

Status and Trends of Wetlands in the Conterminous United States

Information Quality Peer Review Plan

Subject and Purpose of the Report:

The U.S. Fish and Wildlife Service is the principal Federal agency that provides information to the public on the extent and status of the Nation's wetlands. The Wetland Status and Trends project has had a history of success in providing scientific information to resource managers and decision makers about wetlands resource trends in the conterminous United States.

The goal of Wetlands Status and Trends is to produce comprehensive, statistically valid acreage estimates of wetland resources and monitor wetland habitat trends in the U.S. The Service's Wetlands Status and Trends study design and operations are configured specifically to monitor the nation's wetlands. The Service has specialized knowledge of wetland habitats, classification, and ecological change detection.

The Service has produced five national reports on wetland trends. All are referenced in scientific literature and are used by Federal and State agencies, the scientific community and conservation groups for planning, decision making and wetland policy formulation and assessment. An assessment recently conducted for the Service indicated that wetlands status and trends information was widely distributed and used extensively by industry, all levels of government, university researchers, educators and the general public. Three hundred and seventy private businesses, 94 state government agencies, 29 Federal agencies and the Congress are actively using the wetlands information contained in recent status and trends reports or data summaries.

Peer review is one of the important procedures used to ensure that the quality of published information meets the standards of the agency, scientific and technical community. Peer review involves the review of the draft report for accuracy, completeness and quality by specialists in the field who were not involved in producing the draft. The purpose of this plan is to outline the peer review process used to generate the wetlands status and trends report.

Mandates and Directives:

The Emergency Wetlands Resources Act (Public Law 99-645) was enacted to promote the conservation of our Nation's wetlands. Congress recognized that wetlands are nationally significant resources and that these resources have been affected by human activity. The Act requires the Service to conduct wetland status and trends studies of the Nation's wetlands at 10 year intervals. In 2004, the President announced that the Service would complete an updated wetlands status and trends study five years ahead of schedule and more frequently thereafter. The next report on the status and trends of wetlands for the nation is scheduled to be completed by December 2010.

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Dissemination of the Report:

Because the national wetlands status and trends report contains scientific information with findings or conclusions representing the official position of one or more agencies of the federal government, the information contained in the report is considered to be a “highly influential scientific assessment”. These assessments include state-of-science reports and technology assessments.

Technical Panels:

The use of a transparent process, coupled with the selection of qualified and independent peer reviewers, improves the quality of government science while promoting public confidence in the integrity of the government’s scientific products.

Due to the technical complexities and of the Wetlands Status and Trends project and the ramifications of the resultant report, the Service has instigated a series of technical oversight panels to review

scientific configuration, data collection and protocol issues¹ and an individual peer review process for the report findings and conclusions.

Peer review typically evaluates the study design, the quality of data collection procedures, the robustness of the methods employed, the appropriateness of data presentation and discussion, the extent to which the conclusions follow the analysis, and the strengths and limitations of the overall product.

All reviewers have been selected by the Fish and Wildlife Service.

- **Agency Expert Panel** - Internal technical experts form an **“Technical Review and Inspection Team”** for the purpose of reviewing the technical validity of standard operating procedures, technological advances and adaptations, source materials, project documentation and quality assurance plans.

The Service convened this Panel to finalize operational documentation for the Wetlands Status and Trends project in 2004. The panel is currently composed of the following seven individuals:

Jerry Tande, Regional Wetland Coordinator, U.S. Fish and Wildlife Service, Alaska Region, Anchorage, AK.

Jim Dick, Regional Wetland Coordinator, U.S. Fish and Wildlife Service, Albuquerque, NM.

Bill Kirchner, Regional Wetland Coordinator, U.S. Fish and Wildlife Service, Portland, OR.

Mitch Bergeson, Geographic Information Systems Specialist, U.S. Fish and Wildlife Service, NSST, Madison, WI.

Michelle Greenwood, Technical Editor, Publications Program, U.S. Geological Survey, Madison, WI.

Thomas Dahl, Wetlands Status and Trends Project Manager, U.S. Fish and Wildlife Service, Onalaska, WI.

Marty Kodis², Chief, Branch of Resource and Mapping Support, Division of Habitat and Resource Conservation, U.S. Fish and Wildlife Service, Arlington, VA.

- **Statistical Oversight Panel** - This panel is composed of internal and external experts specifically to review and provide oversight of the statistical design, protocols and output(s) of the study.

¹ Information Quality Act, Section 515 of Public Law 106-5554 (Pub. L. No. 106-554, 515, 114 Stat. 2763A-153-154 (2000))

² Headquarters policy review.

This panel is currently composed of the following individuals:

Dr. Kenneth Burnham, Statistician, U.S. Geological Survey, Biological Resources Division, Colorado Cooperative Fish and Wildlife Research Unit, Department of Statistics, Colorado State University, Fort Collins, CO. Dr. Burnham is the Assistant Unit Leader for the Colorado Cooperative Fish and Wildlife Research Unit. His professional experience is in statistical design of studies for sampling biological populations, especially for estimation of population abundance and population dynamics parameters, statistical inference methods for ecological studies, and data-based modeling of biological processes; recent emphasis on model selection, assessing model selection uncertainty, and multi-model inference. Distinguished Statistical Ecologist INTECOL (International Congress of Ecology); Twentieth Century Distinguished Service Award for Outstanding Contribution to Environmental Statistics; Member of the American Statistical Association; The International Biometric Society; Institute of Mathematical Statistics; The Wildlife Society; Ecological Society of America; former member Editorial Board of the Ecological Society of America; former Associate Editor of Biometrics.

Dr. N. Scott Urquhart, Research Scientist, Department of Statistics, Colorado State University, Fort Collins, CO. Dr. Urquhart currently serves as the Director of the Department's Space-Time Aquatic Resource Modeling and Analysis Program. His professional experience is in design of ecological indicators and ecological surveys, environmental statistics, linear models and allied nonparametric methods. He cooperates closely with EPA's Environmental Monitoring and Assessment Program (EMAP). Editor, Environmental and Ecological Statistics; former Associate Editor, American Statistician; former President, Biometric Society; Elected Fellow, American Statistical Association.

Mr. Thomas Dahl, Wetlands Status and Trends Project Manager, Branch of Habitat Assessment, U.S. Fish and Wildlife Service, Onalaska, WI.

Peer Review of the Report:

In selecting peer reviewers the Service must ensure that the reviewers possess the necessary expertise and independence from the agency and that they represent the primary disciplines needed to conduct an authoritative, thorough and unbiased review. Review individuals were selected to represent a diversity of scientific perspectives relevant to wetlands ecology and management. They include representatives from other federal and state resource agencies as they possess unique or indispensable wetlands expertise. Individuals from academia were selected based on their overall experience with a variety of wetland ecosystems and their ability to provide evaluation of biological plausibility.

The Service will solicit letter reviews from experts as this is more expeditious and practicable than convening a panel of experts or contracting for peer review. Individual letter reviews are also more

appropriate since the draft document covers only one discipline³. General principles outlined by the National Research Council⁴ and the National Academy of Sciences were used for the selection process.

Individual Peer Review Experts - Individuals determined based on geographic, topic area and availability.

Expert Subject Matter Peer Reviewers – 2010 Status and Trends Report:

Josh Collins
Lead Scientist
San Francisco Estuary Institute
7770 Pardee Lane
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Susan-Marie Stedman (Subject matter expert not as agency reviewer)
National Fish Habitat Initiative
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³ OMB “Final Information Quality Bulletin for Peer Review”, Executive Office of the President, Office of Management and Budget, M-05-03, December 16, 2004.

⁴ National Research Council, Peer Review in Environmental Technology Development Programs: The Department of Energy’s Office of Science and Technology, National Academy Press, Washington, D.C., 1998: 3.

All reviewer comments will be given consideration and be incorporated where relevant and valid. Accordingly, the Service will prepare a written response to the Individual Expert Peer Reviewers explaining the agency's agreement or disagreement and the actions the agency has undertaken or will undertake in response to the peer review comments.

Individual peer reviewers will be disclosed by name and affiliation only. Due to technical nature of the report no opportunities for public comment will be provided.

Pertinent Document and Notification Web Links:

Web links to each document made public pursuant to OMB Bulletin M-05-03, including this plan and the peer review agenda for the Wetlands Status and Trends report will be made to the U.S. government's official web portal: <http://www.usa.gov/>.

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