208 Bulletin

Clean Water Act of Computing the 1977 Becomes Law Quality of Life

he mid-course corrections to the Water Pollution Control Act Amendments of 1972 were passed into law on December 27, 1977. Called the Clean Water Act of 1977, these corrections will result in numerous changes that will impact the Water Quality Management Program. The information below summarizes sections of the new Act pertaining to the following subjects:

- **Funding of Pollution Control** Programs and WQM Planning 106, 205(g), 208(f)(3)
- Three Year Planning Period 208(b)(1)(B)
- Open Space and Recreation 208(b)(2)(A)
- Irrigation Return Flows 208(b)(2)(F)
- **Dredge and Fill Regulatory** and Permit Programs 208(b)(4), 404
- Cost Sharing for Rural Water **Quality Management** 208(j)
- Interagency Agreements for **WQM** Implementation 304(k)
- **BMP** for Industry 304(e)
- Federal Facilities Compliance

Funding for Pollution Control Program and Water Quality Management Planning

Section 106(a)(2) Section 106 authorization levels are \$100,000,000 annually for fiscal years 1975, 1977, 1978, 1979 and 1980. This amount is subject to appropriations.

Section 208(f)(3) Section 208 authorization levels are \$150,000,000 annually for fiscal years 1975, 1977, 1978, 1979 and 1980. This amount is also subject to appropriations. The 1975 and 1977 levels have no real consequence.

Section 208(f)(2)

All initial 208 grants made before October 1, 1977, will be 100% Federal share, and all grants subsequent to that time will be at 75%. The 100% share is applicable only to the first two years of the grant period. All continuation funding will be at 75%.

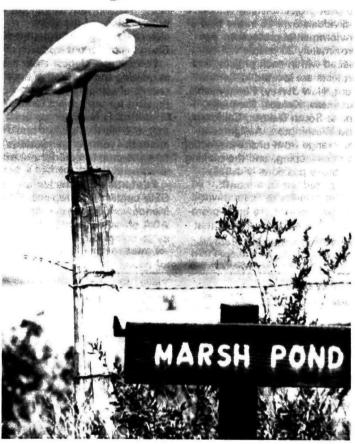
Applying these provisions to grants funded prior to October 1, 1977, the practical effect is to provide 100% funds to FY'76 grantees for the first two years of the grant period.

Thus all grantees receiving initial grants after 1975 but before October 1, 1977, would be entitled to reimbursement of their 25% matching share. However, such reimbursement could only be made after the Agency requests and receives additional appropriations at 100%. The EPA Regions will be informed as to developments concerning these funds.

Section 205(a)

A maximum of two percent of each State's construction grants funds, or \$400,000 of these funds, whichever is greater, may be granted to a State for the management of its construction grant program. This grant may also be used to take into account the reasonable costs of administering NPDES or dredge and fill permit programs, state-

Continued on page 7



An extraordinary computer program will aid public officials to make better decisions in matters affecting the quality of life.

IME: LATE 1977. Place: Chambers County Courthouse in Southeast Texas. Behind a desk groaning with stacks of regulation manuals, scientific papers, and

Marsh Pond, part of the Anahuac National Wildlife Refuge, is home to water and wading birds such as this common egret.

reference manuals, Ms. Pamela Planningperson broods over the latest of her many tasks.

"Good grief!" she mutters Continued to page 2

Old Blood Brings New Life To State Environmental Agencies

new program is being run by the Administration on Aging (AOA) that may prove beneficial to State environmental agencies. The Senior Environmental Employment Program (SEE) is designed to take advantage of the knowledge and talents older Americans possess and to help alleviate some of the difficulties seniors have in finding jobs.

This three year trial program will allocate \$1 million a year for 10 pilot projects which will place individuals over 55 in the field of enviornmental protection. Approximately 20 people will be placed within each project, and projects are located in Connecticut, New Jersey, Pennsylvania, Arkansas, Kansas, Kentucky, IIlinois, South Dakota, California, and Washington. Assignments may range from onsite inspection to bookkeeping, and the training for those positions is usually completed within a month.

The benefits to State environmental agencies are quite promising. The most obvious is that the agencies are able to make needed personnel additions for which they would otherwise not have the funds. Another is that State agencies are able to increase the public awareness of key programs through the use of more personal contracts. For example, the Arkansas Department of Pollution Control and Ecology reported that in the first quarter of the SEE project, more than 300 personal contacts with business, civic and government leaders have been made on 208 alone. Additionally, some 60 presentations of the 208 slide/tape program "About Your Clean Water" were made.

Perhaps the biggest asset lies in utilizing the knowledge and talents of seniors. Their enthusiam for the project (and 208 in particular) has been so great that it is felt that seniors could infect the younger generations to take the time to care for our environment.

For further information on SEE, contact your regional EPA Manpower office, your regional AOA office, or your State agency on aging.

Manpower Shortage? New Legislation Provides Possible Alternative

The passage of the Economic Stimulus Act of 1977 may provide an opportunity for 208 agencies to secure additional funds for labor intensive projects. The legislative action provides for the creation of as many as 400,000 additional jobs in fiscal years 77 and 78. With appropriate management and coordination, it has been estimated that environmental projects and tasks could effectively use 10-20% of these jobs.

The EPA's efforts in environmental work force development have been greatly enhanced by interagency activities with the Employment and Training administration under the Department of Labor. As a continuation of this cooperative relationship between DOL and EPA, it has been suggested that the two agencies embark on a series of model projects which would serve to meet immediate cyclical unemployment problems, and which could be transitioned into a response to structure unemployment problems at a later date. These subjects would have four basic characteristics:

- Projects will be conducted for a definite period of time consistent with CETA Public Jobs Program regulations.
- 2. Project will be supportive of environmental legislative mandates and will, therefore, have a public service objective.
- 3. Projects will be designed to result in a specific product service objective.
- Projects will be undertaken which would otherwise be done with existing funds.

These projects will permit the hiring of unemployed professionals as well as subprofessionals. The size and scope of the overall program should be determined by mutual agreement between DOL and EPA based on most recent available data which deals with unemployment and personnel needs and requirements of State and local environmental agencies.

For further information, contact the 208 Coordinator or Project Officer in your Region.

Quality of Life

Continued from page 1

to herself. "This developer proposes to build a tenniscondominium-restaurant complex between a woodland and marsh. By tomorrow morning I am expected to sum up all the environmental consequences and turn in a report. I'm not sure that's possible."

Now, Ms. Planningperson is no dummy. She has a college degree in government. In her career she is motivated not only by salary, but by sincere concern for the natural world. Nor is she unique.

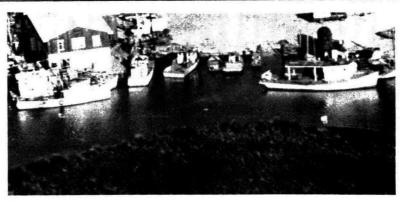
But our Ms. Planningperson has one advantage. She works for Chambers County, Texas. She takes some notes across the hall to a small room containing an instrument much resembling a large typewriter. She flips a switch. Taps a few keys. Takes her fingers from the keyboard. The machine springs to life, and prints:

Chambers County Phase Three Environmental Assessment Program. Good morning, Pam. Do you want a detailed description?

"Yes," types Ms. P.

Enter project name.
"The Creole Tennis,
Chowder, and Elocution

How many acres?
"One hundred and fifty."
Give the latitude and
longitude.



Shrimp and oyster boats gathered at Double Bayou, on Trinity Bay, are part of an economy that depends on the

"Oops. I don't have that information."

Do you have a cell number?

environmental health of Chambers County as a marine nursery.

"Sure. Here it is."

How many dwelling units

per acre.

What's Your WQ IQ?

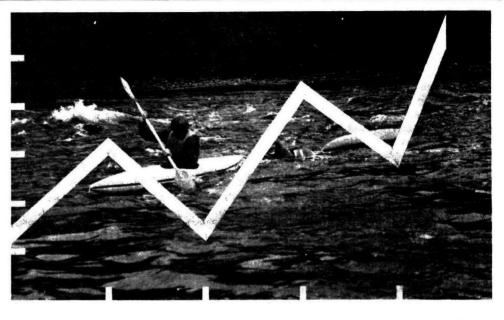
The information from a survey, combined with results from three sets of water quality workshops, committee meetings, and public hearings, will aid Gateway staff, consultants, and Board members to select a water quality plan that reflects public sentiment in the region.

To obtain a copy of the Survey Analysis, contact the Gateway Council. Ask for analysis of an Opinion Survey on Water Quality Issues in the St. Louis 208 Designated Area.

Who knows more about water pollution—people living in urban areas or people living in rural areas? Are people willing to pay for a cleaner environment? Who should be responsible for the clean-up? These and more questions were answered—sometimes with surprising results—when Gateway's Water Quality Program conducted a public opinion survey this summer.

The results were often discouraging:

 Only about one-fourth of those surveyed felt that they were in any way affected by water pollution. Of those who did perceive problems, the most commonly felt effect was that the water "looks bad." Few people felt that there were health



hazards present.

 Almost half were unwilling to pay more than \$3 per month for clean water. Of these, 11% said they were unwilling to pay anything.

 Only 15% knew of any group that was doing anything related to water quality problems.

Other answers were more positive.

- Over half said they were willing to change their water usage habits in order to improve water quality.
- More than any other group, "the individual" was recognized as being responsible for a clean environment both by preventing pollution and by paying for prevention and clean-up efforts.

 Governments at all levels were clearly recognized as having a responsibility to protect the environment.

Some of the questions yielded unexpected results:

- People in rural areas were much more aware of pollution problems than those in urban areas.
- People with higher incomes wre generally not willing to pay higher rates for clean water.
 Areas with lower average income had a higher percentage of people willing to pay higher rates.

As interesting as these facts may be, they are also useful in the water quality planning process. Elected officials and agencies can use the information to make decisions. They know, for

instance, that their constituents believe that all levels of government have a responsibility to provide for a clean environment. They know that if they select plans that will result in some inconvenience to individuals, most people seem willing to make such changes. They know that most people feel a personal sense of responsibility for environmental action and are willing to make a monetary commitment to clean-up efforts. These feelings seems to be shared even by those who do not feel that they are affected by pollution.

Reprinted with permission from: "East-West Directions," a publication of the East-West Gateway Coordinating Council.

"Help! I forgot the classifications!"

The various density classifications are . . .

And so it will go, more or less, for a half-hour or so. The machine in the Chambers County building is tied by telephone lines to a large computer on the Rice University campus in the middle of Houston. The central computer contains literally millions of bits of data - representing virtually eveything known about a Gulf Coast county of 600 square miles. Organized are some 75 environmental factors such as wildlife habitat, water quality, current land uses, vegetation, and hurricane risk. Also programmed into the Rice University computer are electronic routines by which it swiftly addresses such questions as: Will site grading degrade marshlands nearby? Will automotive traffic increase and pollute the air? What kinds and amounts of solid waste will require disposal? Will construction noise disturb the red wolf, a rare and endangered species?

"Well, will it?" Ms. Planningperson asks.

"I could draw you a map of red wolf distribution.

"By all means."

The machine rattles on for a few minutes. Typed characters strike and overstrike lines to produce a shaded-effect map of the range and habitat of the red wolf in Chambers County.

Pleased, Ms. Planningperson reaches for the off switch.

Wait. May I now write your detailed project description?

"That would be lovely. Please do."

More minutes of automatic tapping. A report temerges. It precisely discusses environmental consequences in straightforward style, sometimes in prose, sometimes as charts, sometimes with lists. Then the machine signs off with:

Your total computer time cost is \$6.45. Thank you and goodbye.

In much this way the Quality of Life Computer will be operating in Chambers County later this year, the answer to many a beleaguered planner's dream. No magical black box, the system was laboriously contrived, fact by fact, by innovative scientists under the direction of a remarkable nonprofit copora-

tion, the Southwest Center for Urban Research.

In its ninth year, the
Southwest Center is a consortium sponsored by the University
of Houston, Rice University,
Texas Southern University, the
Baylor College of Medicine, and
the Texas Health Science
Center, all of Houston. As conceived in 1968, the center's goals
were three-fold: identify urban
problems, involve academic experts, and stimulate graduate
study of community headaches.

Numerous fund grants and programs later, the Southwest Center has today grown to oversee a diversity of projects. One has to do with public health planning for a five-state region. Among others proposed, one

Continued to page 4

Sewer District One-of-a-Kind Success

One of Mid-America Regional Council's main tasks in its 208 water quality planning effort is to develop effective, efficient management approaches. To do this, staff is working with local governments that have established successful water pollution control and wastewater management programs. The expertise and experience of those who have designed and who operate these systems is a valuable planning tool.

The headline in the May 31, 1973 edition of the Raytown News read "Sewage Lagoons Doomed by Harvey's Pipes."

The "pipes" referred to were the interceptor sewers being laid in the construction of a unique type of water quality management system in the Kansas City region—the Little Blue Valley Sewer District.

"Harvey" was Harvey Jones, chief enginer for the sewer district and one of the persons largely responsible for the creation of the Little blue District—something he worked on diligently for more than ten years.

The Little Blue district is unique because it is a watershed approach to water quality management.

The river basin is located in

the eastern portion of Kansas City, Mo., in the central part of Jackson County. Part of the basin extends into Cass County.

There are eleven municipalities partially or entirely within the drainage area: Belton, Blue Springs, Grandview, Independence, Lake Tapawingo, Lee's Summit, Kansas City, Raymore, Raytown, Sugar Creek, and Unity Village.

How It Began

Jones said there were two major reasons for the creation of the watershed district.

Because of a building boom that began in the mid-1950s, the existing sewerage system could not keep pace with development in the Little Blue Valley. Discharge into the river was heavy, and the stream, which barely flows in dry weather, could not handle the volume of waste being dumped into it.

In the late 1960s, the state and the federal government said no waste could be discharged into the Little Blue River.

Facing the clean-up problem before them, communities began looking at alternatives. It wasn't feasible for every community along the river to lay separate sewer lines and build their own treatment plants.

Jones, working with the

Jackson and Cass County courts, developed the watershed plan whereby the communities would share a common sewer line and treatment plant.

This plan, because it had not been done before, needed special legislation.

With help from the county courts and attorneys, Jones drafted the legislation that would allow creation of the special type of district.

The political peculiarities involved in the situation caused a few problems at first, Jones said. One in particular was determining how trustees of the district would be selected and who they would be.

It was finally agreed that the three Jackson County judges and the Cass County presiding judge would serve as the district's board of directors.

Since then, Jackson County has changed its governmental structure and now Jackson County representatives are County Executive Mike White and legislators Archie McGee and Fred Arbanas. The Cass County representative is Presiding Judge Weldon Jackson.

Later, a council of mayors from the eleven municipalities in the district was formed. The groups acts in an advisory capacity to the board.

In July 1967, Governor Warren Hearnes signed the bill authorizing creation of the Little Blue Valley Sewer District. Jones said the bill also authorized state grants to the municipalities and sewer districts to construct interceptor sewers and treatment plants. However, he said no funds were appropriated at that time.

After successful attempts to find available state and federal funding, it was up to the voters. They came through on two bond issues, Jones said. The first, for \$9 million. The second, a \$45 million issue, passed by an 85 percent majority.

"The support for the Little Blue project," Jones said, "has been overwhelming. We have had no opposition."

Because of that support, the entire project, which will cost more than the sports complex and Kansas City International Airport combined (an estimated \$280 million), has run smoothly and on schedule.

Building Begins

Construction began on September 22, 1972.

As "Harvey's pipe" began snaking its way through the valley, the sewage lagoons that were spread throughout the area

Continued to page 6

Quality of Life

Continued from page 3

will assess the geothermal resources of West Texas. Yet another will investigate the ecology of a typical Gulf Coast wetland.

But no project is more ambitious than the Quality of Life Computer, the idea for which originated in the mind of a small town public official.

He is Oscar F. Nelson, Jr., judge of the Commissioner's Court. In a Texas county, that's the top administrator, elected at large. Rugged and ruddy, Judge Nelson serves his 15,000 constituents full time from a modest office on the second floor of the courthouse in the town of Anahuac, population: 2000.

A combat veteran of World War II and Korea, son of a rice farmer and school teacher.

Judge Nelson holds degrees from two Texas universities. His background as a successful businessman he now combines with nearly 15 years of experience as county judge. There's a Southwestern word for what he possesses: savvy.

He smiles at that, then responds, "Let's say I do know Chambers County. I was born here, and followed a plow here, and have spent nearly all my years here. I care very deeply for this land and its people. Some of us began to realize in the early 1970's that a rural county, such as ours, adjacent to one of the nation's fastest growing urban areas, Houston, could rapidly lose the qualities of life that we so much enjoy."

A 1972 comprehensive plan reminded Chambers County leaders of their environmental bounties: wide open spaces,

wildlife refuges, sport and commercial fisheries, oyster nurseries, clean air, uncrowded roads, lush rice farms, fat beef cattle, quiet forests, and unspoiled beaches. If some changes were inevitable, could in some way the total county environment be reduced to data to be manipulated by a computer? Wasn't there some shortcut in preparing environmental impact statements? Could the county anticipate what kinds of services it might be required to provide for future development? And in so doing, could the county avoid hiring an army of land use planners?

In legion with Chambers
County, the Southwest Center,
with participation by the Rice
Center for Community Design
and Research, applied for
research funds from the National
Science Foundation. The pro-



Above, Dr. Peter Rowe, architect of the program's data base, queries the computer from his office at the Southwest Center for Urban Research.

Fight City Hall

"More stringent levels of treatment do not necessarily mean 'cleaner' water", found the North Central Texas Council of Governments (NCTOG), the local 208 agency in Dallas-Fort Worth, Texas. This conclusion compelled the NCTOG to oppose additional treatment levels for waste flowing into Texas' Trinity River.

The Texas Water Quality
Board imposed extremely stringent treatment levels at major
publicly-owned plants to meet
dissolved oxygen water quality
standards. The level of treatment
meant 98% removal of suspended solids and BOD.

NCTOG believed that treatment plants presently constructed to meet 96% removal levels (even more stringent than national requirements for secondary treatment) were sufficient. NCTCOG believed that facilities for nonpoint sources of pollution should be additionally considered along with the treatment facilities for point sources. NCTCOG also believed that costs for additional 2% removal were unreasonably high, considering the questionable benefits from the treatment removal.

NCTCOG prepared its wellorganized and technologically well-documented arguments from a regional perspective, involving local governments. The public was involved in all stages of preparation and delivery of testimony before the Board.

In its testimony, NCTCOG questioned the reliability of computer models and the inferences drawn by the State from the model. NCTCOG also stressed the unreasonably high costs of the 98% removal is almost the same as the original cost to go from no removal to 92% removal.

In late July, the Texas Water Quality Board suspended its earlier ruling and reimposed the 96% level.

NCTCOG discovered that regional cooperation, along with favorable public support, was essential in convincing the Texas Water Quality Board to change its position. The local 208 agency found cost-benefit analysis persuasive in temporing demands for unnecessary waste treatment.

It is rare that a local 208 agency must oppose additional levels of waste treatment, but NCTCOG found that environmental legislation must be reasonable in its demands upon public expenditures.

1978 Calendar of National Meetings

Location Boston

Organization
National Governors' Conference
AIP Annual Meeting

Date August 27-29

New Orleans

Annaheim San Francisco Cincinnati Chicago

St. Louis

WPCF Annual Conference
ULI Fall Meeting
ICMA Annual Conference
ASCE Fall Meeting
NLC Congress of Cities

October 1-6 October 7-9 October 15-17 October 16-20

December 5-8

September 25 -

The following item from the December 13, 1977 issue of the National Association of Conservation Districts Tuesday (News) Letter relates to implementation of best management practices.

Report on lowa's Cost-Sharing Program. Since lowa's state cost-sharing program for soil erosion control practices began in 1973, approximately \$8.5 million in funds has been administered by local conservation districts. Practices installed with the cost-sharing funds include 3,090 miles of parallel grass backslope terraces; 428 miles of all other types of terraces; 1,875,000 lineal feet of grassed

waterways; and 1,230 erosion control structures. Funds were provided to 9,654 of the 16,000 landowners who requested assistance.

Since cost-share funds required by lowa's Erosion Control law became available, conservation districts have received approximately 200 complaints from landusers whose property was being damaged by sediment from another's property. More than 80 percent of the complaints have been settled by entirely voluntary means and only two cases have required court action.

posal resulted in an initial grant of \$263,000, followed by supplemental grants of \$225,000 and \$125,000. The county contributed \$50,000. An unrestricted grant of \$45,000 in general support of the Southwest Center's environmental policy activities came from Exxon Company, U.S.A.

The original investigator for the Chambers County project for its first two phases was Dr. Ralph Conant, now president of Shimer College in Illinois. Its director today is an affable, intense, brilliant Australian architect, Peter G. Rowe. Assistant professor at Rice, Rowe's specialties include urban and environmental planning. He is also something of a whiz at gathering up facts, arranging them in meaningful orders, and making them digestible to a computer.

The computer, of course,

makes it all possible. Now taken for granted, it was not invented until 1946 at the University of Pennsylvania. That first one could add in the thousandths of seconds. Yet at the time it was considered no more than an expensive, useless toy, By 1955 computers in the United States numbered 244. Today 135,000 large data processing centers worth \$60 billion accomplish tasks in microseconds that would keep thousands of mathematicians busy for centuries. The Bank of America says without data processing, it would need every adult in California to keep its books. To handle today's volume of telephone calls without computers, every working woman in America could be a telephone operator.

Peter Rowe is of a generation which can't remember a world without computers. The agonies

of algebra, logarithms, and square roots are hurdled in billionths of a second, leaving Rowe and his colleagues to

Continued to page 6

Millions of data points about Chambers County's environment await retrieval from hundreds of reels of tape in Rice University's Computer Tape Storage Center in Houston.



Sewer District

Continued from page 4

hooked up to the system and disappeared. Jones explained that the law required everyone in the area to join the system.

Now, fourteen miles of pipe have been laid and an interim treatment plant has been built near Highway 24 at the Spring Branch tributary.

"It's a long way from being completed," Jones said. But, the target date of 1985 should be met. There are six miles of pipe still to be laid to reach the Missouri River where a permanent treatment plant will be built. Several more miles of pipe upstream need to be completed.

The funding needed to complete the project is available, Jones said. There will be federal and state funds, and the necessary local matching funds have already been obtained.

Economic Boost to Area In 1970, Midwest Research Institute prepared a report on the estimated economic impact of the project. The report indicated that by 1990, when the bonds will be paid, the area served by the district will show:

More than \$900 million in business investments.

More than \$4 million in fixed annual investment spending by businesses.

Increases of 130,000 residents

and 42,000 homes.

Retail sales totaling \$275

Area employment of 127,000.

"I don't know of any operation that could have worked better than this one has," Jones said. The reasons for its success, he said, are the cooperation and support of many people, good enabling legislation, and its method of operation.

"One of the things I was determined had to be before I would have any part of this was that the only ones who paid for the project were the users," Jones said.

Although the sewer lines that are the basis for the project are fondly referred to as "Harvey's pipes," Jones is quick to point out that many people devoted a great deal of time and energy to the creation and continuation of the Little Blue district.

Without the help of Governor Warren Hearnes, Sen. Jasper Brancato, Rep. (now senator) Mary Gant, Sen. Jack Gant and many other fine legislators, the project would not have made it, Jones said.

He also gives much credit to a concerned, interested Jackson County Court, which then included Charles Curry, Dr. Charles Wheeler, and Alex Petrovic.

"There were so many," Jones said. And, he remembers them all.

Rural Wastewater Guidebook Being Prepared

Wastewater treatment and disposal systems for individual homes, rural communities and small developments will be the topic of a guidebook being prepared for developers, builders and government agencies as part of a study in the State of California. Its major purpose will be to highlight alternative waste management techniques for areas not serviced by conventional sewer systems.

Legislative and regulatory ordinances and procedures required to obtain permits for design and implementation of these systems will be summarized by the researchers at SCS Engineers, the environmental engineering firm in Long Beach which was contracted with the California Water Resources Control Board, Sacramento, for preparation of the manual.

A technical and economic evaluation of in-house water and waste reducing fixtures, on-site treatment and disposal systems, and centralized treatment systems available for homes and rural communities will be included.

If it is difficult to imagine developing a fondness for a sewerage system, talk to Harvey Jones.

The walls of his Independence office are a scrapbook of memories related to the Little Blue—pictures, resolutions, newspaper articles, commendations.

It is clear the Little Blue Valley

Sewer District is one of Jones' pets. He's been with it from conception and will stay with it until it's "grown." It will leave him with memories he'll never forget.

Harvey Jones

Reprinted with permission from: remarc, a publication of the Mid-America Regional Council.

Quality of Life

Continued from page 5

worry with the "software," defined as the memories and procedures programmed for a given assignment. Over the past few years with his Down Under charm and Aussie manner of speech, Rowe has won over Cajun shrimpboat families, black independent farmers, and a majority population, many of whom are descended from pioneer settlers of Texas. Clearly, mutual admiration is held by Rowe and the Southwest Center on the one side, and Chambers County government on the other.

"Maybe that's because none of us has ever lost sight of the basic idea," says Rowe. That was to devise a more efficient, less expensive, faster, more accurate, less duplicating method of presenting environmental information to decision-makers in



A grove of oak trees shelters a milk cow at a waterhole on the Joe Lagow Ranch. local government. "We emphatically do not tell them what to do," Rowe adds.

The dialogue with the computer does confront decision-makers with options, consequences, and trade-offs. "The computer says, okay, if you do this then this, this, this, and this will happen," Rowe explains.

Although fiercely independent and leery of invasions of property rights, the people of Chambers County fundamentally were self-taught naturalists, says Rowe. They touch the land, read the signs of the seasons, husband quail and squirrel and deer, and ponder upon the mysteries of bay, shore, and marsh. "Grass-roots conservationists," Rowe describes them. Yet:

"This very understanding of natural processes allows them to accept a degree of change, they know that nature herself is continually changing the environ-

Clean Water Act

Continued from page 1

wide 208 programs, and management of construction grants for small communities. This provision (formerly referred to as the Cleveland-Wright amendment) will provide substantial funds for major portions of each State's water pollution control effort. We do not view 205(g) funding as being available to cover actual planning tasks of the 208 program, but rather as being used to cover administration and oversight of the program, much as is supposed to be done under the 5% areawide set-aside for the States.

EPA regulations and guidance regarding procedures for determining the division of 205 funds between program elements and the allocation of supplemented State and 106 funds have not yet been completed.

Three Year Planning Period The Clean Water Act of 1977 amends the time requirements for submission of water quality management plans certified by the Governor to the Administrator. The amendment, §208(b)(1)(B), requires that for 1) all areawide agencies designated after 1975 and 2) all portions of a State for which the state is required to act as the planning agency, plans must be certified by the Governor and submitted

to the Administrator not later than three years after the receipt of the first 208 planning grant by the agency. The new three year planning period supersedes the two year deadline and the November 1, 1978, deadline for these agencies. For those agencies designated prior to 1975. however, the amendment has no effect on their current deadlines: plans must be certified by the Governor and submitted to the Administrator not later than two years after the planning process is in operation. The extension of the time period should be accomplished on a case-by-case basis by grant amendment. Each EPA region should determine the additional time which each state or areawide agency needs, in consultation with the agency. not to exceed the maximum three-year period. Separate advice will be provided concerning funding availability for additional needs, if any, which may arise in connection with the time extension.

Regulations will be amended to reflect the provisions of the amendments.

Open Space and Recreation §208(b)(2)(A) is amended to require 208 plans to identify "open space and recreation opportunities that can be expected to result from improved water quality, including consideration of potential use of lands associated

with treatment works and increased access to water-based recreation". §201(g)(6) imposes a similar requirement as a condition for construction grants.

Federal support for recreation is under continuing study by OMB "Office of Management and Budget" and the White House as part of the consolidation and reorganization of Federal planning requirements. The agreement between EPA and the Department of the Interior (Fish and Wildlife Service. National park Service, and the Bureau of Outdoor Recreation) is being revised to incroporate Open space and Recreation.

EPA Regional input will be requested to resolve policy issues concerning the timing and emphasis of this program, and to develop more specific criteria for approvable open space/recreation elements in 208 plans.

Irrigation Return Flows

The Clean Water Act of 1977 creates a new subsection (1) of Section 402 and amends Sections 208(b)(2)(F) and 502(14) of the existing law. It exempts irrigation return flows from all permit requirements under Section 402 of the Act and includes irrigated agriculture as a subject to be considered in water quality management plans under Section 208. Irrigated agriculture is no longer defined as a point source.

The amendment to Section 402 of the Act precludes EPA from requiring permits for irrigation return flows, and precludes EPA from requiring any State to require such a permit. However, the States themselves may still regulate irrigation return flows as a part of an approved State Section 402 permit program.

Dredge and Fill Regulatory and Permit Programs

The Clean Water Act of 1977 amends Sections 404 and 208(b)(4) to:

1) authorize the States to replace the Army Corps of Engineers' permit program with their own for certain navigable waters, when EPA approves the States program; (404)

2) authorize the States to establish regulatory programs for the control of certain discharges or other placements of dredged or fill materials. After EPA approves the BMPs which are to be applied to the dredge or fill activities regulated under Section 208, no Federal or State dredge or fill permit is necessary to control these activities. The Act also requires that the regulatory programs include a process for coordination with the Fish and Wildlife Service, and State Fish and Game agencies 208(b)(4). Section 404 is a detailed and Continued to page 8

ment, and that sometimes things have to change in order to stay the same."

Assisting Rowe in building the data base have been a score of scientists from support universities. They have included economists, lawyers, political scientists, geologists, hydrologists, biologists,

chemists, and soils experts - an interdisciplinary team whose combined works fill more than 1,600 pages in seven volumes of "Environmental Analysis for Development Planning, Chambers County, Texas." Soon there is to be a briefer, more generally useful, "Principles for Local Environmental Management."

The Chambers experiment is attracting national attention. Indeed, transferability of methods to other localities was a goal inherent in the original NSF grants. Inquiries have reached Judge Nelson and Peter Rowe from throughout Texas, from nearly all the coastal and Great

Lakes states, from big cities like

Boston, Washington, and St. Louis, from Congress, from coastal zone managers and regional commissioners.

Apparently, our fictional Ms. Planningperson holds kinship with great numbers of civil servants who yearn to cut through the maze of duplicating research and repetitive reporting now confusing and frustrating environmental planning on local levels. They yearn to have their own Quality of Life Computer one that even knows how to re spond when a lady cries, "Help!"



About The Author:

A veteran free lance, Don Dedera works out of his home in Del Mar, California.

Reprinted with permission from: 'Exxon U.S.A.', a publication of Exxon Company.



A growing industrial base for Chambers County includes oil

refining and petrochemical processing.

Third-Class Mail Postage and Fees Paid EPA Permit No. G-35

Washington DC 20460

Clean Water Act

Continued from page 7

complex provision, and this is not intended to be a complete summary.

Cost Sharing for Rural Water Quality Management

Section 208(j) of the Act directs the Secretary of Agriculture to develop, with the Administrator's concurrence, a national program of technical and financial assistance for rural water quality management. Regulations setting forth program requirements must be promulgated by September 30, 1978. The major provisions of this section are:

- (1) An approved 208 plan is required before a project within the area/State can be approved.
- (2) Only those BMPs certified by the designated management agency to be consistent with the approved 208 plan are eligible for cost-sharing.
- (3) The Secretary of Agriculture will enter into long term contracts with individual landowners. The contracts will be of 5-10 years duration and will be based on a plan approved by the Soil Conservation District where one exists.
- (4) Priority will be given to those areas and sources that have the most significant effect on water quality. Note the importance of this requirement. Funds will be apportioned based on water

quality effect and not on a predetermined allocation formula.

- (5) The Secretary of Agriculture may utilize soil conservation districts, State soil and water conservation agencies or State water quality agencies to assist in program administration.
- (6) The management agency must assure that an adequate level of participation will occur in a proposed priority area before contracts are entered into in that area.
- (7) Funds authorization is \$200 million, FY79 and \$400 million, FY80.
- (8) Any funds appropriated will be through the USDA budget.

USDA and EPA have agreed that the development of regulations will be a joint process.

Where State/areawide 208 agencies have identified agriculture as a nonpoint pollution source, regional 208 project officers and nonpoint source staff should provide 208 agencies with the information noted above so they may develop plans which will be useful in meeting the requirements of this section.

Interagency Agreements for Water Quality Management

EPA must enter into agreements with the Secretary of Agriculture, Interior, the Army and other appropriate agencies to provide for the maximum utilization of other Federal laws and programs in implementing 208 plans. EPA is authorized to

transfer funds to these agencies. \$100,000,000 is authorized to be appropriated per fiscal year for the fiscal years 1979-1983.

BEST Management Practices for Industry

Section 304(e) of the Clean Water Act of 1977 authorizes the Administrator to publish regulations supplemental to Federal effluent limitations for "any specific pollutant which the Administrator is charged with a duty to regulate as a toxic or hazardous pollutant under 307(a)(1) and 311." The regulations are to control plant site runoff, spillage or leaks, sludge or waste disposal, and drainage from raw material storage that is associated with or ancillary to an industrial manufacturing or treatment process and which may contribute significant amounts of toxic or hazardous pollutants to navigable waters. These regulations will be suplemental to effluent limitations and must be included in NPDES permits to support Sections 301, 302, 306, 307 or 403, as the case may be. Prior to promulgation of these regulations, BMPs may be imposed on discharges pursuant to 402(a)(1).

NPDES states must have adequate authority to regulate toxic pollution from runoff, spillage, drainage, and sludge or waste disposal associated with point sources, as well as adequate personnel and funding support to enforce that BMP.

Federal Facilities Compilance Section 313, Federal Facility Pollution Control, has been amended by the Clean Water Act of 1977. Each Federal agency with juris-

diction over any property or facility or engaged in any activity resulting, or which may result in the discharge or runoff of performance of his official duties must comply with all Federal, State, interstate, and local requirements, administrative authority, and process and sanctions respecting the control and abatement of water pollution in the same manner, to the same extent as any nongovernmental entity. This requirement applies to 1) any requirements whether substantive or procedural. 2) the exercise of any federal, state, or local administrative authority, and 3) any process and sanction, whether enforced in federal, state or local courts or in any other manner.

Executive Order 11752, which sets out a process for federal agency compliance with state pollution control requirements, will be revised to reflect this amendment. The Office of Federal Activities is responsible for revising the Executive Order; the Water Planning Divison will participate in drafting and reviewing the revised Executive Order.

After agency policy has been developed, existing interagency agreements developed by EPA regional offices regarding section 208 planning and plans must also be revised to reflect the new amendment. This revision will be carried out by the Regional Offices and proposed agreements will be submitted to Headquarters for concurrence. The revision of these agreements should be coordinated with the drafting of Section 304(k) interagency agreements.