currently building an addition to the existing Prospect City Hall. The drainage from the parking lot will be diverted to a sand trap in order to filter the runoff before it enters Harrods Creek. The project is currently in the planning phase.

Prospect, MSD and the Harrods Creek Task Force received a grant from the Department of Fish and Wildlife to do stream restoration and stream buffers along a section of Harrods Creek that is adjacent to Prospect City Hall.

The Innesbrook Subdivision, located within the City of Prospect, is using a lesser than traditional zoning and the streets will be narrower than required by Louisville and Jefferson County Planning and Zoning. This will result in a reduction of impervious area on the site.

Public Education/Outreach Programs, Prospect

Prospect, MSD and the Harrods Creek Task Force received a grant from the Department of Fish and Wildlife to do stream restoration and stream buffers along a section of Harrods Creek that is adjacent to Prospect City Hall. The project will be used as a learning opportunity for Prospect area parents and children.

3.1.6.2 Jefferson County



Refer to the *WATERS of Jefferson County Report – July 1, 1999 to June 30, 2000* for information on Jefferson County.

Post Construction Controls, Jefferson County

Norton Commons is a proposed 600-acre traditional village development located near KY 22 and Chamberlain Lane in the Harrods Creek Watershed. The Norton Commons development will utilize a number of storm water BMPs, including water quality basins, Stormceptors®, and riparian buffers. Phase I of the project has been approved by MSD and construction is ready to begin.

3.1.6.3 Kentucky Transportation Cabinet, District Five



Refer to the *WATERS of Jefferson County Report – July 1, 1999 to June 30, 2000* for information on the Kentucky Transportation Cabinet, District Five (KyTC).

There are no watershed-specific MS4 activities to highlight for KyTC during the reporting period.

3.1.6.4 MSD



Refer to the *WATERS of Jefferson County Report – July 1, 1999 to June 30, 2000* for information on MSD.

Post Construction Controls, MSD

Prospect, MSD and the Harrods Creek Task Force received a grant from the Department of Fish and Wildlife to do stream restoration and stream buffers along a section of Harrods Creek that is adjacent to Prospect City Hall. The project is currently in the planning phase.

Monitoring, MSD

MSD has one long-term monitoring location in the Harrods Creek Watershed as part of their ambient monitoring program (see Table 20). The location has a minimonitor and a United States Geological Survey (USGS) stream flow gauge, which operate continuous node-collectors. Data is recorded at intervals of 15 minutes, 24 hours per day.

Table 20. Monitoring Locations –Harrods Creek Watershed

<i>MS4 Related Monitoring</i>
<ul style="list-style-type: none">• Harrods Creek at Covered Bridge

A summary of the water quality data collected during the current and previous reporting periods can be found on the *WATERS of Jefferson County Report – July 1, 1999 to June 30, 2000* CD in Appendix I.

3.1.7 SSO PROGRAM – MSD

SSO Projects

MSD conducted the following projects during the reporting period as part of the SSO Program:

High School Inflow Source Identification Program - The 2001 High School Program inspected 5,308 LF of interceptor finding no possible pipe defects and two defected man-holes in the Harrods Creek watershed.

Prospect SSES – This project analyzed and investigated 168,940 LF of collection system in the Harrods Creek watershed.

SSO Planning

SSO Project Planning is revised constantly based on the results of ongoing investigations and rehabilitation projects. The following projects are included in the current 5-year plan approved by the MSD Board:

- *I/I General Services – fiscal year 2002*
- *I/I General Services – fiscal year 2003*
- *I/I General Services – fiscal year 2004*

SSO Education

Two public meetings were held to educate residents about SSOs and investigation activities:

- *Prospect SSES, Public Meeting August 2000*

SSO Related Costs

Table 21 summarizes the SSO Program related costs for the reporting period and projected costs for the next three years in the Harrods Creek Watershed.

Table 21. SSO Program Related Costs for July 2000 to June 2004 – Harrods Creek Watershed

<i>SSO Program</i>	<i>July 2000 – June 2001</i>	<i>July 2001 – June 2002</i>	<i>July 2002 – June 2003</i>	<i>July 2003 – June 2004</i>
High School Inflow Source Identification Program*	\$178,932	\$0	\$0	\$0
Prospect SSES*	\$143,402	\$0	\$0	\$0
I/I General Services*	\$709,184	\$830,043	\$400,000	\$250,000
<i>Total*</i>	<i>\$1,031,518</i>	<i>\$830,043</i>	<i>\$400,000</i>	<i>\$250,000</i>

*Only portions of these funds were expended in the Harrods Creek watershed.

EXHIBIT #4

Harrods Creek Watershed

Exhibit #4 may be downloaded at:

<http://www.msdlouky.org/insidemsd/waters/2001/exhibit4.pdf>  (1Mb)