

**2007 ANNUAL REPORT**  
**WICHITA NPDES MUNICIPAL STORM WATER PERMIT**

**I. Introductory Narrative**

**Purpose:** This section is to identify the permit for which the report is provided and address any other topics the municipality would like to discuss beyond the required topics.

**Response:** This report is submitted in compliance with the City of Wichita's NPDES Storm Water Permit, Kansas Permit #MAR94-S001, Federal Permit #KS0091049.

There are several issues that we would like to discuss in this section of the report. First, in 2007, the City Council annexed approximately 2179 square miles into the city, giving the city a total area of 164,233 square miles. The 2007 annexations added a total of 235 housing units with a total population of 564. Attached, in Appendix B, is a summary of the 2007 annexation activities, along with a map of the current city limit boundaries as of December 31, 2007.

The City was issued a new NPDES permit effective October 1, 2007. This report is based largely on the requirements of the expired permit, but also addresses the issues set forth in the new permit.

As reported in prior annual reports, the City continues to work on the Lower Arkansas River fecal coliform contamination issue. The technical advisory and steering committees are still active in overseeing work that is currently being done and planning for work in the future.

In 2007, the Environmental Services Department received a grant in the amount of \$60,000 to proceed with the Lower Arkansas WRAPS Assessment Grant (Phase 2). This phase of the WRAPS program will include hiring a full time ES project coordinator, assessing the condition of priority areas of the Arkansas River and tributaries and designing/installing demonstration projects to identify strategies to address water quality issues including concerns such as bacteria levels and sedimentation. As part of the program, demonstration projects will be developed to address stormwater quality issues. It is envisioned the grant will assist with the "green roof" porous pavement demonstration and several bio-swale projects that are planned by the City of Wichita. KDHE has requested the City of Wichita and Sedgwick County work on this project together and coordinate the efforts. In general, this partnership identifies areas the City of Wichita will coordinate (predominantly urban) and areas that Sedgwick County will work (predominantly suburban or rural).

Monthly sampling was instituted in 1999 on the Big Arkansas River at 53<sup>rd</sup> Street North, at 47<sup>th</sup> Street South, and at 63<sup>rd</sup> Street South and the Little Arkansas River at 53<sup>rd</sup> Street North for all of the principal pollutants of concern. This sampling continued through out 2007. These sample sites were selected to allow the City to determine the principal pollutant levels coming into Wichita, along with the pollutant levels when flow leaves the City. Data for each pollutant is listed in Appendix N.

As has been reported in the last few Annual Reports, Sedgwick County has now taken over all responsibility for solid waste operations in this county. This includes all recycling and household hazardous waste efforts. From this point forward, Sedgwick County should report on these efforts as a part of their Phase II Storm Water Annual Report.

## II. Status of Compliance

### A. **Pollution Prevention Requirements**

**Purpose:** Provide a summary of the amount of waste material properly disposed of through the Household Hazardous Waste/Used Motor Vehicle Fluid Program. The publication and promotion of this program should be documented.

**Status:** This program is now run by Sedgwick County.

The City of Wichita's efforts to raise public awareness about pollution of the Arkansas River continued to take a broad term approach as it has done in past years. In 2007, the City of Wichita continued to do education through the use of mass media public service announcements and programming on the City of Wichita's TV Channel 7. Public Service Announcements made on Channel 7 are documented in Appendix C.

The City of Wichita is also continuing its education efforts at the federal and state levels. Legislation to support education and testing programs by the Equus Bed Groundwater Management District is a major legislative issue for the city. The City is continuing to aggressively pursue federal funding to assist in pollution testing, cleanup, and river corridor development.

The City of Wichita realizes a successful education and public information effort about pollution of groundwater and the river involves far more than simply putting a public service announcement on the air. We are aggressively working to build citizen coalitions to support the efforts and spread the word.

City staff visited and reminded food vendors at the Wichita River Festival of Section 16.32.030 of the City Code. This Section lists out specific prohibitions and requirements and the proper procedures for the disposal of food waste and cooking oils. This festival is a ten-day event held in May. A copy of the handout provided to the vendors and the list of vendors' booths visited are documented in Appendix C.

### B. **Structural Controls**

**Purpose:** To provide a description of the efforts the municipality has made to comply with this section of the permit and our Storm Water Management Program. A discussion of the maintenance activities the municipality had committed to conduct within the Storm Water Management Program versus the actual activities accomplished in the last year are to be address.

**Status:**

1. Channel Maintenance. In 2007, storm water utility maintenance crews completed projects that resulted in approximately 53,108 cubic yards of erosion repair and bank stabilization to various ditches in the community. In addition to the channel maintenance work outlined above, last year each of our in-town ditches were mowed six times during the mowing season at a cost of \$225,000 (See Appendix D).

2. Roadside Ditch Maintenance: The City's Management Program indicated that we would hand clean all of the roadside ditches each year and mechanically clean approximately 54 miles. In 2007, the City met its goal on hand cleaning and mechanically cleaned a total of 102.56 miles of ditches.
3. Catch Basin Cleaning: In the City's Storm Water Management Program, we committed to hand clean 13,500 catch basins three times a year and use high pressure cleaners to mechanically clean 1,500 catch basins three times a year. This is a total of 45,000 catch basin cleanings that were targeted for each year. In 2007, city crews actually completed the inspection and cleaning of 95,456 catch basins throughout the city. Most of these were cleaned with high-pressure cleaners.
4. Publicly Owned Detention Facilities: In 2007, the City did not officially re-inspect the publicly owned detention facilities other than the mowing inspections. The inspector noted that there were no visible erosion problems. The City Storm Water Utility staff continued to maintain and make some repairs to these facilities as needed.
5. Privately Owned Lakes: During the year 2007, the City has continued to work with the owners of private lakes in our community in an effort to resolve some of the erosion and outlet problems that come up from time to time. In previous Annual Reports, the City indicated it's intent to inspect these lakes every four years in order to correct any problems that may exist, including water quality related issues. In 2007, however, due largely to the amount of time that was spent on the construction site erosion control enforcement, sufficient time was not available to do pond inspections to any great degree. Ponds were inspected, however, as problems were brought to our attention by homeowners associations and the like.

**C. Areas of Commercial and Residential New Development or Redevelopment**

**Purpose:** To discuss the efforts the municipality has made to regulate development in compliance with the Storm Water Management Program.

**Status:** In 2007 the Storm Water Management Division continued to study and evaluate BMP's that could be installed in areas of new development and substantial redevelopment in an effort to reduce principal pollutants in our storm water. Because we are continuing to study these technologies, the City has yet to approve rules or ordinances requiring BMP installation for the reasons outlined below.

The biggest problem we have identified with most BMP's is with both the initial cost and subsequent maintenance cost. Most of the BMP's that are found on the market today are cost prohibitive for local units of government to consider. For example, during 2005 the Sedgwick County Conservation District has been assisting the Riverside Neighborhood with a demonstration project to determine the effectiveness of filtration systems for inlets and storm sewers. Instead of installing high maintenance filters on each inlet, the grantee opted to look at the inline filter option consisting of an online vortex-type cleaning unit. The manufacturer of the cleaning unit quoted a price around \$20,000 for such a unit for a 24-inch pipe. This cost did not include installation cost, which could be another \$20,000 or so. Given that there are approximately 900 storm water pipe

outfalls in the City, one can reasonably conclude that this approach would be cost prohibitive for the City. We have found this to be true of many of the commercially available BMP's on the market today.

Therefore, the Storm Water Management Division has reached the conclusion that the only possible cost effective BMP's in areas of new and redevelopment are in all likelihood the nonstructural BMP's, the types of things that would be considered in a subdivisions initial design. Nonstructural items to be considered are: reproducing the pre-developed hydrologic condition; minimizing imperviousness; confining development to least critical areas; fitting development to the terrain; preservation and utilization of the natural drainage system; minimizing disturbed site areas; and the utilization of conservation designs.

The American Public Works Association presented a webinar titled "Let's Get It Right the First Time: Strategies for Effective Stormwater BMP Design and Maintenance. The presentation was held on April 12, 2007. Cahill Associates, Inc. presented a webinar titled "Sustainable Site Design – Porous Pavement & Innovative Stormwater Techniques. This broadcast was held on March 29. Copies of the handouts and roster are provided in Appendix C.

The City of Wichita is also considering Low Impact Development Techniques as a non-structural approach to permanent BMP's in newly developing areas. There are obviously many things to consider in the low impact development approach and the City is presently reviewing these concerns. If possible, the City may seek an EPA/KDHE demonstration grant for some limited subdivision area to try this approach and evaluate its effectiveness. Presently, we feel that this approach might be cost effective in our more sandy soil areas of west Wichita but we question its cost effectiveness in the very heavy clay regions of east Wichita. In the upcoming year the City and the Equus Bed task force, along with the Wichita Area Builders Association, will continue to evaluate nonstructural techniques that can be used in new subdivisions and areas of substantial redevelopment to reduce storm water pollution in the long term.

**D. Public Streets, Roads and Highways**

**Purpose:** To discuss the efforts that the municipality has made to minimize the discharge pollutants from streets including de-icing and sanding activities. Discuss the activities the municipality has committed to accomplish within the Storm Water Management Program compared with actual accomplishments.

**Status:**

1. The following table compares the street sweeping activities, both proposed and accomplished:

Work Task	Goal	2007 Completed
Residential Street Sweeping	2-3 rounds	2.9 rounds
Arterial Street Sweeping	9 rounds	9 rounds
Downtown Street Sweeping	3 per week	110 times

Additionally, we would like to note that the State of Kansas Department of Transportation is responsible for litter pick-up and street sweeping on I-135, I-235, and K-96. The City of Wichita is responsible for litter pick-up on

Kellogg. As we understand it, the State has contracted their work to a private entity.

2. Litter Control: The City's Storm Water Management Program proposed to maintain the prior level of service in picking up litter within our city. We met this goal in 2007.
3. Storm Sewer Pipe: In our Storm Water Management Program, we proposed to clean 685,000 feet of storm sewer with high-pressured cleaners each year. In 2007, the City actually cleaned 1,305,204.5 linear feet (247.2 miles) of pipe.

In 2007, Storm Water Utility personnel televised approximately 138,755 linear feet of pipe in an effort to determine the condition of the pipe and find any illegal connections. Approximately 635 linear feet of storm sewer line was repaired, and 95,456 catch basins were cleaned (arterial, hotspot and routine).

It is also worth noting that the Stormwater Utility has incomplete records of our stormwater sewer lines. Currently the stormwater sewer lines are all located in books. The process to locate a line is a manual system, very time consuming, and expensive. IT/IS worked with Engineering during 2007 to evaluate what is needed and the processes that can be done in-house verses what an outside firm could assist on to convert the manual data to an electronic format. Placing this information on a GIS layer will enhance the ability to timely retrieve this information and at a lesser manpower cost than is currently available. Once the information is on the GIS system, hot spot areas will be easier to determine and recurring problems to ascertain. This will enable the City to provide better service to citizens by taking care of problems before there is a major issue. Also the processing time for contractors to receive the proper permit for installation of stormwater sewer lines would be shortened. When this project is completed a comprehensive electronic GIS record will be available of stormwater discharge points throughout the City.

In 2007 the City of Wichita Public Works Department hired Carlson-Baughman to survey all storm water structures and pipes 8-inches in diameter and larger for the area bound between the Wichita Drainage Canal to the east, the Wichita Valley Center Flood Control to the west and I-235 to the north and south. The collected pipe and structure attribute data is being populated into a stormwater personal geodatabase, with the City's Enterprise GIS database being updated monthly with this new data. Currently, Carlson-Baughman has surveyed 8,924 structures and anticipates to complete the Phase 1 collection area by fall 2008. Public Works Engineering plans to contract the collection of the remainder of the City in Summer 2008 with the entire City's Stormwater GIS layer being completed by 2011.

4. Snow and Ice Control: In 2007, city street maintenance personnel continued to inspect and make improvements in the maintenance of salt storage facilities. All operators of city snow and ice removal equipment received training prior to the beginning of the snow and ice season. Sand and salt distribution equipment was calibrated at that time.

The application of salt brine as pre-treatment on bridges has been an established practice for snow and ice removal in 2007. This brine is

applied to reduce the application rates of dry salt and sand. The brine adheres to the surface instead of running off and prevents bonding of ice to the bridge deck. This helps prevent icing of the bridges and less material is required to keep them from becoming hazardous. This is a process used by many Highway agencies to provide improved response to freezing precipitation and to reduce the amount of salt used for deicing during winter storms. The City has two brine-mixing facilities, one at the Central Maintenance Facility and one at the West Substation. Each facility has a calibrated brine production system and a ten thousand gallon holding tank for a brine solution.

The effectiveness of this approach for snow and ice control has been proven in other agencies, including KDOT.

5. Vegetative Management: In 2007, the City of Wichita treated 1,168.55 acres of land with herbicides, mainly to control noxious and broad leaf weeds along the Wichita/Valley Center flood control project. Only EPA approved herbicides were used.

#### **E. Flood Control Projects**

**Purpose**: To discuss the progress towards the development of a study to determine the cost and benefits of improving existing storm water detention facilities to reduce the discharge of principal pollutants of concern.

**Status**: As reported in prior annual reports, the Storm Water Management staff regularly inspects all city owned detention facilities. Generally speaking, very few problems exist at these facilities. At some facilities, some minor reseeding needs to be done periodically on the banks in isolated spots. A few of the outlet structures periodically have minor amounts of trash and debris in them and are periodically cleaned out. As noted in past annual reports, the large detention facility located at the intersection of K-96 and I-135 continues to be developed as a major recreational facility by the City.

As the City studies various BMP's that might be effective in reducing the principal pollutants of concern from storm water, we plan to consider retrofitting our existing detention facilities, if possible, with these BMP's. The City completed a major project along the Wichita Drainage Canal to reduce bank erosion and improve the flood carrying capacity of this ditch. The Master Drainage Plan for the Cowskin Creek Basin will undoubtedly result in more of this type of work throughout the city. As was the case in previous years, the City continues to work with various private groups that are interested in performing major cleaning activities along our waterways.

#### **F. Application of Pesticides and Fertilizers**

**Purpose**: To discuss the efforts the municipality has made to reduce the discharge of pesticides in compliance with the Storm Water Management Program. To provide confirmation that all employees of the municipality that apply herbicides have current certifications or are under the direct supervision of someone who is currently certified to apply pesticides, as provided by the Kansas Pesticide law.

To provide documentation of the public education program informing the public about the proper use of pesticides and fertilizers, and the proper disposal of these substances and their containers.

**Status:** Currently, the responsibility for the application of any herbicides at city facilities would fall on the Park and Recreation and Public Works Departments. All employees applying these chemicals have the appropriate State certification as evidenced in Appendix E. In order to obtain these certificates, each employee is required to complete the prescribed training course and exam.

The database for commercial herbicide and pesticide applicators has not changed substantially since it was originally done in 1998. As required by our Storm Water Management Program, we did randomly pick 11 applicators on the database and inspect their facilities. A summary of the inspections reports can be found in Appendix F.

#### **G. Illicit Discharges**

**Purpose:** To discuss the City's program of detecting and removing illicit discharges to the storm sewer system along with the summary of the illicit discharges found and the status of their disconnection. To address the efforts made in reviewing the status of dry weather flows.

**Status:** The City's storm water discharge permit requires inspection of 10 high risk "SARA" industries, 15 general industries, and 10 commercial applicators of pesticides and herbicides. In 2007, the City exceeded those requirements by inspecting 12, 20, and 14, respectively (see Appendix F). Additionally, in the course of conducting industrial wastewater discharge permit inspections; the city pretreatment staff addressed storm water issues and cross-connection issues at an additional sixty-one industries. Inspection results that include a brief statement of the results for all categories are listed in Appendix N. Inspection of commercial applicators of pesticides and herbicides were selected as we did previous years, that is to say the seven largest operations were reinspected in 2007.

In addition to the above, City personnel inspected 23 reports of situations that could have had detrimental impacts on storm water. A listing of those 23 investigations plus Environmental Service Departments work is included in Appendix G.

#### **H. Spill Prevention, Containment and Response**

**Purpose:** To discuss the City's spill response program. All spills that were washed in part or in total into the storm sewer must be summarized with information which includes: identification of material spilled, estimated quantity washed into the storm sewer, and any obvious adverse impact on the receiving stream.

**Status:** In 2007, the Wichita Fire Department responded to over 36,000 emergency incidents. Notification for the vast majority of these incidents was received through the 911 Emergency Communications Department. Included in these 36,000 plus incidents, 253 were of incidents that involved, or potentially involved, spilled or leaked materials that could be hazardous to our community and/or the environment.

The Wichita Fire Department provides a multi-faceted response to these types of incidents. The nearest engineer's squad responds, assumes command of the incident and begins an assessment of the critical factors involved. The Hazardous Material Response Team (HMRT) members from both the Wichita Fire Department as well as the Sedgwick County Fire Department respond as needed to assist in this analysis and perform any emergency response measures, which are deemed necessary. Crews coordinate closely with the Wichita Department of Environmental Services regarding their assessment of any actions at the scene. Incident reports for each incident are filed with the Wichita Fire Department's data processing center to document the actions taken by the Wichita Fire Department crews. Copies of the report for spills that could reach the storm sewer system are forwarded to the Division of Storm Water Management.

Company officers for the Wichita Fire Department receive annual refresher training in the basics of hazardous materials response. In addition, the HMRT members receive specialized training in hazardous materials response on a monthly basis.

In 2007, the Storm Water Management received 253 spill reports from the Wichita Fire Department. These reports can be broken down as follows:

<u>Incident</u>	<u>No. of Wash Downs</u>
Auto Accidents	2
Service stations/convenience stores	1
<u>Unknown</u>	<u>1</u>
Total:	4

See Appendix H for more details on wash downs. Two hundred forty-nine incidents were cleaned up with the use of absorbents and/or had no storm water impact.

In addition to the actions taken by the Wichita Fire Department to contain spills that occurred, the Storm Water Management staff also worked with industries during our industrial inspections to be sure that systems were available on site to contain spills of hazardous material should they occur.

**I. Public Education (Illicit Discharges, Used Vehicle Fluids, Toxic Materials)**

**Purpose:** To discuss the public education program, to encourage the reporting of illicit discharges and improper disposal of material to the storm sewer drainage system. The program used to educate the public and the proper disposal of used motor vehicle fluids and household hazardous waste should also be addressed. An estimation of the effectiveness of these public education programs should also be included.

**Status:** Information on public service announcements made on the City of Wichita's TV Channel 7 and visits made to River Festival food vendors is provided in Section II.A above. Therefore, this section addressed the household hazardous waste and recycling programs in the community and our public educational efforts in those areas.

In addition to the above, City staff was also involved in numerous public displays in the community in 2007 and made many public presentations concerning storm

water pollution, the household hazardous waste program, and the recycling program. A listing of those events is as follows:

**A. Public Displays**

- Water Utilities & Environmental Services had booths at Wichita Home Show, February 1-4.

**B. Public Presentations**

- 43 Scheduled talks and presentations made at the W.A.T.E.R. Center to groups of adults and children (1363 total).
- E.A.R.T.H. – Staff participated in the two-day workshop held on April 24 and 25. 422 Students from nine schools participated.
- Project ReDirectory – Staff coordinated the 2007 phone book collection and recycling drive. On September 11, 4,360 pounds of old directories were recycled.
- River Trash Rounds – Staff planned, coordinated and publicized the May 5 River Trash Roundup. This event was sponsored in conjunction with Earth Day, Sierra Club, Riverside Neighborhood Association and the Ark River Task Force.
- Staff created materials and judged the local level of the Science Olympiad Awesome Aquifer competition. The local event was held on February 24 with fifteen teams competing. The state competition was held on April 17 with 27 teams participating. Staff assisted also at the National competition, which was held on May 15. Sixty teams from 40 states participated.
- World Water Monitoring Month – Staff planned, coordinated and publicized the W.A.T.E.R. Center and ARC effort from September 18 to October 18. Twenty-four sites were tested and information uploaded to the National reporting site.
- City and County staff coordinated the TreeCycle program. The drop-off sites were city property while the County conducted the 1006/2007 program.
- Two seminars for irrigation staff and landscape architects were held on February 15 and July 31.
- Rain Garden Training – The W.A.T.E.R. Center was the site for the February 6 Kansas Association of Conservation & Environmental Educators Waterspout Workshop. Participants learned how to teach children about storm water runoff using rain gardens on school properties.
- An Overview of the Stormwater Program was presented to the Ark River Task Force on July 24, 2007.

**C. Public Handouts: Educational information, brochures and lagniappes given away during 2007 totaled 4012. Inserts were also included with City of Wichita water bills during the month October. The total inserts sent out were 133,000.**

Detailed information on the above presentations and the brochures distributed can be found in Appendix C.

**J. Cross-connections Between Sanitary and Storm Sewers**

**Purpose:** To provide a summary of cross-connections between sanitary sewers and storm sewers which have been identified in the last year. A narrative

explanation of the present status of these cross-connections and their potential for elimination should be included. A summary of any sanitary sewer lines, which have been identified within the last year as infiltrating the storm sewers, should be provided with a narrative explanation of the actions taken to correct the problem. If corrections have not previously been made, a schedule to achieve such correction should be included in the report.

**Status:** The cross-connection issue is important, especially when it is considered in conjunction with the development of TMDL's for the Lower Arkansas River Basin, and the effort that is currently underway within the City of Wichita to find the sources of the fecal coliform contamination in the Arkansas River. Related to the cross connection issue is the number of sewer bypasses that occurred for various reasons. The Department of Water Utilities, as required by State Law, documents bypasses of the collection system. These events are known as sanitary sewer overflows (SSO). Included in this report, in Appendix I, is a summary of the SSO reports for 2007 from the Department of Water Utilities. It is difficult to attribute a particular SSO event to an elevated fecal coliform level in the Arkansas River. Sanitary sewer overflows are usually low volume (500 to 1,000 gallons) and often do not have direct drainage access to the river. The City continues to aggressively pursue collection system maintenance and cleaning activities. In addition, many large interceptors in the city are or have been recently rehabilitated resulting in fewer SSO surcharges.

The City of Wichita's sewer collection system maintenance activities include flushing, cleaning and knifing, chemical root treatment, and biological treatment for grease. Sewer employees routinely inspect sanitary sewers using televising cameras to seek out interconnections to the storm drain system and any other condition that might allow sanitary sewer water to drain to the river. Maintenance crews correct defects as soon as they are discovered.

The data below indicates the preventative maintenance activities for 2007:

<b>Sewer Maintenance</b>	<b>Number of Incidents 2007</b>
Stoppages and Bypasses	228
Feet of Sewer Lines Cleaned	2,122,682
Feet of Sewer Treated for Roots	359,139
Feet of Sewer Lines Flushed	9,285
Feet Televised	642,546
Manholes Inspected	8,592
Line Repairs	89
Siphons Treated for Grease	0
Sites Check for Infiltration Inflow	2361
Inflow & Infiltration Sources Removed	29
Feet of Sewer Lines Smoked Tested	105,991

**K. Monitoring Industrial and High Risk Runoff**

**Purpose:** To provide a summary of the inspections and storm water monitoring reports of industrial facilities as required by the City's permit. Information

concerning the discharge or potential discharge of pollutants as required under 40CFR 122.21(g)(7)(III-IV) should also be provided.

**Status:** Section II.G above discusses the industrial inspections that were performed in 2007. A summary of the industrial inspections is included in Appendix F.

All storm event tests results are shown in Appendix L.

In addition to our work with private industries, the City has also been proactive in monitoring conditions at its own industrial sites throughout our community. This effort will continue in the future.

#### **L. Construction Site Runoff**

**Purpose:** To provide a summary of the program implemented, to reduce the discharge of pollution from construction sites consistent with the Storm Water Management Plan. Include a discussion of the educational material and training provided to construction site operators and planning procedures, which have been implemented, to minimize adverse water quality impact.

**Status:** In 2007, the City continued its efforts to enforce the provisions of our Storm Water Pollution Prevention Ordinance.

In 2007, the Storm Water Compliance staff inspected over one thousand construction sites. Of these inspections, 530 Notices of Violations were issued to construction companies and/or homeowners. No citations were issued. Appendix M provides a summary of the enforcement actions taken by the City of Wichita's Environmental Services Stormwater Compliance Division

#### **M. Legal Authority**

**Purpose:** To discuss the municipalities' authority to meet the requirements as stipulated in the city's permit. Any significant changes in legal authority within the last year should be addressed.

**Status:** As previously reported, Sedgwick County is now in charge of solid waste management. This includes the recycling and household hazardous waste program. Since these programs are no longer under the control of the City of Wichita, we feel that these responsibilities should be transferred to Sedgwick County.

#### **N. Storm Water Management Program Resources**

**Purpose:** To address any potential adverse impact on resources for the next year.

**Status:** During the preparation of the 2007 Operating Budget, there were no major changes made at that time that would impact the resources that the storm water staff would have to comply with our permit conditions.

### **II. Schedule of Compliance**

At this time, the City of Wichita has not been issued any schedule of compliance for deficiencies in our Storm Water Management Program.

### III. **Revision to the Approved Storm Water Management Program**

At the present time, we propose no revisions to our Storm Water Management Program other than to make note of the items discussed above.

### IV. **Storm Water Monitoring Data**

#### A. **Storm Event Sampling**

The City met all storm event-sampling requirements, except for an extended drought that prevented the "Winter" (1st Quarter) sample collection.

Storm event tests results are presented by sampling site and then by sampling constituents. The results are shown in Appendix J and L.

#### B. **Non Storm Event Sampling**

The City continues to maintain an aggressive non-storm event-sampling program that was originally started in 1994. This program samples over 21 sites each month and includes all significant water flows in and around the City. Because of the length of the program and the consistency of sampling a considerable amount of data had been produced to reflect the status of storm water in the Wichita area. This data is updated to include 2007 and located in Appendix K.

We have added two sampling constituents of interest to our analyte list. The first addition is the testing for E. coli. This is important because the presence of E. coli may be a better indicator of potential pathogenicity of storm water samples than the presence of f. coliform. We are building a database to see if there is a reasonably reliable correlation between the presence f. coliform and E. coli. The accumulated data do not produce a reliable correlation as yet. We will continue E. coli testing in an attempt to find a correlation. E. coli results are included in Appendix L.

Fecal coliform is a principal pollutant that has been sampled weekly since 1994. The city is undertaking an extensive effort to track the sources of fecal coliform. See Appendix L also.

This report provides a summary of the City of Wichita's Storm Water Management Program for the year 2007, our ninth year of operation under our NPDES Storm Water Discharge Permit. The City feels that it has complied with the provisions of the permit. If you have questions concerning anything in this report, please feel free to contact me at (316) 268 - 8355.

Respectfully submitted,

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Shawn Maloney  
Interim Environmental Compliance Manager  
City of Wichita

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Date