

Appendix 10-3

Extracted Content for
Miami Valley Regional Planning Commission in

Attachment C from the 1993 State WQM Plan Certification
Priority and Implementation Program Process (PIPP)

MVRPC**Plan Element**

MUNICIPAL AND INDUSTRIAL WASTE TREATMENT 130.6(c)(3)

WQM Plan Content

The revised WQMP contains a thorough analysis of the Region's municipal point sources and identifies those which are not meeting NPDES limits and are therefore negatively affecting water quality. The Plan also describes the status with regard to facilities planning and presents the recommended alternatives and implementation schedules. All facilities planning is based on approved population projections. Average flows and wasteloads are projected for each municipal point source through the year 2000.

Facility planning area (FPA) evaluations have been completed for Shawnee Hills in the Little Miami Basin (Greene County), the Village of New Lebanon in the Lower Great Miami Basin (Montgomery County) and the Village of Ansonia in the Stillwater River Basin (Darke County). Each of these includes a community analysis, an assessment of the existing WWT situation and WQ impacts, recommendations for improving wastewater treatment, and suggested financing alternatives.

The Comprehensive Water Quality Report for the Great Miami River (Dayton to the Ohio River) and the Comprehensive Water Quality Report for the Stillwater River (Ansonia, Versailles, Bradford, Greenville, Arcanum, W. Milton, Englewood, Union), prepared by Ohio EPA, address existing industrial wastewater treatment needs. The WQMP contains an inventory and analysis of industrial institutional and other point sources. Flows are projected through 2005. Industrial control measures are presented, along with an implementation strategy.

A 1984 assessment of industrial point source dischargers in the MVR updates WQMP data for these entities. The study identifies, basin by basin, the number of industrial dischargers and their flow volumes for third quarter 1984 and contrasts this with comparable data for 1981, thus establishing trends over this time period. It also includes information on parameters monitored and identifies violations for third quarter 1983 (low flow conditions). Total industrial discharges are compared with municipal discharges for each basin.

The 1984 assessment was further updated in 1990 with the publication of the report: An Inventory of Municipal, Industrial, and Other Point Source Dischargers in the Miami Valley Region; Upper Great Miami River Basin, Lower Great Miami River Basin, Little Miami River Basin, Twin Creek Basin, and Stillwater River Basin.

Comments

none apply

Plan Element

NONPOINT SOURCE MANAGEMENT AND CONTROL 130.6(c)(4)

WQM Plan Content

The revised Areawide WQMP contains analyses of both urban and rural nonpoint sources as contributors to water pollution in the Miami Valley region. In all counties except Montgomery, rural nonpoint source pollution is far more significant than urban. The analyses in the Plan are the result of modeling rather than field data. The model produces a stream segment/subwatershed estimate and ranking of pollutant loads for urban runoff, rural runoff and the combined instream impacts of the two. The Plan also sets forth the management structure for nonpoint sources. The Plan update includes on-site waste disposal studies for Darke, Greene, Miami, Montgomery and Preble counties. The 1987 report, Animal Feedlot Inventory and Assessment Report for Darke County Ohio, documents the magnitude of animal waste related to water quality problems and locates individual feedlots. The Upper Four Mile Creek Watershed Nonpoint Source Pollution Assessment, Preble County, Ohio (1988) examines nonpoint source contributions to water quality degradation of surface and ground water.

Using Darke and Montgomery counties as test areas, two techniques were developed for assessing high risk locations for ground water contamination for on-site disposal system concentrations. Both techniques use MVRPC's data on system concentrations, one in conjunction with detailed information from the Darke County soil survey, and one in conjunction with OCAP-generated data on physical characteristics including depth to bedrock, soil permeability, and depth to water table.

The Plan describes a variety of control measures for both urban and rural runoff. It recommends that Priority Subwatershed Plans (PSPs) be developed and that appropriate control measures be incorporated in these on a subwatershed basis. The Plan also sets forth the management structure for nonpoint sources.

Considerable emphasis was placed on control of pollution from on-site disposal facilities in 1985. Much of this work focuses on Darke County (Stillwater Basin) for which both a model local implementation program and a strategic plan for on-site systems management were completed.

Management of on-site systems in the region has been further strengthened through the execution of Memoranda of Understanding between MVRPC and four of the Region's county health districts. (Health districts are the DMAs for on-site systems under MVRPC's AWQMP.) These instruments, now in effect for Darke, Miami, Montgomery and Greene counties, set forth the responsibilities of the health districts and MVRPC in attempting to reduce and control water pollution from such systems.

Memoranda of Understanding have also been executed between MVRPC and the five soil and water conservation districts serving the Region. SWCDs are the DMAs for agricultural and some urban nonpoint pollution sources under the AWQMP. Like the M.O.U.s with the health districts, these instruments also set forth the responsibilities of the parties regarding control of pollution resulting from storm runoff.

MVRPC documents included by reference in the 2006 State WQM Plan update extracted from 1993 State WQM Plan Certification, Attachment 3

The WQMP assesses urban storm water as a source of nonpoint pollution. Modeling was employed to estimate nonpoint pollution loads generated by urban runoff for each subwatershed/stream segment of each river basin.

Subwatersheds comprising each basin are ranked according to a composite pollution index. Various control measures for urban runoff are described and the development of Priority Subwatershed Plans is recommended.

In 1985, a major study pertaining to urban storm runoff was completed. An Evaluation of the Current and Future Use of Runoff Control/Sediment Abatement Legislation for Development Sites as a Nonpoint Source Pollution Control Techniques in Miami Valley Communities examines five jurisdictions in the Miami Valley region which have enacted RC/SA legislation based on MVRPC's model ordinance. The study compares each local law with the model, reviews the local process for administering the regulations, and presents information on actual development projects to which they have been applied. It also includes a method of analyzing the applicability of such legislation to other Miami Valley communities and prioritizes them according to the results of this analysis.

MVRPC developed Handbook(s) of Sub-Basin Profiles for Nonpoint Source Planning and Management in the Miami Valley Region (1989) to make the data in the Ohio NPS Assessment Report more usable for local planning commissions. In 1991 MVRPC published four county animal feedlot inventory reports: Animal Feedlot and Poultry Operation Inventory for Greene County, Ohio (Little Miami River Basin), Animal Feedlot and Poultry Operation Inventory for Miami County, Ohio (Upper Great Miami Basin), Animal Feedlot and Poultry Operation Inventory for Montgomery County, Ohio (Lower Great Miami Basin), Animal Feedlot and Poultry Operation Inventory for Preble County, Ohio (Twin Creek Basin). In addition the report Animal Feedlot and Poultry Operation Inventory and Assessment, Nonpoint Source Documentation Forms for Greene, Miami, Montgomery, and Preble Counties provided data to Ohio EPA for inclusion in its NPS database and 305(b) report. The Animal Feedlot and Poultry Operation Inventory for Darke County, Ohio (Stillwater River Basin) (1992) report updated the 1987 report for Darke County was necessitated by an increase in the poultry industry.

Comments

The existing assessment within the MVRPC WQMP for nonpoint sources of pollution needs additional analyses. The Plan should include data from various reports, i.e., NURP, LEWMS, USGS Field Studies, water quality data in STORET, and for some watersheds ACOE data is available. Additional studies on particular components of nonpoint source pollution need to be prepared (utilizing data sources listed above), including urban/rural/agricultural runoff and residuals (sludge) disposal. Urban/rural runoff control strategies should be developed as part of Priority Subwatershed Plans (PSPs).

Further analysis of nonpoint source control needs is largely dependent upon the availability and assessment of WQ data on the impacts of the various pollution sources. Such analysis should be completed when possible and the results incorporated into the WQMP.

In order to improve the status of this element, MVRPC should further analyze urban storm runoff

by political jurisdiction, including needed improvements and costs, and identify unsewered areas and needed control measures for them; refine/clarify management structure with regard to DMAs for urban storm water; and integrate local storm water control system into WQMP.

The studies and plans mentioned above have been useful in addressing NPS issues in the region, but an updated comprehensive NPS component should be done. It should be watershed or subwatershed based and should take the stormwater permit program into account.

Plan Element

MANAGEMENT AGENCIES 130.6(c)(5)

WQM Plan Content

The WQMP establishes a management structure that brings together three types of designated management agencies which are responsible, with the prescribed regulatory framework for various aspects of water pollution control. The management structure was formerly comprised of the Water Resources Policy and Technical Advisory Committees and MVRPC. DMAs and other participating agencies were represented at various levels in this structure. In the 1984 WQMP Update, MVRPC took the initial steps in reorganizing their Water Quality Management Planning structure and updated and verified existing DMA implementation statements.

The new structure consists of an Areawide Water Resources Committee and five Basin Councils, one for each of the five sub-drainage areas of the Miami Valley Region. Each Basin Council is comprised of those DMAs identified in the AWQMP, representatives of private industry, related organizations and citizens. The new structure provides a means for basin-oriented water quality concerns to be identified and addressed within the framework of the AWQMP.

Updates to the AWQMP include the reports: 201/208 Consistency Review, North Regional Facilities Planning Area Boundary Change (1989) and 201/208 Consistency Review, Village of Clifton/Village of Cedarville Facilities Planning Area Modifications (1992) as well as other reports mentioned in Attachment B.

Comments

With all types of water pollution--point and nonpoint source--the water quality objectives can be achieved only through the combined actions of federal, State and local governments. the various agencies created by them and the private individuals they represent. The WQMP should continue to develop the means and mechanisms through which the actions of implementors will be focused on water quality problems in the Miami Valley Region. As such, the Plan must 1) identify specific water quality problems; 2) present viable alternatives for addressing these problems; 3) identify the specific implementing parties; and 4) present a schedule which relates the priority of water quality with the timing of pollution control actions, how they will be funded and who is responsible for that implementing action.

Plan Element**IMPLEMENTATION MEASURES 130.6(c)(6)****WQM Plan Content**

The WQMP sets forth target abatement dates (an implementation schedule by basin for municipal, industrial and nonpoint sources, residuals and on-site systems, in general terms.

The regulatory programs which are utilized to implement the WQMP are set forth in a series of supplemental reports which document the relevant legislative authorities for each agency and local government participating in the implementation process. These include counties, municipalities, conservancy districts, health districts, soil and water conservancy districts, EPA, ODNR, ODH, U.S. EPA and the USDA. As the designated planning agency, MVRPC facilitates the organization of all of these into a coordinated management structure through which the regulatory programs and authorities of each are focused upon Plan implementation.

The WQM Plan describes and inventories environmental data for the Miami Valley Region. The environmental setting describes climate, air quality, geology, topography and soils, ground water hydrology, ecology, land use, agricultural productivity and development capabilities for each river basin.

In 1990 MVRPC published An Assessment of the Implementation of 205(j) Project Recommendations in the Miami Valley Region and followed it in 1991 with Implementation of 205(j) Recommendations in the Miami Valley Region: Strategies and Alternatives.

Comments

MVRPC should continue to assess the effectiveness of local regulatory programs in meeting the goals of the WQMP. This assessment will then serve as the basic regulatory foundation for future studies recommending change. MVRPC should identify in future projects and reports the proper legislative authority and implementing agencies. Where specific recommendations are made the regulatory framework for implementation should be clearly identified.

Plan Element

DREDGE OR FILL PROGRAMS 130.6(c)(7)

WQM Plan Content

None

Comments

None

Plan Element

BASIN PLANS 130.6(c)(8)

WQM Plan Content

As the designated planning agency (DPA) for water quality in Darke, Greene, Preble, Miami and Montgomery counties, the Miami Valley Regional Planning Commission is responsible for preparing and administering the Areawide Water Quality Management Plan (AWQMP). The plan consists of a summary report and five basin plans, one for each of the five major sub-drainage areas of the Region delineated for planning purposes. The "basins" are 1) the Stillwater (STW), 2) the Little Miami (LM), 3) the Twin Creek (TC), 4) the Upper Great Miami (UGM), and 5) the Lower Great Miami (LGM). Each basin report, or plan, includes water resources information, data on pollution sources, recommended strategies for correction and prevention of pollution, and a management framework. The initial version of MVRPC's plan was partially certified by the Governor of Ohio in 1979, with the indication that additional work was needed to make a conditional certification possible. Since then, many elements of the plan have been revised, updated and expanded. This additional work is contained in the plan's basin reports and in numerous related reports. The revised plan was adopted by MVRPC in October, 1984, and conditionally approved by the Governor in January, 1985.

In 1986, 1987, and 1988, revised basin plan summaries and recommendations, incorporating pertinent information generated over the past several years, were completed to maximize the utility of these documents for WQ planning purposes. The revisions also were incorporated into the previously generated maps of each sub-drainage area. Prior to these revisions, basin profiles were prepared which contain pertinent water-related information for each sub-drainage area of the Region. Each profile includes data on the basin's physical and demographic setting, its surface and ground water resources and a preliminary listing of priority WQ issues within the basin. Two maps, one depicting impact factors relating to surface waters and the other depicting impact factors relating to ground water, accompany each basin profile.

Comments

None

Plan Element

GROUND WATER 130.6(c)(9)

WQM Plan Content

The WQMP addresses residuals through two key Plan elements, sludge disposal and residuals potentially affecting ground water quality. The Plan contains a thorough analysis of sludge disposal, including existing and projected production, alternative disposal and a recommended residuals management program. The effects of residuals on the region's ground water are documented in Existing and Potential Groundwater Problems in the Miami Valley Region (1980). The study identifies, by county, existing residuals disposal sites (including landfills and surface impoundments) in relationship to the regional aquifers. The Plan update includes An Evaluation of Ground Water Contamination at Disposal Sites South of Dayton, Ohio, Phase II/February 1983." and "Factors Potentially Impacting Groundwater Quality of the Great Miami Buried Valley Aquifer in the Miami Region, December 1983.

The AWQMP identified the protection of ground water as high priority due to the use of the Great Miami Buried Valley Aquifer as a sole source of drinking water for more than 600,000 persons. MVRPC analyzed the local governmental powers and practices for protecting the aquifer in The Role of Local Governments in Protecting the Great Miami Buried Valley Aquifer in the Dayton, Ohio Metropolitan Area (1986). The report also examines existing and planned land uses over the aquifer and the proper role of local governments in protecting the aquifer. Guidelines for local governments to use in protecting the aquifer are given in Potential Pollutant Source Guidelines for Groundwater Protection in the Miami Valley Region. (1987)

MVRPC and OKI cooperated to publish Petition Requesting Sole Source Aquifer Designation for Portions of the Buried Valley Aquifer System if Great Miami/Little Miami Basins in the Miami Valley Region in Southwestern Ohio (1987) which resulted in designation by U.S. EPA in 1988. The designation provides a modest level of protection for the aquifer but more importantly it serves to make people aware of the aquifer's existence and its importance. As a result, a number of subsequent efforts aimed at protecting the aquifer have been completed. Among these are: Recommendation Report for a Groundwater Resources Information Management System (GRIMS) for Southwestern Ohio (1988) (prepared in cooperation with OKI and Ohio EPA), Annotated Bibliography of Hydrology for the Miami Valley Region (1991), Sole Source Aquifer Revision Criteria Project, Miami Valley Region (1991), and Sole Source Aquifer Revision Assessment, Miami Valley Region (1992).

The most notable achievement in the process has been publication of A Groundwater Protection Strategy for the Miami Valley Region (1990). This document which is in eight volumes covers each of MVRPC's five basins and includes data and maps of different aquifer types, land uses, wellhead protection areas and resource protection areas. MVRPC then expanded the strategy through Miami Valley Groundwater Protection Strategy - Implementation Programs for Priority Groundwater Protection Areas; City of Bellbrook Well Field Protection Program (1991), City of Fairborn Well Field Protection Program (1991), and City of Oakwood Well Field Protection Program (1992).

Comments

MVRPC documents included by reference in the 2006 State WQM Plan update extracted from 1993 State WQM Plan Certification, Attachment 3

The Well Field Protection Program documents listed here have not been officially reviewed by Ohio EPA DDAGW staff and their listing in the WQMP does not mean that they meet requirements of Ohio's WHP Program.