

## APPENDIX D: PUBLIC PARTICIPATION

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This Plan was reviewed and commented upon by Citizens' and Technical Advisory committee members. A Citizens' Advisory Committee organizational meeting was held at the Metropolitan Washington Council of Governments on November 17, 1998. A second meeting, of the combined committees, to review an early draft of this Plan and receive comments was held on December 17, 1998. A third meeting, of the combined committees with invitations extended to the public, was held on January 20, 1999. Committee rosters, summaries of meeting discussions, and written comments received are provided as follows:

### Roster: Citizens' Advisory Committee

Wesley A. Brown	
James Booze	
Neal Fitzpatrick	Audubon Naturalist Society
Rodney Livingston	CEC
Erik Olson	Natural Resources Defense Council
Steve Donkin	
Phillip A. Flemming	
Grace Fleming	
John W. Finney	Coalition for Responsible Urban Disposal at Dalecarlia
Mary D. Jackson	ANC 7E Chairperson
Luci Murphy	League of Women Voters
Maria Holleran-Rivera	District of Columbia Corporation Council
James H. Jones	
Carla Pappalardo	Clean Water Action
Tricia McPherson	Clean Water Action
Regina Owens	District of Columbia City Administrator's Office
Davelene Renshaw	

### Roster: Technical Advisory Committee

Jerusalem Bekele	District of Columbia Department of Health
Miranda Brown	Washington Aqueduct Division
Michael Marcott	District of Columbia Water and Sewer Authority
Gary Fisher	US Geological Survey
Frederick Mac Millan	US Environmental Protection Agency, Region III
Gerald Peaks	Virginia Department of Health
John Grace	Maryland Department of the Environment
Traci Kammer-Goldberg	Fairfax County Water Authority
Robert Buglass	Washington Suburban Sanitary Commission

Three meetings were held to discuss the Plan and its development, and a number of written comments were received and incorporated. Summaries of these activities are provided on the following pages.

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### **Meeting Summary Source Water Assessment Program (SWAP) Citizens' Advisory Committee Meeting**

November 17, 1998

6:00 pm

Metropolitan Washington Council of Governments

The meeting was opened by Karl Berger of the Council of Governments (MWCOG). Introductions were made around the table. Attention was called to the handouts that included the program guidance for the EPA Source Water Assessment Programs; as well as a draft outline for a source water assessment plan for the District.

Fred Mac Millan, EPA Region III, (Philadelphia), described the SWAP Program. The SWAP is the most proactive part of the Safe Drinking Water Act of 1996. He described five primary parts of the Multi - Barrier Approach

1. To prevent contamination of and protect drinking water sources
2. Propose design and treatment options
3. Provide well trained personnel
4. ?
5. Develop proper standards

SWAP for the District has five steps:

1. Getting Started and the public involvement
2. Where are the well heads, water intakes, etc.?
3. What are we going to protect our source water from?
4. Are our source water managers doing the best job they can to protect source water?
5. Contingency planning for contamination events.

This meeting represents the start of the SWAP plan process. The draft final plan is due to EPA on February 6, 1999. This plan will be reviewed, amend (if necessary) and approved within nine months. The entire project will take two years to implement with an 18 month extension at most.

Jim Collier - DC Department of Health (DoH), The DC DoH is overseeing the development of this SWAP for the District of Columbia with help from ICPRB and MWCOG. The District and its water intakes are situated at the bottom end of the nontidal portion of the Potomac River Watershed which includes four states, Virginia, Maryland, West Virginia and Pennsylvania. While there are intakes throughout these subwatersheds, there are also, effluent or outfall pipes into the same body(s) of water. This is an area of many concerns and common interests.

To be prepared for proper treatment of this water, the wastewater treatment operators have to determine the primary land use where the water originates; Urban (developed) Land or Rural Land.

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The long term assumption is that the land use pattern of the past 50 years will continue until all rural land is converted to urban land use. In order for treatment facilities to prepare for proper treatment operations, these land uses must be understood. That is because the water coming off of these types of land use are very different. One is not necessarily better than the other, just different.

The drinking water intakes for the District are located in the nontidal section of the Potomac River.

Ross Mandel - Interstate Commission on the Potomac River Basin (ICPRB), explained ICPRB's role in the oversight of the Potomac River. He described how the Source Water assessment plan is to be carried out.

The Plan Assessment has four major tools:

1. Public participation
2. Delineate watershed
3. Identify potential contributors
4. Conduct susceptibility analysis

Mr. Mandel passed out a map showing the watershed for the Potomac River and locating the District of Columbia's drinking water intakes.

### 1. Public participation

Form a citizens' advisory committee.

### 2. Delineate Source Water Area (The Watershed)

Identify the location of Intakes and other sources. The District has two intakes near Great Falls on the Potomac and a few ground water wells. The groundwater wells total five, and are not used for drinking water, only for groundwater monitoring purposes and some other non-drinking water purposes.

### 3. Identify the Potential Contaminants

Make a list of potential contaminants

Use existing water quality data

Use existing NPDES (National Pollution Discharge Elimination System) permitting information and urban and regional forest cover data

Have information on feed lots, farms, etc. for fecal coliform contributions

Have information on air deposition of contaminants

Use data for nonpoint source pollution, runoff from fields etc.

Mr. Mandel said that each state will perform their own assessment. A question was raised regarding Virginia agencies cooperation for data exchange. How will their data overlap with ours. It was pointed out that this is an important point because Virginia's data is a subset of DC's data set as are all the surrounding states. The states will be performing their own separate assessments and DC use this data to form their own conclusions.

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### 4. Susceptibility Analysis

Decisions to be made on the potential threat from each contaminant.

The Susceptibility Analysis will look at transport, integrity of the system, intakes themselves. It will also examine the source water taken in and the finished water.

Comment made to establish a feedback loop between the technical group and the citizens advisory group

Mr. Berger opened the discussion to the group. He stated that the next meeting would occur during the week of January 18 - 22, when the plan would be in draft form for comment by the group. Mr. Berger stated that all attendees at the meeting are considered to be on the citizens group unless they indicate otherwise.

Discussion of the workplan time line. A great concern arose over the short time line and the citizens groups expressed a strong desire to meet in late December or early January in addition to the late January meeting.

A general concern was whether ICPRB could meet this deadline for having a working draft available to the committee for comment.

There was also a great concern over the citizens access to the document over the internet. DC, ICPRB and COG will explore the possibility of doing this.

A comment was made about putting information in water billing statements, however, it was pointed out that the billing cycle had already occurred.

The group indicated that if a draft plan was not available, that they want to meet in late December or early January and can look at plans from other states to become familiar with them and be prepared when reviewing the Districts plan.

A question arose over who was on the Technical Advisory Committee for the DC plan. The technical committee will be comprised of staff from the District, ICPRB, The Washington Aqueduct, and COG. It will not be a formal technical committee per se. A suggestion was made to have someone from the U.S. Geological Survey to participate on the technical committee.

Suggestions were made on how to notify citizens about the next meetings; press releases, newspaper notification, DC Cable Television,

The next meeting is tentatively scheduled for the week of December 14<sup>th</sup> whether the draft was ready or not. Potentially, December 16<sup>th</sup> or 18<sup>th</sup>.

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The meeting adjourned at 8:20 P.M.

*Meeting Summary*

**Meeting of Citizens' Advisory Committee for the  
District of Columbia Source Water Assessment Plan**

December 17, 1998  
Metropolitan Washington Council of Governments

The meeting was called to order at approximately 6 p.m. by Karl Berger of the Metropolitan Washington Council of Governments (COG).

**Presentation by Roland Steiner:**

**Mr. Steiner** of the Interstate Commission on the Potomac River Basin (ICPRB) provided background information on the development of EPA's Source Water Assessment initiative, noting that the three main issues to be addressed by source water assessment plans (SWAPs) are:

- 1) Delineation of the drinking water source (the Potomac River upstream of the Washington Aqueduct intakes)
- 2) Contaminant identification (This can include everything from household chemicals to potentially hazardous materials stored in large quantities by commercial enterprises.)
- 3) Susceptibility analysis (What are the risk factors and which materials potentially pose the greatest and least risks?)

**Mr. Steiner** said that ICPRB staff currently is developing a plan to conduct the assessment. EPA regulations require and ICPRB is seeking citizen input into the plan. In particular, ICPRB is expecting input from the Citizens Advisory Committee (CAC), which is designed to be representative of the views of District citizens in general.

**Mr. Steiner** also noted that people with knowledge of drinking water issues from both the District and neighboring states are represented on a Technical Advisory Committee (TAC) that ICPRB has formed. The members include:

Jerry Peaks, source water coordinator for the Virginia Department of Health;  
John Grace, source water coordinator for the Maryland Department of the Environment;  
Jerusalem Bekele, project manager for D.C. Dept. of Health, Environmental Health Admin.;  
Miranda Brown, Washington Aqueduct Division of the U.S. Army Corps of Engineers;

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Mike Marcotte, Deputy Director, D. C. Water and Sewer Administration;  
Gary Fisher, U.S. Geological Survey;  
Fred Mac Millan, EPA Region III;  
Robert Buglass, Washington Suburban Sanitary Commission;  
Tracy Goldberg, Fairfax County Water Authority.

Although there are no separate meetings of the TAC planned, ICPRB staff will coordinate with its members to obtain review and comment on the plan. In addition, TAC members have and will be invited to all CAC meetings.

**Mr. Steiner** noted the following highlights in the schedule for developing the plan:

Jan. 20, 1999 - next meeting of the CAC (public comment meeting)

Jan. 27, 1999 - final date for any comments on the plan

Feb. 5, 1999 - final plan transmitted to EPA Region III.

Approximately 7 - 10 days prior to the Jan. 20 meeting, a draft of the plan will be sent to members of the Citizens Advisory Committee. This draft will include comments received to date and any responses to those comments.

**Comment: Tricia McPherson** asked if there will be other opportunities to comment on the plan aside from the Jan. 20 meeting.

**Response: Mr. Steiner** said that ICPRB will accept comments directly via phone, FAX or email at any time up to the Jan. 27 comment deadline.

**Mr. Steiner** noted that after the plan is submitted, EPA has up to nine months to review it, request any changes and approve it.

**Comment: Erik Olson** asked what happens if EPA does not approve a plan by the Nov. 6 deadline.

**Response: Fred Mac Millan** said that EPA intends to work with the submitting agencies to ensure that all SWAPs are approved by the Nov. 6 deadline.

### **Discussion of outline/draft framework of the plan (Roland Steiner):**

Advisory group members asked a number of questions and raised several concerns regarding the current incomplete draft of the plan. However, because of time constraints, not all of their comments and questions were registered at the meeting. The members agreed, where possible, to post questions via email for all members of the group.

Among the questions raised at the meeting were:

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What assumptions will be used to determine time or travel estimates for potential contaminants, particularly as regards river flow?

Who will determine the environmental decay rate for pesticides and other contaminants?

How well can the Chesapeake Bay Program watershed model, which was designed to estimate nutrient and sediment loads to the bay, estimate concentrations of contaminants in the Potomac River?

**Comment: Neal Fitzpatrick** expressed concern that any results from modelling be verified by actual monitoring data.

### **Overall concerns:**

**Comment: Rodney Livingston** recommended that questions, responses and all other information regarding the plan be published on the Internet through a dedicated site that would have a “chat room” feature.

**Response: Mr. Steiner** said this is not possible with the time and money allocated to this phase of the project. However, ICPRB staff will list any questions it receives through other means as an appendix to the draft plan.

**Comment: John Finney**, noting that the quality of the drinking water for the District is dependent on what happens in a watershed outside of its boundaries, recommended that the District SWAP be conducted as part of a regional Potomac River effort in which all of the upstream states participate. Conducting a regional SWAP also would avoid duplication and minimize the costs of the project, he said.

**Response: Ross Mandel** and **Mr. Steiner** noted that they are working with staff from these states and that some aspects of the plan will be coordinated. However, there are some aspects that will be unique to the District plan.

**Comment: Mr. Olson** enquired about the cost of actually doing the assessment.

**Response: Mr. Steiner** said it will depend in part on what’s called for in the final version of the plan. He also noted that the District’s Department of Health is responsible for conducting the assessment either directly or through contractors.

**Comment: Mr. Olson** asked how much money the District has budgeted for conducting the assessment and what is the source of any such funds.

**Response: Jerusalem Bekele** said the Department of Health currently has budgeted about \$250,000 for this task. She was not certain of the source of those funds.

### **Discussion of public outreach activities (Karl Berger):**



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**Mr. Berger** noted that COG staff plans to produce a news release for submission to a series of community papers in the District. It also will produce and distribute a flyer that will publicize the Jan. 20 meeting and encourage additional public comment. The flyer could be distributed through District government agencies, the city's Advisory Neighborhood commissions and civic groups.

**Mr. Berger** further noted that the members had recommended that a means be found to post the draft plan on an Internet site prior to the public meeting, but that none of the agencies involved could promise that such a posting could occur within the required time frame. COG staff will attempt to provide copies of the draft, when available, to the various branches of the D. C. Public Library and in the COG Information Center for public access.

**Comment: Mr. Livingston** complained that no means of either Internet or cable television access to the draft plan would be provided as he had requested at the previous CAG meeting.

**Response: Mr. Steiner** said that the currently involved agencies lack the resources to implement these suggestions.

**Comment: Ms. McPherson** suggested that community groups could put information concerning the plan and plan drafts on their own Internet access sites.

**Comment: Davelene Renshaw** recommended that copies of the flyer be made available to CAG members who may be able to further distribute them.

**Comment: Mr. Olson** asked whether the CAG would continue to be able to provide input into the District SWAP process once the plan is submitted on Feb. 5. The members strongly supported continued involvement.

**Response: Mr. Berger** noted that, at present, ICPRB and COG's involvement is scheduled to end with the submission of the plan to EPA, hence this request will have to be addressed by EPA and the District Department of Health. However, the members' strong support for continued involvement can be noted as a recommendation in the plan.

**Ms. Bekele** further noted that Jim Collier and Ted Gordon of the Department of Health's Environmental Health Administration will be the main District government contacts on the SWAP process.

### **Summary actions:**

**Mr. Steiner** provided a comment sheet that provided instructions for providing comments to ICPRB via phone, fax or email. He recommended that CAG members provide comments directly to ICPRB staff.

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The meeting was adjourned at 8 p.m.

### **List of Handouts**

Draft Outline of Framework, D.C. Source Water Assessment and Protection Program Plan

Draft Framework, D.C. Source Water Assessment and Protection Program Plan

Comments on Draft Plan submitted by John Finney

### **List of Attendees**

Neal Fitzpatrick	Audubon Naturalist Society
Davelene Renshaw	
Macara Lousberg	
Rodney Livingston	CEC/DICEE
Erik Olson	NRDC
Roland Steiner	ICPRB
Ross Mandel	ICPRB
Jan Ducnuigeeen	ICPRB
Erik Hagen	ICPRB
John Finney	CRUDD
Tracy Goldberg	FCWA
Maria Holleran-Rivera	DC Corporation Counsel
Carla Pappalardo	Clean Water Action
Tricia McPherson	Clean Water Action
Jerusalem Bekele	Environmental Health Administration, D. C. Dept. of Health
Sharon Gonder	Environmental Health Administration, D. C. Dept. of Health
Fred Mac Millan	EPA Region III

*Meeting Summary*

**Third Meeting of the Citizens Advisory Committee for the  
District of Columbia Source Water Assessment Plan**

**January 20, 1999**

Metropolitan Washington Council of Governments

The meeting was called to order at approximately 6:15 p.m. by Karl Berger of the Metropolitan Washington Council of Governments. The group agreed on an informal discussion of their comments on the draft source water assessment plan (SWAP).

**Presentations:**

**Fred Mac Millan, EPA Region III** noted that source water protection is one aspect of EPA's multi-barrier approach to drinking water safety. Summarizing the activities of the District's project to date, he noted that the last day for public comment on the plan is Jan. 27 and the deadline for the SWAP to be submitted to EPA is Feb. 6.

**Roland Steiner, Interstate Commission on the Potomac River Basin (ICPRB)** noted that all the states in the Potomac basin have agreed to share source water data with each other, a process that ICPRB will facilitate. He also addressed concerns about the accuracy of data from other states by noting that there are major treatment plants on the Potomac River whose intakes are just upstream from those of the Aqueduct which serve Maryland and northern Virginia. Hence, these states should be just as interested in good assessments as the District is. Mr. Steiner also noted that work is proceeding to update the draft SWAP, including the address of public comments.

**Comments from Citizen Advisory Committee members:**

**Mr. Steiner** read the text of FAX comments received from **Charles Verharen**, who is concerned about the potential impact on the District's drinking water of discharges from water treatment plants located upstream. **Mr. Steiner** responded by noting that although this could be investigated, there are no known toxic materials in these discharges. Based on her interpretation of these comments, **Carla Pappalardo** asked if combined sewer overflow discharges pose a threat to drinking water supplies. **Mr. Steiner** response was that these would be investigated where applicable upstream of the intakes.

There were several comments and questions about the source and amount of funds for the actual assessment phase of the project. **Mr. Finney**, for example, stated his interpretation, derived from a conversation with an EPA Region III official, that the District would receive a \$400,000 grant from EPA to conduct the assessment, partly as a means of building environmental expertise in the District's Department of Health.

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However, **Mr. Mac Millan** said that the \$400,000 has been set aside from the District's share of the state revolving loan funds disbursed by EPA.

**Erik Olson** noted continuing concern with the future of public participation once the plan is submitted and the assessment phase begins. He said it is critical for citizen input to continue in this phase and suggested that the current advisory committee should continue. In response, **Mr. Steiner** noted that there has been support for this idea among state and EPA officials. **Jerusalem Bekele** of the District Department of Health said the department is giving serious consideration to this recommendation.

The Citizens Advisory Committee members approved a motion in support of continuing to function during the assessment phase.

**Mr. Olson** asked whether COG and ICPRB would have a role during the assessment phase. In response, **Mr. Steiner** said that the District Health Department will be conducting the assessment and have indicated plans to seek bids from entities interested in doing the assessment work. Thus, he said, there are no guarantees that COG and ICPRB will continue to be involved in the project, even assuming that they choose to submit bids. **Ms. Bekele** confirmed that the Department of Health intends to seek bids to do the assessment work, which, she said, is a required by the department's procurement rules.

**Mr. Olson** asked how nonpoint sources would be inventoried and identified under the District's assessment. In response, **Mr. Steiner** noted that the plan calls for use of federal Agricultural Census data, which can quantify cropland acres or animal numbers in individual counties. However, it was noted that there may be issues regarding the confidentiality of such data.

**Mr. Olson** strongly expressed the view that potential nonpoint sources of pollutants should be identified just as point sources are. Identifying sources by name will be one of the main means by which the public can exert pressure to clean up any problem sources, he said.

**Steve Donkin** asked if the budgeted \$400,000 will be sufficient to conduct the plan. **Mr. Steiner** said that, in cooperation with the other states, the District should be able to locate and name all major sources for that amount. However, **Ross Mandel of ICPRB** noted that other states may not agree to disclosure of the names of all potential polluters.

**Mr. Olson** asked who would make decisions about the disclosure of data and **Ms. Pappalardo** asked how will the District be able to reconcile differing approaches to susceptibility analysis (e.g., fixed radius delineation in Virginia versus Maryland's strategy of using sub-watershed delineations). She also is concerned with the quality of data the District may get from Virginia.

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In response, **Mr. Mac Millan** said that EPA will be evaluating each of the plans submitted by the various states and compatibility will be an issue. **Mr. Mandel** noted that data collection should not be a problem for the District even if there were minimal cooperation from the other states in the basin given the existence of other, easily accessible data sets. **Ms. Bekele** noted that the District will be able to independently analyze the data and draw conclusions that may be different than the conclusions drawn in other states.

**Mr. Olson** asked if the plan considers the possibility of getting new monitoring data to assess such things as temporal variations in the level of Cryptosporidium found in the river. He expressed concern with an over-reliance on modeling results to assess the impact of nonpoint pollution sources. In response, **Mr. Steiner** said the assessment could be that detailed, depending on funding and other priorities.

**Mr. Olson** also expressed an interest in having U. S. Geological Survey involvement in the assessment phase. **Mr. Steiner** said this is possible provided funding is available. **Mr. Berger** noted that the other basin states and the District could jointly contract for USGS services.

Several comments were made concerning word choice and clarity in the draft plan, which **Mr. Steiner** promised to address.

The meeting was adjourned at approximately 7:50 p.m.

### **List of Handouts**

Meeting Summary from December 17, 1998  
Draft Outline of Framework, D.C. Source Water Assessment and Protection Program Plan  
Appendix III from the Draft Plan - National Primary Drinking Water Regulations

Comments on Draft Plan submitted by Charles Verharen  
Comments on Draft submitted by WSSC  
Comments on Draft Plan submitted by John Finney

### **List of Attendees**

Davelene Renshaw		John Finney	CRUDD
Erik Olson	NRDC	Tracy Goldberg	FCWA
Roland Steiner	ICPRB		
Ross Mandel	ICPRB		
Jan Ducnuigeen	ICPRB		
Steve Donkin	DC Green Party		

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Carla Pappalardo Clean Water Action  
Tricia McPherson Clean Water Action  
Jerusalem Bekele Environmental  
Health Administration, D.  
C. Dept. of Health  
James Booze  
Fred Mac Millan EPA Region III  
Geri Albers LWVDC



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### Written Comments Were Received From:

John W. Finney	December 13, 1998
Davelene Renshaw	December 18, 1998
Neal Fitzpatrick	December 21, 1998
Gary Fisher	December 28, 1998
John W. Finney	January 12, 1999
Robert Buglass	January 19, 1999
Charles C. Verharen	January 20, 1999
Neal Fitzpatrick	January 21, 1999
Carla Pappalardo & Tricia McPherson	January 27, 1999



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Date: Sun, 13 Dec 1998 17:20:17 -0500

To: kberger@mwcog.org

From: John Finney <finneyj@worldnet.att.net>

Subject: Comments on Draft Plan

Cc: thomas.p.jacobus@wad01.usace.army.mil, ppagano@ids2.idsonline,  
nvj@epaibm.rtpnc.epa.gov

To: Karl Berger COG Department of Environmental Programs

RE: Draft dated 12/11/98 of D.C. Source Water Assessment and Protection.

Dear Mr. Berger:

Thank you for sending along the Draft of the Program Plan for protecting the sources of drinking water for the District of Columbia. I must say that as written, it is an ambitious plan whose worthwhile points sometimes get lost in bureaucratic use of the English language. But then I am not sure the Plan was written for members of the civilian advisory council that you have so kindly assembled but rather for the officials who will pass upon and enact the plan eventually adopted. With some temerity, therefore, I offer the following comments on the Draft:

1. It seems here is a case whether the District of Columbia should stake out a claim for recognition and uniqueness in more forceful terms than contained in the report. When it comes to sources of drinking water in the Potomac River Basin, the District of Columbia is unique. It has no drinking water resources of its own. Its discharges do not pollute the drinking water resources of any other state. Rather, it is dependent upon all the other states in the Potomac Basin for its water supplies. Correspondingly it is the recipient of the cumulative contaminants that other states let flow into the Potomac and its tributaries. Therefore, it follows that the burden of protecting the drinking water resources of the District (and Falls Church and Arlington) in the future depends not upon actions taken by the District of Columbia but rather upon the individual and collective actions of the states in the Potomac River Basin. The District of Columbia presents a prime example of the need for regional action in protecting its drinking water supplies, for only by regional action can they be protected.

In a way the Draft states that in the third paragraph on p. 2 when it says: "Delineation of DC's source watershed will instead cover the whole topographic watershed extending well beyond the limitations of jurisdictional borders and into neighboring states." Try swallowing that sentence for its verbal pollution! Why not give a little zing to the report by pointing out, as described above, how the District is at the mercy of other states when it comes to its water supply. Here is a case where the District can stand on its soapbox and show a little independence as well as point the finger at all those states that are so indifferent to the tribulations of the District. I need not tell you that water involves not just numbers but also politics.

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*[Section on interjurisdictional cooperation and coordination added to Introduction. The compound sentence was divided into two simpler ones.]*

2. I was particularly glad to see in the first paragraph of page 3 reference to the need for river-side buffer strips to curb runoff of potential contaminants. That, of course, is one of the major solutions to protecting the water sources of the District of Columbia, the Potomac River and the Chesapeake Bay. May I suggest that we go beyond buffer strips to study the concept of set aside or trade-offs of land so as to reduce sedimentary runoffs. Thus, a waterworks could offset the post-treatment sediments it returns to the river by buying land upstream and reducing the sedimentary runoff by an equivalent amount.

*[It was not intended that buffer strips be set up in the assessment process; therefore, the wording now refers to stream-side assessment zones.]*

3. At the bottom of page 3, the draft states that "the relevant potential contaminants have been identified in the DC-SWAP Plan. Where are they identified? What are they? It is not enough, if this is to be a Plan understandable to the general public, to say that the inventory "include contaminants listed in the National Primary and Secondary Drinking Water." I know you are all acting in the public behalf; but you have to describe your actions in words and terms that are understandable to the public. That means avoiding insider terms, such as "contaminant transport" on page 6.

*[Appendix II. National Primary and Secondary Drinking Water Regulations: Chemicals, has been added. "Contaminant transport" has been re-worded.]*

4. I was glad to see sediments listed among the potential contaminants. From my limited knowledge, I think sediments (in other words sand and soil that have run off into the river) are the principal pollutant in the drinking water sources of the District of Columbia. The Washington Aqueduct Authority goes to considerable expense --costs that are passed on to the water users-- in getting rid of the sediment before distributing the water to the District of Columbia, Arlington and Falls Church. In the process, certain coagulants are used, such as forms of alum. There is an unresolved debate over whether the treated sediments represent a pollutant, either to human or to fish and plant life. In the case of the Washington Aqueduct Authority, the treated sediments presumably do not present a hazard to human life since, so far as I know, no city or state draws drinking water from the Potomac below the fall line where the river becomes tidal. A new scientific study is about to be launched on whether the discharged sediments are harmful to fish and plant life in the Potomac.

What to do with the sediments raises all kinds of environmental questions. The Washington Aqueduct currently discharges the sediments into the river at time of high river flow to assure dispersal. The EPA has raised the prospect of stopping discharge of the sediments into the river. If that is done, the sediments would have to be trucked

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out of the Washington Aqueduct complex, which sits next to a residential neighborhood. If that were done, it would raise environmental hazards for residents of the District of Columbia, in diesel exhausts, cited as dangerous by the EPA, in noise pollution in residential neighborhoods, in safety to the elderly and young on neighborhood streets since dump trucks are notoriously uninspected for safety or exhausts, and to the quality of life (and the price of housing) in residential neighborhoods.

The obvious answer is to reduce the sediments, and that brings us back to the initial observation that the District of Columbia should stand up and fight for old D.C. by insisting that states upstream in the Potomac watershed drastically reduce the runoff of sediments into the river. It can be done, as demonstrated by the initial, encouraging results of the Chesapeake Bay plan.

At the bottom of page 7, you talk about assigning numeric values to each of the pollutants. What numeric value do you place on sediments. I think it should be a high one as far as the District of Columbia is concerned.

*[Sediment is universally acknowledged as a serious water treatment problem. The relative numerical values will be assigned by those tasked with conducting the Assessment.]*

I had trouble understanding the paragraph at the bottom of page 10 and at the top of page 11 talking about The Watershed Model. The Draft states that the Watershed Model can not simulate (or measure) sediment-bound constituents and "the cost of these additional efforts is beyond the resources of the DC-SWAP. If these sediment-bound constituents pose a public health hazard, then surely ways can be found to obtain the money to make the necessary studies.

*[Clarifying language has been added to the section describing the use of the Watershed Model. Sampling and modeling programs for sediment-bound constituents are usually conducted on a smaller scale than the Potomac River Basin. The cost of the collection and analysis of sediment samples is greater than \$1000 per sample. Implementation of a monitoring/modeling program for toxics and sediment would cost many times the budget of the entire DC-SWAP. This cost cannot be justified unless it is shown that a potential for a significant threat from sediment-bound constituents exists. The activities outlined in the SWAP will attempt to assess how significant that threat is.]*

5. On page 12, The Draft has trouble deciding whether data is singular or plural. The common usage according to Fowler is that the word is plural in Latin, singular in English, just as in the case of agenda.

*[Fowler is followed.]*

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Please feel free to distribute these comments, for what they are worth, before or during the meeting on Dec. 17. I hope to see you there.

Respectfully submitted,

John W. Finney

Co-Chairperson of the Coalition for Responsible Urban Disposal at  
Dalecarlia (CRUDD)

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Date Sent: Friday, December 18, 1998 11:25 AM  
From: MAIL <"MAIL@SMTP {Bendavie@aol.com}"@c2smtp.potomac-commission.org  
To: COMMENTS <COMMENTS@c2smtp.potomac-commission.org  
Subject: DC Source Water Assessment & Protection Program Plan  
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This is to reiterate my offer to distribute flyers of notice of the Draft Plan to my neighborhood (Southwest) and also that I understand that you will provide me with a copy of that Draft Plan. I also concur that it would be a very good idea to place copies in the Public Libraries and, if you have electronic data, to send in an attached file to those of us who have E-Mail.

Thanks, Davelene Renshaw  
1245 4th St., S. W., E-501  
WDC 20024  
(202) 488-1926

*[Attempts will be made to get flyers to you and distribute copies of the Plan to libraries.]*

## APPENDIX D: PUBLIC PARTICIPATION

AUDUBON NATURALIST SOCIETY, 8940 Jones Mill Road, Chevy Chase, MD 20815  
Phone: 301-652-9188, Fax: 301-951-7179, <http://www.audubonnaturalist.org>

12/21/98

Roland Steiner  
ICPRB

Thanks for providing the opportunity to comment on Draft Framework for the DC Source Water Assessment and Protection.

On page 4, I suggest that a sentence be added that explains EPA's role in setting rules for monitoring raw water for contaminants.

*[Done]*

Add highways, pipelines, incinerators, power plants to table 1, page 5.

*[Table 1 is a list of activities for which potential contaminants have been identified. Highways, pipelines, incinerators, power plants have been identified as needing similar information.]*

What data is already available about the structural integrity of DC's surface water intakes? While I agree this is a factor, I question why it is listed first. Should all of these factors be given equal weight? How will priorities be set for determining susceptibility given limited resources?

*[Structural integrity of system components is the first assessment item mentioned in the US EPA guidance. It is included in the Plan mostly for completeness.]*

More explanation is needed to justify using time of travel of water as a surrogate to assess the sensitivity of the watershed.

*[Travel time analysis has been restated to refer only to instream issues.]*

On page 9, will DC attempt to delineate buffer zones in MD, VA, PA, WV?

*[It was not intended that buffer strips be set up in the assessment process; therefore, the wording now refers to stream-side assessment zones.]*

More explanation is needed to justify using the HSPF model as an assessment tool. What experience can be used to justify the significant reliance placed on HSPF? For example, what does the HSPF say about sediment loads in the Cabin John Creek,

## APPENDIX D: PUBLIC PARTICIPATION

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Difficult Run, Watts Branch, Muddy Branch watersheds upstream of DC water intakes?  
How will protection of DC source water from upstream sediment loads be achieved?

*[Clarifying language has been added to the section describing the use of the Watershed Model. The Watershed Model has been calibrated to predict fall line nutrient and sediment concentrations on the basis of upstream land use and point source discharges. The model has been successfully verified, and is being used by Maryland, Virginia, Pennsylvania, the District of Columbia, and federal agencies involved in the Chesapeake Bay Program to plan regulatory and voluntary programs to reduce nutrients and sediment loads to the Chesapeake Bay. One of the purposes of the model is to predict the effects of implementing these programs, and most of the uses of the model envisioned in the DC-SWAP are extensions of the use of the model's predictive capability in the Bay Program. The model does not simulate the transport of sediment and nutrients in smaller tributaries directly. It does, however, simulate, on a broad scale, how land use activities and point sources in the watersheds of upstream tributaries contribute to the sediment and nutrient loads at the fall line. It can therefore, on a broad scale, be used to measure the relative contribution of geographic regions to fall line loads, to determine under what hydrologic conditions the greatest fall line impacts are likely to occur, and, in many respects, how future changes in upstream land use activities will affect water quality at the fall line.]*

What efforts will be made to assess chemical contaminants from airborne sources? For example, mercury emissions have contaminated the food chain in farm ponds near Dickerson.

What efforts will be made to evaluate the susceptibility of source water contamination from degradation products that are created when chemical contaminants interact with the environment?

*[Air-borne and degradation products have been added to the list of activities to be considered as potentially contaminating source water.]*

Evidence from numerous places indicate that protecting natural systems - especially forests, wetlands, and open spaces - plays a significant role in protecting source waters around the country. No mention of this option is included in the Draft Framework. This option would require all states within the Potomac River watershed to coordinate a basinwide approach. John Finney raised the question at the December 17 meeting about cooperation among states that share the Potomac River. Why wasn't a basinwide approach used?

*[The present project is to develop a Plan to guide the Assessment of potential contamination to source waters. Forests, wetlands, and open spaces might*

## APPENDIX D: PUBLIC PARTICIPATION

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*follow as remediation and protection measures. The 1996 Amendments to the SDWA were developed with significant “stakeholder input” resulting in state-by-state responsibility for implementation.]*

Neal Fitzpatrick  
Conservation Director



## APPENDIX D: PUBLIC PARTICIPATION

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WATER RESOURCES DIVISION  
8987 Yellow Brick Road  
Baltimore, Maryland 21237  
(410)238-4200 FAX (410)238-4210  
December 28, 1998

Dr. Roland Steiner  
Interstate Commission on the Potomac River Basin  
6110 Executive Boulevard, Suite 300  
Rockville, MD 20852-3903

Dear Roland:

Thank you for the opportunity to review the draft framework for the Washington, D.C. Source Water Assessment and Protection Program Plan. The framework seems to be well thought out and is consistent with other documents that we have seen from EPA and MDE. Although we are not able to participate fully on your Technical Advisory Group, we have several comments and suggestions for your consideration.

A general observation is that the framework does not take advantage of the large body of data and interpretive reports that have been produced by the USGS National Water-Quality Assessment (NAWQA) project in the Potomac River Basin. These products may provide a good foundation for much of your data gathering and analysis activities. Information can be found on the World-Wide Web at <http://md.usgs.gov/pnawqa/> or you can contact Joel Blomquist at (410)238-4260.

You mention (page 2) that delineation of the watershed above the two D.C. surface-water intakes will be based on USGS 1:250,000 and 1:24,000 scale mapping. The Potomac NAWQA project has produced watershed delineations for the Potomac River at Chain Bridge and for selected upstream subwatersheds where fixed-site sampling was conducted. These were based on 1:100,000 mapping and any discontinuities at map sheet boundaries have already been addressed. You may contact the NAWQA project through Joel Blomquist at (410)238-4260 to discuss availability of this data layer. It is important that watershed boundaries do not vary between agencies and that major agencies agree on watershed delineations. You will likely want to add delineations of watersheds above selected water withdrawal points.

The section on Chesapeake Bay Fall Line Monitoring Program (page 4) needs revisions. It is important to directly acknowledge the federal and state participants in that effort, which is done not by the Chesapeake Bay Program but in support of it. The following (underlined) is suggested to replace the current text. Also, note that the title of the monitoring program has been changed to be more precise.

Chesapeake Bay River Input Monitoring Program

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The U.S. Geological Survey, in cooperation with the Maryland Department of Natural Resources and the Virginia Department of Environmental Quality, monitors nutrient and sediment concentrations at the downstream freshwater limit of nine major tributaries to Chesapeake Bay, including the Potomac River at Chain Bridge.

[REDACTED] The monitoring program is a contribution to the Chesapeake Bay Program, and is described on the World-Wide Web at <http://va.water.usgs/chesbay/RIMP/>. The Chesapeake Bay Program and cooperating agencies, including USGS, also monitor toxics and metals at the downstream freshwater limit of the Susquehanna, James, and Potomac Rivers. These stations are at or near where the physiographic Fall Line crosses the rivers, and the locations are sometimes called Fall-Line stations. While monitoring programs for metals and toxics are not as extensive as those for nutrients and sediment, they still provide significant data on which contaminants may impact the District's raw water supply.

In the section on Sensitivity of the Watershed (page 6), we are uncomfortable with stating that time-of-travel "implicitly incorporates consideration of these sensitivity factors". We agree that it would be a good surrogate to assess watershed sensitivity closer to headwaters. However, at points farther downstream, the complexity of a watershed such as the Potomac would negate the usefulness of time-of-travel as single representative parameter. Nonetheless, time-of-travel is a critical parameter for assessing susceptibility to effects from upstream inputs of any pollutant.

Your general direction of using existing HSPF watershed modeling as a starting point is good.

For Assessment Round I (page 8), you should incorporate obtaining any GIS data from sources such as USGS, and in particular the delineation of the watersheds. You should also incorporate any data and interpretive products available from sources such as USGS NAWQA, in particular its nutrient and pesticide retrospective studies, its synoptic water-quality studies, and its bottom sediment and tissue study.

In the References, note that Jack (1984) should state "Petersburg to Green Spring", and that Taylor (1970) and Taylor (1971) are both Maryland Geological Survey Information Circulars.

*[All comments have been incorporated.]*

If you have any questions about our comments, please contact me at (410)238-4259 or [gtfisher@usgs.gov](mailto:gtfisher@usgs.gov).

For the District Chief, MD-DE-DC  
Gary T. Fisher, P.E.  
Hydrologist, Surface-Water Specialist

## APPENDIX D: PUBLIC PARTICIPATION

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cc: Jerusalem Bekele, DC DoH  
Miranda Brown, WAD  
Michael Marcott, WASA  
Frederick MacMillan, EPA Region III  
Gerald Peaks, VA DoH  
John Grace, MDE  
James Gerhart, USGS MD-DE-DC District  
Ward Staubitz, USGS VA District  
Joel Blomquist, USGS Potomac NAWQA

## APPENDIX D: PUBLIC PARTICIPATION

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>>Return-Path: <finneyj@worldnet.att.net>  
>>X-Sender: finneyj@postoffice.worldnet.att.net  
>>Date: Tue, 12 Jan 1999 23:05:21 -0500  
>>To: kberger@mwcog.org  
>>From: John Finney <finneyj@worldnet.att.net>  
>>Subject: Jan. 8 Draft of Source Water Assessment Plan  
>>Cc: thomas.p.jacobus@wad01.usace.army.mil, nvj@epaibm.rtpnc.epa.gov,  
>> hamner.rebecca@epamail.epa.gov, ppagano@ids2.idsonline.com  
>>  
>>Dear Mr. Berger:  
>>  
>> Thank you for sending me a revised copy of draft plan for the District of  
>>Columbia's Source Water Assessment Program.  
>> I find the revised draft, while still awfully wordy, a great improvement  
>>over the earlier draft. For me, the statement of purpose of the project, as  
>>explained on pages 6 and 7, is much clearer and more understandable.  
>>Indeed, it finally is made clear that the future protection of D.C. water  
>>supplies depends on what takes place upstream from the District. The plan,  
>>therefore, proposes that the District survey the entire watershed for  
>>future contaminants of its water supply, drawing upon information supplied  
>>by the upstream states and federal agencies, but acting on its own.  
>> I still find this a very ambitious project for a District government  
>>which has trouble fixing water pipes in its own domain. And I still believe  
>>a regional approach would be preferable. But after talking with Vicky  
>>Bennetti of EPA, I have a better understanding of why it is proposed the  
>>the District do the study on its own.  
>>  
>> I gather there is a touch of paternalism (or in this case maternalism) in  
>>EPA urging the District to conduct the study on its own. The hope within  
>>the EPA is that the District will develop knowledge, skills and competence  
>>in environmental matters in doing the study on its own but with federal  
>>financing. I am not sure that such paternalism, however well-intended,  
>>falls within the mandate of the EPA. But if the effect is to prepare the  
>>District government to defend its citizens against neighborhood pollution  
>>ordered by the EPA, then I can only applaud the effort.  
>>  
>> As I understand the funding, EPA has made a grant of \$400,000 to the  
>>District to conduct the basin-wide study, with the expectation the study  
>>will be carried out by the Interstate Commission on the Potomac River  
>>Basin under the direction of a staff person from the District's Office  
>>Environmental Health. The \$400,000 is not an insignificant sum given the  
>>needs of the District of Columbia, but it still is small enough to keep  
>>the study from becoming a big boondoggle.  
>> In connection with the funding, I wonder whether the statement at the top

## APPENDIX D: PUBLIC PARTICIPATION

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>>of page 6 that the source of funding will be a set aside from the 1997  
>>allotment to the District (I believe for \$12.5 million) is correct. My  
>>understanding is that the funding is a direct grant from EPA since the  
>>District does not have a Drinking Water Revolving Fund, as do the states.

*[The funding statement has been clarified in the document.]*

>> I initially was skeptical about the capability of the District government  
>>to manage such a project. But I gather from D.C. Council Member Kathy  
>>Patterson that the Environmental Health Administration of the D.C.  
>>Department of Health has gathered together a competent group of officials,  
>>including my Palisades neighbor Nick Kaufman, for whom I have the highest  
>>regard.

>> So after my initial reservations, I say let's get to it. Let the District  
>>demonstrate it can stand on its own two feet in defending its drinking  
>>water sources against contamination by the upriver states. I am not sure  
>>the states, which tend to treat our district as an orphan, will cooperate  
>>fully or will pay much attention to the conclusions reached by the  
>>District study. But at least the District will have a study to shove in  
>>the faces of the states if they continue to disregard the interests of the  
>>District in protecting the purity of the Potomac River above the fall line.  
>>[REDACTED]

*[REDACTED]*

>> Before you go to the printer, however, you may want to find another word  
>>for anthropomorphic at the bottom of page 12. Anthropomorphic refers to  
>>the attribution of human characteristics to non-human objects. Thus, for  
>>example, the EPA has anthropomorphic feelings about the bullhead minnows  
>>that swim in the shadow of Chain Bridge. I think the word you are looking  
>>for is "mamade."

*[The suggested replacement was made in the document.]*

>> Congratulations on your efforts to get this project underway. I know that  
>>you and Mr. Steiner have worked hard on this in the face of carping from  
>>civilians on an advisory panel. But I think the study will be all the  
>>better for being blessed with the observations of those who eventually  
>>will drink the water you are trying to protect.

>> If you would, please send along a copy of this to Mr. Steiner, and  
>>circulate it in any way you wish.

APPENDIX D: PUBLIC PARTICIPATION

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>>

Sincerely yours,

>>

>>

John W. Finney  
Co-Chair of CRUDD>>

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## APPENDIX D: PUBLIC PARTICIPATION

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Date Sent: Tuesday, January 19, 1999 6:01 PM  
From: "Buglass, Bob" <"MAIL@SMTP  
{bBuglas@wssc.dst.md.us}"@c2smtp.potomac-commission.org>  
To: RSTEINER <RSTEINER@c2smtp.potomac-commission.org>  
Subject: DC SWAP Draft Comments  
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Roland -

This draft looks very well done to me. I have a few minor comments/suggestions for your consideration. Some may not be appropriate to the current stage; feel free to ignore or defer.

- \* Page 6 and page 15, may want to note whether both intakes are shore intakes, which are more susceptible to effects of local tributary runoff water quality.
- \* Page 9, may be worthwhile to mention and get data from the Rockville water plant, with its intake [REDACTED].
- \* Page 11, besides sand and gravel, other types of mining (active and abandoned) may be significant. "Biosolids" is the current preferred term for municipal wastewater plant sludge.

*[The list of activities in the Plan is for those activities which contaminants have been associated.]*

- \* Page 12, last paragraph, may want to emphasize that urbanization increases surface runoff peak flows far more than would be predicted by the increase in impervious area, because of hydrologic/hydraulic modification. The result is often extensive stream channel erosion from fairly minor storms.
- \* Page 13, under Potential Sources of Contamination, even undeveloped areas have potential sources of contamination, e.g. pathogens from large deer populations.
- \* Page 13, under Susceptibility, may want to consider biodegradability along with the listed removal mechanisms.
- \* Page 18, under Taste and Odor, runoff from snow melt, and when the ground is frozen, often contains ammonia which results in taste and odor problems. Also, some roadway deicing chemicals contain urea, another nitrogen source, and another taste and odor precursor.
- \* Page 19, minor typos, second paragraph, Westvaco is spelled differently; third paragraph "their transport".

## APPENDIX D: PUBLIC PARTICIPATION

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*[All comments incorporated except as noted above.]*

I'm not sure if I can come to the meeting tomorrow night. If any questions, please call at 301-206-8082, or return e-mail.



## APPENDIX D: PUBLIC PARTICIPATION

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January 20, 1999

Mr. Roland Steiner  
Interstate Commission on the Potomac River Basin  
6110 Executive Boulevard  
Suite 300  
Rockville, MD 20852

Dear Mr. Steiner:

Thank you for inviting me to have these remarks read into the record at the Source Water Assessment Plan public meeting tonight.

With Mr. John Finney, I am concerned that sediment deposition in the Potomac above the Washington Aqueduct Water Treatment Plant adds to the water quality and waste disposal problems of the Aqueduct Plant.

I am particularly concerned that the drinking water treatment plants above Washington add to this problem by discharging their waste directly into the Potomac.

You indicated in our phone conversation that around twenty drinking water treatment plants may be sited above Washington. You also indicated that the WSSC treatment plant now discharges all its solid waste directly back into the Potomac some few miles above the Aqueduct intakes.

Mr. Karl Berger at the Metropolitan Washington Council of Governments said to me by phone today that WSSC was contracting for a plant that would eliminate some but by no means all solid discharge.

I would like to see the current SWAP plan (January 8, 1999) revised to include assessment of the threats posed by all water treatment plants in the Potomac River Basin to the quality of Washington's drinking water.

*[Water treatment plant discharges are subject to NPDES permits, and as such will be considered in the Assessment.]*

I would also like to see the current SWAP plan include arguments for and against the discharge of the Washington Aqueduct Water Treatment plant's own waste products back into the Potomac.

*[The DC treatment plant solids are discharged to the river down stream of the intakes; therefore, they are outside the scope of the DC Source Water Assessment. The fact that there are no other drinking water withdrawals*

APPENDIX D: PUBLIC PARTICIPATION

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*down stream of those discharges makes it unlikely that they will be considered in any Source Water Assessment.]*

Thank you for your attention.

Sincerely,

Charles C. Verharen  
1207 35<sup>th</sup> Street, Northwest Phone: 202-338-6033  
Washington, DC 20007 Fax : 202-965-4735

## APPENDIX D: PUBLIC PARTICIPATION

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1/21/99

Roland Steiner  
ICPRB

Thanks for the opportunity to submit these additional comments and questions about the Draft Source Water Assessment and Protection Program Plan for the District of Columbia.

Page numbers refer to the December 11, 1998 Draft. So far, I have not taken the time to compare the 12/11/98 Draft with the 1/8/99 Draft. It would help to have new language delineated.

Sincerely,

Neal Fitzpatrick

### General Comments

The Watershed Model and the Hydrologic Simulation Program-Fortran (HSPF) are both existing tools, which were developed for specific purposes other than those described in this document. While models and simulations can be extended, evolved, improved and otherwise modified, it is extremely risky for modifications of the type described in this document to be done by those who developed the original model or simulation. Typically many assumptions, both explicit and implicit, are necessary in the process of developing models and simulations. No matter how well documented, important assumptions will not be apparent to other users, which can lead to significant problems.

The biggest problem with modeling and simulation is believability of the results. It is very important, particularly when adding capabilities to an existing model, to first establish a baseline of the characteristics of the model before modification. As important capabilities are added, incremental checks of specific functions or characteristics should be examined very carefully. The objective of these checks should be to determine if the tool produces results that make sense; for a set of inputs that correspond to an intuitive case, does the tool produce results that are consistent with expectations? This type of systematic approach is not discussed in the document.

Modeling and simulation can easily become open-ended activities. The trial and error approach rarely yields the desired results.

### Specific Comments

The Potomac River, upstream of the fall line, is divided into eleven segments with each segment representing a river reach and the area of land that contributes to it. Are the

## APPENDIX D: PUBLIC PARTICIPATION

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characteristics of each segment the same for the entire segment, or can there be multiple land uses within a segment?

*[There are multiple land uses within each segment.]*

What does “fully-calibrated hydrology” mean? Does it mean that the HSPF models the flow of water in the hydrological cycle, representing precipitation, evaporation, runoff, ground water flow, and transport to some level of agreement with measured data for all of the types of land use to be considered? What about transpiration? Infiltration?

*[In this case, “fully-calibrated” means that the average daily flows calculated by the model are in agreement with the daily flows measured at the USGS monitoring station at Chain Bridge. The flows predicted by the model are also calibrated to observed data at other locations, such as Millville, WV, for the Shenandoah River and Shepherdstown, WV, for the upper Potomac. All aspects of the hydrologic cycle, including transpiration and infiltration, are represented in the model.]*

It is stated on page 12 that the HSPF is capable of modeling the transport of fecal coliform bacteria, and that the Watershed Model will be adapted to simulate the fate and transport of fecal coliforms. To what extent has the HSPF been validated for this use? Have the predicted results from HSPF been compared to measured results at the upper end of the contamination level? Interpolation is vastly preferable to extrapolation.

*[HSPF is a flexible model that can be used to study the fate and transport of a wide range of contaminants. The user determines the contaminant of interest and specifies the parameters that describe its behavior in an input file. The model itself does not need to be validated; it will be calibrated against observed monitoring data. Neither interpolation or extrapolation should be necessary. The Watershed Model, in a sense, is just a set of input files for HSPF, though, of course, it takes an enormous effort to develop and maintain the input files, calibrate the model, and analyze the results.]*

At the bottom of page 12 there are several tasks identified as “necessary to adapt the Watershed Model to the representation of the fate and transport of fecal coliform bacteria.” If HSPF is the underlying simulation and it already covers these effects, then shouldn’t the modifications to the Watershed Model be minimal?

*[As stated above, the user must specify which constituents are modeled and the parameters to describe their fate and transport. Currently, the Watershed Model does not simulate fecal coliforms, so the parameters necessary to represent them will have to be added to the input files that currently run the model. The underlying model hydrology and hydraulics, however, will not*

## APPENDIX D: PUBLIC PARTICIPATION

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*change, therefore much of the work in developing a model has already been done.]*

At the top of page 13 it states, “Additional analysis will be necessary to make inferences from the results of the fecal coliform simulation which apply to pathogens such as giardia and cryptosporidium.” What types of analysis? Fecal coliforms are probably not good indicator for other pathogens in all conditions. How will this be included?

*[The statement was intended to express the recognition that fecal coliforms are not necessarily a good indicator of other pathogens, and has been changed to reflect that. Many states, including Pennsylvania and Maryland, have studies to examine the sources, fate, and transport of cryptosporidium., and the DC SWAP will make use of the results of those studies to determine the susceptibility of DC’s drinking water supply to contamination from it.]*

On page 13 it states “The Watershed Model calculates nutrient concentrations, as well as chlorophyll concentrations, at the fall line.” Where are the intakes relative to the fall line? Is it not necessary to calculate these concentrations at the intakes to correlate cause and effect?

*[Chain Bridge is [REDACTED]. Since the purpose of using the Watershed Model is to evaluate the relative contribution of different regions in the watershed to fecal coliform concentrations at the intakes, it should not be necessary to correct the model for the exact location of the intakes. In determining, for example, whether the South Branch of the Potomac or the Conococheague Creek contributes more to the concentration of fecal coliform concentrations at the intakes, there is no need to correct for the 1.5 or 10 mile difference in location, because those distances are small compared to the size of the basin.]*

## APPENDIX D: PUBLIC PARTICIPATION

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Date Sent: Wednesday, January 27, 1999 11:46 PM  
From: CWA Program Staff <"MAIL@SMTP  
dccwa@cleanwater.org"@c2smtp.potomac-commission.org>  
To: RSTEINER <RSTEINER@c2smtp.potomac-commission.org>,  
kberger <"MAIL@SMTP {kberger@mwcog.org}"@c2smtp.potomac-  
commission.org>  
Subject: Final SWAP Comments

District of Columbia  
SOURCE WATER ASSESSMENT PROGRAM

Comments Submitted by:

Carla Pappalardo, Tricia McPherson, and Clean Water Action

Prepared by: Carla Pappalardo and Tricia McPherson

January 27, 1999 These written comments regarding the District of Columbia's Draft Source Water Assessment Plan are submitted by Carla Pappalardo and Tricia McPherson (a District resident) as members of the required Citizens' Advisory Committee (as stated in the EPA guidelines for the Source Water Assessment Plans each state, including the District of Columbia, must submit to the EPA for approval). This documentation is submitted by Carla Pappalardo as the Chesapeake Regional Coordinator and Tricia McPherson as the Field Canvass Director for Clean Water Action's National Headquarters in the District of Columbia. Where comments directly relate to specific parts of the Draft SWAP, those sections will be identified.

Funding Constraints:

We want to thank the Council of Governments for its role in this process as well as the EPA and ICPRB for their work in providing answers to our questions. Regarding funding for the Plan and the actual Assessment, it was quite clear through meetings of the CAC, that the Department of Health is unclear as to the actual amount of money set aside for this and where it comes from. We therefore urge ICPRB to continue its role through the actual assessment by submitting a bid. Our hope is for the Department of Health to open up the bidding process and not take on the role themselves.

Furthermore there are concerns as to the sufficiency of the allotted EPA grant of \$400,000 that was given to the District, to not only complete the assessment, but carry out the plan. Some concerns arise as to if this allocated sum of money is in fact sufficient. Will there be enough to fully implement an assessment of the potential and relevant contaminants? Will there be enough to carry out the "massaging" of other states' data as needed for DC's Plan? And finally, will there be enough to incorporate all data into an effective plan that would essentially protect and prevent source water

## APPENDIX D: PUBLIC PARTICIPATION

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contamination? If this grant is in fact the only available source of funding, and required findings for a comprehensive assessment exceed that amount, then does this mean that some contaminant sources will not be included? Or will additional monies be made available, such as what was suggested at the last "public" meeting in regards to states in the watershed area pooling money to do a regional study?

*[Until a budget and scope of work are developed for the Assessment, it is difficult to address the issue of supplemental funds for the Assessment phase.]*

### Public Participation/Inter-jurisdictional Coordination:

In some ways DC is ahead of other states in public participation even though the process was started much later in other places. One question that still needs to be addressed is, what range of residents was contacted in the District and did this represent a well-rounded group of residents? We are requesting that a list of these outreach efforts be sent to us.

*[MWCOC sent letters soliciting interest in helping to develop the District of Columbia's SWAP Plan to more than 100 individuals. These people included all of those who attended a public meeting on drinking water issues in Washington, D.C., held by EPA Region III in March 1996. They included other representatives of civic and environmental organizations in the city, the chairs of the 29 Advisory Neighborhood Commission subdistricts in the city, and representatives of various city government agencies or other organizations involved in drinking water and public health issues.]*

Thank you for the "extra" meeting that the CAC requested for further comment on these draft plans. In light of the importance of these Assessments (for protection of our drinking water), and the fact that in part, we must rely on the neighboring states of Maryland, Virginia, West Virginia, and Pennsylvania (for their state plans' data), we foresee a potential need for additional comments beyond the submission date requirements. Any future comments will be submitted to EPA, Region III or the District of Columbia Department of Health.

There are still major concerns regarding "Inter-jurisdictional Cooperation and Coordination." As mentioned above, DC will need to rely on the data provided to us by our neighbors. In the last SWAP meeting it was clarified that we will use only their data and not their plans or assessments, and that once we have that data, it will be massaged for the District's plan. Perhaps it is the suggestion of massaging the data that brings concern. Or perhaps it is the question of overall sufficiency of that data. Yes, the EPA still has to approve those state plans. However, with no citizen oversight there can

## APPENDIX D: PUBLIC PARTICIPATION

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be no guarantee our concerns will be addressed, particularly since we are unaware as to who will actually carry out the plan.

*[It is noted in the Plan that the Citizens' Advisory Committee recommended a continuing role for public involvement.]*

### Potential Contaminants:

The topographic watershed approach to source delineation is important in the necessity to meet the EPA indications for Source Water Assessment Plans. In regards to Section II.D and Section III. there are concerns which have been mentioned in CAC meetings, but not fully addressed. There is discussion in Section II.D of Zone Segmentation and subsequent delineation to be "based on potential pollution pathways and the varying degree of susceptibility posed by the different classes of potential contaminants and sources." Who will determine these issues?

*[These issues will be determined by the staff conducting the Assessment.]*

It is recognized that there are funding "limitations." However, all potential contaminants, not just "relevant" ones (Section III.A.) must be searched for, their pathways and travel times to water sources projected. We must be certain that the data received from the other states in the Potomac River Basin Watershed covers all potential contaminants and potential travel times, even if they are not considered "relevant," which usually means "expected." Through accidents such as human error or even through natural causes the unexpected can become the expected.

In Section II.E dealing with Mapping Delineation, it is sited that the hydrologic layer will include "major" rivers, streams, lakes, and reservoirs. All reservoirs are "major" to those who draw their drinking water from them. There are concerns regarding what constitutes "major." Sources of contamination to our source waters do not choose to locate themselves only on "major" waterways. When taking the inventory of business types and activities, for which related potential contaminants are identified (Section III, Table 1.) the hydrologic layer of mapping should include all "pertinant" rivers, streams, lakes, and reservoirs. In determining which are pertinent, it will be necessary to evaluate what businesses or activites may in fact be located on "minor" rivers, streams, lakes, and reservoirs. Since the delineation element of the Assessment will be founded on this base map, to have an Assessment done on source water which is accurate, complete, and cost effective this would need to be addressed in the SWAP Plan. The same would hold true for "minor" roads as a potential source for contamination, unless this solely deals with a base map for viewing purposes only and not as an actual basis for where to do assessments.



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*[Your latter statement is nearer to our thinking. It is intended that rivers and roads be shown down to some level of detail which is not too crowded. If a potential contaminant source exists, it will be assessed regardless of whether it is located on a mapped river or road.]*

It is our understanding that monitoring is not as extensive in some states as in other states. In addition, enforcement on that monitoring has been seen as problematic. We are once again dependent upon our neighbors for their monitoring data, which may or may not be adequate. Section III.B states that an "attempt" will be made to determine the source of identified contaminants of "concern" as they are discovered in the monitoring data. The District's Plan should be clear on what contaminants are of concern to DC and if those contaminants are not a part of the monitoring data from a neighboring state, should be identified and data obtained.

*[Contaminants found in the water demonstrate susceptibility; therefore, the Assessment is a priori done. We are trying to push a little farther here if we can — into what would be the watershed protection phase.]*

Referencing Table 1 again, some minor adjustments in wording of certain activities and additions to that list are recommended. The list mentions Municipal Wastewater/Sewer lines and Septage lagoons and sludge. We would suggest language include Combined Sewer Overflows. Retention ponds at wastewater treatment facilities may reach capacity, and overflow is not treated before discharge. Another potential contaminant would be superfund sites. Although the Front Royal site in Virginia is listed there is no mention of other sites. Highways and different types of land uses are mentioned, however, areas of extensive residential development are not. These areas can be a contributing factor to source water contamination due to various practices including pesticide applications, runoff, oil changes, accidental dumping of toxic household chemicals, etc.

*[We propose two methods of determining if a potential contaminant is present in the watershed: (1) direct assessment = presence in water monitoring data, and (2) potential contaminant assumed to be associated with a known activity in the watershed. Table 1 and other similar information sources allow us to translate from activity to presumed presence of potential contaminant when that contaminant has not been found in water quality monitoring. Therefore, Table 1 is one source of information we found to translate from "activity" to possible presence of potential contaminant. We know that other such tables exist and are more complete — covering activities you mention above.]*

Enforcement:

There is currently no enforcement mechanism to "assure that as they [the states] implement source water protection programs the water sources for the District of

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Columbia are also protected" (from section I.D of the Introduction). One issue discussed frequently at our DC SWAP meetings has been the suggestion to continue the involvement of the Citizens' Advisory Committee in the actual assessment. This could be an effective way of including more public participation in the Assessment, as well as ensuring the information available to DC is extensive enough to meet the needs of protecting the water supply of our nation's Capitol. We strongly urge the continued presence of the Citizen's Advisory Board in the furthering of this project. This could also be a way for citizen's to take ownership over ensuring clean water for the District and to assist with fostering the necessary working relationships with "upstream" states. Clean Water Action would be more than willing to help forge relationships with our neighbors, and with the capability of reaching almost 100,000 member households, can have an effective impact in this campaign for clean and safe water.

*[Again, it is noted in the Plan that the Citizens' Advisory Committee recommended a continuing role for public involvement.]*

Please respond in writing regarding our public comments. We look forward to the continuance of the Citizens' Advisory Committee in an official capacity.