



Section 1 INTRODUCTION

1.1 Background and Purpose

The Clean Water Act (CWA) was passed in 1972 to help protect and restore the waters in our Nation's streams, rivers, and lakes. In the early 1990s, Phase I of the National Pollutant Discharge Elimination System (NPDES), under authority of the CWA, was passed to regulate stormwater management in large urban areas. Phase II regulations were developed and passed near the turn of the century requiring medium size cities meeting a certain population density and other criteria to develop stormwater initiatives to address pollution associated with urban runoff. In March of 2003, the City of Bowling Green, and numerous other "Phase II Cities and Counties" submitted permit applications to the Kentucky Division of Water outlining a 5 year plan for addressing the Phase II requirements.

The thought behind the Phase II program is that urban runoff is a chief cause of stream impairment, and that urban runoff can be managed in large part by effectively addressing a few key areas; educating and involving the public on the impacts of urban runoff and how the public can help, managing the storm sewer infrastructure and addressing illicit discharges (discharge of pollution / polluted runoff), implementation of local regulatory authority, development of best management practices (BMPs) for construction and post-construction, and environmentally sensitive and responsible municipal operations. This BMP manual was developed to support Phase II efforts in addressing Construction Site Runoff and Post Construction Runoff as required by the Phase II permit for Bowling Green and numerous other Phase II communities. Additionally, a number of the BMPs address municipal operations, and residential issues and can be used for sharing information with the public.

The manual presents a brief introduction to stormwater Best Management Practices (BMPs). The following types of BMPs are addressed: Site Planning and Design Practices (SPD); Erosion Prevention Practices (EPP); Sediment Management Practices (SMP); Good Housekeeping Practices (GHP); BMPs for Residential and Homeowners (RHP), Stormwater Pollution Prevention Practices (SPP) , and Stormwater Pollution Treatment Practices (PTP). The manual describes how BMPs can be selected, and contains a series of fact sheets for each type of BMP to be used in the area. The intent of the Stormwater Best Management Practices Manual is to provide guidance on BMP selection, design, and implementation to plan submitters, reviewers, construction site operators, and site inspectors. There are also guidance materials for activities at commercial and industrial facilities.

The fact sheets are categorized, focused, and concise so that they may be used as quick references for design, inspection, and maintenance guidance. In this way, the fact sheets are designed to be stand-alone documents that may be distributed to facilitate discussion about design and/or implementation of the management practice. Many of the practices are considered structural practices in that they involve construction. However, several of the BMPs cover non-



structural practices where normal activities are performed in a different manner with stormwater quality in mind.

1.1.1 Goals of the Program

In support of the information provided in the “Stormwater”, City Code Section 21-2 goals of the post-construction runoff management program are:

1. Improve the Quality of Bowling Green and Warren County’s water resources by:
 - Implementing of minimum control measure
 - Providing education to citizens
2. Provide protection of the short-term and long-term public health, safety, and general welfare by:
 - Providing for regulation and management of Bowling Green’s stormwater system, including public and private facilities in Bowling Green service area.
 - Protecting, and preserving stormwater quality and fish and wildlife habitat within Bowling Green.
 - Protecting those downstream from stormwater quality impairment.
3. Comply with state and federal stormwater regulations developed pursuant to the Clean Water Act Amendments of 1987 and subsequent amendments.
 - Managing the quality of stormwater discharged to the MS4 by controlling the contribution of pollutants associated with development and redevelopment activity.
 - Controlling stormwater pollution caused by the suspension and transport of soils and other sediments.
 - Facilitating the use of the public and private stormwater management systems that will not result in excessive maintenance costs.
 - Encouraging the use of natural and aesthetically-pleasing designs that optimize the preservation of natural areas.
 - Guiding the construction of stormwater management facilities by developing comprehensive master plans and guidance that address stormwater quantity and quality.
4. Sustain Development of the area in an environmentally conscience manner by:
 - Development of regulation protecting the environment.
 - Providing training and guidance material to the development community.
 - Enforcement of regulations.
5. Preserve Natural features in the Bowling Green and Warren County area by:
 - Using environmentally friendly practices.



- Providing buffering around natural features.
- Encouraging the preservation of floodplains, floodways and open spaces to protect and benefit the community's quality of life and natural resources.

1.2 List of Definitions, Abbreviations and Acronyms

1.2.1 Definitions

"Authorized Enforcement Agency" shall mean the Bowling Green Public Works Department, City Engineer (or designated subordinates).

"Best Management Practice (BMP)" shall mean a measure that is implemented to protect water quality and reduce the potential for pollution associated with storm water runoff. These could include schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to storm water, receiving waters, any natural drainage crevice, karst feature, ditch, known subterranean water channel, closed systems or catch basins, conveyance or the MS4. BMPs also include treatment practices, operating procedures and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.

"Blue Line Streams" shall mean streams that are represented on the most recent version of the United States Department of the Interior Geological Survey 1:24,000 USGS quadrangle maps.

"Certified Contractor" shall mean a person who has received Erosion Prevention and Sediment Control (EPSC) training and is licensed by the City of Bowling Green to inspect and maintain erosion prevention and sediment control practices.

"Channel" shall mean a natural or constructed/manmade watercourse with definite bed and banks to confine and conduct continuously or periodically flowing water. Channel flow is that water which is flowing within the limits of the defined channel.

"Clean Water Act (CWA)" shall mean those Federal regulations (33 U.S.C - 1251 et seq. and any subsequent amendments thereto) that prohibit the discharge of pollutants to waters of the United States unless such discharge is in accordance with an approved National Pollutant Discharge Elimination System (NPDES) permit.

"Clearing" shall mean any activity that removes vegetative surface cover.

"Construction Activity" shall mean any activities subject to NPDES construction permits issued by the United States Environmental Protection Agency (USEPA) or the Kentucky Division of Water (KDOW). Currently these include construction projects resulting in land disturbance of one (1) acre or more. Such activities include, but are not limited to, clearing and grubbing, grading, excavating and demolition.