MASIC × GC 1 .W66 no.4

REPORT OF A WORKSHOP TO ASSESS THE

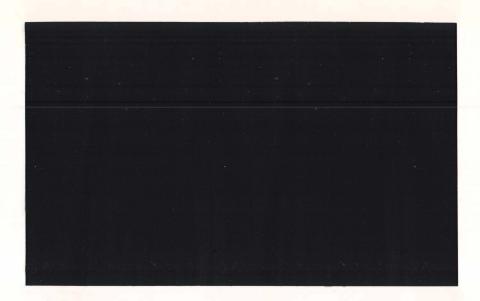
NEED FOR AN OMPA-SPONSORED SYNTHESIS

ACTIVITY ON POLLUTION IN CHESAPEAKE BAY

J. R. Schubel



State University of New York
Stony Brook
LIBRARIES



MARINE SCIENCES RESEARCH CENTER STATE UNIVERSITY OF NEW YORK STONY BROOK, NEW YORK 11794

A Report to The
Office of Marine Pollution Assessment

4

REPORT OF A WORKSHOP TO ASSESS THE

NEED FOR AN OMPA-SPONSORED SYNTHESIS

ACTIVITY ON POLLUTION IN CHESAPEAKE BAY

J. R. Schubel

Workshop Held 29 July 1981

EPA Central Regional
Laboratory, Annapolis, MD

Working Paper 4
Reference 81-7

Approved for Distribution

Dehules

J. R. Schubel

- This is an exploratory workshop whose principal purpose is to determine whether, or not, a special synthesis effort sponsored by the National Oceanic and Atmospheric Administration's (NOAA) Office of Marine Pollution Assessment (OMPA) focussed on pollution in Chesapeake Bay and its management problems would be useful and welcome.
- We are contemplating a synthesis effort and not a research program.
- If we decide to conduct an effort, it will be at a modest level of funding over a two to three year period.
- We may elect to do nothing.
- I asked the Marine Sciences Research Center (MSRC) of the State University of New York (SUNY) to organize and lead the workshop because OMPA has a Cooperative Agreement with MSRC in the general area of pollution in coastal waters of the United States, and because several members of the MSRC's faculty have worked extensively in the Chesapeake Bay.
- We have no further commitment to MSRC or to any other organization at this point.

CONCLUSIONS OF WORKSHOP

- An appropriately planned and coordinated OMPAsponsored synthesis effort would be a valuable and welcome addition to Chesapeake Bay activities.
- Any OMPA-sponsored synthesis effort should be management oriented.
- Any OMPA-sponsored synthesis effort should be coordinated closely with and build upon EPA's Chesapeake Bay Program.
- OMPA should assign someone soon to serve on the Environmental Protection Agency Chesapeake Bay Program Management Committee to minimize duplication and to ensure maximum effectiveness of a follow-on OMPA-sponsored activity.

- An OMPA-sponsored synthesis effort should select tasks that will complement work already done under the EPA CBP but it should not pick up unfinished EPA tasks.
- Syntheses can be done for a variety of purposes which include: research, teaching, management.
- The form and substance of the most useful synthesis product will depend to a large extent upon the audience for which it is intended and the uses to which it will be put.
- Synthesis products might include: written summaries, oral summaries, workshops, diagnostic models, systems to provide ready access to a group of experts, interactive computer systems.
- In making decisions, each decision maker usually relies directly upon the advice of a small number of trusted and respected experts, and not directly upon data and information banks, or general synthesis documents.
- Published documents are usually one year, or more, "out of date" by the time they appear. There is no convenient and economical way to keep them current, and often they are too general to be of direct use to the manager faced with a problem that requires a decision.
- Interactive computer systems may provide managers with an important decision making tool, but their development will be difficult, costly, and time consuming. The American Management Association has stated that development of effective interactive computer systems for environmental management will be the most difficult systems to develop.
- Perhaps the greatest value of synthesis documents to managers is to inform the public of the best scientific thinking on the natural processes that characterize the Bay, how society has affected those processes, and on how various management strategies can be expected to affect the quality of the Bay and the uses society makes of it. Authoritative and properly presented synthesis documents can provide the basis for understanding why specific management strategies are being pursued.

RECOMMENDATIONS OF WORKSHOP

• If a monograph series is to be the synthesis product, it should be targeted to managers and to questions and problems managers most face.

- Topics for monographs should be selected jointly by scientists, managers and citizens, perhaps through the Chesapeake Bay Program Management Committee. Topics might be selected from among the 7 remaining subject areas identified at the outset of the EPA CBP¹, from the list of "uses of the Bay²," or from other sources³.
- Once topics have been selected, monographs should be developed around a series of specific management questions.
- Each monograph should be the result of a collaborative effort of one, or more, scientists working with one, or more managers.
- Each monograph should exemplify how the best and most up-to-date scientific information can be brought squarely to bear on important management questions. The reports should indicate how well the management questions can be answered with existing data and knowledge, and what benefits management could expect from more research into specific questions.

The ten subject areas listed below were identified at the outset of the EPA's Chesapeake Bay Program. The last seven are not being addressed by the EPA CBP and might be considered as possible topics for a monograph series.

- 1. Submerged 4. Shoreline erosion 7. Hydrological aquatic vegetation
 - 5. Dredging and dredged material 8. Shellfish bed disposal
- modifications closures

- 2. Toxics
- 3. Eutrophica- 6. Fisheries modifi- 9. Wetlandstion cation

 - 10. Small boat effects

²Uses of the Bay that have been identified on a number of occasions and that might serve as topics for a monograph series.

- 1. Fisheries and wildlife
- 2. Transportation
- 3. Waste placement
- 4. Recreational uses
- 5. Electricity generation
- 6. Shoreline development
- 7. Mining

3Other subjects suggested at workshop as possible topics for an OMPA-sponsored monograph series.

- 1. Human pathogens
- 2. Chlorination
- catastrophic events
- 4. Unintentional introduction of new/species
- 3. Crisis management/ 5. Drainage basin management and environmental quality within the Bay

Mr. James Audet
Environmental Data & Information Svce.
National Oceanic & Atmospheric Admin.
National Oceanographic Data Center
Washington, D.C. 20235

Dr. Richard Bruno, Chief
U.S. Army Corps of Engineers
Waterways Experiment Station
Chesapeake Bay Model
P. O. Box 148
Stevensville, Maryland 21666

Dr. Michael A. Champ
U.S. Department of Commerce
National Oceanic & Atmospheric Admin.
Office of Marine Pollution Assessment
RD/MP2 Rockwall Building, Rm. 320
Rockville, Maryland 20852

Mr. Philip M. Cohen
Office of Marine Pollution
National Oceanic & Atmospheric Admin.
Rockwall Building, Room 320
Rockville, Maryland 20850

Dr. Rita Colwell
Department of Microbiology
University of Maryland
College Park, Maryland 20742

The Honorable James B. Coulter Department of Natural Resources Tawes State Office Building Annapolis, Maryland 21402

Dr. L. Eugene Cronin, Director Chesapeake Research Consortium 1419 Forest Drive, Suite 207 Annapolis, Maryland 21403

Dr. Tudor T. Davies Chesapeake Bay Program & Director Environmental Research Lab. South Ferry Road Narragansett, Rhode Island 02882

Dr. Thomas DeMoss Environmental Protection Agency Chesapeake Bay Program Annapolis, Maryland 21401 Dr. William M. Dunstan
Department of Oceanography
Old Dominion University
Norfolk, Virginia 23452

Mr. Paul W. Eastman
Interstate Commission on the
 Potomac
1055 First Street
Rockville, Maryland 20850

Dr. Henry Frey, Chief
Marine Environmental Services
Division
OA/C21, National Ocean Survey
Rockville, Maryland 20852

Mrs. Caren Glotfelty
Maryland Department of Health
Office of Environmental Progs.
Baltimore, Maryland 21200

Mr. John S. Gotschalk
Citizens Program for Chesapeake
Bay (CPCB) Inc.
1412 16th Street N.W.
Washington, D.C. 20036

Mr. Ronald Gregory
Virginia State Water Control
Board
2111 Hamilton Street
Richmond, Virginia 23230

Mr. James E. Gutman 233 Vittshire Lane Severna Park, Maryland 21146

Mr. Frank Hammons Maryland Port Administration Baltimore, Maryland 21201

Ms. Mary Kasper Citizens Program for Bay 6600 York Road Baltimore, Maryland 21212

Dr. M. Lynch
Virginia Institute of Marine
Sciences
Gloucester Point, VA 23062

Dr. Frank Perkins
Virginia Instit. of Marine Sciences
Gloucester Point, Virginia 23062

Dr. Donald W. Pritchard
Marine Sciences Research Center
State University of New York
at Stony Brook
Long Island, New York 11794

Mr. Larry Pugh
National Oceanic & Atmospheric
Administration
Research and Development (NOAA/RD)
Rockville, Maryland 20850

Dr. Aaron Rosenfield, Director
National Oceanic & Atmospheric
Administration
National Marine Fisheries Service
Oxford Laboratory
Oxford, Maryland 21654

Dr. J. R. Schubel, Director Marine Sciences Research Center State University of New York at Stony Brook Long Island, New York 11794 Mr. Hal Stanford
National Oceanic & Atmospheric
Administration
Office of Marine Pollution
Assessment - Northeast Office
Stony Brook, New York 11794

Dr. Harris B. Stewart, Sr. Center for Marine Studies Old Dominion University Norfolk, Virginia 23508

Dr. R. Lawrence Swanson
Director, MP
Office of Marine Pollution
Assessment; National Oceanic
& Atmospheric Administration
Rockwall Building, Room 320
Rockville, Maryland 20852

Mr. Cloyde Wiley Virginia State Health Dept. 109 Governor Street Richmond, Virginia 23219

Mr. Lee Zeni
Maryland Department of Natural
Resources
Annapolis, Maryland 21401