

APPENDIXES

APPENDIX A

THE SURVEY AND INTERVIEW PROCESS

THE HEINZ CENTER for Science, Economics and the Environment, a private, nonprofit public policy research center in Washington, D.C., has been contracted by the NOAA Office of Ocean and Coastal Resources Management (OCRM) to explore how good ideas and practices for coastal problem solving are shared with others who have similar needs, and how information sharing might be improved. The Heinz Center has brought together a dozen experts in coastal management from government, academia, business, and nongovernmental organizations to undertake the study.

The impetus for the study comes from a number of sources. OCRM regularly receives queries from state coastal managers wanting to find out how others have addressed the problems they are facing, but has no systematic means of providing this information in a comprehensive manner. In the 1999 NOAA Coastal Services Center's "customer survey," 80 percent of respondents said they needed better "access to information about and how other offices have addressed similar issues and management options." Clearly, coastal managers are saying they need to become a more effective and efficient learning community.

Our study addresses this need, with specific objectives to

1. Define the problem more clearly by documenting how we *do* share coastal problem-solving ideas and practices now in government, academic, business, and not-for-profit sectors.
2. Identify the strengths, limitations, and outlook for present information-sharing methods and efforts.

3. Identify ways to improve information sharing and learning, drawing on the experiences of those within and outside the coastal management community.

THE STUDY PROCESS

To begin our study, we want to learn from those involved in coastal management—planners, regulators, developers, and advocates in the public, academic, private, and not-for-profit sectors. Our first information-gathering effort will involve semi-structured interviews of coastal managers in government, academia, and the private and nongovernmental sectors. Following our interviews, we plan to conduct a small workshop to explore in more depth what we learn in the interviews. We will invite a number of coastal managers to the workshop, as well as others who can help us learn more about becoming a more effective learning community. The panel will then deliberate and prepare its report to NOAA.

SURVEY/INTERVIEW

The interview questions below are designed to facilitate our learning. If we haven't asked the right question, tell us so. We need to know what you think about, How can coastal managers and decision makers learn and adapt the lessons and experiences of others to achieve better outcomes?

Confidentiality. Although we may generalize results of this survey, individual interviews are confidential. We will ask your permission if we wish to cite specific examples you provide.

INTERVIEWEE

Name:

Address:

Phone:

E-mail:

INTERVIEWER

Name:

Interview Questions

1. Looking back over the last decade or so, what are the most important changes or improvements in coastal programs, planning and development processes, regulatory or acquisition programs, etc., that have affected how you do business? [*Examples include (1) a new way to track*

and report performance, (2) new way of assessing wetland functions and development tradeoffs, (3) improving public access to beaches or waters, (4) cleaning up and redeveloping brownfields or deteriorated waterfronts, (5) involving the public and interest groups in decision making, (6) public-private collaborations, (7) addressing sea level rise within bays and estuaries or along the ocean coasts, and so on.]

Possible Follow-up Questions:

- A. What were the motivations for making these changes or improvements? [For example, a directive from higher up, a response to other pressures, a clear resource or development-related problem, etc.]
 - B. For state CZM staff—in the overall scheme of problems you deal with, how important are national initiatives as drivers for changes or innovations, for example, the 6217 non-point pollution program or the CZM Section 309 CZM improvement process over the last decade? To what extent have 309 financial resource availability or the skills of staff and leaders played roles in the outcomes of initiatives you've undertaken?
 - C. Were the changes or improvements you made based on conventional practices, or would you characterize them more in the “innovative” category? [We define innovative as simply an idea or practice that you perceive as *new*.]
2. Where did you turn for information, ideas, strategies, or tools to help design and implement changes and improvements in coastal management? What are the most important and credible *channels* of communication?

Possible Follow-up Questions:

- A. Is the search process and information availability issue-dependent?
- B. In designing your program improvements, were there good examples elsewhere from which you could draw lessons?
- C. Did you have to reinvent or tailor existing approaches in significant ways? How did you go about that?
- D. How important is networking for getting problem-solving ideas or approaches?
- E. What individuals, organizations, or media do you (and your staff or colleagues) most rely upon?

- F. Do you ever bring someone in from another state, agency, or program to give you the details first hand and help you think through the adaptation process?
 - G. Were there situations where you could find nothing useful elsewhere and had to work from scratch, inventing your own approach and solution?
3. How do the really good ideas and practices in coastal management spread or diffuse? Can you give an example?

Possible Follow-up Questions:

- A. How has technology fostered innovations in problem solving and in getting innovative solutions to problems transferred to others who could use them?
 - B. What kinds of information transfer media work best for you—for example, conference presentations, in-depth workshops, project reports documenting processes and results, case studies, demonstration projects, journal articles, CDs, published reports, and so on?
 - C. How do you share your good ideas and practices for coastal management problem solving with others? Can you give an example?
4. How would you like to get your information in the future, given the constraints you face and the resources available—human, financial, and technological? What should be given more emphasis by whom and why?
5. Finally, are there other people you think we should interview to learn specifics about a particular information sharing example or coastal management innovation?

Thanks very much for your time and ideas. We will keep you abreast of the study process and put you on the mailing list for our final report. In the meantime, if you have anything you would like to follow up on, don't hesitate to call or e-mail. You can contact me or the study coordinator, Sheila David at The Heinz Center (202-737-6307 sdavid@heinzctr.org).

APPENDIX B

SURVEY PARTICIPANTS

Ray Allen, Coastal Bend Bays and Estuaries Program, Texas
Wendy Allen, North Inlet-Winyah Bay NERR, South Carolina
Robert Bailey, State of Oregon Coastal Management
Brad Barr, NOAA National Marine Sanctuaries, Woods Hole, Massachusetts
Lillian Borrone, President's Ocean Policy Commission, Washington, D.C.
Jeb Boyt, Coastal Management Program, Texas General Land Office
Doug Canning, Coastal Management Specialist, Washington State Department
of Ecology
David Carter, State of Delaware Coastal Management
Chris Chung, Office of State Planning, Hawaii Coastal Management
Elizabeth Corbin, Hawaii Department of Business, Economic Development,
and Tourism
Tim Dillingham, American Littoral Society, New Jersey
Helen Drummond, Galveston Bay National Estuary Program, Texas
Richard Eckenrod, Tampa Bay National Estuary Program, Florida
Robert Goodwin, Washington Sea Grant, Washington
Mike Graybill, South Slough NERR, Oregon
Bryon Griffith, USEPA, Gulf of Mexico Program Office, Mississippi
Mike Guilbeaux, Community Conservation Network, Hawaii
Debbie Heaton, Sierra Club, Delaware
Ginger Hinchcliff, NOAA Coastal Services Center, South Carolina
Phillip Hinesley, State of Alabama Coastal Management
Fred Holland, Hollings Marine Lab, South Carolina
David Keeley, State of Maine Coastal Management
Geraldene Knatz, Port of Long Beach, California
Kathleen Leyden, State of Maine Coastal Management
Gary Lytton, Rookery Bay NERR, Florida
Fred McManus, USEPA, Florida Keys Water Quality Program, Florida

Sam Messina, State of New York Coastal Management
Jeffrey Pantazes, Public Service Electric and Gas, New Jersey
Dwayne Porter, Baruch Institute, University of South Carolina
Peter Rappa, Sea Grant, University of Hawaii
Rebecca Roth, California Coastal Commission
Paul Sandifer, Hollings Marine Lab, South Carolina
Terry Steven, Padilla Bay NERR, Washington
Bob Tudor, Delaware River and Bay Commission, New Jersey
Tom Wakeman, Port Authority of New York and New Jersey

APPENDIX C

WORKSHOP PARTICIPANTS

The Heinz Center workshop was held in Woods Hole, Massachusetts, June 25–27, 2003.

David Bancroft, Alliance for the Chesapeake Bay, Maryland
Betsy Blair, Hudson River NERR, New York
Doug Brown, NOAA, Office of Ocean and Coastal Resource Management
William Burgess, Maryland Department of Natural Resources
Ralph Cantral, NOAA, Office of Ocean and Coastal Resource
Jeanne Christie, Association of State Wetland Managers, New York
Charles Colgan, University of Southern Maine
Sarah W. Cooksey, Delaware Coastal Programs
Tracey Crago, Woods Hole Oceanographic Institute Sea Grant, Massachusetts
Sheila D. David, The Heinz Center, Washington, D.C.
Richard Delaney, Urban Harbors Institute, Massachusetts
Michael Deluca, Rutgers University, New Jersey
William DuPaul, Virginia Sea Grant
Dick Eckenrod, Tampa Bay NEP, Florida
Jon Fisher, Texas Chemical Council
Madilyn Fletcher, Baruch Institute, University of South Carolina
Christine Gault, Waquoit Bay NERR, Massachusetts
Jim Good, Oregon State University
Judy Goss, The Heinz Center, Washington, D.C.
Dawn Hamilton, The Coast Alliance, Washington, D.C.
Olwen Huxley, U.S. House Science Committee, ETS Subcommittee
Robert Kay, Kay Consulting, Mosman Park, Australia
Jack Kindinger, USGS, Center for Coastal and Watershed Studies
James Langdon, Wisconsin Coastal Programs

Kathleen Leyden, Maine State Coastal Programs
Kem Lowry, Jr., University of Hawaii
Tony MacDonald, Coastal States Organization, Washington, D.C.
Andrew Manus, Ducks Unlimited, Maryland
Kalle Matso, CICEET, New Hampshire
Donna McCaskill, NOAA, Coastal Services Center
Arleen O'Donnell, Massachusetts Department of Environmental Resources
Steve Olsen, Coastal Resources Center, University of Rhode Island
Rebecca Roth, California Coastal Commission
Miki Schmidt, NOAA, Coastal Services Center
Suzanne Schwartz, USEPA, Ocean and Coastal Protection Division
Nicholas Shufro, United States–Asia Environmental Partnership Program,
Washington, D.C.
Susan Snow-Cotter, Massachusetts Coastal Programs
Caroline Stem, Foundations for Success, New York
Maya K. van Rossum, Delaware Riverkeeper Network
Robert Wayland, Consultant, Virginia

APPENDIX D

ABOUT THE CONTRIBUTORS AND THE PROJECT STAFF

THE CONTRIBUTORS

JAMES GOOD, *Chair*, is professor and director of the graduate program in Marine Resource Management in the College of Oceanic and Atmospheric Sciences, Oregon State University. He has served as Oregon Sea Grant's Coastal Resources Specialist (1980–2003), conducting applied research and outreach programs for Oregon and the Pacific Northwest. Much of his teaching, research, and outreach work has focused on state and community-based planning and management for estuaries, urban waterfronts, beaches, and marine environments. He led the marine and estuarine ecosystem assessments for Oregon's State of the Environment Report 2000 and was principal investigator for estuaries and coastal wetlands in the National CZM Effectiveness Study. Prior to coming to Oregon State University in 1980, he was executive director for the Columbia River Estuary Study Taskforce and, before that, a U.S. naval officer. He received his B.A. in chemistry from Susquehanna University, M.S. in marine resource management, and Ph.D. in geography from Oregon State University.

RALPH CANTRAL is chief of the National Policy and Evaluation Division, Office of Ocean and Coastal Resource Management, National Oceanic and Atmospheric Administration National Ocean Service. He served as executive director of the Florida Coastal Management Program from 1992 through 2001. In 1999–2000, he also served as acting executive director of the Florida Communities Trust, a \$66 million-per-year land acquisition program for local governments. Prior to moving to Florida, he served in a number of coastal management, planning, and community development positions with the State of North Carolina. He has also worked for local government and regional agencies. He serves on a number of state and national boards and committees, and is published in the fields of coastal

management, planning, and dispute resolution. He holds B.A. and M.A. degrees in geography.

CHARLES COLGAN is professor of public policy and management in the Edmund S. Muskie School of Public Service at the University of Southern Maine. He is chair of the Muskie School's graduate program in community planning and development and is associate director of the USM Center for Business and Economic Research. His regular economic analysis activities include serving as the Maine model manager for the New England Economic Project and chair of the State of Maine Consensus Economic Forecasting Commission. His long-term economic forecasts are used by the Maine Department of Transportation and the economic development districts of Maine. Prior to joining the University of Southern Maine, he served with the Maine State Planning Office in the administrations of Governors James Longley, Joseph Brennan, and John McKernan. His state government positions included state economist, director of natural resource and economic policy, and special assistant to the governor for international trade policy. He also served as director of research for the Finance Authority of Maine. He received his B.A. from Colby College in 1971, did graduate studies in international relations at the University of Pennsylvania, and received his Ph.D. in economic history from the University of Maine in 1992.

SARAH W. COOKSEY has been involved in environmental protection for the past fifteen years. She has been head of the Delaware Coastal Programs for the past ten years, responsible for both the Delaware Coastal Management Program and the Delaware National Estuarine Research Reserve. She is past chair of the Coastal States Organization and currently a member of its executive committee. She serves as the coastal management representative to the Cooperative Institute for Coastal and Estuarine Environmental Technology Advisory Board. She was employed for a number of years by the U.S. Environmental Protection Agency in Washington, D.C., where she worked with state governments on water pollution control.

MICHAEL DELUCA received his B.S. in biology from Fairleigh Dickinson University in 1978, and M.S. in marine science from the Virginia Institute of Marine Science College of William and Mary in 1984. He currently serves as the senior associate director of the Institute of Marine and Coastal Sciences at Rutgers University. He is chair of the Rutgers Dive Safety Control Board and the director of the Mid-Atlantic Bight National Undersea Research Program. He is also the manager of the Mullica River–Great Bay National Estuarine Research Reserve. His research interests include environmental policy related to resource management (especially coastal, estuarine, and fishery management), science education and the promotion of environmental awareness among students and educators, watershed

approaches to coastal ecosystem management, dredged material management and sediment decontamination, and undersea technology.

JON FISHER is senior vice president for Texas Chemical Council (TCC). He began at TCC in 1981 as director of research, and has held the titles of vice president–research and senior vice president–research. He served from 1994 until 2002 as vice president–government affairs for the Texas Ag Industries Association (TAIA), having served as vice president of one of its predecessor associations. In 2001, TAIA presented him with its Harry P. Whitworth Political Involvement Award. In 1989, he received an Outstanding Service Award from the Texas Agricultural Aviation Association (where he worked for eight years in the 1980s). At TCC, he has had a hand in drafting or working on every significant piece of environmental and hazard communication legislation in Texas since 1981. He is also active in lobbying at the regulatory level. He was the leader of the Chemical Industry Focus Group, which helped develop Texas' current Coastal Management Plan, and represents the chemical industry on the Gulf of Mexico Coalition Business Council.

MADILYN FLETCHER is currently the director of the Belle W. Baruch Institute for Marine Biology and Coastal Research at the University of South Carolina. The Baruch Institute develops and conducts programs in multidisciplinary research on coastal, estuarine, and marine systems (<http://www.baruch.sc.edu>). In her role as Baruch Institute director, she has a strong interest in regional partnering and the development of initiatives that coordinate strong science with real-world applications and needs. She is principal investigator for the Carolinas Coastal Ocean Observing System (Caro-COOPS), a new initiative with partners North Carolina State University and the University of North Carolina–Wilmington. Caro-COOPS is currently being implemented and will comprise a mooring array off of the Carolinas' coast, which is designed to integrate real-time monitoring of hydrologic and meteorological conditions with state-of-the-art computer models to characterize and predict complex coupled air-land-sea processes. The University of South Carolina portion of this collaborative project is focused on information management and integration. She is also principal investigator for Cast-Net, a multi-institutional program focused on development of tools to facilitate documentation, integration, and sharing of data from laboratories in the Southern Association of Marine Laboratories (SAML).

KEM LOWRY, JR., is professor and chair of the Department of Urban and Regional Planning, University of Hawaii. He received his Ph.D. from the Department of Political Science, University of Hawaii in 1976. He has been a visiting scholar at the Institute for International Relations and Development in Asia, Sophia University, Tokyo; visiting faculty at the Department of City and Regional

Planning, University of North Carolina; and a fellow at the Marine Policy Program, Woods Hole Oceanographic Institution. He has published articles on planning and environmental management, and coastal management and evaluation in numerous journals. He is also the co-author of *Choosing Change: A Self Assessment Manual for Non-Profits*.

ANDREW MANUS is currently director of conservation programs for the mid-Atlantic office of Ducks Unlimited, Inc. Prior to joining Ducks Unlimited, he served as director of the Delaware Division of Fish and Wildlife. During his tenure from 1993 to 2001, he represented the state of Delaware on the Atlantic States Marine Fisheries Commission, the Atlantic Flyway Council, the North American Wetlands Conservation Council, and chaired the International Association of Fish and Wildlife Agencies' Wildlife Diversity Committee. His state service has also included time as deputy director of the Divisions of Soil and Water and Water Resources within the Delaware Department of Natural Resources and Environmental Control. In that position he led the development and design of an "Environmental Compliance Reference Guide," implemented the department-wide Inland Bays Recovery Initiative, and administered the state's Coastal Management Program. He began his career in 1976 with the University of California Sea Grant College Program, where he served as an area marine extension agent and coastal resources specialist. He became Director of the University of Delaware's Sea Grant College Program in 1980, and was its Executive Director from 1984–1989. He holds a B.S. degree from the University of New Hampshire and a M.S. degree from Texas A&M University. In their spare time, he and his wife Lynn work hard at maintaining his mother-in-law's farm, where they breed, raise, and train Labrador retrievers.

MAYA K. VAN ROSSUM is the Delaware Riverkeeper and executive director of the Delaware Riverkeeper Network (DRN) since 1996. She is an environmental attorney, strategist, community organizer, facilitator, coalition builder, and manager. As the Delaware Riverkeeper, she serves on a number of the region's committees including the Delaware River Basin Commission's Toxic Advisory Committee, Water Quality Advisory Committee, and its Total Maximum Daily Load (TMDL) Implementation Advisory Committee; the Lower Delaware River Wild and Scenic Management Plan Committee and Advisory Committee; and has served on New Jersey's Stormwater Focus Group. She has been appointed by DEP Secretary McGinty to the Pennsylvania Stormwater BMP manual oversight committee, by Governor Rendell to Pennsylvania's Delaware River Basin Regional Water Resources Committee. Since spring 2002 she has served as an adjunct professor and director of the Environmental Law Clinic at Temple's Beasley School of Law. She served as faculty on the Pennsylvania Bar Institute's 2003 Environmental Law Forum, Water Quantity/Sprawl. She testified before the U.S. House

Committee on Resources concerning wild-and-scenic designation for the Lower Delaware River in 2000. She has a B.S. from La Salle University; a juris doctor degree with certificate in environmental law, cum laude, from Pace University School of Law; and a master's of law degree in corporate finance from Widener University School of Law.

ROBERT WAYLAND retired from the U.S. Environmental Protection Agency in February 2003 where, for twenty-eight years, he served in a variety of key positions, the most recent of which (1991–2003) was director of the Office of Wetlands, Oceans, and Watersheds. In that capacity he exercised national program leadership for wetlands protection, water quality monitoring, watershed management, non–point source pollution control, and ocean programs including the National Estuary Program and dredged material management, and administered an annual budget of over \$300 million. His contributions were recognized by Presidents Clinton and Bush, each of whom awarded him the presidential rank of Meritorious Senior Executive; the Wildlife Habitat Council, which awarded him its President's Award; and the Association of State and Interstate Water Pollution Control Administrators, which recognized him with their Elizabeth J. Fellows Partnership Award. Since his retirement, he has consulted with the U.S. Commission on Ocean Policy and serves on the boards of the Southeast Watershed Forum and the Conservation and Preservation Charities of America. He is a graduate of The George Washington University and enjoys sailing and snorkeling.

HEINZ CENTER STAFF

SHEILA D. DAVID is a consultant for The Heinz Center, where she is managing studies for the Sustainable Oceans, Coasts, and Waterways Program. At The Heinz Center she has worked with committees to produce several studies: *The Hidden Costs of Coastal Hazards* (2001), *Evaluation of Erosion Hazards* (2001), *Integrated Management of the Tempisque River Basin, Costa Rica* (2001), *Dam Removal: Science and Decision Making* (2002), *Human Links to Coastal Disasters* (2002), and *Dam Removal Research: Status and Prospects* (2003). Before joining The Heinz Center in 1997, she served for twenty-one years as a senior program officer at the National Research Council's Water Science and Technology Board, where she was study director for some thirty committees that produced reports on topics such as managing coastal erosion, restoration of aquatic ecosystems, protection of groundwater, wetlands characteristics and boundaries, water quality and water reuse, natural resource protection in the Grand Canyon, and sustainable water supplies in the Middle East. She has served as an adviser to and board member of the Association for Women in Science (AWIS) and as editor of *AWIS* magazine. She

is also a founder of the National Academy of Sciences' annual program honoring women in science.

JUDY GOSS is a research assistant for The Heinz Center's Sustainable Oceans, Coasts, and Waterways Program, where she has worked on three other studies: *Dam Removal: Science and Decision Making* (2002), *Human Links to Coastal Disasters* (2002), and *Dam Removal Research: Status and Prospects* (2003). She graduated cum laude with a degree in political science from Mary Washington College in 2001. She currently volunteers with the District of Columbia Urban Debate League in Washington, D.C., where she teaches high school students and teachers about policy debate. She is particularly interested in the intersection of gender and political communication and plans to pursue a graduate degree in communication studies.