

U.S. Environmental Protection Agency
Region IV
Atlanta, Georgia

Ground-Water Roundtable
January 15-17, 1992

MEETING SUMMARY

February 1992

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I. INTRODUCTION

Representatives of Georgia, Mississippi, Alabama, Florida, Kentucky, North Carolina, South Carolina, and Tennessee attended the Region IV Roundtable. The State participants represented a variety of State agencies with ground-water-related responsibilities, including agricultural agencies, health agencies, and environmental protection agencies. A complete list of attendees is attached.

The Roundtable was structured so that State participants met in small break-out groups to discuss specific elements of a Comprehensive State Ground-water Protection Program (CSGWPP). The break-out group discussions were then summarized in plenary sessions. This report summarizes the presentations made at these plenary sessions.

A. Opening Plenary Session

Pat Tobin, Deputy Regional Administrator, Region IV

Mr. Tobin presented a historical perspective on ground-water protection activities, noting that the States have accomplished much since the mid 1970s. The CSGWPP approach builds on these efforts and is meant to address gaps in ground-water protection and to foster greater cooperation and coordination among agencies with ground-water protection responsibilities. He stressed the importance of the States' input that would be obtained during the course of the Roundtable.

Ray Cunningham, Director, Water Management Division, Region IV

Mr. Cunningham told the States that the Agency is trying hard to move away from an old approach of "widget counting" to a new approach that focuses on environmental results. He said that the States will play a key role in defining this new approach. He introduced the three main questions that the States would focus on over the course of the Roundtable:

- What should be the elements of a CSGWPP?
- What should be the adequacy criteria for those elements?
- What should be EPA's oversight role?

Allan Antley, Associate Director, Water Management Division

Mr. Antley presented slides which summarized the Task Force Report. He noted that the States were participants in the development of this policy document and that the goal and principles outlined in the strategy underlie the CSGWPP approach. He concluded his remarks by listing 6 benefits that would accrue to the States through participation in the CSGWPP approach:

- 1) Better protection of the ground-water resource;
- 2) More efficient and effective use of human and financial resources;
- 3) Greater flexibility for States to target their priorities;
- 4) Incentive funding from EPA;
- 5) Consistent deference to State priorities by EPA programs; and
- 6) Integration of ground-water data across all programs.

Ramona Trovato, Director, Ground-Water Protection Division, EPA HQ

Ms. Trovato presented Headquarters perspective on the CSGWPP approach. She emphasized that the Roundtables represented a new approach to guidance development. She said that in developing the program, EPA would not pursue a "business as usual approach." Development of the CSGWPP approach depends heavily on early and detailed input from the States who will ultimately have to implement the approach. She emphasized that the CSGWPP approach emphasizes greater coordination and cooperation among ground-water related programs, but that no individual program would be absorbed by a CSGWPP.

Question and Answers for the First Panel of Presenters

Question: Will comments coming out of this Roundtable be used solely by the Region in developing its own approach to dealing with the States, or will they be used in formulating national guidance which may be somewhat different from what was recommended by Region IV States?

Answer: Allan Antley: There will be national guidance, but it will provide significant flexibility to the Regions to implement the CSGWPP approach. The guidance will contain a "menu approach" that will allow the Regions to decide how they will run the program. Ramona Trovato: There will be a national guidance which will reflect the input received from all States. However, since most States seem to be coming up with the same sorts of issues and suggestions, the guidance should reflect State concerns.

Question: How will EPA coordinate with other Federal Agencies such as DOE, USGS, DOD, and others?

Answer: Ramona Trovato: We are currently considering a Federal Agencies Roundtable that would deal with these issues. This is a concern that has been voiced at most of the Roundtables and while we are already dealing one-on-one with certain Federal agencies, its clear that we will have to make a more concerted effort. Pat Tobin: Regions should also consider holding a Federal agency roundtable with regional offices of Federal agencies.

Question: How will local governments be included in the CSGWPP approach?

Answer: Allan Antley: EPA has no authority to mandate that locals participate or otherwise move toward comprehensive programs. However, in order to have a Comprehensive Program, all of the States ground-water-related activities need to be included. Thus States have to try to include local laws and activities in the overall comprehensive approach.

Question: To what degree will States be able to move money from current programs that may not be high priority within the State to programs that are a higher priority?

Answer: Pat Tobin: Strategic planning is becoming a priority at the Agency. Greer Tidwell is on a work group that is looking for new ways to hold Regions and States accountable. This new approach focuses more on environmental outcomes and indicators than on traditional measures such as the number of enforcement actions or inspections. The workgroup's goal is to decrease STARS commitments by as much as 50 percent. This effort will allow States to approach environmental protection more strategically, as well. As for funding, the Agency is looking for ways to let the States use EPA grant dollars on priorities the States specify. There are statutory constraints that keep the Agency from doing some of this, but the move is clearly toward greater State flexibility to allow them to focus more of the resources available to them on their priorities. Finally, as we move to this new way of operating, EPA needs input from the States on what EPA's oversight role should be.

Question: Should we rule out legislative tinkering that would make it easier to let States use grant dollars flexibly?

Answer: **Pat Tobin:** We can't expect that there will be too much opportunity for legislative change in the **near term**. But we can provide our ideas on what should be changed to Headquarters' **staff** so that when they have opportunity to meet with Hill staff, they'll be able to offer constructive suggestions. **Ramona Trovato:** We are anxious to hear your ideas on statutory and regulatory changes that would make it easier to implement the CSGWPP approach. RCRA, SDWA, and CWA are all up for reauthorization in the near future, so the Agency will have a chance to make suggestions. For that reason, we are anxious to get your ideas on what needs to be changed.

Question: We understand that other Regions have already held their Roundtables. Will we be told what conclusions they came to so that we can factor this into our discussions?

Answer: No. The desire is for each Region to address the ground-water issues of their respective regions. Later, comments and reports from other Regions can be made available.

Question: Will RCRA reauthorization deliberations take the Wellhead Protection Program into account?

Answer: **Ramona Trovato:** That would be ideal, but might not happen. Right now there are just too many conflicting and competing ideas on what needs to occur during RCRA reauthorization. **Clare Donaher:** In some discussions at Headquarters, the GWPD staff have been urging RCRA staff to consider the Wellhead Protection Program as they formulate their positions. Your interest and input on this issue will be reported back to the appropriate staff.

Question: Have any efforts to coordinate other Federal agency funding so that it will support the CSGWPP approach taken place?

Answers: **Ramona Trovato:** There have been some discussions with some agencies, namely the Department of Agriculture and the USGS. But there's still a lot that needs to be done.

B. Second Panel of Presenters

Fred Chanania, Special Assistant, Office of Solid Waste, EPA HQ

Mr. Chanania emphasized that it is not business as usual in the RCRA program. RCRA Subtitle C may be difficult to change so that it better fits in with the CSGWPP approach, but RCRA Subtitle D is wide open and very amenable to the CSGWPP approach. Furthermore, the 1992 RCRA implementation plan encourages States to set their own environmental priorities and then provides flexibility which allows States to fund these priorities. Finally, Mr. Chanania emphasized that over the course of the Roundtable, State participants should articulate specific examples of where different programs don't intersect cleanly or comfortably and try to focus on the benefits of participating in the CSGWPP approach.

James Kutzman, Associate Director, Waste Management Division, Region IV

Mr. Kutzman provided a historical look at the genesis of the new approach outlined in the Task Force Report. He noted that it arose from an effort to assure that ground-water is protected as a resource, to avoid overly prescriptive new federal legislation, and to resolve as much as possible conflicts and redundancies in ground-water protection programs.

Stephen Johnson, Director, Field Operations Division, Office of Pesticide Programs, EPA HQ

Mr. Johnson outlined the new Pesticides and Ground-Water Strategy and pointed out how closely coordinated and intertwined the Pesticides strategy and the CSGWPP approach really are.

Rodney DeHan, Assistant Chief, Bureau of Drinking Water and Ground-Water Resources, Florida Department of Environmental Regulation

Dr. DeHan suggested that there is already a lot of activity at the State level. In particular, he listed all of the Florida State statutes that in some way promote aspects of ground-water protection. He presented a list of benefits that will accrue to States that pursue the CSGWPP approach:

- A common definition of the issue of ground-water protection will emerge.
- Society's ground-water protection goal will be defined.
- Realistic objectives can be developed within the context of the States characteristics, needs, and priorities.
- An inventory of State resources available to deal with ground-water protection issues will be developed.
- Resources can be pooled across programs for use on similar objectives.
- Human and financial resources can be distributed so that State priorities are addressed.
- The ground-water protection bureaucracy within the States will be streamlined.
- Redundancies in ground-water protection efforts will be weeded out.
- A system of one-step permitting may be more likely.
- Lawmakers, the media and the general public will be better educated on the holistic approach to ground-water protection.

Dr. DeHan also listed several obstacles to the successful implementation of this new approach:

- Political hurdles, (growth vs environmental protection).
- A lack of adequate funding to carry out all of the activities implicit in a comprehensive approach.
- ~~Competition~~ ^{Coordination} with the private sector for qualified staff necessary to run the various programs.
- Basic research on ground-water issues is lacking.
- Transfer of technical expertise is lacking.
- Turf and jurisdictional problems among the various State agencies.
- Concern about the environment ebbs and flows. When it ebbs, interest in implementing the CSGWPP approach may wane.

- Unbridled growth places significant new strains on the ground-water resource.
- The traditional approach has a lot of inertia that will be difficult to counteract.
- Special interest lobbying may make it difficult to address certain unaddressed sources of contamination.
- Nature has cursed Florida with highly vulnerable ground-water resources.

Greer Tidwell, Regional Administrator, Region IV

Mr. Tidwell was very supportive of the Agency's Ground-Water Strategy, the Regional Roundtable and efforts to develop CSGWPPs. He stressed the importance of state input in developing National Guidance and in establishing programs that are responsive to state's priorities. He also indicated that by his involvement on a National Workgroup that is looking at accountability systems, the principles and intent of the ground-water strategy can be considered.

II. CSGWPP ELEMENTS AND ADEQUACY CRITERIA

The following section provides a summary of State comments that were presented during the plenary sessions of the Roundtable on the elements and adequacy criteria of a CSGWPP. The summary has been organized by element. Each element summary includes a discussion of the points of agreement and disagreement among State participants and outlines the States' proposed changes to the element.

ELEMENT 1 **STATED GOAL**

Points of Agreement on Element 1

- A State's goal should be well defined and broadly understood by all affected parties within the State.
- All parties that will be affected by the goal should be involved in its development.
- States' goals should be at least as stringent as the Federal goal. However, States should be able to set a more stringent goal.
- The goal should not be too specific. Objectives aimed at achieving the overall goal can be more specific.
- The goal should stress protection and prevention as key components.

Points of Disagreement on Element 1

- Many states thought that a goal should be embodied in statutes so as to have some form of legally binding status, while others believe that current statutes adequately control pollution and a policy statement in the CSGWPP would suffice.

Issues

- State participants discussed whether a national (EPA) ground-water policy goal, as well as the CSGWPP goal, should address issues outside the responsibility of EPA (such as ground-water quantity, public health and conservation). Some pointed out that since EPA has no jurisdiction over quantity issues it should be left out. Others noted that a State's program can not be comprehensive without some discussion of quantity and conservation issues. In the broader context, the national goal, and States' goals, should include all issues and elements necessary to protect and conserve the resource regardless of jurisdictional or regulatory responsibility. They noted that even if such a discussion is included in the CSGWPP, EPA need not be involved in regulating quantity and should not review the portion of the CSGWPP that deals with quantity.

ELEMENT 2
DEFINE ROLES, RESPONSIBILITIES, AND COORDINATION MECHANISMS

Points of Agreement on Element 2

- This element should address the roles of three main groups of players:
 - Intra-state parties, including both State agencies and local governments;
 - EPA; and
 - Bordering States.

Intra-State Parties:

- States should identify a lead agency, coordinating committee or similar body to have overall responsibility for oversight and coordination of the CSGWPP, the degree of authority should be appropriate for particular states (e.g., coordination v. authority).
- The lead agency or body should be established by the legislature, governor or other appropriate state officials.
- That lead agency should establish interagency committees to track progress and assure coordination among agencies.
- States should decide whether or not to use MOUs/MOAs to formalize inter-agency coordination, but some mechanism to clarify program roles and responsibilities should be established.
- States should develop a matrix that shows the responsibilities and activities of all agencies, non-governmental organizations, and local government entities that have ground-water responsibilities. This matrix would allow States to assess where redundant activities are occurring and where gaps exist. The analysis should focus on statutory authorities.

Bordering States:

- A coordinating mechanism needs to be established with bordering States, including guidelines or procedures for dealing with differences in managing joint resources.

EPA:

- EPA's role should be as a negotiator. EPA should not dictate what States should do; rather EPA should negotiate approval of the CSGWPP with the States in accord with each State's unique characteristics.
- EPA should encourage cooperation among state and other federal agencies.
- EPA should ensure that States are implementing their CSGWPPs and should provide feedback to States on their programs and implementation status.
- EPA's main role is as the provider of funding. The review process will have to be based on the funds available. Without funding, there can be no program.

- In judging the adequacy of this element, EPA should look for evidence of linkage among the important players and for clear delineation of roles.

Issues

- If EPA is running a program within a State, what responsibility will the State have to define EPA's role?
- How detailed should roles and responsibilities be to prevent misunderstandings and assure adequate coordination yet not to inhibit flexibility to meet changing needs?

ELEMENT 3
PROGRAM PLAN AND MECHANISM FOR DOCUMENTING PROGRESS

Points of Agreement on Element 3

- This element should remain flexible so that States can define their own mechanisms for documenting progress.
- This element should focus on progress made toward developing a CSGWPP plan, and should not target useless quantitative measures.
- Clarification is needed between a program and a plan.
- The State participants wondered why this element was included at all. It appears to duplicate several other elements of a Comprehensive Program. For example, a plan would include a discussion of who is responsible for various activities; this is duplicative of element 2.

Points of Disagreement on Element 3

- Some participants felt that the definition should be changed so that it includes a list of items EPA will require to be reported in order for the State to adequately document its activities in implementing a CSGWPP.
- One participant thought the element title should be changed to Records and Recordkeeping.
- Most states thought lead agencies should be designated; other states thought this would lead to turf battles and other difficulties.

ELEMENT 4
COMPREHENSIVE ASSESSMENT OF AQUIFER SYSTEMS

Points of Agreement on Element 4

- An adequate aquifer assessment should generally contain details on the following components to the extent feasible:
 - The aquifer should be hydrogeologically defined; this includes defining the geology, chemistry, and hydrology of the aquifer.
 - The size, location, and utilization (past, present and future) of the aquifer should be defined.
 - The assessment should lead to an understanding of the vulnerability of the aquifer and risks to human health.
 - If applicable, an aquifer assessment should include some modeling of the aquifers' characteristics and vulnerability. In some settings, modeling is not an appropriate assessment tool.
 - An assessment program should include procedures for updating the assessment as needed.
- This element should be closely linked to elements 2, 6, and 7:
 - Element 2 discusses roles and responsibilities. One agency or bureau needs to be accountable for coordinating all assessment activities and updating the assessment on a regular basis.
 - Element 6 deals with priority setting. The aquifer assessment should be an important component of priority setting.
 - Element 7 includes monitoring and data management. Updating aquifer assessments will require monitoring and the accessibility of assessment data will depend on the data management systems.
- As part of the assessment program, States should map their aquifer resources, including recharge and other areas of vulnerability.
- The assessment will not take the place of site specific monitoring and testing. It will only serve as a starting point for setting priorities and determining control measures.
- Information from local levels of government can be very useful to the overall assessment. Local governments should therefore be included in the assessment process.

Points of Disagreement on Element 4

- Participants couldn't agree on the degree of flexibility EPA should afford the States. Some felt that EPA should establish a minimum set of criteria that would define a technically adequate assessment. Others felt that if a state has performed aquifer delineations/assessments and that information is appropriately formatted and can be used in making ground-water protection decisions, then this element has been satisfied. Finally, still others voiced the opinion that if a State can differentiate use, value, and vulnerability and can provide a reasonable rationale for

their approach to assessment, EPA should accept the assessment as adequate.

Issues

- Aquifer ~~assessment~~ is very resource intensive. States may have to orient their aquifer assessments based on specific objectives. Further, if EPA sets up a minimum standard, it should be based on funding available to do aquifer assessment work.
- Aquifers that cross State boundaries present a particular challenge. There should be some consistency in the way such an aquifer is assessed. Accomplishing this objective may be difficult but should be addressed as part of Element 2.
- Aquifer assessments can be used in a variety of ways, including applicability to siting criteria, permit issuance, prioritization and particularly public education.

ELEMENT 5
POTENTIAL CONTAMINATION SOURCE INVENTORY

Points of Agreement on Element 5

- A ~~comprehensive~~ inventory of all sources is impossible. As such, resources should be focused on contamination sources in high-priority ground waters as determined by such items as use and vulnerability, and/or based on the magnitude of potential ground-water contamination from a specific source, especially impacting human health.
- The adequacy of a State's source inventory should depend on how well the source inventory is tied to aquifer vulnerability assessments, baseline conditions and water quality classifications. High priority areas should have more detailed inventories.
- States should use ground-water classification systems to choose which threats on the inventory to address.
- The inventory needs to be updated on a regular basis; procedures for doing so should be clarified.
- States should be encouraged to use SARA Title III data to do their source inventories. EPA should facilitate this.
- Nonpoint sources of pollution need to be considered in the inventory.
- Meaningful inventories of minor pollution sources can only be carried out by local governments.

Points of Disagreement on Element 5

- The need for this element was questioned by many State participants, while others considered an inventory to be a key element. Most States do not presently conduct contamination source inventories. The value of a potential source inventory was particularly questioned. Why worry about potential threats when there are many actual contaminating sources that are currently going unaddressed. Furthermore, this could become a politically difficult issue because companies do not like to see their names on lists of potential contaminators. Getting states to the point that they can effectively deal with known problems is a large enough task. The purpose of this element should be closely examined since there may be limitations on what a state can do with potential sources.
- States could not agree on whether the inventory should be consolidated at the State level. Some ~~felt that~~ each program ought to keep its own inventory while others felt that in order for the inventory to be comprehensive, it should focus on the whole State. Still others thought that the ~~potential~~ source inventory should be done at the local level. Linkage among state, federal ~~and~~ local agencies is important.

Barriers

- It would be particularly difficult to inventory currently unregulated and non-point sources of contamination.
- More sources are known now than most states are capable of managing.

- Developing inventories are resource intensive. Progress on this element will be difficult.
- Data are best collected at the local level but currently is not widely conducted; changing this pattern will not be easy.
- Inventories need to be updated and kept current to be useful.
- Automated state systems which are compatible with Federal systems are needed.
- States do not have funds to inventory potential sources of pollution, especially from non-permitted sources.

ELEMENT 6
PRIORITY SETTING FOR ACTIONS TAKEN TO PROTECT OR REMEDIATE THE RESOURCE

Points of Agreement on Element 6

- All States ~~will~~ not be able to set up identical prioritization schemes. EPA needs to be flexible in determining the adequacy of this element.
- Ground-water classification systems used by states, need not be identical, but, if used, should at least contain water quality, vulnerability and use data.
- This element should only focus on priorities for protection/prevention activities. It should not include priorities for remediation, which should be addressed by Element 11.
- State participants discussed criteria that a State might use in setting ground-water protection priorities. These include the following:
 - Vulnerability of the ground water to contamination;
 - Population served and population projected;
 - Environmental significance of the ground water;
 - Whether the ground-water resource is hydrologically connected to important surface water systems;
 - Tradeoffs between the cost of protecting the ground water and the cost of replacing the ground water as a drinking water source;
 - Determination of critical water supplies (e.g., serving large numbers of people, salt water intrusion areas, high individual use areas);
 - Risks to human health of potential contamination;
 - Availability of water and its accessibility, and associated economic considerations;
 - Relative importance, and trade-offs, of the land use that would be affected by protecting the ground water;
- States should rank sources of contamination and should link actual sources of contamination to specific contamination sites.
- Public ~~participation~~ and education are important in priority setting.
- States ~~should~~ have the flexibility to use prioritization criteria as they see fit. Once a State has set priorities, EPA should assure that funds available for ground-water programs can be used to address established priorities. This includes authority to restructure programs and where possible to redirect dollars across program lines.
- The States identified possible steps that a State would follow in setting their priorities. States should:
 - Establish legislative authority for classifying ground water;
 - Classify the ground-water resources within their boundaries;

- Map and delineate resources;
 - Identify existing and projected uses;
 - Establish discharge regulations for obvious sources; and
 - Set priorities for contamination prevention activities.
- State, local and regional governmental bodies all should be involved in defining ground-water priorities.
 - The results of the priority-setting should lead to refining aquifer classifications in response to priorities (e.g., well-head protection, high recharge areas, future public water supply, sole source aquifer) followed by implementing water use and discharge regulations, and coordination among all levels of government.
 - Public education is needed, particularly to address non-point and unregulated sources of contamination.

Points of Disagreement on Element 6

- Some State participants stated that population should be a key factor in setting priorities. Others noted that this was unfair because it discriminates against rural populations who are likely to have the least protection as well.

Barriers

- States need to have legislative authority in order to develop prioritization mechanisms that will stick.
- Federal programs are not being implemented consistently with regard to ground-water standards. This makes it difficult to set priorities across programs.
- States currently do not have the flexibility to move money between programs. This means that State priorities can not always be addressed.
- Risk assessments are frequently overwhelmed by uncertainties.

ELEMENT 7
MONITORING, DATA COLLECTION, AND DATA ANALYSIS ON THE
NATURE AND QUALITY OF GROUND-WATER

Points of Agreement on Element 7

- The definition should be changed by replacing the words "management information system" with something less global. The data management system should focus on the nature and quality of ground water. More specifically, information should be classified by aquifer characteristics, sources of contamination, and specific contamination sites.
- The distinction needs to be made between a resource protection approach (data intensive; classification, standards and use based) and a source reduction approach (site focused). While resource protection strategies are clearly preferable, source reduction strategies take considerably less data and resources to initiate.
- The system should contain data on the following six components:
 - Sources of contamination, such as land uses, industrial polluters, etc., listing all permitted facilities;
 - Pathways through which the contamination enters the aquifer; i.e., recharge areas, hydrogeologic conditions, susceptibility to impact, etc.;
 - Structure and condition of aquifers; i.e., well locations, mapping data, sampling locations, current and background conditions, etc.;
 - Models linking contamination sources with ground-water contamination;
 - Where applicable, conceptual models that characterize the resource;
 - Data base management system that is spatially based (GIS is desirable, but programs can be operated without it).
- Many states will also want to integrate information on water usage and for management purposes.
- The adequacy of the data system depends on the objective the State is trying to meet with its data system. The needs of the regulators will be different if they are trying to establish a classification system than if they are trying to track sources so that contamination can be reduced.
- Adequacy should be judged based on the outputs. Does the data system supply information that is useful to ground-water protection managers?
- This notwithstanding, States should have data sufficient to determine the character and condition of their aquifers. This will require a plan for measuring and assessing baseline conditions.
- EPA should not define adequacy based on specifications for a data management or monitoring system, however, there should be consistency in how data is reported.
- While ground-water program data collection under different programs may not have to collect the same ground-water data, minimum data elements, such as quality, quantity, temporal and

spatial considerations should be specified. Data meeting these minimum standards should be entered into a standard system, while non-standard data could be used by each program for its own needs.

- GIS systems are useful and even desirable, but the adequacy criteria for this element should not mandate that States create these systems.
- Ambient monitoring data should be consistent across the various agencies. While this is not a necessity, such consistency would enable more careful assessments of water conditions. Clearly, however, most data collection will remain project specific and opportunistic.
- The data management system should include some component which allows decision makers to link contamination to specific sources, and should allow states to coordinate use of the system across program lines.
- States should assess their current data management/collection systems and should develop a plan for improving them. These plans should be specific in dealing with different components of the data management/collection systems (i.e., ambient monitoring data, contaminated sites, data availability, participating groups, needs, operating procedures, etc.). The plans should indicate how data will be collected and managed, how quality will be maintained and how data will be linked to decision-making. Plans need to be based on realistic assessments of existing data management and resources available.

Points of Disagreement on Element 7

- State participants could not agree on the need for consistency in the data collected by the States under mandated Federal programs. Some argued that having all Federal programs require the same data from their monitoring would be a good beginning toward assuring data consistency. Others said that this couldn't be done without a legislative fix and should therefore not be considered. The same can be said for State-run programs.
- State participants could not agree on the most efficient method of storing and accessing data. On one hand, uniform data standards and centralization of storage has advantages. On the other hand, it may be more practical to leave data de-centralized, yet make accessible to all users, e.g., through a network. If the latter, it is extremely important to log data entries sufficiently.

Barriers

- Developing and maintaining data management systems can be very resource intensive. This element ~~can~~ not be adequately implemented without adequate funding. However, States should ~~not wait~~ for new funding; rather, they should do what they can with currently available resources.
- Data being currently collected by the various ground-water-related programs is collected for different reasons and under different mandates. This leads to having incompatible data. Another way to say this is that existing data collection systems are opportunistic and driven by the programs that they support. Issues of consistency and accessibility are also concerns.
- Different States have different capabilities and resources (such as those necessary to set up and run data management systems) as well as differing legislative powers and coordination among environmental agencies.

- EPA data collection and management standards and requirements are inconsistent between programs.
- Agencies ~~realizing~~ the costs of expanded or standardized data collection requirements will not directly ~~reap~~ the benefits. This reduces the incentive for those agencies to participate.

Action Items for EPA

- EPA should assure that data collected under Federal programs is collected in the same format. This suggests a list of minimum monitoring protocols, for instance.
- EPA should be a clearing house for all data collected under Federal programs (including USGS) to facilitate data transfer.

ELEMENT 8
ADMINISTRATIVE MECHANISMS TO MEASURE THE ENVIRONMENTAL
RESULTS OF THE STATE'S GROUND-WATER PROTECTION PROGRAMS

Points of Agreement on Element 8

- This is a very important element. Most States have standards or some other way of measuring the results of their ground-water remediation and contamination prevention efforts. These will likely need to be reviewed and revised by the States.
- The definition is very cumbersome and needs to be simplified.
- The definition should include health concerns.
- This element must be closely tied to and linked with Element 2 (Roles and Responsibilities). Accountability should be clear on this element.
- States must be willing to adopt Federal standards or develop their own standards if Federal standards don't exist.
- Standards should be environmentally based (e.g., MCLs). They should not include quotas for work outputs such as inspections, permits written, etc. The type of standard to be used depends on the contaminant, the ground water, and other factors. States should use strategic indicators (e.g., quality of the ground water) instead of tactical indicators (e.g., number of permits issued).
- Aesthetics and narrative standards should also be used as appropriate. Narrative standards should be based on, in order of availability, MCLG's, health advisories, known carcinogenic/mutagenic values and the literature. Performance standards, such as best management practices, should also be utilized.
- States should have a good quality assurance program to ensure that the data used to measure environmental results is good. In this regard, lab certification programs are beneficial to States' ground-water protection programs.
- In measuring for environmental results, a number of quantitative indicators could be considered such as number of permits issued, violations, percolation ponds, pollution spills, injection wells plugged, superfund sites cleaned and enforcement cases initiated.

Points of Disagreement on Element 8

- Some participants thought that EPA should establish ground-water standards separate from MCLs because MCLs do not apply in all cases (e.g., Lead and Copper). Others thought that MCLs have been very useful and that the benefit of developing separate ground-water standards is not great enough to merit the cost. Others thought that States, not EPA, should be developing the ground-water standards.

Barriers

- Administrative and institutional barriers that make it difficult to adopt a similar standard across various programs exist.

- Many States do not have the staff expertise to evaluate toxicity data to be able to establish their own standards.
- Interstate differences in standards can be difficult to resolve. EPA needs to play a major role in settling disputes that arise around these issues.
- County health offices exert tremendous influence in the arena of setting health based standards. This is an institutional barrier that must be overcome.
- Differences in opinions about the toxicological assessment of risk.

ELEMENT 9
PREVENTION PROGRAM FOR REDUCING OR ELIMINATING POLLUTION

Points of Agreement on Element 9

- The list of **techniques** in the definition should include reuse, identification of leaching pesticides, public education, and waste minimization.
- States should be aware of and address potentially polluting activities that are not addressed by existing programs or activities, i.e., non-point sources such as septic tanks, animal wastes, pesticides and fertilizers.
- There are several activities that must be undertaken in order to have a viable ground-water pollution prevention program:
 - Recognize the role of permitting to pollution prevention;
 - Provide technical assistance to polluters;
 - Create strong incentives and/or disincentives through enforcement settlements, subsidies, etc.;
 - States should identify all governmental and non-governmental agencies that play a role in the prevention program;
 - States should have a lead agency or specified body heading up the pollution prevention portion of the CSGWPP;
 - States should prioritize issues needing to be addressed;
 - State personnel in all relevant State agencies should be educated as to the opportunities and methods for reducing pollution; and
 - States should have a way to evaluate and update activities.
- Permitting activities offer a good opportunity to stress preventing but only if the permitter is afforded the time and opportunity to provide technical assistance. States should include a mechanism to determine the effectiveness of the program. Compliance data may be one source of data for conducting evaluations.

Barriers

- EPA's **quotas** for specific outputs are a real barrier to implementing this element.
- There is a **lack** of knowledge about ground-water pollution prevention techniques.
- Surveillance of the ground water and of potentially contaminating activities is costly.
- States are lacking authority to deal with all sources of contamination and getting new authority is difficult. One example is surface impoundments used in agriculture.
- Ground-water programs are currently fragmented and diffuse. Its difficult to set priorities across the various programs.

- Some programs actually work at cross purposes. Regulatory mandates are often limited in their scope.
- EPA's emphasis on "bean-counting" focuses attention on polluted areas and detracts from pollution prevention activities.
- There are turf battles between various state agencies.
- There are not enough resources to carry out mandates and embark on a new effort to fill pollution prevention gaps.

Action Items for EPA

- EPA should continue to be involved in R&D and Technical Assistance.
- EPA can promote pollution reduction and elimination in its programs.
- EPA should encourage the governors to lend their support to this effort. This comment was later expanded to refer to the entire CSGWPP approach. Without support from the governor, the approach will likely not be implemented in the States. Only the governor (or some other high official with responsibility for all potentially involved agencies) can assure that various agencies are cooperating in the development and implementation of the State's CSGWPP.
- EPA should promote interstate technical cooperation.

ELEMENT 10
FEDERAL, STATE, AND LOCAL AUTHORITIES TO CONTROL SOURCES OF CONTAMINATION
AND TO CONDUCT COMPLIANCE AND ENFORCEMENT ACTIVITIES

Points of Agreement on Element 10

- A comprehensive source control program must include:
 - Technical assistance, preferably with subsidies to those managing actual contamination sources and local governments, on how to minimize contamination, especially for unregulated sources of contamination.
 - Public education.
 - Coordination of all existing authorities so that sources of contamination are addressed effectively and efficiently. This coordination should involve the shifting of both staff and funding, and could encourage joint projects, examination of gaps and suggestions for improvement.
 - A viable remediation and clean-up program.
 - An analysis of regulatory gaps and unaddressed sources and a plan for addressing these gaps and sources.
- EPA should not judge the adequacy of this element based on whether or not a State has primacy for EPA programs. If EPA runs a particular program within a State, this becomes another component of the comprehensive program. Comprehensiveness should be judged based on competency, not on the authorizations that a State may have.
- States should publicize remediation activities, as this increases the visibility, potential benefits, and need for prevention.
- States should use current reporting mechanisms to report progress to EPA and to report on the sufficiency of resources to run this component of the CSGWPP.

Barriers

- It is not reasonable for EPA to expect that States will develop programs to regulate currently unregulated sources without new funds.
- Land use controls vary considerably from state to state and may be problematic in some states as a way of preventing ground-water contamination.

ELEMENT 11
A COMPREHENSIVE REMEDIATION PROGRAM THAT SETS
PRIORITIES FOR ACTION ACCORDING TO RISK

Points of Agreement on Element 11

- The definition of this element should emphasize the tremendous diversity in remediation needs.
- Remediation activities should be prioritized based on aquifer use, value, vulnerability, and potential use; the properties of the chemical; whether or not the ground water discharges to surface water, and other similar factors as determined by the State. State priorities are different than Federal mandates. Prevention/education at the local level will greatly reduce the need for remediation.
- The responsibility for remediation can not be delegated to the local level because local governments are unable to deal with issues of liability and because generally they do not have the technical expertise.
- Increased flexibility is needed concerning how funds are utilized.
- Remediation is secondary to prevention and is generally appropriate only at individual sites where significant pollution has already occurred.

Barriers

- State participants noted that most remediation activities are driven by Federal programs, and that sites that need remediation but which do not fall under a Federal program can not be addressed. They encouraged EPA to broaden definitions under remediation programs so that more of such sites can be addressed using Federal programs.
- New remediation technologies are not transferred to States on an implementable scale. In other words, technologies that worked in a laboratory or in some other controlled environment often do not meet expectations when actually used in the field.
- States do not have the flexibility to transfer funds to local governments to address remediation needs at that level.
- It is often difficult to identify the source from which contamination has emanated.
- States often have difficulty retaining qualified personnel.
- Gaps between Federal programs are often larger than the programs themselves. Funds available through the 106 ground-water grant are often the only way to address sites currently unaddressed by existing regulatory authority.
- Federal program inconsistencies.

ELEMENT 12
WATER WELL PROGRAM, FOR PUBLIC AND PRIVATE WELLS, COVERING AREAS
SUCH AS WELL TESTING, DRILLER CERTIFICATION, WELL CONSTRUCTION,
AND WELL PLUGGING

Points of Agreement on Element 12

- States agreed that including private wells is an important part of a CSGWPP.
- This element received a lot of support from State participants. Everyone thought it was important to address the issue of wells.
- Monitoring wells should be included in the title and the definition of this element, as well as standards for enforcement.
- States should have adequate driller certification programs.
- The CSGWPP needs less focus on public wells, because these are already being addressed in present programs. Public wells, however, are an important part of a CSGWPP.
- This element should include both well inspections and enforcement against poorly constructed and/or sited wells.
- Private wells could perhaps be best addressed at the local level.

Points of Disagreement on Element 12

- Some participants thought that the States should have the authority to plug and abandon any well that poses a threat to the ground-water resource or to human health. Others pointed out that this would be very difficult with private wells. The State can't force a private well owners to give up their well even if its contaminated, unless the well is a conduit for aquifer contamination. An active effort should be made to locate and plug abandoned wells.

Barriers

- The number of wells is overwhelming for effective logging, monitoring and inspection.
- Limited funding is available from both State and Federal agencies for inspections. Wells are not a fiscal priority and they should be so.
- Limited ~~public~~ education exists about the need for complying with inspection and registration guidelines (public health issues).
- Drillers ~~are~~ generally uneducated about hazards they create or could avoid.

Issues

- Dealing with private wells presents some very difficult challenges. There are just too many of them and private ownership presents some particular challenges. One suggestion for at least partially addressing this dilemma is to get private and public (HUD) mortgage lenders to make well inspections a condition of home loan approval.

III. STATE CAUCUSES ON DEVELOPMENT AND REVIEW GUIDELINES

A. Alabama

The following points were highlighted from the Alabama state caucus. Participants note that:

- The Alabama Ground-Water Program is pretty well coordinated and integrated, but gaps do exist.
- Much progress has been made in developing WHP and in coordinating with the Department of Agriculture and Industries on pesticides.
- The need for additional regulations is recognized, but day-to-day demands on a minimally staffed program have prevented their development.
- Tremendous gaps exist in coverage of EPA programs. Alabama addresses as many contamination sites, requiring investigation and corrective action through state Water Pollution Control Act and 106 Ground-Water funding, as are dealt with in RCRA program. Also local environmental health issues are not well integrated with state environmental programs.
- Administrative burden on states in implementing a CSGWPP should be held to a minimum.
- Alabama has a real problem with funding; e.g., some agencies depend on federal funds for 75% of budget, much less than 25% of ground-water funding comes from general funds. As such, it is difficult even to stay at a level funding situation from year to year.
- This Roundtable process could be very helpful. Participants support it and hope that it gains in momentum and produces real benefits.
- Coordination/cooperation at the Federal level needs to be improved or streamlined. These improvements should then filter down to the state.

B. Florida

Florida participants responded directly to specific questions highlighted in the EPA Guidebook prepared for the Roundtables. Their comments include:

- Concerning Profiling/Assessing/Planning: State and Regional personnel are already working together to profile and assess existing State ground-water protection efforts.
- Concerning Continuous Improvement and Review: - How will the public periodically review the States' CSGWPPs?
- "Is it necessary to establish a formal deadline by which States should implement their CSGWPP? If so, what should that deadline be?"
 - o If this refers to a program, No, because it depends on a multitude of factors, not the least of which is funding.
 - o If this refers to a plan, Yes.

- "Is this process appropriate? What changes would you recommend?"
 - o Yes, if it is a plan, but if it is a program, phase the plan and put feasible (generous) deadlines on each phase.
- "Are the submission requirements appropriate?"
 - o Yes, annual report, describing program progress and gaps so EPA should not have false expectations.
- "Does the coordinated workplan address high-priority gaps in State ground-water protection efforts?"
 - o It should - it can be made capable of filling the gaps and being the basis for negotiating grants in the region.
- "Will workplan activities lead to adequate implementation of specific elements of a CSGWPP?"
 - o It should - if funding, administrative and legislative obstacles are removed.
- "Are specific milestones of progress presented for FY 1993 and beyond?"
 - o They should.
- "States should continue to develop annual workplans until they determine that they are implementing CSGWPPs. Then, States can submit descriptions of their CSGWPPs to EPA for review and concurrence."
 - o Yes, no problems.
- RE: Headquarters' Role (Generic):
 - o Obstacles will include legislative, administrative and funding resources; alliances should be solicited with manufacturers, agriculture groups, lobbyists, environmental groups.
- Headquarters' Role: "Identifying issues that require national program coordination";
 - o ADD - or legislative intervention.
- Headquarters' Role:
 - o ADD A BULLET - EPA should review its own programs to ensure that existing programs are being coordinated, and report this information to the states.
- "What is your reaction to EPA's - both Headquarters' and Regions' role? - How would you revise this role?"
 - o EPA and other Federal agencies should report on their programs for putting their houses in order on an annual basis and identify gaps that may or may not be agreed upon by the States, i.e. It should be a two way street.

- RE: Submittal Requirements (Generic): "... This should be accompanied by a letter of transmittal letter from the Governor and a certification from the State's Attorney General indicating that the State has the authority to carry out the program."
 - o Do not agree with the need for the State's Attorney General's Office to be involved in certifying authorities.
- RE: "The State program description should demonstrate the following: That it is actively implementing the program."
 - o Criteria/conditions of approval should be established at the beginning of the process based on the removal of obstacles; approval of the plan linked to those criteria/conditions.
- Adequacy Review Process
 - o Once again, is this plan or program?
- "Have adequate financial and staff resources been committed to implementation?"
 - o EPA should also answer this question, is it a program or a plan?
- "Is the adequacy review process appropriate? What should be explained more clearly?"
 - o EPA should have a corresponding annual report indicating its progress in making other EPA programs conform to its National Strategy Goals.
- "Are the key questions sufficient to determine if a program is comprehensive?" These responses represent Florida specific issues:
 - o Data management and sharing among agencies.
 - o Improve and coordinate QA/QC to enable data sharing and GIS development.
 - o Map scales and resolution - need consistency among local, regional, state, and federal levels
 - o Additional efforts to remove turf and jurisdictional barriers by better defining agency roles and responsibilities?
 - o EPA can play a major role in removing some of these barriers by bringing commissioners together.

C. Georgia

The following comments summarize the discussion of caucus participants:

- Georgia is blessed with having 90% of all environmental activities in one agency.
- Participants want the state to take a holistic approach to management and establish a Ground-Water Coordinating Committee.

- The Georgia Comprehensive Planning Act outlines the following:
 - o Communities responsibility
 - o EPD review
 - o Wellhead protection
 - o Watershed protection
 - o Recharge areas
 - o Roles of various State agencies.
- Elements 8,9,10,11 are all repeats or sub-elements of elements 1-7.
- Public education is vital to the success of a CSGWPP and should be a separate element.
- Issues pertaining to funding:
 - o If you develop a comprehensive plan, EPA should say how much additional funding will be there if progress is made toward a comprehensive plan.
 - o Heavily dependent on Federal Funds. Georgia is talking about fee system.
 - o EPA/State should not reduce general funding with any fee system that may be adopted.
 - o EPA should provide funds for ground-water use permitting programs (part of holistic management).
 - o State should also commit funds/fees.
- Roundtable has not provided adequate input for program coordination/consolidation.
- Point source contamination from agriculture wells needs to be better addressed.
- Law needs to be clarified regarding private wells.
- State/Local laws - programs can not reach everyone.
- Education very important - communities are ready to protect the environment.
- Better monitoring network would lead to better progress.
- Pesticides not a major problem in Georgia at this time.
- Nitrates may be a problem. As such, the following should be considered:
 - o Statutory authority may be a problem.
 - o Need authority to regulate fertilizers.
 - o FIFRA primacy.
 - o Sources; poultry farms, turf farms and septic tanks
- EPA needs streamlined/revised elements which realistically assess comprehensive plan:
 - o Pesticides should have high priority
 - o Nitrates
 - o Address use of septic tanks
 - o EPA needs to fund other State programs
 - 1) Water use
 - 2) Local Issues (Education, Pollution)
 - o Environmental education of legislators and the public.

D. Kentucky

Participants highlighted the following points related to plan development and review:

- Kentucky has established an interagency network with few gaps, and has a Ground-Water Task Force in place.
- Need to coordinate efforts, not duplicate efforts and therefore duplicate expenses; EPA needs to coordinate grant process with review and funding.
- EPA needs to prioritize its own program activities.
- Coordination of data - both within the State and with EPA is important.
- Before CSGWPP can be implemented other State and Federal agencies need to be in the process, such as DOD, DOE, USDA, DOT, USGS,
- GIS can eliminate costs by not duplicating efforts and data responsibilities.
- Do we have realistic national time table?
- Does EPA have technical support in place?
- If a State agencies plan has already been put in place and approved by EPA, then that plan should be an approved part of the overall comprehensive program.
- Need to follow up this meeting with another one to evaluate what has been accomplished.

E. Mississippi

Participants in the Mississippi caucus noted the following comments pertaining to development and review:

- The key state agencies in Mississippi that would need to work together to develop a CSGWPP are the Miss. Dept. of Environmental Quality, the Miss. Dept. of Agriculture, and the Miss. State Board of Health. At the working staff level, good communication occurs often - in some cases, on a weekly basis. At a higher level, these three agencies (and a few others) meet twice monthly to review and act on all environmental permits impacting ground water. Thus, there is already a high level of coordination in Mississippi, among specific ground-water programs, and we see no major impediments to developing a CSGWPP for our state.
- To have a true CSGWPP as envisioned by EPA, states will need a tremendous increase in financial resources. This was recognized repeatedly during the roundtable discussions this week as a "barrier" to most of the elements. Realistically, none of us are ever going to have enough money to fully implement all of the elements of an ideal "comprehensive" program. Therefore, EPA should to lean heavily on two words as it finalizes its guidance and then begins to review state submittals - practicality and flexibility.

The state can identify all of the major problems concerning ground-water protection, but without more resources, cannot solve them all. States must be allowed to determine their own priorities and utilize whatever resources are available to work on them. States must

also be trusted to approach those problems in the manner which will work in their state as opposed to how it works elsewhere. Thus, if EPA will be practical and flexible, great strides can be made toward a working CSGWPP.

- EPA ~~should~~ recognize that many components on a CSGWPP are in place now in some states. The question as to whether there should be a formal deadline for states to implement a CSGWPP should not be asked. The appropriate question to ask is "When can states submit a description of your existing and planned efforts toward a CSGWPP?" In our opinion, Mississippi is implementing some components of a CSGWPP already.
- Finally, Mississippi lauds EPA's efforts to bring the states together to allow them to decide what the elements of a CSGWPP should be and how should adequacy be determined. These were not accomplished during the Roundtable, however, and issues raised at the Roundtable demonstrate how extremely difficult this is to do on a national scale. We wonder if the process is being made more difficult than necessary. If the concept of a CSGWPP can be clearly explained to the states, then why not have the states prepare a document which describes its existing programs, its gaps and needs, and its plans to fill those gaps and meet those needs? And why can not EPA subjectively review those state submittals and make recommendations for strengthening and improving certain areas?

If EPA were to do this and determine that in its opinion Mississippi lacked a CSGWPP because of certain logical reasons, the state would be willing to accept such a conclusion and would work to make whatever changes or additions necessary to build an acceptable CSGWPP. This process can work without making the adequacy criteria onerous and complicated.

F. North Carolina

Participants in the North Carolina caucus noted the following observations:

- Plan or Program - this needs to be clarified; it is difficult to set deadlines for program completion.
- Annual Submissions - individual programs account for status in work plan review process.
- Final Submission - EPA should acknowledge the right of the state to determine adequacy of efforts to meet program needs as the state assesses those needs. No penalty should be incurred if efforts fall short of EPA expectations if that program is not supported by EPA.
- Benefits - the obvious ones; also should help EPA identify and push new federal initiatives.
- Barriers - funding, politics and public perceptions of program vs. that of staff.
- EPA ~~Actions~~ - should focus on research, information transfer.
- EPA should support state clean-up standards where they are more stringent than EPA's.

G. South Carolina

Participants in the caucus discussed several aspects of development and review guidelines, including:

- EPA should help establish ground-water classification systems in those states without such systems. A classification system provides the "cornerstone" for regulatory authority and a comprehensive approach.
- Currently, tasks performed by each ground-water program are dictated by the individual program commitments/elements agreed to in each years grant. For example, elements of the Comprehensive State Ground-Water Protection Program (CSGWPP) have been included in the FY92 106 Ground-Water Grant, but not RCRA, CERCLA, etc. To insure that established programs participate, EPA should include elements of the CSGWPP in each programs grant process. Therefore, EPA must develop and implement the comprehensive approach at the Federal level to facilitate implementation at the state level.
- A concern discussed by every state representative is the apparent lack of supplementary funds to implement the additional duties of implementing the CSGWPP. Current funding by EPA is rigid and specific to programs implemented at the state level. As a result many states have monies to address, from a health and environmental impact standpoint, lower priority problems and may not have any funding to address other problems of larger significance identified by each state (i.e., not truly "comprehensive"). However, states can establish a CSGWPP by implementing the comprehensive philosophy and establishing better communication and cooperation between each existing program.
- Adequacy criteria for a CSGWPP should be very flexible to allow each state to tailor a program appropriate for that state.

H. Tennessee

The following comments summarize the caucus discussions on development and review guidelines:

- Development, Implementation and Review Procedures:
 - o EPA should condition all the grants it makes to an individual state to require coordination with the 106 Ground-Water Program managers to ensure a basic level of cooperation and coordination occurs.
- Annual Submissions:
 - o EPA's proposal as described on page III-2 of "Implementing the Task Force Report" appears reasonable.
- Final Submission:
 - o It should be understood by the EPA that each individual regulation will have to go through official rulemaking processes that includes approval by the Attorney General. Resubmitting existing regulations to the Attorney General is redundant. The Governor can be asked for his input, but it is not guaranteed, nor in some cases necessary. Cabinet level agreement should be sufficient.
- Benefits:
 - o Review of the benefits stated in the Task Force Report could be interpreted as decreasing the rigorous standards that now exist. Flexibility is desirable, but lack of standards is not always desirable.
 - o Coordinated data management has significant appeal to Tennessee. In addition, establishing programs to address ground-water contamination not

currently covered by existing programs has merit.

- o Prevention activities of a CSGWPP appeals to Tennessee from the standpoint that it will give the most benefit for the dollars spent. Specifically, WHP may save some of the States water supplies.
- o How much incentive, in dollars, is the EPA talking about?

-- Barriers:

- o With no statutory requirement, a lack of will exists in the state to enforce.
- o Special Interest Groups oppose CSGWPP
- o Turf guarding will cause problems
- o Funding shortfalls
- o Turnover of staff due to low salaries
- o Building codes require pesticide applications
- o Lack of laboratory certification for non-drinking water contaminants.
- o Lack of low cost treatment practices published for well owners
- o No statutorily defined requirements for interstate cooperation
- o No federal statutes requiring the establishment of a CSGWPP
- o Lack of streamlined and reliable enforcement for States
- o Lack of EPA support in enforcement
- o Drain cleaners containing substances hazardous to ground-water.

-- Actions EPA needs to take:

- o Assist states in developing local and state funding mechanisms for a CSGWPP
- o Assume responsibility for developing interstate agreements where interstate problems exist
- o Publishing and distribution of technical guidance on WHP, UIC permitting, well construction standards, pollution prevention, and public education techniques that advise the average citizen of his rights and information sources. In addition, the public needs a better understanding of relative risks and occurrence of ground-water contaminants.
- o Publish remediation techniques that the homeowner can use to deal with failing septic tanks and field lines, coliform bacteria in wells and iron and sulfur bacteria in aquifers.
- o The EPA should fund programs in proportion to the expected public health and environmental benefits.

-- Additional Elements:

- o The EPA should work with states to help the state obtain support from its legislature to provide funding for CSGWPP when the state doesn't have the necessary support.

IV. SUMMARY OF MAJOR CONCERNS

During the Roundtable, several themes and concerns were raised on a consistent basis. These were highlighted in the closing comments by Beverly Houston, Chief of the Ground-Water Protection Branch for EPA Region IV:

- Funding is a great concern to states. The concern was stated on several occasions that the availability of funding in a certain area (e.g., Superfund) should not solely dictate the use of funds. Their use may be inconsistent with the priorities established by the state. States want

the flexibility to match whatever funds exist with the priorities established by decision-makers in their respective states. This issue will likely need to be addressed at the national level.

- The States want flexibility in the way the programs are evaluated. Some specification on minimum acceptable components or criteria are acceptable, but program guidelines should not be overly specific. They should be more qualitative than quantitative. One approach may be to have a set of minimum components, a set of ideal components toward which a state could work (as a target or guideline for refining a states program) and a "shopping list" of acceptable approaches from which states could select the most appropriate for their circumstances.
- Conservation and other important considerations to protecting ground-water resources should be included in a national goal, and state goals, regardless of jurisdictional or regulatory authority. To address the concerns expressed about what EPA will do on issues over which they do not have authorization, explicit recognition of their lack of authority may be appropriate. Nonetheless, most participants supported the idea that a national goal should address ground-water resources comprehensively.
- The EPA Pesticides Program has developed 12 elements for State Pesticide Management Plans that are similar to those which were the subject of discussion during the Roundtable. Where differences occur between the two sets of elements (such as public education/awareness, resources), the Pesticide Program elements seem more consistent with the concerns of states in Region IV. As such, many state participants believe that the elements of the Pesticides Program should be adopted. Not only do they more completely portray the elements needed in the Comprehensive Ground-Water Programs, their use would allow the ongoing work on pesticides to be readily incorporated into the CSGWPP. If the Pesticide Program Elements are not adopted, then several of the elements should be consolidated, and elements added on funding and public involvement.
- Greater coordination and cooperation is needed within states as well as among states and federal agencies in the implementation of ground-water programs. This is particularly important, if not essential, to the development of CSGWPPs. Mechanisms need to be established for dealing with interstate issues concerning the management of common ground-water resources. Better coordination and consistency is also greatly needed among federal agencies.
- Greater attention needs to be given to non-regulated sources, individual use issues and the local government role in developing comprehensive ground-water protection programs.

V. ADDITIONAL COMMENTS FROM ROUNDTABLE PARTICIPANTS

A form was provided at the Roundtable to allow participants the opportunity to reinforce or to make additional comments on the elements, the planning process or ground-water policy in general. This section documents those comments.

Element 1

1. Add conservation as an element to the National and eventually to the State's goal statement.
2. Should be consistent with a National Anti-Degradation Policy.
3. The State goal should include the present and "reasonably expected" use of the aquifer. The stated goal of prevention means future use, so those ground waters must also be considered. In

Florida, all aquifers with less than 2,000 p.p.m. TDS are reasonably expected to be used now or at some future point for potable supply, perhaps with reverse osmosis treatment.

4. It all boils down to this--
 - 1) Are you looking for contamination?
 - 2) How many wells or aquifers are impacted?
 - 3) What are you doing about it? (Enforcement and cleanup)
5. Too nebulous a goal is useless.

Element 2

1. The lead agency should be the Environmental Department but variations among states may necessitate the establishment of an overseeing legislatively created committee.
2. Water quality and quantity programs should be integrated because the use of the ground-water resources can have a direct effect on aquifer contamination. Example: An industry or city using a large amount of ground water can create a large cone of depression which can draw contamination from adjacent RCRA sites, landfills, etc., into an otherwise clean aquifer. Given this linkage, EPA should strongly consider providing funds to State Programs regulating ground-water use.
3. This will be difficult for states without mini-EPAs. It may require EPA to ask (require) states to designate (create) a lead ground-water agency.
4. This is the crux of our problem. We are uncoordinated. Many agencies do not, or cannot, technically share information. A common level of understanding by means of MOU, or better yet, executive or legislative order may be needed. Quantity/quality should be integrated.
5. Identify enabling authority and regulations. Cover orphan sites. Track enforcement.
6. A committee of involved ground-water staff from all programs with a few non-governmental agencies and local governmental representatives, may be a useful and effective mechanism that addresses oversight, public education, and integration to drive the CSGWPP.

Element 3

1. EPA should defer to a state's documentation of its progress.
2. Program development needs to be phased into operation with the simplest steps the first year and more complex ones later. Consideration must also be given to the capacity of the state, with large well-budgeted states implementing more elements sooner, rather than later. Small states can begin with fewer elements and have a longer completion period.
3. ARAR's are an important point of deference--not defer less stringent by EPA, but defer to more stringent State requirements.
4. I do not think annual CSGWPP submittals to EPA are needed. Two or three year submittals are more reasonable to document progress and evolution of a state plan. From a practical standpoint, this plan will be developed under 106 G-W funding and states (like Mississippi) that receive only small grants under this program would be severely impacted by such an annual reporting requirement. Once plans are approved, a 3-5 year reporting period should be acceptable. Progress

can be monitored in yearly automated work plan submittals on grant applications.

Element 4

1. Major ~~aquifers~~ hydrogeologically defined and mapped (to at least 1:100,000 scale).
2. Recharge areas mapped.
3. Vulnerability or surficial aquifer mapped.
4. Ambient water quality in aquifers continuously monitored.
5. Management models for major aquifers where feasible.
6. In our high growth (population) state, all aquifer areas are currently mapped for major aquifers, but they are also all currently vulnerable to pollution due to the proximity of dischargers. The only place left to restrict, and possibly the best place to stop construction of new dischargers or modify existing dischargers is over the high recharge areas and where karst or fractured geology encourage rapid extensive pollution. These areas must be focused upon.
7. Recharge areas being defined means drastically different things. It is a relatively simple matter to show recharge areas for homogenous sand aquifers. It is very difficult to show recharge areas for karst (limestone, springs, sinkholes) requiring detailed study. This needs to be taken into account before you require it as part of a comprehensive aquifer assessment.
8. EPA should provide much flexibility in a state's assessment of aquifer systems. If aquifers are 1) defined, if 2) recharge areas are defined, and 3) vulnerability to contamination is characterized for decision-making purposes, EPA should accept the work the State may have already done.
9. If EPA can identify clear data and mapping needs, they can influence the priority of these activities in USGS Water Resource Division programs, a way to swing additional resources to bear on aquifer assessments.

Element 5

1. This should be delegated to local government/citizens. It cannot be done at the State level.
2. SARA Title III information needs to be computerized in every state. EPA needs to push this in the agency responsible for collecting the information. Class V injection wells are important here and State Departments of Transportation are a problem here (stormwater drainage).
3. If EPA ~~can't put~~ ^{can} put together a definition of an "IDEAL" aquifer assessment, why its needed, and how it can be used to ensure ground-water resource protection, they can use this to affect USGS Water Resource-related priorities. Many improvements in state assessments can be made if "shared" projects (mapping, vulnerability, monitoring, modeling, and data management/GIS) among States, USGS, and EPA can be coordinated with "pooled resources". EPA can drive this!

Element 6

1. Remediation in many cases may be technically and financially infeasible. The main effort and resources should be directed toward prevention and waste reduction and focus remediation effort

on containment.

2. This is **already** being done. It is a state issue, not subject to EPA review.
3. **Coordination of federal risk assessment** at cleanup sites needs to be revamped and made **consistent between** programs (e.g. RCRA-SDWA). More research is needed in agricultural loading and application of fertilizers for nitrate contamination.
4. Priority on protection means priority on aquifers, wellheads, private wells. We have for the most part been professional permitters--permitting discharge of wastes into the environment. If it comes to a draw, we should err on the side of protecting the public, not getting the permit through.

Element 7

1. Efforts to have a state-wide ground water monitoring network are virtually non-existent (with rare exceptions); yet such a network is the only "sure" way of measuring success and failure of environmental programs.
2. Mindless gathering of data should be discouraged. Only data to be used in management decision-making should be gathered. Monitoring of ambient WQ is covered in Element 4.
3. A real key is not whether administrative mechanisms are in place, but is there active enforcement of violations and is there tracking of enforcement, coordination among programs.

Element 8

1. Lacking a network, a State may have to use indicators for measuring success or results, which are at best inaccurate.
2. Overlaps totally with Element #3; include in #7.
3. Bean counting measures should not be included to measure adequacy of state GW programs! Qualitative, not quantitative.
4. Is there active enforcement? Are they tracking that enforcement follow-up? Is enforcement communicated with other State agencies where there might need to be coordinated enforcement?
5. Ground-water standards must be set at Drinking Water MCLs when potable aquifers are concerned.
6. It is **very important** that the same ground-water standards are used from state to state; otherwise interstate problems will develop. Also, one state's ground-water quality will probably be affected by the **lax** ground-water standards of the other state.

Element 9

1. RCRA reauthorization on Title C & D needs to specifically address the protection of Wellhead Protection Areas in the design standards and siting criteria of RCRA facilities and landfills.
2. Overlaps Element #6; include in #3.
3. A key element is federal program coordination in EPA before States can affect program integration

of their own for federally mandated programs.

Element 10

1. Overlaps 9, 2, and 3; include in 3.

Element 11

1. Overlaps with 9, 10, 6, and 3; include in 3.
2. EPA must resolve the problem of cross program transfer of grant funds by decree from the Administrator. If that is not possible, legislative (congressional) intervention may be necessary.
3. Federal inconsistency between programs creates difficulties here.

Element 12

1. This element may represent a detail that does not need to be listed as an element. If it is to be singled out, many other issues such as leaky tanks, may need to be listed also
2. Should include monitoring wells. Also need inspection, timely and appropriate enforcement. Public education to consumers (private well owners).
3. Each state should address this, but is it a part of a CSGWPP?
4. Testing of wells for suspected/likely contaminants should be a requirement with data collected by the agency in charge of CSGWPP.

General Comments

1. Resources--EPA should look at what we are doing with what we have in each individual state. Not every state has the same resources to work with. Under the 106 grant program, EPA is not even providing equal funding among states in the southeast region. Tennessee gets the least (or nearly so) in the region.
2. If we get into lengthy reports, etc., we end up having less and less time to do the actual work. Don't give us a ball to run with that has a chain attached to it.
3. EPA verbiage is not understandable; EPA ran out of Elements after E-7; reduce number of elements to avoid mindless repetition in CSGWPP submittals.
4. Lobbying of governors, state legislatures, and national trade groups by the federal government is needed more. A congressional sponsor for modifying federal statutes should be sought. Senator Graham might be a starting point as he led Florida's environmental change in the 80's and crafted our Safe Drinking Water Act in the 70's.
5. Please make the 12 elements equal the 12 elements of the Pesticide State Management Plans as much as possible or identical.
6. Please try to make the 12 Elements of the CSGWPP track the Pesticide SMP 12 elements as

closely as possible.

7. The EPA feeling that ground-water legislation would not be worthwhile may need to be re-thought. With CWA, RCRA, SDWA reauthorizations coming up in the future, a comprehensive environmental protection legislation for WATER may be a good thing. Also, EPA needs to do a better sales job at the highest program levels in order to get all state program players committed to the CSGWPP concept. As an illustration -- for this meeting we had only the Ground-Water Division of our agency and Department of Agriculture's Pesticides program present. Hazardous Waste Division (RCRA, CERCLA, Uncontrolled Sited), Surface Water Division (106, 319, 305) and the Office of Land & Water Resources (Ground-Water Quality Management Program, State Water Management Plan, and Well Construction & Permitting) were absent from our agency. Also, our Department of Health (SDWA and Oil & Gas Board (Class II-UIC) were not represented at the meeting.

VI. STATE AND EPA ROUNDTABLE PARTICIPANTS

The following lists identify participants at the EPA Region IV Roundtable. All eight states in Region IV were represented as well as staff from both EPA Headquarters and Region IV.

**EPA Region IV Ground-Water Roundtable
Atlanta, Georgia - January 15-17, 1992**

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