

"SECTION 208 PLANNING:
NEW MEXICO'S PROGRAM AND PERSPECTIVE"

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Section 208 is one of three planning programs mandated under various sections of the Federal Water Pollution Control Act Amendments of 1972 (PL 92-500). New Mexico has been involved with the other two programs, facilities plans for sewage collection and treatment systems and river basin water quality management plans, for some time. Facilities plans identify community needs for the collection and treatment of sewage, what areas should be served, what system should be designed based on cost-effectiveness of a number of alternatives and the environmental effects of the selected system over the other alternatives. River basin plans deal with the identification of sources of water pollution in a geographic area, a summary of existing water quality and water quality problems in that area, a review of the water quality management systems in the area and a set of plan recommendations to address significant water quality problems. The river basin plans are essentially Phase I of a continuing planning process for water quality management in New Mexico.

The river basin plans basically dealt with point sources of water pollution, that is what comes out "the end of the pipe". An example would be the discharge from a sewage treatment plant. Water quality planning under Section 208 addresses two significant issues, regional wastewater management or treatment needs and nonpoint sources of water pollution. The issue of Regional wastewater management or treatment needs raises questions about the most cost-effective and environmentally sound way of collecting and treating sewage in urbanizing areas adjacent to established municipalities. There are several regional facilities plans currently in the review process including Albuquerque, Eastern Valencia County and Central Grant County plans. Non-point of water pollution are quite difficult to define; they are "diffuse" or areawide sources such as a concentration of septic tanks in an area or urban stormwater runoff. In a sense nonpoint sources are everybody's problem since they are not coming out of the end of a pipe: How many septic tanks in an area create a nonpoint source problem? Whose septic tanks are responsible? Identifying and controlling significant nonpoint sources is a difficult and time-consuming task; they are hard to quantify and extremely complex to manage. Because water quality planning efforts under Section 208 focus on non-point sources of water pollution they supplement and further develop the continuing planning process begun in preparing river basin plans. New Mexico's Section 208 program is primarily focused on the identification and control of nonpoint sources of water pollution.

The state has received a 75% Federal grant of about a million dollars to carry out water quality planning under Section 208 by November 1, 1978. The state is providing 25% match in state salaries. Almost 80% of the grant is going to contract work. Three areas have been identified in New Mexico for Section 208 planning (See Figure 1): The Navajo Nation lands in New Mexico, the Albuquerque Metro area and the rest of the state. The Navajo Nation is conducting its own water quality planning with monies from New Mexico and other states' grants. The Albuquerque Metro area was identified for two reasons: First, it is the major urban-industrial area in the state and second a number of water resources planning activities are currently underway, including, the Corps of Engineers Albuquerque Greater Urban Area water resources study, and a couple of regional facilities plans. In addition, a number of the technical studies under Section 208 being conducted along the Rio Grande, include the Albuquerque Metro Area. The third identified Section 208 area is the remainder of the state.

The Water Quality Control Commission has been designated as the water quality planning agency for Section 208 planning (See Figure 2). In turn, it has delegated "lead agency" responsibility to the New Mexico Environmental Improvement Agency, which is responsible for administering the grant, managing the contract work being done, assembling the elements of the plan and presenting the plan to the Water Quality Control Commission. Two other state agencies have been delegated specific responsibilities for portions of the Section 208 program. The Natural Resource Conservation Commission has been delegated the responsibility for studying sediment production and its impact on water quality and the Department of State Forestry has been delegated the responsibility for assessing forestry management practices and their impacts on water quality. An interagency agreement has been entered into with the Middle Rio Grande Council of Governments to carry out the public involvement program in the Albuquerque Metro Area.

Public involvement is crucial to the planning process; each of the agencies involved in a portion of the Section 208 program has an advisory committee to represent constituencies in the general public. The middle Rio Grande Council of Governments will draw on its Board of Directors composed primarily of local elected officials, for the Albuquerque Metro Area Section 208 Policy Advisory Committee. Both the Natural Resource Conservation Commission and the Department of State Forestry are using committees composed of people with specific expertise in sediment and forest practices. The Environmental Improvement Agency works with the overall Statewide Section 208 Policy Advisory Committee whose members represent major constituencies in the so-called "general public". Committee members represent interests from agriculture to Federal land management agencies to New Mexico's counties to the League of Women Voters in the state. The New Mexico Section 208 public involvement program is discussed separately; only brief references are made to the program here.

Water quality in New Mexico is generally good. We don't have the same type or complexity of problems as other areas with more rainfall



or more people. There are some problems, however; fecal coliform counts exceed the standard along part of the Rio Grande, algae growth occurs in reservoirs across the state and salinity increases in general from north to south along the Rio Grande. Nonpoint sources may have significant impacts on sediment and salinity loadings to a water course, for example. At this point, we don't know; we have some ideas on what the impacts are but no supporting data. The focus of much of New Mexico's Section 208 program, then, is on identifying and hopefully attaching some numbers to nonpoint source problems.

Table 1 is a brief summary of the major technical studies being carried out in the planning program. In a sense it is one-sided; public participation is an integral part of the program's effort but is discussed separately. It should be noted that most of the work being done under contract is to collect data. The Environmental Improvement Agency will take the data to use in developing plan recommendations. The contractor does not do the actual planning work. The academic community has a substantial body of expertise. Five of the thirteen contracts have gone to university researchers and of those five, two have been awarded to people at New Mexico State University. The state is fortunate to be able to draw on university expertise for work under this program.

A few general comments need to be made about the Section 208 planning program. First, New Mexico's program addresses New Mexico's water quality needs and priorities. A lot of public involvement went into the development of work to be done in the Section 208 program; the study of the impacts of toxic substances, particularly "PCBs" and mercury on food chains in the Rio Grande was the direct result of comments made by concerned citizens at a spring, 1976, Section 208 meeting in Santa Fe. We are not working with a blueprint from Dallas; the Environmental Protection Agency has been flexible enough in this program to accept the state's priorities. An example is the emphasis on ground water in our program: Collecting existing ground water quality data statewide and organizing them into a computer data base and looking at the regional impacts of uranium industry activities on water quality in the Grants Mineral Belt. Looking down the road at implementation of plan recommendations, what's needed will depend on the problems identified. "Attainability" is going to be a key concept in implementation, as is the identification of costs and benefits. We're focussing on nonregulatory approaches but we realize nonregulatory approaches aren't going to work for everything. The intent is not to reinvent the wheel but to develop solutions with which New Mexican's can live with, solutions which address New Mexico's needs. This makes public participation in developing plan recommendations especially critical. The Water Quality Control Commission has adapted a policy of implementation at the lowest appropriate level of government. The problems which the Section 208 planning program addresses are simply not amenable to national standards or regulations.

The Section 208 program should address water quality issues. There is a tendency to make the Section 208 program one of "great expectations", the universal answer to all the coordination difficulties

Figure 1: IDENTIFIED STATE 208 PLANNING AREAS:

1. Albuquerque Metro Area^{1/} — — 
2. Navajo Reservation — — 
3. Remainder of State

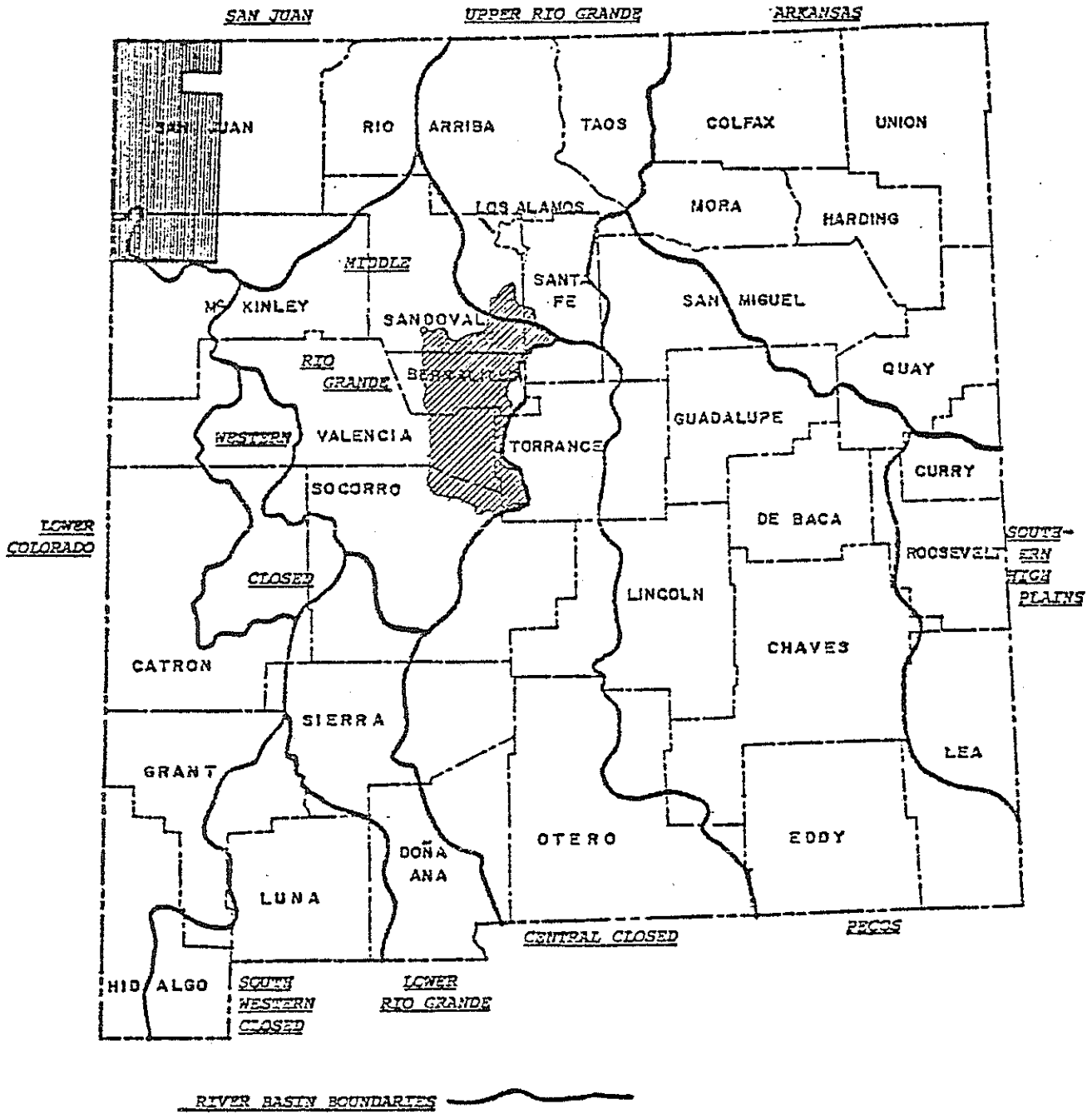
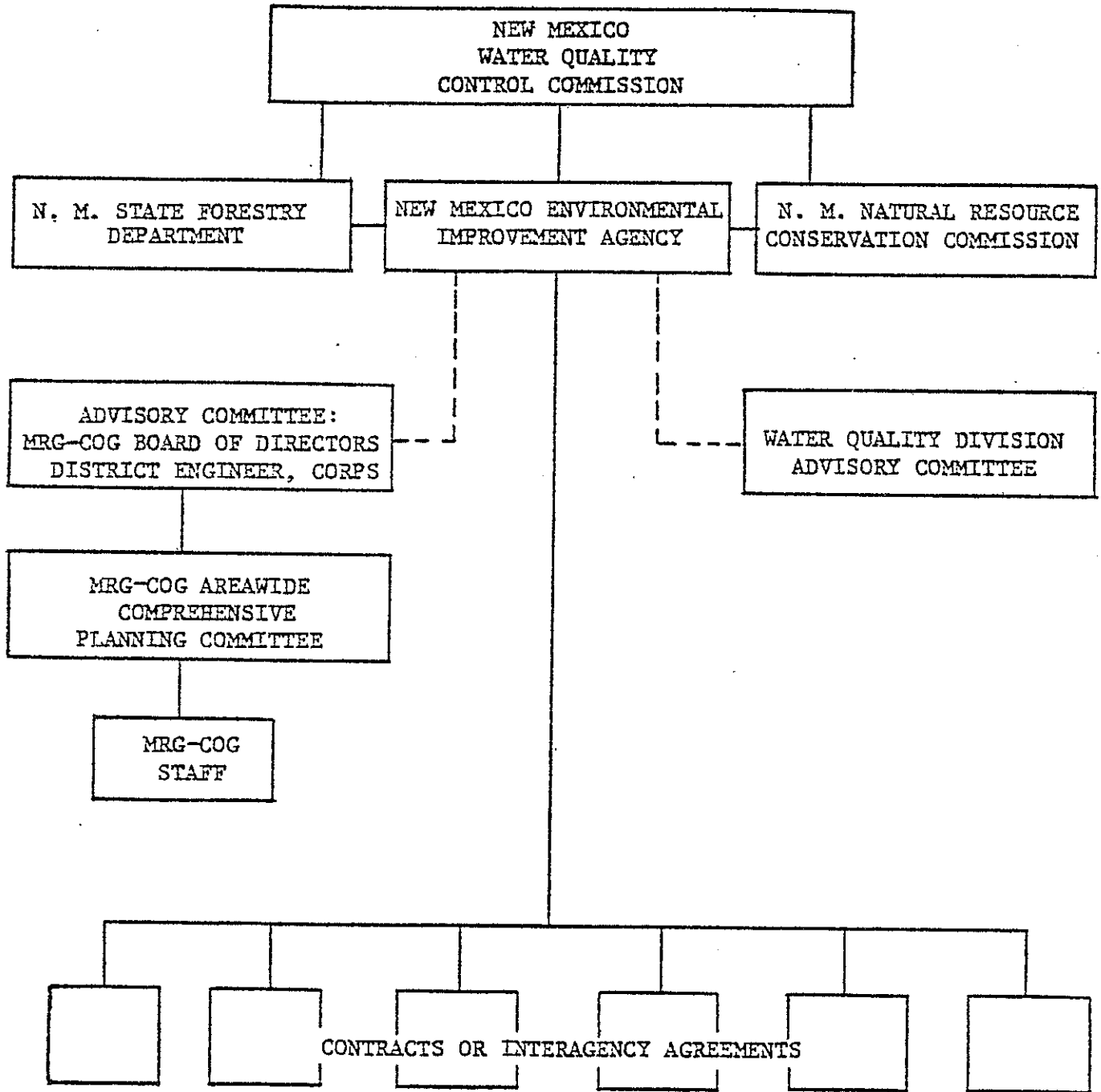


Figure 2: Water Quality Management (Section 208) Planning, Program Management

Albuquerque Metro Area

Statewide Area



or the gaps in other programs. It is a continuing planning process rather than a final product, a process which is not going to solve all problems. While the planning process is going to take more time than we have available to meet the November 1, 1978 deadline, it will, with the help of concerned New Mexicans, provide the basis for water quality management efforts in years to come.

Table 1

SECTION 208 WATER QUALITY
STUDIES IN NEW MEXICO

1. Sediment production and its effects on water quality throughout the state.
2. Forest activities---including timber harvest, planting, fertilization, application of pesticides and herbicides, wildfire, prescribed fire, all recreational activities, and road building---and their effects on water quality. This project is being conducted on all forested lands in New Mexico.
3. Irrigated agriculture: Practices that degrade water quality.
4. The nutrients nitrogen and phosphorus: Their presence, and effects on plant growth in reservoirs.
5. Management of sewage in rural areas: Feasible and workable alternatives to central sewage treatment facilities.
6. Ground water quality information: Compilation and evaluation of statewide data, formation of computer storage bank.
7. Ground and surface water quality monitoring program, to determine regional long term impacts of uranium industry activities.
8. Toxic or hazardous substances: Their uptake and biomagnification in food chains associated with the river system.