

SEAGO AREAWIDE WATER QUALITY MANAGEMENT PLAN EXECUTIVE SUMMARY

Background

The SouthEastern Arizona Governments Organization (SEAGO) is the designated Areawide Water Quality Management Planning Agency for Cochise, Graham, Greenlee, and Santa Cruz Counties under Section 208 of the Clean Water Act. Section 208 requires development of areawide water quality management plans which must include, at a minimum, (a) identification of municipal and industrial treatment works for a 20-year planning period; (b) a description of program activities to control nonpoint source pollution; (c) identification of agencies necessary to carry out the plan; and, (d) identification of implementation measures.

This Water Quality Management Plan (WQMP) is a comprehensive revision of SEAGO's 1979 Plan for the four-county area. It does not however, include Indian reservation land in the northern portion of the region. The WQMP considers changes in federal laws and programs as well as impacts of new state programs developed as a result of the 1986 Environmental Quality Act. It also considers changes which have occurred in the region since 1979.

The planning process for this plan revision began in early 1991, and opportunities for public involvement were offered during issues identification and development of the project scope of work; after development of background material and to review project direction, and during public review and comment on the draft plan. The plan is organized into seven major sections :

1. The state and federal laws, regulations, and programs affecting water quality.
2. A description of the planning area.
3. A description of the water resources in the planning area.
4. A point source management plan element.
5. A nonpoint source management plan element.
6. A drinking water section.
7. A regional continuing planning process section.

Much current data is contained in the appendices to the plan, and these are designed to be removed and updated as new information is available. Included as an attachment to this executive summary, is an excerpt of the plan's recommendations.

Laws, Regulations, and Programs

SEAGO's WQM Plan reviews federal and state laws and programs for protection of water quality and identified implications for water quality management in the region.

Major federal and state laws that form the basis for state water quality management programs include the 1972 Clean Water Act (CWA) with major amendments in 1987, which focuses primarily on protection of surface water; the Safe Drinking Water Act (SDWA) as amended in 1986 with a focus on protection of public drinking water supplies; Arizona's 1986 Environmental Quality Act (EQA) which created the Arizona Department of Environmental Quality (ADEQ) and requires that programs be adopted by rule to protect both surface and groundwater; and, Arizona's 1980 Groundwater Management Act (GMA) which established the Arizona Department of Water Resources to manage groundwater resources.

The 1987 amendments to the CWA placed increased emphasis on control of nonpoint source pollution and expanded the NPDES permit program to include municipal and industrial stormwater discharge. State programs developed under the EQA include the Aquifer Protection Permit (APP) Program and programs to control nonpoint source pollution through implementation of Best Management Practices (BMPs). The 1986 amendments to the SDWA place more stringent requirements on drinking water supply systems for treatment, monitoring, and reporting.

Description of the Planning Area

SEAGO's plan also reviews land ownership, land use, and population in the region. Patterns of growth as seen in 1980 and 1990 Census data are different from those projected in the 1979 Plan. The major difference is a much higher rate of growth in Santa Cruz and Cochise Counties, with much of that growth occurring in unincorporated areas or incorporated areas that are not currently served by a centralized wastewater collection system. These higher rates of growth place increased demands on infrastructure, including need for water supply and wastewater treatment systems.

Description of the Water Resources

SEAGO's WQM Plan revision includes a review of ADEQ Assessment Reports for surface and groundwater quality in the region. In its 1992 Water Quality Assessment Report, ADEQ identifies and prioritizes a number of surface waters where water quality standards to protect designated uses are not being met. For the highest priority stream segments, ADEQ intends to develop "Total Maximum Daily Loads" (TMDLs) which will be used to establish load reductions for nonpoint sources of pollution and to provide the basis for more stringent limits for point source (NPDES) permits.

ADEQ's 1992 Water Quality Assessment Report has no "Target TMDLs" the highest priority for development of TMDLs, for streams in the SEAGO region. It does however, list a number of other streams as high priority for TMDL development. All Water Quality Limited Waters, or sections of surface waters that do not meet water quality standards, are listed in the appropriate appendix.

This section of the plan also discusses groundwater quality in the region, with a brief discussion of the problems with the Nogales Wash and the St. David nitrates contamination area, an EPA designated "Superfund" site.

Point Source Management Plan Element

New state permit programs established by ADEQ mean that a large number of facilities, including wastewater treatment works, landfills, mining operations, and industrial facilities must now get a permit for discharges from the facility or reuse of effluent. There are approximately 200 facilities in the SEAGO region which require an individual permit. Most of these require Aquifer Protection Permits and must submit applications according to a schedule set by ADEQ. This section of SEAGO's plan reviews types of permits and includes a list of facilities. Recommendations are also made for ADEQ to address problems with technical review and permitting.

Projection of wastewater treatment needs over the 20-year planning period focuses on more densely populated areas, which are identified as incorporated places and census designated places with populations of 1,500 people or more. Areas which are projected to need new or expanded wastewater treatment facilities are listed in the appendix. Recommendations are made for planning responsibilities in unincorporated areas and for special districts. The plan also makes a number of recommendations regarding what should be included in wastewater treatment facility plans for these areas. During the completion of the plan, it was discovered that three entities are performing the duties of a Designated Management Agency, although they have never received formal designation from ADEQ. The WQMP requests that these agencies be so designated.

Review and compliance data reported by ADEQ for 1989, 1990, and 1991 showed that over half of the approximately 60 facilities which require an individual permit were out of compliance with state and/or federal requirements at least once during this period, and that facilities having permits are more likely to be out of compliance than facilities which do not yet have permits. Major reasons for non-compliance are failure to submit monitoring data (for facilities with permits and reporting requirements) and operation and maintenance problems found during a facility inspection (for facilities without permits). Recommendations are made to address compliance problems, primarily through improved programs for technical assistance.

A number of other issues are discussed and recommendations made, including disposal of sludge and septage, household hazardous waste, pretreatment requirements, onsite wastewater treatment and solid waste management. An Appendix to this section of the plan is a description of all current permit requirements, and their fees.

Nonpoint Source Management Plan Element

This section of the plan reviews a number of federal and state programs to control nonpoint source pollution, including the NPDES permit program for stormwater runoff, the Section 404 Dredge and Fill Permit Program, Arizona's regulatory program for underground storage tanks, and Arizona's nonpoint source programs for certain categories of nonpoint source pollution. Because some of these programs may not adequately protect sensitive resources, and because control of nonpoint source pollution is largely a land use and land management decision best made at the local level, this section of the plan identifies areas where there is opportunity for local control and involvement. Public involvement is encouraged for permit decisions and for management of pollution on public lands through the NEPA/Environmental Assessment process. Recommendations are made for management agency designations, for ADEQ, for other federal and state agencies including ADOT, and for local governments.

Drinking Water Section

There are approximately 200 active public and semi-public water supply systems in the SEAGO region. Most drinking water systems in the region are small to very small systems, with 96 percent serving 3,300 people or fewer (EPA's upper limit for "small" systems) and over 80 percent serving fewer than 500 people. This high percentage of small systems has a significant impact with respect to the cost of compliance with new regulations and increased monitoring requirements mandated by the 1986 amendments to the SDWA. All public systems using surface water supplies must provide filtration and disinfection, regardless of system size, and additional treatment may be required to meet new standards. Sampling requirements and frequencies are based on the type of system, and with one or two exceptions are the same regardless of the number of people served. This makes the per capita cost of compliance much higher for smaller systems. A review of the compliance data provided by ADEQ shows that regionally, approximately 80 percent of the water systems were out of compliance with the requirements of the Safe Drinking Water Act or Arizona's rules and regulations.

This section of the plan includes a number of recommendations, with an emphasis on ways to ensure that water supplies are provided by systems with the financial, technical, and managerial capability to operate and maintain those systems long-term. Recommendations are also included for ADEQ and for improved technical assistance to help facilities comply with regulations.

Regional Continuing Planning Process

This plan must be consistent with federal and state laws and programs for water quality and is influenced by other federal and state laws and programs. Therefore, it must be updated as changes

occur in those laws and programs. Local and sub-regional water quality management plans, and individual facilities and permits must be consistent with this plan as well as other local and sub-regional water quality plans. If local plans or facilities are not consistent with this plan, either they must be changed or this plan must be changed.

The regional continuing planning process defines how this plan will be kept up-to-date as changes occur; how consistency between local plans, facilities and permits and this plan will be determined; under what conditions a plan amendment may be required and the process to be used for amending the plan, and how the public will be involved in the continuing planning process.