

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I

JFK FEDERAL BUILDING, BOSTON, MA 02203



REGIONAL ASSESSMENT

COMPREHENSIVE GROUND WATER PROTECTION PROGRAM

NOVEMBER 1993

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**EXECUTIVE SUMMARY
REGIONAL ASSESSMENT (REGION I)**

I. INTRODUCTION

A. OBJECTIVES OF THE REGIONAL ASSESSMENT

In a gesture of solidarity with the states, Region I initiated a "Regional Assessment" of sixteen (16) ground water-related programs. The objectives of the Regional Assessment are to: 1) establish a baseline of how EPA programs function; and 2) identify program recommendations for better cross-program interaction and support of comprehensive protection.

B. REGIONAL ASSESSMENT PROCESS

Interview process.

An extensive survey questionnaire was prepared and used in a series of interviews with each of the 16 ground water-related programs. The questionnaire was developed using the 6 Strategic Activities and Adequacy Criteria, as described in the CSGWPP guidance.

Program teams were established, consisting of a ground water program state coordinator and a member from each of the ground water-related programs. The regional programs perceived benefits gained through their participation in the Regional Assessment.

Baseline Information and Recommendations.

The information developed was used to generate the following data: 1) baseline information of each program's current activities and approaches; and 2) program recommendations, lead contact, and timeframe for implementing each recommendation (See Appendix C & D).

II. WATER RESOURCE PROTECTION - FUTURE DIRECTIONS

A. HOLISTIC APPROACH

Region I has designated Resource Protection as one of its goals for Fiscal Year 1994. Through the integration of programs, critical resources which deserve special attention due to outstanding value shall be targeted for special consideration. The principles of Resource Protection is further complemented by the Water Division's support of a holistic approach to Water Resource Management for both state and federal water programs. Through such support, water programs are encouraged to expand their program focus, thereby conducting activities and setting priorities based

on a thorough understanding of the water resource, including surface water, ground water and wetlands.

Examples such as the following illustrate several ways in which regional programs shall be further integrated in acknowledgement of the interaction between surface water and ground water, and in support of a holistic approach to Water Resource Management:

1. Support greater consideration of ground water protection in surface water programs;
2. Institute formal process for considering ground water protection into NPDES permits and as a factor in priority setting;
3. Use pretreatment inspection opportunities to provide education and outreach materials to permittees describing Pollution Prevention, BMPs, and ground water protection;
4. Maps and background information about the importance and location of priority resources shall be provided to all water-related programs;
5. State ground water, surface water, and wetland resource coordinators shall continue to regularly meet.
6. Program 106 integrated grant guidance distributed to the States shall encourage CSGWPP support;
7. New program initiatives, such as the source water program, shall be encouraged in order to promote overall coordination of surface water and ground water resources;
8. Training shall be provided to EPA program staff to improve understanding of potential impacts of program activities on all resources.

B. RESOURCE PROTECTION BASED ON USE AND VALUE

Ground water use, value, and vulnerability will provide the common tool to geographically target federal and state resources to meet our mutual goal of "preventing adverse effects to human health and the environment and protecting the environmental integrity of the nation's ground water."

Program recommendations provided herein reflect areas where the programs shall implement measures to further support a state directed approach to ground water management, based on the use and value of the resource. For example, the Region's Superfund and RCRA C Corrective Action Programs shall factor wellhead protection areas into their priority ranking systems to determine: 1) where to focus remediation efforts; and 2) the extent of restoration to the area. Similarly, the NPDES Program may designate major permits based on high value ground waters within priority watersheds, and adjust for the impacts of permitted discharges within or near

critical ground water areas hydrologically connected to the receiving surface water body.

The Ground Water Management Section (GWMS) has a responsibility to facilitate a dialogue to resolve questions concerning this new approach. In particular, the Region's Programs need: 1) clear definitions of use, value, and vulnerability as applied consistently at the federal and state levels; 2) statewide data and/or maps indicating the locations of ground waters with designated uses and relative values defined by the State; and 3) guidance on how to apply ground water use, value, and vulnerability to mutually support resource protection and other strategic environmental priorities. Resolution of such issues shall be a high priority for the GWMS in Fiscal Year 1994.

III. RESULTS

A. BARRIERS TO COMPREHENSIVE PROTECTION

Background.

A principle goal of this assessment is to identify ways that Region I can achieve more comprehensive ground water resource protection. Inevitably, there are barriers that slow progress toward our goal. During program interviews and the initial assessment process, several types of barriers were identified that impede our ground water protection progress. Generalized barriers that impede Region resource protection have been divided into eight principle types. These barriers are described below:

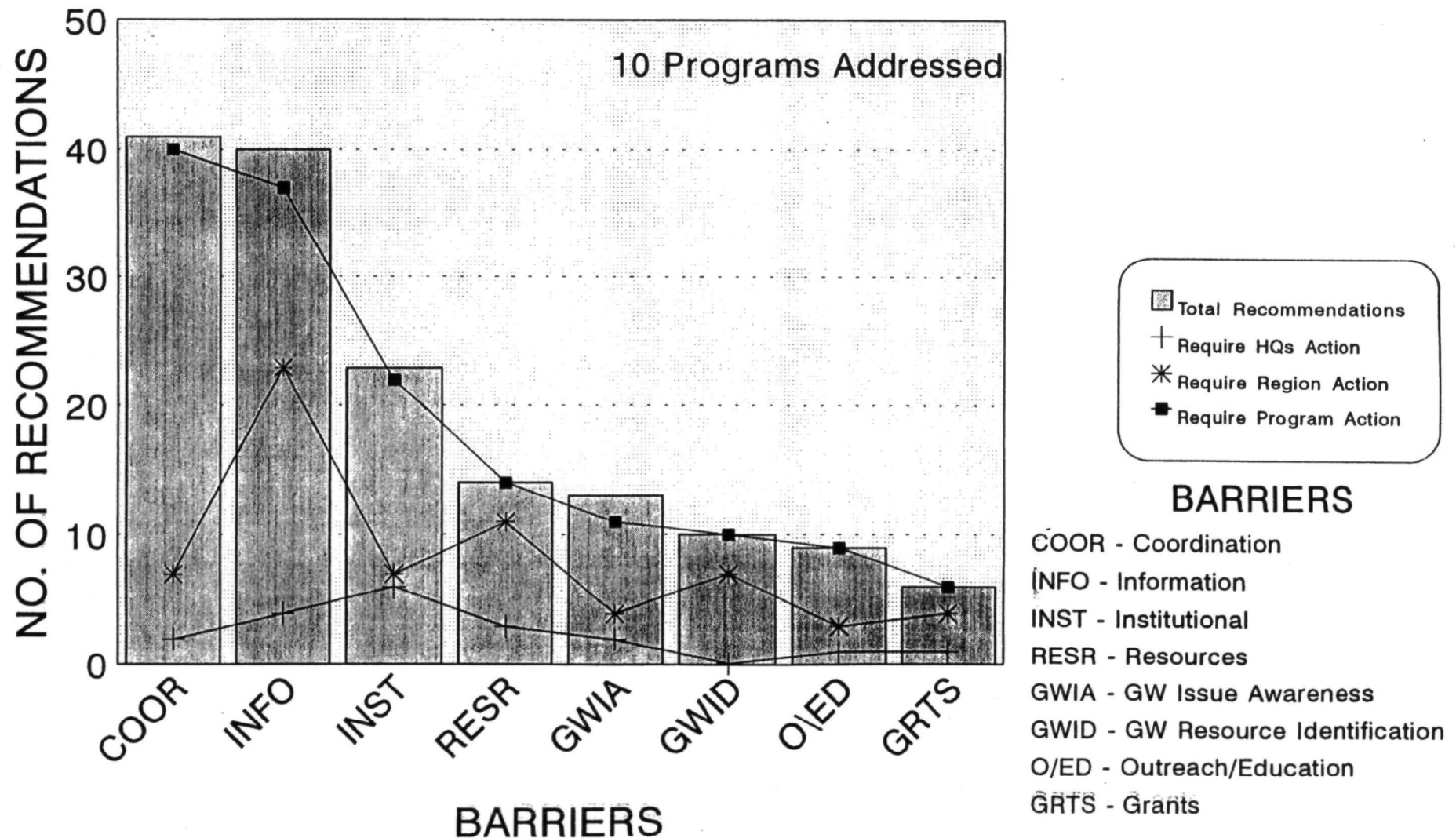
- Resources (staff and financial)
- Information (availability, quality, accessibility)
- Coordination
- Ground Water Resource/Contaminant Source Identification
- Awareness and Communication about Ground Water Programs
- Grants (timing, flexibility, guidance, conditions)
- Institutional Restrictions (Regulations, policies)
- Public Outreach/Education

Summary of Program Recommendations According to Barriers.

Overcoming barriers to more comprehensive and effective resource protection requires broad EPA support. Figure 2 shows the number of recommendations identified to overcome the principle barriers. Such recommendations have been further divided between recommendations requiring Headquarters, Regional (e.g. Leadership Team) or Program Action. Based on the number of recommendations identified per barrier, Coordination of Activities, Information Management and Systems, and Institutional Restrictions were the most commonly identified impediments to comprehensive resource protection, with a total of 41, 40, and 23

Figure 2

RECOMMENDATIONS TO ADDRESS BARRIERS TO A COMPREHENSIVE GROUND WATER PROTECTION STRATEGY



recommendations, respectively.

The majority of the recommendations listed for most programs under the Information Management barrier have been identified as requiring Headquarters/Regional action (40 total; 23 HQ/Regional). Therefore, due to the scope of the recommended changes, actions taken to overcome this barrier must happen at the upper management level. In comparison, greater than 70% of both the Coordination and Institutional Recommendations have been identified as requiring program action, reflecting the ability of changes which address such barriers to occur more easily at the operational level.

B. ANALYSIS OF RECOMMENDATIONS

1. HEADQUARTERS RECOMMENDATIONS

Although the focus of this Regional Assessment was on identifying ways to improve coordination and integration among the regional programs, over 25 recommendations requiring Headquarters action were identified.

Approximately half of the recommendations addressed the Information Management and Institutional barriers. Examples of such recommendations are listed below:

Information Management.

- a) Encourage HQ to include mandatory data entries and reporting requirements for longitude and latitude;
- b) Improve the availability and accessibility of EPA data systems, including PCS and FRDs, and their ability to link with Geographic Information Systems (GIS);
- c) Increase the availability and use of Global Positioning Units (GPS);
- d) Provide adequate resources to support enhancement of regional/state information management systems.

Institutional.

- a) During reauthorization of major statutes (e.g. CERCLA), recommend changes for consistency with CSGWPP guidance;
- b) Promote through legislative and operational changes the use of "use and value" of the resource as a critical tool in program activities and priority setting;
- c) Encourage creative use of Supplemental Environmental Projects (SEPs) for prevention projects;
- d) Continue to promote linkages between the Public Water Supply (and other programs) and Ground Water Protection Programs.

In addition to the above recommendations, many programs expressed a lack of direction and support on comprehensive ground water strategies from their national programs. Approximately 56% of the programs interviewed did not

receive instructions from their HQs program to support the comprehensive ground water approach. This inadequate cross-program commitment from the national programs is reflected in limited discussion of CSGWPP at national program meetings and operating guidances. Therefore, some regional programs believe that without clear direction, business as usual may prevail.

2. REGIONAL RECOMMENDATIONS

As described in Figure 2, approximately 70 recommendations have been identified by the programs as changes which require Regional Action (e.g. Leadership Team).

The following 3 recommendations were agreed upon by the Region I Ground Water Policy Committee as Regional Recommendations to be forwarded to the Leadership Team for review/action (date - January 1994):

- a) Assign staff/dollars to establish a cross-program workgroup (e.g. QAT) to overview an assessment of the region's information management capacity and needs to support program priority setting. This workgroup would: 1) examine information availability, accessibility and systems, building on the state and federal information management programs; and 2) determine options for increasing information management capacity where appropriate to support resource based priority setting;
- b) Institutionalize gathering of accurate longitude/latitude of contaminant source information (e.g. RCRA facilities, NPDES facilities) in all programs. A regional cross-program group should be established or merged with Ed Conley's Good Science Group to lend consistency to, and set guidelines for locational data gathering. This recommendation shall address the need expressed by the programs for accurate locational data to use in priority setting;
- c) Send message to "take a risk" in the creative use of Supplemental Environmental Projects (SEPs). Enforcement settlements may include support for resource protection activities (e.g. support local wellhead protection efforts in cases where contamination impacts drinking water supplies; and require protection programs when supplying alternative water supplies).

3. PROGRAM RECOMMENDATIONS

Theme: Resource Based Protection Approach

Increasingly, Regional programs' guidance and support to

Figure 5

DO REGIONAL PROGRAMS CONSIDER GROUND WATER RESOURCE CHARACTERISTICS IN THEIR PRIORITY SETTING?

GW Characteristics

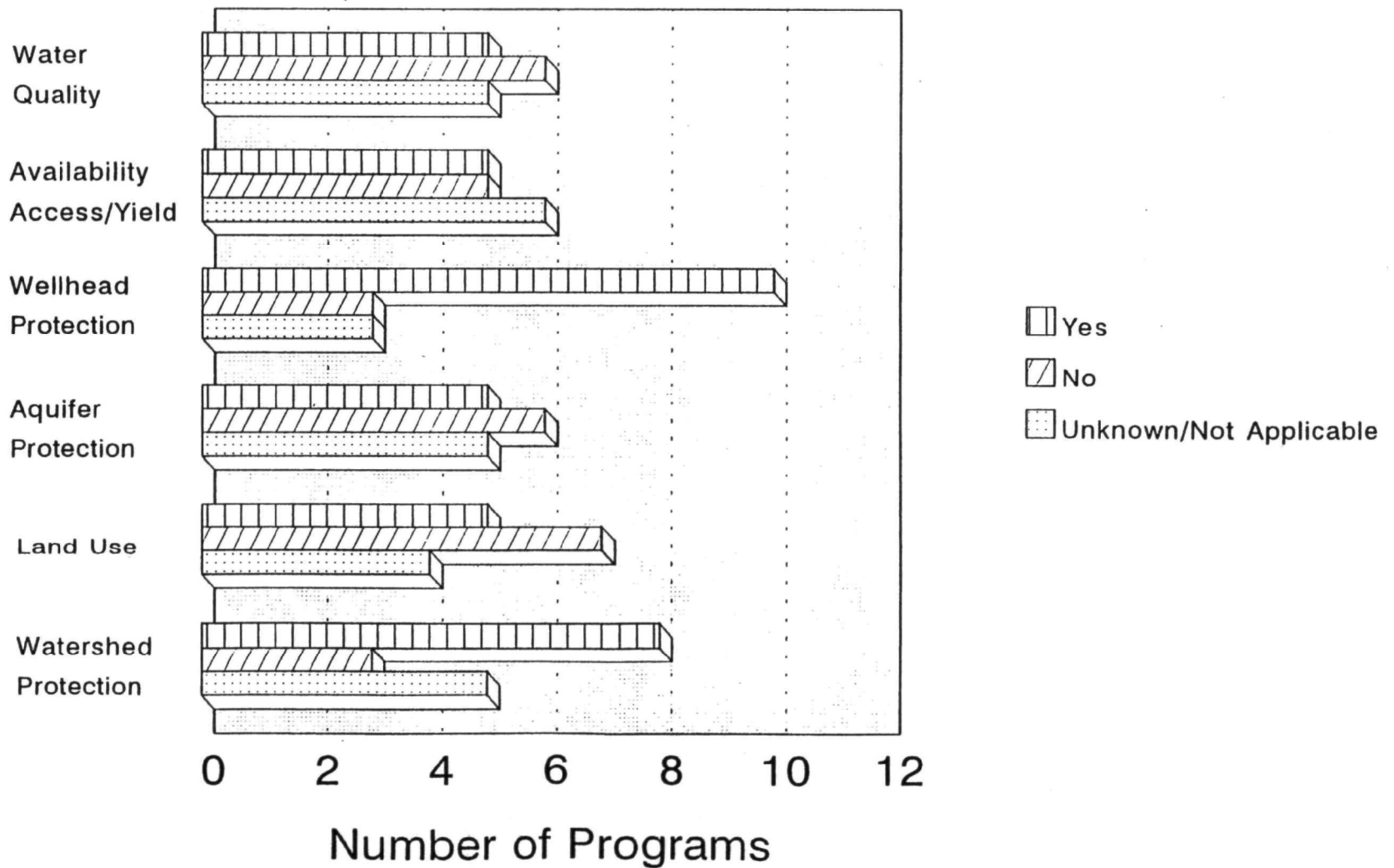
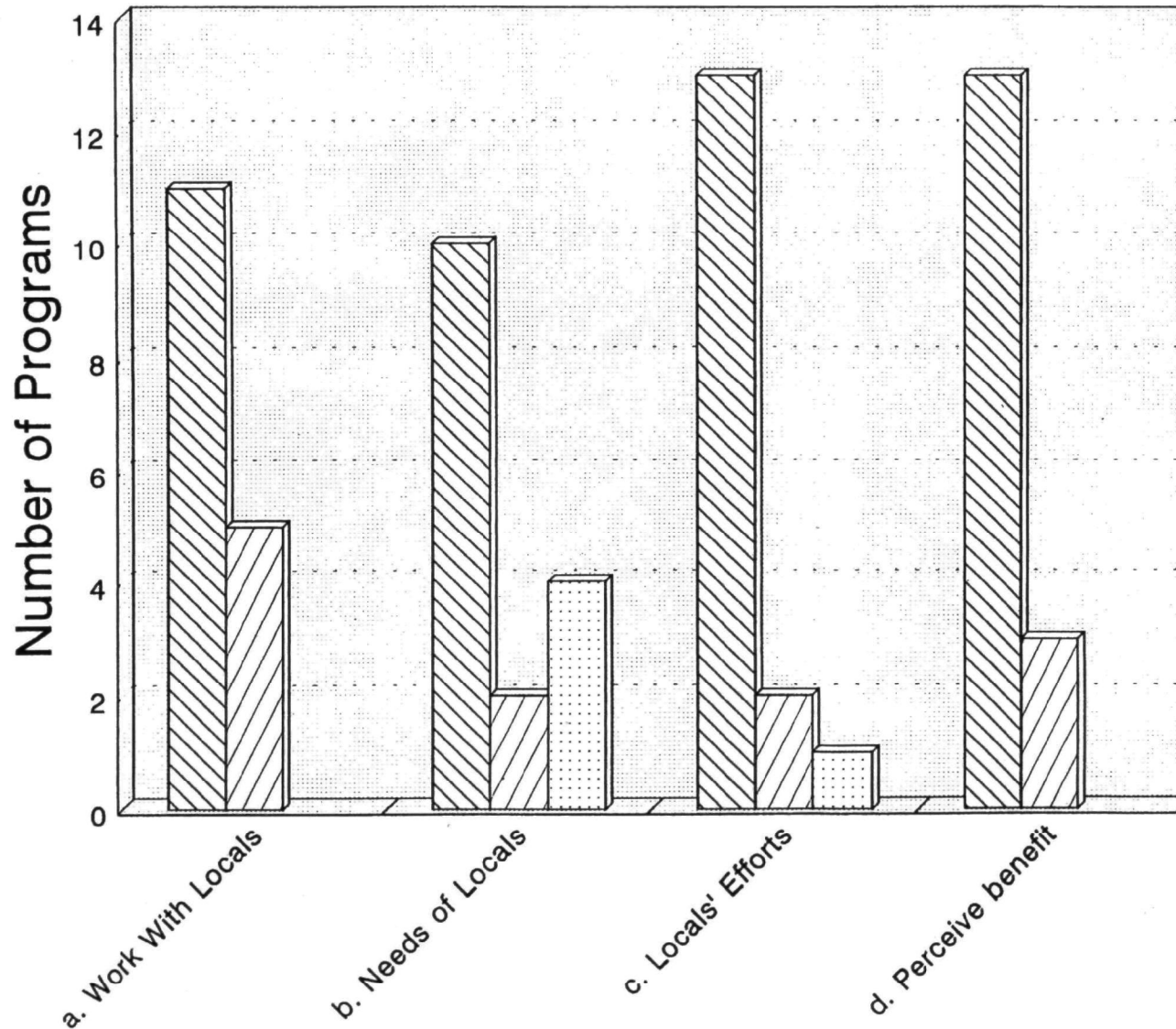


Figure 6

CONSIDERATION OF NEEDS AND COORDINATION WITH LOCAL GOVERNMENTS ON GROUND WATER AND CSGWPP ISSUES

16 Programs



a. Do Program objectives include working directly with local governments or interest groups?

b. Does Program consider Locals' needs in Program's GW protection planning & efforts?

YES
NO
NOT APPLICABLE

c. Would local efforts/info. benefit Program's ability to protect GW resources?

d. Does the Program perceive benefit from discussions with Locals about local GW protection?

state programs are promoting greater awareness of resource based priority setting, coordination and decision making. However, currently, ground water related programs do not routinely use a number of ground water resource characteristics for setting priorities, including land use and aquifer protection. As illustrated in Figure 5, of the ground water related characteristics programs reportedly considered, wellhead protection areas (WHPAs) were the most familiar and most frequently cited.

The following examples indicate program areas where ground water resource based activities are occurring:

- 1) the Underground Storage Tank (UST) program has begun focusing field presence and record inspections in EPA designated sole source aquifers;
- 2) the Underground Injection Control (UIC) program has been advising state UIC programs to focus attention on wellhead protection areas and to participate in state multi-media inspections;
- 3) the national NPS guidance for FY 94 approved funding of resource based wellhead protection activities as one means of preventing surface and ground water contamination.
- 4) the PWSS program uses frequent contact, program support, and outreach to water suppliers, organizations, and their state programs, to encourage delineating wellhead areas and identifying contamination threats within them.

RCRA C, Corrective Action, and Superfund programs recommended they could use locations of critical resource areas, such as current and expected wellhead protection areas, to aid in prioritizing and selecting "new starts" for remedial attention. Towards this approach, Superfund has undertaken a major contractor effort for accurately locating latitude and longitude of all public water supply wells throughout Region I.

Figure 6 indicates the Region's favorable belief that local programs can provide supplemental assistance. Involving local communities, with their management authorities to establish protection bylaws and health ordinances, and to conduct inspections of commercial activities, is essential to resource based protection. To further encourage this, PWSS has recommended it will request states to share with local communities their results of sanitary surveys conducted on ground water and surface water PWS systems.

Theme: Awareness and Coordination

There are a variety of ways awareness and coordination among

the Region's programs is occurring. For example, familiarity of programs occurs through routine contact on program activities. It occurs through contact on special geotargeted projects such as the Merrimack River Initiative, Regional activities such as Quality Action Team or participation on regional workgroups such as the Pollution Prevention Task Force. For coordination purposes, all cross-program teams are tracked on LAN Tracking System. Finally, the Water Division tracks grants and other initiatives for easy distribution among staff.

States developing adequate Nonpoint Source Management Plans and Pesticide State Management Plans can expect relying on them to significantly satisfy Regional review of those programs for CSGWPP endorsement.

Coordination in developing the Regional Assessment resulted in new awareness and further understanding of programs' roles in ground water efforts and CSGWPPs. Pollution Prevention has recommended to serve in a consulting role to ground water committees for addressing specific issues. Many programs including NPS, SW, NPDES, SF, RCRA C, UIC, and others, sought a stronger role for the GWM program for coordinating and distributing ground water resource information.

UST, RCRA C, and the other grant oriented programs, agreed to continue to insert into grant guidance and workplans, the requirement for working with the states' ground water programs on developing CSGWPPs, and to participate on the state ground water coordinating mechanisms/committees. The Marine and Estuarine Protection (M & E) program recommended they will improve its involvement with the with GWM and NPS, especially for coastal areas. The Pesticide program expressed it would improve support and coordination with the NPS, Bays/Near Coastal and the PWSS programs. Superfund identified beneficial links with the Ground Water program and together have accepted several recommendations to improve coordination between the two programs.

Recognizing the natural interconnection between surface and ground waters, the Water Quality Management (WQM) and GWM programs accepted recommendations to improve communication and education across the programs.

Through national and Regional annual grant guidance, and/or grant conditions, all ground water related programs will continue to specify the need for their state programs to coordinate with states' ground water programs in developing and implementing its CSGWPP, and to participate in their state's ground water coordinating mechanism.

Theme: Information

Programs agreed to define their information needs and expressed a willingness to address action recommendations.

The Marine and Estuarine Protection, Pesticides, UIC, and Ground Water programs expressed their need to improve locational data and to increase the use of Global Positioning System (GPS) units to gather the data.

Programs accepted considering ground water as a critical resource area for their activities, but needed to obtain related information. They recommended that ground water resource information be coordinated through the GWM program.

Programs including UIC, Superfund, UST, GW, RCRA C, and others, expressed commitments to support obtaining accurate latitude and longitude through contractors at remedial sites, in-field inspections, permit requests. Some programs have committed to working with their state programs to have latitude and longitude accurately reported for all new sources prior to operation and to note when systems are taken off-line.

Several programs including RCRA C, Stormwater, UIC, Ground Water Management and PWS expressed a desire for workstation on-line data system access, and for improved availability and accessibility, particularly for integrated data management and access.

IV. CONCLUSION

Developing a Regional comprehensive approach to protecting ground water is a continuing and evolving process. It is one that will necessarily involve state, regional, and local players, which will cause new and recurrent issues to surface and resurface until adequately addressed. Updating the Regional Assessment may also be necessary as States develop and implement state CSGWPPs calling for Regional support and flexibility based on their unique needs and circumstances.

Appendix D lists the program recommendations identified through this Regional Assessment. Programs have committed to implementing recommendations which were acceptable and could be addressed in FY'94 and FY'95. Other remaining recommendations will be tracked and addressed as progress is made and resources permit. The Region looks forward to successful implementation of the many actions, through the participation of all national, regional and state programs and in support of comprehensive ground water protection.

REGIONAL ASSESSMENT

I. INTRODUCTION

A. BACKGROUND

1990 GW Protection Strategy.

In 1990, EPA issued its 1990s Ground Water Protection Strategy, establishing principles and elements for a "comprehensive" ground water protection program. It recognized that current protection efforts are fragmented and occur along particular statutory authorities. The Strategy specifies an approach of bringing together the capacities of existing programs in a more cohesive and coordinated style, across all government levels, to comprehensively manage and protect ground water resources.

The Strategy calls for states to develop "Comprehensive State Ground Water Protection Programs (CSGWPP)." It also specifies for EPA Regions to similarly improve coordination and integration among their ground water-related programs and to support implementation of state CSGWPPs. Some basic tenets of the Strategy include the following.

- States have the primary role and responsibility to direct protection efforts;
- Preventing pollution is the principle objective, and is preferable to clean-up;
- Remedial efforts should be commensurate with, and guided by, the use and value of the resource;
- Coordination and integration of programs, across government levels, are the means to a cohesive approach;
- Establishing priorities and activities on a resource based approach.

1993 EPA Final Guidance for CSGWPPs.

Developed with considerable state input, the guidance identifies six strategic activities and criteria for determining the adequacy of states' programs for comprehensively protecting GW. Successful implementation of the 6 Strategic Activities demonstrates that a state is comprehensively protecting its ground water resources based on its goals and priorities. The Guidance further recognized that attaining fully integrating comprehensive programs across all state, federal and local activities, could take several years. Therefore, as an interim measure of progress, and a demonstration of a state's commitment to implement a comprehensive program, EPA issued two "sets" of criteria, "Core" criteria for an interim level of progress, and the criteria for the "fully integrating" level of implementation.

The states in Region I are concurrently initiating activities to develop their Core Comprehensive State Programs, and concurrently identify areas of improvement to achieve fully

integrated programs.

B. OBJECTIVES OF THE REGIONAL ASSESSMENT

Responding to EPA's Ground Water Strategy, and to states' observations that EPA is an impediment to states' practicing coordinated comprehensive programs, states requested that EPA also review its own ground water-related programs. Accordingly, in a gesture of solidarity with the states, Region I initiated a "Regional Assessment" of sixteen (16) ground water-related programs. The objectives of the Regional Assessment are to: 1) establish a baseline of how EPA programs function; and 2) identify program recommendations for better cross-program interaction and support of comprehensive protection.

To take a similar approach to states developing their CSGWPPS, information for the Regional Assessment was developed according to the 6 Strategic Activities and criteria, as described in the CSGWPP guidance. This approach will also result in complimentary state and EPA programs.

The process for developing the Assessment was intended to involve as many senior staff and management as possible to improve the "cultural awareness" of ground water protection roles and issues. The Assessment does not present general information on each program since that is available in program pamphlets, introductions to regulations, orientation materials, or other program documents. Rather, the Assessment looks at how the programs function internally, with other Regional programs and with state counterpart programs. It is intended to be an effective, action oriented document seeking to identify and commit programs to undertake recommendations which will improve ground water resource management and coordination, both Regionally and with the states.

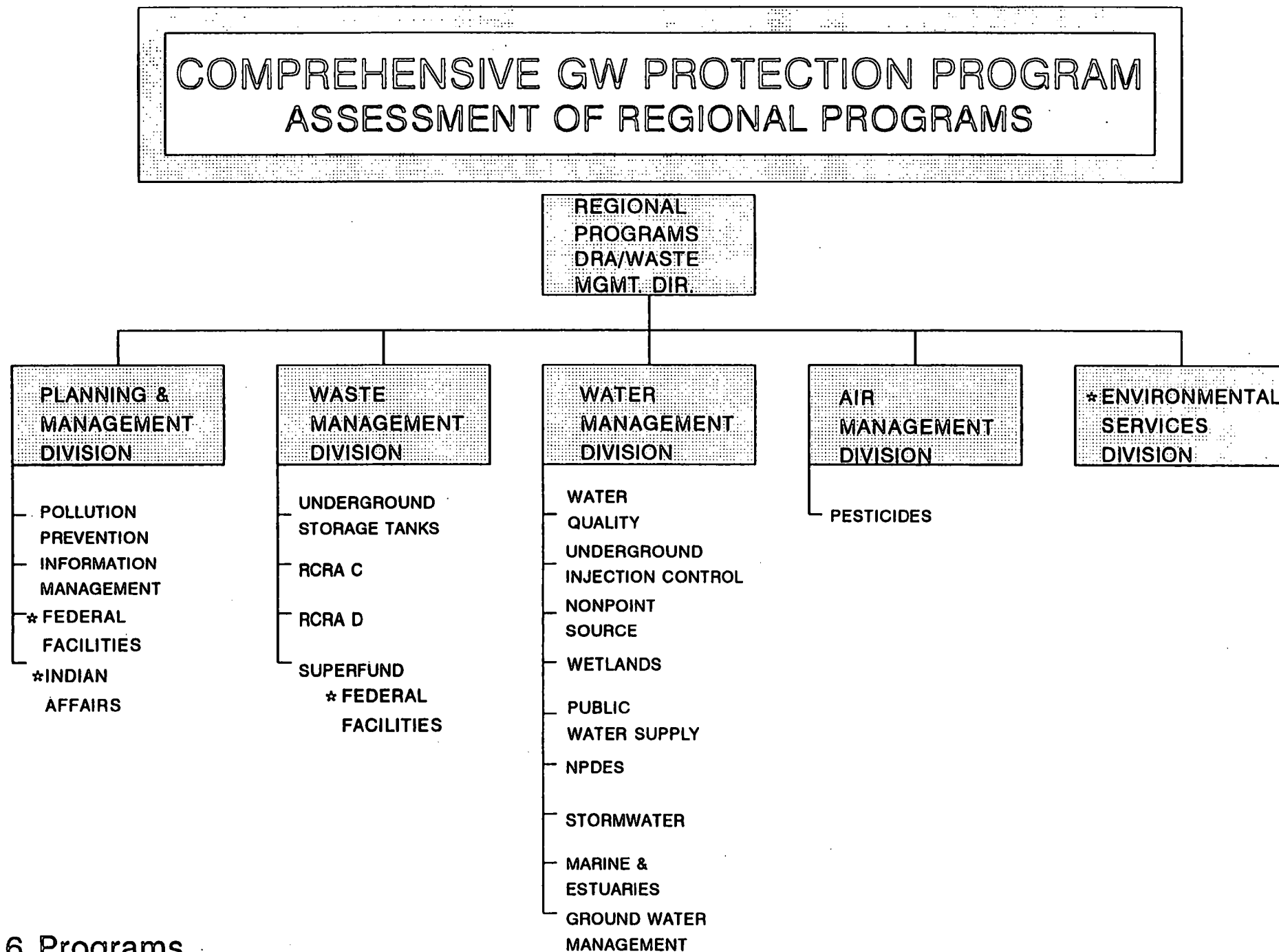
C. REGIONAL ASSESSMENT PROCESS

Interview process.

An extensive survey questionnaire was prepared and used in a series of interviews with each of the 16 ground water-related programs (see Figure 1). The questionnaire was developed using the 6 Strategic Activities and Adequacy Criteria, as described in the CSGWPP guidance. In general, the focus of the program interviews were on how programs worked internally, with other Regional programs and with their respective state programs. See Appendix A for the survey questionnaire.

Program teams were established, consisting of a ground water program state coordinator and a member from each of the ground water-related programs. In an interview style, each program team responded to the Survey questionnaire to generate the Regional Assessment's information. See Appendix B for the

Figure 1



16 Programs

*To be Included FY '94

listing of the team members representing their programs.

As indicated in Table 1, the regional programs perceived benefits gained through their participation in the Regional Assessment.

Baseline Information and Recommendations.

The information developed was used to generate the following data: 1) baseline information of each program's current activities and approaches; and 2) program recommendations, lead contact, and timeframe for implementing each recommendation. The Regional Assessment presents the baseline material in the section entitled "Program Information from Survey Responses," (see Appendix C). Similar to the Survey format, baseline information was developed and presented according to the six Strategic Activities and Adequacy Criteria. The program baseline materials provide the justification and rationale for the identified barriers and recommendations.

The Regional Assessment also presents "Recommendations" for each program's implementation or involvement. They are the heart of the Regional Assessment process and report. These recommendations are the feasible tasks and objectives the programs have accepted to implement and have assigned a time frame and a program person to be responsible for implementation. Predominantly, the recommendations focus on efforts for programs to improve their coordination and integration with other Regional and state programs, and on information management and locational data (latitude and longitude) issues.

Draft Recommendations and findings from the interview process were presented to Region I's Ground Water Policy Committee (GWPC), for their briefing. Among those, three recommendations having significant cross-program and Regional implications were highlighted for GWPC adoption, for elevation to the Region's Leadership Team. See Section III.B.2., for the three recommendations adopted by the GWPC. As progress is made, other significant Regional recommendations may be deliberated by the GWPC. Otherwise, recommendations will be addressed at the program level. Several recommendations for HQ programs which require a national "fix" are also presented. See Appendix D for the listings of program, Regional and HQ recommendations, as outlined on a program basis.

Uncertainties.

The process was effective for involving all state coordinators from the Ground Water Management program, but by the same token, was also complicated by having so many conducting the interviews. Not all questions were asked by the program interviewers and there were some differences in interpretation

Table 1

PERCEIVED BENEFITS GAINED BY PROGRAM THROUGH PARTICIPATION IN CSGWPPS

- **GROUND WATER MANAGEMENT**
 - Coordination and integration could lead to better understanding of the roles of the Programs in GW protection and lead to better coordination among them
 - Establish rapport with staff and line of communication with managers
 - Expectation of better GIS capabilities with all Programs participating
- **INFORMATION MANAGEMENT**
 - Will allow Programs to design their programs to better support other programs
 - Better position to provide information to other Programs for other uses
 - Can better support Information Management and Regional goals
- **MARINE & ESTUARIES**
 - Very little
- **NPDES**
 - Watershed approach coordination
 - Possible multimedia and Pollution Prevention coordination
- **NONPOINT SOURCE**
 - Project integration will provide opportunity to address the interaction of surface water and ground water, as an example: surface water can be limitedly improved with improvements to ISDS that affect ground water quality
- **POLLUTION PREVENTION**
 - Better understand ground water priorities
 - Ability to distribute P2 Outreach to a wider audience
- **PESTICIDES**
 - Contributes to assure better review of Pesticide's State Management Programs (SMPs)
 - Contributes to better understanding of GW protection goals and priorities

Table 1 (Cont)

PERCEIVED BENEFITS GAINED BY PROGRAM THROUGH PARTICIPATION IN CSGWPPS

- **PUBLIC WATER SUPPLY**
 - Improved protection of public health through source water protection, vulnerability assessments and waivers
 - Use of source control programs to identify and inspect threats
- **RCRA C**
 - Sharing or networking of GW protection priorities and state's priorities.
- **RCRA D**
 - Limited benefits to this Program
- **SUPERFUND**
 - Ability to support states as trustees of GW, consistent with CSGWPP strategy.
 - Opportunity to continue a dialogue for federal and state waste programs to be consistently implemented and coordinated
 - If flexibility on use of federal GW classification schemes, as specified in the NCP, can be provided, then EPA will be able to more fully rely on the states for decisions relating to GW resources.
- **STORM WATER**
 - More complete understanding of environmental impact of Programs on GW protection.
 - Opportunity to share information so better decisions can be made to minimize impact.
 - Information sharing.
- **UNDERGROUND INJECTION CONTROL**
 - Coordination of Program activities will result in better protection of GW resources
- **UNDERGROUND STORAGE TANKS**
 - Coordination of State Program Activities will result in better protection of ground water resources
- **WETLANDS**
 - Protection of Wetlands
- **WATER QUALITY MANAGEMENT**
 - Improved coordination and understanding between Programs

of questions and responses. Compiling information consistently across pertinent programs required revisiting some programs to obtain necessary information. Therefore, while trends may be accurately extracted from an evaluation of the data, in some cases it may be misleading to derive specific conclusions from a limited analysis of the information.

II. WATER RESOURCE PROTECTION - FUTURE DIRECTIONS

A. HOLISTIC APPROACH

Region I has designated Resource Protection as one of its goals for Fiscal Year 1994. Through the integration of programs, critical resources which deserve special attention due to outstanding value shall be targeted for special consideration. The principles of Resource Protection is further complemented by the Water Division's support of a holistic approach to Water Resource Management for both state and federal water programs. Through such support, water programs are encouraged to expand their program focus, thereby conducting activities and setting priorities based on a thorough understanding of the water resource, including surface water, ground water and wetlands.

With respect to ground water, a holistic approach to water resource management shall emphasize the interconnections between surface water and ground water. While surface waters and ground waters were once considered two separate systems, scientists and environmental planners now recognize that ground waters and surface waters are hydrogeologically linked and directly impact each other, both in terms of water quality and water quantity. An example of an approach which targets integrated resource protection activities and priorities at the federal, state and local levels is the Merrimack River Watershed Initiative. Building on the successful integration efforts of the Merrimack River Watershed Initiative, regional programs shall further appreciate the benefits of a broad resource-based approach to environmental management. As specified in the Initiative's Declaration of Cooperation, participants of the Initiative have agreed to recognize the interaction between surface water and ground water, and acknowledge the link between land use and water quality.

As a result of the Regional Assessment, EPA Region I has identified several areas where implementation of program recommendations shall significantly support coordination of ground water and surface water protection efforts. Examples such as the following illustrate several ways in which regional programs shall be further integrated in acknowledgement of the interaction between surface water and ground water, and in support of a holistic approach to Water

Resource Management:

1. Support greater consideration of ground water protection in surface water programs through discussions within EPA, and with states, local and other federal agencies;
2. Institute formal process for considering ground water protection into NPDES permits and as a factor in priority setting;
3. Use pretreatment inspection opportunities to provide education and outreach materials to permittees describing Pollution Prevention, BMPs, and ground water protection;
4. Maps and background information about the importance and location of priority ground water, surface water, and wetlands resources shall be provided to all water-related programs, where available;
5. State ground water, surface water, and wetland resource coordinators shall continue to regularly meet. Coordinators shall be responsible for distributing relevant information to programs and reviewing work plans to identify potential resource impacts and concerns;
6. Program 106 integrated grant guidance distributed to the States shall encourage CSGWPP support;
7. New program initiatives, such as the source water program, shall be encouraged in order to promote overall coordination of surface water and ground water resources for the protection of human health;
8. Training shall be provided to EPA program staff to improve understanding of potential impacts of program activities on surface water, ground water and wetlands resources.

B. RESOURCE PROTECTION BASED ON USE AND VALUE

Use, value, and vulnerability of the ground water resource form the common thread which links all ground water-related programs at the federal, state, and local levels. These three factors, embodied in the Agency's ground water policy goal, provide the basis for defining and applying differential protection in a consistent manner across programs and agencies. The final CSGWPP guidance states EPA and the States must keep prevention of contamination as the first priority and, when prevention fails or contamination exists must establish the goal of remediation to restore ground water to its designated use. Furthermore, the Guidance emphasizes that a realistic approach to restoration is needed based upon the

actual and reasonably expected uses of the resource, as well as on social and economic values.

Region I states use a combination of mechanisms to define use and value, typically through ground water classification systems and Wellhead Protection Programs. However, further discussion is needed to ensure consistent application of these terms. Upon further clarification, ground water use, value, and vulnerability will provide the common tool to geographically target federal and state resources to meet our mutual goal of "preventing adverse effects to human health and the environment and protecting the environmental integrity of the nation's ground water."

Program recommendations provided herein reflect areas where the programs shall implement measures to further support a state directed approach to ground water management, based on the use and value of the resource. For example, the Region's Superfund and RCRA C Corrective Action Programs shall factor wellhead protection areas or other identified high value ground waters into their priority ranking systems to determine: 1) where to focus remediation efforts; and 2) the extent of restoration to the area. Similarly, the NPDES Program may designate major permits based on high value ground waters within priority watersheds, and adjust for the impacts of permitted discharges within or near critical ground water areas hydrologically connected to the receiving surface water body.

Regional programs have generally expressed a willingness to embrace new ways of doing business, namely a state directed resource-based approach to program activities and priorities. However, the Ground Water Management Section (GWMS) has a responsibility to facilitate a dialogue to resolve questions concerning this new approach. In particular, the Region's Programs need: 1) clear definitions of use, value, and vulnerability as applied consistently at the federal and state levels; 2) statewide data and/or maps indicating the locations of ground waters with designated uses and relative values defined by the State; and 3) guidance on how to apply ground water use, value, and vulnerability to mutually support resource protection and other strategic environmental priorities. Resolution of such issues shall be a high priority for the GWMS in Fiscal Year 1994.

C. GROUND WATER MANAGEMENT STRATEGIES FOR FY'94

To promote ground water protection as an integral part of a holistic water resource-based approach to environmental management, Region I's Ground Water Management Section shall pursue the following:

1. KEY DIRECTIONS

A. Implementation of the Wellhead Protection Programs (WHPPs)

All states in Region I have approved WHPPs. These programs provide a broad framework for ground water protection in New England. However, the success of WHPPs and ultimately ground water protection across all boundaries lie solely with effective implementation. In particular, a critical element of each WHPP is the appropriate delineation of the Wellhead Protection Areas (WHPAs), a necessary tool for focussing awareness and activities in multiple programs and at all levels of government.

B. Federal/State/Local Coordination

Ground water protection activities cast a broad net across numerous governmental agencies, with a major emphasis at the operational level on community ground water efforts. In view of competing resources, support for such local efforts shall be best accomplished through coordinated activities and partnerships from all levels. In an effort to communicate ground water protection strategies to targeted local audiences who are most directly impacted by the quality of the resources, the Ground Water Management Section shall foster partnerships, and support state and local technical assistance and outreach.

C. Promotion of Ground Water Protection

Through comprehensive ground water efforts at the state and federal levels, a greater awareness of ground water as a sensitive resource shall be achieved and integration of ground water-related programs promoted. In addition, continuing public education efforts shall be sustained to keep alive the message of resource protection. To support such communication, the Ground Water Management Section shall facilitate information gathering and sharing for an expanded network of community, state and federal ground water protectors. Particular support shall be provided for implementation of program recommendations, including providing programs information on critical ground water resources.

2. ACTION ITEMS FOR GROUND WATER MANAGEMENT SECTION

A. Implementation of WHPPs

- Support Technical Assistance Conferences:
- Target communities for technical assistance on wellhead delineations;
- Facilitate sharing information on Wellhead Demonstration

- projects;
 - Support efforts to identify critical ground water resource areas and share information among programs;
 - Pursue funding mechanisms to support state/local WHP efforts.
- B. Federal/State/Local Coordination
- Facilitate discussions with federal and state programs on defining resource protection based on "use and value";
 - Conduct state/local needs assessment;
 - Identify local ground water contacts, including Regional Planning Commissions;
 - Through the Regional and State Assessments, identify areas for greater state flexibility and opportunities for ground water integration;
 - Utilize Regional Planning Commissions to facilitate state/local communication and coordination;
 - Conduct monthly conference call with state partners;
 - Support local outreach efforts and technical assistance;
 - Continue comprehensive planning and foster broad water resource awareness.
- C. Promotion of Ground Water Protection
- Facilitate successful implementation of program recommendations from Regional Assessment;
 - Develop and implement a communication strategy at local, state and federal levels to promote ground water protection;
 - Implement strategy to generate and institutionalize gathering of information on the success of the program;
 - Promote efforts to include ground water in critical presentations and at environmental forums;
 - Educate broad audiences.

III. RESULTS

A. BARRIERS TO COMPREHENSIVE PROTECTION

1. Background

Effective protection of ground water and other resources is complicated. Ground water protection, like many of our other resource protection efforts, cross traditional program and jurisdictional boundaries. However, comprehensive protection of multiple resources is essential if we are to achieve the greatest environmental gains.

A principle goal of this assessment is to identify ways that Region I can achieve more comprehensive ground water resource

protection. Inevitably, there are barriers that slow progress toward our goal. During program interviews and the initial assessment process, several types of barriers were identified that impede our ground water protection progress. Generalized barriers that impede Region resource protection have been divided into eight principle types. These barriers are described below:

- Resources (staff and financial)
- Information (availability, quality, accessibility, integration)
- Coordination (within and among Headquarters, Region, States and Locals)
- Ground Water Resource and anthropogenic Contaminant Source Identification
- Awareness and Communication about Ground Water Programs
- Grants (timing, flexibility, guidance, grant conditions)
- Institutional Restrictions (Regulations, policies, organizational culture, operational procedures)
- Public Outreach/Education (awareness, availability and accessibility of information and activities)

2. Description of Barriers

a. Resources

Sparse financial and staff resources were identified as hindering support for and implementation of resource protection. Many programs interviewed felt that staff resources do not match our responsibilities for evaluation, planning, coordination, and implementation. In addition, many programs indicated that significant financial resources were needed for general program assessment and implementation, as well as information management system and data enhancements that could increase our ability to better protect critical resources.

b. Information

Information describing the Environment and regulated activities were identified as essential to supporting comprehensive resource protection. Issues identified as barriers to ground water resource protection specifically, and

resource protection generally can be divided into the following four issue areas: data availability, data quality, data accessibility, and information integration.

The poor availability of quality and useful information describing the conditions and locations of regulated activities, contaminant sources, critical resources, and threats to resources, was identified by many as slowing progress toward comprehensive resource protection. The accessibility to these types of information (the ease, convenience, effectiveness, and speed of access) was viewed by many as important to routine resource protection decisions. Many programs indicated that in order to make broader cross program use of data possible, there was need to overcome barriers impeding information sharing and to agree on information standards and key types.

Environmental information provides the basis that we use to affect environmental protection. Figure 2 illustrates the number of times program recommendations were identified under the Information Management barrier. As illustrated by this Figure, the programs interviewed felt that better and more efficient use of information would improve our effort to provide comprehensive protection for a broad spectrum of critical resources.

c. Coordination

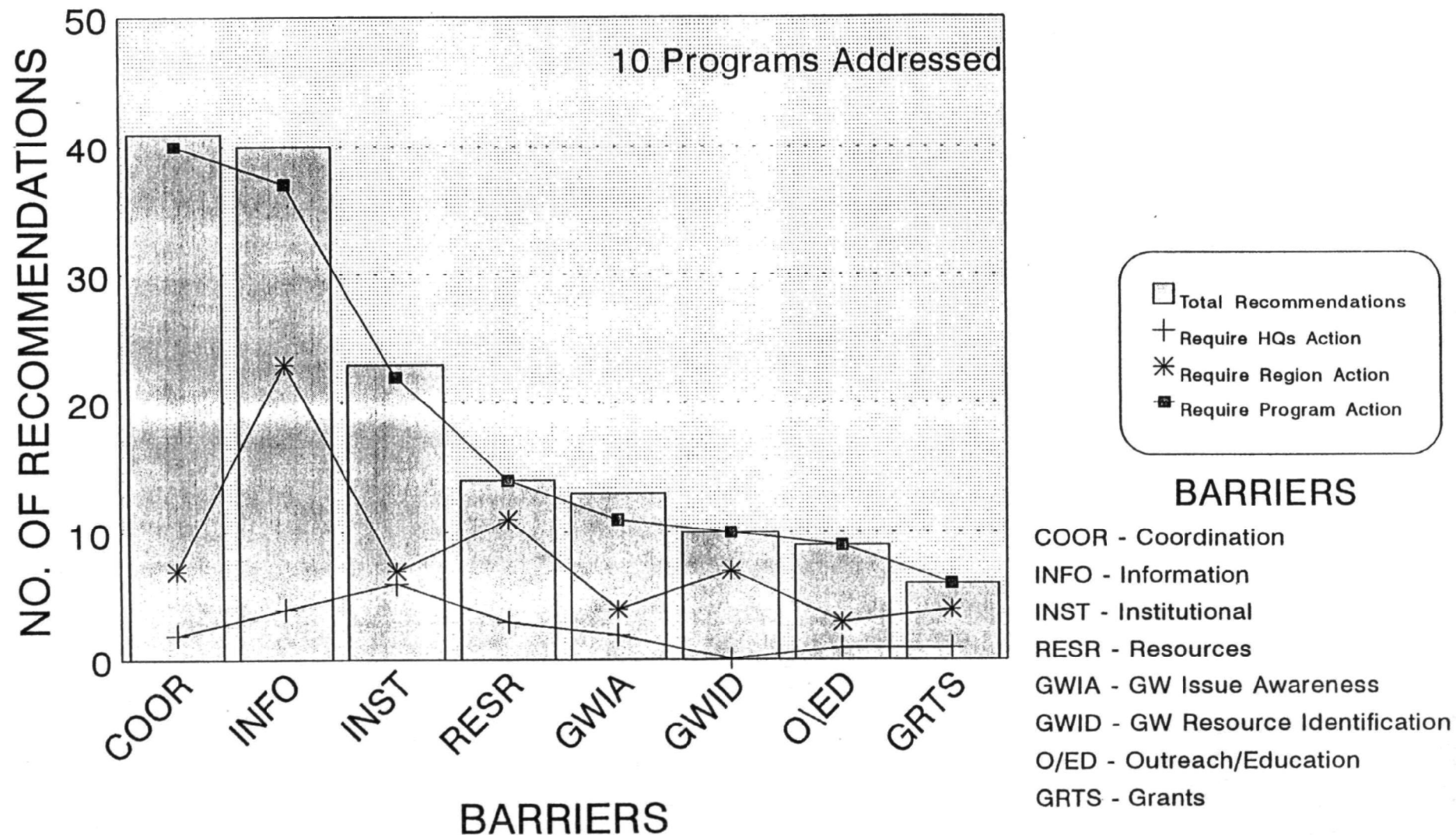
Coordination and the development of formal and informal cooperative agreements within and among Headquarters, the Region, States and Locals is necessary if we are to understand and support mutual efforts to protect and manage environmental resources. Cross program coordination was identified by many programs as important to improving resource protection effectiveness and consistency within the Region and with the New England States. EPA and state initiatives with watershed and geographically targeted resource protection focus will necessitate significant internal and external cooperation that many felt we are not prepared for. Finally, increasing emphasis on developing state and local environmental protection and management capacity, and the promotion of local leadership of resource protection will require substantial coordination of our collective environmental protection efforts.

d. Identification of Ground Water Resource and of Contaminant Sources.

Identification of critical environmental resources and contaminant sources is essential for improving programs and strategies to protect important resources. Resource and contaminant source information was identified as critical in

Figure 2

RECOMMENDATIONS TO ADDRESS BARRIERS TO A COMPREHENSIVE GROUND WATER PROTECTION STRATEGY



the coordination of prevention and remediation efforts across programs, because resource protection is a principal basis for setting priorities. Many programs felt that the Agency would be better able to improve EPA and State efficiency and effectiveness of resource protection efforts if critical resources could be identified and delineated. By focusing our efforts on a universe of critical resources, as identified by EPA and the States, the Agencies could encourage a broader spectrum of programs to apply their resource protection abilities to high priority areas. Accordingly, application of such efforts would not only result in more comprehensive protection but may also be more economical.

e. Ground Water Program Awareness

Regional programs with impact on ground water resources need to be aware of ground water protection initiatives so that they can better support comprehensive resource protection goals. There is a need to share information about regional ground water protection activities. Generally, programs interviewed felt that their efforts to protect ground water and support state and local efforts could be enhanced with broader knowledge of activities and direction of ground water protection. Increased program awareness can also improve regional comprehensive ground water protection.

f. Grants

Grants are a principal mechanism used by EPA to support implementation of environmental protection. Enhancement of grant documents and grant processes can be used to accomplish comprehensive resource protection. Programs felt that grants could more extensively use guidance and procedures to encourage or require cross program communication and coordination, in support of comprehensive state ground water protection. Some programs indicated that variable timing of grant awards by different programs, and the inflexibility to use grant resource to support ground water and resource protection presented significant barriers to comprehensive protection. As indicated by the program recommendations, grants seem to offer many opportunities to support cross program integration of ground water and other resource protection efforts.

g. Institutional Issues

Institutional barriers are external and internal restrictions that limit staff and program ability to effectively accomplish environmental protection. Institutional barriers typically reduce our capability and extend the time needed to accomplish goals, and may result in a reduced willingness to change organizational impediments. Often our capability to work

efficiently is impeded by regulations, policy, resources, logistics, training, and technical limitations and operational inefficiency. Similarly, our capabilities can be reduced by organizational cultural phenomena such as politics, turf battles, program policy, personal agenda, and limited vision. These types of institutional barriers are identified by many programs as slowing environmental progress. Increased program involvement, education, communication, and coordination that is focused on comprehensive resource protection will present opportunities to identify and address substantive institutional barriers.

h. Public Outreach and Education

Sustained successful protection of environmental resources is dependant on informed action of knowledgeable members of the environmental community. Directors of EPA, state, local, and private environmental programs can more effectively support resource protection, if they understand how their efforts and those of others can lead to more comprehensive resource protection. One of EPA's goals is to affect broader public action supporting environmental protection. Public involvement is a key means to actualizing this goal.

Ground water resource protection decisions commonly occur locally. It is important to understand and consider local perspectives when developing strategies to:

- prevent contamination
- control contamination
- protect resources
- manage resource use
- Develop environmental standards
- Assess resource use and value

Most programs indicated that environmental value could be added in promoting better understanding of ground water resource issues. The programs perceived a value to broader outreach efforts that promote resource protection and management. In particular, active outreach and initiatives that provide educational materials and technical help can support broader public roles in environmental protection.

3. Summary of Program Recommendations According to Barriers

Overcoming barriers to more comprehensive and effective resource protection requires broad EPA support. Table 2 shows the number of recommendations identified to overcome the principle barriers. Such recommendations have been further divided between recommendations requiring Headquarters, Regional (e.g. Leadership Team) or Program Action. Based on the number of recommendations identified per barrier,

Table 2

BARRIERS TO A COMPREHENSIVE GROUND WATER PROTECTION STRATEGY

NUMBER OF RECOMMENDATIONS TO PROGRAM BARRIERS

| P R O G R A M | | RESR | INFO | COOR | GWID | GWIA | GRTS | INST | O/ED | TOTALS |
|---------------------------------|---------------|-------|-------|------|------|------|------|------|------|---------------|
| | INFO. MGMT. | 4/4 | 7/7 | 3/1 | 3/3 | 1/1 | | 1/1 | 2/2 | 21/19 |
| | NONPT. SOURCE | 1/0 | | 2/0 | 1/0 | 1/0 | | 2/0 | | 7/0 |
| | NPDES | | 3/0 | 4/1 | 1/0 | 1/0 | | 2/0 | | 11/1 |
| | PESTICIDES | 2/2 | 1/1 | 1/0 | | 1/0 | 1/1 | 1/1 | | 7/5 |
| | PWSS | | 5/1 | 8/0 | | | | 2/0 | | 15/1 |
| | RCRA C | 4/2 | 8/3 | 8/4 | 1/1 | 3/1 | 2/2 | 3/1 | 1/0 | 30/14 |
| | STORMWATER | 1/1 | 4/4 | 3/0 | 2/2 | 3/0 | 1/1 | 7/2 | 2/0 | 23/10 |
| | SUPERFUND | 0/0 | 3/3 | 5/0 | 1/0 | 2/1 | 2/0 | 3/1 | 1/0 | 17/5 |
| | UIC | 1/1 | 6/3 | 3/1 | 1/1 | 1/1 | | 1/0 | 3/1 | 16/8 |
| | UST | 1/1 | 3/1 | 4/0 | | | | 1/1 | | 9/3 |
| TOTALS | | 14/11 | 40/23 | 41/7 | 10/7 | 13/4 | 6/4 | 23/7 | 9/3 | <u>156/66</u> |

Recommendation Numbers = Total # Recommendations for Program /
Program Recommendations Requiring Regional Action

BARRIERS

RESR - Resources

INFO - Information

COOR - Coordination

GWID - Ground Water Resource Identification

GWIA - Ground Water Issue Awareness

GRTS - Grants

INST - Institutional

O/ED - Outreach/Education

Coordination of Activities, Information Management and Systems, and Institutional Restrictions were the most commonly identified impediments to comprehensive resource protection, with a total of 41, 40, and 23 recommendations, respectively.

The majority of the recommendations listed for most programs under the Information Management barrier have been identified as requiring Headquarters/Regional action (40 total; 23 HQ/Regional). Therefore, due to the scope of the recommended changes, actions taken to overcome this barrier must happen at the upper management level. In comparison, greater than 70% of both the Coordination and Institutional Recommendations have been identified as requiring program action, reflecting the ability of changes which address such barriers to occur more easily at the operational level.

The breakdown of the total number of recommendations for selected programs according to the eight principle barriers is presented in Table 2. This breakdown illustrates three principles: 1) the honesty of the programs in assessing their activities and priorities, and their willingness to find new and creative ways to achieve their goals; 2) the majority (90 out of a total of 156) of the program recommendations can be implemented at the operational level; and 3) the extent of the challenge to provide EPA support from Headquarters and among Regional programs to overcome regional/national barriers toward comprehensive ground water protection.

B. ANALYSIS OF RECOMMENDATIONS

1. HEADQUARTERS RECOMMENDATIONS

Although the focus of this Regional Assessment was on identifying ways to improve coordination and integration among the regional programs, over 25 recommendations requiring Headquarters action were identified.

As illustrated by Figure 2, approximately half of the recommendations addressed the Information Management and Institutional barriers. Examples of such recommendations are listed below:

Information Management.

- a) Encourage HQ to include mandatory data entries and reporting requirements for longitude and latitude;
- b) Improve the quality, availability and accessibility of EPA data systems, including PCS and FRDs, and their ability to link with Geographic Information Systems (GIS);
- c) Increase the availability and use of Global Positioning Units (GPS);

- d) Provide adequate resources to support enhancement of regional/state information management systems to support resource protection.

Institutional.

- a) During reauthorization of major statutes (e.g. CERCLA), recommend changes for consistency with CSGWPP guidance - state directed resource-based approach;
- b) Promote through legislative and operational changes the use of "use and value" of the resource as a critical tool in program activities (e.g. remediation decisions) and priority setting;
- c) Encourage creative use of Supplemental Environmental Projects (SEPs) for prevention projects;
- d) Continue to promote linkages between the Public Water Supply (and other programs) and Ground Water Protection Programs.

In addition to the above recommendations, many programs expressed a lack of direction and support on comprehensive ground water strategies from their national programs. As shown in Figure 3, 56% of the programs interviewed did not receive instructions from their Hqs program to support the comprehensive ground water approach. This inadequate cross-program commitment from the national programs is reflected in limited discussion of CSGWPP at national program meetings and operating guidances. Therefore, some regional programs believe that without clear direction, business as usual may prevail.

Recommendations requiring Headquarters action are listed by program in Appendix E. In addition, although not specifically designated as a Headquarters recommendations, many of the regional and program recommendations have transferability to the national programs (see Appendix D).

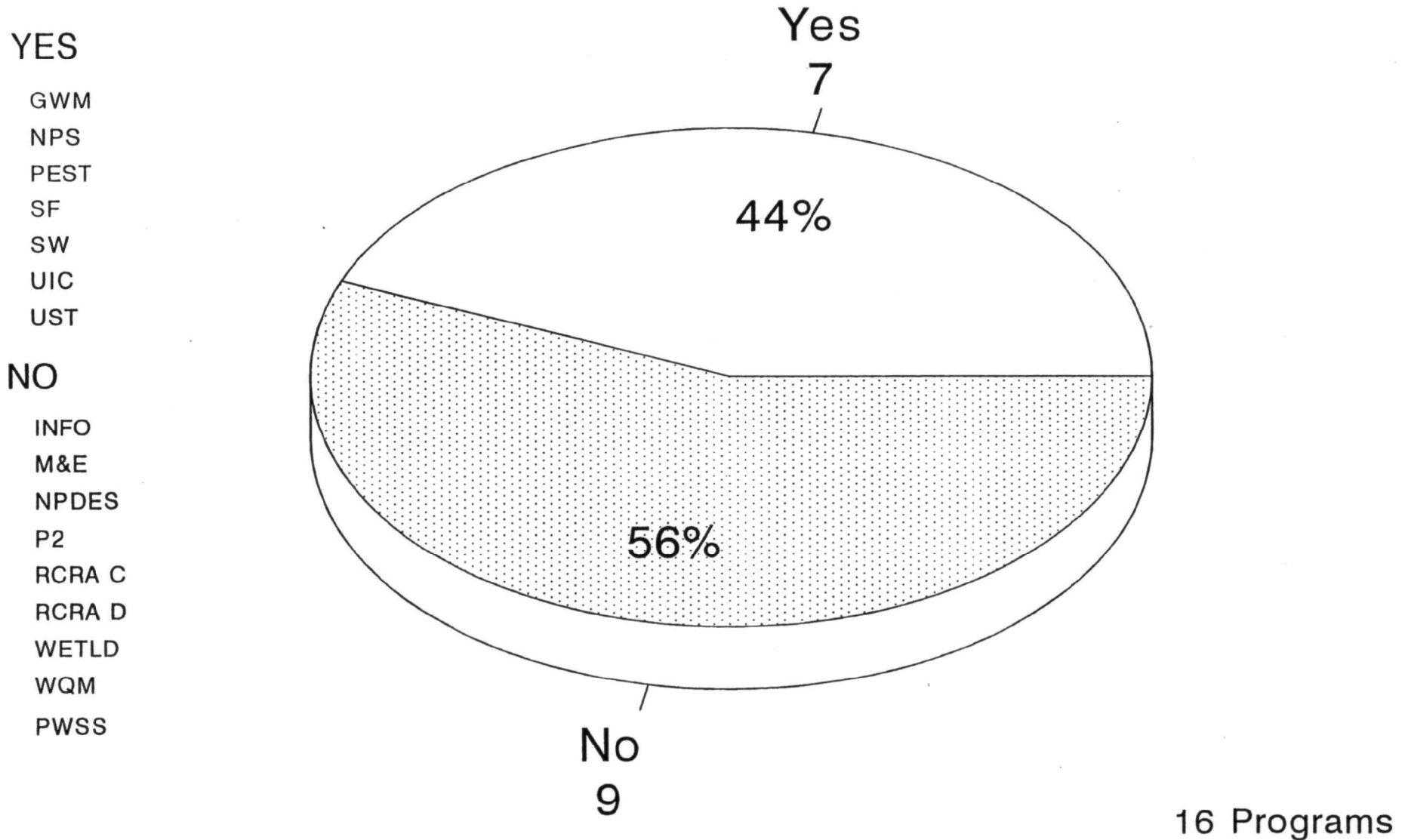
2. REGIONAL RECOMMENDATIONS

As described in Table 2, approximately 70 recommendations have been identified by the programs as changes which require Regional Action (e.g. Leadership Team). These recommendations reflect the perception that due to the scope of recommended changes, actions require upper management support and consequently cannot be easily implemented at the program operational level.

On September 30, 1993, Region I's Ground Water Policy Committee met to: 1) discuss the preliminary findings of the programs interviews; 2) determine a process for finalization of the Regional Assessment; 3) review the Regional Recommendations; and 4) identify which Regional Recommendations shall be presented to the Leadership Team for Regional Action. Understanding resource constraints, the highest priority items were identified, thereby allowing

Figure 3

Regional Programs Have Received Instruction From Their HQs Program To Support The Comprehensive Ground Water Protection Approach



consideration of a few "big" actions while taking many "small" actions at the program level.

The following 3 recommendations were agreed upon by the Region I Ground Water Policy Committee as Regional Recommendations to be forwarded to the Leadership Team for review/action (date - January 1994):

a) Assign staff/dollars to establish a cross-program workgroup (e.g. QAT) to overview an assessment of the region's information management capacity and needs to support program priority setting. Such program/regional priority setting shall support Resource Protection, Environmental Justice, and targeted initiatives like the Urban Lead Project. Since this exercise would examine information management capacity to support priorities based on a number of regional initiatives, representatives from key priority teams would be invited to participate. This workgroup would: 1) examine information availability, accessibility and systems, building on the state and federal information management programs; and 2) determine options for increasing information management capacity where appropriate to support resource based priority setting;

b) Institutionalize gathering of accurate longitude/latitude of contaminant source information (e.g. RCRA facilities, NPDES facilities) in all programs. A regional cross-program group should be established or merged with Ed Conley's Good Science Group to lend consistency to, and set guidelines for locational data gathering. Institutional efforts may include: a) changes to permit applications; b) grant conditions to states; c) increased use of GPS units for inspectors and EPA contractors; d) use of EPA's information gathering authorities via mass mailing; and e) greater coordination across programs. This recommendation shall address the need expressed by the programs for accurate locational data to use in priority setting, as illustrated in Figure 4.

c) Send message to "take a risk" in the creative use of Supplemental Environmental Projects (SEPs). Enforcement settlements may include support for resource protection activities (e.g. support local wellhead protection efforts in cases where contamination impacts drinking water supplies; and require protection programs when supplying alternative water supplies). The Multi-media Enforcement Group shall be encouraged to look harder where projects may result in significant resource protection. This recommendation is consistent with a recommendation to HQ to revisit the SEP guidance and allow greater flexibility.

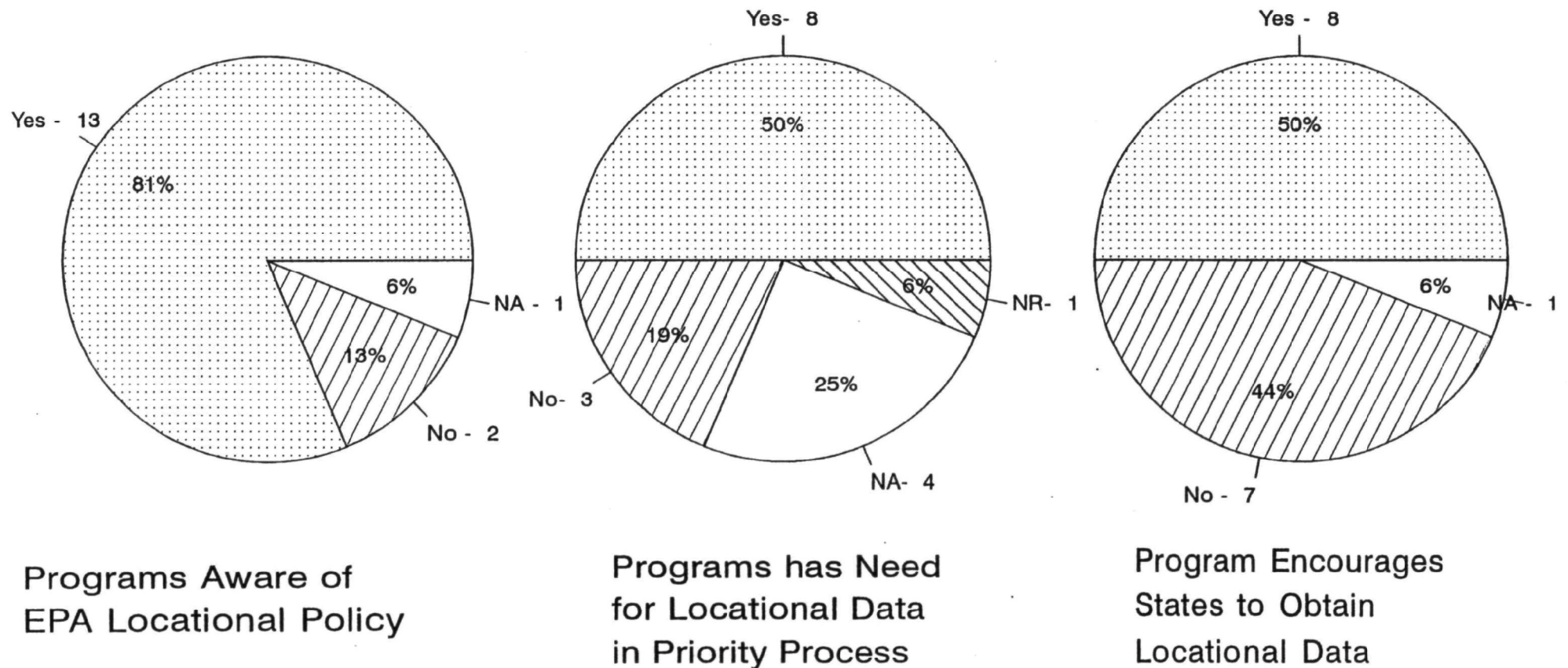
3. PROGRAM RECOMMENDATIONS

Figure 4

SOURCE/RESOURCE LOCATIONAL INFORMATION

Latitude/Longitude Data

16 Regional Programs



NA - Not Applicable, NR - No Response

Several prominent themes were identified during program interviews which characterize regional cross-program ground water protection activities. This section will focus on four major themes: 1) Delegation; 2) Resource Based Approach; 3) Awareness and Coordination; and 4) Information. A summary of each theme will be followed by a description of current practices, and program recommendations to be implemented to address these areas.

Delegation

To a great extent in Region I, state programs (except NPDES in three states) have received delegation, primacy, or primary responsibility under negotiated grants, to administer all possible programs. States are heavily vested with program responsibility. This fulfills one of the major tenets of EPA's Ground Water Protection Strategy for states taking the primary responsibility for directing ground water protection. States have greater latitude to set priorities and administer the programs than if administered by the Region.

Much of the efforts and responsibilities in the major ground water related regional programs are in state oversight. Accordingly, the Region's opportunities for impacting states' activities is generally during program approvals, annual grant guidance and workplan negotiations, and at mid-year evaluations. However, the Region does retain some inspection and enforcement authorities in cases of permit and source control programs.

Information and recommendations presented in the Assessment could apply similarly to state programs where states have the lead activity.

Theme: Resource Based Protection Approach

The "resource based approach" to preventing and cleaning-up contamination in critical resource areas is one of the key principles of EPA's Ground Water Protection Strategy. It is receiving increased support and popularity as it is embodied in the following:

- "watershed protection"
- "aquifer protection"
- "wellhead protection"
- "resource protection"
- "source water protection"

Some programs have already included aspects of a resource based approach into their decision making. In the Nonpoint Source (NPS) program, competitive grants have been issued to states where significant water resource areas have been

identified in their State Nonpoint Source Management Plans. Most recently, the NPS program has issued guidance for states to identify their priority ground water resource areas. Another example is the NPDES program issuing permits on a watershed basis.

Ground Water Resource Based Activity

Current Practice.

Increasingly, Regional programs' guidance and support to state programs are promoting greater awareness of resource based priority setting, coordination and decision making. However, currently, ground water related programs do not routinely use a number of ground water resource characteristics for setting priorities, including land use and aquifer protection. As illustrated in Figure 5, of the ground water related characteristics programs reportedly considered, wellhead protection areas (WHPAs) were the most familiar and most frequently cited.

Wellhead protection areas have been inconsistently considered in program activities (see Table 3). Most programs expressed and understand the importance of WHPAs, but in some instances neither national guidance nor the priority ranking practices have included consideration of wellhead protection areas. For example, RCRA C's National Corrective Action Priority System (NCAPS), and the program's follow-up Environmental Benefits Review do not address the presence of public water supply wells as being different from other types of wells. Furthermore, RCRA C and other Regional multi-media inspection programs, do not set inspection and enforcement priorities based on wellhead protection areas or other critical resources.

The following examples indicate program areas where ground water resource based activities are occurring:

- 1) the Underground Storage Tank (UST) program has begun focusing field presence and record inspections in EPA designated sole source aquifers;
- 2) the Underground Injection Control (UIC) program has been advising state UIC programs to focus attention on wellhead protection areas and to participate in state multi-media inspections;
- 3) the national NPS guidance for FY 94 approved funding of resource based wellhead protection activities as one means of preventing surface and ground water contamination.
- 4) the PWSS program uses frequent contact, program support, and outreach to water suppliers, organizations, and their state programs, to encourage delineating wellhead areas and identifying contamination threats within them. Water suppliers, if they are implementing wellhead protection programs, can be eligible for receiving waivers from certain monitoring requirements.

Figure 5

DO REGIONAL PROGRAMS CONSIDER GROUND WATER RESOURCE CHARACTERISTICS IN THEIR PRIORITY SETTING?

GW Characteristics

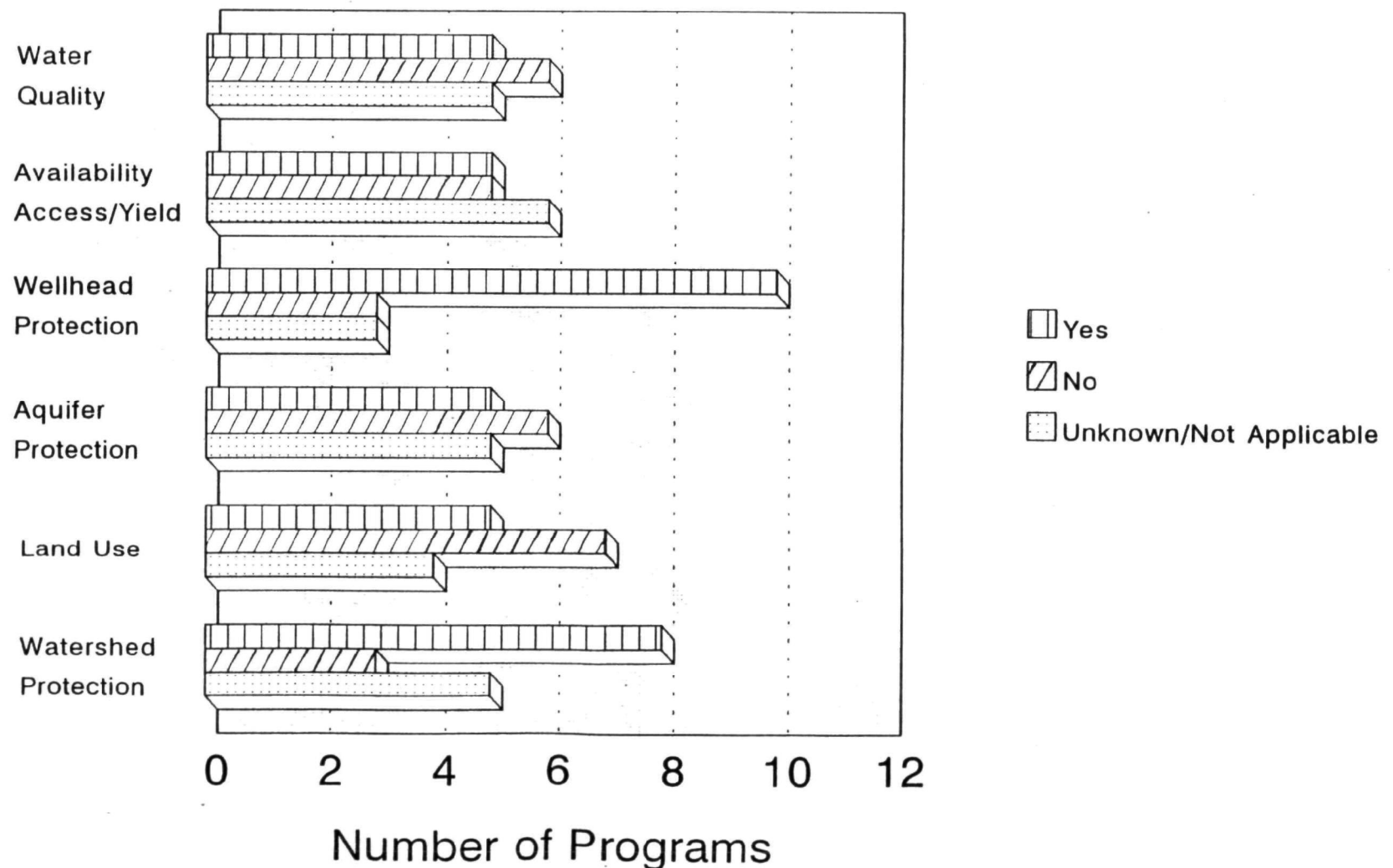


Table 3

WELLHEAD PROTECTION

| PROGRAMS | WHP PRIORITIZATION | | WHP IMPLEMENTATION | |
|----------|---|---|--|---|
| | *(1) Considers WHP in its Priorities | *(2) Encourages State WHP Priorities | *(3) Knows of State WHP Goals | *(4) Considers WHP in Activities |
| GWM | Yes | Yes | Yes | Yes |
| INFO | *NA | NA | No | NA |
| M & E | Yes | Yes | Somewhat | Somewhat |
| NPDES | Yes | No | No | Yes |
| NPS | Yes | Yes | Yes | Yes |
| P2 | NA | Somewhat | Yes | Yes |
| PEST | NA | Yes | Somewhat | Yes |
| PWSS | Limited | Yes | Yes | Limited |
| RCRA C | No | No | Somewhat | No |
| RCRA D | Yes | Yes | No | Yes |
| SF | Yes | No | No | Yes |
| UIC | Yes | Yes | Yes | NA |
| UST | Yes | Yes | Somewhat | Yes |
| WETLD | Somewhat | Somewhat | Somewhat | Somewhat |
| WQM | Somewhat | Somewhat | No | Somewhat |

*(1) Does the program consider Wellhead Protection (WHP) as a Program priority for controlling contaminant source activities?

*(2) Does the Program encourage/require state programs to define and use WHP as a high priority for controlling contaminant source activities?

*(3) Is the Program knowledgeable of state WHP programs and their goals?

*(4) Does the Program consider WHP areas in its activities and decision making?

*NA Not Applicable

Overall, WHP is the only primary and routine ground water resource characteristic used in setting priorities.

Impediments to Resource Based Practice.

There are a couple of primary impediments to resource based activities: 1) data availability on resource characteristics; and 2) the lack of institutional awareness within state, Regional and HQ programs. To actively incorporate a resource based approach as a method of carrying-out program work and objectives on a daily basis, better tools are needed. Programs need current and accurate information on location and characteristics of critical water resources, land use, contamination sources, and populations. All levels of government need to participate in identifying, obtaining and using such information, through a state directed CSGWPP.

Until recently, there has been little awareness and institutional precedent to move from a predominantly control oriented style of protection to a resource based one. With added awareness gained from the interview process for the Regional Assessment, programs have expressed interest on directing more attention to activities, including inspections, in wellhead protection areas, if states can provide maps showing critical ground water resource areas - like PWS wells and WHPA locations. However, in many cases this information is not complete. Except for Rhode Island which has all WHPAs delineated, states are still in the early stages of implementing their WHP programs and delineating WHPAs. In two states, preliminary and interim WHPAs for community systems exist. Therefore, the Ground Water Management Section must continue to work aggressively with the states in the area of wellhead delineation.

Obtaining resource characteristics and the locations of resource areas (such as wellhead protection areas, sand and gravel aquifers, recharge areas, etc), would allow programs to direct their activities to protecting them.

Program Recommendations and Commitments to Resource Based Approach.

Programs now recognize that with limited program resources, attention should be focused on protecting the critical resource areas, and to encourage state programs to do the same. To move in that direction, RCRA C recommends setting its priorities for inspecting and conducting enforcement activities on facilities and generators within wellhead protection areas. RCRA C further recommends use of grant mechanisms to encourage state programs to pursue resource based inspections.

Superfund reported that resource based considerations associated with watershed protection and wellhead protection are not generally applied. However, all priority setting schemes do use proximity or distance to private and public water supply wells. RCRA C, Corrective Action, and Superfund

programs recommended they could use locations of critical resource areas, such as current and expected wellhead protection areas, to aid in prioritizing and selecting "new starts" for remedial attention. Towards this approach, Superfund has undertaken a major contractor effort for accurately locating latitude and longitude of all public water supply wells throughout Region I. States are providing their latest well addresses/locations and are reconciling differences between state and Region I locations.

Other programs are also making commitments for resource based activities, including the Ground Water Management program's commitment to coordinate with state ground water to obtain and distribute ground water resource information (including wellhead protection area mapping) to the Region's programs. NPDES, Underground Injection Control, and others indicated needing water resource information such as wellhead protection areas for incorporating resource factors into their inspection, permitting, prioritizing and for discussions with their State programs.

In the Nonpoint Source program, the resource based approach is increasingly occurring. For the last two years, the program has supported resource-based state wellhead protection projects with Clean Water Act (CWA) S.319 funding. In FY 93, two projects included wellhead protection efforts for working with towns to inventory contaminant source and institute controls and BMPs and a state multi-program enforcement approach. In FY 94, National and Regional grants guidance promoted ground water resource based priority setting by identifying and supporting grant activities in significant aquifers or wellhead protection areas. In addition, the Nonpoint Source program will continue to support critical ground water resource based targeting by allowing some flexibility for assessment and planning activities towards implementing protection projects.

Figure 6 indicates the Region's favorable belief that local programs can provide supplemental assistance. Involving local communities, with their management authorities to establish protection bylaws and health ordinances, and to conduct inspections of commercial activities, is essential to resource based protection. To further encourage this, PWSS has recommended it will request states to share with local communities their results of sanitary surveys conducted on ground water and surface water PWS systems. Sanitary surveys conducted by the PWSS program will be provided to state drinking water programs with encouragement to also share them with communities. The RCRA C inspection program also favors providing inspection results to communities - "makes sense for building partnerships."

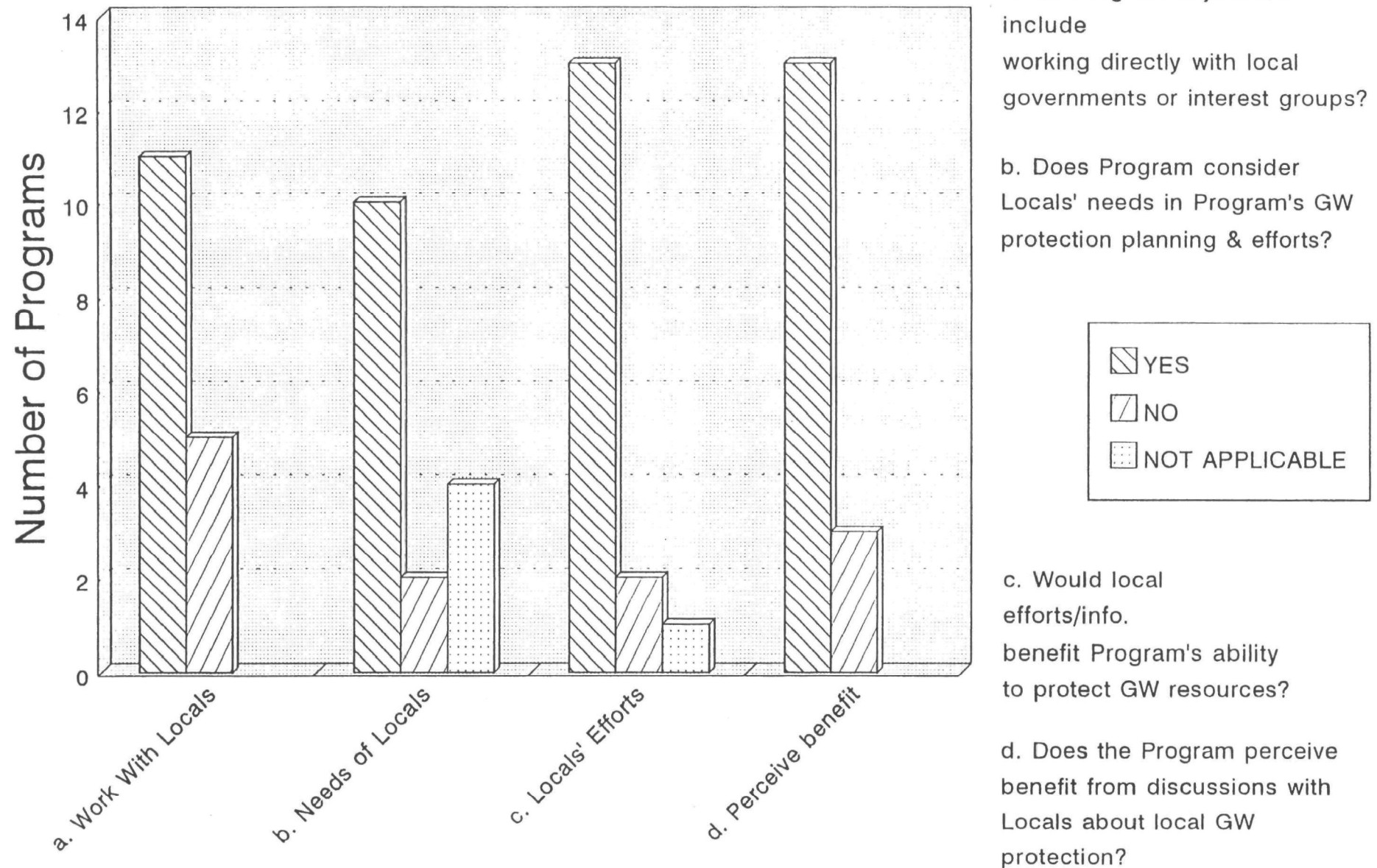
Theme: Awareness and Coordination

The Ground Water Protection Strategy recognizes that

Figure 6

CONSIDERATION OF NEEDS AND COORDINATION WITH LOCAL GOVERNMENTS ON GROUND WATER AND CSGWPP ISSUES

16 Programs



"coordination" is the primary mechanism for developing and implementing comprehensive protection programs. Without creating statutes and regulations that mandate a new comprehensive program, the Strategy prescribes use of current authorities and program practices, brought together through coordination, for building ground water comprehensive protection.

Current Practices.

The Region's programs indicated that there are benefits to be gained by each program, and in resource protection as a whole, by bringing together the various ground water related activities from among all programs (see Table 1). Comprehensive ground water protection relies on fitting fragments of existing programs together. The Region's programs (including NPS, Pollution Prevention (P2), Stormwater/NPDES (SW), NPDES, PWSS, and others) have indicated that awareness of each other's functions and needs would be beneficial to them.

There are a variety of ways awareness and coordination among the Region's programs is occurring. For example, familiarity of programs occurs through routine contact on program activities. It occurs through contact on special geotargeted projects such as the Merrimack River Initiative, Regional activities such as Quality Action Team or participation on regional workgroups such as the Pollution Prevention Task Force. In addition, there are over 50 cross-program teams in the Region. For coordination purposes, all of them are tracked on LAN Tracking System. Finally, the Water Division tracks grants and other initiatives for easy distribution among staff.

The interconnection between programs and administrative efforts is important. For instance, the Quality assurance Team (QAT) on Grants issues prompted the Region's policy for issuing all grant guidance to states on or before May 1. This was the major issue states raised to the Region during state CSGWPP Roundtables. States had indicated that EPA impedes the states' abilities to practice comprehensive programs, because they received grant guidance and grant awards at different times, precluding good planning across the states' programs.

The Water Management Division has taken a proactive approach to coordination when it formed a cross-program team for each Region I state. Teams are composed of state program coordinators from each of the water programs. State coordinator teams have developed charters and are meeting to review annual state objectives and work plan activities for grant programs, identify significant state initiatives, share information on projects and state activities and identify issues relating to resources, staffing or overall performance. Program coordination from outside of the Water programs are welcomed and encouraged to attend.

At the program level, Table 4 characterizes coordination among the ground water related programs and identifies whether each program believes current coordination is adequate. As indicated by the Table, there are several closely linked ground water related programs. They include the NPS program, the Ground Water Management (GWM) program and Underground Injection Control (UIC) programs. Each has a designated program contact who works closely with other contacts on reviewing annual grant guidance and state workplans, negotiating final grants and approving management plans.

There is a close link also between the Pesticides and the Ground Water Management programs. Current emphasis is on developing and reviewing draft Generic Pesticide State Management Plans. States developing adequate Nonpoint Source Management Plans and Pesticide State Management Plans can expect relying on them to significantly satisfy Regional review of those programs for CSGWPP endorsement.

Superfund has had longstanding assistance from the PWSS program for developing risk assessments. The Superfund program also continues to support contractor assistance to complete locating all public water supplies to a one second accuracy in all Region I states.

Program coordination with federal agencies is presented in Table 5.

Program Recommendations and Commitments to Program Awareness and Coordination.

Most respondents to the Regional Assessment felt cross-program state coordinator teams would be useful and expressed willingness to participate on such teams. The Ground Water program will consider proposing to the Water Management Division and Ground Water Policy Committee formalizing Region-wide state coordinator teams.

Coordination in developing the Regional Assessment resulted in new awareness and further understanding of programs' roles in ground water efforts and CSGWPPs. With little prior awareness for ground water issues and CSGWPP initiatives, several programs including P2 and SW/NPDES programs, had an opportunity to view their programs in the context of the Regions ground water efforts and committees. Pollution Prevention has recommended to serve in a consulting role to ground water committees for addressing specific issues. In addition, to promote ground water coordination and awareness, the P2 program would present emerging issues and concerns related to ground water in the P2 forums. Similarly, the GWM program would continue participation on the Region's Pollution Prevention Task Force "to maintain communication and ensure integration."

Many programs including NPS, SW, NPDES, SF, RCRA C, UIC, and others, sought a stronger role for the GWM program for

Table 4

CROSS PROGRAM COORDINATION PERTAINING TO GROUND WATER

| | | PROGRAM RESPONSES - PROGRAM COORDINATES WITH: | | | | | | | | | | | | | | | |
|--|--------|---|------------------|-------------|-----------------------|-------------|--------|------------------|------------------|-----------------------|-----------------------|--------|--------|-------------|-------------|-----------------------|-------------|
| | | G W M | I N F O | M & E | N P D E S | N P S | P 2 | P E S T | P W S S | R C R A C | R C R A D | S F | S W | U I C | U S T | W E T L D | W Q M |
| P R O G R A M I N T E R V I E W E D | GWM | *** | 3/A | 3/I | 2/I | 4/A | 4/I | 4/A | 4/I | 2/I | 2/I | 4/I | 3/A | 4/A | 2/I | 2/I | 2/I |
| | INFO | 3/A | *** | 3/A | 3/A | 3/A | 2/A | 3/A | 3/A | 3/A | 3/A | 3/A | 2/A | 2/A | 3/A | 3/A | 3/A |
| | M & E | 2/A | 2/A | *** | 2/I | 4/A | 2/A | 2/A | 2/A | 2/A | 2/A | 2/A | 3/I | 2/A | 2/A | 3/A | 3/A |
| | NPDES | 3/I | 2/I | 4/A | *** | 2/I | 3/I | 2/A | 3/A | 3/A | 3/A | 3/A | 4/A | 2/A | 2/A | 4/A | 4/A |
| | NPS | 4/A | 3/I | 4/A | 3/A | *** | 4/A | 3/I | 3/A | 2/A | 3/A | 2/A | 3/I | 3/A | 3/A | 4/A | 4/A |
| | P2 | 4/A | 4/A | 4/A | 4/A | 4/A | *** | 4/A | 4/A | 4/A | 4/A | 4/A | 4/A | 4/A | 4/A | 4/A | 4/A |
| | PEST | 4/A | 3/A | 2/A | 3/A | 4/A | 3/A | *** | 2/I | 2/A | 2/A | 2/A | 2/A | 2/I | U | 2/A | 2/A |
| | PWSS | 4/I | 4/A | U | 3/I | 2/I | U | 2/I | *** | 2/I | 2/I | 4/A | 2/I | 2/A | 2/I | 2/I | 2/I |
| | RCRA C | 3/I | 3/I | 2/A | 2/I | 2/I | 4/A | 2/I | 3/I | *** | 2/A | 4/I | 2/A | 2/I | 3/A | 2/A | 2/A |
| | RCRA D | U | U | U | U | U | U | U | U | U | *** | U | U | U | U | U | U |
| | SF | 4/A | 4/A | 3/A | 3/A | 2/A | 3/A | 2/A | 4/A | 4/A | 3/A | *** | U | 3/A | 3/A | 4/A | 4/A |
| | SW | 2/I | 2/I | 3/I | 4/A | 4/A | 2/I | 2/I | 3/I | 2/I | 2/I | 2/I | *** | 2/I | 2/A | 2/I | 2/I |
| | UIC | 3/A | 2/A | 2/A | 2/I | 3/A | 3/I | 2/A | 3/A | 2/A | U | U | 3/I | *** | U | U | U |
| | UST | 3/A | 3/A | 2/A | 2/A | 2/A | 3/A | 2/A | 3/A | 4/A | 3/A | 3/A | 2/A | 3/A | *** | 2/A | 2/A |
| | WETLD | 3/A | 2/A | 3/A | 2/A | 3/I | 2/A | 2/I | 2/I | 2/A | 2/A | 2/I | 2/A | 2/A | 2/A | *** | 4/A |
| | WQM | 3/I | 3/A | 4/A | 4/A | 4/A | 3/I | 2/I | 2/I | 2/I | 2/I | 2/I | 4/I | 2/I | 2/I | 3/I | *** |

GWM - Ground Water Management

INFO - Information Management

M&E - Marine & Estuaries

NPS - Nonpoint source

P2 - Pollution Prevention

PEST - Pesticides

PWSS - Public Water Supply

SW - Storm Water

SF - Superfund

UIC - Underground Injection Control

UST - Underground Storage Tanks

WETLD - Wetlands

WQM - Water Quality Management

Level of Coordination:

4 - Frequent, Recurrent

3 - Occasional, Sporadic

2 - Rarely to Never

U - Unnecessary

Adequacy of Coordination:

A - Adequate

I - Needs Improvement

A dash (-) indicates no information available, a (?) indicates information unknown.

Table 5

**REGIONAL PROGRAM INTERACTION WITH FEDERAL AGENCIES
IN
GROUND WATER PROTECTION ISSUES**

| REGIONAL PROGRAM | FEDERAL AGENCY | LEVEL OF INTERACTION |
|--------------------------|---|-------------------------------------|
| Ground Water Management | FAA, FHA, FmHA, HUD, IHS | Occasionally |
| Information Management | FWS, SCS, USGS | Occasionally |
| Marine & Estuaries | COE, FWS, NOAA, SCS, USGS USCG | Routinely Routinely Rarely |
| Nonpoint Source | NOAA, SCS ASCS, FS, FWS COE, USGS | Routinely Occasionally Rarely |
| Pollution Prevention | USDOE USDOT | Frequently Rarely |
| Pesticides | SCS, USDA | Routinely |
| Public Water Supply | None | |
| RCRA C | None | |
| RCRA D | None | |
| Stormwater/NPDES | COE, FWS, USGS FHA, NOAA, SCS | Routinely Occasionally |
| Superfund | ATSDR, COE, FWS, NOAA, USGS | Routinely Routinely |
| UIC | SCS | Occasionally |
| UST | None or ? | Occasionally |
| Water Quality Management | COE, FERC, FS, FWS, NOAA, SCS, USGS | |
| Wetlands | COE, FS, FWS FEMA, FERC, FHA, SCS | Routinely Occasionally |

ATSDR - Agency for Toxic Substances and Disease Registry
 ASCS - Agricultural Stabilization and Conservation Service (USDA)
 COE - U.S. Army Corps of Engineers (DOD)
 FAA - Federal Aviation Administration (DOT)
 FEMA - Federal Emergency Management Agency
 FERC - Federal Energy Regulatory Commission
 FHA - Federal Highway Administration (DOT)
 FmHA - Farmers Home Administration (USDA)
 FS - U.S. Forest Service (USDA)
 FWS - U.S. Fish and Wildlife Service (DOI)
 HUD - Dept. of Housing and Urban Development
 IHS - Indian Health Services (DOI)
 NMFS - National Marine Fisheries Service (DOC)
 NOAA - National Oceanographic and Atmospheric Administration (DOC)
 SCS - Soil Conservation Service (USDA)
 USCG - United States Coast Guard (DOT)
 USGS - U.S. Geological Survey (DOI)

coordinating and distributing ground water resource information. In response, the GWM program accepted a commitment to coordinate with Regional, federal, and state agencies to obtain and distribute current information on wellhead protection areas, other state recognized resource areas, sole source aquifers and high yield sand and gravel aquifers. GWM would also provide state resource management plans that identify or define priority resources. Ground Water Management program will also work with its state programs to identify data layers and information Regional programs could use from the state programs. Continuous dialogue is necessary now to understand current inventories and data gathering efforts.

UST, RCRA C, and the other grant oriented programs, agreed to continue to insert into grant guidance and workplans, the requirement for working with the states' ground water programs on developing CSGWPPs, and to participate on the state ground water coordinating mechanisms/committees.

The Underground Storage Tank program is generally a state operated program, and annual guidance plays an important role in coordination. Through the programs, annual grant guidance the program will encourage increased coordination between the States UST/LUST programs and the ground water and wellhead protection programs. Currently, state LUST programs are considering WHPAs in prioritizing activities. Internally, the Region's UST program will coordinate and share inspection results with the Ground Water Management staff.

Several programs expressed a desire and commitment to improve coordination with other programs. However, constraints are already affecting programs ability to do so. PWSS and RCRA D are constrained now from any further coordination beyond current levels because of limited time and resources. To the extent resources allow, PWSS would seek further coordination with the NPS, RCRA C, UST, RCRA D, and other Federal Facilities programs. RCRA C also expressed concern that constraining resources may also affect substantial future coordination efforts.

The Marine and Estuarine Protection (M & E) program recommended they will improve its involvement with the Ground Water program, in its activities and with technical staff. Similarly, it will work to better its coordination with the NPS, especially for coastal areas. The Pesticide program expressed it would improve support and coordination with the NPS, Bays/Near Coastal and the PWSS programs.

Superfund identified beneficial links with the Ground Water program and together have accepted several recommendations to improve coordination between the two programs. Jointly, they will formalize procedures for coordinating on significant site-specific ground water issues, such as ground water reclassification, technical impracticability waivers, and

creative use of Supplemental Environmental Projects. Like other programs, Superfund expects to coordinate on using wellhead protection areas and public water supply locations, if plotted on GIS maps, for use in determining site priorities.

Recognizing the natural interconnection between surface and ground waters, the Water Quality Management (WQM) and GWM programs accepted recommendations to improve communication and education across the programs.

Program's Commitments for Coordination with States' Programs. Region I's states are heavily vested with the delegation, primacy, or approvals through grant mechanisms, for administering federal and state ground water related protection efforts. Consequently, most of the Region's ground water related programs provide some oversight of state programs. Coordination, primarily through national and Regional guidance, sets the direction of program activities. Annual evaluations oversee the progress state programs are making.

Coordination among state programs is vital, and Regional facilitation to encourage and support it is important. Coordination among state programs is the primary objective and tool for states to implement Comprehensive State Ground Water Protection Programs.

Through national and Regional annual grant guidance, and/or grant conditions, all ground water related Regional programs will continue to specify the need for their state programs to coordinate with states' ground water programs in developing and implementing its CSGWPP, and to participate in their state's ground water coordinating mechanism.

Regional programs will undertake several actions with their state programs. Superfund will initiate discussions to cooperatively understand state and federal differences between the programs, and to support consistent approaches to priority setting and determining clean-up objectives. One potential outcome might be the use of one (1) list of hazardous waste sites and a priority sequence to cooperatively evaluate and remediate such priority sites.

The Nonpoint Source and Ground Water Management programs will coordinate with states to identify ground water priorities necessary for the grant support and preparation of the revised FY 94 Nonpoint Source Management Plans. The Stormwater/NPDES program will improve coordination with GW to encourage identification of water resource protection priorities and to develop resource protection strategies. It will prepare fact sheets for their permit writers, applicants and state programs. Stormwater agrees with the recommendation to establish a Regional/State mechanism to prioritize program activities.

In a very important outreach connection to states, and eventually local officials, the P2 program on request will coordinate development and distribution of related ground water and pollution prevention outreach materials. In CSGWPP meetings with state officials, this type of "hands-on" information was cited as being critical to state and local inspectors wishing to promote "good neighbor" relations between local officials and commercial establishments. The UIC program will encourage its state program to participate in the states' multimedia inspections and to increase efforts to inform state inspectors about UIC issues. The Pesticides and Ground Water programs commit to improving awareness of state wellhead protection programs by state pesticides programs.

For the most part, programs saw the importance of local community involvement in overseeing and managing potentially contaminating activities. They acknowledge the supplemental role locals can play in the Region's and state's activities. (See Figure 6). The degree to which programs work directly with locals through technical assistance, demonstration grants, and remedial response, varies among programs. GWM, PWSS, UIC, and NPS programs support community efforts directly and through state funded programs. Assistance generally supports building local capacity for managing their resources by instituting BMPs, local by-laws or health ordinances and inventorying local contaminating land use activities. Remedial response activities assist communities directly. Contamination incidents often raise community awareness for instituting their own controls.

Three new opportunities were identified to improve community awareness and promote local efforts. The RCRA C program recommends furnishing results of inspections to local boards of health or other official boards. PWSS agrees to provide results of their sanitary surveys to state drinking water programs and will encourage that they be provided to local boards. PWSS will promote that states do the same.

Superfund will initiate opportunities to establish a mechanism for communicating with local ground water managers to gain information on contaminated sites, to verify site locations (latitude and longitude) and to identify land uses and management controls.

Theme: Information

"Information" evokes concerned sentiments from those who believe we cannot manage effectively without it, to those who say we cannot afford to get it. Information can improve the program ability to identify priorities, take a resource based approach to protection and provide a measure for assessing progress in ground water protection.

Current Practice.

The Regional Assessment survey and dialogue with Regional

programs clearly indicated the need for improved information management and locational data acquisition at the Regional and state levels. Accordingly, one objective is to institutionalize information practices at state and federal levels, and in commercial business activities.

The programs' need for available and accurate information is reflected in its support for the following:

- applying resource based approach of protection (watershed and aquifer protection)
- identifying locations of critical resources
- identifying locations of contamination threats
- setting priorities for EPA and state:
 - inspections and enforcement (RCRA C, UIC, UST, etc)
 - remedial response (Superfund, RCRA C - NCAPS, Corrective Action new starts, UST, etc.
 - targeting areas by "use" and "value"
- directing nonpoint source funding to priority ground waters
- directing outreach to communities at greatest risk
- providing mapped resource and contamination threats to local officials and public
- determining Environmental Equity projects
- conducting special initiatives like the Merrimack River Initiative, or other geotargeted projects
- coordinating with states for annual grant objectives and workplans and tracking deliverables.

Program's Commitments on Information.

Programs agreed to define their information needs and expressed a willingness to address action recommendations.

The Marine and Estuarine Protection, Pesticides, UIC, and Ground Water programs expressed their need to improve locational data and will work to increase the availability and use of Global Positioning System (GPS) units to gather the data.

Programs accepted considering ground water as a critical resource area for their activities, but needed to obtain related information. They recommended that ground water resource information be coordinated through the GWM program. As indicated previously, the GWM program will work with PWSS and state programs to obtain and display the location of public water supply wells and any wellhead protection areas currently mapped.

The most commonly expressed need was for locational information and resulted in the recommendations to obtain accurate latitude and longitude data.

Programs including UIC, Superfund, UST, GW, RCRA C, and others, expressed commitments to support obtaining accurate latitude and longitude through contractors at remedial sites,

in-field inspections, permit requests. Some programs have committed to working with their state programs to have latitude and longitude accurately reported for all new sources prior to operation and to note when systems are taken off-line.

Several programs including RCRA C, Stormwater, UIC, Ground Water Management and PWS expressed a desire for workstation on-line data system access, and for improved availability and accessibility, particularly for integrated data management and access.

Probably the most problematic issues the Region faces for implementing resource based operations are the fragmented nature of information management across multiple programs, and the availability of and access to accurate locational information on water resources and potential contamination sources.

IV. CONCLUSION

Developing a Regional comprehensive approach to protecting ground water is a continuing and evolving process. It is one that will necessarily involve state, regional, and local players, which will cause new and recurrent issues to surface and resurface until adequately addressed. Updating the Regional Assessment may also be necessary as States develop and implement state CSGWPPs calling for Regional support and flexibility based on their unique needs and circumstances.

Appendix D lists the program recommendations identified through this Regional Assessment. Programs have committed to implementing recommendations which were acceptable and could be addressed in FY'94 and FY'95. Other remaining recommendations will be tracked and addressed as progress is made and resources permit. The Region looks forward to successful implementation of the many actions, through the participation of all national, regional and state programs and in support of comprehensive ground water protection.

Appendix A

**COMPREHENSIVE GROUND WATER PROTECTION PROGRAM
REGIONAL ASSESSMENT**

STRATEGIC ACTIVITY 1

**ESTABLISHING A GROUND WATER PROTECTION GOAL
TO GUIDE ALL RELEVANT PROGRAMS IN THE REGION**

**GROUND WATER POLICY COMMITTEE
Implementation Subcommittee
Data Management Committee**

Region I
Regional Assessment
Criteria Questionnaire
Strategic Activity 1

EPA's Ground Water Protection Goal

EPA's ground water protection goal and policy is presented in "PROTECTING THE NATION'S GROUND WATER: EPA'S STRATEGY FOR THE 1990's - The Final Report of the EPA Ground-Water Task Force," July 1991. It has been further clarified and stated in the "Final Comprehensive State Ground Water Protection Program Guidance," December 1992. EPA's ground water protection goal affects all ground water-related programs, unless guided otherwise by statute or regulation.

EPA's overall goal is "to prevent adverse effects to human health and the environment and to protect the environmental integrity of the nation's ground water." Except where specified though regulation or statute, the EPA goal statement notes that "in determining appropriate prevention and protection strategies, EPA will also consider the use, value, and vulnerability of the resource, as well as social and economic values."

In place of criteria, programs should address the following questions:

- a. Has the program received instructions or encouragement from their HQ program to support and incorporate the Strategy's comprehensive protection approach into...
 - program's internal activities and priorities ? ☐ yes, ☐ no
 - with their state program's activities ? ☐ yes, ☐ no
- b. Has the program discussed or otherwise communicated with their state program regarding CSGWPP goals/activities ? How..
 - ☐ program director/senior management meetings
 - ☐ annual national/regional program guidance
 - ☐ annual negotiated work plans
 - ☐ grant conditions
 - ☐ other
- c. Briefly, identify state ground water protection program goals or objectives which conflict with the program's ?

COMPREHENSIVE GROUND WATER PROTECTION PROGRAM

REGIONAL ASSESSMENT

STRATEGIC ACTIVITY 2

ESTABLISHING PRIORITIES, BASED ON CHARACTERIZATION OF GROUND WATER RESOURCES, IDENTIFICATION OF SOURCES OF GROUND WATER CONTAMINATION, AND PROGRAMMATIC NEEDS, TO ASSURE DIRECTION OF ALL RELEVANT REGION I PROGRAMS AND ACTIVITIES TOWARD THE MOST EFFICIENT AND EFFECTIVE MEANS OF ACHIEVING OUR GROUND WATER RESOURCE PROTECTION GOAL

**GROUND WATER POLICY COMMITTEE
Implementation Subcommittee
Data Management Committee**

Region I
Regional Assessment
Criteria Questionnaire
Strategic Activity 2

1. Determine if EPA Region I Program has established basic definitions and approaches for a coherent priority-setting process and is applying them in a consistent manner that supports protection of ground water resources.

- a. Does program set priorities after considering program activity impact on ground water resources?
- b. Indicate the ways the prioritization scheme(s) support protection of ground water resources.
- c. Indicate if prioritization is:
 - ☐ required by regulation or statute
 - ☐ required by HQ
 - ☐ required by Region
 - ☐ beneficial to program
 - ☐ a documented process
 - ☐ consistently used
 - ☐ formal or informal
- d. Indicate if prioritization rationale has been established with input or involvement by states or other EPA programs. How?
- e. List program areas where this type of prioritization occurs and identify activity prioritized. (Prioritization name, if any).
 - ☐ Assign degree of threat to resource or people
 - ☐ Geotarget sites or resources for attention
 - ☐ Specifying order of inspections
 - ☐ Specifying order of enforcement
 - ☐ Specifying order of sanitary surveys
 - ☐ Determining staffing levels (investment / disinvestment)
 - ☐ Others (please identify any others).
- f. Does the program encourage or require states to prioritize?
- g. Do states prioritize similar activities?
- h. How does state prioritization scheme(s) differ from programs?
- i. Indicate programs in Region or states whose activities and

Region I
Regional Assessment
Criteria Questionnaire
Strategic Activity 2

priority setting would benefit from this program's prioritization processes.

- j. Indicate programs at EPA or the states who might use information generated by this program in their respective program prioritization processes.
- k. Indicate whether program could benefit from other EPA or State prioritization processes?
- l. Indicate coordination mechanisms used to discuss program prioritization w/in the program Regional and state programs.
- m. Describe any barriers to prioritizing program activity that support ground water protection.

Region I
Regional Assessment
Criteria Questionnaire
Strategic Activity 2

2. Determine if EPA Region I Program uses ground water priority-setting process that is based on sufficient consideration of varied ground water characteristics.

Note: In New England the program should assume all GW is intrinsically vulnerable to contamination, and the threat is related to land-use activities over the GW.

- a. Describe prioritization approach(es) used.
- b. Indicate if program priority setting process considers ground water resource characteristics, or resource related factors, such as:

flow patterns: __yes(__primary, __minor), __no
flow rate (transmiss.): __yes(__primary, __minor), __no
water quality: __yes(__primary, __minor), __no
availability (access/yield): __yes(__primary, __minor), __no
sand & gravel aquifer: __yes(__primary, __minor), __no
bedrock aquifer: __yes(__primary, __minor), __no
wellhead protection: __yes(__primary, __minor), __no
State GW classification: __yes(__primary, __minor), __no
Fed. GW classification: __yes(__primary, __minor), __no
local aquifer prot. zone: __yes(__primary, __minor), __no
land-use activity: __yes(__primary, __minor), __no
current use: __yes(__primary, __minor), __no;
reasonably expected future use: __yes(__primary, __minor),
__no;
watershed protection effort: __yes(__primary, __minor), __no

- c. List any other water resource characteristics considered.
- d. Describe any barriers to utilizing ground water characteristics in program activity prioritization processes.
- e. Describe where program obtains information relating to ground water characteristics or related factors listed above.
- f. Does the program encourage or require state to include the above types of factors in setting priorities?

Region I
Regional Assessment
Criteria Questionnaire
Strategic Activity 2

3. Determine if EPA Region I Program has sufficient contamination source inventories and assessments to support its process for identifying all significant potential sources of contamination and to consistently determine its ground water protection priorities based on the relative threats of these sources to the resources.

- a. Does the program have contaminant sources inventoried?
- b. Indicate which significant contaminant sources are inventoried.
- c. Has the program characterized or have sufficient information on the nature of the threat(s) that each significant contaminant poses to ground water resources to prioritize program activity?
- d. Does the program set priorities based on relative threats to ground water?
- e. When setting priorities, does the program need contaminant source information from:
 - another EPA program? ☐yes, ☐no
 - a state program? ☐yes, ☐no
 - local sources? ☐yes, ☐no
 - another federal agency? ☐yes, ☐no

[Criteria #4 asks "from who", and "how" the information is obtained?]

- f. Describe any barriers to utilizing the contaminant source inventory information in the program's prioritization process.
- g. Does the program encourage or require state programs to obtain contaminant source information suitable for use in priority setting? (Is latitude/longitude info suggested)?

4. Determine if EPA Region I Program has sufficient technical capabilities to support its priority-setting process and determinations.

- a. Indicate the technical needs of the priority process.

Indicate:

Region I
Regional Assessment
Criteria Questionnaire
Strategic Activity 2

- priority setting criteria (i.e.; pws wells w/in 1/2 mi.)
 - types of information needed (GW resource characteristics, contaminant source inventory, population size, number of facilities, etc.)
 - sources of information needed/used ("who" has the information and how is it obtained)
 - support needed from other programs, federal and state (to develop data, etc.)
 - information management systems that support process
 - information formats necessary
 - minimum set of data elements necessary
 - latitude and longitude w/accuracy to support priority setting (one second,")
- b. Does the program priority setting processes :
- use automated information management systems
 - use Regional GIS
 - have sufficient trained staff
 - have mechanism to interact with state data systems
- c. Indicate technical barriers that impede or preclude prioritization of program activity that can result in better ground water resource protection.
- d. As a routine, how does the program obtain state data information to support priority setting ?
- e. Is the program encouraging or requiring the state to support detailed mapping and assessment to address the state's highest priority needs ?

Region I
Regional Assessment
Criteria Questionnaire
Strategic Activity 2

5. Determine if EPA Region I program has formally adopted measures of ground water protection (e.g., performance standards, quality standards, etc), which are sufficient to support consistent program priority setting and the measurement of progress toward protection of ground water resources.

- a. Is your program aware of formal EPA or state adopted measures of ground water protection, such as:
- ☐ water quality standards
 - ☐ pollutant discharge standards
 - ☐ soil clean-up standards
 - ☐ contamination mitigation standards
 - ☐ classification standards
 - ☐ reference points
 - ☐ other
- b. Indicate which of these ground water protection measures are used to support prioritization of program activity.
- c. Does the program estimate public health and environmental risk from exposure to contaminated GW ? How is it factored into priority setting ?

6. Determine if protecting public water supplies is among EPA Region I's highest priorities and whether controlling contaminant sources in wellhead protection and recharge areas and basins of drinking water reservoirs and aquifers is a priority.

- a. When prioritizing program activities, does the program routinely consider the following resource protection areas as program priorities for controlling contaminant sources:
- wellhead protection areas, ☐yes, ☐no
- sole source aquifers, ☐yes, ☐no
- public water supply sources intakes or points of withdrawal, ☐yes, ☐no
- aquifer recharge areas, ☐yes, ☐no
- potential high yield aquifer areas, ☐yes, ☐no
- surface water basins draining to public water supply reservoirs and aquifers, ☐yes, ☐no
- public water supply contamination source assessment areas, ☐yes, ☐no
- local aquifer protection overlay districts (zones)
- others resource based factors ?
- b. Obtaining locations (latitude/longitude) of resource areas and contaminant sources is crucial to priority setting. How does the program currently obtain information related to above resource areas, and for contaminant source activities?
- c. Does the program encourage or require state programs to define and use wellhead protection, or other resource based

Region I
Regional Assessment
Criteria Questionnaire
Strategic Activity 2

areas, as being high priority areas for controlling
contaminant source activities ?

- d. How is information for protecting public water supplies factored into the program's priority setting ?
- e. Does the program encourage or require state programs to obtain locational information (latitude/longitude) in the state's resource assessment and contaminant source activities ?

7. Determine if EPA Region I program is sufficiently coordinating its ground water protection with its surface water quality and other environmental priorities.

This criteria will be addressed in Strategic Activity #3.

8. Determine if EPA Region I program's priorities sufficiently incorporate and support a process of on-going review and improvement of the six Strategic Activities supporting Regional comprehensive ground water protection.

It is assumed that the Region's GW Policy Committee will oversee an on-going review and improvement of GW activities internally and with the States.

Addressing this criteria calls for the compilation of all programs input to the Regional Assessment and is best left to the end when all data is in.

WRAP UP QUESTIONS

EPA's GW Strategy and states have stressed there is need for improved state/EPA partnership with states having the primary responsibility, and that states should have increased flexibility and EPA support.

What flexibility is there in EPA - State interaction in implementing program prioritization schemes ?

How can the program better support states' programs toward comprehensively protecting ground water resources ? (States will identify specific recommendations important to them).

How could states make your job easier in the area of priority setting?

How can the program better interact/integrate to support Regional comprehensive ground water protection in the area of priority setting ?

COMPREHENSIVE GROUND WATER PROTECTION PROGRAM

REGIONAL ASSESSMENT

STRATEGIC ACTIVITY 3

**DEFINING AUTHORITIES, ROLES, RESPONSIBILITIES, RESOURCES, AND
COORDINATING MECHANISMS ACROSS RELEVANT EPA, STATE, AND LOCAL
PROGRAMS FOR ADDRESSING IDENTIFIED GROUND WATER PROTECTION
PRIORITIES**

**GROUND WATER POLICY COMMITTEE
Implementation Subcommittee
Data Management Committee**

I. PROGRAM BASELINE DATA

1. Determine that all EPA ground water-related programs responsible for addressing the Region's and states' ground water protection priorities are identified. A lead contact (RA, DRA/coordinating committee, or program director) is established for coordinating and assisting states' development and implementation of their Comprehensive State Ground Water Protection Programs, and to oversee development of Region I's Regional Assessment and subsequent implementation.

- a. Does the program impact or have a role ground water protection. If yes, briefly identify.
- b. Is the program aware of any Regional coordinating committee(s) or programs responsible for overseeing ground water protection in the Region? Identify them.
- c. What are the perceived benefits gained by the program through their participation in comprehensive ground water protection efforts in the Region and state program?
- d. Do the following program guidances include elements or commitments on ground water protection through developing and implementing states' Comprehensive Ground Water Protection Programs, and for developing the Regional Assessment?

| Guidance | Yes/No '93 | Yes/No '94 |
|----------------------------------|------------|------------|
| Agency Oper. Guidance(STARS) | | |
| HQ Grant Guidance to States | | |
| HQ FY 93/94 Grant Guidance | | |
| Regional FY 93/94 Guidance | | |
| Program Strategic Plan (HQ/Reg.) | | |
| Other _____ | | |

2. Determine if a coordinating mechanism(s) operates that (a) includes all EPA programs with ground water-related responsibilities, (b) brings all programs' expertise to bear on EPA's ground water protection priorities, and (c) supports development and implementation of states' Comprehensive State Ground Water Protection Programs.

- a. Is the program represented on the Region I Ground Water Policy Committee? Is she/he an active participant? Who is it and what's their title?
- b. Is there a designated point of contact between the program and Region I's ground water program? Who is it?

What is the role and activity of the ground water program in coordinating and supporting programmatic activities?
Reply: Yes, No, or describe if not included below below).

- ___ Review of the program's annual guidance
- ___ Review of the state work plans
- ___ Participation in, and review of, program's priority setting
- ___ Participation identifying data needs and supporting its development
- ___ Discussion of program issues for potential Ground Water Policy Committee attention
- ___ Liaison with state ground water programs
- ___ Other _____

- c. Has the program participated in any cross program ground water-related protection activities? What are they (please be specific)?

- ___ Workaday and routine program activities
- ___ KPA activities...
- ___ Pollution prevention programmatic activity, or on P2 Taskforce...
- ___ Light industry pollution prevention program material development - dry cleaning, auto services, pit stops...
- ___ Geographic targeted initiatives, Merrimack River Initiative, Nashua River project, Chesprecot Water District...
- ___ Data management efforts...
- ___ Locating water wells or resource assessment...
- ___ Other _____

- d. Has the program participated in activities associated with CSGWPPs? What are they?

- e. What barriers could limit the program's participation in coordination efforts?
- across EPA ground water-related programs?
 - between the program and states' program?
 - between the program and states' ground water protection program managers?
- f. Identify topics and presentations for improving the coordination mechanism's (Ground Water Policy Committee, Implementation Subcommittee, and Data Management Committee) knowledge of Agency issues and functions (i.e.: priority setting, data management/needs, etc.).
- g. Identify internal Regional issues (see "consider" list below) with potential cross-program implications which could be raised to the Ground Water Policy Committee (or Ground Water Management Section) for coordination and direction.
- h. Identify possible state issues (see "consider" list below) with potential cross-program implications which could be raised to the Ground Water Policy Committee (or GW Management Section) for coordination and/or direction.
- i. Identify significant program issues or cross-program matters (see "consider" list below) raised by states that might be addressed or coordinated through the Ground Water Policy Committee, or GW Management Section.

Consider:

- 1) Participation on internal cross-program state work group for knowledge, coordinating activities
- 2) State's capability of having lead role and responsibility for ground water protection
- 3) Building state and local capacity
- 4) Conferring more Regional EPA flexibility (if states do not already have them)
- 5) Conflicts when programs attempt using resource oriented approaches (for planning, issuing grants, prioritizing activities, conducting resource assessment, and conducting inspections, compliance, and enforcement)
- 6) Needing to satisfy "beans" rather than protection
- 7) States requesting Regional program support,

- technical assistance, etc.
- 8) Changing grant / work plan approval process
 - 9) Appropriate use of grants across traditional program lines
 - 10) Other _____

OPTIONAL QUESTION

What does the program believe states would ask of the Region that would support the states' program?

3. Determine if sufficient resources are available to address EPA's Regional ground water protection needs, requirements, and priorities, and to support Comprehensive State Ground Water Protection planning and implementation efforts.
- a. How has the program made a commitment of staff time and financial resources directly related to ground water protection, or to activities and issues having a surface water - ground water relationship?
 - b. In what way(s) will the program continue to support (funding, internal resources, technical assistance) the development and implementation of the states' Comprehensive State Ground Water Protection Programs?
 - c. What improvements could be made on the program's ability to provide quality service or technical assistance to the Region's programs, states or the public which would require additional staff and funding resources?

Consider:

- ___ Data collection
- ___ Data display and distribution
- ___ Resource assessment
- ___ Prioritizing resource areas for program attention
- ___ Contaminant source locations
- ___ Providing technical assistance/expertise to programs, states, locals and public
- ___ Providing technical assistance to states, locals and public
- ___ Conduct public education and outreach
- ___ Conducting inspections in critical ground water resource areas

- ____ Taking compliance and enforcement actions in critical resource areas, as well as by referrals and special initiatives
- ____ Determining use, value and vulnerability of ground water resource
- ____ Other _____

d. What areas/activities would the program like to focus allocation of resources (prevention, priority setting, data management, etc.)? Briefly describe this for states in general, and for the Region's program).

4. Determine if relevant federal agencies within Region I are sufficiently informed and consulted in support of Region I's ground water protection efforts, and in support of states' development and implementation of CSGWPPs.

a. Identify the federal agencies with whom the program interacts, or should interact with, and the typical level of interaction with each? (Levels include: "routinely," "occasionally," "rarely," "never, but should").

Agency

Level of Interaction

| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

b. What has been the nature or types of ground water issues discussed with these agencies and how comprehensive have been the discussions?

c. Has the program ever had any formal agreement (MOA, MOU, data exchange agreement, etc.) with another federal agency? If yes, what was its purpose?

d. How could the program benefit from ground water protection discussions with another federal agency?

e. How could the program's input benefit another federal agency?

- f. Has the program discussed CSGWPP with another federal agency?
- g. Is the program aware of any state agency which has identified another federal agency regarding a ground water issue? If yes, identify agencies and issues.
- h. Has the state agency asked for the program's/EPA's involvement? (Briefly describe).

5. Determine if EPA has a role in assisting states on interstate matters, and should initiate coordination efforts / mechanisms for substantive ground water protection issues.
- a. Is the program aware of any ground water protection or management issues that have interstate implications? If yes, briefly describe the issue(s).
 - b. Has the program discussed interstate coordination issues regarding ground water: (briefly, identify agency/issue)?
 - within its program or with another Regional program?
 - with any state agency?
 - with any federal agency?
 - c. Has any state(s) requested the program's/Region's participation or technical assistance in coordinating or resolving issues between states? If yes, briefly identify the states and the program's response.
 - d. Does the program believe the Region should arrange and facilitate interstate dialog in support of state activities? Yes, no.
 - e. Are there any established interstate coordinating mechanisms that can be used to discuss interstate ground water protection issues? If yes, identify them, such as the following:
 - New England Interstate Water Pollution Control Commission
 - Northeast Waste Management Officials Association
 - New England Water Works Association
 - Others _____
 - f. Do interstate issues warrant establishing a new interstate coordinating mechanism for ground water-related issues? Yes, no. If yes, what suggestions can the program make on its nature, structure, and future agenda.

6. Determine if EPA is sufficiently considering local government (communities, regional planning agencies, etc.) needs and is encouraging/requiring states to engage and closely coordinate with local governments on ground water-related issues and CSGWPPs.
- a. Is there a component to the program's mission, Agency Operating Guidelines / STARS measures, or program objectives for working directly with local governments or interest groups? If yes, briefly identify.
 - b. How does the program involve, if at all, community/local government (local's role) in the program's planning or activities?
 - c. How could the program, further and appropriately, involve community/local government in the program's planning and activities?
 - d. How has the program considered the needs of community / local government in the program's ground water protection planning (strategic, annual, etc.) and efforts? Such as local needs for: (yes, no, not applicable)
 - _____ where the hazards/contamination (RCRA C & D, Superfund, nonpoint, UIC...) sources exist in their communities, from EPA/state contaminant source inventories
 - _____ where program conducts inspections / and provides results back to locals
 - _____ where program takes enforcement actions / and provides results back to locals
 - _____ technical assistance for "science" and facilitation
 - _____ technical assistance to train local inspectors
 - _____ development of quality educational materials for public outreach, and curriculum
 - _____ emergency response reaction should involve local officials, and follow-up communication
 - _____ management options necessary for preventing and controlling contamination sources
 - _____ developing advocacy to propel local efforts
 - _____ developing models, pilots or other initiatives
 - _____ engaging states to improve state and local partnerships / connections
 - _____ other _____

- e. How does the program seek to provide necessary tools for improving local capacity/capability for preventing contamination to ground water resources?

For instance, the program:

issues grants to communities; yes___, no___
provides mapped resources; yes___, no___
provides inventories/addresses/locations of
contaminating sources; yes___, no___
distributes technical assistance documents;
yes___, no___
involves locals in program strategic planning;
yes___, no___
conducts outreach efforts on program and
technical matters; yes___, no___
provides pollution prevention materials;
yes___, no___
conducts training for local inspection
officials; yes___, no___
certifying private inspectors; yes___, no___
other_____

- f. Would active local efforts/information directly benefit or improve the program's ability and effectiveness to protect the ground water resources? If yes, identify local efforts/information. (Yes, no, not applicable, or briefly describe if not listed below).

The following local efforts could benefit the Region's or states' ground water protection program:

___ targeting inspections for Region/state visits
___ conducting inspections
___ verifying contaminant source information, status
and location (address, lat/long)
___ identifying critical or significant ground water
resources
___ identifying land uses, sensitive receptors
___ verifying new public water supply locations
(lat/long)
___ identification of local management controls
___ availability of state or local management documents
___ others _____

- g. Does, and how does, the program encourage or require states to engage and work closely with local governments and to consider local government needs for ground water protection and resource management?

- h. Is the program willing to use grant guidance, grant conditions, input to geotargeted initiatives or resource management plans, to engage and improve state-local commitments and efforts? If not, why not.
- i. Does the program perceive any benefit (in strategic planning, day-to-day operation, priority setting, developing technical assistance, etc.) in having discussions with state and local governments about local ground water protection?
- j. Identify any barriers to considering local ground water protection needs in the programs activities?

WRAP UP QUESTIONS

This effort and questionnaire is structured for developing the Regional Assessment with three primary sections, current Baseline Data (Section I), State Flexibilities (Section II) which can be conferred upon states by the Region, and Program Recommendations (Section III) to improve coordination and integration of ground water-related programs and to assist states in developing and implementing CSGWPPs

II. STATE FLEXIBILITY

EPA's GW Strategy and states have stressed there is need for improved state/EPA partnership with states having the primary responsibility, and that states should have increased flexibility and EPA support.

To what degree does the program feel the state's program already has substantial flexibility in administering their program?

Where are areas of greater state flexibility relating to defining authorities, roles, responsibilities, resources, and coordinating mechanisms for supporting ground water protection activities?

COMPREHENSIVE GROUND WATER PROTECTION PROGRAM

REGIONAL ASSESSMENT

STRATEGIC ACTIVITY 4

**IMPLEMENTING ALL NECESSARY EFFORTS TO ACCOMPLISH
THE REGION'S GROUND WATER PROTECTION MISSION
CONSISTENT WITH THE AGENCY'S POLICIES AND
IN SUPPORT OF THE STATES' PRIORITIES**

**GROUND WATER POLICY COMMITTEE
Implementation Subcommittee
Data Management Committee**

STRATEGIC ACTIVITY 4

I. PROGRAM BASELINE DATA

1. Determine if the Region's programs are being implemented to attain EPA's objectives and to support the states' CSGWPPs. Do programs have objective measures such as standards, criteria or others, which are directed at prevention and control of contamination?

- a. Determine if the program, or program components, is delegated (approved, issued primacy, or is managed by a multi-program or multi-agency team, etc.) to states for primary implementation responsibility.
- b. Briefly, describe what your program is all about. Identify the different components or facets of the program. And, identify the types of activities occurring or being encouraged in the Regional and States' programs. (The list of activities below might be helpful).
- c. Does the program use any of the following activities for prevention/remedial efforts, or support similar state or local activities? Identify measurable objectives (standards, criteria...) aimed at reducing or preventing potential releases of contamination. (Indicate "yes" below under column).

| | Regional Program | State Program | Local Activity |
|---|---------------------|------------------|-------------------|
| • Controls through permitting | / | / | / |
| • Enforcement/compliance and inspection activity | / | / | / |
| • Other regulatory activity, limits, goals | / | / | / |
| • Development of management plans | / | / | / |
| • Development of surface water/ GW water resource assessments | / | / | / |
| • Development of local action agreements | / | / | / |
| • Other non-regulatory activity, mgt. controls for resource protect., monitoring activities | / | / | / |
| • Performance standards | / | / | / |
| • Facility siting criteria | / | / | / |
| • Maximum loading criteria | / | / | / |
| • BMPs | / | / | / |
| • State GW classification | / | / | / |

- State GW quality standards / /
- Drinking water MCLs, or health advisories / /
- Remediation clean-up levels / /
- Assessment of health risk levels / /
- Contamination "threat" associated with land-use / /
- Other criteria for decision making, (identify)_____ / /

- d. Identify standards or criteria in program to reduce or prevent contamination, or establish remedial action. And, are they different generally from state criteria?
- e. Explain the use of ground water classification in the program activities and decisions.
- f. Do remedial/clean-up programs consider the use and value of ground water in decision making? (Remedial programs).
- g. Explain the use of 'time' as a management option for remedial clean-up. (Remedial programs).
- h. How does the program decide what is a "reasonable" time frame for ground water restoration? And, is this generally different from states approach?
- j. Under what conditions would the program decide to "walk away from a ground water clean-up (eg: natural attenuation, or technical impracticability)? Are they different generally from what states consider?

- k. Consider the following programs and activities, and indicate the type of activity (see list) and the degree of coordination or involvement the program has with the other programs listed below:

| Program Interviewed | Activity & Coordination Level (see lists below) | Is it Adequate? |
|----------------------------|---|---------------------------|
| | | Yes/no/needs improvement. |
| 1. PESTICIDES | _____ | _____ |
| 2. NONPOINT SOURCE | _____ | _____ |
| 3. RCRA C | _____ | _____ |
| 4. UST | _____ | _____ |
| 5. RCRA D | _____ | _____ |
| 6. SUPERFUND | _____ | _____ |
| 7. INFO/DATA MGT.- GIS | _____ | _____ |
| 8. UIC | _____ | _____ |
| 9. PWSS | _____ | _____ |
| 10. POLLUTION PREVENTION | _____ | _____ |
| 11. STORM WATER | _____ | _____ |
| 12. NPDES | _____ | _____ |
| 13. REGIONAL COUNSEL | _____ | _____ |
| 14. GW/WELLHEAD PROTECTION | _____ | _____ |
| 15. BAYS/NEAR COASTAL | _____ | _____ |
| 16. FEDERAL FACILITIES | _____ | _____ |

Levels of Coordination / Involvement:

Often (routinely), 4; Occasionally, 3; Rarely, 2; Never, 1

Program Activity

- A. Annual Grant or Other Program Guidance Development
- B. State Work Plan Review
- C. State Program Mgt. Plans (NPS, PEST..)
- D. Mid-year Evaluation
- E. Grants timing and coordination
- F. Setting Priorities (State, Regional)
- G. Strategic Planning
- H. Unilateral or Multi-Media Inspections
- I. Compliance / Enforcement
- J. Resource Characterization (Wellhead areas, critical aquifers, sole source aquifers, hydraulic factors, etc.)
- K. Coordinating and Intergrating among programs for considering critical GW resources into programs' activities and decisions
- L. Identifying Contaminant Sources
- M. Data Development and Use; obtaining latitude/longitude
- N. Surface water - Ground water Interaction
- O. Resource Mgt. Plans (Bays/Coastal/Wetlands)
- P. Technical Assistance / Expertise
- Q. Special GeoTarget Initiatives
- R. Public Education / Outreach States & Public
- S. Other (Specify) _____

- l. How would the program characterize the support between the Regional GW Management Section and the program? How can it be improved?
- m. Identify Regional programs that could be useful or beneficial to the program and where support should be improved.
- n. Identify which other Regional programs which could benefit from the program's activities? (i.e. targetting geographic and resource areas, conducting inspections, managing information, obtaining locational data, reviewing program guidance or work plans, etc.).
- o. Participation in a state's GW Coordination Mechanism and with the Ground Water Protection program is paramount to the success of states' CSGWPPs.

Does the program encourage or instruct the state's program to contact and coordinate with the state's....

- Ground Water Program ?
- Another state program ?
- "Ground Water Coordination Mechanism"?

- p. Indicate the available opportunities in the program to encourage / require the state program's participation in the state's ground water coordination mechanism and with the ground water program. Indicate the program's willingness to use these opportunities. (Yes, No, NA)

Consider:

- A. ___ Annual national guidance
- B. ___ Annual regional guidance
- C. ___ Workplan negotiation
- D. ___ Grant conditions
- E. ___ Mid-year evaluation
- F. ___ State-Regional directors meetings
- G. ___ NEIWPCC coordination meetings
- H. ___ NEMOA coordination meetings
- I. ___ Cooperative agreements, MOUs
- J. ___ Special initiatives
- K. ___ Development of state, resource, or area-wide management plans (NPS, Pest. SMP, Bays...)
- L. ___ Other suggestions (please indicate) _____

- q. How are the states meaningfully involved in the program's activities or functions now (where they have input or participation)? How can these be improved?

- r. Are other Regional or state programs, local officials or public being made aware of the ground water-related products being prepared, or have been recently prepared, by the states or other EPA funded recipients? (Yes, no, and if yes-how)
- s. Would the program participate in Regional cross-program state-specific coordinating committees (similar to those being established in the Water Management Division? (Yes, no, if not-why not)
- t. Should the GW Management Section consider developing a low-tech ground water "newsletter" for providing greater awareness of each others' ground water-related matters? (Program emphasis, technical assistance documents received, data base coverages acquired, etc).
- u. Does the program, or related geographic or resource initiative, have a current newsletter? Please identify it.
- v. Does the state's program or related geographic initiatives have newsletters? What are their names?
- w. States have identified EPA as a "barrier" to improving coordination, priority setting and implementation among their programs. They have asked EPA for coordinated grant timing across ground water-related programs.

Identify the program's grant process timing (transmittal of national &/or regional guidance, receipt of draft workplans, and issue of grant).

Identify any constraints or limitations the program may have towards improving the Region's coordination (and possible timing) of grants to states, thereby allowing states to improve their cross-program coordination.
- x. In what areas could the program provide flexibility to address program priorities of their choice, use funding across normal grant program lines, support more "prevention" oriented type activities, direct activities to significant resource areas, geographic emphasis, etc?
- y. For permit programs, how are ground water concerns factored into permit activities and decisions?

2. Determine if characterization or assessment of ground water vulnerability, and where appropriate the ground water's use and value, (used in prevention measures) support decisions affecting ground water protection and management in the Regional program and under states' CSGWPPs.

Note 1. Preventing contamination wherever possible is the principal objective of the Agency's Ground Water Protection Strategy and states' CSGWPPs. They emphasize an approach for identifying critical resources (resource assessment) vulnerable to potential threats, and for identifying and locating potential contamination sources (source inventories) to be controlled and managed.

Note 2. Regarding vulnerability, Region I states' ground water protection program managers and other programs, have indicated that ground waters in New England are vulnerable to potential releases of contamination in nearly all settings.

- a. How, and for what purpose, does the program use information about ground water resource characterization, (e.g.: flow patterns), and its vulnerability to contamination?
- b. What types of resource-related information are used in program activities (other than prioritizing- covered previously), and decision making? (See below).
- A. ☐ Resource sensitivity
 - B. ☐ Geological/hydraulic parameters
 - C. ☐ Potential yield
 - D. ☐ Aquifer type (bedrock, sand & gravel...)
 - E. ☐ Contamination sources, inventory and locations
 - F. ☐ Ground water quality
 - G. ☐ Current water use
 - H. ☐ Reasonably expected future water use
 - I. ☐ Water resource value
 - J. ☐ Surface - Ground water interaction
 - K. ☐ Public or private well water monitoring
 - L. ☐ State water resource information (explain)
 - M. ☐ Local aquifer protection zones
 - N. ☐ State or EPA GW classification (which)?
 - O. ☐ Others (specify) _____
- c. If resource characterization is not used now, which ones could benefit the program in planning, activities, and decision making? Is the program willing to assist generating and/or obtaining this information? (May wish to seek Section Chief's thoughts).

- d. Is the resource characterization information available and from whom?
- e. Is the program aware of, or using, state resource information and data coverages? Briefly identify.
- f. How, and for what purpose, does the program utilize information on ground water use, value, and vulnerability? How are these obtained or determined?
- g. Is the program aware of the Agency's April 8, 1991, Locational Data Policy? Identify activities using latitude / longitude.
- h. Lat/long has utility in resource assessment and in contaminant sources inventories. In addition to priority setting, where could the program benefit from using lat/long (inspections, monitoring wells, etc)?
- i. How is the program moving toward latitude/longitude collection and use?
- j. How is the lat/long generated by EPA, or shared with states? Does Region obtain this data from states?
- k. Identify barriers to routinely collecting lat/long (one second accuracy) in the program from now/into the future.
- l. Is the program encouraging or requiring state programs to collect and use locational data?
- m. Generally, how well are states' programs or initiatives collecting lat/long? How could the program assist or engage the state program for collecting it routinely?
- n. Does the program have sufficient technical capabilities to evaluate, use and integrate ground water characterization into program activities and decisions?

3. Determine if Region is sufficiently considering state Wellhead Protection Program (WHP) programs and EPA goals when conducting program activities.

Note: The Agency acknowledges the WHP program as a primary resource based, prevention oriented program, addressing the protection of health of public water supply users.

- a. Is the program knowledgeable of State Wellhead Protection programs and their goals? (All states but Maine are implementing EPA approved programs). (Yes/no/must improve)
- b. Does the program or initiative, consider WHP areas (developed according to state regulation and guidance) in its activities and decision making? (Yes, no; if no, why not).
- c. Describe current activities being focused on WHP areas, such as conducting inspections and enforcement, inventoring contamination sources, providing outreach to state programs or local activity.
- d. List any specific program activity or decision making that could consider WHP areas and protection measures, protecting them directly, or as a secondary outcome (i.e.; management controls to reduce contaminants to coastal bays).
- e. Many localities protect aquifers through aquifer protection zones/overlay districts instead of WHP areas. Has the program/state program considered these locally derived areas? (Yes, no)
- f. Identify barriers to using WHP areas in program planning, activities and decisions?
- g. Does state program consider WHP in their planning, activities and decisions?
- g. Does, and how does, the program encourage states' programs to consider wellhead protection in its activities and decision process?

4. Determine if other aspects of ground water protection activities are being implemented.

a. Does the program : (Yes, no).

1. ___ Conduct inspections ?
2. ___ Participate in multi-media inspections ?
3. ___ Coordinate inspection results back to all relevant ground water-related Regional programs?

What is Region/state relationship on who conducts inspections and who takes enforcement actions where authorities overlap? And, is there a formal agreement? (Attach any inspection forms currently used).

- b. What areas does the program believe need additional implementation (current efforts may not be sufficient-regardless of cause) - which could reduce or eliminate potential environmental releases to ground water?
- c. Identify improvements the Regional program could make that would support state programs and improve their operating effectiveness for protecting ground water resources? And, have states inquired about this?
- d. Generally, and as representing the program, what do you think states need to do to gain the program's confidence in states' capacity to "direct" ground water protection efforts in the state? (May wish to have Section chief's thoughts).
- e. In what way(s) does your program include GW - SW interaction into its activities and decisions?

WRAP-UP QUESTIONS

This effort and questionnaire is structured for developing the Regional Assessment with three primary sections, current Baseline Data (Section I), State Flexibilities (Section II) which can be conferred upon states by the Region, and Program Recommendations (Section III) to improve coordination and integration of ground water-related programs and to assist states in developing and implementing CSGWPPs

II. STATE FLEXIBILITY

EPA's GW Strategy and states have stressed there is need for improved state/EPA partnership with states having the primary responsibility, and that states should have increased

flexibility and EPA support.

To what degree does the program feel the state's program already has substantial flexibility in administering their program?

Where are areas of greater state flexibility relating to defining authorities, roles, responsibilities, resources, and coordinating mechanisms for supporting ground water protection activities?

III. RECOMMENDATIONS

What are the recommendations for greater integration of all ground water-related programs with respect to defining authorities, roles, responsibilities, resources, and coordinating mechanisms for supporting ground water protection activities?

COMPREHENSIVE GROUND WATER PROTECTION PROGRAM

REGIONAL ASSESSMENT

STRATEGIC ACTIVITY 5

**COORDINATING INFORMATION COLLECTION AND MANAGEMENT
TO MEASURE PROGRESS, RE-EVALUATE PRIORITIES, AND
SUPPORT ALL GROUND WATER-RELATED PROGRAMS**

**GROUND WATER POLICY COMMITTEE
Implementation Subcommittee
Data Management Committee**

I. PROGRAM BASELINE DATA

1. Determine if Region collects, coordinates, and manages information, including record-keeping, monitoring, and other necessary information, within and across all programs to re-evaluate priorities, measure progress toward meeting EPA ground water protection goals and priorities, and support all program activities related to comprehensive state ground water resource protection.
 - a. Identify any information that the program currently collects, manages and/or coordinates, that could be used by the program, or other Regional or state programs to protect ground water. (Names of data bases, types of information, status of inspections and their results, etc., that can be used for ground water resource protection). (Provide characteristic print-out).
 - b. What program information is currently provided to, or requested by:
 1. Other Regional programs? _____
 2. States' programs? _____
 3. Local officials and public? _____
 - c. How could the information generated, collected and managed by the program be useful (information exchange) to ground water protection efforts of: (THINK CREATIVELY)
 1. Another Regional program ? _____
 2. State programs ? _____
 3. Local officials/boards ? _____

(E.g., providing results of inspections to local officials - such as Boards of Health; zoning officials)
 - d. What generally are the complications in acquiring and using information the program collects and applying it

to the program's ground water protection or remedial efforts?

1. What types of data base problems or shortcomings currently exist?
 2. Can the program extract the data it needs in an appropriate format to support its ground water-related activities? If not, briefly explain.
 3. Are paper results not routinely converted to electronic storage and retrieval systems? (i.e.; are multi-media inspection results being electronically entered for cross-program, state and local purposes?)
- e. Is information which is controlled by the program readily accessible (available and extractable) to other programs, state agencies and locals? (Yes, no; if no briefly explain).
- f. Does the program have a plan to assure that program controlled information can be made available to ground water related programs? (Yes, no). And, identify any barriers that hinder acquisition of information / data.
- g. "Environmental Indicators" - What information is currently collected by the program, other programs or state programs, that can be used for measuring progress in ground water protection, and for remedial improvement?
- h. Can the program suggest any indicators for showing progress being made on protecting ground water resources (preventing contamination) in the Region I? (Whether from Region/state/or local agencies). (Yes, no; if yes please describe your suggestion).

- i. What program issues regarding information and data collection, management and use, would the program like addressed, or otherwise clarified or brought to the awareness of the Ground Water Policy Committee?
2. Determine whether Region uses, and otherwise encourages states to use relevant data from local governments and other state and federal programs (i.e., Wellhead, Public Water Supply, etc.) to re-evaluate priorities, measure progress toward meeting EPA/State ground water protection goals and priorities, and support all program activities related to Comprehensive State Ground Water Resource Protection.

- a. Does the program use ground water related information /data from other Regional, federal, states or local programs to support their ground water resource protection and remedial activities? (Yes, no; if yes, identify source and information type).

Current Information
Sources

Type of Information /
Data

- b. What critical information does the program need now, but does not have, for setting and re-evaluating priorities, measuring progress, assessing ground water resources, etc.? Who has it, and are there barriers to obtaining it and using it (i.e., incompatible computer formats, information is not qualified, staff time and resources are insufficient to extract it from paper or electronic files, etc.)?
- c. Is the program aware of, and uses, state developed information from state management and assessment reports? (Such as those below, to assist in setting priorities, issuing grant guidance, developing

pollution prevention information, identifying prevention activities to be supported, measuring progress toward protecting ground water resources, etc.). (Yes, no; previously unaware of state reports).

1. Nonpoint Source, Section 319 State Management

Program reports identifying activities, practices and watersheds for improving NPS contamination to surface and ground waters.

2. Wellhead Protection Program reports
 3. Comprehensive Coastal Management Plan reports
 4. Section 305 (b) Water Quality Assessment Reports
 5. State Clean Water Strategies
 6. State Ground Water Protection Strategies
 7. others ?
- d. Does the program specify to the state program what information/data to collect, manage and/or use? (Yes, no; if yes, identify the information).
- e. How does the program encourage and support state programs to collect and use relevant information from other state, local and federal programs?
- f. What would the program like to see the state's program do to: (So that the program and state's program can re-evaluate priorities, support activities, and measure progress towards protection goals):
1. Improve on the information currently collected and managed; and, how the information can be put to other uses?
 2. Improve on how the information is collected and managed.
 3. Have states requested assistance from the Region?
 4. How can the Region support state efforts?
- g. Is the program willing to use grant guidance, grant conditions, work plan negotiations, program delegations (mid-year evaluations, directors meetings, etc.), to encourage or require state programs to improve on their collection, management and use of information/data? (Yes, no; if no, why not)

3. Determine if Region has defined a sufficient set of data elements to facilitate efficient data sharing and cross media analyses, and determine if Region is providing data users with constant comparable data that is suitable for use in all ground water related programs.
- a. Has the program identified a specific set of ground water related data elements that would support efforts by the program or others to protect ground water?
 - b. Is the program and state's program aware of EPA's minimum set of data elements? (Yes, no).
 - c. Indicate any specific program data elements that may be important to other programs with responsibility to protect ground water.
 - d. Indicate if the program has been part of discussions about development of or use of data to support ground water protection.
 - (1) cross program use of data
 - (2) data quality standard
 - (3) minimum sets of data elements
 - (4) data automation
 - (5) data management system enhancement to facilitate data access or data transfer.
 - (6) program use of GIS to display data and make decisions
 - (7) facility, site, data point locational standards
 - (8) program information needs assessments
 - (9) other

NOTE: Nearly all programs recognize the importance for obtaining and using accurate locational data (re: latitude and longitude, "lat/long"). There is agreement that lat/long is paramount for identifying areas where human health and ecology are at risk from potential ground water contamination. Lat/long serves:

- To chart critical ground water resources (through related aquifer/watershed hydrogeologic characteristics, etc.)
- To map human activities as sources of potential contamination
- As a major factor in Regional/state strategic planning and program activities (i.e.; directing inspections and enforcement activities, directing remedial activities, adding to ground water resource characterization and understanding, etc.)

- To facilitate cross-program, cross-jurisdiction pollution prevention through coordinated federal, state, and local efforts.

Address the following questions regarding LAT/LONG: (Many of the responses may have been previously given in other places, but, please bear with us to coalesce the information in this section).

- e. Is the program aware of the Agency's national locational data policy and its requirements for implementation? (Yes, no; if no, why not)?
- f. What program functions now collect information including lat/long? And, what purpose does location information currently serve? If it is collected, but not used, explain why. Identify barriers: (i.e.,...
 - there is no purpose for it's use
 - the information is imprecise, unqualified, and cannot be used for charting or mapping purposes
 - in paper format, not useful in strategic planning or other program activities
 - not included in HQ or Regional data base
 - not accessible or retrievable in any useful format
 - site assessment and monitoring locations at remedial sites
 - other (explain) _____
- g. Does the program now use locational data from another program, or from states? If yes, identify the program, type of information, and whether the information is adequate.
- h. What additional locational data does the program most have need for, and for what purpose would it be used?
- i. How would the program like to see improvements in locational data collection and management in its program or other Regional program?
- j. What improvements would the program like to see in locational data collection and management in its state's program or other state program? Briefly summarize relevant discussions conducted.
- k. How can the program support state efforts, and identify any barriers to obtaining locational data.
- l. Obtaining locational data now for all Regional facilities, permits, monitoring wells, contaminant generators, public water supply inlets, nonpoint

sources, etc., is expensive and resource limited.
Identify any means (opportunities) for collecting accurate locational data on existing and new points from this time forward.

THINK CREATIVELY.

- (i.e., all inspectors at Regional and State programs carry GPS units to obtain accurate fixes
- all applications (instructions to filing forms) at Regional and state programs could require certified location fixes
-

- m. Is the program willing to use grant guidance, grant conditions, work plan negotiations, program delegations (mid-year evaluations, directors meetings, etc.), to encourage or require state programs to improve on their collection, management and use of locational information / data? (Yes, no; if no, why not).

4. Determine if EPA monitoring program scope and design reflect EPA and State ground water protection priorities and goals.

- a. Does program perform or influence any monitoring program with impact on ground water quality or quantity or ground water resource management.
- b. Does the program use or have need for information from monitoring programs that have impact on ground water that are managed by other EPA or State programs? (Yes, no; if yes what information from whom?)
- c. Has program discussed the scope and nature of any monitoring programs and their support of ground water protection with other EPA or State programs? Briefly describe status of discussions.
- d. Identify any types of monitoring that the program has interest in.

WRAP-UP QUESTIONS

This effort and questionnaire is structured for developing the Regional Assessment with three primary sections, current Baseline Data (Section I), State Flexibilities (Section II) which can be conferred upon states by the Region, and Program Recommendations (Section III) to improve coordination and integration of ground water-related programs and to assist states in developing and implementing CSGWPPs

II. STATE FLEXIBILITY

EPA's GW Strategy and states have stressed there is need for improved state/EPA partnership with states having the primary responsibility, and that states should have increased flexibility and EPA support.

To what degree does the program feel the state's program already has substantial flexibility in administering their program?

Where are areas of greater state flexibility relating to coordinating information collection and management to measure progress, re-evaluate priorities, and support all ground water-related programs?

III. RECOMMENDATIONS

What are the recommendations for greater integration of all ground water-related programs with respect to coordinating information collection and management to measure progress, re-evaluate priorities, and support all ground water-related programs?

COMPREHENSIVE GROUND WATER PROTECTION PROGRAM

REGIONAL ASSESSMENT

STRATEGIC ACTIVITY 6

**IMPROVING PUBLIC EDUCATION AND PARTICIPATION
IN ALL ASPECTS OF GROUND WATER PROTECTION
TO ACHIEVE SUPPORT OF THE
STATE'S PROTECTION GOAL, PRIORITIES, AND PROGRAMS**

**GROUND WATER POLICY COMMITTEE
Implementation Subcommittee
Data Management Committee**

I. PROGRAM BASELINE DATA

- 1. Determine if an active public education program exists that addresses the key issues in decisions on the goal, objectives, priorities, and progress of the Region's and states' comprehensive ground water programs.**
 - a. Is there a public education / outreach / or involvement component in the program's mission, strategic planning objectives, Agency Operating guidance - STARS measures, HQ or Regional annual guidance, etc? (If yes, identify where it is included).**
 - b. Briefly describe the program's current public education and outreach to the states and the public. (For instance, what types of "technical assistance documents", fact sheets, pamphlets, etc., are developed for state and local distribution?).**
 - c. Describe how, if at all, states' or local programs are involved in the program's strategic planning, establishing objectives of the program, or in identifying the needs for public education and outreach?**
 - d. Briefly describe how the program encourages or requires the states' programs to include an active public education, outreach and participation component to its activities.**
 - e. Identify ways the program could improve its public education and outreach efforts, particularly in support of improving local capacity and awareness (advocacy) for preventing ground water contamination, and for addressing the use and value of ground waters involved in remedial activities.**

- f. Identify technical assistance the program could provide to states' programs to support and improve states public education and outreach efforts. Have states asked the program for any assistance?
- g. Identify ways the states' programs could improve their public education and outreach activities.
- h. Are there any public education or outreach issues at the Regional, state, or local levels that should be presented to the Region's Ground Water Policy Committee for consideration at the Regional level?

WRAP-UP QUESTIONS

This effort and questionnaire is structured for developing the Regional Assessment with three primary sections, current Baseline Data (Section I), State Flexibilities (Section II) which can be conferred upon states by the Region, and Program Recommendations (Section III) to improve coordination and integration of ground water-related programs and to assist states in developing and implementing CSGWPPs

II. STATE FLEXIBILITY

EPA's GW Strategy and states have stressed there is need for improved state/EPA partnership with states having the primary responsibility, and that states should have increased flexibility and EPA support.

To what degree does the program feel the state's program already has substantial flexibility in administering their program?

Where are areas of greater state flexibility relating to improving public education and participation in all aspects

of ground water protection to achieve support of the state's ground water protection goal, priorities, and programs.

III. RECOMMENDATIONS

What are the recommendations for greater integration of all ground water-related programs with respect to improving public education and participation in all aspects of ground water protection to achieve support of the state's ground water protection goal, priorities, and programs.

Appendix B

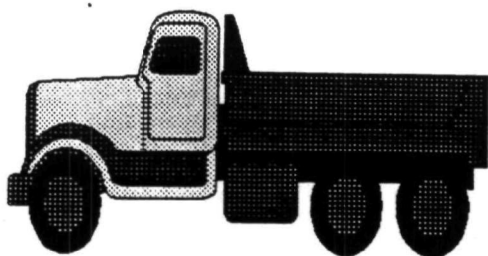
REGION I - PROGRAM REPRESENTATIVES FOR REGIONAL ASSESSMENTS

Ground Water Manager Assignment for Regional Assessment

September 1993

| <u>NAME</u> | <u>REGIONAL PROGRAM</u> | <u>PHONE</u> | <u>GROUND WATER MGR.</u> |
|-----------------|-------------------------|--------------|--------------------------|
| Rob Koethe | PESTICIDES * | 565-3702 | Tara Tracy |
| Bob Morehouse | NONPOINT SOURCE * | 565-3513 | Tara Tracy |
| Frank Battaglia | RCRA C * | 573-9643 | Rob Adler |
| Bill Torrey | UST * | 573-9604 | John Haederle |
| Myra Schwartz | UST | 573-5743 | (Same) |
| John Hackler | RCRA D (Waste GIS) | 573-9670 | Michele Notarianni |
| Aaron Gilbert | RCRA D * | 223-5529 | (Same) |
| Chuck Franks | RCRA D | 573-9678 | (Same) |
| Dennis Huebner | SUPERFUND * | 573-9610 | Jane Downing |
| Greg Charest | DATA MGT/GIS * | 565-4528 | Dave Delaney |
| Dave Delaney | UIC * | 565-3615 | Dave Delaney |
| Ralph Abele | WETLANDS | 565-4438 | John Haederle |
| Chris Ryan | PWSS-WATER SUPPLY * | 565-3609 | Chris Ryan (PWS) |
| Abby Swaine | POLLUTION PREVENT. | 565-4523 | Michele Notarianni |
| Jay Brolin | STORMWATER | 565-3590 | Dave Delaney |
| Shelly Puleo | | 565-3528 | (Same) |
| Jerry Potamis | NPDES/PERMITS | 565-3575 | Trish Garrigan |
| Janet Labonte | NPDES/PERMITS | 565-3566 | Trish Garriagn |
| Steve Silva | NPDES/ENFORCEMENT | 565-2489 | Jane Downing |
| Steve Couto | NPDES/ENFORCEMENT | 565-3499 | Jane Downing |
| Brain Rohan | REGIONAL COUNSEL | 565-4972 | Jane Downing |
| Rob Adler | GW/WHP/SSA * | 565-3601 | Rob Adler |
| Matt Liebman | BAYS/NEAR COASTAL | 565-4866 | Doug Heath |
| Dave Turin | WATER QUALITY | 565-3543 | Doug Heath |

Appendix C



WASTE

MANAGEMENT

DIVISION



PROGRAM: SUPERFUND

STRATEGIC ACTIVITY 1 - GW PROTECTION GOAL

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

Regional Programs are aware of and promote consistent ground water protection strategy goals.

- * The goal of EPA's Superfund approach to ground water remediation is to return usable ground waters to their beneficial uses within a timeframe that is reasonable given the particular circumstances of the site.
 - * The Ground Water Protection Strategy provides overarching guidance that the program considers in deciding how best to protect human health and critical systems threatened by contaminated ground water. The "Guidelines for Ground Water Classification" is used as guidance to help make decisions on the level of ground water cleanup at Superfund sites (see Strategic Activity #4 below). [Note: These guidelines are in draft form and have not been consistently and widely used throughout the Agency.] The Strategy and the Guidelines are not used as strict criteria (e.g. ARARs) but rather to set goals for ground water cleanup (e.g. remediation approaches).
 - * Although the program has communicated with their state programs regarding CSGWPP goals and activities, instructions from Superfund's national program has been vague.
 - * Program believes that existing state classification schemes may not have realistic goals and therefore may limit the ability of the federal program to fully endorse a state directed resource-based approach to ground water remediation at Superfund sites.
 - * Existing federal laws and regulations may limit ability of program to embrace CSGWPP.
-

PROGRAM: SUPERFUND

STRATEGIC ACTIVITY 2 - PRIORITIES

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program has established approaches for its priority-setting process to protect GW resources.

- * The CERCLIS data base includes over 2500 potential contaminated sites. The progression of a site may include the conduct of a Preliminary Assessment (PA), Site Inspection (SI), Worst First Site Screening (WFSS), Hazardous Ranking System (HRS), Superfund Accelerated Cleanup Model (SACM), Remedial Investigation (RI), and Feasibility Study (FS). Prioritization occurs to various degrees throughout to determine: 1) which sites are listed on NPL; 2) potential early action; 3) assignment of resources.
- * There is no prioritization for Pas. A PA is performed for all sites referred to EPA for investigation (60 Pas/year) within one year of entry of CERCLIS. The PA is scored by using a modified version of the HRS (40 CFR Part 300).
- * All sites are not screened out after a PA is completed and must proceed to the next step (SI) by law. The large backlog of sites needing an SI or SIP are assigned as resources become available, selecting candidates for Sis could be based in part on CSGWPP.
- * All sites with both a completed SI and a preliminary HRS score greater than 28.5 are subject to the WFSS process to determine relative priorities for further federal action. HRS is utilized to determine whether sites are eligible for proposal on the National Priority List (NPL).
- * SACM screening is performed on pre-NPL and NPL sites for identification of potential early actions, including Time Critical and Non-Time Critical Removal Actions.
- * Unstarted RIs are prioritized to determine which NPL sites should be actively worked on.
- * The regions give monies to the states to conduct PA/Sis; for sites near NPL proposal, the Region discusses their priorities with the states. The state prioritization scheme for state waste sites is not widely known and is conducted independent from EPA's priority scheme.

Criterion #2

The Program demonstrates consideration of varied GW characteristics in its priority-setting process.

- * A high priority is placed on sites with significant GW contamination; When determining threats posed by GW contamination for priority setting, all GW is assumed to be drinkable.
- * The above priority schemes incorporate knowledge of the following GW Characteristics:

| GROUND WATER CHARACTERISTICS | PA/SI | WFSS/HRS | SACM | RI/FS |
|------------------------------|-------|----------|------|-------|
| Flow Patterns | X | X | X | X |
| Flow Rate | | | X | X |
| Water Quality | X | X | X | X |
| Availability | | | X | X |
| Aquifer Type | | | X | X |
| Wellhead Prot. | X | X | X | X |
| State GW Class. | | | X | X |
| Fed.GW Class. | | | X | X |
| Local Prot. | | | | |
| Current Land Use | X | X | X | X |
| Future Land Use | | | X | X |
| Watershed Prot. Efforts | | | | |
| Nature of Cts. (DNAPLS) | X | X | X | X |

- * The nature and extent to which GW characteristics are factored into the above priority setting reflect the availability of such information at various points in the Superfund pipeline (see Strategic Activity #4 below).
- * In addition to the above GW characteristics, all priority schemes use information about ecological endangerment, impacts to wetlands and distance to private or public water supplies.

Criterion #3

Regional Programs have contamination source information available to identify potential threats to GW and to set priorities based on the relative threats to ground water resources.

- * All sites (non-NPL, pre-NPL, NPL) which come into the federal door is inventoried in the CERCLIS data base. There are over 2500 sites currently in CERCLIS, 700 with completed SIs.
- * The states have separate overlapping lists of state sites and generally do not share their information for the purpose of compiling one universe (federal and state) of contaminated sites.
- * When setting priorities, the program receives information on contaminant sources from EPA-Environmental Services Division, State Waste Programs, local government (zoning etc.) and the public.
- * Lack of state-wide contaminant source mapping of >700 potential HRS

sites limit the program's ability to compare such locations against resource characteristics on a broad scale in order to accomplish priority setting based on the value of the resources.

Criterion #4

The Program has technical capabilities to support its GW protection priorities and decisions.

- * The ability to incorporate resource characteristics into priority setting is restricted by the availability of such data (e.g. resource mapping), particularly in the early stages of the pipeline prior to site-specific studies.
- * The program.. "does the best we can with what we have." The priority schemes (WFSS vs. HRS vs. SACM vs. RI/FS) are designed to fit the capabilities of the program and each reflects the appropriate level of available data.
- * In order to conduct resource-based priority setting, the program needs the following types of information: 1) contaminant source inventories; 2) affected population size; 3) GW resource characteristics (see criterion -- above); 4) locational site data; and 5) perceived threats. The inability to obtain such information will limit the quality of the priority setting.
- * For pre-remedial sites, contractors use available background data, including USGS topographical maps; state and local contacts are surveyed for existing data relating to the site, including distance to water supplies and land use activities. For SACM sites and sites where RI/FSs have been conducted, ground water characteristics are derived from field-generated data (e.g. well logs, water level measurements, permeability tests); state and federal GW classification information is provided by state/federal contacts.
- * Barriers that impede prioritization include: 1) lack of GIS capability; 2) lack of consistent GW classification; 3) lack of understanding of use, value, vulnerability. GIS was used for mapping contaminant sources and ground water resources in CT. "It's a dream to do it for all others." There are also priority screens which may complete with resource preference for example environmental justice, economic impact, community interest, enforcement appeal etc.

Criterion #5

The Program has included measurement objectives for GW protection priority-setting and methods for assessing the Program's progress in the protection of GW resources.

- * Drinking water standards, GW classification standards, population served and preliminary risk assessments are used to support prioritization of program activities.
- * Sites which pose significant threats to human health from exposure to contaminated GW, as defined by preliminary risk assessments, are assigned a greater priority at the SACM and RI/FS stages. For example, sites which pose an imminent threat to drinking water supplies are likely to be candidates for early actions, including time-critical removal actions. Exposure pathways (e.g. # of receptors) are factored into the HRS prioritization.

Criterion #6

The Program's activities give high priority to managing contamination sources in wellhead protection areas and other public water supply source areas.

- * The program considers the following resource protection areas as program priorities for controlling contaminant sources:

| RESOURCE PROTECTION AREAS | YES | NO |
|---|-----|----|
| Wellhead Protection Areas | X | |
| Sole Source Aquifers | X | |
| Publ. Water Supply Intakes | X | |
| Aquifer Recharge Areas | | X |
| High Yield Aquifer Areas | | X |
| Watershed basins assoc. w/ Surface/GW Water Supplies | | X |
| Local aquifer protection overlay districts | | X |
| Private GW supply recharge areas | X | |
| Other | | |

- * HRS evaluates the proximity of public water supplies to hazardous waste sites. For new sites, highest priority for assigning resources would generally be given to sites whose GW contamination threatens public water supplies. However, the ability of the program to assess such high priority sites is sometimes limited by the ability to accurately locate sites against critical resource areas (e.g. wellhead protection areas).

PROGRAM: SUPERFUND

STRATEGIC ACTIVITY 3 - RESPONSIBILITIES

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program has been identified as GW related and lead contact named to support Regional GW & CSGWPP matters.

- * Prioritization for identifying NPL sites and early actions are based on perceived threats to human health and the environment from exposure to contaminated ground water. Removal/remedial decisions relating to cleanup technology, restoration time frame, and cleanup levels are guided by state and federal laws, regulations and GW classification schemes.
- * Perceived benefits gained by the program through participation in CSGWPP include: 1) support of states as trustees of GW; 2) consistency across state/federal programs (e.g. one site list). Core state grants could include a push for states to participate in comprehensive strategy.
- * Dennis Huebner (NH&RI Waste Management Branch) is Superfund lead contact - Overall GW Policy Issues for Waste; GW Policy Steering Committee GW Implementation Subcommittee.

Criterion #2

The Program is involved with the Regional GW coordinating committee and supports cross-program activities & CSGWPPs.

- * Program is represented on the GW Policy Committee by Mel Hohman (GW Strategy Advocate) and Dennis Huebner (Superfund lead contact).
- * Federal GW program supports program activities by conducting selected risk assessments and providing policy input on GW-related issues.
- * Program has participated in cross program activities (Merrimack River, Nashua River, locating public water wells) and CSGWPP state round tables.
- * The following barriers impact the ability of the program to participate in coordination and CSGWPP efforts: 1) resources; 2) NCP-federal statutes and regulations that establish EPA response actions; 3) state GW contacts not known; 4) lack of direction by national programs to convince the regional programs that EPA is serious about a state directed-resource based approach to GW management.

Criterion #3

The Program has staff and resources allocated for GW protection concerns and support of CSGWPPs.

- * Resources, both funding and staff time, are directed at identifying, prioritizing, assessing and remediating hazardous waste sites. The

vast majority of such sites have ground water contamination problems. Therefore, Superfund commits significant resources towards ground water management.

- * Program will support implementation of a state directed resource-based approach to the extent allowed under federal laws, regulations and guidance. Further clarification on potential conflicts between NCP and CSGWPP guidance needs to be provided by the national programs.
- * Program expects to continue support for CSGWPP through staff review time and input.
- * Improvements should be made in the following areas to improve the program's ability to support CSGWPP: 1) funding; 2) resource assessments; 3) priority setting; 4) contaminant source locations; 5) targeting activities in critical resource areas; 6) determining use, value, vulnerability.

Criterion #4

Relevant Federal Agencies are informed & consulted by the Program in support of Regional GW protection efforts and state development of CSGWPPs.

- * The program interacts routinely and has formal agreements with Federal Facilities (GW Assessment & Remediation), ATSDR (Health Assessment), NOAA (Environmental Assessment, Army Corps of Engineers (GW Remediation), USGS (GW Assessment), US Fish & Wildlife (Environmental Assessment).
- * The program has not discussed CSGWPP with other federal agencies and does not believe Superfund's CSGWPP efforts could benefit from input from such agencies at this time.

Criterion #5

The Program coordinates with the states to assess interstate matters, and assists and encourages interstate cooperation.

- * Interstate coordination may be necessary if a site encompasses ground water contamination that crosses state boundaries (none to-date).
- * In such cases, New England Interstate Water Pollution Control Commission and Northeast Waste Management Officials Association are established mechanisms that could be used for discussion of interstate GW protection issues.

Criterion #6

The Program considers local needs and encourages/requires States to closely involve and assist locals.

- * Every removal and remedial action must comply with specific public participation requirements including: 1) community relation plans; 2) public repositories; 3) public meetings/hearings; 4) public comment periods.
- * Due to resource constraints,.. "the program is doing as much as it can to involve town and local governments" in the program's planning and activities.

- * Local needs of educational materials, technical assistance (TAG grants) and emergency response capabilities are factored into program's planning.
- * The following local efforts could benefit the program's ability to support CSGWPP:

| LOCAL EFFORTS | YES | NO |
|--|-----|----|
| TARGETING INSPECTIONS | | X |
| CONDUCTING INSPECTIONS | | X |
| VERIFYING CONTAMINANT SOURCE INFORMATION | X | |
| IDENTIFYING CRITICAL RESOURCES | X | |
| IDENTIFYING LAND USES | X | |
| VERIFYING PUBLIC WATER SUPPLY LOCATIONS | X | |
| IDENTIFICATION LOCAL MANAGEMENT CONTROLS | X | |
| AVAILABILITY OF MANAGEMENT DOCUMENTS | X | |

- * There could be an additional complication if local GW classifications are different from either state or federal.

PROGRAM: SUPERFUND

STRATEGIC ACTIVITY 4 - IMPLEMENTATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program coordinates, integrates, and prioritizes resource-based efforts, and evaluates them to improve the Region's and State's GW protection efforts.

- * Superfund program is managed by EPA, with input from states. States have parallel but distinct waste programs which are responsible for overseeing state hazardous waste sites. The program does not know how the state waste programs function, including priority setting and cleanup decision making. Remediation goals may be similar for state and federal sites because they form the basis for State ARARs, but the technical means to cleanup state sites may be different.
- * The Superfund program has multiple components each directed at the assessment and control of ground water contamination:

| SITE ASSESSMENT | REMOVAL/REMEDIAL | COST RECOVERY/ENFORCE. |
|--|---|---|
| This program is responsible for: management of the CERCLIS data base; oversight and conduct of Preliminary Assessments (Pas), Site Investigations (Sis) of pre-remedial sites; screening and listing of sites on the National Priority List (NPL). | This program is responsible for: the assessment of the nature and threats of contaminated sites; selection, design and performance of removal and remedial actions. | This component of the Superfund program is responsible for the documentation of costs incurred at sites, and enforcement actions, including responsible party searches, negotiations, and settlements or referrals. |

- * Performance standards for remedial action can be health-based (e.g. MCLs, toxicity standards, health advisories), ecologically-based (e.g. AWQCs), or technology-based (e.g. mass reduction of pollutants).
- * The ground water classification influences the decisions relating to cleanup levels and remedial activities. Typically for ground water classified as potable, the cleanup levels shall be MCLs or other health-based standards. As described in the preamble to the National Contingency Plan (NCP), the Ground Water Protection Strategy and the "Guidelines for Ground Water Classification are not ARARs but help define situations for which standards may be ARARs and help set goals for ground water remediation. "EPA will make use of state classification when determining appropriate remediation approaches for ground water. Classification of ground waters by EPA is only done to the extent it guides remedy selection. If the use of state classification would result in the selection of a nonprotective remedy, EPA would not follow the state scheme." Region I's Office of Regional Counsel (ORC) has determined that the above wording of the NCP provides flexibility for EPA to defer to the state classification

schemes in cases where use of such classifications would result in a protective remedy.

- * As described in the CSGWPP guidance, EPA's goal is to remediate all aquifers to meet their designated uses. Decisions relating to what the program considers what a reasonable restoration time frame may greatly influence the nature and extent of the remedial action selected for the site. For example, a selected restoration time frame of 10 years vs. 30 years may result in a more aggressive remedial action (e.g. pump and treat vs. natural attenuation).
- * The decision on what is a reasonable time frame for GW restoration generally is determined through a site-specific analysis of alternatives and by a balance of nine criteria, including protection of human health, cost, effectiveness and implementability. Such factors such as location, proximity to population and likelihood of exposure shall be used when determining remediation timeframes. In addition, Superfund regulations specify that "EPA's preference is for rapid restoration, when practicable, of Class I ground waters and contaminated ground waters that are currently, or likely in the near term to be, the source of a drinking water supply" and where institutional controls are not clearly effective or reliable. Reasonable restoration time periods may range from very rapid (one to five years) to relatively extended (perhaps several decades)." The Preamble to the NCP further specifies that "if there are other readily available drinking water sources of sufficient quality and yield that may be used as an alternative water supply, the necessity for rapid restoration of the contaminated ground water may be reduced." The program is not aware of how the states determine what is a "reasonable" time frame for restoration for state sites.
- * The decision on the type of remedial action, including natural attenuation, is determined by a balance of nine criteria, including protection of human health, cost, effectiveness and implementability. Technological impracticability may be used as a justification to choose a less aggressive cleanup strategy although still protective. As described in the Preamble to the NCP, "natural attenuation is generally recommended only when active restoration is not practicable, cost-effective or warranted because of site-specific conditions or where natural attenuation is expected to reduce the concentration of contaminants in the ground water to the remediation goals - levels determined to be protective of human health and sensitive ecological environments - in a reasonable timeframe." The program is not aware of how the states determine whether to "walk away from a ground water cleanup" for cleanups at state sites governed by state law.
- * The program has described the following areas where the Ground Water Management Section can better support their GW-related activities: 1) coordinate information of locations of Wellhead Protection Areas (WHPAs), Sole Source Aquifers (SSAs) and location of other critical resources; 2) facilitate site-specific dialogue with state GW programs on use and value of GW; 3) consultation on site-specific GW issues, including GW reclassification; 4) GW policy discussions.
- * Program does not encourage or instruct state's program to contact and coordinate with the state's GW Coordination Mechanism and GW program (coordination between state waste and GW programs is assumed). The program is willing to use the following opportunities to promote state internal coordination: 1) annual national guidance; 2) grant conditions; 3) Program Directors meeting; 4) NEMOA meetings; 5)

cooperative meetings; 5) special initiatives.

- * In accordance with the regulations, the program gives the state a reasonable opportunity for comment on site documents and coordinates with them on a routine basis. EPA gives money to the states to participate in all program activities.
- * Cooperative agreements with the states to perform Pas/Sis are negotiated at the end of the fiscal year. Core multi-site cooperative agreements are finalized throughout the year.

Criterion #2

The Program obtains/uses information to assess resource vulnerability for remedial/prevention actions; and considers resource use and value in remedial efforts and in prevention efforts where appropriate.

- * Use and value of the ground water is considered in the remedial decision making to the extent the state ground water classification systems have factored such parameters into its classification scheme. The program asks for clarification on methodologies on measuring the use and value of ground water. In particular, the CSGWPP guidance states that EPA must take a realistic approach to restoration based upon the actual and reasonably expected uses of the resource as well as on social and economic values, but does not explain how to measure such use and value.
- * As part of the Remedial Investigation conducted to assess the nature and extent of contamination, the following resource-related information may be compiled and evaluated: geological parameters, yield, aquifer type, contaminant sources, water quality, use, value, GW/SW interaction, GW classification. The program generates significant resource-related information. In addition, it obtains some information from the states and USGS to the extent to which the information is readily available.
- * The program does not routinely compile accurate longitude/latitude on contaminant sources and does not require state programs to collect and use locational data. The program has financially supported some state mapping efforts.

Criterion #3

The Program considers wellhead protection areas as high priority resources in prevention and remediation efforts in Region and State programs.

- * There are no current program activities which are focused on WHP areas. Barriers to using WHP information include: lack of cross-program education, limited accessibility and availability of WHP delineation, inaccurate longitude/latitude on sites, no formal cross-program (Superfund/GWMS) coordination mechanism.

Criterion #4

The program implements other aspects of Ground Water protection.

- * Ground Water/Surface Water interaction is evaluated during the Remedial Investigation in assessing the threat to surface water posed

by contaminant plume migration.

STRATEGIC ACTIVITY 5 - INFORMATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Regional Program collects, coordinates and manages information to assess priorities, measure progress and support CSGWPPs.

- * Ground water monitoring data (hydrogeological and chemical) is collected at every site.
- * Site data is generally kept on hard copies in site files and is not routinely converted to electronic storage and retrieval systems. Ground water data is accessible to other programs, state agencies and locals to the extent such programs/agencies are able to review site files and extract relevant data.
- * "Environmental Indicators" collected by the program could include population within specified distance to the site (number of people protected as a result of site removal/remedial activities).

Criterion #2

The Program uses and encourages states to use data from local, state and other federal programs, to assess priorities, measure progress and support CSGWPPs.

- * Program obtains ground water-related information/data from USGS and state waste programs.
- * In order to perform resource-based priority setting, the program needs accurate longitude/latitude information on ground water contaminant sources (sites) and critical resources (Wellhead Protection Areas).
- * The program does not direct state programs to collect, manage and/or use ground water data and locational information. States manage their sites (state sites), including data gathering, separate from the federal Superfund program. The program has however encouraged this and has financially supported some state efforts.

Criterion #3

The Program has a defined set of data elements and is providing data users with comparable qualified data.

- * The program has not identified a specified set of ground water related elements that support ground water protection.
- * In general, program and state programs are not aware of EPA's minimum set of data elements.
- * The program is not aware of the Agency's national locational data policy and its requirements for implementation.

Criterion #3A

The Program collects and facilitates the use and sharing of accurate locational data (lat./long.) among other Regional Programs, Locals and the State's CSGWPPs.

- * Locational data on sites are generally developed from topographical maps, stored in paper format (reports), and therefore not useful in strategic planning or other program activities. The exception is the locational mapping of sites and resource characteristics which was performed through a joint effort by EPA and the state of Connecticut.
- * The program provided significant financial resources to support efforts to locate public water supplies within the Region.
- * Obtaining locational data for all pre-remedial, removal and NPL sites would require significant investment of resources and effort, using Connecticut as a model.

Criterion #4

The scope and design of regional ground water monitoring programs reflect EPA and State priorities and goals.

- * Superfund is the prime keeper and generator of ground water monitoring data, as obtained through site assessment and remedial activities.
 - * The scope of ground water monitoring performed at sites adequately reflects the goal of remedial investigations - to determine the nature and extent of contamination.
 - * A universal data storage system does not exist in Superfund. This limits the practical use of the data generated for strategic planning.
-

PROGRAM: SUPERFUND

STRATEGIC ACTIVITY 6 - PUBLIC PARTICIPATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program's goals, priorities and progress are addressed through a public education/involvement process.

- * As required by statute and guidance, the program has specific and extensive public involvement requirements. Such education/outreach efforts include: 1) community relations plans; 2) community Technical Assistance Grants; 3) public hearings/meetings; 4) information repositories; 5) public comment periods.
 - * Fact sheets on sites are periodically developed for state and local distribution.
 - * State programs have not asked program for technical assistance.
 - * To improve outreach activities, state programs could articulate in writing what they are doing now and what their future directions are. Similarly, the Region needs to clearly articulate what we expect the states to do across all media programs and what we and Headquarters are doing to remove barriers, including statute changes where necessary.
-

PROGRAM RCRA C

STRATEGIC ACTIVITY 1 - GOALS

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

Regional Programs are aware of and promote consistent ground water protection strategy goals.

- * Outside of the Ground Water Protection Strategy, the program was not aware of a common or single GW protection goal.
- * The Agency's Grant Guidance and Agency Operating Guidance for RCRA C does include reference to supporting CSGWPP's and comprehensive ground water protection approach.

STRATEGIC ACTIVITY 2 - PRIORITIES

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program has established approaches for its priority-setting process to protect GW resources.

- * Overall, there is minor, or no, prioritization (in program/state program) in compliance, inspection/enforcement, that include GW consideration (not resource-based). Priorities are set by contaminant or industry-based initiatives.
- * Currently, there is little need to prioritize permitting activities (TSDs, closures). State programs have the lead, and these activities are usually handled on a first come basis.
- * Corrective Action (CA) is the only RCRA C program to formally prioritize activities for site clean-ups. The name of CA priority setting approach is the National Corrective Action Priority System (NCAPS). It ranks sites through calculation of general risk-based factors at each site, and minimally considers ground water. NCAPS is Regionally supplemented by an informal forum of Section/Branch Chiefs and is referred to as the Environmental Benefits Review. The review is, for the most part, open to considering other issues (institutional, environmental, site ownership, etc.) including ground water ones which go beyond the couple of factors in NCAPS. In practice, the Review has not resulted in resource-based priority setting.
- * Other Regional/state programs had limited input in priority setting formulation and rationale.
- * Program grant guidance to the states has not requested state inspection and enforcement with a focus on resource-based priority setting. CA program is EPA operated, so the states have no CA activities to prioritize.
- * The program does not use, in any appreciable or routine way, GIS or supporting files on contaminant sources, and water and ground water resources, to assist in priority setting. Obtaining state information and data is generally not routine for supporting priority setting.

Criterion #2

The program demonstrates consideration of varied GW characteristics in its priority-setting process.

- * Generally, GW characteristics are not factored significantly into priority setting.
- * See #1 above. GW resource considerations are not included in inspection and enforcement priority setting in the program, or state's program.

Consideration of GW resources is limited in NCAPS prioritization. NCAPS GW considerations include "current/future use" (i.e. drinking water), and distance to any type of well.

Environmental Benefits Review does not routinely involve consideration of further GW factors beyond the NCAPS ranking.

Prioritization does not actively involve obtaining data or input from other Regional or state programs. State programs are contacted proforma about the ranking.

- * The program understood that other programs could benefit from an effective prioritization process and listing from RCRA C.
 - * RCRA C does not encourage state program to set resource-based priorities. But, grants can be used to do that.
-

Criterion #3

Regional programs have contamination source information available to identify potential threats to GW and to set priorities based on the relative threats to ground water resources.

RCRA C upgrading database w/ RCRIS. Contaminant codes identified for many handlers (TSDs, LQG, SQGs (inputted by the state)).

Region and state programs have not used the Region's or state's contaminant source information to focus inspection and enforcement, and corrective action in most threatened resource areas.

- * Region and state contamination source data not consistently available or conveniently accessible.
 - * Region and state resources data is not consistently available or conveniently accessible
 - * Program has not sought or used existing Regional and state GW resource information for identifying critical resources for prioritizing inspections and enforcement, and permitting. NCAPS uses few resource characteristics, thereby not requiring greater resource information from Region and state data.
 - * Program was not familiar with State available data for NCAPS.
 - * Generally, program feels state resource data not consistently available or accessible for determining resource use/value to set corrective action priorities or clean-up levels.
 - * RCRA C does not seek local resource information, its "use" and "value," or contaminant sources, in setting priorities.
-

Criterion #4

The Program has technical capabilities to support its GW protection priorities and decisions.

- * Program has limited technical staff to undertake complete resource and contaminant source data gathering to improve priority setting.
-

Criterion #5

The Program has included measurement objectives for GW protection priority-setting and methods for assessing the Program's progress in the protection of GW resources.

- * Program does not use various standards (measures) in NCAPS Corrective Action priority setting; nor in prioritizing inspections/enforcement. Standards can be used in the Regional Environmental Benefits Review.
- * Various standards and protection measures are considered in establishing clean-up objectives in corrective action.
- * Risk to public health is not directly considered in priority setting for inspections and enforcement. For corrective action, there are two factors in the NCAPS ranking calculation, including general toxicity of the contaminants and public use or proximity.
- * Assigning a toxicological "risk" to public health is considered in establishing clean-up levels after priority sites have been selected and site investigations conducted.

Criterion #6

The Program's activities give high priority to managing contamination sources in wellhead protection areas and other public water supply source areas.

- * Regional and state inspection and enforcement and enforcement activities do not consider wellhead protection areas (WHPAs) in setting priorities.
- * NCAPS considers distance from wells in calculating corrective action priorities; it does not distinguish between public or private water wells, nor consider WHPAs. Environmental Benefits Review can consider this but has not to date.

Criterion #7

The Program coordinates its GW priorities with other environmental priorities.

- * "Other environmental" priorities are not defined. But, the program is involved in other Regional priorities such as Environmental Equity, Pollution Prevention, Investment/Disinvestment, etc.

Criterion #8

The Program's priorities include on-going reviews and improvements of Strategic Activities supporting the CSGWPPs.

- * This criterion is too general in most ways. Whenever there is opportunity to review the program to make improvements, the Branch Chiefs meet weekly and can address issues and activities. Many of the issues in the waste programs, however, are nationally oriented and can only be resolved at that level.

This Regional Assessment will result in many issues for the program to think about. Its recommendations will suggest improvements in our

program that will have to be discussed; and, state submitted CSGWPPs will identify areas that the program should think over.

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PROGRAM RCRA C

STRATEGIC ACTIVITY 3 - RESPONSIBILITIES

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Regional Program has been identified as GW related and lead contact named to support Regional GW & CSGWPP matters.

- * Program recognizes it has a role in ground water protection, in the Region's comprehensive protection efforts and in support of CSGWPP efforts with the states.
- * RCRA C program does not specifically have a lead program contact; it has a representative on Implementation Subcommittee, and is generally represented by a Superfund branch chief who represents the Waste Division on the GW Policy Committee. Waste Management Division Director is also the Leadership Team advocate for comprehensive GW efforts and co-chair of the GW Policy Committee.
- * Currently there is no point-of-contact for RCRA C and the GW programs.

Criterion #2

The Program is involved with the Regional GW coordinating committee and supports cross-program activities & CSGWPPs.

- * RCRA C has a member on Implementation Subcommittee, but not the GW Policy Committee. Waste Management Division is represented on the GW Policy Committee by a Superfund Branch Chief, and the Waste Management Division Director.
- * RCRA C understands GW Management Section provides primary support for the Implementation Subcommittee (ISC) and the GW Policy Committee and has a pivotal role in communication.
- * There are no assigned program contacts between RCRA C (or any of the Waste Management Division programs) and the GW Management program.
- * Program expects to benefit from comprehensive program coordination among Regional programs by gaining greater knowledge of resource values, classification and other GW related factors, and expects state programs will receive the same benefit from their state ground water program.
- * Annual guidance/workplans for the last two years required state programs to coordinate and participate in state CSGWPP activities and the state's coordination mechanism.
- * There is specific staff for conducting the NCAPS calculations and addressing other issues for Environmental Benefits Review, for setting priorities. Some other programs may become involved, but that hasn't been the case to date. There could be better resource-based priority setting if the GW Policy Committee understood the need for incorporating GW related resource factors and information, and

assessed the need for inter-program and state coordination.

Criterion #3

The Program has staff and resources allocated for GW protection concerns and support of CSGWPPs.

- * There are limited resources to provide "quality" service or technical assistance to Region's programs, or to states and locals.
- * No program and no state programs' efforts (in most states) are being made to improve local capacity for managing hazardous waste, or for obtaining feedback from local oversight. Locals could possibly assist program with verification of RCRIS facility and generator locations.
- * No program or state programs' efforts in public outreach and education.
- * Program has not developed a role for, nor involved, the GW Management program as an additional resource for review of annual guidance, workplans, or grant conditions; there have not been discussions of critical GW resources, data needs, state issues, etc.
- * Additional resources would be needed by the program and state program to improve awareness and outreach to elevate local capacity for managing local hazardous waste efforts; additional tools needed could include inspector training, description of legal authorities, development of model health ordinances or by-laws, providing demonstration projects, distribution of literature and local data, etc.

Criterion #4

Relevant Federal Agencies are informed & consulted by the Program in support of Regional GW protection efforts and state development of CSGWPPs.

- * RCRA C has had little coordination or routine contact with Federal resource agencies like USGS, SCS, Dept. of Agriculture, etc., or of RCRA C issues at Federal facilities.

Criterion #5

The Program coordinates with the states to assess interstate matters, and assists and encourages interstate cooperation.

- * The program was not aware of any current significant inter-state issues which need the program's intervention or resolution.
- * One area for future concern may involve the transport of other states' hazardous wastes over roads through critical resource areas; a second issue concerns hazardous wastes brought in for treatment from another state which has only limited capacity to handle waste generated in its own state.

Criterion #6

The Program considers local needs and encourages/requires States to closely involve and assist locals.

- * The program and state program have public notice and comment process for all permitting functions in the program (for TSDs, closures, and corrective action permits and orders).
 - * Generally, RCRA C and state programs do not include a local role in priority setting, coordination, inspection and enforcement, strategic planning, outreach, technical assistance, etc.
 - * Generally, RCRA C and state program have not traditionally considered needs of local governments and communities for local prevention efforts to control the threat of contamination from hazardous waste generators and facilities. Building state and local capacity could provide improved overview of potential threats.
 - * There is an opportunity for a productive local role. Program and state programs' inspection results are not routinely presented to or discussed with local governments who could provide another appropriate level of interest and provide local follow-up.
 - * Program recognized that improved local efforts could directly benefit the program and states' programs, with such efforts as:
 - targetting inspections for Region/state inspections
 - verifying locational information on contaminant source activities
 - identifying critical ground water resources for priority setting
 - identifying land uses and sensitive receptors
- Local needs could include:
- technical assistance and "science"
 - local inspector training
 - development of quality outreach/educational materials
 - distribution of quality P2 information
 - developing local advocacy
 - developing model ordinances, or demonstration projects
 - providing useful resource information and contaminant source inventories
- * Occasionally, press releases are issued on results of multi-media inspection/enforcement action. Locals have input in the development of emergency response plans and are notified of emergencies. Locals are notified of corrective actions being undertaken.

STRATEGIC ACTIVITY 4 - IMPLEMENTATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program coordinates, integrates, and prioritizes resource-based efforts, and evaluates them to improve the Region's and State's GW protection efforts.

- * Program is chiefly delegated to the states for issuing TSD permits, receiving notifications for small and large quantity generators, regulating very small quantity generators, administering manifest system and regulating transporters; states regulate closures.
- * State and Region cooperatively conduct inspections and enforcement.
- * Only EPA administers Corrective Action program for past releases, (similar to the Superfund clean-up activity)
- * Inspections are often carried out in joint state-Region visits. Setting priorities for conducting inspections/enforcement is not resource-based. Often set by initiative, focusing on certain contaminant use or industry.
- * Generally, Region's corrective action program is only RCRA C program setting priorities, and it is used for determining what sites will be addressed first. NCAPS and Environment Benefits Review are the priority setting mechanisms. NCAPS is minimally resource-based taking into account the distance to any type of well and GW's current/future use; it is national and institutionally derived within the EPA. Environmental Benefits Review is more flexible to address further issues including other ground water and health based factors, but generally this has not been the practice.
- * Local and public comment in permitting process is principally the only local involvement in program/state program. Locals are notified of corrective action activities when such activity occurs, and in the case of an emergency event.
- * The program and states' programs do not support improving local capacity to manage and control hazardous waste activities in the community. The program has not encouraged the state program to assess and conduct local outreach and support the development of "tools" to improve local capacity. Occasional assistance is provided through state ground water and wellhead protection programs.
- * Some tools are provided in regulation and practice by the public water supply and GW programs before issuing approvals for new GW sources of drinking water which require wellhead protection efforts in the community.
- * Corrective action activities in developing clean-up levels, threat to health and the environment consider federal and state surface and ground water and drinking water standards/classification, health advisories, etc.

- * For establishing corrective action priorities, particularly in the Environmental Benefits Review, and for establishing clean-up levels, the program has great need for resourced-based information and contaminant source inventories. There is also need for land-use activities to distinguish between industrial and residential uses in establishing clean-up and health risk levels. Determining the resource "use" and "value" is significant here.
- * Corrective action program has not defined or judged how "time" may be a management option, nor what may be a "reasonable" time frame in which a clean-up action would have to be taken or completed (except in a priority or emergency situation). Program might consider "time" options if ground water use is low and clean-up costs are "very high." Unlike, Superfund, the site owners are known and responsible.
- * Coordination is routine and adequate with Regional Counsel and the Pollution Prevention program; and occasional, but needing improvement, with the Water Supply program (particularly with respect to risk assessment); generally adequate though occasional with most of the Waste programs; and low to inadequate with most of the Water, Info/Data, and Pesticides programs.

The table below approximates the degree of interaction between the program and the other Regional programs.

| <u>PROGRAM</u> | OPERATIONAL | LOW / INADEQUATE |
|---------------------|-------------|---------------------|
| <u>PESTICIDES</u> | | * |
| <u>PWSS</u> | * | |
| <u>UIC</u> | | * |
| <u>STORMWATER</u> | | * |
| <u>NPDES</u> | | * |
| <u>SL/WHP</u> | | * |
| <u>BAYS/COASTAL</u> | | * |
| <u>NONPOINT SRC</u> | | * |
| <u>INFO/DATA</u> | | * |
| <u>FED FACILITY</u> | * | |
| <u>P2</u> | * | |
| <u>ORC</u> | * | |
| <u>SUPERFUND</u> | * | |
| <u>UST</u> | * | |
| <u>RCRA D</u> | * | |

- * The program identified several other programs that would be especially "useful" to seek coordination improvements, including:
 - PWSS, GW/WHP, UIC, WATER QUALITY/BAYS (TMDLs), and INFO/DATA

These program could provide resource information, important to inspections/compliance priority setting, and to corrective action priority setting and clean-up level determinations.

- * At the state level these connections are probably improved since many considerations involving water resource information exchange is necessary to the permitting process the states administers.
- * Inspection/compliance at state level has not employed water resource information to set resource-based priorities, but should be required to do so under grant guidance and grant conditions.
- * The program believes improved cross-program communication is needed, and participation in cross-program state coordinators meetings and a Regional newsletter would be useful ways of doing it.
- * Grants timing is generally as follows:
 - National Guidance in April - May
 - Regional Guidance in May - June
 - Draft Grants in July
 - Final Grants in mid-August - Fall
- * Waste program grants are not consolidated or uniformly distributed and could serve as a barrier to any state wishing to improve and establish cross-program coordination and annual objectives.

Criterion #2

The Program obtains and uses information to assess resource vulnerability for remedial/prevention actions; and considers resource "use" and "value" in remedial efforts and in prevention efforts where appropriate.

- * Overall, GW vulnerability is not factored into prioritizing (inspection/enforcement, NCAPS - corrective action, permitting) but could be included to some degree in review of permits (TSD, Corrective Action, and closures) in Regional or state programs.
- * "Use and value" are factors when considering,
 - NCAPS ranking of corrective actions - only if GW is used as a drinking water source
 - determining corrective action clean-up levels
 - land use - considering commercial vs. residential use
 - determining "time" as a factor on how soon, if at all, a corrective action will be taken
- * Comprehensive resource-related information is used in corrective action site reviews and decisions, and the state programs probably use much of the same comprehensive data in considering permits for TSDs, closures. Generally, much of the information is site specific, and off-site to the degree contamination migrates.
- * Generally, the RCRA C site managers is not aware of the EPA "locational" policy for obtaining latitude/longitude. Essentially, program managers and site managers have little direct use of latitude and longitude in locating a site, or facility features. However, the

program recognized the substantial need for quality locational (and GIS) information on GW resource conditions/quality, other environmental attributes and its use, and for assessing human use and the risks associated with it.

- *· Quality latitude and longitude for facilities and resources (TSDs, LQG, SQG, conditionally exempt SQGs, corrective action) is needed for prioritizing inspection / enforcement, ranking and decisions on corrective actions based on the use and quality of the resource and on land and human use, etc.
- *· Because much of RCRA C is delegated (permitting, closures, LQG, SQG notification, inspection, etc.), states have substantial need for quality latitude and longitude for ranking, identifying resources and human use, strategic planning, etc.
- *· RCRA C is not moving forward with specific activity or policy in obtaining quality latitude and longitude, nor encouraging and requiring state programs to obtaining quality latitude and longitude. For the Region/state programs, barriers appear to be low "awareness" and "staff and program resources."

Criterion #3

The Program considers wellhead protection areas as high priority resources in prevention and remediation efforts in Region and State programs.

- *· RCRA C does not specifically address or focus any part of the program on protecting wellhead protection areas (WHPAs). Regional NCAPS ranking for corrective action does not consider WHPAs (relative NCAPS factors include: distance to any well, and GW use for drinking water), though the Environmental Benefits Review may consider WHPA protection, but, has not been the practice or awareness to do so.
- *· For the most part, priority setting for Regional and state inspections/enforcement does not consider WHPAs. Future permitting and closures ranking will likely use NCAPS as a priority setting mechanism, which does not include WHPA factors.
- *· The program does not encourage or require state programs to address or focus activities in WHPAs, though many state environmental/hazardous waste regulations require attention to WHPAs. Such as, new public water supply wells will not be approved if a TSD facility is in a WHPA. New permits for TSD will not be approved if in a WHPA.

STRATEGIC ACTIVITY 5 - INFORMATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Regional Program collects, coordinates and manages information to assess priorities, measure progress and support CSGWPPs.

- * The primary RCRA C data base is Resource Conservation Recovery Information System (RCRIS). It contains information from RCRA C Notification forms from all handlers and Permit Application. Notification submittal includes common address and contact information, ownership, and description of wastes; an EPA facility ID number is assigned, but latitude and longitude is not required.

The Hazardous Waste Permit Application Parts A and B requesting a TSD permit, requests more detailed information and the facility location in latitude and longitude among other facility and waste information.

- * RCRIS contains activity type (LQG, SQG, TSD, etc); location addressing, mailing address, contacts and owners, past and present operators, accessibility - bankruptcy (current status or filing for), litigation status, owner/operator access/left country/or under prosecution, off-site waste receipt, violations and inspection report findings, river basin (not required), etc.

Latitude and longitude is also indicated for TSDs and LQGs, but is applicant provided and its quality is uncertain, and for most purposes unreliable.

- * Multiple data bases exist with the states, since most states also have further hazardous waste program information, particularly for the conditionally exempt facilities small quantity generators (= VSQGs).
- * The principle data base problem is the random and low quality of the latitude and longitude information, since it is obtained from applicants without requirements for accuracy.
- * Information from RCRIS is accessible to other programs, state programs and other entities and the public, upon request. It is not user friendly and requires querying the right information.

Criterion #2

The Program uses and encourages states to use data from local, state and other federal programs, to assess priorities, measure progress and support CSGWPPs.

- * Available ground water related data from various sources (state, local, etc.) are not used by the program and state program for prioritizing inspections and enforcement activities. Ground water resource information would be most useful if obtained.
- * Available ground water related data from various sources (state, local, etc.) are not used by the program to prioritize corrective

actions. Priority setting for corrective action utilizes limited GW related information.

- * Broadly available information from state and other sources is obtained and used during corrective action investigation and remedial planning.

Criterion #3

The Program has a defined set of data elements and is providing data users with comparable qualified data.

- * The program has not identified a minimum set of data elements, but is willing to participate in discussions regarding them for the RCRA C program. Currently, the only elements included in their data collection is the latitude and longitude, as it is obtained from the applicant.

Criterion #3A

The Program collects and facilitates the use and sharing of accurate locational data (latitude and longitude) among other Regional Programs, Locals and the State's CSGWPPs.

- * Accurate locational data, according to EPA's one second (1") locational data policy, is not collected. Latitude and longitude is submitted by the applicant without quality control or certification.

Criterion #4

(Responses: a-c)

The scope and design of regional ground water monitoring programs reflect EPA and State priorities and goals.

- * Currently, there are no regional ground water monitoring programs in which RCRA C program participates. When state and EPA data management systems can handle large volumes of on-site monitoring results, the information could help characterize ground water on a regional basis.

PROGRAM RCRA C

STRATEGIC ACTIVITY 6 - PUBLIC PARTICIPATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program's goals, priorities and progress are addressed through a public education/involvement process.

- * Generally, the program does not have a public education and involvement component. Public comments are sought during the administrative processes of permitting for TSDs, and closure and Corrective Action activities.
- * Also, see the above section on Strategic Activity 4 - "Implementation" under Criterion #1

STRATEGIC ACTIVITY 1 - GW PROTECTION GOAL

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

Regional Programs are aware of and promote consistent ground water protection strategy goals.

- * The goal of the national RCRA D Program for improving the safety of solid waste management facilities is to protect ground water and prevent pollution from poorly designed and operated landfills. EPA intends to achieve this goal via recently promulgated Municipal Solid Waste Landfill (MSWLF) regulations.
 - * Region I RCRA D staff are aware of the Agency's ground water protection strategy via: final CSGWPP guidance, Municipal Solid Waste Landfill Regulations (MSWLF), Implementation Subcommittee (ISC) meetings.
 - * The Program has not discussed CSGWPPs with the Region I States because the RCRA D Program: 1) does not provide continuing program grants with annual guidance to States and 2) is currently taxing States to submit Solid Waste Permitting Program (SWPP) applications without providing any funds. It is difficult to ask the States to do more at this present time.
-

STRATEGIC ACTIVITY 2 - PRIORITIES

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program has established approaches for its priority-setting process to protect GW resources.

- * The MSWLF regulations establish minimum criteria for ground water monitoring, landfill siting, design, and operation, and corrective action to ensure protection of ground water resources.
- * The States, rather than the Region, establish priority-setting processes pertaining to MSWLFs as part of the State Solid Waste Permitting Program (SWPP) applications. States are encouraged to use state ground water classification systems, State Wellhead Protection Programs (WHPPs), and other differential protection mechanisms to prioritize activities (siting, closure, corrective action) for MSWLFs.
- * The Program's current priorities are driven by the effective date of the MSWLF regulations. The Program's highest priority is to assist the New England State with developing SWPPs for Region I's review and approval. However, the Program has no enforcement mechanism to require the States to submit SWPP applications.

Criterion #2

The Program demonstrates consideration of varied GW characteristics in its priority-setting process.

- * Although the Program does not have a resource-based priority-setting process, Program staff have expertise with DRASTIC, NCAPS, and a Region I DRASTIC version to assist States with setting priorities based on ground water characteristics.

Criterion #3

Regional Programs have contamination source information available to identify potential threats to GW and to set priorities base on the relative threats to ground water resources.

- * Contaminant source information is not needed by the Program for SWPP reviews.
- * State Solid Waste Program have varying amounts and types of data on existing landfills. The RCRA D Program has no oversight role and does not collect landfill data from the States.

Criterion #4

The Program has technical capabilities to support its GW protection priorities and decisions.

- * The States currently make the decisions for MSWLFs. It is anticipated States will continue to do so with approved SWPPs.
 - * The RCRA D Program does not presently need technical capabilities for making decisions on MSWLFs, as MSWLFs are covered by State Solid Waste Programs. Should a State decide not to submit a SWPP or does not receive approval, the Program will need to consider data collection and information management.
-

Criterion #5

The Program has included measurement objectives for GW protection priority-setting and methods for assessing the Program's progress in the protection of GW resources.

- * The MSWLF regulations require the use of reference points such as Maximum Contaminant Levels (MCLs) and, when MCLs are not available, other health-based standards established by the State.
 - * The MSWLF regulations encourage consideration and use of classification standards for ground water and water quality.
-

Criterion #6

The Program's activities give high priority to managing contamination sources in wellhead protection areas and other public water supply source areas.

- * The Program does not encourage States to use State WHPPs as management tools for landfills; rather, States propose in SWPP applications an integrated application of their ground water programs to set priorities.
 - * The MSWLF regulations reference local WHPPs for MSWLF owners/operators as additional requirements they should be in compliance with.
-

Criterion #7

The Program coordinates its GW priorities with other environmental priorities.

- * Five main areas of the MSWLF regulations (location, operation, design, ground water monitoring & corrective action, closure and post-closure care) consider ground water impacts in concert with other applicable concerns.
 - * The Program considers impacts to other natural resources such as wetlands and floodplains when evaluating State SWPP siting criteria as established by the MSWLF regulations.
 - * The Program considers impacts to surface waters and air when evaluating State SWPP landfill operating criteria as established by the MSWLF regulations.
-

Criterion #8

The Program's priorities include on-going reviews and improvements of Strategic Activities supporting the CSGWPPs.

- * The Program has no oversight responsibilities for Region I-approved SWPPs. States must notify EPA only when changes to the SWPP are made
-

STRATEGIC ACTIVITY 3 - RESPONSIBILITIES

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Regional Program has been identified as GW related and lead contact named to support Regional GW & CSGWPP matters.

- * A lead contact is identified for the Implementation Subcommittee. There is a lead person for ground water issues related to RCRA D SWPP reviews.
- * RCRA D's ground water protection role is to ensure safe design and operation of MSWLFs to prevent ground water contamination.
- * The national RCRA D guidance for use by Regions to review SWPP applications does not reference CSGWPP commitments; however, the MSWLF regulations do describe EPA's new ground water policy.

Criterion #2

The Program is involved with the Regional GW coordinating committee and supports cross-program activities & CSGWPPs.

- * Support to the GWPC is represented by Advocate from Waste Division.
- * RCRA D staff participate in the Merrimack River Initiative, Chesprocott Initiative, P2 KPA, P2TF, and Locational Policy development for Region I.
- * Barriers to the Program's participation with CSGWPPs: 1) Limited Regional staff with large workloads; 2) Not politically feasible to ask States to support CSGWPPs because RCRA D is not providing any funds to develop SWPPs.

Criterion #3

The Program has staff and resources allocated for GW protection concerns and support of CSGWPPs.

- * Staff review SWPP applications which ensure protection of ground and surface waters. Staff are also dedicated to pollution prevention issues.

Criterion #4

Relevant Federal Agencies are informed & consulted by the Program in support of Regional GW protection efforts and state development of CSGWPPs.

- * No Federal Agencies are involved with the RCRA D Program.

Criterion #5

The Program coordinates with the states to assess interstate matters, and assists and encourages interstate cooperation.

- * The Program coordinates with the States via the interstate organization, NEWMOA, where the Region funds a Solid Waste Manager. Region I/II Solid Waste Workgroup also collaborates monthly via conference calls.
 - * Ground water issues have not been raised in an interstate forum yet.
-

Criterion #6

The Program considers local needs and encourages/requires States to closely involve and assist locals.

- * The Program funds pilot projects to assist communities with solid waste management planning.
 - * The Region I Solid Waste Library is dedicated to responding to public inquiries.
 - * SWPPs are reviewed by the public and hearings are held before SWPPs are finally approved by EPA.
-

STRATEGIC ACTIVITY 4 - IMPLEMENTATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program coordinates, integrates, and prioritizes resource-based efforts, and evaluates them to improve the Region's and State's GW protection efforts.

- * The MSWLF regulations encourage States to use differential protection mechanisms. The Program empowers States to prioritize MSWLF activities using a resource-based approach, encouraging use of state ground water classification schemes for landfill siting, design, ground water monitoring, and corrective action.
- * Corrective action criteria in the MSWLF regulations consider current and future uses of ground water (USE) and ground water quality and quantity (VALUE).
- * Time until "full protection is achieved" is one of five evaluation factors owners/operators must consider in selection of a remedy. Other factors include the technical and economic capability of the owner/operator and potential risk reduction.
- * Contamination from certain constituents does not require remediation as decided by the State director of an approved SWPP. The owner/operator must demonstrate to the State the following:
 - 1) the ground water is contaminated by other substances from non-MSWLFs and remediation of those substances would not significantly reduce risk to actual or potential receptors or;
 - 2) the ground wter is not currently or reasonably expected to be a source of drinking water and is not hydraulically connected to waters to which the constituents are or could migrate to at levels which exceed established ground water protection standards or;
 - 3) remediation of the release is technically impracticable; or
 - 4) remediation results in unacceptable cross-media impacts.
- * The Program coordinates primarily with the Information Management Program for special projects which might locate landfills.

Criterion #2

The Program obtains/uses information to assess resource vulnerability for remedial/prevention actions; and considers resource use and value in remedial efforts and in prevention efforts where appropriate.

- * The Program does not make decisions on resource vulnerability; rather, the States do once the Program approves of the States' processes for doing so.
-

Criterion #3

The Program considers wellhead protection areas as high priority resources in prevention and remediation efforts in Region and State programs.

- * The Program emphasizes differential protection, focusing on ground water classification. States identify in their SWPP applications how WHPAs will be used to prioritize actions.

STRATEGIC ACTIVITY 5 - INFORMATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Regional Program collects, coordinates and manages information to assess priorities, measure progress and support CSGWPPs.

- * The Program does not collect information on MSWLFs. There are no reporting requirements exist for EPA-approved State SWPPs.
- * The Program's Information Management liaison participates in Regional data management issues and conducts studies to promote integrated environmental management, utilizing locations of RCRA C and D facilities and Superfund sites.

Criterion #2

The Program uses and encourages states to use data from local, state and other federal programs, to assess priorities, measure progress and support CSGWPPs.

- * No, the Program does not use other data to set priorities. States use data as deemed necessary to run their particular programs.

Criterion #3

The Program has a defined set of data elements and is providing data users with comparable qualified data.

- * The Program does not collect data and therefore provides none.

Criterion #3A

The Program collects and facilitates the use and sharing of accurate locational data (lat./long.) among other Regional Programs, Locals and the State's CSGWPPs.

- * The Program does not require States to collect locational data of a specific format.

Criterion #4

The scope and design of regional ground water monitoring programs reflect EPA and State priorities and goals.

- * The MSWLF regulations set forth comprehensive ground water monitoring program requirements which closely parallel RCRA C ground water monitoring systems for hazardous waste disposal facilities. The purpose is to ensure consistent, reliable ground water monitoring data are collected.

- * Monitoring design is flexible, recognizing the hydrogeologic variability from site to site. The number, location, and depth of monitoring wells is, thus, not specified.

STRATEGIC ACTIVITY 6 - PUBLIC PARTICIPATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program's goals, priorities and progress are addressed through a public education/involvement process.

- * The public has influenced the catapult of solid waste management issues into the limelight, moving EPA to develop "The Solid Waste Dilemma: An Agenda for Action", February 1989.
 - * The public is given an opportunity to comment upon State SWPP approvals before finalization.
 - * The Program maintains a library of information to respond to information requests by the public.
-

PROGRAM: UNDERGROUND STORAGE TANK

STRATEGIC ACTIVITY 1 - GW PROTECTION GOAL

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

Regional Programs are aware of and promote consistent ground water protection strategy goals.

- * The UST program includes reference to the CSGWPP process and ground water strategy in their guidance and grant activities to the states.
-

PROGRAM: UNDERGROUND STORAGE TANK

STRATEGIC ACTIVITY 2 - PRIORITIES

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program has established approaches for its priority-setting process to protect GW resources.

- * Under the UST program, EPA asks the state to develop a prioritization scheme for cleanup activities, but defers to the state when establishing definitions and approaches.
- * The UST program is a regulatory prevention program that allows states to identify the location and age of tanks, develop a data base for inventorying, and encourages the development of regulations. It is not really a resource-based program; it is more a technically driven program that focuses on testing for leaks and replacement of substandard systems.
- * The LUST program manages cleanup/remediation of leaking underground storage tanks. States have their own resource protection based priority schemes with public and private well supplies considered a very high priority.
- * The UST program is first and foremost a state program - EPA only helps run it by providing financial assistance. We provide technical assistance and grants to the states. UST regulations are procedurally-based, and defer to state governments.
- * The cornerstone coordination mechanism for the UST program is the 1987 requirement for states to produce a Workplan Output for LUST Cooperative Agreements. This agreement showed that the states had the ability to manage, administer, and enforce their own programs.
- * Barriers identified include lack of money and staff, too many sites, GPS data available but not accessible, and legislative pressure to not "back off" on sites that the state may have prioritized according to their own needs. Massachusetts was named as a particularly challenging state: institutional barriers, such as the fact that two separate agencies (DEP, Dept. of Public Safety) have overlapping jurisdiction and responsibilities, make it difficult to prioritize program activities.

Criterion #2

The Program demonstrates consideration of varied GW characteristics in its priority-setting process.

- * Wellhead protection areas are considered by all six states when doing remediation work. On the prevention side, Maine considers gw resource characteristics in their regulations, and Rhode island in their enforcement policies.

Criterion #3

Regional Programs have contamination source information available to identify potential threats to GW and to set priorities base on the relative threats to ground water resources.

- * The states have this information; it is not routinely collected or used at the Regional level.

Criterion #4

The Program has technical capabilities to support its GW protection priorities and decisions.

- * EPA has the technical capability to support the states in these areas, but we don't do priority setting, thus, this criteria doesn't really apply.

Criterion #5

The Program has included measurement objectives for GW protection priority-setting and methods for assessing the Program's progress in the protection of GW resources.

- * The UST program defers to state standards (performance standards, quality standards, etc.).

Criterion #6

The Program's activities give high priority to managing contamination sources in wellhead protection areas and other public water supply source areas.

N/A

Criterion #7

The Program coordinates its GW priorities with other environmental priorities.

- * There is little or no coordination with surface water programs (LUST's don't usually leak directly into a waterbody); only ground water coordination currently exists.

Criterion #8

The Program's priorities include on-going reviews and improvements of Strategic Activities supporting the CSGWPPs.

- * The UST program is already conferring maximum flexibility upon the states; as a result, we have no regulatory "club" to hit them with.
- * More staff and program dollars to the states and EPA would be welcome. Also, increased emphasis and dollars for obtaining GPS locational data. This would greatly assist the states in tracking and monitoring. Regulatory and targeting activities would also be vastly improved with better GPS locational data.

PROGRAM: UNDERGROUND STORAGE TANK

STRATEGIC ACTIVITY 3 - RESPONSIBILITIES

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Regional Program has been identified as GW related and lead contact named to support Regional GW & CSGWPP matters.

- * Proper siting and land use controls for UST's could be a tremendous benefit to ground water. Pollution prevention is the most cost efficient method; siting and land use regs could provide more consistent, focused ground water protection, facilitate enforcement efforts, etc.

Criterion #2

The Program is involved with the Regional GW coordinating committee and supports cross-program activities & CSGWPPs.

- * One issue that should be addressed is heating oil tanks; UST currently defers to state-set MCL's for petroleum clean ups. Some states (New Jersey) have raised MCL's for heating oil spills from 100 to 10,000. using the argument that the lower MCL level is not commensurate with the actual human health risk. EPA has never attempted to set cleanup standards for petroleum - we let states set their own standards. Perhaps the GWPC might want to look into the question of whether we want to continue to let states set their own MCLs for petroleum, or whether it is desirable for EPA to do more facilitating/coordinating among states for evaluating uniform standards for states (this question requires state feedback).

Criterion #3

The Program has staff and resources allocated for GW protection concerns and support of CSGWPPs.

N/A

Criterion #4

Relevant Federal Agencies are informed & consulted by the Program in support of Regional GW protection efforts and state development of CSGWPPs.

N/A

Criterion #5

The Program coordinates with the states to assess interstate matters, and assists and encourages interstate cooperation.

- * A gasoline station contamination incident on the Rhode Island/Connecticut border several years ago highlighted good interstate cooperation between state environmental programs.

- * NEIWPCC meets with the UST program quarterly, and regularly updates interstate issues with them.

Criterion #6

The Program considers local needs and encourages/requires States to closely involve and assist locals.

- * The UST program only allocates \$162,000 per state, which essentially funds three FTEs; there are not adequate resources at the present time to do outreach activities.
- * Being a federally-funded state-run program, EPAs UST program feels that EPA is already administering maximum flexibility.

PROGRAM: UNDERGROUND STORAGE TANK

STRATEGIC ACTIVITY 4 - IMPLEMENTATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program coordinates, integrates, and prioritizes resource-based efforts, and evaluates them to improve the Region's and State's GW protection efforts.

- * UST is a federally-financed, state run program. There is a formal delegation authority presently with NH, VT, ME and RI; MA and CT should be decided in FY'94.
- * The UST program primarily relies upon new UST tank standards and leak detection requirements, while states usually determine remedial action levels.
- * The ground water classification issue is a state issue only; no EPA ground water classification standards were in place in 1988 when the UST program was created. The New England states, which differ widely in their classification on the use and value of ground water, apply their own classification systems to remediation standards for UST cleanups.
- * New Hampshire is currently exploring the use of time as a management option for remedial cleanup actions, specifically the areas of natural biodegradation, attenuation zones, & when to justify no action levels.
- * UST program feels that the ground water section is doing an excellent job coordinating and communicating on the CSGWPP process.
- * The UST program strongly encourages contact and coordination through their grant guidance and activities.
- * A QAT team was formed to look at coordinated grant issuance. The National/Regional guidance goes to states by April 1, draft workplans area due back by June 14, final workplans by August 2. Theoretically, completed, approvable workplans are ready by Oct. 1, followed by release of grant monies.

Criterion #2

The Program obtains/uses information to assess resource vulnerability for remedial/prevention actions; and considers resource use and value in remedial efforts and in prevention efforts where appropriate.

- * EPA's UST program is requesting GIS data delivery from states this year, to support environmental equity and other targeting considerations. Grant conditions are the mechanism for achieving this.
- * Priority setting, inspections, and environmental equity are the program benefits which could be realized from the use of lat/long standards.

- * The UST program is currently using a consultant to assist in GPS data gathering, address matching, etc. The program is not making lat/long use a grant condition.
- * All states, except MA and ME, have used lat/long to do locational data, such as tying in facility data base with # of tanks, type of fuel stored, etc.
- * States don't want owners/operators to provide locational data - they prefer to do it themselves. Issue of quality control.
- * The states generally see value in the use of lat/long. UST program estimates that it will take two years to complete site locations and tie in to facility data base.

Criterion #3

The Program considers wellhead protection areas as high priority resources in prevention and remediation efforts in Region and State programs.

- * EPA UST program does not routinely consider WHP areas in its activities and decision making; states do. National program did not have the data when UST program was formed in 1988; WHP guidance was in effect at the time, with no formalized gw classification standards. Because of this, EPA cannot require that WHP areas be incorporated into state decision making, only assure that minimum federal standards will be met.
-

PROGRAM: UNDERGROUND STORAGE TANK

STRATEGIC ACTIVITY 5 - INFORMATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Regional Program collects, coordinates and manages information to assess priorities, measure progress and support CSGWPPs.

- * Information is typically gathered and maintained by the state. Although there is officially a federal notification requirement, states are the ones who reply to FOIA's, etc. Types of information the EPA UST program routinely collects are state quarterly reports, and inspection and compliance info, which resides on LOTUS.
- * Generally, the UST program doesn't feel the need to create more work than necessary. For instance, a 21E request that comes to EPA would be passed on to MA DEP, who would have the specific data needed on tank locations, etc.
- * When the UST program first tried to perform priority setting for doing UST inspections on PWS wells, they could not get any information on WHPA's. They wanted to target a ground water-dependent town, but could not get the info they needed to make the correct decision (this was in the pre-GPS era). Generally, the data varies wildly from town to town. Thirty towns to date have been analyzed for compliance, of which 50-90% have achieved.
- * Lack of ability to target towns based upon vulnerability is a constraining factor for most state UST/LUST programs in Region I.
- * Well data and town water distribution systems would be useful data to have for the EPA UST/LUST program.
- * LUST program uses total number of releases as an environmental indicator, although it does not distinguish between major and minor spills.
- * In the future, the UST program would like to track tank replacements as a measure of progress.

Criterion #2

The Program uses and encourages states to use data from local, state and other federal programs, to assess priorities, measure progress and support CSGWPPs.

- * EPAs UST program is asking states to provide tank data for all six states at once, so that they can input onto GIS. Tank-specific attributes will be used with state programs as a targeting tool. The information is being requested ASCII format.
- * Grant guidance is used to improve data collection. Generally, the UST program at EPA does not dictate data needs, but rather responds to state-identified needs and gaps. Also, the UST program is providing

assistance to MA to improve their GIS capability this year.

Criterion #3

The Program has a defined set of data elements and is providing data users with comparable qualified data.

- * Tank locations, attributes, wellhead locations, aquifers, etc. are specific data elements that are important to the program.

Criterion #3A

The Program collects and facilitates the use and sharing of accurate locational data (lat./long.) among other Regional Programs, Locals and the State's CSGWPPs.

N/A

Criterion #4

The scope and design of regional ground water monitoring programs reflect EPA and State priorities and goals.

- * The role of GIS needs to be better defined. The UST program feels that it should be raised to the level of the Ground Water Policy Committee and Data Management Subcommittee.
-

PROGRAM: UNDERGROUND STORAGE TANK

STRATEGIC ACTIVITY 6 - PUBLIC PARTICIPATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program's goals, priorities and progress are addressed through a public education/involvement process.

N/A



WATER MANAGEMENT DIVISION



PROGRAM: Underground Injection Control

STRATEGIC ACTIVITY 1 - GW PROTECTION GOAL

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

Regional Programs are aware of and promote consistent ground water protection strategy goals.

- * Program has received encouragement from EPA HQ to consider comprehensive resource protection in programs internal activities and during their interaction with states.

 - * The program has communicated with state UIC programs the importance of CSGWPP.
-

PROGRAM: Underground Injection Control

STRATEGIC ACTIVITY 2 - PRIORITIES

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program has established approaches for its priority-setting process to protect GW resources.

- * Program encourages state prioritization of state activity to protect ground water resources.
 - * Prioritization can focus state program activity and result in greater protection of ground water resources.
 - * EPA UIC program does no prioritization. Program has a major responsibility to encourage state prioritization of UIC activity to support state and local resource protection.
 - * States are encouraged to prioritize outreach education, technical assistance, inspections, and enforcement to assume more comprehensive resource protection.
 - * Successful prioritization of state UIC activities would benefit water supply, nonpoint source, storm water, and wellhead protection programs.
 - * State prioritization of UIC activity would be more possible if information describing resources was more accessible for program decisions.
-

Criterion #2

The Program demonstrates consideration of varied GW characteristics in its priority-setting process.

- * Program encourages state consideration of ground water characteristics such as groundwater availability, wellhead protection, groundwater classification, local aquifer protection, watershed protection, sole source aquifers to support prioritization of program activity.
 - * The availability and accessibility of information describing groundwater characteristics is poor and NOT convenient to consider.
-

CRITERION #3

Regional Programs have contamination source information available to identify potential threats to GW and to set priorities base on the relative threats to ground water resources.

- * The program does not inventory contaminant sources; however, the program encourages the states and EPA programs to consider making contaminant source information more useful to a broad spectrum of programs that could use this type of information to prioritize program activity and consequently protect resources.

- * The program encourages state UIC programs to UIC activity of facilities they are able to prioritize.
 - * State programs are encouraged to set their priorities and their program activity based on the relative threat of a facility activity to water resources.
 - * State programs could use contaminant source information from EPA programs, state programs and local resources.
 - * Contaminant source information is not conveniently available to state programs.
-

Criterion #4

The Program has technical capabilities to support its GW protection priorities and decisions.

- * The EPA is not able to support state prioritization of its UIC program activity because EPA information that the state program would use is not conveniently accessible to state programs.
 - * EPA Poor Regional data quality information availability information accessibility preclude use of EPA information to support state program priority settings.
 - * The EPA UIC program encourages state use of facility and resource information to prioritize their program decisions to protect ground water.
-

Criterion #5

The Program has included measurement objectives for GW protection priority-setting and methods for assessing the Program's progress in the protection of GW resources.

- * The UIC program is aware of many formally adopted state measures to protect ground water.
- * State UIC programs are encouraged to use all applicable state and federal ground water protection measures to support prioritization of program activity.

Criterion #6

The Program's activities give high priority to managing contamination sources in wellhead protection areas and other public water supply source areas.

- * The program routinely and strongly encourages state UIC programs to consider wellhead protection, sole source aquifers, public water supply sources, groundwater availability and local resource protection when prioritizing program activity.
- * The program strongly encourages EPA and states to continue to compile information identifying and describing resources of critical environmental concern and to enhance information management system and Geographic Information System (GIS) tools so that EPA and state programs can better prioritize program activity to protect resources.

Criterion #7

The Program coordinates its GW priorities with other environmental priorities.

- * Program consistently encourages state and EPA programs to consider a broad spectrum of resources when considering prioritization of program activity.

Criterion #8

The Program's priorities include on-going reviews and improvements of Strategic Activities supporting the CSGWPPs.

- * Program continues to encourage EPA and states to make significant improvement to environmental and facility information management systems and to encourage enhancement of GIS tools in ways that will allow consideration of information needed to prioritize program activity convenient, easy, fast, more automated, more cross program useful.
-

PROGRAM: Underground Injection Control

STRATEGIC ACTIVITY 3 - RESPONSIBILITIES

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Regional Program has been identified as GW related and lead contact named to support Regional GW & CSGWPP matters.

- * Program activity has a direct impact on groundwater resources. The program oversees state UIC programs that regulate discharge of wastes into the ground through wells.
- * The Program is an active member of the Groundwater Policy Committee and participates on the Policy Committee implementation and data management subcommittees.
- * Currently Agency, grant, regional guidances and the Regional Strategic plan does not consider CSGWPP.'

Criterion #2

The Program is involved with the Regional GW coordinating committee and supports cross-program activities & CSGWPPs.

- * The program is represented on the Groundwater Policy Committee.
- * The program actively coordinates activity with the groundwater management program. The groundwater program actively reviews program guidance, state work plans, participates in discussions about priority setting and provides liaison with state groundwater programs.
- * The program has participated in pollution prevention initiatives, dry cleaning, industry pollution prevention activities, geographic initiatives in the Merrimack, Blackstone and Nashua River Basin areas.
- * CSGWPP participation has been a major program activity.
- * EPA/ state information management needs to support resource protection is a significant issue that should be addressed by the Groundwater Policy Committee.
- * The following cross program issues have been identified as important by the New England States:

Criterion #3

The Program has staff and resources allocated for GW protection concerns and support of CSGWPPs.

- * Program participates in all discussions about groundwater resource protection within EPA and with states.
- * Program actively encourages and supports state CSGWPP efforts.
- * EPA regional support and resources directed at the following world increase effectiveness of Region State and local resource protection.
 - Resource assessment
 - Prioritizing resource areas for program attention
 - Contaminant source locations
 - Conduct public education and outreach
 - Conducting inspections in critical ground water resource areas
 - Taking compliance and enforcement actions in critical resource areas, as well as by referrals and special initiatives
 - Determining use, value and vulnerability of ground water resources

Criterion #4

Relevant Federal Agencies are informed & consulted by the Program in support of Regional GW protection efforts and state development of CSGWPPs.

- * The program interacts with USGS and other federal agencies conducting program work associated with National Water Quality Assessments.
- * The UIC program coordinated with EPA's federal facilities program and participates on federal facility multimedia inspections.

Criterion #5

The Program coordinates with the states to assess interstate matters, and assists and encourages interstate cooperation.

- * Ground water protection and well head protection often involve interstate consideration of resource protection.
- * The program is occasionally involved in discussions about interstate ground water protection issues with state UIC and ground water programs.
- * Interstate ground water protection issues are discussed with federal agencies associated with National Water Quality Assessment in the region.
- * Interstate coordination of ground water protection and management issues is supported by the NEIWPCC, NEWMOA, and the New England Water Works Association,

Criterion #6

The Program considers local needs and encourages/requires States to closely involve and assist locals.

- * Public education and outreach are an important part of EPA and state program work.
- * The states are primarily responsible for coordinating and conducting education and outreach to the public, local governments and regulated facilities.
- * The program encourages through discussion, guidance documents and state outreach activities in the following areas:
 - where program conducts inspections
 - where program takes enforcement actions
 - technical assistance for 'science' and facilitation
 - technical assistance to train local inspectors
 - development of quality educational materials for public outreach and curriculum
 - management options necessary for preventing and controlling contamination sources
- * Resources to increase state UIC implementation are the greatest barriers to increasing program effectiveness to protect groundwater resources.

PROGRAM: Underground Injection Control

STRATEGIC ACTIVITY 4 - IMPLEMENTATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program coordinates, integrates, and prioritizes resource-based efforts, and evaluates them to improve the Region's and State's GW protection efforts.

- * The UIC program is delegated to each of the New England states.
- * State UIC programs use permitting, enforcement, management plans, best management practices, groundwater classification, wellhead protection, and drinking water standards to reduce or limit waste discharges to ground water resources.
- * The UIC program occasionally coordinates program activities with Pollution Prevention, nonpoint sources, information management, stormwater, federal facilities and groundwater protection.
- * The program actively and routinely coordinates program activity with state and EPA groundwater programs.
- * The program encourages state program coordination on groundwater issues through regional guidance, workplan negotiation, midyear evaluations, NEIWPCC meetings and special geographic initiatives.

Criterion #2

The Program obtains/uses information to assess resource vulnerability for remedial/prevention actions; and considers resource use and value in remedial efforts and in prevention efforts where appropriate.

- * Program encourages state use of information characterizing ground water resources to support resource protection decisions.
- * State UIC programs consider ground water use and value, local aquifer protection zones, groundwater classification, and water resource information to support program decisions.
- * The program is aware of EPA locational data policies.
- * The program actively encourages state and EPA programs regulating facility activities or overseeing state regulatory programs to encourage collection of appropriate locational data for regulated activities.
- * State programs are slowly collecting locational data; however, resources are a barrier to significant data collection.

Criterion #3

The Program considers wellhead protection areas as high priority resources in prevention and remediation efforts in Region and State programs.

- * EPA and state programs are very knowledgeable of groundwater protection and wellhead protection program goals and routinely consider wellhead protection in program planning and decisions.
 - * State UIC programs focus program inspection enforcement and outreach efforts in wellhead protection and drinking water protection areas.
 - * UIC program activities that focus on groundwater resource protection includes:
 - multimedia inspections resulting in identification of UIC activities
 - * More effective state UIC program activities to protect resources would be supported by increased financial resources.
-

PROGRAM: Underground Injection Control

STRATEGIC ACTIVITY 5 - INFORMATION

CRITERIA VS. PROGRAM INFORMATION FORM SURVEY RESPONSES

Criterion #1

The Regional Program collects, coordinates and manages information to assess priorities, measure progress and support CSGWPPs.

- * Data collected and managed by EPA UIC program is associated with grant tracking.
- * No regional UIC data is requested by others.
- * State UIC programs maintain data on closed UIC facilities and permitted UIC activities.
- * State programs desire greater access to EPA facility and environmental resource data.
- * State UIC information is typically in hard copy and available.
- * Typically members of controlled UIC facilities are used as indicators of program success.

Criterion #2

The Program uses and encourages states to use data from local, state and other federal programs, to assess priorities, measure progress and support CSGWPPs.

- * EPA UIC program encourages state program use of groundwater related information to support resource protection. States desire to use these kinds of information to make decisions; however, data is typically not readily available.
- * The program is aware of state non point source state management plans, coastal management plans, Water Quality Reports, state clean water and groundwater protection strategies.
- * Program encourages states to use information about critical resources and contaminant source information from other programs to support program activity.

Criterion #3

The Program has a defined set of data elements and is providing data users with comparable qualified data.

- * The UIC program is aware of and reports use of EPA's minimum set of data elements to describe activity that may impact water resources.
- * Consensus and agreement by EPA and states on a minimum set of data elements is important to facilitate cross program use of program data to protect critical resources.
- * The program is aware of EPA's National Locational Data Policy.
- * State UIC programs are encouraged to include locational information for permitted UIC activity.
- * State programs desire and have need for locational data for facilities regulated by RCRA, TSCA, PWS, and NPDES statutes.

Criterion #3A

The Program collects and facilitates the use and sharing of accurate locational data (lat./long.) among other Regional Programs, Locals and the State's CSGWPPs.

Criterion #4

The scope and design of regional ground water monitoring programs reflect EPA and State priorities and goals.

- * EPA and state UIC programs do not perform monitoring and do not typically have need for monitoring data.
- * State programs may be able to use groundwater quality monitoring data associated with areas of contaminated groundwater to direct inspection of UIC activity.

PROGRAM: Underground Injection Control

STRATEGIC ACTIVITY 6 - PUBLIC PARTICIPATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program's goals, priorities and progress are addressed through a public education/involvement process.

- * There is a public education and outreach component to UIC program activity and state UIC programs are encouraged to include out reach activities in their programs.
 - * New England State UIC programs develop outreach materials directed at regulated industries, local officials, and the public to keep them informed about UIC issues and groundwater resource protection.
 - * State UIC programs in conjunction with their state groundwater program counterparts determine state UIC program direction and objectives.
 - * States are encouraged to include active public outreach components in their programs during discussions about yearly workplans, during midyear review and occasionally through out the year.
 - * The program supports public outreach, education, and technical assistance through contact with EPA HQ, EPA Regions and states.
-

PROGRAM: NPDES/Pretreatment

STRATEGIC ACTIVITY 1 - GW PROTECTION GOAL

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

Regional Programs are aware of and promote consistent ground water protection strategy goals.

- * The NPDES and Pretreatment programs are primarily driven by their own program goals.
 - * Staff were not familiar with agency groundwater protection goals.
-

STRATEGIC ACTIVITY 2 - PRIORITIES

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program has established approaches for its priority-setting process to protect GW resources.

- * The priority setting process for the programs are driven by regulatory mandates, STARS targets, compliance and reissuance needs, and program implementation, not protecting ground water resources.
- * Recently, more flexibility has been given to states in setting priorities so long as adequate justification/explanation can be provided.

Criterion #2

The Program demonstrates consideration of varied GW characteristics in its priority-setting process.

- * The programs do not consider GW characteristics.

Criterion #3

Regional Programs have contamination source information available to identify potential threats to GW and to set priorities base on the relative threats to ground water resources.

- * N/A to these programs

Criterion #4

The Program has technical capabilities to support its GW protection priorities and decisions.

- * The programs do not have specific technical capabilities to support GW protection- although some staff may be knowledgeable in this area.

Criterion #5

The Program has included measurement objectives for GW protection priority-setting and methods for assessing the Program's progress in the protection of GW resources.

- * The programs do not measure progress in groundwater protection.

Criterion #6

The Program's activities give high priority to managing contamination

sources in wellhead protection areas and other public water supply source areas.

N/A

Criterion #7

The Program coordinates its GW priorities with other environmental priorities.

The programs do not have GW priorities.

Criterion #8

The Program's priorities include on-going reviews and improvements of Strategic Activities supporting the CSGWPPs.

- * The programs continue to try to improve. In the area of communication
 - a recent QAT effort resulted in new fact sheets and permit formats.
-

PROGRAM: NPDES/Pretreatment

STRATEGIC ACTIVITY 3 - RESPONSIBILITIES

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Regional Program has been identified as GW related and lead contact named to support Regional GW & CSGWPP matters.

- * Program contacts have been identified and interviewed, but I do not believe there is a lead contact named to actively support Regional GW and CSGWPP matters.

Criterion #2

The Program is involved with the Regional GW coordinating committee and supports cross-program activities & CSGWPPs.

- * The programs support cross-program activities. However, because the programs are not perceived as a "primary" gw program there has not been much involvement on the GW Coordinating Committee.

Criterion #3

The Program has staff and resources allocated for GW protection concerns and support of CSGWPPs.

- * No, the programs do not have staff allocated for this, but they are cooperating when needed.

Criterion #4

Relevant Federal Agencies are informed & consulted by the Program in support of Regional GW protection efforts and state development of CSGWPPs.

- * N/A

Criterion #5

The Program coordinates with the states to assess interstate matters, and assists and encourages interstate cooperation.

- * Yes, this is an important aspect of the NPDES program
- * The Pretreatment Program is specific to municipalities, so it does not get into interstate matters.

Criterion #6

The Program considers local needs and encourages/requires States to closely involve and assist locals.

- * Public hearings for NPDES program are required during which local needs are considered.

- * Local needs are considered when setting local limits for the Pretreatment program.

STRATEGIC ACTIVITY 4 - IMPLEMENTATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program coordinates, integrates, and prioritizes resource-based efforts, and evaluates them to improve the Region's and State's GW protection efforts.

- * Both the NPDES and Pretreatment programs are prioritized based on program compliance and regulatory directives. Occasionally resource-based efforts are considered, including impacts on surface water drinking supplies, but GW protection is not included.

Criterion #2

The Program obtains/uses information to assess resource vulnerability for remedial/prevention actions; and considers resource use and value in remedial efforts and in prevention efforts where appropriate.

- * These are not remedial programs. Programs are regulatory driven and primarily respond by setting limits to control pollutants, not by pollution prevention actions.

Criterion #3

The Program considers wellhead protection areas as high priority resources in prevention and remediation efforts in Region and State programs.

- * Wellhead protection areas are not considered. However, they might be if the program staff were aware of where they are.
-

STRATEGIC ACTIVITY 5 - INFORMATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Regional Program collects, coordinates and manages information to assess priorities, measure progress and support CSGWPPs.

- * The NPDES program collects, coordinates and manages information for it's own program priorities and uses a computerized data base (PCS) for tracking compliance. Indirectly this supports CSGWPP.
 - * The Pretreatment program primarily uses audits and inspections to measure program compliance.
-

Criterion #2

The Program uses and encourages states to use data from local, state and other federal programs, to assess priorities, measure progress and support CSGWPPs.

- * The programs primarily use internal data. However, where needed additional data is sought. Currently not much other data (local, state, federal) is easliy accessible to program staff.
-

Criterion #3

The Program has a defined set of data elements and is providing data users with comparable qualified data.

- * Data elements as required by PCS.
 - * Pretreatment program requires scan of priority pollutants of influent and effluent to determine local limits.
-

Criterion #3A

The Program collects and facilitates the use and sharing of accurate locational data (lat./long.) among other Regional Programs, Locals and the State's CSGWPPs.

- * The accuracy of the program's locational data is not certain. Sharing of this data is not activley facilitated.
-

Criterion #4

The scope and design of regional ground water monitoring programs reflect EPA and State priorities and goals.

- * N/A

PROGRAM: NPDES/Pretreatment

STRATEGIC ACTIVITY 6 - PUBLIC PARTICIPATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program's goals, priorities and progress are addressed through a public education/involvement process.

- * The NPDES program is primarily regulatory. A public hearing process is the primary tool for public comment. The program does not actively promote it's goals, priorities and progress through public education and involvement. The delegated states (CT, RI, and VT) may do more in this area than the non-delegated state (MA, NH, ME).
 - * The Pretreatment program - carried out at the local level - relies on Sewer Use Ordinances and setting of local limits to inform the public and regulated community.
 - * Staff members do occasionally get involved in educational events.
-

PROGRAM: NPDES/STORMWATER

STRATEGIC ACTIVITY 1 - GW PROTECTION GOAL

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

Regional Programs are aware of and promote consistent ground water protection strategy goals.

- * The program is aware of the Regional efforts to protect ground water.
 - * The program has received no direction from EPA HQ to support ground water protection or incorporate comprehensive ground water protection in program activities.
 - * The program has had no discussion with states about CSGWPP.
-

STRATEGIC ACTIVITY 2 - PRIORITIES

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program has established approaches for its priority-setting process to protect GW resources.

- * The program currently does not prioritize activities based on consideration of ground water resources. Permittees are asked about their proximity to water supplies, however, this information is not used to prioritize permitting activities.
- * Permitting rating worksheet could be used to upgrade a minor permit to a major permit.
- * Generally permitting prioritization is supported by EPA HQ, Region I and the program. Prioritization processes however, are informal and not consistently applied.
- * States have influence on EPA region prioritization processes through 305(B) report processes. Prioritization typically include consideration of lakes, watersheds, geographic targeting, and coastal initiatives.

Criterion #2

The Program demonstrates consideration of varied GW characteristics in its priority-setting process.

- * The program is not aware of and does not specifically use ground water resource characteristics to set program priorities.
- * There is a need to clarify for the program the use and significance of resource characteristics for priority setting.
- * There is no program encouragement of state program use of ground water characteristics for their program activity prioritization.

Criterion #3

Regional Programs have contamination source information available to identify potential threats to GW and to set priorities base on the relative threats to ground water resources.

- * The program uses SIC codes and Discharge Monitoring Reports to gain insight into the significance of a facility activity and to support program prioritization of major permits.
- * There is currently no use of contaminant source information to prioritize minor NPDES and stormwater activities.
- * Facilities required to report and that are consistently inventoried is specified in federal regulations. No facilities are inventoried and prioritized to protect resources.

- * The program does not set priorities based on relative threats to ground water.
- * The program could use contaminant source information from other EPA, state and federal agencies.
- * Barriers to using contaminant source information for prioritizing program activity are related to resources, information, and information management utility.
- * Permit prioritization typically occurs for major and some minor permits. Permitting is prioritized according to threat to resources or people and geographic targeting.
- * Prioritization does not impact inspections, enforcement and staffing.
- * Program encourages state program prioritization to protect resources that include ground water.
- * Program feels it could benefit from program prioritization activity in RCRA and Superfund programs.
- * Barriers to prioritization that would result in program comprehensive resource protection include narrow institutional focus on surface water, staff and funding resources and the inability to access supporting information.

Criterion #4

The Program has technical capabilities to support its GW protection priorities and decisions.

- * The program needs better access to information describing ground water resources and other critical environments.
- * Priority setting would be more possible if there were greater access to facility locational data, resource characterization and contaminant source information.
- * Information quality, availability, accessibility are seen as impediments to prioritization of program activities to protect resources.
- * Standards of data format and adoption of a minimum set of facility data elements would support greater sharing of information.
- * The program uses PCS system to manage permit data.
- * There is no link of PCS to Regional GIS.
- * The program does not have a mechanism to share information or obtain information from states that would support program activity prioritization.
- * The program uses 106 state work plans to guide program activities.

Criterion #5

The Program has included measurement objectives for GW protection priority-

setting and methods for assessing the Program's progress in the protection of GW resources.

- * The program is generally aware of EPA and state adopted measures to protect ground water resources; however, no specific performance standards, or quality standards associated with ground water are used to prioritize program activity.

Criterion #6

The Program's activities give high priority to managing contamination sources in wellhead protection areas and other public water supply source areas.

- * The program routinely considers the relationship of permitted activity to surface water drainage and to public water supply reservoirs.
- * The program does not routinely consider prioritization of activities using consideration of Wellhead Protection Areas, Sole Source Aquifers, Water Supply Intakes and wells, high yield aquifers, and local aquifer protection areas.
- * The program does not use information on ground water resource areas to set program priorities.
- * The program encourages state consideration of ground water resource protection areas through 106 program planning process.

Criterion #7

The Program coordinates its GW priorities with other environmental priorities.

Criterion #8

(Responses: Any suggestions/observations are welcomed)

The Program's priorities include on-going reviews and improvements of Strategic Activities supporting the CSGWPPs.

- * The program can support state CSGWPP efforts by encouraging consistent formal incorporation of state ground water protection goals in stormwater program planning.
 - * Program activity prioritization would be supported by better access to information describing areas of critical environmental concern.
-

PROGRAM: STORMWATER

STRATEGIC ACTIVITY 3 - RESPONSIBILITIES

CRITERIA VS. PROGRAM INFORMATION FROM RESPONSES

Criterion #1

The Regional Program has been identified as GW related and lead contact named to support Regional GW & CSGWPP matters.

- * Stormwater can impact surface and ground water quality. Stormwater program can encourage use of disposal practices that reduce waste loading and encourage infiltration best management practices.
 - * The program is aware and participates on the Region I Ground Water Policy Committee, the Implementation Subcommittee and state program coordinating committees.
 - * The program understands the benefit sharing information about program activities that impact ground water with Regional and state programs.
 - * Agency guidance to Regional program and state programs does not include elements or commitments on ground water protection.
-

Criterion #2

The Program is involved with the Regional GW coordinating committee and supports cross-program activities & CSGWPPs.

- * The program is represented on Region I Ground Water Policy Committee.
- * The program maintains contact with the Ground Water management program.
- * Program views role of Ground water programs supporting identification of ground water information needs, supporting ground water issued discussions, liaison with state ground water programs, support for review of general permit documentation, guidance, and best management practices that impact ground water.
- * Program is actively involved with storm water runoff from highways and parking plots and their ground water impacts.
- * The program has participated in EPA/State roundtables associated with CSGWPP and the Regional Assessment of ground water protection activity.
- * Barriers to more effective program coordination include management support, state priorities, program regulatory limitation, resources, and conflicting program guidance.
- * Issues important to cross program coordination include geographic and watershed targeting and cross program prioritization to protect ground water resources.

riterion #3

The Program has staff and resources allocated for GW protection concerns and support of CSGWPPs.

- * The program has committed staff resources to coordination efforts through the Ground Water Policy Committee.
 - * The program expects to continue to participate in state/Regional CSGWPP activities.
 - * Improvements in data quality, availability and accessibility, prioritization of environments of critical concern, information on regulated contaminant sources, resources for technical assistance and outreach to states and the public and more effective targeting on inspections and enforcement would increase the program ability to support other Regional programs.
 - * Increased resources to improve use of EPA and State data to support pollution prevention and prioritize program activity would improve ground water and resource protection.
-

Criterion #4

Relevant Federal Agencies are informed & consulted by the Program in support of Regional GW protection efforts and state development of CSGWPPs.

- * Program has contact with USGS, USFWS, COE, SCS, NOAA occasionally.
 - * Typically, ground water is never a topic of discussion.
 - * The program can benefit from discussing concerning design and best management practices developed through work by other federal agencies.
 - * Stormwater state programs have worked with the US Postal Service and various federal facilities.
 - * State stormwater program interact with the EPA Wastewater and Stormwater programs and Waste management programs.
-

Criterion #5

The Program coordinates with the states to assess interstate matters, and assists and encourages interstate cooperation.

- * The program considers downstream impacts of permitted activity on surface water quality, aquatic biology, wetlands; however, the program rarely considers impacts on ground water.
- * The program has had no interstate discussion about ground water issues and has received no state requests for assistance to resolve ground water issues.
- * The program is aware of established interstate organizations like NEIWPCC, NEMOA, and NEWWA that are available mechanisms to discuss resource protection issues.

Criterion #6

The Program considers local needs and encourages/requires States to closely involve and assist locals.

- * There are no EPA guidances or program objectives that direct the program work with local governments to protect ground water.
- * These are opportunities for public comment on best management practices, draft permits and other public notification processes. There are no other formal efforts to involve the public in program activities or planning.
- * There have been few efforts to consider community ground water protection needs when permitting stormwater discharge activities.
- * States are encouraged to work closely with local communities dealing with stormwater; however, ground water resource protection is not emphasized.
- * The program can consider use of grant and program guidance to states to encourage consideration of local ground water resource protection when specifying stormwater disposal options.
- * Lack of information identifying local resource protection needs is a primary barrier to considering local needs. Program could focus more effort on consideration of local resource protection needs.

PROGRAM: STORMWATER

STRATEGIC ACTIVITY 4 - IMPLEMENTATION

CRITERIA VS. PROGRAM INFORMATION FROM RESPONSES

Criterion #1

The Program coordinates, integrates, and prioritizes resource-based efforts, and evaluates them to improve the Region's and State's GW protection efforts.

- * The stormwater program is delegated in some states and direct implementation by EPA program in others.
- * The program is responsible for implementing the stormwater program permitting discharges and overseeing state delegated stormwater programs.
- * The program uses Regional permitting enforcement, discharge guidelines, drinking water standards, effluent quality limits, water quality goals and best management practices that are directed at reducing or preventing contamination of resources.
- * The program requires similar state activities as condition for primacy to implement stormwater programs.
- * The program can consider local discharge limits, stormwater management plans, facility siting criteria and best management practices.
- * The program does not use ground water classification when considering stormwater discharges.
- * The program coordinates with many EPA programs rarely and sees a benefit to better communication especially with regard to more comprehensive resource protection.
- * The program does not encourage State program coordination with state ground water programs.
- * The program encourages stormwater programs coordination with State wetland, 319, 6217 and lake programs.
- * The program has opportunity to encourage state coordination through annual regional program guidance, workplan negotiations, grant conditions, state/EPA directors meetings, NEIWPCC meetings, special initiatives.

Criterion #2

The Program obtains/uses information to assess resource vulnerability for remedial/prevention actions; and considers resource use and value in remedial efforts and in prevention efforts where appropriate.

- * Program uses information about public water supplies to guide setting discharge limits. Public surface water supplies are considered most often. The program uses little ground water information to make decisions.

- * Program could use information about ground water use, wellhead protection areas, aquifer protection zones, state ground water classification to support program decisions.
- * The program does not use state ground water information.
- * Program considers public water supply use, but does not consider ground water value and vulnerability.
- * Programs considering collection of latitude and longitude locational data for facility discharges they regulate. There is no provision to collect locational data associated with general permits.
- * Locational data is not shared with states.
- * Resource and specific institutional requirements to collect locational data slow inclusion of this type of data in information management systems.
- * The program does not have sufficient technical capabilities to evaluate and use information about ground water to support decisions.

Criterion #3

The Program considers wellhead protection areas as high priority resources in prevention and remediation efforts in Region and State programs.

- * Program is aware of but not very knowledgeable about state wellhead protection programs.
 - * The program does not routinely consider wellhead protection or local aquifer protection zones in program decisions.
 - * The program and consider ground water resources and wellhead protection to prioritize program activity.
 - * State program occasionally consider wellhead protection in program decisions and Regional program has not encouraged state consideration of ground water resources to support activities.
 - * Cross program coordination and poor resource information accessibility are barriers to greater use of resources to support program decisions.
-

PROGRAM: STORMWATER

STRATEGIC ACTIVITY 5 - INFORMATION

CRITERIA VS. PROGRAM INFORMATION FROM RESPONSES

Criterion #1

The Regional Program collects, coordinates and manages information to assess priorities, measure progress and support CSGWPPs.

- * Program manages information about facilities discharge activities, effluent quality, discharge points. This information is managed in PCS and stormwater databases.
 - * Currently, no information from these databases are provided by other EPA programs. Information could be provided to EPA programs, State, and local organizations if requested.
 - * The primary difficulty in applying program managed information if ground water protection is that data is focused on surface water concerns. The primary focus of program is to regulated discharges to surface water environments. Information of use for ground water resource protection is typically poor, incomplete or not available.
 - * Discharge monitoring report data, pollution prevention plans, status of BMP implementation and inspection can be used to gain a sense of progress toward ground water resource protection.
 - * Program decisions could be better supported by easier on line access, PCS data, locational data of discharges, on line access through GIS to resource information that could be used to prioritize program activity.
-

Criterion #2

The Program uses and encourages states to use data from local, state and other federal programs, to assess priorities, measure progress and support CSGWPPs.

- * Program does not consider or encourage states to consider ground water related information from local, state, or other federal programs to support decisions to protect resources and support CSGWPP.
- * Program is not aware of the location of means of access to, quality of, value of, and uses of a broad spectrum of information about ground water and other resources that could support program.
- * This does not use any state developed ground water source information to set program priorities. The program considers state developed information available in Section 319 state management reports as Section 305(b) water quality reports, state cleanwater strategies and watershed management plans; however, these sources are not considered for ground water protection activities.
- * Program does not encourage or require states to collect information that is not specifically required by statute.

Criterion #3

The Program has a defined set of data elements and is providing data users with comparable qualified data.

- * The program has not formally identified any set of data elements that would support program efforts to protect ground water.
- * The program is not aware of EPA efforts to standardize use of a minimum set of data elements that can support cross program data use.
- * Program information that could be useful to efforts by others to protect resources include discharge location, facility activity, SIC codes, facility identification number, monitoring data, discharge limitations.
- * Program is aware of EPA national locational data policy.
- * Program is considering collection of locational data describing permitted discharge locations.
- * Program could use locational data for facilities provided by Toxics, Water Supply, RCRA, and air programs, and the geographic location of resources of critical concern identified by the Region.

Criterion #4

The scope and design of regional ground water monitoring programs reflect EPA and State priorities and goals.

- * The program maintain monitoring information associated with discharges of stormwater that can have an impact on ground water resources.
- * Program has an interest in monitoring associated with RCRA, public water supply, Underground tanks to enable better assessment of surface water impact on ground water degradation.
- * The program has had no discussions concerning the scope and nature of a monitoring programs and their support of ground water resource protection.

PROGRAM: STORMWATER

STRATEGIC ACTIVITY 6 - PUBLIC PARTICIPATION

CRITERIA VS. PROGRAM INFORMATION FROM RESPONSES

Criterion #1

The Program's goals, priorities and progress are addressed through a public education/involvement process.

- * Public outreach and education about stormwater is a component of program activity. Outreach issues are addressed in grants and guidance.
- * Outreach and education are typically accomplished through hotline call in, presentations, factsheets, pamphlets.
- * Outreach initiatives rarely consider issues of ground water protection. Program could incorporate ground water protection issues in outreach efforts.
- * State watershed protection initiative offer best opportunity for program to gain insight to public needs for information.
- * Improved EPA internal and EPA/State communicating can facilitate greater understanding of ground water resource protection.

PROGRAM: WETLANDS

STRATEGIC ACTIVITY 1 - GW PROTECTION GOAL

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

Regional Programs are aware of and promote consistent ground water protection strategy goals.

- * The Ground Water Management Section briefed the New England wetlands managers at their quarterly meeting on the CSGWPP strategy and goals.
 - * The wetlands program has not received specific recommendations or guidance from their HQ counterparts on incorporating the Strategy's comprehensive approach into the wetlands program.
-

PROGRAM: WETLANDS

STRATEGIC ACTIVITY 2 - PRIORITIES

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program has established approaches for its priority-setting process to protect GW resources.

- * The wetlands program does not specifically set priorities after considering activity impact on ground water resources; EPA wetlands plays a reactive role by responding to Corps of Engineers public notice requirements for 404 permit applications. Wetlands does practice prioritizing in a sense; for example, they would put "priority" on a permit that proposed to fill 13 acres of wetlands, as opposed to a permit to put in a pier in Boston Harbor. Also, EPA can require an applicant to file for an individual permit under the 404 program (difficult, lengthy process) rather than a nationwide permit (easier, shorter process). This is a form of prioritization.
- * Prioritization or categorization schemes involve functional assessments of wetlands and assignment of relative value bases upon these assessments. Although the wetlands program does not like to "rank" wetlands, national policy changes may push categorization. The result would be greater coordination with the Corps of Engineers in terms of examining ground water and other values more closely.
- * The wetlands program feels that the National Wetlands Forum would be a good vehicle for integrating CSGWPP concerns.
- * Wetlands, as a program, does not generate a lot of information. Resource mapping is not done by EPA, but funded through NEIWPC.
- * Emergency Wetlands Resource Act, passed by Congress in 1988, is administered by EPA and the Fish & Wildlife Service, and was formed to recommend funding for land acquisition (primarily wetlands) that have outstanding resource values other than wildlife. This program could be viewed as an opportunity to incorporate CSGWPP concerns, as well as protect high value aquifers and other ground waters.
- * Under Section 404(c) of the Clean Water Act, EPA has the authority to veto permit applications that will have adverse impacts on municipal water supplies or recharge areas of supply wells.

Criterion #2

The Program demonstrates consideration of varied GW characteristics in its priority-setting process.

- * The areas where the Wetlands program obtains information relating to ground water characteristics are: 1.) sole source aquifer program, 2.) 404 applications from the Corps of Engineers, and 3.) the Ground Water Management Section.

Criterion #3

Regional Programs have contamination source information available to

identify potential threats to GW and to set priorities base on the relative threats to ground water resources.

N/A

Criterion #4

The Program has technical capabilities to support its GW protection priorities and decisions.

- * EPA recently funded a permit tracking project in Connecticut and New Hampshire. The resultant data will be shared with EPA wetlands.

Criterion #5

The Program has included measurement objectives for GW protection priority-setting and methods for assessing the Program's progress in the protection of GW resources.

- * The Wetlands program is primarily driven by state water quality standards, which guide the permit process. The Federal 401 permit program also includes a provision for recognizing Outstanding Resource Waters, which can be defined (at least in Massachusetts) as 1.) watersheds of drinking water supplies, 2.) vernal pool habitat, and 3.) coastal Areas of Critical Environmental Concern (ACEC).

Criterion #6

The Program's activities give high priority to managing contamination sources in wellhead protection areas and other public water supply source areas.

- * The wetlands program does consider WHPAs, public water supplies, etc. as important program priorities for controlling contaminant sources, however clean fill is defined as a pollutant, not a contaminant.

Criterion #7

The Program coordinates its GW priorities with other environmental priorities.

N/A

Criterion #8

The Program's priorities include on-going reviews and improvements of Strategic Activities supporting the CSGWPPs.

- * The concept of greater flexibility is not really relevant in the wetlands program, which is primarily regulatory in nature. The program feels that the only area where "flexibility" could be introduced would be the grants program.
- * State Wetlands Conservation Plans would be an effective mechanism to introduce CSGWPP concerns. EPA is currently funding an FTE in Vermont to produce the Plan.

PROGRAM: WETLANDS

STRATEGIC ACTIVITY 3 - RESPONSIBILITIES

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Regional Program has been identified as GW related and lead contact named to support Regional GW & CSGWPP matters.

- * No program guidances targeted to the wetlands program currently include elements or commitments on ground water protection through the CSGWPP process.

Criterion #2

The Program is involved with the Regional GW coordinating committee and supports cross-program activities & CSGWPPs.

- * The wetlands program is represented on the Region I Ground Water Policy Committee.
- * The wetlands program has identified technical assistance on ground water issues as an area where the ground water and wetlands programs could improve coordination.
- * The Wetlands White Paper, a planning document that was produced with input from all Region I state wetlands programs, contains discussion of ground water values and protection.

Criterion #3

The Program has staff and resources allocated for GW protection concerns and support of CSGWPPs.

- * The wetlands program has approximately 10 FTEs devoted to wetlands enforcement, public education/outreach, and grant activities.
- * One area where the wetlands program could use more technical analysis is the area of ground water withdrawal impacts on wetlands.

Criterion #4

Relevant Federal Agencies are informed & consulted by the Program in support of Regional GW protection efforts and state development of CSGWPPs.

- * The federal agencies that the EPA wetlands program continuously interacts with are the Army Corps of Engineers, the Fish & Wildlife Service, and the National Marine Fisheries Service. Other agencies that they coordinate infrequently with are the Soil Conservation Service, Federal Highway Administration, and Flood Emergency Management Agency (FEMA).
- * The wetlands program has several formal agreements with other federal agencies: an interagency personnel agreement with the Fish & Wildlife

Service (Ralph Abele's position), enforcement activities with the Corps of Engineers, and a BTAG (Biological Technical Assistance Grant) with the Superfund program.

Criterion #5

The Program coordinates with the states to assess interstate matters, and assists and encourages interstate cooperation.

- * The wetlands program discusses interstate coordination issues regarding wetlands (ground water included) on a quarterly basis through the meetings of the New England Wetlands Managers group.
-

Criterion #6

The Program considers local needs and encourages/requires States to closely involve and assist locals.

- * The wetlands program has a full time outreach coordinator devoted to working closely with locals. Also, 104(b)(3) grants to the states encourage local involvement and coordination.
- * The wetlands program would be willing to use the grant guidance process as a vehicle for improving coordination relative to CSGWPP issues; they would like the ground water section to provide them with grant language.

PROGRAM: WETLANDS

STRATEGIC ACTIVITY 4 - IMPLEMENTATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program coordinates, integrates, and prioritizes resource-based efforts, and evaluates them to improve the Region's and State's GW protection efforts.

- * The most promising vehicle for integrating the CSGWPP process to states is the requirement for states to do State Comprehensive Management Plans. If states complete these, EPA and the Corps will consider streamlined permitting as a "carrot".
- * Generally, the wetlands program feels that the ground water section does a good job of keeping them abreast of ground water issues.
- * A ground water newsletter would be of interest to the wetlands program if it focused on an area of mutual concern, i.e. ground water withdrawal effects on wetlands ecosystems.

Criterion #2

The Program obtains/uses information to assess resource vulnerability for remedial/prevention actions; and considers resource use and value in remedial efforts and in prevention efforts where appropriate.

- * 404 permits are logged in on lat/long.

Criterion #3

The Program considers wellhead protection areas as high priority resources in prevention and remediation efforts in Region and State programs.

N/A

PROGRAM: WETLANDS

STRATEGIC ACTIVITY 5 - INFORMATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Regional Program collects, coordinates and manages information to assess priorities, measure progress and support CSGWPPs.

N/A

Criterion #2

The Program uses and encourages states to use data from local, state and other federal programs, to assess priorities, measure progress and support CSGWPPs.

N/A

Criterion #3

The Program has a defined set of data elements and is providing data users with comparable qualified data.

N/A

Criterion #3A

The Program collects and facilitates the use and sharing of accurate locational data (lat./long.) among other Regional Programs, Locals and the State's CSGWPPs.

N/A

Criterion #4

The scope and design of regional ground water monitoring programs reflect EPA and State priorities and goals.

N/A

PROGRAM: WETLANDS

STRATEGIC ACTIVITY 6 - PUBLIC PARTICIPATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program's goals, priorities and progress are addressed through a public education/involvement process.

- * The wetlands section has a non-regulatory component that exclusively deals with wetlands education and outreach.
- * The wetlands section has a vast list of in house publications available to the public, such as fact sheets, pamphlets,

PROGRAM: WATER QUALITY MANAGEMENT SECTION

STRATEGIC ACTIVITY 1 - GW PROTECTION GOAL

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

Regional Programs are aware of and promote consistent ground water protection strategy goals.

- * The Water Quality Management Section is mostly program driven. Currently, there is no program that formally incorporates the GW protection goals into state water quality standards. This is not to say that ground water concerns are ignored by this program. These goals can be incorporated on a case by case basis into program's activities to the extent that information regarding the connection between surface water pollution sources and ground water are identified and brought to the attention of program staff.

PROGRAM: WATER QUALITY MANAGEMENT SECTION

STRATEGIC ACTIVITY 2 - PRIORITIES

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program has established approaches for its priority-setting process to protect GW resources.

- * Program does not prioritize ground water or ground water information.
-

Criterion #2

The Program demonstrates consideration of varied GW characteristics in its priority-setting process.

- * The Program does not prioritize ground water protection or resource characteristics.
 - * The Program can obtain limited ground water information through NPDES permit review and CWA 305(b) reports.
-

Criterion #3

Regional Programs have contamination source information available to identify potential threats to GW and to set priorities base on the relative threats to ground water resources.

- * The Program does not prioritize ground water information. Information regarding ground water impacts is used on a case by case basis.
-

Criterion #4

The Program has technical capabilities to support its GW protection priorities and decisions.

Criterion #5

The Program has included measurement objectives for GW protection priority-setting and methods for assessing the Program's progress in the protection of GW resources.

- * Measurement objectives for GW are not mandated by Clean Water Act. Connecticut, however, has incorporated GW classification system into its WQ standards.
 - * The Program assesses impacts to surface-water quality from point and non-point discharges, including NPDES and pump and treat remediation discharges. GW is not factored into priority setting. Impacts assessed are 1) human health and 2) organisms in surface water.
-

Criterion #6

The Program's activities give high priority to managing contamination sources in wellhead protection areas and other public water supply source areas.

- * Yes. Resource protection areas considered are public water supplies, aquifer recharge areas (when examining wetland impacts), and contaminant source assessment areas.

Criterion #7

The Program coordinates its GW priorities with other environmental priorities.

- * Ground water information from other programs is sought when necessary.
- * Improved coordination can ensure incorporation of GW's six Strategic Activities into WQ program.

Criterion #8

The Program's priorities include on-going reviews and improvements of Strategic Activities supporting the CSGWPPs.

- * There is some flexibility in the Program for EPA/State interaction. But prioritization schemes are not used.
-

PROGRAM: WATER QUALITY MANAGEMENT SECTION

STRATEGIC ACTIVITY 3 - RESPONSIBILITIES

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Regional Program has been identified as GW related and lead contact named to support Regional GW & CSGWPP matters.

- * The Program has an indirect role in managing non-point source and GW discharge permits.

Criterion #2

The Program is involved with the Regional GW coordinating committee and supports cross-program activities & CSGWPPs.

- * Eric Hall represents the Program in the Ground Water Policy Committee.
- * The Program has participated in CWA 319 grants comprehensive planning.

Criterion #3

The Program has staff and resources allocated for GW protection concerns and support of CSGWPPs.

- * No. The Program does not have staff allocated specifically for ground water protection activities. If a question or issue arises about ground water, then we can work with the Ground Water Management Section.
- * However, closer communication between the Program and the GWMS is recommended.
- * The Program would like to focus on priority setting, prevention, and remediation for the Region's programs.

Criterion #4

Relevant Federal Agencies are informed & consulted by the Program in support of Regional GW protection efforts and state development of CSGWPPs.

Criterion #5

The Program coordinates with the states to assess interstate matters, and assists and encourages interstate cooperation.

- * Interstate coordination regarding ground water is routinely encouraged with regard to non-point source programs. This will also likely be a part of 303(d) planning activities.

Criterion #6

The Program considers local needs and encourages/requires States to closely involve and assist locals.

- * Yes, particularly with regard to prioritization for NPS and development of management plans.

PROGRAM: WATER QUALITY MANAGEMENT SECTION

STRATEGIC ACTIVITY 4 - IMPLEMENTATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program coordinates, integrates, and prioritizes resource-based efforts, and evaluates them to improve the Region's and State's GW protection efforts.

- * Yes, but only in the context of reviewing GW or non-point source impacts to surface-water quality. In general, the Program uses State water quality standards to reduce contamination, with the exception of when 1) when EPA applies federal criteria and 2) downstream State criteria. GW classification can be used in the permit process to protect GW quality.
- * The Program coordinates often with the non-point source, stormwater, NPDES, Regional Counsel and GWMS programs; occasionally with the GIS and Bays programs; and rarely with the rest (listed in 4.k.).
- * Support with the Program and the GWMS is through an informal staff relationship. This can be improved by educating respective staffs about their program activities. The Program thinks that RCRA, CERCLA and Pesticides could benefit from the Program's activities.
- * The Program believes that ground water concerns are poorly factored into permit activities and decisions. This is a result of the regulatory factors discussed above.

Criterion #2

The Program obtains/uses information to assess resource vulnerability for remedial/prevention actions; and considers resource use and value in remedial efforts and in prevention efforts where appropriate.

- * On a case by case basis. Generally, the Program only uses resource-related information such as surface water/ground water interaction data. GW information alone is rarely used.
- * Resource characterization information may come later after the State TMDL programs mature.
- * NPDES outfalls maybe checked occasionally by the Program through topo map or site visit to confirm location..

Criterion #3

The Program considers wellhead protection areas as high priority resources in prevention and remediation efforts in Region and State programs.

- * The Program's level of protection of high priority resources reflects the level of protection mandated by federal law (CWA goals) and state water quality standards.

PROGRAM: WATER QUALITY MANAGEMENT SECTION

STRATEGIC ACTIVITY 5 - INFORMATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Regional Program collects, coordinates and manages information to assess priorities, measure progress and support CSGWPPs.

- * The Program does not collect, coordinate or manage GW information to make priorities.

Criterion #2

The Program uses and encourages states to use data from local, state and other federal programs, to assess priorities, measure progress and support CSGWPPs.

- * On a case by case basis, as necessary to protect critical resource areas and hydrologically linked surface waters.
- * The Program is aware of Nonpoint Source, Section 319 State Management Program reports and any other reports that describe surface water quality [305(b), 303(d)].
- * The Program may assist the States determine what information to collect, manage and use in 303(d) and nonpoint source information with regard to surface water contamination from ground water.

Criterion #3

The Program has a defined set of data elements and is providing data users with comparable qualified data.

- * No. The Program is also unaware of the Minimum Set of Data Elements for Water Quality and EPA's Locational Data Policy.

Criterion #3A

The Program collects and facilitates the use and sharing of accurate locational data (lat./long.) among other Regional Programs, Locals and the State's CSGWPPs.

- * No.

Criterion #4

The scope and design of regional ground water monitoring programs reflect EPA and State priorities and goals.

- * The Program does not monitor ground water quality.

PROGRAM: WATER QUALITY MANAGEMENT SECTION

STRATEGIC ACTIVITY 6 - PUBLIC PARTICIPATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program's goals, priorities and progress are addressed through a public education/involvement process.

- * Yes, but ground water information is not addressed through the Program.
-

PROGRAM: NONPOINT SOURCE

STRATEGIC ACTIVITY 1 - GW PROTECTION GOAL

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

Regional Programs are aware of and promote consistent ground water protection strategy goals.

- * Yes. Using cross-program efforts, as well as guidance issued to and communication with states, consistent application of federal and state ground water protection goals is promoted through the development and implementation of §319 work plans and Nonpoint Source Management Plans.
-

STRATEGIC ACTIVITY 2 - PRIORITIES

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program has established approaches for its priority-setting process to protect GW resources.

- * Not yet, but will with development and implementation of GW prioritization component of NPS Management Plans by states. Prioritization "guidance" is forthcoming.

Criterion #2

The Program demonstrates consideration of varied GW characteristics in its priority-setting process.

- * Not yet, but possible with development and implementation of GW prioritization component of NPS Management Plans by states.

Criterion #3

Regional Programs have contamination source information available to identify potential threats to GW and to set priorities base on the relative threats to ground water resources.

- * No contaminant sources are inventoried by the program; states undertake this work and use the results in-state. As noted above, states will be encouraged to set priorities under the GW prioritization "guidance".

Criterion #4

The Program has technical capabilities to support its GW protection priorities and decisions.

- * Unknown until prioritization "guidance" is developed and implemented.

Criterion #5

The Program has included measurement objectives for GW protection priority-setting and methods for assessing the Program's progress in the protection of GW resources.

- * Unknown until prioritization "guidance" is developed and implemented.

Criterion #6

The Program's activities give high priority to managing contamination sources in wellhead protection areas and other public water supply source areas.

- * Informally now; should improve with development and implementation of the prioritization "guidance" which will include high priority public water supply areas such as WHPA's. Lat/long is not required for location of contamination sources, and would only be funded if it were part of an implementation project.

Criterion #7

The Program coordinates its GW priorities with other environmental priorities.

- * See previous answers.

Criterion #8

The Program's priorities include on-going reviews and improvements of Strategic Activities supporting the CSGWPPs.

- * Need to continue seeking state input on guidance development.
-

PROGRAM: NONPOINT SOURCE

STRATEGIC ACTIVITY 3 - RESPONSIBILITIES

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Regional Program has been identified as GW related and lead contact named to support Regional GW & CSGWPP matters.

* Yes. Bob Morehouse.

Criterion #2

The Program is involved with the Regional GW coordinating committee and supports cross-program activities & CSGWPPs.

* Yes, through GWPC and annual ad-hoc §319 review teams.

Criterion #3

The Program has staff and resources allocated for GW protection concerns and support of CSGWPPs.

* Yes, to the extent that NPS staff oversee and coordinate GW components of state work plans.

Criterion #4

Relevant Federal Agencies are informed & consulted by the Program in support of Regional GW protection efforts and state development of CSGWPPs.

* Yes.

Criterion #5

The Program coordinates with the states to assess interstate matters, and assists and encourages interstate cooperation.

* Yes through NEIWPC, although no situations to date.

Criterion #6

The Program considers local needs and encourages/requires States to closely involve and assist locals.

* Yes, guidance requires public participation.

PROGRAM: NONPOINT SOURCE

STRATEGIC ACTIVITY 4 - IMPLEMENTATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program coordinates, integrates, and prioritizes resource-based efforts, and evaluates them to improve the Region's and State's GW protection efforts.

- * Some efforts already exists (e.g., CSGWPP/WHPP and P² as required by NPS guidance; coordination with GWMS), but will be improved with development and implementation of the prioritization "guidance".

Criterion #2

The Program obtains/uses information to assess resource vulnerability for remedial/prevention actions; and considers resource use and value in remedial efforts and in prevention efforts where appropriate.

- * See above relative to prevention; little remediation under §319.

Criterion #3

The Program considers wellhead protection areas as high priority resources in prevention and remediation efforts in Region and State programs.

- * See above.
-

PROGRAM: NONPOINT SOURCE

STRATEGIC ACTIVITY 5 - INFORMATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Regional Program collects, coordinates and manages information to assess priorities, measure progress and support CSGWPPs.

- * Unknown regarding specific data bases managed by NPS programs (state and federal); however, forthcoming ground water prioritization "guidance" will likely encourage use of existing data bases (e.g., WHPP, Public Water Supply) for prioritization, at a minimum.

Criterion #2

The Program uses and encourages states to use data from local, state and other federal programs, to assess priorities, measure progress and support CSGWPPs.

- * See above.

Criterion #3

The Program has a defined set of data elements and is providing data users with comparable qualified data.

- * Unknown.

Criterion #3A

The Program collects and facilitates the use and sharing of accurate locational data (lat./long.) among other Regional Programs, Locals and the State's CSGWPPs.

- * Lat/long is not required for location of contamination sources, and would only be funded if it were part of an implementation project.

Criterion #4

The scope and design of regional ground water monitoring programs reflect EPA and State priorities and goals.

- * Yes.
-

PROGRAM: NONPOINT SOURCE

STRATEGIC ACTIVITY 6 - PUBLIC PARTICIPATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program's goals, priorities and progress are addressed through a public education/involvement process.

* Yes; §319 guidance requires public participation/education.

PROGRAM: MARINE AND ESTUARINE PROTECTION SECTION

STRATEGIC ACTIVITY 1 - GW PROTECTION GOAL

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

Regional Programs are aware of and promote consistent ground water protection strategy goals.

- * The Program has not received encouragement from HQ's to incorporate the CSGWPP strategy into its own internal activities and priorities or with State program activities.
-

PROGRAM: MARINE & ESTUARINE PROTECTION SECTION

STRATEGIC ACTIVITY 2 - PRIORITIES

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program has established approaches for its priority-setting process to protect GW resources.

- * Program does not prioritize ground water or ground water information.

Criterion #2

The Program demonstrates consideration of varied GW characteristics in its priority-setting process.

- * The Program does not prioritize ground water protection or resource characteristics.

Criterion #3

Regional Programs have contamination source information available to identify potential threats to GW and to set priorities base on the relative threats to ground water resources.

- * The following contaminant sources are inventoried: POTW's, contaminated rivers, atmospheric deposition, dredging material, stormwater drainage, CERCLA sites, RCRA sites, landfills.
- * The major threats to surface water are sources of nitrate and phosphate.
- * Ground water may be prioritized only when it may contribute nitrate/phosphates to surface water at unacceptable levels.
- * Barriers consist of access difficulties, hard copy data, missing data, and suspect quality of data.
- * The Program encourages the collection of lat/long coordinates of sources.

Criterion #4

The Program has technical capabilities to support its GW protection priorities and decisions.

- * The program has sufficient technical capability but not enough money. It needs more GPS units.

Criterion #5

The Program has included measurement objectives for GW protection priority-setting and methods for assessing the Program's progress in the protection of GW resources.

* Measurement objectives are contained in water quality standards.

Criterion #6

The Program's activities give high priority to managing contamination sources in wellhead protection areas and other public water supply source areas.

* Resource areas (such as ground water recharge zones) and contaminant sources are mapped and digitized. GPS is also used, when available.

Criterion #7

The Program coordinates its GW priorities with other environmental priorities.

N/A

Criterion #8

The Program's priorities include on-going reviews and improvements of Strategic Activities supporting the CSGWPPs.

N/A

PROGRAM: MARINE & ESTUARINE PROTECTION SECTION

STRATEGIC ACTIVITY 3 - RESPONSIBILITIES

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Regional Program has been identified as GW related and lead contact named to support Regional GW & CSGWPP matters.

- * The Program is not aware of any Regional coordinating committee for ground water protection.

Criterion #2

The Program is involved with the Regional GW coordinating committee and supports cross-program activities & CSGWPPs.

- * The Program has participated only in the Merrimack River Initiative.

Criterion #3

The Program has staff and resources allocated for GW protection concerns and support of CSGWPPs.

- * No. The Program does not have staff allocated specifically for ground water protection activities. If a question or issue arises about ground water, then we can work with the Ground Water Management Section.
- * However, closer communication between the Program and the GWMS is recommended.

Criterion #4

Relevant Federal Agencies are informed & consulted by the Program in support of Regional GW protection efforts and state development of CSGWPPs.

- * U.S. Geological Survey - routinely
USDA-SCS - routinely
NOAA - routinely
Corps. of Engineers - routinely
U.S Fish and Wildlife Service - routinely
U.S. Coast Guard - rarely

Criterion #5

The Program coordinates with the states to assess interstate matters, and assists and encourages interstate cooperation.

- * Lake Champlain (NY/Vt): nitrate and land-use issues
- * The Program has not discussed interstate coordination regarding ground water.

The Program believes that the Region should facilitate interstate dialog about GW issues, such as with the NEIWPCC.

riterion #6

The Program considers local needs and encourages/requires States to closely involve and assist locals.

- * Yes, with local governance committees, demonstration projects, and attends many meetings with local groups.

The Program heavily involves local government in planning and decision-making, with respect to septic systems, development of educational materials for public outreach, BMPs, and establishing partnerships.

- * The Program works with local governance committees to focus on embayments and minibay projects such as Plum Island Sound, Waquoit Bay, Wellfleet Harbor, etc.
-

PROGRAM: MARINE & ESTUARINE PROTECTION SECTION

STRATEGIC ACTIVITY 4 - IMPLEMENTATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program coordinates, integrates, and prioritizes resource-based efforts, and evaluates them to improve the Region's and State's GW protection efforts.

- * Yes, but only in the context of protecting surface-water quality in coastal areas.

Criterion #2

The Program obtains/uses information to assess resource vulnerability for remedial/prevention actions; and considers resource use and value in remedial efforts and in prevention efforts where appropriate.

- * The Program only uses resource-related information such as resource sensitivity, aquifer type, contaminant sources, and surface water/ground water interaction data from the U.S. Geological Survey, USDA-SCS, universities, and State agencies. Other information includes water-quality data, land use data, MASS GIS coverages, bathymetric data, and 1:5,000 scale orthophotos of State coastline.

Criterion #3

The Program considers wellhead protection areas as high priority resources in prevention and remediation efforts in Region and State programs.

- * The Program has little or no awareness of State wellhead protection programs. Obtaining maps showing WHPAs would be helpful.
-

PROGRAM; MARINE & ESTUARINE PROTECTION SECTION

STRATEGIC ACTIVITY 5 - INFORMATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Regional Program collects, coordinates and manages information to assess priorities, measure progress and support CSGWPPs.

- * The Program currently compiles information in its Massachusetts Bays Program database. Information is provided to State and local programs for research and monitoring studies.
- * The Program does not now have a plan to share its data with the GWMS or other ground water related programs.
- * Currently, program emphasis is on nitrate modeling and management in coastal embayments.

Criterion #2

The Program uses and encourages states to use data from local, state and other federal programs, to assess priorities, measure progress and support CSGWPPs.

- * The Program uses such information (through its own data management committee) but does not now actively encourage greater use among agencies according to CSGWPP guidelines.
- * The Program is aware of and uses CCAMP reports.

Criterion #3

The Program has a defined set of data elements and is providing data users with comparable qualified data.

- * No, the Program does not define or specify particular ground water data elements. It is not aware of the Minimum Set of Data Elements for Ground Water Quality.

Criterion #3A

The Program collects and facilitates the use and sharing of accurate locational data (lat./long.) among other Regional Programs, Locals and the State's CSGWPPs.

- * The Program uses locational data from the USGS, SCS and university researchers, but not from states. Locational data tends to be limited to surface water quality monitoring stations.

Criterion #4

The scope and design of regional ground water monitoring programs reflect EPA and State priorities and goals.

* The Program monitors only surface-water quality data.

PROGRAM: MARINE & ESTUARINE PROTECTION SECTION

STRATEGIC ACTIVITY 6 - PUBLIC PARTICIPATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program's goals, priorities and progress are addressed through a public education/involvement process.

- * Yes, but only in the context of managing and characterizing impacts to surface water quality in coastal and marine environments. Ground water, per se, is not intrinsic to Program goals.
-

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PLANNING

AND

MANAGEMENT

DIVISION



PROGRAM POLLUTION PREVENTION

STRATEGIC ACTIVITY 1 - GW PROTECTION GOAL

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

Regional Programs are aware of and promote consistent ground water protection strategy goals.

- * The goal of the Region I Pollution Prevention (P2) "Program" is to promote P2 integration into the Region's programs wherever possible and to assist the New England States with increasing their capacity to run P2 Programs.
 - * P2 is more of a theme or concept to institutionalize into the Region's practices rather than an operating "program".
 - * The Region's two P2 Coordinators have not discussed CSGWPPs with the Headquarters Pollution Prevention Division (PPD) nor the Region I States. The P2 Coordinators are in the process of identifying what are their roles in the Region I CSGWPP process.
-

STRATEGIC ACTIVITY 2 - PRIORITIES

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program has established approaches for its priority-setting process to protect GW resources.

- * P2 priorities are established by the Region I P2 Task Force (established in 1989) through consensus-building with final approval from the Leadership Team.
- * The Leadership Team has designated P2 a key priority area for FY 1993 and 1994 under the Region's Strategic Planning process.
- * Ground water protection priorities may be integrated with P2 via the annual P2 workplan writing process begun in FY 1993. Each Division agrees to invest/disinvest in new P2 activities. Currently, ground water concerns are most effectively addressed through the Water Division P2 Workplan Writers Workgroup.
- * The Region I States have historically targeted activities by industry that is, the magnitude of the industry's impact on the environment. The States have just begun to integrate P2 more closely with their media programs via state P2 task forces. The States are also applying media grants to do P2 in priority watersheds and ground water resource areas (FY 1994).

Criterion #2

The Program demonstrates consideration of varied GW characteristics in its priority-setting process.

- * The P2 Task Force sets priorities with significant input from the States. Ground water characteristics are not applicable for use in the Task Force's priority-setting process.
- * The focus of the Region I P2 Program is policy development versus technical determinations.
- * Initially, comparative risk studies were used to target activities to prevent problems which pose the greatest environmental and health risks; ground water pollution was ranked as having a low potential risk to human health and the environment.

Criterion #3

Regional Programs have contamination source information available to identify potential threats to GW and to set priorities base on the relative threats to ground water resources.

- * The Program does not use contaminant source information. However, the States or Regional media programs may use land use data to implement specific P2 projects.

Criterion #4

The Program has technical capabilities to support its GW protection priorities and decisions.

- * Although the P2 Program is more policy oriented, more guidance is needed to write permits (e.g. NPDES) which specifically incorporate P2. The P2 Task Force has convened a workgroup to organize and develop P2 training for permit writers.

Criterion #5

The Program has included measurement objectives for GW protection priority-setting and methods for assessing the Program's progress in the protection of GW resources.

- * Not applicable.

Criterion #6

The Program's activities give high priority to managing contamination sources in wellhead protection areas and other public water supply source areas.

- * The P2 Program relies on the media programs to integrate resource protection concerns into P2 projects. For example, the media program representatives directing the PIT STOPS project developed guidance for States to target technical assistance in high priority water resource areas such as WHPAs.
- * The P2 Task Force does not currently dictate in its funding criteria that P2 projects must occur in high priority resource areas.

Criterion #7

The Program coordinates its GW priorities with other environmental priorities.

- * The P2 Task Force seeks to institutionalize P2 into all the Region's programs. The Task Force, with representatives from every Division, balances all environmental priorities of the Agency and agrees upon a roadmap to follow via consensus-building.

Criterion #8

The Program's priorities include on-going reviews and improvements of Strategic Activities supporting the CSGWPPs.

- * The Program currently participates on the GWPC and ISC.
-

STRATEGIC ACTIVITY 3 - RESPONSIBILITIES

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Regional Program has been identified as GW related and lead contact named to support Regional GW & CSGWPP matters.

- * The lead contact on CSGWPP and P2 issues also serves as the P2 Task Force alternate for the Water Division.

Criterion #2

The Program is involved with the Regional GW coordinating committee and supports cross-program activities & CSGWPPs.

- * Each P2 Coordinator is a member of the GWPC and ISC.
- * The P2 Coordinators facilitate (at least initially) virtually all cross-program P2 activities funded with P2 monies (e.g. PIT STOPS). The P2 Coordinators also serve on the former P2 KPA and the Region I Merrimack River Initiative Committee, with their primary role as facilitators of the Region I P2 Task Force.

Criterion #3

The Program has staff and resources allocated for GW protection concerns and support of CSGWPPs.

- * The Program coordinates with media programs via several committees.
- * P2 integration is fairly decentralized in the Region. Each Division may invest in P2 activities and oversees state implementation of P2 using media grants.
- * The P2 Task Force is developing P2 training for permit writers which should protect all water resources.

Criterion #4

Relevant Federal Agencies are informed & consulted by the Program in support of Regional GW protection efforts and state development of CSGWPPs.

- * The Program has interacted with DOT concerning transportation plans for which the Air Division is the lead contact. Also, DOE and the Program interact on water conservation issues. The media programs are consulted for their technical expertise as necessary.
- * Formal agreements between EPA/DOT and EPA/FHWA have been established to cooperate better in planning such that environmental impacts will be considered.

STRATEGIC ACTIVITY 4 - IMPLEMENTATION

CRITERIA VS. PROGRAM IMPLEMENTATION FROM SURVEY RESPONSES

Criterion #1

The Program coordinates, integrates, and prioritizes resource-based efforts, and evaluates them to improve the Region's and State's GW protection efforts.

- * P2 is not a "program" in the traditional sense; rather, P2 is a concept which is incorporated into operating practices. There is no distinct, national "P2 Program" per say with requisite legal authorities.
- * The two P2 Coordinators working in the Planning & Management Division promote P2 integration and coordination formally via facilitation of the P2 Task Force and informally on a consultation basis. Each Division performs P2 activities in the Region with decentralized coordination by the P2 Task Force, which meets monthly to quarterly. Beyond sharing information and advising with policy development, the Task Force is now responsible for general oversight and distribution of Regional P2 funds and providing guidance and training for all subsequent (from FY 1994) P2 Workplan Writing activities.
- * The States all promote P2 in their media programs to various degrees. The States have had P2 Programs since the beginning of the 1990s. The Region has typically exercised minimal oversight of the States' P2 Programs, as Headquarters has managed the Pollution Prevention Incentives for States (PPIS) grants. Now that the Regions will administer these grants, there are opportunities to ensure resource protection priorities are integrated into States' efforts. (Note: PPIS grants do not constitute a "delegated program".)

Criterion #2

The Program obtains/uses information to assess resource vulnerability for remedial/prevention actions; and considers resource use and value in remedial efforts and in prevention efforts where appropriate.

- * The Program does not collect resource data. (See SA#5)

Criterion #3

The Program considers wellhead protection areas as high priority resources in prevention and remediation efforts in Region and State programs.

- * The Program is aware of State Wellhead Programs.
- * Priorities set by the P2 Task Force to date do not require or encourage targeting to wellhead protection areas. The media programs which implement P2 projects help set the resource protection priorities.

PROGRAM POLLUTION PREVENTION

STRATEGIC ACTIVITY 5 - INFORMATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Regional Program collects, coordinates and manages information to assess priorities, measure progress and support CSGWPPs.

- * The Program does not collect any resource or industry data. Data collection is done by the States and Regional media programs, which are represented on the P2 Task Force.
- * The Program maintains a P2 Resource Center which consists of EPA P2 documents and miscellaneous P2 materials. The Region I Library receives only the main EPA P2 documents from the Center. The Waste P: manager in the Waste Division also maintains a separate collection focused on waste issues.
- * A recent Executive Order requires federal facilities to produce P2 plans which may make federal facility data available to the Regions.

Criterion #2

The Program uses and encourages states to use data from local, state and other federal programs, to assess priorities, measure progress and support CSGWPPs.

- * States are not encouraged to use ground water data. The States are given much flexibility with how they set priorities.

Criterion #3

The Program has a defined set of data elements and is providing data users with comparable qualified data.

- * Not applicable.

Criterion #3A

The Program collects and facilitates the use and sharing of accurate locational data (lat./long.) among other Regional Programs, Locals and the State's CSGWPPs.

- * The Federal and State P2 Programs do not collect facility data.

Criterion #4

The scope and design of regional ground water monitoring programs reflect EPA and State priorities and goals.

- * Not applicable.

Criterion #5

The Program coordinates with the states to assess interstate matters, and assists and encourages interstate cooperation.

- * The Program coordinates with several interstate organizations via the P2 Task Force:
 - New England Interstate Water Pollution Control Commission (NEIWPCC)
 - Northeast Waste Management Officials Association/North East State Pollution Prevention Roundtable (NEWMOA/NESPFR)
 - North East States for Coordinated Air Management (NESAUM)

Criterion #6

The Program considers local needs and encourages/requires States to closely involve and assist locals.

- * The Program rarely works directly with locals except when responding to occasional requests for information or assistance. States are not specifically encouraged to involve locals.
 - * Identifying local needs for P2 materials could help focus Headquarters in developing technical assistance documents.
-

STRATEGIC ACTIVITY 6 - PUBLIC PARTICIPATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program's goals, priorities and progress are addressed through a public education/involvement process.

- * The P2 Program responds to local requests for information as needed. Local outreach is performed by the State P2 Technical Assistance Programs and Region I media programs.
 - * Identifying local needs for P2 materials could help focus Headquarters PPD in developing technical assistance documents.
-

PROGRAM INFORMATION MANAGEMENT

STRATEGIC ACTIVITY 1 - GW PROTECTION GOAL

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

Regional Programs are aware of and promote consistent ground water protection strategy goals.

- * Program has received no instructions or encouragement from EPA Headquarters to support Comprehensive Ground Water Resource Protection.
 - * The program has not discussed or communicated with State program counterparts regarding CSGWPP goals or activities.
-

PROGRAM INFORMATION MANAGEMENT

STRATEGIC ACTIVITY 2 - PRIORITIES

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program has established approaches for its priority-setting process to protect Ground Water (GW) resources.

- * Program has had no specific discussions regarding program activity prioritization to support protection of ground water resources.
- * Program serves the information management need of programs requesting support and views prioritization of program activity as a program specific responsibility.
- * Program can work to support program prioritization processes when requested and routinely encourages secondary use of data for focusing resource protection.

Criterion #2

The Program demonstrates consideration of varied GW characteristics in its priority-setting process.

- * Program has no program activity process that considers ground water protection.

Criterion #3

Regional Programs have contamination source information available to identify potential threats to GW and to set priorities base on the relative threats to ground water resources.

- * Program is not in a position to inventory contaminant sources and, consequently, does not use this type of information to protect ground water resources.
- * The barriers to utilizing contaminant source inventories that might be used by EPA programs include: lack of adequate locational data that can support prioritization based on relative proximity to critical resources; outdated and error filled contaminant source inventory data bases; incomplete contaminant source inventories; significant issues of data quality, data availability, data accessibility; and, issues of information management utility and integration that can support substantive resource protection.

Criterion #4

The Program has technical capabilities to support its GW protection priorities and decisions.

- * Program does not set priorities that are directed at protecting ground water resources.
- * EPA program technical needs could be determined when programs indicate priority setting processes adopted.
- * Programs wishing to prioritize activity can indicate facility, resource, contaminant source, and environmental monitoring data needs. Information system enhancements and tools would be identified and specific enhancements could be made if resources are available.
- * Latitude and longitude locational data is not available in EPA data bases precluding their use to support program prioritization processes.
- * Program has not encouraged state information management counterparts to support state program prioritization schemes.

Criterion #5

The Program has included measurement objectives for GW protection priority-setting and methods for assessing the Program's progress in the protection of GW resources.

- * Program is aware of many state and EPA standards adopted to protect ground water; however, the program does not use this type of information to prioritize its program activity.

Criterion #6

The Program's activities give high priority to managing contamination sources in wellhead protection areas and other public water supply source areas.

- * Program does not consider resource protection areas when prioritizing program activity.
- * Program attempts to consider the information needs of all levels of government and the public but has no specific mandate or authority to focus on local organizations.
- * Latitude and longitude locational data for source of contamination and resource areas is important to prioritizing EPA program activity to protect resources. The program obtains locational data from State programs, EPA contractors, and EPA labs typically on program request.

Criterion #7

The Program coordinates its GW priorities with other environmental priorities.

Criterion #8

The Program's priorities include on-going reviews and improvements of Strategic Activities supporting CSGWPPs.

PROGRAM INFORMATION MANAGEMENT

STRATEGIC ACTIVITY 3 - RESPONSIBILITIES

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Regional Program has been identified as GW related and lead contact named to support Regional GW & CSGWPP matters.

- * The program supports maintenance of Region information and information management systems. The program has no responsibility for regulatory activity that impacts ground water and other resources. The program has responsibility for maintenance of many types of information and information systems that are important to effective resource protection.
 - * The program actively participates on the Ground Water Policy Committee.
 - * No EPA guidances to the program includes reference to CSGWPP or resource protection.
-

Criterion #2

The Program is involved with the Regional GW coordinating committee and supports cross-program activities and CSGWPPs.

- * The program is represented on the Ground Water Policy Committee. The program maintains contact with State information management programs and CSGWPP roundtables to assure cross program access to information.
 - * The program routinely participates in cross program ground water and resource protection related activity. The program participates in the Resource protection, KPA, Light Industry Project, Pollution Prevention, Geographic Targeting in Merrimack River, Nashua River, Blackstone River Basins, Chesprocott and Bays Initiatives.
 - * Barriers to increased program support of resource protection include resources, information and information system limitations.
-

Criterion #3

The Program has staff and resources allocated for GW protection concerns and support of CSGWPPs.

- * The program views its role as a service to Regional programs. Work related to CSGWPP and resource protection occurs with direction and resources provided by programs needing services.
 - * The program advocates and supports secondary and cross program uses of EPA data. Increased regional commitment of resources would enhance our opportunities to actualize broader use of Regional data to protect resources.
-

Criterion #4

Relevant Federal Agencies are informed and consulted by the Program in

support of Regional GW protection efforts and state development of CSGWPPs.

- * The program occasionally has contact with USGS, USFWL, and DOA SCS. Contact has primarily been related to transfer of information that can support Regional program data needs.
 - * Memorandums of Understanding (MOU) with these Federal Agencies have been developed nationally. There are no specific MOU that are Region specific. The program is not aware of any Federal Agency/State MOU that relates to resource protection.
-

Criterion #5

The Program coordinates with the states to assess interstate matters, and assists and encourages interstate cooperation.

- * The program is an active participant in the Merrimack River Initiative.
 - * Topics of inter-State coordination have focused on issues of information exchange to support specific Regional program needs. No discussion of ground water specific interstate issues has occurred; however, ground water and other resource information transfer does occur.
 - * The program participates in discussions about data management and geographic information coordinated through the NEIWPCC and the State/EPA Data Management Coordinating Committee.
-

Criterion #6

The Program considers local needs and encourages/requires States to closely involve and assist locals.

- * There is no component of programs mission that encourages or directs program activity with local governments. The program does not consider the information needs of local resource protection.
- * The program has no grants with States and is not in a position to require State focus on local activities. The program has had no discussion with States about their support of local resource protection.

PROGRAM INFORMATION MANAGEMENT

STRATEGIC ACTIVITY 4 - IMPLEMENTATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program coordinates, integrates, and prioritizes resource-based efforts, and evaluates them to improve the Region's and State's GW protection efforts.

- * The program does not perform any regulatory activity or oversee any state regulatory program. The program does not prioritize any of its activity with ground water or resource protection as an objective.
 - * Information management functions routinely necessitate contact with all Regional programs. Related ground water contact is typically rare with the most common contact regarding GIS services.
 - * The program has good working relationship with the Ground Water Management and Water Supply Branch. The program could be part of a more substantial effort to identify and protect a broader spectrum of critical resources and to assess information management needs.
 - * A broad spectrum of programs could benefit from Regional efforts to improve EPA ability to prioritize activity to protect resources.
 - * The program discusses information management issues with states and could discuss issues of resource protection information needs through State/EPA Data management program processes.
-

Criterion #2

The Program obtains/uses information to assess resource vulnerability for remedial/prevention actions; and considers resource use and value in remedial efforts and in prevention efforts where appropriate.

- * The program obtains and manages resource related information in response to requests from Regional programs. The program does not use resource information to make program decisions.
 - * The program is aware of EPA's latitude/longitude locational data policy. There is a national EPA effort to standardize latitude/longitude coding and to assure that all EPA programs include these data in their databases.
 - * Few Region I databases contain reliable latitude/longitude information that is suitable to support prioritization of program activity that will result in better protection of resources. The principal barrier to collection of latitude/longitude locational data is a Regional decision to do so.
 - * State programs are beginning to collect latitude/longitude information for appropriate data bases and they use this information to support resource protection.
-

Criterion #3

The Program considers wellhead protection areas as high priority resources in prevention and remediation efforts in Region and State programs.

- * The program is aware of Wellhead Protection (WHP) program; but not knowledgeable about program goals. The program does not regulate any activity or oversee state regulatory activity and, consequently, does not consider WHP when directing program activity.
-

PROGRAM INFORMATION MANAGEMENT

STRATEGIC ACTIVITY 5 - INFORMATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Regional Program collects, coordinates and manages information to assess priorities, measure progress and support CSGWPPs.

- * The program currently collects, manages, and provides many types of information that can be used by Regional and State programs to protect resources. The program provides Geographic Systems (GIS) Data Management, Information transfer, and hardware and software technical support to Regional programs and States.
 - * With some notable exceptions, information available in Regional data management systems, including ground water monitoring data, is of poor quality, missing key data, and is not conveniently accessible to support resource protection on a broad scale. There is no Regional plan to assess information and information system needs that can support prioritization of program activity to protect resources.
 - * The program would like to have the Agency's monitoring data that is developed or contracted for in one place that is LAN accessible. In addition, the program recommends the development of a listing of other state data sources that would allow the Agency to readily assess their utility and assessability.
-

Criterion #2

The Program uses and encourages states to use data from local, state and other federal programs, to assess priorities, measure progress and support CSGWPPs.

- * The program does not use Regional or State ground water resource information to conduct program activities.
 - * The program regulates no activities or oversee State regulatory programs and does not direct Regional or State information collection or management.
 - * The program supports Regional and State collection and management of information that supports resource protection.
-

Criterion #3

The Program has a defined set of data elements and is providing data users with comparable qualified data.

- * The program is aware of EPA latitude/longitude locational policy.
- * The program has no functions that necessitate collection of locational data. All locational data that program uses to support Regional activities is provided by Regional programs or the states.
- * Locational data in Regional data management systems is typically of poor quality or non-existent.

Criterion #3A

The Program collects and facilitates the use and sharing of accurate locational data among other Regional Programs, Locals and the State's CSGWPPs.

Criterion #4

The scope and design of regional ground water monitoring programs reflect EPA and State priorities and goals.

- * The program conducts no environmental monitor activity and has little opportunity to impact the scope of monitoring efforts.
- * The program acquires and uses monitoring data developed through Regional program activities. These data are typically used in the program's efforts to support other program activity.

PROGRAM INFORMATION MANAGEMENT

STRATEGIC ACTIVITY 6 - PUBLIC PARTICIPATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program's goals, priorities and progress are addressed through a public education/involvement process.

- * Public and state access to Regional data is a component of program activity. The program does not have a public outreach component to its mission. Currently, the program has discussed issues of increased public access to EPA data. EPA/HQ has indicated that public access is an issue. The program engages the states to discuss information access through state/EPA information management processes.
-



**AIR
MANAGEMENT
DIVISION**



GENERAL NOTE: The Pesticides programs in Region I have already taken significant and measurable strides in ground water protection, principally through state implementation. All the New England states have primary responsibility for administering various federal programs under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); these programs include ground water protection, endangered species, and worker protection. Specifically, using EPA guidance, states are developing and implementing Generic State Management Plans and will developing and implementing Pesticide-Specific Management Plans (collectively known as SMP's).

PROGRAM: PESTICIDES

STRATEGIC ACTIVITY 1 - GW PROTECTION GOAL

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

Regional Programs are aware of and promote consistent ground water protection strategy goals.

- * Yes. Guidance issued to states promotes consistent application of ground water protection goals (at the state level) through the development and implementation of SMP's.
-

PROGRAM: PESTICIDES

STRATEGIC ACTIVITY 2 - PRIORITIES

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program has established approaches for its priority-setting process to protect GW resources.

- * Yes. Guidance issued to states establishes need for priority-setting (at the state level) through the development and implementation of SMP's.

Criterion #2

The Program demonstrates consideration of varied GW characteristics in its priority-setting process.

- * Yes, as above. The SMP Guidance component "V. Basis for Assessment and Planning" includes consideration of how the state identifies "current or reasonably expected drinking water sources" and "ground water that can affect ecosystem integrity". Component V also includes emerging CSGWPP considerations, land use, and determination of use, value and vulnerability.

Criterion #3

Regional Programs have contamination source information available to identify potential threats to GW and to set priorities base on the relative threats to ground water resources.

- * Yes, as above. Through the SMP process states are assessing pesticide threats to ground water resources. Contamination source information from pesticide use is retained by the states not the regional office.

Criterion #4

The Program has technical capabilities to support its GW protection priorities and decisions.

- * Yes, the Pesticides Program GW protection priorities include technical and financial support including review of states' SMPs. SMP review procedures supplement technical expertise in key areas by drawing on experts from other programs.

Criterion #5

The Program has included measurement objectives for GW protection priority-setting and methods for assessing the Program's progress in the protection of GW resources.

- * A part of each state's Cooperative Agreement with EPA includes specific targets and milestones for pesticides and ground water SMP development.

Criterion #6

The Program's activities give high priority to managing contamination sources in wellhead protection areas and other public water supply source areas.

- * Yes. Through the development and implementation of SMP's, the New England states typically prioritize contamination sources in public water supply source areas.

Criterion #7

The Program coordinates its GW priorities with other environmental priorities.

- * Yes. Pesticide management and use is undertaken by states relative to other considerations such as worker protection and endangered species, through guidance from EPA.

Criterion #8

The Program's priorities include on-going reviews and improvements of Strategic Activities supporting the CSGWPPs.

- * The Program recommends creation of a mechanism for review of and concurrence with Generic Pesticide State Management Plans or review and approval of Pesticide-Specific State Management Plans. Ideally, this organization would be separate from the Region I Ground Water Policy Committee, but would regularly brief the Policy Committee on activities related to review/concurrence/approval.
-

PROGRAM: PESTICIDES

STRATEGIC ACTIVITY 3 - RESPONSIBILITIES

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Regional Program has been identified as GW related and lead contact named to support Regional GW & CSGWPP matters.

- * Yes; Rob Koethe.

Criterion #2

The Program is involved with the Regional GW coordinating committee and supports cross-program activities & CSGWPPs.

- * Yes, Pamela Ringoff is a member of the GW Policy Committee. Robert Koethe is a member of both the GW Implementation and Data Management Subcommittees. The pesticide and ground water SMP development process encourages cross-program activities at both the Headquarters and Regional levels.

Criterion #3

The Program has staff and resources allocated for GW protection concerns and support of CSGWPPs.

- * Yes, in order to meet its ground water protection responsibilities especially as they relate to the SMP process, Program FTEs are allocated for pesticides and ground water protection. Financial support is provided through FIFRA grants to pesticide regulatory agencies for protecting ground water from potential pesticide contamination. Nevertheless, more resources for Region's Pesticide Program and for state agencies developing SMPs would be helpful.

Criterion #4

Relevant Federal Agencies are informed & consulted by the Program in support of Regional GW protection efforts and state development of CSGWPPs.

- * The Pesticides Section works closely with the USDA Cooperative Extension Service to deliver pesticide education programs to train pesticide applicators using Restricted-Use pesticides. Since education is a key component for protection of ground water resources, CES is involved in the SMP process in all Region I states. Other federal agencies with whom the Program has contact include the USDA Soil Conservation Service, the Agricultural Experiment Station System, and the U.S. Fish and Wildlife Service.

Criterion #5

The Program coordinates with the states to assess interstate matters, and assists and encourages interstate cooperation.

- * No, the pesticide SMP process does not specifically address interstate issues. To date, no potential problems have emerged for Regional Office attention and no guidance has been provided by Headquarters.
-

Criterion #6

The Program considers local needs and encourages/requires States to closely involve and assist locals.

- * The SMP mechanism emphasizes the central role of the state in ground water protection. SMPs also consider other levels of governments. SMP Component II addresses Roles and Responsibilities of Agencies, including federal, state and local agencies. SMP Components III - Legal Authority, X - Public Awareness and Participation, XI - Information Dissemination, and possibly some other SMP components may also address local considerations.
-

PROGRAM: PESTICIDES

STRATEGIC ACTIVITY 4 - IMPLEMENTATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program coordinates, integrates, and prioritizes resource-based efforts, and evaluates them to improve the Region's and State's GW protection efforts.

- * The New England states have primary responsibility for administering various federal programs under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA); these programs include ground water protection, endangered species, and worker protection. Key programs are pesticide enforcement and applicator certification and training. Specific GW protection efforts include standard setting in the SMP process, cross-program coordination at the Federal and state levels, and consideration of GW in guidance development and implementation.

Criterion #2

The Program obtains/uses information to assess resource vulnerability for remedial/prevention actions; and considers resource use and value in remedial efforts and in prevention efforts where appropriate.

- * GW resource vulnerability, typically developed using information such as current and expected use, is a key consideration in the development and implementation of SMP's.
- * Lat/long is obtained and utilized where possible; additional GPS access is necessary.

Criterion #3

The Program considers wellhead protection areas as high priority resources in prevention and remediation efforts in Region and State programs.

- * While the state pesticide programs utilize their state WHPP information to some extent, knowledge of the programs could improve. As previously noted, SMP's are the primary mechanism for consideration of WHPA's (e.g., priority area for monitoring).
-

PROGRAM: PESTICIDES

STRATEGIC ACTIVITY 5 - INFORMATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Regional Program collects, coordinates and manages information to assess priorities, measure progress and support CSGWPPs.

- * Principally through SMPs, GW data is collected and managed by the states; data typically stays with the states. The Program supports the Merrimack River Initiative and has facilitated the inclusion of pesticide use information collected by the New Hampshire pesticide lead regulatory agency.
-

Criterion #2

The Program uses and encourages states to use data from local, state and other federal programs, to assess priorities, measure progress and support CSGWPPs.

- * See above.
-

Criterion #3

The Program has a defined set of data elements and is providing data users with comparable qualified data.

- * Although the Program does not collect its own ground water data, SMP Component VI - Monitoring recommends use of EPA's MSDE. As previously noted, lat/long and other descriptors may not always be available and a defined set of data elements is not specified in SMP draft guidance.
-

Criterion #3A

The Program collects and facilitates the use and sharing of accurate locational data (lat./long.) among other Regional Programs, Locals and the State's CSGWPPs.

- * See above.
-

Criterion #4

The scope and design of regional ground water monitoring programs reflect EPA and State priorities and goals.

- * Through SMP's, states design and implement pesticides monitoring programs, reflecting state priorities and goals, along with EPA guidance.
-

PROGRAM: PESTICIDES

STRATEGIC ACTIVITY 6 - PUBLIC PARTICIPATION

CRITERIA VS. PROGRAM INFORMATION FROM SURVEY RESPONSES

Criterion #1

The Program's goals, priorities and progress are addressed through a public education/involvement process.

* Public outreach/education regarding pesticides/GW occurs principally through SMP's.

Appendix D

COMPREHENSIVE GROUND WATER PROGRAM - REGIONAL ASSESSMENT

RESOURCE CONSERVATION AND RECOVERY ACT - C (RCRA C)

FINAL RECOMMENDATIONS

I. BARRIER 1 - RESOURCES

1. Provide, and require states to provide, sufficient resources (after resources are identified) to acquire adequate numbers of GPS units for obtaining accurate latitude/longitude during all inspections, complaint responses and site investigations (excepting on-site investigations, borings, test pits, monitoring locations, until coordination logistics, applications and data repositories are established).
(Region/Program/State) [SA 2;4;5] (Program, Region)
{Lead contact - Frank Battaglia; FY '95 activity}
2. Consider, cooperatively with the state, to direct or provide resources sufficient for initiatives to inspect small quantity generators in high priority, critical GW resource areas. (Program) [SA 2;4] {Lead contact - Frank Battaglia; FY 95}

II. BARRIER 2 - INFORMATION

1. Note: There is a critical need for ground water resource related information for the Regional and state RCRA C activities, including priority setting (inspection/ enforcement, NCAPS and Environmental Benefits Review), remedial investigation, assessment of risk and determination of clean-up levels, etc. Remedial assessment utilizes all GW related information identified in the Survey. Generally, there is critical need for GW resource related including the following for attaining a comprehensive GW protection approach:
 - resource sensitivity
 - hydro/geologic parameters
 - aquifer characteristics
 - ground water quality and yield
 - current uses and value
 - reasonably expected future use and value
 - location of public and private wells
 - wellhead protection areas
 - local aquifer protection zones
 - Sole Source Aquifers
 - population statistics
 - etc.
2. Use available information in resource based approach, including all prioritizing for inspections, enforcement, corrective action (NCAPS) and

Environmental Benefits Review; and use in risk and clean-up level determinations, etc.; and site investigation and remedial planning. Promote and require state program to do the same. (Program) [SA 2;4;5] {Lead contact - Frank Battaglia, Pat Hickey; FY 95}

3. Integrate contaminant-based inspection initiatives with the resource-based approach (i.e.: dry cleaners in WHPAs). (Program) [SA 2] {Lead contact - Pat Hickey; FY '94/95}
4. Participate with other Regional and state programs in identifying the program's/state program's data needs for GW related resource information, contamination, demographics, source information, etc., not currently in existing state and Regional data bases. (Program/Region) [SA 2;4;5] {Lead contact - Frank Battaglia; FY '94/95}
5. Acquire/obtain, and similarly require state program under grant workplans or conditions, to collect quality accurate latitude/longitude information now and in the future, including obtaining it in all opportunities, including notifications, applications, inspections, etc. for all LQGs, SQGs, VSQGs (state), TSDs, etc. Encourage state program to obtain accurate data on VSQGs (conditionally exempt). (Region/Program) [SA 2;5] {Lead contact - Frank Battaglia; FY '94/95}
6. Encourage states to continue to make program information more accessible to local governments and organizations directing resource protection. (Including mapped resources, source inventories, technical assistance documents, fact sheets, pilot projects, etc.). (Program) [SA 3,4;6] {Lead contact - Frank Battaglia; FY '95}

III. BARRIER 3 - COORDINATION

1. Time and staff constraints could limit coordination with other programs. Identify coordination needs and roles and discuss with other Regional and state programs how best to improve coordination. Similarly encourage state program. (Program) [SA 3] {Lead contact - Frank Battaglia; FY '94/95}
2. Improve program staff knowledge of state, Regional and locally available data and information. Cooperatively identify with state and Regional program and data managers, the water resource-related information, demographic and user information and contaminant source information currently available that can be applied to RCRA C uses. (Region/Program/State). [SA 2;4;5] {Lead

contact - Frank Battaglia; FY '94/95}

3. Coordinate with Regional and state program and data managers, and institutionalize data sharing, cataloging and inventorying, to maintain knowledge of available information/data, GIS data layers, critical resources, etc. (Region/Program) {Lead contact - Frank Battaglia; FY '94/95} [SA 4;5]
4. Assign coordinating contacts between RCRA C and GW Management Section programs. Define any roles in reviewing annual guidance or grant conditions, participation in information management discussions and in prioritizing activities in critical resource areas, etc. (RCRA C Program/GWM Program) [SA 3] {Lead contact - Frank Battaglia (RCRA C); Rob Adler (GWM) ; FY '94/95}
5. Continue to encourage state program to closely coordinate with state GW program on resource and contaminant source issues and data/information efforts. (Program) [SA 3] {Lead contact - Frank Battaglia; FY '94/95}
6. Continue to require, in grant guidance and grant conditions, the state program's participation (with the state GW office) in state efforts for developing and implementing the Comprehensive State GW Protection Program (CSGWPP) and other resource related program. (Program) [SA 3;4] {Lead contact - Frank Battaglia; FY '95}
7. Continue to require state program's participation on the states' "GW Coordination Mechanism" (committee) . (Program) [SA 3] {Lead contact - Frank Battaglia; FY '95}
8. Participate in cross-program coordinator teams, such as in teams recently initiated in the Water Division; team forums (for Region's state coordinators) are being held for program coordinators to discuss cross-program issues, priorities, resource information, etc. (Region/Program) [SA 3;4] {Lead contact - Frank Battaglia; FY '94/95}
9. Attempt coordinating and involving local data, land use, resource use and characteristics, etc., into priorities for corrective action, and inspections. (Region/Program) [SA 2] {Lead contact - Frank Battaglia, Ernie Waterman; FY '94/95}
10. Share priority determination and results of inspections/enforcement with other programs (UIC, NPS, WHP, PWS...) for their prioritization.

(Region/Program) [SA 2;4] {Lead contact - Frank Battaglia, Ernie Waterman; FY '94/95}

11. Coordinate (encourage state program to coordinate) with P2 for outreach materials for inspections. (Region/Program/ State) [SA 2;4] {Lead contact - Pat Hickey; FY '94/95}
12. Coordinate with state and GWM to utilize state resource documents. (Region/Program) [SA 2;5] {Lead contact - Frank Battaglia (RCRA C), Rob Adler (GWM); FY '94/95}
13. Improve coordination with the Water Management programs and Toxic and Pesticides program. (Program) [SA 3] {Lead contact - Frank Battaglia; FY '94/95}

IV. BARRIER 4 - GROUND WATER RESOURCE / SOURCE IDENTIFICATION

1. Encourage state program to participate in resource assessment and mapping critical resources for setting priorities, undertaking corrective action, etc. (Program) [SA 5] {Lead contact - Frank Battaglia; FY '95}

V. BARRIER 5 - GROUND WATER ISSUES AWARENESS

1. Improve GW Policy Committee's understanding of the limited GW resource considerations in current priority setting approaches, and obtain support for cross-program improvements in information/location and GW resource data. Role of GW Policy Committee is needed to improve resource-based priority setting. (Region/Program) [SA 3] {Lead contact - Frank Battaglia, Dennis Huebner; FY '94/95}
2. Improve NCAPS - consider supplemental GW resource information. (Program/HQ/Region) [SA 2] {Lead contact - Frank Battaglia, Ernie Waterman; FY '95}
3. Program/state program put high priority for inspections at federal, state and local municipal facilities (DPWs, post offices, town halls, fire stations, etc.). (Region/Program/ State) [SA 2;4] {Lead contact - Pat Hickey; FY '94/95}

VI. BARRIER 6 - GRANTS

1. Provide flexibility to traditional grant program funding lines to support cross-program priorities. (Region/Program) [SA 2;4] {Lead contact - Frank Battaglia; FY '95}

VII. BARRIER 7 - INSTITUTIONAL

1. Institute resource-based priority setting. (Program)
{Lead contact - Frank Battaglia, Pat Hickey; FY 94/95}
2. Improve NCAPS - RCRA C corrective action priority methodology calculation to include additional resource based factors; and/or improve Environmental Benefits Review for considerations GW and water resource factors. (Headquarters/Program) [SA 2] {Lead contact - Frank Battaglia, Ernie Waterman; FY '95}
3. Initiate defining "use" and "value" as related to the program, and participate with other programs to arrive at consistent definitions; related to setting corrective action clean-up limits and priority setting (under NCAPS). Identify the type of information needed for their determination, and cooperatively initiate data collection. (Program) (Headquarters/ Region) [SA 2,4] {Lead contact - Frank Battaglia; FY '95}
4. Promote with state programs to require accurate and certified (by engineer, surveyor, etc.) latitude/longitude locational information (one second accuracy). Make appropriate changes in the instructions for filing the forms. (Headquarters/Program) [SA 5] {Lead contact - Frank Battaglia; FY 95}
5. Promote institutionalizing collection of accurate latitude/longitude in service industries such as banking, insurance, realtors and mortgage industries. (Headquarters/Region/Program) [SA 4;5] {Lead contact - Frank Battaglia; FY '94/95}

VIII. BARRIER 8 - OUTREACH / EDUCATION

1. Identify and participate in identifying ways to enhance public access to EPA/RCRA C information related to sources of contamination, pollution prevention and regulated activities. (Region/Program) [SA 3;4;6] {Lead contact - Frank Battaglia; FY '95}
2. Provide local government Boards of Health, or other Board with results of inspections conducted in their towns, to support local resource protection efforts. (Program) [SA 4;5;6] {Lead contact - Pat Hickey, Frank Battaglia; FY 94/95}
3. Undertake, and encourage the state program, assessing the needs and assistance necessary for improving the locals capacity to manage hazardous waste activities; prioritize development of these types of assistance. Support "local tools." Tools include:
 - technical assistance and "science"

- local inspector training
 - development of quality outreach/educational materials
 - distribution of quality P2 information
 - developing local advocacy
 - developing model ordinances, or demonstration projects
 - providing useful resource information and contaminant source inventories
- (Program/State) [SA 3;4]
- {Lead contact - Frank Battaglia; FY '95),

COMPREHENSIVE GROUND WATER PROGRAM - REGIONAL ASSESSMENT

RCRA D PROGRAM

FINAL RECOMMENDATIONS

III. BARRIER 3 - COORDINATION

1. Continue close coordination with State Ground Water Protection Program Managers to assist with developing State Solid Waste Permitting Program (SWPP) applications. Region I RCRA D staff may seek GWMS assistance on an as-needed basis to understand state operations prior to state discussions and raise and/or resolve controversial issues. [SA 4; 1] (P)
{Lead contact- Aaron Gilbert; FY'94 activity}
2. Inform Region I State Ground Water Managers of SWPP efforts and encourage coordination with State RCRA D staff. [SA 4; 1] (P)
{Lead contact- Michele Notarianni; FY'94 activity}

COMPREHENSIVE GROUND WATER PROGRAM - REGIONAL ASSESSMENT

SUPERFUND PROGRAM

FINAL RECOMMENDATIONS

I. BARRIER 1 - RESOURCES

II. BARRIER 2 - INFORMATION

1. Support development and utilize information on locational mapping of priority or critical resources (e.g. wetlands, WHPAs) for priority setting of sites (e.g. SIs, HRS), and for determining appropriate remediation approaches. (Region/Program/GWMS) [SA 2; 4; 5]
{Lead contact- Lynn Gilleland; ongoing activity}
2. Support development and share information with states and regional programs on accurate locational data and mapping of sites, for use in priority setting and for determining appropriate remediation approaches. Site inventories are compiled on the CERCLIS list, but not locationally mapped (e.g. GIS). (Region/Program) [SA 2; 4; 5]
{Lead contact- Lynn Gilleland; ongoing activity}
3. For identifying potential CERCLIS listing and providing site-specific background, establish mechanism to obtain information obtained from sanitary surveys conducted at local level, and conversely provide locational site data to local ground water managers. Local contacts could also provide information on verifying site locations (e.g. lat/long.) and identifying land uses and local management controls. (Region/Program) [SA 3; 4; 5]
{Lead contacts- Lynn Gilleland/Don Smith; ongoing activity}

III. BARRIER 3 - COORDINATION

1. Provide specific vision/direction, funding and encouragement to the regions, to support and incorporate comprehensive ground water planning into programs' activities and priorities. (Headquarters) [SA 1]
2. Initiate discussions with states to cooperatively understand state/federal differences between programs, support consistent approaches to priority setting and determining cleanup objectives, and determine areas for mutual support and improvement. Fully comprehensive

programs may include 1 list of hazardous waste sites, where states and EPA in partnership determine strategies for all sites, including designation of lead agency. [SA 2; 4; 6]
{Lead contact- Dennis Huebner; ongoing activity}

3. Work with GWMS to formalize procedures to coordinate on significant site-specific ground water issues (e.g. GW reclassification, Technical Impracticability Waivers). (Program/GWMS) [SA 3; 4]
{Lead contact- Dick Willey; ongoing activity}
4. Continue to support a communication channel between federal and state Superfund and Ground Water programs, to discuss ways to further support a state directed resource-based approach to ground water remediation. GWMS shall facilitate discussions with state Ground Water Programs on assessing use, value and vulnerability of ground water, based on a comprehensive state strategy. (Program/GWMS) [SA 3; 4]
{Lead contact- Dennis Huebner; ongoing activity}
5. Promote state internal coordination including: annual national guidance; Program Directors Meeting; NEMOA Meeting; state/EPA meetings; special initiatives. [SA 3; 4] {Lead contact- Dennis Huebner; ongoing activity}

IV. BARRIER 4 - GROUND WATER RESOURCE SOURCE IDENTIFICATION

Upon establishment of realistic and consistent state classification schemes, establish a mechanism to use state classification in setting program priorities and determining appropriate remediation approaches. (Program/GWMS) [SA 2; 4]
{Lead contact- Dennis Huebner; ongoing activity}

V. BARRIER 5 - GROUND WATER ISSUES AWARENESS

1. Encourage the consistent incorporation of the new comprehensive approach into agency operating guidance and strategic planning. (Headquarters/Program) [SA 3]
{Lead contact- Dennis Huebner; ongoing activity}
2. Clearly articulate what EPA expects the states to do in support of CSGWPP across all programs and what regional and national programs are doing to remove barriers, including changes in statutes and guidances where necessary. (Headquarters/Region/Program) [SA 4; 6]
{Lead contact- Dennis Huebner; ongoing activity}

VI. BARRIER 6 - GRANTS

1. Require the states and EPA contractors through grant/contract conditions, to acquire accurate locational mapping of sites in their site assessments

activities (e.g. PA/SI). [SA 2]
{Lead contact- Don Smith; ongoing activity}

2. Incorporate into core state grants to the extent possible a requirement to participate in the comprehensive ground water strategy. [SA 3]
{Lead contact- Carl Deloi; ongoing activity}

VII. BARRIER 7 - INSTITUTIONAL

1. With facilitation by Ground Water Management Section, encourage and initiate dialogue with states to define realistic goals and objectives for ground water remediation, which includes use, value and vulnerability. (Program/GWMS) [SA 1]
{Lead contacts- Dennis Huebner/Dick Willey; ongoing activity}
2. CERCLA/NCP specify methods for determining cleanup approaches which may restrict flexibility in promoting a state directed resource-based approach to remediation. During reauthorization of CERCLA, national programs should recommend changes for consistency with CSGWPP Guidance. Such changes may include deletion of reference to federal ground water classification system (in deference to state classifications), and clarification for preference for rapid restoration where warranted based on the use and value of the resource. (Headquarters/Program) [SA 4]
{Lead contact- Dennis Huebner; FY'94 activity}
3. Encourage creative use of Supplemental Environmental Projects (SEPs) in settlement of Superfund liabilities. For example, can we get PRPs to finance local Wellhead Protection Programs in areas in close proximity to the sites? The outcome of such efforts would be to further protect the existing water supplies so that the need for additional sources, including ground water at the site, shall be minimized. By financing local prevention activities, PRPs would be providing the regulatory agencies greater comfort in allowing less aggressive approaches, including technical impracticability waivers, while minimizing their potential future liability. (Headquarters/Region/Program) [SA 4]
{Lead contact- Ira Leighton; ongoing activity}

VIII. BARRIER 8 - OUTREACH/EDUCATION

Conduct cross-program training with GWMS on State Wellhead Protection Programs and goals. (Program/GWMS) [SA 4]
{Lead contact- Nancy Smith; ongoing activity}

COMPREHENSIVE GROUND WATER PROGRAM - REGIONAL ASSESSMENT

UNDERGROUND STORAGE TANK (UST) PROGRAM

FINAL RECOMMENDATIONS

I. BARRIER 1 - RESOURCES

Increase resources to UST program for increased leak detection activities and for obtaining GPS locational data (HQ/Region/state). [SA 2, SA 4,4b].
{Lead contact- Myra Schwartz; FY'94 activity}

II. BARRIER 2 - INFORMATION

1. Encourage increased data sharing between state and federal programs (state/Region) [SA 5].
{Lead contact- Myra Schwartz; FY'94 activity}
2. Encourage states to institute the use of lat/long standards for use in priority setting, inspections, monitoring, and compliance. [SA 4,2g-n, SA 5,3h].
{Lead contact- Myra Schwartz; FY'94 activity}
3. Consider the use of more relevant environmental indicators to monitor progress in ground water protection, such as tracking tank replacements (state). [SA 5,1k]. {Lead contact- Myra Schwartz; FY'94 activity}

III. BARRIER 3 - COORDINATION

1. Encourage increased communication and coordination between LUST program and ground water/wellhead protection program at the state level [SA 3].
{Lead contact- Myra Schwartz; FY'94 activity}
2. Communicate the status of each state's wellhead protection program to the UST program. Provide mapping, where available, of communities with designated wellhead protection areas for use in targeting enforcement and remediation decisions (GWMS) [SA 5,1e]. {Lead contact- Myra Schwartz; FY'94 activity}
3. Provide the UST program with information on well data and water distribution systems within WHPAs (GWMS/PWSS) [SA 5,1f]. {Lead contact- Myra Schwartz; FY'94 activity}
4. Coordinate and share inspection results between EPA UST

staff and ground water management staff [SA 3].
{Lead contact- Myra Schwartz; FY'94 activity}

IV. BARRIER 4 - GROUND WATER RESOURCE IDENTIFICATION

N/A

V. BARRIER 5 - GROUND WATER ISSUES AWARENESS

N/A

VI. BARRIER 6 - GRANTS

VII. BARRIER 7 - INSTITUTIONAL

Evaluate the desirability of increased information sharing with states on health-based risk issues relating to heating oil petroleum spills, and whether state standards are the most appropriate and effective means of ensuring the protection of public health (HQ/Region/state) [SA 3,2h].
{Lead contact- Myra Schwartz; FY'94 activity}

VIII. BARRIER 8 - OUTREACH/EDUCATION

N/A

COMPREHENSIVE GROUND WATER PROGRAM - REGIONAL ASSESSMENT

MARINE AND ESTUARINE PROTECTION SECTION

FINAL RECOMMENDATIONS

I. BARRIER 1 - RESOURCES

The Program needs more Global Positioning System units for locational data. (Region)

II. BARRIER 2 - INFORMATION

The program shall encourage information gathering on local conditions affecting nitrogen loading rates, including soil types. (Program)
{Lead contact- Matt Liebman; FY'94 activity}

III. BARRIER 3 - COORDINATION

1. The Program shall encourage greater involvement with ground-water related activities and technical staff, including coordination with the Nonpoint Source Program, especially for coastal areas. (Program)
{Lead contact- Matt Liebman; FY'94 activity}
2. The Region and the States should improve growth management strategies.

IV. BARRIER 4 - GROUND WATER RESOURCE IDENTIFICATION

V. BARRIER 5 - GROUND WATER ISSUES AWARENESS

VI. BARRIER 6 - GRANTS

VII. BARRIER 7 - INSTITUTIONAL

1. Program shall support program planning on a regional, embayment or watershed basis.
{Lead contact- Matt Liebman; FY'94 activity}
2. Improve Massachusetts Title 5 regulations.
{Lead contact- Matt Liebman; FY'94 activity}
3. Program shall encourage giving more authority to regional planning agencies and county governments.
{Lead contact- Matt Liebman; FY'94 activity}

VIII. BARRIER 8 - OUTREACH/EDUCATION

COMPREHENSIVE GROUND WATER PROGRAM - REGIONAL ASSESSMENT

NON POINT SOURCE PROGRAM

FINAL RECOMMENDATIONS

I. BARRIER 1 - RESOURCES

Generate awareness at the state level of opportunities for §319 and §320 Estuaries Program expenditures allowed for the state revolving fund under the Clean Water Act. Source: SA#3. {Lead contact- Robert Morehouse; FY'94 activity}

II. BARRIER 2 - INFORMATION

No recommendations developed.

III. BARRIER 3 - COORDINATION

1. Increase involvement and communication with regional and state NPS staff regarding regional CSGWPP activities. Source: SA#2. {Lead contact- Robert Morehouse; FY'94 activity}
2. Provide support for ground water product reviews and information exchange of materials developed under Clean Water Act §604(b) water quality planning projects. Responsible: Ground Water Management Section/Non Point Source Program. Source: SA#5. {Lead contact- Robert Morehouse; FY'94 activity}

IV. BARRIER 4 - GROUND WATER RESOURCE IDENTIFICATION

Continue to recognize and support flexibility for Clean Water Act §319 ground water projects to conduct assessment and planning activities which will result in implementation. Responsible: Ground Water Management Section/Non Point Source Program. Source: SA#3. *This recommendation is also applicable to Barrier #7.* {Lead contact- Robert Morehouse; FY'94 activity}

V. BARRIER 5 - GROUND WATER ISSUES AWARENESS

Continue to identify ground water priorities for region and states and provide as part of Regional §319 guidance. Responsible: Ground Water Management Section/Non Point Source Program. Source: SA#2. {Lead contact- Robert Morehouse; FY'94 activity}

VI. BARRIER 6 - GRANTS

No recommendations identified.

VII. BARRIER 7 - INSTITUTIONAL

1. Continue to emphasize an holistic water resource approach to state programs to ensure maximization of funding. Source: SA#2.
{Lead contact- Robert Morehouse; FY'94 activity}
2. Refer also to Barrier 4.

VIII. BARRIER 8 - OUTREACH/EDUCATION

No recommendations identified.

COMPREHENSIVE GROUND WATER PROGRAM - REGIONAL ASSESSMENT

NPDES/PRETREATMENT PROGRAM

FINAL RECOMMENDATIONS

I. BARRIER 1 - RESOURCES

II. BARRIER 2 - INFORMATION

1. Make information on the location of all public water supplies accessible to permit writers and Pretreatment staff. Have them include relevant information in the permit fact sheet. (Program) [SA# 5]
{Lead contacts- Kevin McSweeney/Jane Downing; FY'94 activity}
2. Prepare fact sheet for permit writers on what is important to consider to determine groundwater/drinking water impacts. (Program) [SA# 3]
{Lead contacts- Kevin McSweeney/Jane Downing; FY'94 activity}
3. Give a basic hydrogeology presentation to permit writers and Pretreatment program personnel. (Program) [SA# 4] {Lead contact- Jane Downing/Division Training Team; FY'95 activity}

III. BARRIER 3 - COORDINATION

1. Examine water quality standards/criteria as potential permit limits in consideration of drinking water/groundwater concerns. (Program) [SA# 4]
{Lead contact- Bill Butler; ongoing activity}
2. When deciding where to do inspections or audits for the NPDES or Pretreatment programs consider proximity to WHPA and/or SSA, in addition to considering program compliance and implementation. (Program) [SA# 2]
{Lead contact- Larry Brill; FY'95 activity}
3. Provide information to the Pretreatment staff about state UIC and Groundwater discharge permit programs and contacts for possible referrals. Specifically, for instances where they know of industrial uses in unsewered areas. (Program) [SA# 5]
{Lead contact- Dave Delaney; FY'94 activity}
4. Examine Regional policies (CSO, Sludge, Toxicity, Stormwater, Pretreatment) for consistency regarding groundwater concerns. (Region) [SA# 1]
{Lead contact- Kevin McSweeney; 1QFY'94 activity}

IV. BARRIER 4 - GROUNDWATER RESOURCE SOURCE IDENTIFICATION

Examine the potential for groundwater contamination from Exfiltration in critical groundwater areas. (Program) [SA# 4]; {Lead contact- Tony Depalma; FY'95 activity}

V. BARRIER 5 - GROUNDWATER ISSUES AWARENESS

Factor groundwater concerns in when developing BMP's as part of a NPDES permit. (Program) [SA# 4]
{Lead contact- Kevin McSweeney; 1QFY'94}

VI. BARRIER 6 - GRANTS

VII. BARRIER 7 - INSTITUTIONAL

1. Include groundwater considerations when determining if a discharge is a "major" or a "minor" discharge. (Program) [SA# 2]
{Lead contact- Kevin McSweeney; ongoing activity}
2. Amend Supplemental Environmental Project guidance to make it less restrictive and allow for more creative solutions including pollution prevention and wellhead protection. (Program) [SA# 4]
{Lead contact- Larry Brill/ORC; FY'95 activity}

VIII. BARRIER 8- OUTREACH/EDUCATION

COMPREHENSIVE GROUND WATER PROGRAMS - REGIONAL ASSESSMENT

PUBLIC WATER SUPPLY SUPERVISION PROGRAM

RECOMMENDATIONS

I. BARRIER I - RESOURCES

N/A

II. BARRIER 2 - INFORMATION

1. Encourage HQ to include mandatory data fields for latitude and longitude data into HQ's PWSS modernized system that will replace FRDS. (Headquarters/Program) {Lead contact - Bob Mendoza; FY '94/95 activity}
2. Promote with HQ's that latitude and longitude be a mandatory reporting requirement under future SDWA regulations. (It is not currently required). (Headquarters/Program) {Lead contact - Bob Mendoza; FY '94/95 activity}
3. Promote with HQ's that the new PWSS modernization program be able to link with GIS systems for integrated data management. (Headquarters/Program) {Lead contact - Bob Mendoza; FY '94 activity}
4. Coordinate with state programs to determine whether they require latitude and longitude of new PWS sources being approved. Strongly promote with states' programs. (Program) {Lead contact - Bob Mendoza; FY '94 activity}
5. Promote with RCRA C, GW, SF, and other programs, the important need for centralized data management or compatibility of multi-program data integrated data systems which allow data base access and utilization by all programs; promote real-time, on-line automated work stations. (Program/Region) {Lead contact - Bob Mendoza; FY '94/95 activity}

III. BARRIER 3 - COORDINATION

1. PWSS and GW will seek to establish coordination mechanism for the source control programs (RCRA C, UST, SF, etc.) to provide information regarding their facilities and generators or other threatening activities to PWS wells. (Program/Region) {Lead contacts - Chris Ryan (PWSS) and Rob Adler (GWM); FY '94/95 activity}
2. Participate with cross-program teams for identifying available information and for identifying other information and data needs. Continue participation on cross-program state coordinator teams established in the

- Water Management Division. (Program/Region) {Lead contact - Chris Ryan and other PWSS state coordinators; FY '94/95 activity}
3. Exchange guidance between PWSS and GW for review; annual guidance for s.106 national/Regional ground water, UIC (national), and PWSS (national/Regional) guidance. (Program) {Lead contacts - Bob Mendoza (PWSS) and Jane Downing (GWM); FY '95 activity}
 4. Improve coordination between PWSS and GW by exchanging a staff participant to attend each others section meetings. (Program) {Lead contacts - Bob Mendoza (PWSS) and Jane Downing (GWM); FY '94/'95 activity}
 5. Coordinate with Regional Counsel to determine the utility of ORC's enforcement tracking database to prioritize inspection and state and EPA enforcement in the PWSS programs. (Program) {Lead contact - Chris Ryan; FY '94/95 activity}
 6. Strongly encourage the states' PWSS programs make available information and latitude and longitude on public water supplies to their other state programs. (Program) {Lead contact - Bob Mendoza; FY '94/'95 activity}
 7. Promote with states' PWSS programs the utility of sharing findings of sanitary surveys (conducted by the state and Region I) with local Boards of Health, or other local boards. (Program) {Lead contact - Bob Mendoza; FY '94/'95 activity}
 8. Continue to encourage, through grant guidance and conditions, state programs participate in the states' ground water coordination mechanisms, and support the states' ground water programs in developing and implementing states' CSGWPPs. (Program) {Lead contact - Chris Ryan; FY '94/95 activity}

IV. BARRIER 4 - GROUND WATER RESOURCE IDENTIFICATION

N/A

V. BARRIER 5 - GROUND WATER ISSUES AWARENESS

N/A

VI. BARRIER 6 - GRANTS

N/A

VII. BARRIER 7 - INSTITUTIONAL

1. Within the context of SDWA reauthorization, will continue to promote need for and likelihood that small and medium systems should demonstrate their ability to comply with the SDWA requirements, including planning and prevention activities for source water protection.
(Headquarters/Program) {Lead contact - Bob Mendoza; FY '94/'95 activity}
2. Promote with HQs to develop the PWS modernization system with the capability of providing system upgrades (for state PWSS data systems) as new regulations are issued.
(Headquarters/Program) {Lead contact - Chris Ryan; FY '94/'95 activity}

VIII. BARRIER 8 - OUTREACH / EDUCATIONAL

N/A

COMPREHENSIVE GROUND WATER PROGRAM - REGIONAL ASSESSMENT

STORMWATER (NPDES) PROGRAM

FINAL RECOMMENDATIONS

I. BARRIER 1 - RESOURCES

Provide resources and tools that can support program priority setting and pollution prevention that supports broad resource protection. (Region/Program) [SA 2; 3; 4]
{Lead contact- Kevin McSweeney}

II. BARRIER 2 - INFORMATION

1. Require quality longitude and latitude data for major facilities regulated by EPA. (Region/Program) [SA 2; 4; 5] {Lead contact- Ronnie Harrington; FY'95 activity}
2. Improve the quality, availability and on-line accessibility of PCS data to program and others. (Headquarters/Region/Program) [SA 2; 3; 5] {Lead contact- Ronnie Harrington; FY'95 activity}
3. Encourage EPA and state programs to adopt EPA's minimum set of data elements to facilitate cross program data utility and sharing. (Region/Program) [SA 5] {Lead contact- Ronnie Harrington; FY'95 activity}
4. Provide on-line work station access to GIS tools that can display critical resources and program activity to support program decisions. (Region) [SA 2; 4; 5] {Lead contact- Ronnie Harrington; FY'94 activity}

III. BARRIER 3 - COORDINATION

1. Encourage discussion of CSGWPP with federal and state programs. [SA 1; 3] {Lead contact- Kevin McSweeney; FY'94 activity}
2. Establish a coordination mechanism within the Region and with the states that support efforts to prioritize activities. [SA 2; 4] {Lead contact- Steve Silva; FY'94 activity}
3. Promote state cooperation with state ground water program and encourage communication of ground water resource protection priorities and strategies. [SA 2; 3] {Lead contact- Kevin McSweeney; FY'94 activity}

IV. BARRIER 4 - GROUND WATER RESOURCE SOURCE IDENTIFICATION

1. Provide cross-program education about the types and

sources of resource information that can support program activity. (Region/Program) [SA 2; 5]
{Lead contact- Jane Downing/Division Training Team; FY'95 activity}

2. Encourage formal EPA identification of critical resources that can be used by EPA and state programs to better direct program activity that will result in resource protection. (Region/Program) [SA 4]
{Lead contact- Steve Silva; FY'94 activity}

V. BARRIER 5 - GW ISSUES AWARENESS

1. Continue interprogram communication about CSGWPP and ground water protection. [SA 1; 2; 6]
{Lead contact- Kevin McSweeney; FY'94 activity}
2. Participate in improved communication between EPA programs to facilitate identification of program issues impacting ground water. [SA 4]
{Lead contact- Kevin McSweeney; FY'94 activity}
3. Improve CSGWPP education outreach within program and to state program. [SA 4]
{Lead contact- Kevin McSweeney; FY'94 activity}

VI. BARRIER 6 - GRANTS

Consider grant guidance which encourages states to improve their collection, management and use of latitude and longitude to locate regulated facilities. (Region/Program) [SA 3; 4; 5]
{Lead contact- Bill Nuzzo; FY'95 activity}

VII. BARRIER 7 - INSTITUTIONAL

1. Support program consideration of a broad spectrum of resources when setting priorities. [SA 2]
{Lead contact- Steve Silva; FY'94 activity}
2. Develop formal standardized approach to prioritizing program activity that supports water supply and ground water protection. [SA 2]
{Lead contact- Larry Brill; FY'95 activity}
3. Support development of technical ability to use ground water resource characterization to prioritize program activities. (Region) [SA 2; 4]
4. Support greater consideration of ground water protection through discussion within EPA and with states, local and other appropriate federal agencies. [SA 3] {Lead contact- Kevin McSweeney; FY'94 activity}

5. Promote use of GIS tools to support program prioritization processes. (Region/Program) [SA 2;4]
{Lead contact- Kevin McSweeney; FY'94 activity}
6. Institute formal process for considering ground water protection into permits. [SA 4]
{Lead contact- Kevin McSweeney; 2QFY'94 activity}
7. Formalize introduction of CSGWPP into regional guidance to states. [SA 1; 3; 4; 5]
{Lead contact- Bill Nuzzo; ongoing activity}

VIII.BARRIER 8 - OUTREACH/EDUCATION

1. Encourage inclusion of CSGWPP and WHP information in program outreach efforts to states and permittees.
[SA 4] {Lead contact- Kevin McSweeney; FY'94 activity}
2. Use inspection opportunities to provide education and outreach materials to permittees describing Pollution Prevention, BMPs, and ground water protection.
[SA 5; 6] {Lead contact- Tony Depalma; FY'95 activity}

COMPREHENSIVE GROUND WATER PROGRAM - REGIONAL ASSESSMENT

UNDERGROUND INJECTION CONTROL (UIC) PROGRAM

FINAL RECOMMENDATIONS

I. BARRIER 1 - RESOURCES

Encourage EPA/HQ to change Class V funding formulas for calculating allocations to states that will increase resources available to protect water supplies.

(Headquarters/Region/Program) [SA 1; 2; 4]

{Lead contact- Dave Delaney; FY'94 activity}

II. BARRIER 2 - INFORMATION

1. Encourage states to include appropriate quality latitude and longitude locational data for facilities with permitted UIC wells. (Region/Program) [SA 2; 4; 5]
{Lead contact- Dave Delaney; FY'94 activity}
2. Encourage states to include a minimum set of data elements in program information management systems to facilitate cross-program environmental analysis and information sharing that can support comprehensive resource protection. (Region/Program) [SA 5]
{Lead contact- Dave Delaney; FY'94 activity}
3. Encourage states to use automated information management systems to manage permitted UIC activity.
[SA 2; 3; 5]
{Lead contact- Dave Delaney; FY'94 activity}
4. Encourage states to enhance program information and information management systems so that they can support comprehensive resource protection. [SA 2; 3; 5]
{Lead contact- Dave Delaney; FY'94 activity}
5. Encourage states to make program information more accessible to local governments and organizations directing resource protection. [SA 2; 3; 5]
{Lead contact- Dave Delaney; FY'94 activity}
6. Encourage EPA to improve availability, accessibility and quality of EPA information and information management systems sufficiently to support broad cross program use by state, EPA and local programs to protect environmental resources. (Headquarters/Region/Program)
[SA 2; 3; 5]
{Lead contact- Dave Delaney; FY'94 activity}

III. BARRIER 3 - COORDINATION

1. Increase coordination of program activity with Federal Facility program. [SA 1; 3]
{Lead contact- Dave Delaney; FY'94 activity}
2. Encourage state program to participate in state multimedia inspection processes and to increase efforts to inform state inspectors about UIC issues. [SA 3; 4]
{Lead contact- Dave Delaney; FY'94 activity}
3. Encourage EPA/HQ to promote more inter-Regional transfer of information regarding pollution prevention, BMPs, and outreach educational materials appropriate to UIC and related programs. (Headquarters/Region/Program) [SA 3] {Lead contact- Dave Delaney; FY'94 activity}

IV. BARRIER 4 - GROUND WATER RESOURCE SOURCE IDENTIFICATION

Encourage formal EPA identification of critical resources that can be used by EPA and state programs to better direct program activity that will result in resource protection. (Region/Program) [SA 4]
{Lead contact- Dave Delaney; FY'94 activity}

V. BARRIER 5 - GROUND WATER ISSUES AWARENESS

Improve communication within EPA and with states to ensure better transfer of information about pollution prevention, BMPs, technology transfer that will increase resource protection. (Region/Program) [SA 2; 4; 6]
{Lead contact- Dave Delaney; FY'94 activity}

VI. BARRIER 7 - INSTITUTIONAL

Formalize inclusion of CSGWPP reference in UIC grant guidance. [SA 1; 3; 4; 5]
{Lead contact- Dave Delaney; FY'94 activity}

VII. BARRIER 8 - OUTREACH/EDUCATION

1. Encourage inclusion of CSGWPP and WHP information in program outreach efforts to states and permittees. [SA 4] {Lead contact- Dave Delaney; FY'94 activity}
2. Use inspection opportunities to provide education and outreach materials to permittees describing Pollution Prevention, BMPs, and ground water protection. [SA 5; 6] {Lead contact- Dave Delaney; FY'94 activity}
3. Encourage more extensive outreach targeting to state, local and private organizations that can support implementation of BMPs, bylaws, permits and pollution prevention that can support more comprehensive resource protection. (Region/Program) [SA 3]
{Lead contact- Dave Delaney; FY'94 activity}

COMPREHENSIVE GROUND WATER PROGRAM - REGIONAL ASSESSMENT

WATER QUALITY MANAGEMENT SECTION

FINAL RECOMMENDATIONS

I. BARRIER 1 - RESOURCES

II. BARRIER 2 - INFORMATION

III. BARRIER 3 - COORDINATION

1. Provide better communication of cross-program needs. The GWMS staff should be more aware of my Program's activities and vice versa. Education of our respective staffs will help open channels of communication.
{Lead contact- Dave Turin; FY'94 activity}
2. The GWMS should coordinate Technical Impracticability proposals and issues between my Program and the Waste Management Division for CERCLA/RCRA sites that currently impact or will impact surface-water quality.
{Lead contacts- Dave Turin/Doug Heath; FY'94 activity}
3. GWMS staff should work with the TMDL staff and investigate opportunities to control those sources.
{Lead contacts- Dave Turin/Doug Heath; FY'94 activity}

IV. BARRIER 4 - GROUND WATER RESOURCE IDENTIFICATION

V. BARRIER 5 - GROUND WATER ISSUES AWARENESS

The Program can better support State efforts in protecting ground water resources by improved communications at the EPA/State level through the CSGWPP process.
{Lead contact- Dave Turin; FY'94 activity}

VI. BARRIER 6 - GRANTS

VII. BARRIER 7 - INSTITUTIONAL

VIII. BARRIER 8 - OUTREACH/EDUCATION

COMPREHENSIVE GROUND WATER PROGRAM - REGIONAL ASSESSMENT

WETLANDS PROGRAM

FINAL RECOMMENDATIONS

I. BARRIER 1 - RESOURCES

N/A

II. BARRIER 2 - INFORMATION

N/A

III. BARRIER 3 - COORDINATION

1. Provide New England State Sole Source Aquifer (SSA) and Wellhead Protection Area (WHPA) maps to Region I Wetlands program to assist in identification of wetlands projects with potential for adverse impact to ground water (GWMS) [SA 3].
{Lead contacts- Ralph Abele/John Haederle; FY'94 activity}
2. Encourage State Drinking Water and Wetlands programs to consider impacts of new water supply wells on wetlands ecosystems (Region/State) [SA 3].
{Lead contact- Ralph Abele; FY'94 activity}

IV. BARRIER 4 - GROUND WATER RESOURCE IDENTIFICATION

N/A

V. BARRIER 5 - GROUND WATER ISSUES AWARENESS

N/A

VI. BARRIER 6 - GRANTS

1. Integrate ground water issues into grants guidance to states (HQ/Region) [SA 4,1w].

VII. BARRIER 7 - INSTITUTIONAL

N/A

VIII. BARRIER 8 - OUTREACH/EDUCATION

1. Coordinate EPA and U.S. Army Corps of Engineers public education and outreach efforts relative to ground water issues (HQ/Region) [SA 4,1w].

COMPREHENSIVE GROUND WATER PROGRAM - REGIONAL ASSESSMENT

INFORMATION MANAGEMENT PROGRAM

FINAL RECOMMENDATIONS

I. BARRIER 1 - RESOURCES

1. Provide adequate resources (Region) and support activities (Program) to assure continued program participation in efforts to protect ground water resources. (Region)(Program) [SA2;3]
{Lead contact- Chris Diehl; FY'94 activity}
2. Provide sufficient resources (Region) and support activities (Program) to increase the availability, assessability and quality of information in EPA information management systems. (Region/Headquarters) (Program) [SA2;3;5]
{Lead contact- Chris Diehl; FY'94 activity}
3. Provide adequate resources (Region) and support activities (Program) to support enhancement of EPA information and information management systems so that they can more effectively support resource protection. (Region/Headquarters) (Program) [SA3;5]
{Lead contact- Chris Diehl; FY'94 activity}
4. Provide resources (Region) and support activities (Program) to determine EPA program information and information system needs to support prioritization activities necessary for comprehensive resource protection. (Region)(Program) [SA3]
{Lead contact- Chris Diehl; FY'94 activity}

II. BARRIER 2 - INFORMATION

1. Facilitate Identification of EPA programs' information and information system needs that can support prioritization of program activity to protect resources. (Region) (Program) [SA2]
{Lead contact- Chris Diehl; FY'94 activity}
2. Facilitate Identification of information that EPA programs need to characterize and assess the threat of contaminants and regulated activity to environmental resources. (Region) (Program) [SA2]
{Lead contact- Chris Diehl; FY'94 activity}
3. Improve accessibility, availability, and quality of information that programs can use to prioritized program activity and that will support efficient,

comprehensive EPA and State protection of environmental resources. (Region/Headquarters) (Program) [SA2;4;5]
{Lead contact- Chris Diehl; FY'94 activity}

4. Promote acquisition of quality, appropriate latitude and longitude locational data for all EPA regulated facilities. (Region)(Program) [SA2;4]
{Lead contact- Greg Charest; FY'94 activity}
5. Provide information and encourage EPA and State programs to use a minimum set of data elements in data management systems to facilitate efficient data sharing, cross program analysis and comprehensive environmental resource protection. (Region)(Program) [SA5] {Lead contact- Chris Diehl; FY'94 activity}
6. Facilitate identification of ways that EPA information and information management systems can better support State and EPA efforts to consider environmental vulnerability and value when making program decisions. (Region)(Program) [SA3;4]
{Lead contact- Chris Diehl; FY'94 activity}
7. Facilitate Determination of whether there are information management issues related to acquisition, management, use of EPA and State monitoring data that make these data difficult to use to support comprehensive protection of water resources. (Region)(Program) [SA5]
{Lead contact- Chris Diehl; FY'94 activity}

III. BARRIER 3 - COORDINATION

1. Promote EPA, State and interstate dialogue on mutual uses of information to protect environmental resources. (Region)(Program) [SA3]
{Lead contacts- Chris Diehl/Greg Charest; FY'94 activity}
2. Promote increased access and information exchange between federal agencies. [SA3]
{Lead contact- Chris Diehl; FY'94 activity}
3. Promote regional program support to enhance EPA information and information management systems that will result in their broader use to protect the environment and resources. [SA3]
{Lead contact- Chris Diehl; FY'94 activity}

IV. BARRIER 4 - GROUND WATER RESOURCE IDENTIFICATION

1. Facilitate Identification of resource related

information needed by programs to make environmental decisions that will result in better resource protection. (Region)(Program) [SA2;4]
{Lead contact- Chris Diehl; FY'94 activity}

2. Facilitate Identification of EPA programs' need for contaminant source and regulated activity data necessary to prioritized program activity that can result in resource protection. (Region)(Program) [SA2]
{Lead contact- Chris Diehl; FY'94 activity}
3. Facilitate Determination of EPA programs' need for information from State and federal agencies that can support resource protection. (Region)(Program) [SA5]
{Lead contact- Chris Diehl; FY'94 activity}

V. BARRIER 5 - GROUND WATER ISSUE AWARENESS

Encourage discussion with States and within EPA about the importance of information and information management to CSGWPP. (Region) (Program) [SA1;2;6]
{Lead contact- Chris Diehl; Fy'94 activity}

VII. BARRIER 7 - INSTITUTIONAL ISSUES

Promote discussion about use of EPA information to support prioritization of program activity. (Region) [SA2]

VIII. BARRIER - 8 EDUCATION/OUTREACH

1. Facilitate Identification of ways to enhance public access to EPA information related to pollution prevention, environmental resources, sources of contamination and regulated activity that place the environment at risk and to environmental monitoring data that can support State and local resource protection. (Region) [SA6]
2. Facilitate identification of EPA information that local governments need access to that can support their resource protection efforts. (Region) [SA6]

COMPREHENSIVE GROUND WATER PROGRAM - REGIONAL ASSESSMENT

POLLUTION PREVENTION (P2)

FINAL RECOMMENDATIONS

I. BARRIER 3 - COORDINATION

1. Re-evaluate P2 Program Managers' roles on Region's CSGWPP committees. The Region's P2 Coordinators should consult with the CSGWPP committee on specific issues rather than as regular participants. (Program) [SA 2]
{Lead contact- Abby Swaine; ongoing activity}
2. Continue participation by the Ground Water Management Section on Region I Pollution Prevention Task Force (P2TF) as support to lead P2TF Water representative to maintain communication and ensure integration. (GWMS) [SA 2; 3] {Lead contact- Michele Notarianni; ongoing activity}

II. BARRIER 4 - GROUND WATER RESOURCE & SOURCE IDENTIFICATION

Decide whether geographic targeting within critical water resource areas makes sense for Region I Pollution Prevention Incentives for States (PPIS) grants and P2 AC&C funds, with close consultation of P2 Program Managers and Water Lead on P2TF. (Region) [SA 1; 2]
{Lead contact- Mark Mahoney; 2&3QFY'94 activity}

III. BARRIER 5 - GROUND WATER ISSUES AWARENESS

Present emerging issues and concerns related to ground water in a P2 forum, highlighting documented threats to ground water and the importance and role of P2 in ground water protection. (Program) [SA 1; 3]
{Lead contacts- Mark Mahoney/Abby Swaine; ongoing activity}

IV. BARRIER 7 - INSTITUTIONAL

Clarify what specific components of resource protection activities are P2 by Region I's interpretation to assist both EPA and States with identification and implementation of P2 activities. (Program) [SA 2; 3]
{Lead contacts- Mark Mahoney/Abby Swaine; 1QFY'94 activity}

V. BARRIER 8 - OUTREACH/EDUCATION

Coordinate development and distribution of related ground water and P2 outreach materials, based on identified needs, to address requests for P2 information by state ground water managers and local officials. (Program) [SA 1: 6]
{Lead contact- Abby Swaine; ongoing activity}

COMPREHENSIVE GROUND WATER PROGRAM - REGIONAL ASSESSMENT

PESTICIDES PROGRAM

FINAL RECOMMENDATIONS

I. BARRIER 1 - RESOURCES

1. Provide additional resources to influence the states in program development and implementation (e.g., collection of baseline and targeted monitoring activities) consistent with CSGWPP, since the components of the Pesticides Program which result in ground water protection are largely implemented by the Region I states. Responsible: Region I. Source: SA#5.
2. Provide additional resources to the Region I Pesticides Program to support Regional CSGWPP activities. Responsible: Region I. Source: SA#3.

II. BARRIER 2 - INFORMATION

Increase the availability and use of GPS to obtain latitude and longitude data. Responsible: Headquarters/Region I. Source: SA#4.

III. BARRIER 3 - COORDINATION

Improve support and coordination between Pesticides Program and Nonpoint Source, Bays/Near Coastal, and Public Water Supply Programs. Responsible: Ground Water Management Section/Pesticides Program. Source: SA#4. {Lead contact- Rob Koethe; FY'94 activity}

IV. BARRIER 4 - GROUND WATER RESOURCE IDENTIFICATION

No recommendations developed.

V. BARRIER 5 - GROUND WATER ISSUES AWARENESS

Improve awareness of state wellhead protection programs by state pesticides program. Responsible: Ground Water Management Section/Pesticides Program. Source: SA#4. {Lead contact- Rob Koethe; FY'94 activity}

VI. BARRIER 6 - GRANTS

Search for opportunities to improve timing with other grant program(s) in order to improve coordination of mid-year and end-of-year reviews. Responsible: Headquarters/Region I.
Source: SA#4.

VII. BARRIER 7 - INSTITUTIONAL

Create a mechanism for review of and concurrence with Generic Pesticide State Management Plans or review and approval of Pesticide-Specific State Management Plans. Ideally, this organization would be separate from the Region I Ground Water Policy Committee, but would regularly brief the Policy Committee on activities related to review/concurrence/approval. Responsible: Region I.
Source: SA#2.
{Lead contact- Rob Koethe; FY'94 activity}

VIII. BARRIER 8 - OUTREACH/EDUCATION

No recommendations developed.

Appendix E

COMPREHENSIVE GROUND WATER PROGRAM - REGIONAL ASSESSMENT

LIST OF HEADQUARTERS RECOMMENDATIONS

I. WASTE MANAGEMENT DIVISION

A. RESOURCE CONSERVATION AND RECOVERY ACT - C (RCRA C)

BARRIER 7 - INSTITUTIONAL

1. Improve NCAPS - RCRA C corrective action priority methodology calculation to include additional resource based factors; and/or improve Environmental Benefits Review for considerations GW and water resource factors. (Headquarters/Program) [SA 2] {Lead contact - Frank Battaglia, Ernie Waterman; FY '95}
2. Initiate defining "use" and "value" as related to the program, and participate with other programs to arrive at consistent definitions; related to setting corrective action clean-up limits and priority setting (under NCAPS). Identify the type of information needed for their determination, and cooperatively initiate data collection. (Program) (Headquarters/ Region) [SA 2,4] {Lead contact - Frank Battaglia; FY '95}
3. Promote with state programs to require accurate and certified (by engineer, surveyor, etc.) latitude/longitude locational information (one second accuracy). Make appropriate changes in the instructions for filing the forms. (Headquarters/Program) [SA 5] {Lead contact - Frank Battaglia; FY 95}
4. Promote institutionalizing collection of accurate latitude/longitude in service industries such as banking, insurance, realtors and mortgage industries. (Headquarters/Region/Program) [SA 4;5] {Lead contact - Frank Battaglia; FY '94/95}

B. SUPERFUND PROGRAM

BARRIER 3 - COORDINATION

Provide specific vision/direction, funding and encouragement to the regions, to support and incorporate comprehensive ground water planning into programs' activities and priorities. (Headquarters) [SA 1]

BARRIER 5 - GROUND WATER ISSUES AWARENESS

1. Encourage the consistent incorporation of the new comprehensive approach into agency operating guidance

and strategic planning. (Headquarters/Program) [SA 3]
{Lead contact- Dennis Huebner; ongoing activity}

2. Clearly articulate what EPA expects the states to do in support of CSGWPP across all programs and what regional and national programs are doing to remove barriers, including changes in statutes and guidances where necessary. (Headquarters/Region/Program) [SA 4; 6]
{Lead contact- Dennis Huebner; ongoing activity}

BARRIER 7 - INSTITUTIONAL

1. CERCLA/NCP specify methods for determining cleanup approaches which may restrict flexibility in promoting a state directed resource-based approach to remediation. During reauthorization of CERCLA, national programs should recommend changes for consistency with CSGWPP Guidance. Such changes may include deletion of reference to federal ground water classification system (in deference to state classifications), and clarification for preference for rapid restoration where warranted based on the use and value of the resource. (Headquarters/Program) [SA 4]
{Lead contact- Dennis Huebner; FY'94 activity}
2. Encourage creative use of Supplemental Environmental Projects (SEPs) in settlement of Superfund liabilities. For example, can we get PRPs to finance local Wellhead Protection Programs in areas in close proximity to the sites? The outcome of such efforts would be to further protect the existing water supplies so that the need for additional sources, including ground water at the site, shall be minimized. By financing local prevention activities, PRPs would be providing the regulatory agencies greater comfort in allowing less aggressive approaches, including technical impracticability waivers, while minimizing their potential future liability. (Headquarters/Region/Program) [SA 4]
{Lead contact- Ira Leighton; ongoing activity}

C. UNDERGROUND STORAGE TANK (UST) PROGRAM

BARRIER 1 - RESOURCES

Increase resources to UST program for increased leak detection activities and for obtaining GPS locational data (HQ/Region/state). [SA 2, SA 4,4b].
{Lead contact- Myra Schwartz; FY'94 activity}

BARRIER 7 - INSTITUTIONAL

Evaluate the desirability of increased information sharing with states on health-based risk issues relating to heating

oil petroleum spills, and whether state standards are the most appropriate and effective means of ensuring the protection of public health (HQ/Region/state) [SA 3,2h].
{Lead contact- Myra Schwartz; FY'94 activity}

II. WATER MANAGEMENT DIVISION

A. PUBLIC WATER SUPPLY SUPERVISION PROGRAM

BARRIER 2 - INFORMATION

1. Encourage HQ to include mandatory data fields for latitude and longitude data into HQ's PWSS modernized system that will replace FRDS. (Headquarters/Program)
{Lead contact - Bob Mendoza; FY '94/95 activity}
2. Promote with HQ's that latitude and longitude be a mandatory reporting requirement under future SDWA regulations. (It is not currently required).
(Headquarters/Program) {Lead contact - Bob Mendoza; FY '94/95 activity}
3. Promote with HQ's that the new PWSS modernization program be able to link with GIS systems for integrated data management. (Headquarters/Program) {Lead contact - Bob Mendoza; FY '94 activity}

BARRIER 3 - COORDINATION

Exchange guidance between PWSS and GW for review; annual guidance for s.106 national/Regional ground water, UIC (national), and PWSS (national/Regional) guidance. (Program)
{Lead contacts - Bob Mendoza (PWSS) and Jane Downing (GWM); FY '95 activity}

BARRIER 7 - INSTITUTIONAL

1. Within the context of SDWA reauthorization, will continue to promote need for and likelihood that small and medium systems should demonstrate their ability to comply with the SDWA requirements, including planning and prevention activities for source water protection.
(Headquarters/Program) {Lead contact - Bob Mendoza; FY '94/'95 activity}
2. Promote with HQs to develop the PWS modernization system with the capability of providing system upgrades (for state PWSS data systems) as new regulations are issued. (Headquarters/Program) {Lead contact - Chris Ryan; FY '94/95 activity}

B. STORMWATER (NPDES) PROGRAM

BARRIER 2 - INFORMATION

Improve the quality, availability and on-line accessibility of PCS data to program and others.

(Headquarters/Region/Program) [SA 2; 3; 5]

{Lead contact- Ronnie Harrington; FY'95 activity}

C. WETLANDS PROGRAM

BARRIER 6 - GRANTS

Integrate ground water issues into grants guidance to states (HQ/Region) [SA 4,1w].

BARRIER 8 - OUTREACH/EDUCATION

Coordinate EPA and U.S. Army Corps of Engineers public education and outreach efforts relative to ground water issues (HQ/Region) [SA 4,1w].

D. UNDERGROUND INJECTION CONTROL (UIC) PROGRAM

BARRIER 1 - RESOURCES

Encourage EPA/HQ to change Class V funding formulas for calculating allocations to states that will increase resources available to protect water supplies.

(Headquarters/Region/Program) [SA 1; 2; 4]

{Lead contact- Dave Delaney; FY'94 activity}

BARRIER 2 - INFORMATION

Encourage EPA to improve availability, accessibility and quality of EPA information and information management systems sufficiently to support broad cross program use by state, EPA and local programs to protect environmental resources. (Headquarters/Region/Program)

[SA 2; 3; 5] {Lead contact- Dave Delaney; FY'94 activity}

BARRIER 3 - COORDINATION

Encourage EPA/HQ to promote more inter-Regional transfer of information regarding pollution prevention, BMPs, and outreach educational materials appropriate to UIC and related programs. (Headquarters/Region/Program)

[SA 3] {Lead contact- Dave Delaney; FY'94 activity}

III. AIR MANAGEMENT DIVISION

A. PESTICIDES PROGRAM

BARRIER 2 - INFORMATION

Increase the availability and use of GPS to obtain latitude and longitude data. Responsible: Headquarters/Region I.
Source: SA#4.

BARRIER 6 - GRANTS

Search for opportunities to improve timing with other grant program(s) in order to improve coordination of mid-year and end-of-year reviews. Responsible: Headquarters/Region I.
Source: SA#4.

IV. PLANNING AND MANAGEMENT DIVISION

A. INFORMATION MANAGEMENT PROGRAM

BARRIER 1 - RESOURCES

1. Provide sufficient resources (Region) and support activities (Program) to increase the availability, assessability and quality of information in EPA information management systems. (Region/Headquarters) (Program) [SA2;3;5]
{Lead contact- Chris Diehl; FY'94 activity}
2. Provide adequate resources (Region) and support activities (Program) to support enhancement of EPA information and information management systems so that they can more effectively support resource protection. (Region/Headquarters) (Program) [SA3;5]
{Lead contact- Chris Diehl; FY'94 activity}

BARRIER 2 - INFORMATION

Improve accessibility, availability, and quality of information that programs can use to prioritized program activity and that will support efficient, comprehensive EPA and State protection of environmental resources. (Region/Headquarters) (Program) [SA2;4;5]
{Lead contact- Chris Diehl; FY'94 activity}