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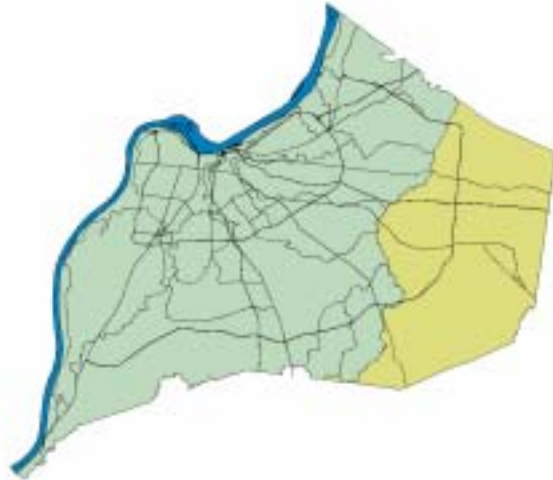
3.10 CEDAR CREEK

3.11 FLOYDS FORK

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

Exhibit 14 illustrates several features of the Municipal Separate Storm Sewer System (MS4) and Sanitary Sewer Overflow (SSO) Programs in the Floyds Fork Watershed.

Figure 24. Floyds Fork Watershed (Jefferson County Only)



3.11.1 HISTORY, DEMOGRAPHIC AND COMMUNITY INFORMATION

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

3.11.2 HYDROLOGY AND FLOODING

There are approximately 10.8 square miles of flood hazard area (area within the 100-year Federal Emergency Management Administration (FEMA) Floodplain) and there are an estimated 503 structures located within this floodplain.

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

3.11.2.1 Flood Prevention Measures

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

3.11.3 STATUS OF WATER QUALITY

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

3.11.4 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 61 shows a summary of the water quality violations within the Floyds Fork Watershed.

Table 61. Summary of Water Quality Violations in the Floyds Fork 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***
Floyds Fork at Ash Avenue	0.00%	76.03%	61.06%	71.95%	229	0.00%	0.27%	0
Floyds Fork at Taylorsville Road	0.08%	36.66%	36.66%	49.04%	153	0.00%	29.72%	6
Chenoweth Run at Gelhaus Lane	0.25%	25.58%	15.92%	14.06%	74	0.00%	27.38%	40
Chenoweth Run at Ruckreigel Pkw	0.00%	6.52%	6.52%	11.93%	66	0.00%	5.77%	2
Floyds Fork at Bardstown Road	New ambient stream monitoring location – contains no USGS flow gauge							

* Per Time Interval
 ** Per Time Interval Excluding Questionable Values
 *** One Unit Change Per 24 Hours

3.11.4.1 Point Source

Table 62 summarizes point sources in the Floyds Fork Watershed.

Table 62. Summary of Point Sources – Floyds Fork Watershed

Sanitary Sewer Overflows	Combined Sewer Overflows	Storm Water Outfalls	General Permittees	Significant Industrial Users	Wastewater Treatment Plants
Recurring: 4 Investigated: 2 Eliminated: 1	NA	Year Sampled: 1996, 1997,1999 Total: 739 Contaminated: 5 (.006%)	15	8	MSD Regional: 1 MSD small: 11 Private: 36

SSO fact sheets are located in Appendix V.

3.11.4.2 Non-Point Source

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

3.11.4.3 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 capacity, 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*.

3.11.5 TRACKING CHANGES IN WATER QUALITY

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

3.11.6 MS4 PROGRAM – CO-PERMITTEES

There are five co-permittees in the Floyds Fork Watershed that are responsible for fulfilling the requirements of the MS4 Permit. The co-permittees include:

- City of Anchorage
- City of Jeffersontown
- 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.

3.11.6.1 City of Anchorage



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

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

3.11.6.2 City of Jeffersontown



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

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

3.11.6.3 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

Little Springs Farm is located on the south side of Bardstown Road at Floyds Fork. The development will be installing several water quality basins to capture the first ½-inch of runoff from the development. The basins will be planted with wetland vegetation. The developer has also agreed to protect numerous karst features within the development. The project is currently in the planning phase.

Glenmary Village is located on the north side of Bardstown Road at the Floyds Fork/Big Run convergence. The development will be installing a single water quality basin to treat the first ½-inch of runoff from the development. A sand filter will also be used in conjunction with the water quality basin. The project is currently in the planning phase.

The Woods of Beckley Station is a development in the Floyds Fork Watershed. As part of the development, three water quality retention basins were constructed to capture and control storm water runoff. The construction is complete.

3.11.6.4 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.

3.11.6.5 MSD



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

Monitoring, MSD

MSD has five long-term monitoring locations in the Floyds Fork Watershed as part of their ambient monitoring program (see Table 63). Each 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 63. Monitoring Locations – Floyds Fork Watershed

MS4 Related Monitoring

- Floyds Fork at Taylorsville Rd
 - Floyds Fork at Ash Ave
 - Floyds Fork at Bardstown Road
 - Chenoweth Run at Gelhaus Ln
 - Chenoweth Run at Ruckreigle
-

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

3.11.7 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 51,451 LF of interceptor finding two possible pipe defects and 27 defected man-holes in the Floyds Fork watershed.

Preliminary SSO Storage Facility Design – This project encompasses the siting and preliminary design of a wastewater equalization storage facility at the old Kirkham Trace WTP. The purpose of the facility is to provide temporary wet-weather storage of sanitary flow upstream of the Pope Lick PS in order to reduce or eliminate the chance of releasing wastewater to the environment.

Jeffersontown Annual I/I Remediation Phase 2 – Under this project the following rehabilitation took place in the Floyds Fork watershed.

- 2,540 LF of cured-in-place sewer main rehabilitation.
- 67 cured-in-place lateral rehabilitations.
- 820 manhole chimney seal installations

Cedar Creek 2 I/I Remediation – Under this project, 395 manhole chimney seals were installed in the Floyds Fork watershed.

Cedar Creek Model – The Cedar Creek watershed contains 90,000 LF of the 506,000 LF of collection system that was modeled in this project.

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*
- *Kirkham Trace Wet Weather Storage Facility Construction – fiscal year 2002*
- *Jeffersontown I/I Remediation Phase 3*
- *Jeffersontown I/I Remediation Phase 4*
- *Floyds Fork SSES Phase 1*

Planned rehabilitation will be similar to ongoing rehabilitation projects.

SSO Education

No specific public meetings were held during the reporting year.

SSO Related Costs

Table 64 summarizes the SSO Program related costs for the reporting period and projected costs for the next three years in the Floyds Fork Watershed.

Table 64. SSO Program Related Costs for July 2000 to June 2004 – Floyds Fork 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*	\$215,581	\$0	\$0	\$0
Preliminary SSO Storage Facility Design	\$48,795	\$0	\$0	\$0
Jeffersontown Annual I/I Remediation Phase 2*	\$975,178	\$0	\$0	\$0
I&I General Services*	\$854,439	\$830,043	\$400,000	\$250,000
Kirkham Trace Wet Weather Storage	\$0	\$433,342	\$1,321,658	\$0
Cedar Creek 2 I/I Remediation*	\$1,086,075	\$0	\$0	\$0
Cedar Creek Model*	\$60,728	\$0	\$0	\$0
Jeffersontown I/I Remediation Phase 3	\$1,235,407	\$374,612	\$0	\$0
Jeffersontown I/I Remediation Phase 4	\$0	\$0	\$1,131,991	\$608,009
Total	\$4,476,203	\$1,637,997	\$28,53,649	\$858,009

*Only portions of these funds were expended in the Floyds Fork watershed.