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The Federal Waste Water Treatment System Construction Grant Program: What It Requires of States and How It Works

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Thesis —
Leopold

The Federal Waste Water Treatment System

Construction Grant Program

What It Requires of States and

How It Works

L.C. Leopold

MMA 65-652 (72-73)

May 1, 1973

MASTER OF MARINE AFFAIRS
UNIV. OF RHODE ISLAND

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 (Separate Package)

For the purpose of this study, EPA was represented by personnel at the Boston Office of the New England Regional Offices (Region I). Rhode Island provided the structure, people, and documents which represent state-level and local-level government activities.

More specific areas investigated within the framework of the study include:

- Pertinent laws and Guidelines of the granting programs;
- Mandatory planning and documentation requirements;
- Review actions of controlling agencies;
- Requisite procedures to achieve a grant;
- Actual content of grants (cash, technical aid, other?)
- Extent, if any, of regulatory and/or police powers available to each agency;
- Court recourse, if any;
- Freedom from, or presence of, political pressures at each level;
- Degree of interaction between successive levels of governments;
- Evidence of personal contact between agencies;
- Formal and/or informal problem-resolving mechanisms between agencies;
- Evidence of how efficiently the total system effects the quality of the nation's waters and waterways.

The federal law from which most of the direction and grants flow is the Federal Water Pollution Control Act, As Amended (33 U.S.C. 466 et seq.) through April 3, 1970. This is the extension

of the initial Water Quality Act (P.L. 84-600) of July 9, 1956. It is from this law and its Interim Guidelines that the requirements for such things as Statewide Water Quality Management Plans, Basin Plans, and Metropolitan/Regional Plans emerge (see Parts 3 & 4). On October 18, 1972, Congress overrode a Presidential Veto to pass P.L. 92-500, "Federal Water Pollution Control Act Amendments, 1972" (Part 4, entry 8 of this paper). It is this document that is referred to as the "72 Amendments" through out the body of this paper.

PART 1

Interview Sequence

The first interview was with Mr. Stuart Peterson, Chief, Construction Granting Division, EPA Region I (New England Region). The conversation was relatively short. He provided an Application Kit for Construction Grants (Part 4, entry 11). Essentially his office is the pipes and pumps technology end of the operation. His office determines that the actual physical plant is engineeringly sound and will do that which is specified in the design concept.

Further, he said that his office does no processing of a grant application until the following prerequisites are completed. First, the EPA Regional Planning Division must tell him that the proposed project is in compliance with an approved Basin Plan and/or an approved Metropolitan/Regional Plan, all of which must be within an EPA-approved State Plan. Second, the fully approved project must have been priority ranked by the state from within which the application originated. The state's priority ranking requires that all other more highly ranked projects must receive earlier EPA consideration.

Third, the Construction Grants Division Office must be notified by the Administrative Office that all federal requirements relating to the Applicant's financial soundness, accounting procedures, employment practices, and over all operational capabilities have been met. In retrospect, it was somewhat odd to note that Mr. Peterson never mentioned the 72 Amendments.

It became obvious that although his office has the title, other offices have greater impact upon the fate of an application for

waste water treatment plant construction grants, Mr. Peterson then supplied the following names: Mr. Donald Smith, Chief of Section, Basin Planning Section, EPA Region I, and Mr. Carleton A. Maine, Chief, Division of Water Pollution Control, Rhode Island Department of Health.

The next interview was with Mr. Donald Smith, Chief of Section, Basin Planning Section, Water Quality Branch, EPA Region I. His formal training was as a Sanitary Engineer. He has been with Federal Water Quality Control Programs for over 10 years.

Mr. Smith's first statement was indicative of his pragmatic, not academic, approach to the Planning Section's role in waste water treatment facilities and programs. "The EPA is like the Corps of Engineers. We're in the construction granting business. The more grants we make, the greater our impact upon the problem." In order to approve a grant, the new facility must be part of a much larger approved planning effort. The basic plan required is that from the state of the applicant. Without the EPA approval of that document, everything is halted. EPA has accepted minimal interim state plans to facilitate grant approval. Because the regulations and requirements have become more complex over the last four years, the quality of plans actually submitted has tended to lag.

People in the Basin Planning Branch recognize that grants being issued now tend to be based on the problems and realities of today; not on the kinds of long term goals that should be sought. "If there appear to be no great problems with the particular facility,

assuming a reasonable function in the Basin Plan Area, this office, in all probability, will go ahead with, approve, the project." Again, he emphasized the underlying philosophy of cleaning up the water, and if "there is no grant, there is no cleaning up."

The Federal Interim Regulations, if followed in their entirety (see Parts 3 & 4), require extensive area research even by the smallest unit of local government, let alone the Plan for a complete state. If no grants were approved until a complete plan was approved, nothing would have been granted in the last 4 years. On the other hand, the "so-called" plans fall far short of what they should be, and they do little justice to the intent of area-wide and state-wide planning. In passing, it was noted that what is really being sought is effective land use planning in the fullest meaning of the concept. Plans should really be addressing future growth patterns and/or the limits thereto.

State and local applicants are still trying to write minimum-content statements that will be allowed to "slide By." While the Planning Branch is gradually upgrading its own standards of what is minimal, they are constantly fighting the inertial lag of one community questioning why its material 'which is at least as good as what the neighboring town did last year' is not now acceptable.

In effect, earlier the Planning Section used "logical and reasonable tests" of a proposal when getting started. This early laxity is now breeding no new efforts; or essentially useless (poor) plans. It is the Planning Section's goal to induce a greater amount of pre-thinking, instead of costly (time and money) re-thinking, of submitted documents.

EPA's lack of staff and resources to adequately handle legally mandated levels of performance significantly contributes to the acceptance of far less than ideal planning documents. One might characterize this emerging process as the dynamics of lowered goals.

Mr. Smith was asked whether his section tends to feel much, if any, political pressures. He stated that the system is now set up such that EPA is essentially insulated from state or local government pressures. EPA works through the state office of waste water treatment control and utilizes that office as an effective pre-filter.

If, on the other hand, a member of Congress may want to "know why such and such a program is going in a particular direction." Usually the Planning Section can provide sufficient data to show how a "political solution" will lead to "cost ineffectiveness and therefore loose EPA funding." The response information, returned to the legislator through the Regional Administrator, is "usually sufficiently authoritative to satisfy the legislator and therefore his constituents."

While not mentioning the untried penalty powers within the 72 Amendments, Mr. Smith indicated EPA really had very weak and limited enforcement powers. Beyond moral suasion, EPA may first, not fund a project; second, threaten to or actually hold up funds to a project; third, rigidly enforce particular contractual matters that are within an already granted contract. EPA's ability to

withhold the carrot is much greater than their stick. Therefore, a community must genuinely want the federal funding before it (the town) can be made to respond to strong EPA influence.

While obviously not speaking for all of EPA, Mr. Smith established that EPA is generally a source of planning directives and requirements, and also grant moneys, to state level governments. Except for minimal technical aid and advice to waste water treatment plant operators, EPA provides little or no direct technical, engineering, or general assistance to states or smaller governmental units. This procedure further helps to isolate the Regional Offices of EPA from any bodies of government within a state's jurisdiction. This author feels that the lack of outward flowing real assistance may, in part, be due to limited personnel & resources; not simply intent.

Mr. Smith reflected that EPA's fairly strong leadership role tends to be diminished by its continuous inability to meet legislatively mandated, and operationally required deadlines. When a state agency submits a document, it reasonably expects a reply within the 30, 60, or 90 day response period established by federal standards. When the Regional Office can not respond in the required time, the submitting authority begins to wonder; 1, why the rush in the first place; 2, those people don't really care anyway. "For each overshot deadline, the states and local units lose a bit more confidence in us and bit more respect for us." Functionally each missed deadline does not change from where the money flows, but it does alienate and discourage the very people with whom EPA must interface if progress is to be rapidly achieved.

The somewhat sour note, while at the end of the 2 hour session, does not truly reflect the dynamic and optimistic outlook of the Basin Planning Section Chief.

The final interview was with Mr. Carleton A. Maine, Chief, Division of Water Pollution Control (DWPC), Rhode Island Department of Health. He provided sufficient information to establish that his office appears to be the most vital link along the local, regional, state, and federal chain. Our conversation lasted almost 3 hours. Mr. Maine is a very knowledgeable, energetic person who shares a similar sense of pragmatism with Mr. Smith.

The first topic of discussion was money; where it comes from, how it's gotten, and where it goes. Within this framework, the costs to the local communities were explained. He first explained why and how HUD has gotten out of supporting local waste water treatment construction planning. Under HUD's 701 program, HUD actually advanced the loans for a local community to do its preliminary site planning, its engineering, its drafting, and its construction proposals. This was usually 40 to 60 thousand dollars worth of paperwork preparation. The process usually produced good engineering documents. However, the local community had obtained the work with no expenditure from the local budget. Then when the question of funding the community's share of the construction costs was put before the citizens, they would usually turn the issue down. With no local funding mechanism, the construction project would die.

This phase of the HUD 701 program had a loan forgiveness clause in it which cancelled the debt if the local community did not receive

a construction grant. What was supposed to be an advance loan program became a money losing give-away which has now been cut off by HUD.

While it means higher initial costs to a local community, Mr. Maine firmly believes that the community's true interests lie where their money is. Internalizing the funding forces real community involvement. When asked why a town would even begin to incur a planning cost, let alone a construction cost, Mr. Maine said that it was usually in response to a state Department of Public Health requirement or direction.

Under the EPA funding program prior to October, 72, the federal share was 55% of the total costs of a construction project. Rhode Island's share was 25%, and the local government's share was 20%. EPA's funding, when granted, actually comes as reimbursed money provided to the building agency after requisite portions of the construction are completed; not as an advanced front-money loan like the eliminated HUD program.

Under the 72 Amendments, the federal share has been raised to 75 % and the required state portion has been "cut out." This leaves the local government with an unexpected additional 5% load. Mr. Maine feels that Rhode Island can and should pick up the 5% difference to avoid additional burdens to local bodies beyond that level of bonding already authorized. He pointed out that it is both costly and difficult for a community to return to the voters for additional funds for the same project.

He went on to show that Rhode Island now has EPA commitments

for 24 million dollars through 1 January, 1974, as the federal portion of planned construction. He also pointed out that his office has pending additional projects that need federal funding of 33 million dollars. These are projects whose funding proportions are the pre-72 Amendment distributions. He believes that those projects not yet approved may be eligible for the more recent 75/25 (20% local plus 5% Rhode Island) cost sharing, but he has not received firm guidance from the Boston Regional Office (EPA).

The Rhode Island DWPC has a present annual budget of \$489,000 (FY 73). EPA provides about 48% of that, or \$230,000. The other 52% comes from the Rhode Island State Treasury. This EPA support is direct aid for statewide operations and has nothing to do with actual construction funding.

The conversation digressed somewhat as it returned to the question of how does the state induce a community to initiate construction projects. The answer; mostly by persuasion and implied pressure. When asked about court action, Mr. Maine claimed that the state courts had proved to be of little value to him. Pressed further, he explained the experiences and reasons for his attitude.

First of all, if a town has no sewage treatment system (no pipes, collectors, pumps, treatment facilities, or outfalls), the state must then go after each home owner on an individual case by case basis; not the town government. Mr. Maine's office did it once in an area where the soil conditions were such that neither leach lines nor septic systems could prevent untreated waste from becoming a health hazard. The DWPC suggested to the court that the homes

be required to maintain closed holding tanks, the contents to be pumped out and trucked away at regular intervals. While this seemed like an acceptable solution, the court held the store, pump and truck method was an "unreasonable solution" due to costs incurred by the homeowner. Discouraged, no further DWPC action was taken in the matter.

Mr. Maine further related that the state can go after a municipality if it maintains any kind of facility that is doing an inadequate job. He chose Jamestown as a classic case where the Division won the court fight, but the town got its own way. Jamestown has a collector system that provides only partial primary treatment at best before pumping the effluent into Narragansett Bay. In 1967 the DWPC got a court order banning any new hook-ups to the system until it was upgraded. Instead of spurring community action for improving the treatment system, Jamestown has used the court order to severely restrict new construction on the island. The islanders wanted, and still want, to inhibit growth, so they have used the court order to their own ends. The order has had the same effect as highly restrictive zoning and Jamestown is happy with it. Obviously this was not the intent of Public Health Department. This writer got the distinct impression that Mr. Maine has very little patience with long delaying procedures that generate little or no positive results; the court system in this case.

Returning to the granting procedure, it was noted that Mr. Peterson, Mr. Smith, and Mr. Maine had all mentioned the phrase 'priority ranking' and that it had seemed to be a state function.

Mr. Maine confirmed that each state assigns specific rank order for all applications for waste water treatment system construction grants from within that state. This led to a request to know more about how such ranking was assigned. It would appear to put the DWPC, and the Department of Public Health, in line for potentially untold amounts of political pressure. Mr. Maine was quick to respond that much controversy is avoided since the ranking is achieved by use of a "detailed" priority rating system. A copy of the system's breakdown and point values is appended to this paper (Part 4, entry 12).

There are three major subdivisions in the total system. Section A attempts to evaluate how much change for the better (reduced amount of pollution impact) will be gained by the project. Part B is a per capita cost factor: the Reasonable Cost of Facilities divided by both the Present Population and also the Future Design Population. The higher the per capita cost - the more points earned. Part C is titled "Applicants Readiness to Proceed." That scale ranges from a low of "Preliminary Report Prepared" to a high of "Ready to Award Contracts (Local Money Available)." The priority ranking is earned by summing the points awarded in each section: Priority = A + B + C. The project is then placed on the state list wherever its point total places it. The ranking system is not a first come, first served system; but one that assigns priority according to established value. It also means that a more recent proposal may "bump" one already ranked if its point total warrants it.

When asked how well the ranking worked, Mr. Maine said that it

was "not a bad system" except that he would like to alter or eliminate Part B. He noted that a community of relatively fewer people with more land per person (an affluent bed-room community) would almost always have higher per capita costs than a densely peopled urban area. While Part B represents only 5 points out of a maximum possible of 60 points (A(35) + B(5) + C(20)), projects are often separated in rank order by 1 or 2 points. This writer wondered why the system was used when the Division Chief had such strong negative feelings about Part B.

Officially the priority ranking system was established by the Rhode Island Department of Public Health with gubernatorial approval. However, the DWPC's program is "very closely modelled after recommendations from EPA." Pressed further, Mr. Maine related that the recommendations, in this case, came through discussions and negotiations with Region I EPA personnel, not laws as published in federal guidelines. EPA, therefore, has had real influence on how project priorities as assigned, but makes sure that all actual ranking is an in-state function.

Having finally introduced the more direct EPA-Rhode Island functional relationship, Mr. Maine was encouraged to describe it. (His following comment was very much in keeping with the impression of this writer.) Almost all of the EPA people with whom the DWPC office must deal are "technicians in the sense that they are engineers - not trained planners." They tend to be both flexible and reasonable in their approach to, and demands upon, the state. "They have to be or they'd make no grants. No grants means nothing

SP.

is built, and no building means no corrective action." He feels he gets fairly good cooperation and respect from the EPA personnel as opposed to being forced into the role of a lesser entity.

Mr. Maine was asked why he chose the words "reasonable" and "flexible" to describe the federal people. He said that it stems from the problems and realities of the least well done, yet truly most important phase of the DWPC's work as tasked by federal regulations. This progressed into a discussion of plans and planning activity. Most fundamental of all is supposed to be an approved statewide plan for water resources and waste water treatment requirements. These general area requirements are supposed to be based on more detailed Basin Plan evaluations of each of Rhode Islands hydrologically delimited & separate regions. Within each of the watershed basins are supposed to be Regional/Metropolitan Planning Districts. The R/M Planning Districts (politically defined areas) are supposed to generate and maintain criteria that limit effluent loading of streams and waterways to within water quality standards as set by the Department of Public Health for the state's waters. All of the plans, criteria, assigned levels of water quality, and effluent loading limitations are supposed to be reviewed and approved by EPA before they become effective.

This rather cyclical and complex sequence seems to have been created by urban planners looking to employ more planners. But, as Mr. Maine emphasized, no project is supposed to receive a federal grant unless there exists an EPA APPROVED State Plan, a Basin Plan, and an M/R Plan.

For each local project proposal, the requesting government must submit an Environmental Assessment Statement (EAS) along with all of the engineering documents. Local governments have the resources to write little more than the sketchiest of Assessments. This EAS is passed on to EPA with no state-level review. If EPA is going to fund the project, then it, not the local government, must write an Environmental Impact Statement (EIS) based on the EAS. EPA's EIS usually falls far short of their own goals because of the minimal information in the original EAS. (This was one of the areas Mr. Smith had indicated was such a weakness also.)

By Mr. Maine's own admission, "Rhode Island has very crude Basin Plans. The plans for each defined basin are piecemeal in nature and not of good quality. EPA has designated them as Interim Plans in order to keep the granting process going." The degree of "crudeness" referred to above is in relation to the product as anticipated in federal laws and guidelines (Parts 3 & 4), not in relation to the planning products of other New England states.

One of the major requirements of the Statewide and of the Basin Plans is that all waters in Rhode Island must be designated as to their use-type quality, labeled A through D. Type A water is for body contact recreation; whereas type D can be used for commercial shipping - but not for shellfishing, body contact or drinking. Once a designator has been assigned, new effluent loadings must be limited so as to maintain and/or raise the use-quality of the water, never to lower it. The Plans are supposed to be of such descriptive detail that effluent absorption capabilities per unit length for a

given water body are known. According to Mr. Maine such qualitative and quantitative knowledge simply does not yet exist. Further, the Plans are supposed to contain dynamic flow models for each water system described. So far neither Rhode Island nor EPA has developed an effluent and particulate-matter behavior model that works when tested in the field. Apparently the chemical and physical interactions of the bottom sediments is not well known. In response to an aside, Mr. Maine said he had not drawn on the State University for either field data or stream modeling assistance. Further, unless one is talking about a very expensive tertiary waste treatment system, all treated effluent introduces some additional loadings to its receiving waters.

This inability to establish predictive models should, in the letter of the law, result in non-approval by EPA of all Rhode Island planning efforts to date. It was pointed out, however, that this was one more situation in which an unmet requirement was seen from a "reasonable point-of-view." Recognizing the inability to meet federal requirements, EPA has labeled current plans as "interim" documents. The continued extension of these permitted "temporary" plans is an unsettled question. Meanwhile they suffice until something better is mandated.

The topic of planning and attendant state-federal responses was pursued. Once, under the pressure of an EPA initiated emerging deadline, Mr. Maine's office submitted a simple two page report containing only the most recent hard (quantitative) data. A few days later Mr. Maine received a call from EPA asking why all of his

reports "weren't so short and sweet?" He guesses that the technical people want facts but the legislative writers want volume. This demand for extensive planning has apparently caused some real negative response on the part of the state level personnel.

Mr. Maine quoted an un-named friend of his in New York who claims to pad present data with material from 1950's planning documents. "By the time they (EPA) realize the stuff is old and repetitious, it's two years later and the project is already going." When asked if poor planning didn't dilute and/or reduce the effort to regulate and clean up the environment, Mr. Maine reiterated his pragmatic point of view. Hard regulations and strict interpretation would effectively stop all new construction, thus no clean up.

Since both the EPA and state personnel seem to be able to negotiate their way around problems, Mr. Maine was asked if there existed problems which were not so amicably solved. To this writer's surprise there is and it is not simply a paper detail. The conflict is the question of by-pass gates. (A diverting valve and pipe subsystem whereby untreated effluent may be routed directly to receiving waters whenever emergencies completely shut down the normal pumps and/or other parts of the plant system.)

EPA flatly says, "No by-pass gates." Rhode Island directs that all installations must have them. Rhode Island requires that the gates be manually operated, sealed, and opened only on orders from the DWPC of the Public Health Department. Even redundancy of normal pumps and an on-site auxiliary generator will not satisfy the state. Mr. Maine related an incident from Groton, Connecticut

to illustrate his point. An automobile hit a power pole causing a pump to shut down with subsequent failure of the on-site generator. There was no by-pass gate in the system; and, although the power line was repaired in 6 hours, the effluent flow backed up into private homes and primary treatment tanks of local industry. The back up was so extensive that effluent overflowed in the river anyway. It took several months to put the treatment system back on line because the pumps themselves had become shorted out due to in-plant flooding. About six hours of bypassed raw sewage was prevented at the expense of several months of improper treatment and excessive repair costs.

This naturally led to a question and response as to the mechanism for accommodating the conflict. First, there can be no EPA funds spent on the by-pass portion of the construction project. That phase must be all local funds even though state mandated. Second, EPA building inspectors "don't see the by-pass going in." This mention of on-site inspection introduced official, direct contact between the local agency and EPA.

Once the grant has been approved and issued, EPA Administrative, Accounting, and Engineering people deal directly with the sponsoring municipality. EPA oversees all phases of the bonding, hiring, site preparation, construction, auditing, completion, and performance as required by any and all applicable federal regulations.

When the project is initiated, the state is no longer involved unless the construction plans or system capacities need to be altered. While rare, all alterations must have state approval before installation.

When asked what significant changes, if any, his Division realized as the result of the October, 72 Amendments, Mr. Maine listed several, both large and small. In addition to 1) a number of very confusing deadlines and 2) the altered grant ratio; there was particular concern about the more limited water quality standards. Only use-types A and/or B are to be allowed. Less clean, but commercially usable water use-types C & D are to be discontinued. In theory this means that ALL waters within and without a state are supposed to be fit for fish/shellfishing and/or body contact recreation. While special case by case exceptions may be permitted by EPA, this is felt to be unreasonable and probably unattainable for any time in the near or far future

Another major change of which Rhode Island would rather have no part has to do with permits for industrial effluent discharge levels into navigable water of the nation. Under the 72 Amendments, EPA has been assigned the U.S. Army Corps of Engineers Permit Licensing Program. EPA now wants to officially give the function to the states. Apparently most states have opted to control the industrial licensing; Rhode Island, Maine, and New York have not. Rhode Island has estimated that it would cost \$700,000 the first year and \$500,000/yr on a continuing basis for it to license, monitor, and administer the program itself. EPA has offered Rhode Island \$200,000 in assistance for the first year only if were to assume the program.

In addition to costing the state an extra \$500,000/yr, EPA would still retain an item by item review power over the state

licenses. Since the state already must concur with any EPA decision before a license may be issued, Rhode Island can not see benefits in paying more for a function which, in fact, it already has.

The large blocks of grant money appropriated in the law, and subsequently impounded by the Executive branch, have not really altered the DWPC's operation. If the additional money becomes available, Rhode Island has projects ready to absorb at least 33 million more federal dollars. In fact it may be questionable whether local and state building capability could absorb that much new work without, at least initially, high inflationary costs.

Another seemingly small change in the 72 Amendments now allows EPA grants to cover construction of lateral lines (pipes in the streets for home hook-ups) for the first time. Rhode Island's DWPC feels that these should still be a local cost. Lateral lines have an expected design life of 50 years whereas the treatment plant facility has an expected life of 20-25 years. Lateral lines are not considered by the state to be an excessive burden upon the local government given the life expectancy.

Mr. Maine stated that if lateral lines appear as part of a project proposal, the state will tend to assign a lower priority ranking to it than to those which cover more major facilities only. This would be under Part A, amount of pollution reduced for dollars spent. Knowing that their grant applications would get lower ranking, why should a municipality include the lateral lines in a proposal. The answer was that it was "political suicide not to." The local government leaders, by excluding the lateral lines,

leave themselves wide open to charges at the next election that 'they did not take advantage of all possible federal aid; they caused our local taxes to rise unnecessarily.'

Exposing the area of political pressure, Mr. Maine was asked if the granting process was usually affected by politics. "No, but," was his answer. Normally the ranking system takes care of local people trying to gain early grants. However, there was one circumstance, a circuitous case. HUD wanted to put housing for the elderly into Warwick as demonstration project. But, there were no sewer hook-ups (lateral lines) in the streets; nor was there any state or local money budgeted for the additional piping. This was before the 72 Amendments. Because money for the necessary lines was not available; the state had assigned the sewer construction grant application a rather low priority based on sub-Part C of the ranking system. Therefore, EPA could not fund the needed sewage treatment plant, and HUD can not put in dwellings without proper waste treatment. HUD got EPA to ask Rhode Island to 'reconsider' the priority of the project. Choosing not to explain how, Mr. Maine related that funds were found to cover the street pipes, the application was reranked, the lines went in; and HUD housing was built. This was claimed to be atypical especially since HUD is now completely out of the waste water treatment planning effort.

Mr. Maine believes that federal and state efforts will become more sophisticated and complete as they both gain experience. Of course the necessary resources and personnel must also be

forth coming. Yet experience dictates, and present circumstances force, that some time must pass before high quality planning is achieved. Neither legislative works nor quick money will create instant results. The goals, which have been expanded in the 72 Amendments, are there, but it will take a while to reach them.

In order to cover the problem of grant acquisition from the point of view of the municipality, an article titled "Steps Municipality Must Take for Federal Aid, 75-25% 'Matching' Grants for Water Cleanup" has been included as entry 14 in Parts 3 & 4. It is a brief scenario of a small town organizing toward, applying for, and receiving a construction aid grant from EPA under the new 72 Amendments. While it adds little of any substance to that which has already been presented, it definitely helps to more fully complete the picture of the federal-to state-to local-to state-to federal sequence of observations.

PART 2

Recommendations for Further Studies

The study, having fully completed its initially stated goals, leads inevitably to more unanswered questions. Available time and resources limited the scope of this study in a number of ways.

It is a strong assumption, not a proven fact, that EPA Region I is characteristic of both the activity and attitudes of Regional Offices nationwide. A full review of the Legal and Enforcement Division of EPA Region I may provide intricacies of operation and influence not provided in this paper. No extremely detailed account of EPA cash flows was attempted, so no knowledge of possible political pressures on the net distribution of grants was attempted.

No estimate was made to determine how potential, future Land Use Planning under the Coastal Zone Management capabilities of NOAA or the Department of Interior may effect EPA's activities. It seems obvious that some integration and coordination, at least at the federal level, will have to take place. No guess was attempted to predict how future Congressional funding of the 72 Amendments will proceed.

The same assumption concerning the representative nature of the activities of Rhode Island's DWPC is, in fact, untested by comparisons with that of other states. The true problems of states licensing, monitoring, and administering industrial effluent discharge into coastal waters is unexplored. No attempt was made to factually compare and establish the efficacy of Rhode Island's DWPC. An appraisal, either economic or social, of the non-existent long range use-goals of Narragansett Bay was not tried. It is clear that a definitive statement about the ultimate usage(s) of

PART 3

Index to Reference Documents

This section contains a series of short content inventories of the documents in Part 4. These are not intended to be critical reviews, but rather a rapid ready reference set. Only portions which are of direct bearing to this paper are described. The documents are arranged by chronological sequence of publication.

The first entry is the Federal Water Pollution Control Act, As Amended (33 U.S.C. 466 et seq.) through April 3, 1970. This text serves as a legal history of the evolving basic Act (PL 84-600) approved July 9, 1956. Its Sections include:

- 1) Policy Declarations to enhance quality and value of water resources and for abatement of water pollution.
- 3) Federal - state cooperation is desired.
- 7) There shall be grants for water pollution control programs.
- 8) There shall be grants for construction of treatment works - establishes the federal grant sharing ratio.
- 10) Enforcement measures against pollution of interstate or navigable waters - much review procedures and no teeth.
- 13) Control of Sewage from Vessels - establishes that standards need to be promulgated.
- 15-20) Sections that deal with training and research grants.
- 21) Other Federal Agencies are supposed to Cooperate in the Control of Pollution.
- 22) Administrative organization.

23) Definitions.

This document also includes the texts of Reorganization Plan No. 2 of 1966 and Executive Order 11507 of February 4, 1970. Both expand and attempt to define more clearly the federal effort for pollution abatement and control.

The second entry is EPA's Guidelines for Water Quality Management Planning published January, 1971. They are officially still in effect as of this writing. These Preliminary Planning Guidelines are to provide the basic areas of concern to be addressed when attempting to meet the requirements for EPA Waste Water Treatment Works Construction Grant Program and for HUD Water and Sewer Facilities Grant Program. The document has 5 chapters:

- 1) Approach to Water Quality Management Planning
- 2) Basin Plans
- 3) Metropolitan/Regional Plans
- 4) EPA Plan Evaluation Procedures
- 5) Evaluation of Construction Grant Applications for Conformance to Plans.

This document also contains a copy of the Rules and Regulations for Grants for Water Pollution Control, Part 601, Federal Register, Vol 35, no. 128, July 2, 1970. It notes the need for an "effective Basin Plan" (para. 601.32 (a)). On pages 1-9, the text of the Guidelines sanctions Interim Plans in order to reconcile lead time for planning with flow of construction projects. Much other conceptual data is included and this document serves well as a

non-legalistic introduction to the whole problem addressed by this project.

The third entry, titled Water Quality Management Planning, Institutional Arrangements for Water Quality Management Planning, is a critique prepared for EPA by an outside contractor published September, 1971. The report identifies the status and problems of the State level water quality management planning programs. Particularly it notes that the lines of communication which are not based on dollar flow are either weak or non-existent. There are constant references in this document to the previously cited Guidelines. This too is a good, readable reference for understanding the relevant Federal, state and local intergovernmental relationships.

The fourth entry, published November 27, 1971, Federal Register, Vol 36, no. 229, titled Grant Programs Interim Regulation, begins to supply the kinds of functional details not found in either the actual Laws or Agency Guidelines. It codifies and establishes procedures for grants awarded by EPA.

The fifth entry is Water Quality Standards Summary, a Joint Publication by EPA and the Rhode Island Department of Health, Division of Water Supply & Pollution Control, published December, 1971. The text provides both verbal and quantitative description of what water use-types A through D are. It also defines the hydrological basins for the State of Rhode Island and assigns classifications

to the major water bodies in each basin. It is a deceptively simple, but important document since it supplies numbers and names to otherwise abstract requirements.

The sixth entry is titled Environmental Impact Statements, Procedures for Preparation, Federal Register, Vol. 37, no. 13, January 20, 1972. It is a further EPA elaboration clearly requiring local grant seeking governments to include Environmental Assessment Statements (EAS) with the grant application. Para 6.23 states that the EAS should follow the form and format prescribed in Para 6.45. A reading of Para 6.45 indicates why local governments have real difficulties submitting an EAS of anything more than minimal value. The required open ended narrative is expansive and complex, and this is the officially required product.

The seventh entry is titled General Grant Regulations and Procedures; State and Local Assistance Interim Regulations, Federal Register, vol. 37, no. 112, June 9, 1972. These regulations were published in an effort to provide grant applicant with more explicit statements of grant-award and administrative requirements. These regulations are a more detailed statement of prior regulations and of previously uncodified policies, procedures, and terms of respective grant programs. The quantity of specific information is indicative of the level of confusion that state and local governments were having while trying to conform to a rapidly evolving and changing program.

The eighth entry is a copy of PL 92-500, "Federal Water Pollution Control Act Amendments of 1972," as passed on October 18, 1972. There are five Titles to this Act. The most dramatic portion is Section 101.(a)(1-5), the statements of national policy which set as a goal the elimination of the discharge of all pollutants into navigable waters by 1985. Each of the Titles sets more greatly defined standards than did the Water Pollution Control Act of 1970. Each of the Titles has extensive funding authorizations; portions of which are presently under Executive Impondment. It is therefore difficult to guess at the true impact of each Title. There is much internal cross referencing in the document which makes it as whole, and as separate new deadlines and requirements, difficult to understand.

Under Title III, Sec. 309. (c)(1&2), the EPA is now fully authorized to bring civil suit against persons, corporations, or municipalities for non-compliance and/or violation of licenses or orders issued by the EPA. Both imprisonment and cash fines are detailed for conviction of such offenses. This is a far cry from Sec. 10.(d) & (e) of the 1970 Act which was a drawn out sequence of reviews, with no penalties, for situations of non-compliance.

It is an Act that should eventually have great impact upon the ultimate improvement of the nations's waters.

The nineth entry is a very readable set of Guidelines for Developing or Revising Water Quality Standards under the 1972 Amendments (entry eight above) published by EPA in January, 1973.

The text attempts to unravel the complicated sequence of reports and deadlines required by the Act itself. It instructs Regional EPA personnel that upgraded and revised state planning activity schedules should be as complete as possible relative to the shortness of the deadlines. Operating Procedures defining State-Federal interfacing is described on pages 32-36. On page 39 is a sequential listing of the newly mandated deadlines. It is this writer's opinion that they will most likely be overshot.

The tenth entry titled Preparation of Environmental Impact Statements, Interim Regulation, Federal Register, Vol. 38, no. 11, January 17, 1973, is an expanded elaboration of the January 20, 1972 Interim Regulations (entry six above). One of the purposes of this document is to help define when Impact Statements need not be made for purely administrative actions. By expanding the scope of the available details, the text severely limits when a Declaration of Negative (translate "none") Impact may be used. This eliminates a dodge many local governments have been using to avoid and evade writing an EAS of any substance. Also new is the requirement (Para 6.56.(b)(5)) that the local government must conduct a public hearing on its EAS, and that a record of the hearing must accompany the EAS when a grant application is submitted to EPA. While most of this document is directed to in-house EPA personnel, local municipalities will need to digest it as planning requirements become more sophisticated and rigidly enforced.

The eleventh entry is an Application Kit for Construction Grants provided by Mr. Stuart Peterson. This Kit is what would be provided to a local government should it desire to initiate an application for waste water treatment construction aid assistance. There are 5 documents in the Kit. Two of the documents relate to Compliance Requirements of Title VI, Civil Rights Act of 1964. The multiple page form even goes so far as to ask for a percentage racial distribution of those members of the community that will not benefit from the project.

A one page Environmental Assesment Outline is included. It is a deceptively simple form. It is an open ended essay. According to Mr. Donald Smith, Chief Basin Planning Section, Region I, EPA, too often Sections II through VII are answered, "none." The fourth form is simply a population census sheet for federal indexing of the grant area. The final form is a detailed budget proposal in Parts I through III. Part IV is a narrative and covers much the same kinds of information as the EAS. In addition, however, it requires evidence of Comprehensive Planning and also the requestor's committment for adequate staffing and funding for the facility once it has been completed.

The twelfth entry is the Rhode Island Department of Health, Division of Water Pollution Control, "Priority for Construction Grants under P.L. 660" schedule. It is a self explanatory, guileless document, except that the actual evaluation of each portion remains a human decision. While given as a state regualtion, the *format and contents were suggested and approved by EPA as a proper*

presents an accurate statement of the problems and processes except for one major detail. On the last column of the last page (no. 22), the text indicates that the project will get state priority ranking of Number 1 without the local bond issue having first been passed, and the money made available. This is contrary to what has been presented earlier in this paper. The critical assumption is that the Rhode Island ranking system is a representative example, not the exception, of state-level operations. It may be that the authors of this article have taken an improper liberty in order to create a smooth story line. Otherwise it appears that the "Governor's Office" in the article is acting in ways that violate the rights and interests of other municipalities in the state. The other point completely missing is any mention of anything that resembles an Environmental Assessment Statement for submission to EPA. Either the authors forgot (ignored?) the requirement or it is assumed to be part of the services produced by the hired consulting service.