NEPA

National Environmental Policy Act

LESSONS LEARNED

U.S. DEPARTMENT OF ENERGY QUARTERLY REPORT

December 1, 2015; Issue No. 85 Fourth Quarter FY 2015

Water Resources Council Revises Floodplain Guidelines

New guidelines will help federal agencies, including DOE, update their procedures to implement Executive Order (E.O.) 11988, *Floodplain Management*, which was amended in January 2015[1] "to improve the Nation's resilience to current and future flood risks, which are anticipated to increase over time due to the effects of climate change and other threats" (*LLQR*, March 2015, page 1). DOE soon will undertake a rulemaking to revise its *Floodplain and Wetland Environmental Review Requirements* (10 CFR Part 1022) to account for amendments to E.O. 11988 and the guidelines.

The Water Resources Council[2] in October issued *Guidelines for Implementing Executive Order 11988, Floodplain Management, and Executive Order 13690, Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input*. The guidelines were developed by

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The new floodplain management guidelines will help prevent losses caused by flooding that affect the environment, economy, and public health and safety. (Photo: U.S. Army Corps of Engineers)

[1] *E.O. 13690,* Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input*, amended E.O. 11988.*

[2] *The Water Resources Council consists of the Secretaries of the Interior, Agriculture, Army, Commerce, Housing and Urban Development, Transportation, and Energy Departments, and the Administrator of the Environmental Protection Agency.*

The National Tribal Energy Summit – A NEPA Perspective

By: Rob Seifert, Director, Office of Environmental Compliance, Office of Environmental Management

More than 450 representatives from Tribal, state, and federal government agencies, Tribal corporations, and private sector organizations, including almost 100 representatives from Tribes and Alaska Native Villages, participated in the annual National Tribal Energy Summit. This year's summit, titled "A Path to Economic Sovereignty," focused on building partnerships and discussing energy and security issues. Over the three days of presentations, roundtables, and working group meetings, the discussion highlighted the significant contributions made by Tribes to the DOE mission through partnerships with DOE sites and programs.

The summit was sponsored by DOE's Office of Indian Energy Policy and Programs in cooperation with the National Center for American Indian Enterprise Development and the National Conference of State Legislatures, on September 23–25.

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Inside *Lessons Learned*

Welcome to the 85th quarterly report on lessons learned in the NEPA process. This issue features Administration changes in environmental policy to better account for climate change and improve watershed- and landscape-scale planning. Thank you for your continued support of the Lessons Learned program. As always, we welcome your suggestions for improvement.

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Carol Borgstrom
Director
Office of NEPA Policy and Compliance

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Be Part of Lessons Learned

We Welcome Your Contributions to *LLQR*

Send suggestions, comments, and draft articles – especially case studies on successful NEPA practices – by January 20, 2016, to Yardena Mansoor at yardena.mansoor@hq.doe.gov.

Quarterly Questionnaires Due February 1, 2016

For NEPA documents completed October 1 through December 31, 2015, NEPA Document Managers and NEPA Compliance Officers should submit a Lessons Learned Questionnaire as soon as possible after document completion, but not later than February 1. Other document preparation team members are encouraged to submit a questionnaire, too. Contact Vivian Bowie at vivian.bowie@hq.doe.gov for more information.

LLQR Online

All issues of *LLQR* and the Lessons Learned Questionnaire are available on the DOE NEPA Website at energy.gov/nepa under Guidance & Requirements, then Lessons Learned. To be notified via email when a new issue of *LLQR* is available, send your email address to yardena.mansoor@hq.doe.gov. (DOE provides paper copies only on request.)

Presidential Memorandum Directs Net Benefit or No Net Loss Goal for Natural Resources Mitigation

President Obama recently directed several federal agencies to enhance their mitigation efforts, including by establishing a goal to achieve a net benefit or no net loss for natural resources they manage. DOE is not mentioned in the November 3 *Presidential Memorandum: Mitigating Impacts on Natural Resources from Development and Encouraging Related Private Investment*; however, DOE does cooperate on NEPA reviews with agencies listed in the memorandum, including the U.S. Forest Service and the Bureau of Land Management.

In the memorandum, the President recognizes our "moral obligation to the next generation to leave America's natural resources in better condition than when we inherited them" and the importance of this obligation to "the strength of our economy and quality of life."

Improving Regulatory Consistency

The Departments of Defense, the Interior, and Agriculture, the Environmental Protection Agency, and the National Oceanic and Atmospheric Administration are directed to utilize landscape- or watershed-scale planning and establish a net benefit or no net loss goal for natural resources they manage. These agencies should favor advance compensation (mitigation for which measurable benefits are achieved before a project's harmful impacts occur), and consider the long-term durability of these measures. In addition, they should increase public transparency in their mitigation policies, including the locations of impacts and mitigation projects, and ensure that these policies are implemented consistently across the country. This consistency, the memorandum notes, can "create a regulatory environment that allows us to build the economy while protecting healthy ecosystems."

Each of the aforementioned agencies is directed to produce mitigation policies or guidance within the next year (180 days for the U.S. Forest Service). When working with these agencies on NEPA reviews, DOE should identify how potential mitigation activities may be impacted by their efforts to achieve the goals of the memorandum.

Deputy General Counsel Highlights Role of Environmental Justice in NEPA

Kedric L. Payne, DOE Deputy General Counsel for Environment and Compliance, described the evolution of environmental justice (EJ) in NEPA practice at the inaugural National Civil Rights Conference in Washington, DC, on November 4–5. The mission of the National Civil Rights Conference, co-hosted by a coalition of federal departments and agencies, was "to provide a collaborative forum for federal civil rights professionals to receive training, share best practices, and explore cross-cutting issues in enforcement and compliance," according to the conference program.

The principles of NEPA go hand in hand with the principles of environmental justice.

– Kedric L. Payne
Deputy General Counsel for Environment and Compliance, DOE

NEPA and EJ Principles

Mr. Payne recounted the history of EJ and NEPA, drawing parallels between them. "NEPA provides an important framework to advance EJ through projects involving federal actions, especially when communities can access the NEPA process early in a project's development," he said. Mr. Payne emphasized key NEPA principles, including that the law "recognizes that each person should enjoy a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment."

The connection between EJ and NEPA can be seen in Executive Order (E.O.) 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (February 11, 1994), explained Mr. Payne. E.O. 12898 provides that "each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations."

Mr. Payne described the Presidential Memorandum issued in conjunction with E.O. 12898, which lists four ways to consider EJ under NEPA: 1) environmental effects, 2) mitigation, 3) community participation, and 4) through EPA's review of EISs pursuant to Section 309 of the Clean Air Act. Mr. Payne added that the Council on Environmental Quality's (CEQ's) 1997 *Environmental Justice: Guidance under NEPA* has helped ensure that EJ concerns are effectively identified and addressed.

Interagency Working Group Preparing Report on EJ Methodologies in NEPA

A federal Interagency Working Group (IWG) on EJ was convened in 1994 as a result of E.O. 12898. Mr. Payne highlighted how the current Administration has reinvigorated the IWG, including its NEPA Committee, which "seeks to improve the effective, efficient and consistent consideration of environmental justice issues in the NEPA process through the sharing of best practices, lessons learned, research, analysis, training, consultation, and other experiences of federal NEPA practitioners." Mr. Payne described a report that the NEPA Committee is currently preparing, *Promising Practices for EJ Methodologies in NEPA Review*. The NEPA Committee "spent over 36 months researching, analyzing, and discussing the interactions of EJ and NEPA," he said.

The NEPA Committee is considering several subjects in its development of the report, including: meaningful engagement, scoping process, defining the affected environment, alternatives, identifying minority and low-income populations, disproportionately high and adverse impacts, and mitigation and monitoring, said Mr. Payne. For example, the NEPA Committee identified the importance of selecting a geographic unit of analysis appropriate for the potentially affected area and for ways that minority and low-income populations could be impacted, he explained. In addition, when identifying potential disproportionately high and adverse impacts, Mr. Payne underscored the importance of looking closely at the unique circumstances of the proposed action and alternatives, and the potentially affected communities, to best understand potential impacts.

He said that the NEPA Committee report, which is expected soon, will provide flexible approaches for agencies as they consider EJ in NEPA analyses. The report is intended to assist with implementing CEQ's 1997 guidance by sharing effective ways to consider EJ that have been used across federal agencies.

Floodplain Guidelines *(continued from page 1)*

an interagency working group that considered more than 2,000 comments received on draft guidelines earlier this year.

The guidelines explain that the amended E.O. 11988 calls for "agencies to use a higher vertical flood elevation and corresponding horizontal floodplain than the base flood for federally funded projects to address current and future flood risk and ensure that projects last as long as intended." The guidelines also explain that the amended E.O. reinforces important concepts articulated in E.O. 11988 when it was issued in 1977, "such as avoiding adverse impacts associated with actions in a floodplain and minimizing potential harm if an action must be located in a floodplain."

The guidelines continue to emphasize integrating implementation of E.O. 11988 with NEPA. "When a proposed action is subject to review under E.O. 11988 and NEPA, an agency should include any relevant analysis prepared under E.O. 11988 in the resulting NEPA document," the guidelines state. DOE integrates floodplain assessments with its NEPA analyses, to the extent practicable, and that practice is expected to continue.

New Definitions for Floodplains

The guidelines explain that the definition of floodplain for purposes of federal decisionmaking depends on the type of proposed action being considered. Under the 1977 version of E.O. 11988, the approach for federal actions has been to define a floodplain as either the 100-year floodplain or, for critical actions, the 500-year floodplain. That practice will continue, the guidelines explain, for federal actions except those deemed "federally funded projects."

The guidelines define federally funded projects as those for which federal funds are used for new construction, substantial improvements, or to address substantial damage to structures and facilities. For federally funded projects, agencies will use the Federal Flood Risk Management Standard (FFRMS), which was established with the amendments to E.O. 11988; those amendments are articulated in E.O. 13690 (January 30, 2015). (The guidelines describe an exception to the FFRMS for actions that an agency considers to be in the interest of national security.)

The FFRMS provides agencies with a choice of three alternative approaches to define a floodplain for federally funded projects:

(1) *Climate-Informed Science Approach*: Use the "best-available, actionable hydrologic and hydraulic data and methods that integrate current and future changes in flooding based on climate science." (E.O. 13690) The FFRMS identifies this as the preferred approach, and states that federal agencies "should use this approach when data to support such an analysis are available."

(2) *Freeboard Value Approach*: Add 2 feet to the base flood elevation or, for a critical action, add 3 feet. The base flood elevation is the area subject to a one percent or greater chance of flooding in any given year, also known as the 100-year floodplain.

(3) *The 0.2-percent-annual-chance Flood Approach*: Use the 500-year flood elevation.

Emphasis on Resiliency

The guidelines clarify that the FFRMS is a resiliency standard. "Changes in terminologies from 'protection' to a broader focus on resilience and risk management reflect the recognition that floodwaters cannot be fully controlled, full protection from floods cannot be provided by any measure or combination of measures, and risk cannot be completely eliminated." Instead, the guidelines continue, coordinated efforts among governmental and non-governmental parties "can be used to manage the level of risks in a floodplain."

"The vertical flood elevation and corresponding horizontal floodplain determined using the approaches in the FFRMS establish the level to which a structure or facility must be resilient. This may include using structural or nonstructural methods to reduce or prevent damage; elevating a structure; or, where appropriate, designing it to adapt to, withstand and rapidly recover from a flood event," the guidelines state.

Other New Considerations

Two other concepts included in the guidelines are the use of natural systems in floodplain management and the need to consider potential impacts to vulnerable populations. For all federal actions to which E.O. 11988 applies (not just federally funded projects), agencies, "where possible, shall use natural systems, ecosystem processes, and nature-based approaches in the development of alternatives." These approaches should be considered in early planning and design of federal actions.

"The use of nature-based approaches, combined with the preservation and restoration of natural systems and ecosystem processes where appropriate, provides numerous benefits and supports a system-wide, watershed approach to flood risk management that considers the interdependencies of natural systems," the guidelines explain. This consideration of nature-based

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Considering Ecosystem Services in Decision Making

Natural systems provide "vital contributions to economic and social well-being," states a recent memorandum for federal agencies. In *Incorporating Ecosystem Services into Federal Decision Making* (October 7, 2015), the Office of Management and Budget, CEQ, and White House Office of Science and Technology Policy direct agencies to better incorporate "the full range of benefits and tradeoffs among ecosystem services associated with federal actions." DOE's Office of Sustainability Performance is leading an inter-office implementation team to help DOE meet the goals of the memorandum.

What are ecosystem services?

Ecosystem services are the benefits that natural systems provide to people. NEPA reviews often consider these benefits – services like timber production, water purification, flood protection, and recreational opportunities.

The memorandum acknowledges that NEPA analysis represents one of the decision making processes where impacts to ecosystem services can be accounted for and analyzed, but not the only one. The accompanying White House blog post points out that the memorandum complements other Administration efforts such as the Gulf Coast Ecosystem Restoration Council's recent draft list of projects to restore natural storm barriers in the Gulf Coast.

When the natural systems that produce ecosystem services are harmed or destroyed, the services may be replaced through new infrastructure or simply lost. For example, loss of a coastal wetland may lead to consideration of a new flood wall to provide flood protection and more substantial drinking water infrastructure to make up for lost water quality improvements that had been provided by the wetland.

Improving NEPA Analysis by Considering the Full Range of Environmental Benefits

Many ecosystem services are public goods that may have benefits not fully recognized in private markets. The memorandum points out that advances in science and technology have provided a better understanding of the links between ecosystems and the services they provide. Better accounting for these benefits in NEPA and other decision making, the memorandum states, will not just ensure healthy ecosystems for future generations, but will more effectively address the challenges facing the Nation.

The memorandum promotes better integration into federal decision making of the full range of benefits and tradeoffs among ecosystem services. The memorandum explains that an ecosystem-based approach can:

1. More completely inform planning and decisions,
2. Preserve and enhance the benefits provided by ecosystems to society,
3. Reduce the likelihood of unintended consequences, and
4. Where monetization is appropriate and feasible, promote cost efficiencies and increase returns on investment.

Developing the DOE Work Plan

The memorandum directs agencies to develop a report by March 30, 2016, describing how ecosystem services are currently incorporated into agency decision making. Many DOE offices may already be using ecosystem services to inform decision making regarding wetlands and other natural areas. The memorandum directs each agency to establish a work plan on furthering this incorporation and fully meeting the goals of the memorandum. This effort will involve many DOE offices, including the NEPA Office, participating in the inter-office implementation team mentioned above. CEQ will develop government-wide implementation guidance, which will undergo agency and external public review, and will serve as a basis for future updates of the DOE work plan.

To facilitate this DOE-wide effort, the NEPA Office is compiling examples of how ecosystem services are currently accounted for in documents like land use plans, climate-adaptation plans, sustainability or vulnerability reports, and NEPA documents. If you have examples or ideas of how ecosystem services can be better incorporated into DOE analyses, please contact Bill Ostrum at william.ostrum@hq.doe.gov or 202-586-4149.

Transitions: New NEPA Compliance Officers

Environmental Management: Julie Smith

Julie Ann Smith, on detail from the Office of Electricity Delivery and Energy Reliability (OE), is serving as Acting NCO for the Office of Environmental Management (EM), following the retirement of EM's former NCO, Jeanie Loving. As Acting NCO, Dr. Smith is responsible for providing guidance on NEPA compliance issues associated with the treatment, storage, packaging, transportation, and disposal of hazardous and radiological wastes from EM cleanup activities. She joined DOE's Office of NEPA Policy and Compliance in early 2009 from the Federal Transit Administration and in 2013 took a position as an Electricity Policy Analyst in OE's National Electricity Delivery Division. She is a NEPA Document Manager for OE proposed cross-border electric transmission lines and will continue working part-time with OE during the detail to EM. Dr. Smith has an undergraduate degree in Environmental Chemistry and masters and doctoral degrees in Public Policy – Environmental. She can be reached at juliea.smith@hq.doe.gov or 202-586-7668.

NNSA, Kansas City Field Office: Sybil Chandler

Sybil Chandler now serves as the NCO for the Kansas City Field Office, which is part of the National Nuclear Security Administration (NNSA). In addition to her NEPA responsibilities, as Environmental Health and Safety Manager, she oversees the site contractor in matters relating to environmental issues and emergency management. Ms. Chandler is also part of the Bannister Federal Complex disposition team, a DOE and General Services Administration collaboration preparing the DOE-owned former Kansas City Plant for redevelopment by demolishing the existing infrastructure and remediating the environmental concerns. (DOE relocated operations from the Kansas City Plant to a new National Security Campus in 2014.) Before joining DOE in July 2015, her 25-year career included responsibility for regulatory compliance and safety in private sector enterprises and serving as the Environmental Health and Safety Program Coordinator for a community college. She received her Bachelor of Science in Occupational Safety from Louisiana State University and her Master of Science in Health Education/Occupational Safety from the University of Southern Mississippi. She is a Certified Hazardous Materials Manager and a Certified Safety Professional. Ms. Chandler can be reached at sybil.chandler@nnsa.doe.gov or 816-488-3417.

Ms. Chandler replaces David Caughey as NCO for the Kansas City Field Office. Mr. Caughey retired late last year.

Southwestern Power Administration: Aiden Smith

Aiden Smith has been named NCO for the Southwestern Power Administration (SWPA), headquartered in Tulsa, Oklahoma. Mr. Smith began his career as a student intern at SWPA and transitioned to full-time employment in 2006. First as an Electrical Engineer and then as a Public Utilities Specialist, he worked closely with SWPA's stakeholders to develop power sales, transmission service, and infrastructure agreements. Now as SWPA's Vice President, Transmission Strategy, Mr. Smith manages SWPA's coordination with Regional Transmission Organizations and energy markets, organizes SWPA's efforts under Section 1222 of the Energy Policy Act of 2005 (including the *Plains & Eastern Clean Line Transmission Line Project FEIS* (DOE/EIS-0486) issued November 2015), and oversees SWPA's environmental program. Mr. Smith is a Certified Energy Manager and holds a Bachelor of Science in Engineering Physics from the University of Tulsa. He can be reached at aiden.smith@swpa.gov or 918-595-6764.

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New NCOs *(continued from previous page)*

Western Area Power Administration, Rocky Mountain Region: Brian Little

Brian Little has been designated NCO for Western's Rocky Mountain Region (RMR) in Loveland, Colorado. He started his environmental career as a Student Career Experience Program trainee in the Bureau of Reclamation and, after graduating from Kent State University with a Bachelor of Science in Conservation Biology, accepted a Natural Resource Specialist positon in Bureau of Reclamation's Eastern Colorado Area Office. Since joining RMR in March 2013, Mr. Little has been involved in environmental planning and compliance activities for construction and maintenance projects. In August 2015, he was selected as Environmental Manager, responsible for overseeing RMR's environmental and cultural resource protection programs. Prior to his federal civilian career, he served in the United States Marine Corps; he currently serves in the Colorado Air National Guard. Mr. Little can be reached at blittle@wapa.gov or 970-461-7287.

On behalf of the DOE NEPA Community, the NEPA Office offers Gene Iley, RMR's former NCO, best wishes on his retirement.

Tribal Summit *(continued from page 1)*

Lessons Learned from the Tribes

DOE senior leadership participated in and benefited from a Tribal-led training session. The Tribes provided information on their histories and values, and shared how a deeper understanding of Tribal perspectives can help inform DOE's decisions. The training provided a broad foundational understanding of the relationship between Tribes and the federal government, examined key sensitivities to support positive and communicative government-to-government relationships, and identified key cultural perspectives.

DOE's Office of Environmental Management also met with the Tribes in a listening session to hear their perspectives on DOE's efforts to engage Tribes in waste cleanup efforts. This session focused on identifying best practices in Tribal consultation that can provide for meaningful engagement and protection of valued cultural, natural, and other Tribal resources.

In both the training and listening sessions, the Tribes raised concerns about the limited review timeframe for NEPA documents. For lengthy and complex documents, the Tribes shared that the minimum review periods established under CEQ's and DOE's NEPA implementing regulations do not provide sufficient time for a Tribe's review and internal approval before submitting comments to DOE. The Tribes emphasized that as sovereign nations, they must comply with their own internal bureaucratic procedures before they can submit documents to DOE. The comment periods established in DOE's NEPA regulations may not provide enough notice to get a NEPA document on a Tribe's agenda at Tribal council meetings for approval, let alone provide comments on the document to DOE. Recognizing that there are many factors to be considered when determining the appropriate length of a comment period on a NEPA document, Tribal participants at the summit requested that DOE be mindful of Tribes' capacity constraints and internal processes when establishing NEPA document review schedules.

Putting Lessons Learned into Practice

Meaningful engagement with Tribes is an essential component of the NEPA process and is vital to the success of DOE's programs. Tribal comments introduce different perspectives that enhance the planning process and improve DOE's decisions by helping DOE to better understand the communities that DOE projects may affect. While minimum timeframes exist, they are not always the best answer. To ensure that Tribes have the opportunity to provide meaningful evaluation of and feedback on NEPA documents, DOE, in partnership with its stakeholders, should consult with Tribes early in the NEPA process to establish a schedule that supports an inclusive and well-informed decisionmaking process.

DOE can offer cooperating agency status when a Tribe has jurisdiction or special expertise, as noted in CEQ's NEPA regulations (40 CFR 1508.5) and encouraged in the CEQ and Advisory Council on Historic Preservation's *NEPA and NHPA: A Handbook for Integrating NEPA and Section 106*. (See *LLQR*, June 2013, page 1.) DOE can also consider providing the Tribes advance notice of when NEPA documents will be available, and the opportunity to submit their own narratives for inclusion in a NEPA document. (See *LLQR*, June 2011, pages 9 and 15.)

More information about the summit, including the program and links to the presentations, is available on the Office of Indian Energy Policy and Program's website.

Transitions: NCO Retirements

Bonneville Power Administration: Kathy Pierce

Every federal career has to start somewhere, and for Kathy Pierce, it was at age 16, as a GS-2 Personnel Clerk Typist for the Navy. After 40 years of federal service – 35 of them with the Bonneville Power Administration (BPA) – she retired on October 1, 2015. She served as BPA's NEPA Compliance Officer since 2005, but had been active in NEPA issues since she joined BPA in 1981.

In those early years, Ms. Pierce contributed to major EISs for BPA's Resource Programs, Delivery of the Canadian Entitlement,[1] and other generation and energy efficiency projects and programs. In the Environmental Planning and Analysis group, she was a key member of the team that successfully sought delegation of all NEPA authorities, based on the quality and uniqueness of BPA's NEPA program.

Ms. Pierce then led the team that produced the *BPA Business Plan EIS* (DOE/EIS-0183), which has supported BPA's daily business operations for 20 years and has served as a model for expediting projects and saving money while meeting the spirit and letter of environmental laws. She also led the team that developed a tiered *Fish and Wildlife Implementation Program EIS* (DOE/EIS-0312), which has supported BPA's fish and wildlife mitigation and enhancement efforts since 2003.

Kathy Pierce worked closely with the Office of NEPA Policy and Compliance during DOE NEPA rulemakings in 1992, 1996, and 2011. She proposed revisions to the Subpart D classes of actions (i.e., that normally fit within a categorical exclusion or that require an EA or EIS) that reflected power marketing administration experience and promoted efficiency in DOE's NEPA practice.

Kathy Pierce shared innovative approaches used by BPA NEPA program in *LLQR* articles:

- BPA's Reader's Guide Makes EIS Reader-Friendly (with Charles Alton, June 2001, page 6)
- Card Game Highlights Diversity at Federal-Tribal NEPA Clinic (June 2004, page 10)
- Bonneville's "Balanced Scorecard" Approach to Mitigation, Monitoring, and Adaptive Management (June 2011, page 1)

Kathy Pierce (right) visited DOE Headquarters in October to say farewell to Carol Borgstrom and NEPA Office staff.

She was a strong voice in the DOE NEPA Community. A consistent theme of her presentations was that NCOs and NEPA Document Managers must manage the NEPA process and pay special attention to quality assurance, schedule management, and communication both within the NEPA team and with external stakeholders. "We can't make sure there are no surprises during the course of a project, but we can make sure everyone is equally surprised," she remarked in an *LLQR* article (June 2012, page 1) on managing EIS schedules.

She received a Meritorious Service Award and the Administrator's Excellence Award, BPA's highest award, in March 2010 (June 2010, page 12). She was recognized for providing extraordinary contributions to BPA's mission – through "unusual initiative, regional and national innovation, and outstanding customer service; exemplary management skills and devotion to duty; and dramatic cost-savings for BPA and the region."

In retirement, Kathy plans to spend more time on her long-standing volunteer activities, many of which reflect her environmental values and cultural interests. She is a docent at the Chinook Tribe's Cathlopotle Plankhouse and helped build the replica long house. She also volunteers at the Ridgefield National Wildlife Refuge (Clark County, Washington) and the Title VII Indian Education Program.

The Office of NEPA Policy and Compliance will miss Kathy's thoughtful contributions, as well as her unflagging positive attitude. On behalf of the DOE NEPA Community, the NEPA Office wishes her a happy and fulfilling retirement.

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[1] *The Columbia River Treaty, a water management agreement between the United States and Canada, optimizes flood management and power generation by coordinating the operations of reservoirs and water flows of the Columbia and Kootenay Rivers on both sides of the border. Under the Treaty, the United States provides Canada one-half of downstream power benefits, "the Canadian Entitlement." (Based on http://blog.gov.bc.ca/columbiarivertreaty/faqs/.)*

NCO Retirements *(continued from previous page)*

Reflections and Farewell from Raj Sharma, Office of Nuclear Energy

Standing at the threshold of retirement leads one to contemplate the past.

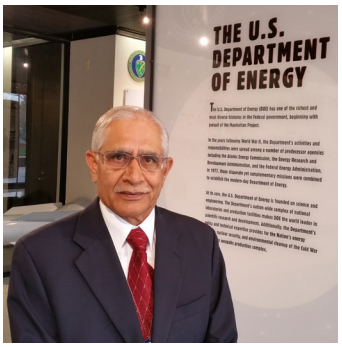
Major early steps in the federal approach to environmental regulation focused on protecting water – the 1899 Refuse Act (to prevent the obstruction of harbors) and the 1948 Federal Water Pollution Control Act (to establish water quality standards and control discharges of pollutants). Publication of Rachel Carson's *Silent Spring* (1962) is widely credited with inspiring the modern environmental movement, as well as resulting in the insecticide DDT being banned from use first in the United States and later worldwide.

By the late 1960s, it was recognized that pollution is a multimedia issue, and the 1970s witnessed a blossoming of the interdisciplinary field of environmental sciences. President Richard M. Nixon signed NEPA into law on January 1, 1970, and created the Environmental Protection Agency the same year. During the rest of the decade, major environmental legislation encompassing all media (water, air, and land) was enacted with bipartisan support.

With the enactment of a comprehensive set of environmental laws, compliance with and enforcement of regulations became high priority. Except for NEPA, though, as late as the mid-1980s, federal agencies claimed "sovereign immunity" and took the position that complying with environmental regulations was a matter of "comity." In essence, agencies would comply informally, as a matter of courtesy, not subject to enforcement action. In other words, agencies asserted that they could not be held responsible for noncompliance. This posture changed due to the federal government's own initiative, and in response to court decisions, as well as due to the enactment of the Federal Facilities Compliance Act of 1992. Now, environmental laws are uniformly enforced for public and private undertakings.

NEPA Policy Drives the Analysis

As NEPA practitioners, most of us are quite familiar with Section 102(2)(C) of NEPA, which requires analysis of environmental impacts for major federal actions significantly affecting the quality of the environment. Section 101, which embodies the declaration of national environmental policy, is intangible and not amenable to prescriptive guidance. Section 101(b) leaves it up to the federal government to use all practicable means to carry out the stated environmental policy. To use an analogy, the NEPA documents prepared under Section 102 are the trees and the policy stated in Section 101 is the forest. We should not be so engrossed working with the trees that we become oblivious of the forest. We should not lose sight of the fact that it is the policy that drives the impact analysis.



I feel privileged to have lived and worked during these times of environmental renaissance, which have spanned almost three generations. While working for the Consolidated Edison Company of New York, I got involved with NEPA in 1971, soon after the Calvert Cliffs decision, which required the Atomic Energy Commission (precursor of the Nuclear Regulatory Commission) to prepare an EIS for reactor licensing because issuance of the license for construction or operation of a reactor was considered a major federal action. In the early 1970s, while working on commercial reactor EISs, I struggled to define what constitutes a significant impact. Working at a power company, a national laboratory, and then a federal agency helped me understand how the perspective changes depending on the kind of organization one works for.

In the end, I must say that I enjoyed working for DOE for the last 32 years. I met Carol Borgstrom soon after I joined (April 1984, in a snowstorm in Denver). As years went by, I developed a high regard for her and her very hard-working staff. At least for as long as she is at DOE, the Department's NEPA program is in good hands.

My best regards to DOE's NEPA Community. I wish you well.

On behalf of the DOE NEPA Community, the NEPA Office offers best wishes to Dr. Rajendra Sharma on his retirement at the end of December. The last of the pioneer class of NCOs, Raj has served as the NCO for the Office of Nuclear Energy continuously since 1990, when the position was established (Secretary of Energy Notice (SEN) 15-90). In 25 years as an NCO, he has made many contributions to DOE's NEPA rulemakings, guidance development, and NCO meetings. See his recent observations in LLQR, *June 2015, page 3.*

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NCO Retirements *(continued from previous page)*

Nevada Site Office: Linda Cohn

Linda Cohn is retiring in late January from the Nevada Site Office, National Nuclear Security Administration, where she has served as NCO since 2008 and as Deputy NCO for several years earlier. Ms. Cohn also has served as the Nevada Site Office's Cultural Resource Program Manager, American Indian Consultation Program Manager, and Program Coordinator for classified projects. She has served as a NEPA Document Manager, most notably for the Nevada site-wide EIS issued in 2013 (*Continued Operation of the Department of Energy/National Nuclear Security Administration Nevada National Security Site and Off-Site Locations in the State of Nevada*, DOE/EIS-0426). In addition, she has contributed insights and recommendations in NEPA guidance efforts, rulemaking, and the lessons learned program.

Linda is well respected and frequently consulted by NCOs and headquarters staff. On behalf of the DOE NEPA Community, the NEPA Office offers her best wishes on her retirement.

Floodplain Guidelines *(continued from page 4)*

approaches does not "prevent agencies from using more traditional structural and nonstructural flood risk management approaches."

Also, the guidelines "recognize the importance of considering impacts to and engagement of vulnerable populations" and acknowledge that this relates to the consideration of environmental justice.

"For example, those in lower income brackets often live in housing most vulnerable to flooding and lack the resources (financial or other) to undertake recommended loss-reduction, evacuation, or recovery measures," the guidelines explain. "The elderly, children, individuals with existing health conditions, non-English speaking or illiterate groups, groups lacking access to public or private transportation, or those with disabilities may be unable to undertake self-protective actions before, during, or after a flood. Agencies should ensure that Federal actions proactively avoid environmental injustices by identifying any disproportionately high and adverse impacts to the public safety, human health, or environmental resources of such vulnerable populations."

Agency Regulations to Be Revised

The guidelines emphasize that each agency, through its regulations or procedures for floodplain management, is responsible for determining how best to determine the floodplain for federally funded projects. For projects involving multiple agencies, the guidelines recommend early coordination among agencies to resolve potential conflicts.

E.O. 13690 directs agencies to update their floodplain regulations and procedures after the Water Resources Council issues implementing guidelines. Now that the Council has done so, the Office of NEPA Policy and Compliance, in coordination with the Office of the Assistant General Counsel for Environment and DOE's NEPA Compliance Officers, is beginning the process of updating DOE's *Floodplain and Wetlands Environmental Review Requirements* (10 CFR Part 1022). During the rulemaking process, the existing regulations remain in effect.

For additional information, contact Brad Mehaffy, NEPA Office, at bradley.mehaffy@hq.doe.gov.

Agencies maintain the responsibility and flexibility to tailor their procedures to meet their prescribed missions while fulfilling the requirements of E.O. 11988.

– Guidelines, Part I, E.O. 11988 Section 6

DOE-wide NEPA Contracting Update

A DOE team is evaluating the offers received in response to a Request for Quotations to provide NEPA support services. The scope of the solicitation is similar to that of the DOE-wide NEPA support contracts that expired in the summer of 2014, i.e., the preparation of NEPA documents and other environmental documents, as well as support for other environmental activities. These activities could include, for example, public involvement, obtaining and analyzing environmental data, preparing floodplain and wetland assessments, and assisting DOE in meeting its obligations under the National Historic Preservation Act and the Endangered Species Act.

DOE's National Nuclear Security Administration (NNSA) is conducting the acquisition and will administer the anticipated blanket purchase agreements. Like the earlier DOE-wide contracts, they will be available for use by all of DOE, including NNSA and the Federal Energy Regulatory Commission.

Training Opportunities

Migratory Bird Conservation Training
Washington, DC; January 26–28, 2016

DOE will host migratory bird conservation training presented by the U.S. Fish and Wildlife Service (FWS) on January 26–28 at DOE Headquarters (Forrestal Building). The program will include sessions related to NEPA. "We will discuss common questions and issues NEPA practitioners often encounter when trying to incorporate the Migratory Bird Treaty Act into their NEPA documents," said Lesley Kordella, one of the FWS trainers. Topics will include environmental laws relevant to migratory bird protection and how to address migratory birds in evaluating the affected environment, impact analysis, cumulative impacts, and mitigation. The training also will include a session on issues specific to DOE and its current Memorandum of Understanding with FWS regarding implementation of Executive Order 13186, *Responsibilities of Federal Agencies to Protect Migratory Birds*.

Registration is open to all federal agency staff. For further information, including the agenda, contact Beverly Whitehead, Office of Sustainable Environmental Stewardship, at beverly.whitehead@hq.doe.gov or 202-586-6073.

National Environmental Justice Conference and Training Program and National Conference on Health Disparities
Washington, DC; March 9–12, 2016

A National Dialog for Building Healthy Communities is the theme of the 2016 National Environmental Justice Conference and Training Program, which will be held jointly with the Ninth Annual National Conference on Health Disparities on March 9–12 in Washington, DC. The conference, sponsored jointly by DOE, other federal agencies, the Howard University School of Law, and private industry partners, is free to government employees, community organizations, students, and faculty.

Agenda sessions will include panels on the impacts of climate change on human health and the environment, the connection between public health and environmental justice, and the role of environmental exposure in reducing health disparities. Additional information is available on the conference website.

National Association of Environmental Professionals
Chicago; April 11–14, 2016

The National Association of Environmental Professionals (NAEP) will hold its 41st annual conference April 11–14 in Chicago with a theme of *Charting the Next 40 Years of Environmental Stewardship*. Presentations and panel discussions will explore NEPA regulatory developments, guidance, litigation outcomes, public involvement, and analytical techniques.

The opening address of the conference will be presented by Karen Weigert, Chief Sustainability Officer of the City of Chicago. The keynote speaker will be Susan Hedman, Administrator of EPA's Region 5 and Manager of the Great Lakes National Program, which coordinates with Canada and brings together federal, state, tribal, local, and industry partners to restore and protect the world's largest freshwater system.

Optional training workshops are offered (for an additional registration fee) on April 11: a full-day "intermediate/advanced" NEPA workshop; a half-day seminar by the National Park Service, Natural Sounds and Night Skies Division, on the assessment of impacts from anthropogenic light and noise on natural and cultural resources and national park visitors; and a half-day workshop offered by American Public University on interdisciplinary team management and effective community engagement.

Conference attendance is open to environmental professionals in all levels of government, academia, and the private sector. Early registration rates are available, and discounts are offered to speakers and government employees. Additional information is available on the NAEP conference website.

The listing of any privately sponsored conferences or training events should not be interpreted as an endorsement of the conference or training by the government.

EAs and EISs Completed July 1 to September 30, 2015

EAs[1]

Bonneville Power Administration
DOE/EA-1974 (7/7/15)
Wallooskee-Youngs Confluence Restoration Project, Clatsop County, Oregon
Cost: $141,000
Time:19 months

DOE/EA-1995* (9/10/15)
Trestle Bay Restoration Project, Clatsop County, Oregon
EA was adopted; therefore cost and time data are not applicable to DOE. [US Army Corps of Engineers was the lead agency; DOE was a cooperating agency.]

Office of Energy Efficiency and Renewable Energy
DOE/EA-2001 (9/30/15)
Final Rule, 10 CFR Part 433, Energy Efficiency Standards for New Federal Commercial and Multi-Family High Rise Residential Buildings' Baseline Standards Update
Cost: $5,000
Time: 10 months

Fermi Site Office/Office of Science
DOE/EA-1943 (9/25/15)
Construction and Operation of the Long Baseline Neutrino Facility and Deep Underground Neutrino Experiment at Fermilab and Sanford Underground Facility, Batavia, Illinois and Lead, South Dakota
Cost: $1,070,000
Time: 36 months

Golden Field Office/Office of Energy Efficiency and Renewable Energy
DOE/EA-1985* (9/10/15)
Virginia Offshore Wind Technology Advancement Project on the Atlantic Outer Continental Shelf Offshore Virginia
EA was adopted; therefore cost and time data are not applicable to DOE. [US Department of the Interior Bureau of Ocean Energy Management was the lead agency; DOE was a cooperating agency.]

Richland Operations Office/ Office of Environmental Management
DOE/EA-1915 (9/30/15)
Proposed Conveyance of Land at the Hanford Site, Richland, Washington
Cost: $1,440,000
Time: 46 months

Western Area Power Administration
DOE/EA-1979 (8/17/15)
SummitWind Farm, Grant County, South Dakota
The cost for this EA was paid by the applicant; therefore cost information does not apply to DOE.
Time: 23 months

DOE/EA-1982 (9/30/15)
Parker-Davis Transmission System Routine Operation and Maintenance Project and Proposed Integrated Vegetation Management Program, Arizona, California, and Nevada
Cost: $197,000
Time: 20 months

EISs

Advanced Research Projects Agency-Energy
DOE/EIS-0481 (80 FR 47489, 8/7/15)
(Draft EIS EPA Rating: LO)
Engineered High Energy Crops Programs, Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia
Cost: $1,100,000
Time: 42 months

Bonneville Power Administration
DOE/EIS-0506* (80 FR 50616, 8/20/15)
(Draft EIS EPA Rating: LO)
Crooked River Valley Rehabilitation, Idaho County, Idaho
EIS was adopted; therefore cost and time data are not applicable to DOE. [US Forest Service was the lead agency; DOE was a cooperating agency.]

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[1] *EA and finding of no significant impact (FONSI) issuance dates are the same unless otherwise indicated.*
* *Adopted*

EAs and EISs Completed *(continued from previous page)*

Office of Electricity Delivery and Energy Reliability
DOE/EIS-0459 (80 FR 56466, 9/18/15)
(Draft EIS EPA Rating: EC-2)
Hawaii Clean Energy Programmatic EIS, Hawaii
The cost for the preparation of this EIS was shared with the state; therefore total cost is not applicable to DOE. [DOE cost was $1,000,000 and Hawaii cost was $2,100,000.]
Time: 57 months

ENVIRONMENTAL PROTECTION AGENCY (EPA) RATING DEFINITIONS

Environmental Impact of the Action
LO – Lack of Objections
EC – Environmental Concerns
EO – Environmental Objections
EU – Environmentally Unsatisfactory
Adequacy of the EIS
Category 1 – Adequate
Category 2 – Insufficient Information
Category 3 – Inadequate
(For a full explanation of these definitions, see the EPA website at http://www2.epa.gov/nepa/environmental-impact-statement-rating-system-criteria.)

NEPA Document Cost and Time Facts[1]

EA Cost and Completion Times

- For this quarter, the median cost for 5 EAs for which cost data were applicable was $197,000; the average was $570,000.
- For this quarter, the median completion time for 6 EAs for which time data were applicable was 21 months; the average was 26 months.
- Cumulatively, for the 12 months that ended September 30, 2015, the median cost for the preparation of 10 EAs for which cost data were applicable was $196,000; the average was $363,000.
- Cumulatively, for the 12 months that ended September 30, 2015, the median completion time for 16 EAs for which time data were applicable was 21 months; the average was 24 months.

EIS Cost and Completion Times

- For this quarter, the cost for the preparation of 1 EIS for which cost data were applicable was $1,100,000.
- For this quarter, the median and average completion times for 2 EISs for which time data were applicable were 50 months.
- Cumulatively, for the 12 months that ended September 30, 2015, the median cost for the preparation of 3 EISs for which cost data were applicable was $1,470,000; the average was $4,190,000.
- Cumulatively, for the 12 months that ended September 30, 2015, the median completion time for 7 EISs for which time data were applicable was 55 months; the average was 54 months.

[1] *For EAs, completion time is measured from EA determination to final EA issuance; for EISs, completion time is measured from the* Federal Register *notice of intent to the EPA notice of availability of the final EIS.*

What Worked and Didn't Work in the NEPA Process

To foster continuing improvement in the Department's NEPA Compliance Program, DOE Order 451.1B requires the Office of NEPA Policy and Compliance to solicit comments on lessons learned in the process of completing NEPA documents and distribute quarterly reports.

The material presented here reflects the personal views of individual questionnaire respondents, which (appropriately) may be inconsistent. Unless indicated otherwise, views reported herein should not be interpreted as recommendations from the Office of NEPA Policy and Compliance.

Scoping

What Worked

- *Narrowing EIS scope*. The original proposal had two major projects. The information about the two projects was very different. DOE decided to eliminate one of the projects from detailed study because it did not meet the need to directly improve habitat and water quality, it was only at 25 percent design, and it was a separate action not dependent on or connected to the other component.
- *Good meetings*. The public meeting and individual meetings with Tribal Nations resulted in DOE gaining a very good understanding of issues that needed to be addressed in the EA.

What Didn't Work

- *Changes to scope*. A number of changes to the scope of the project resulted in associated NEPA lag time and schedule re-baselining.

Data Collection/Analysis

What Worked

- *Most data readily available*. The resource impact analyses presented in the EA were mostly supported by existing and readily available data from other projects undertaken in the area.

What Didn't Work

- *Delay in receipt of cultural resource information*. Cultural resource information came in very slowly, which delayed analyses and findings.
- *Large program area*. The programmatic EIS covered a large geographical area and required data that were not always available.
- *Use of out-of-date data*. Sharing data between the site contractor and NEPA contractor was problematic. In some cases, the NEPA contractor used information obtained from internet searches that was out of date or not comprehensive. The correct data were later identified and used.

Schedule

Factors that Facilitated Timely Completion of Documents

- *Frequent conference calls*. Frequent conference calls kept everyone aware of "to-do" lists and EA progress.
- *Statutory driver*. A statutory directive to complete the EA by a certain date led to focus on the schedule for timely completion of the document.

Factors that Inhibited Timely Completion of Documents

- *New review process*. The cooperating agency used a new administrative review process with new procedures. This project, which was the first to use the new process, identified workflow problems.
- *Inadequate schedule*. The EIS schedule did not include adequate time for internal reviews of revised documents.
- *Inadequate staff*. The lead federal agency had limited staff available to work on the project. This staff also had little EIS experience and no familiarity with their new NEPA procedures.

Teamwork

Factors that Facilitated Effective Teamwork

- *Committed cooperating agencies*. Cooperating agencies committed to and met all schedules set for the EIS process.
- *Effective cooperating agency participation*. The cooperating agency participated in team meetings and reviews, assisted with the Clean Water Act analysis/compliance, and helped respond to public comments.

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What Worked and Didn't Work *(continued from previous page)*

- *Effective team participation*. Having regular conference calls and NEPA team participation on the Integrated Project Team helped to keep the project moving toward completion.
- *NEPA Team Charter*. Preparation of a NEPA Team Charter, which addressed how four DOE organizations, three laboratories, and a number of contractors would work together to prepare the EA, facilitated effective teamwork.
- *Good working relationships*. The good working relationship, among the many persons and multiple agencies involved in the preparation of this programmatic EIS, facilitated timely completion of the document.
- *Responsive team members*. All core project team members were responsive and available throughout the EA process.

Factors that Inhibited Effective Teamwork

- *Coordination with NEPA contractor*. Coordinating the comment review process was cumbersome because the same comments had to be submitted several times before being addressed by the NEPA contractor.
- *Disagreements among team members*. Disagreements among EA team members on the NEPA process led to long meetings to achieve resolutions.
- *Contractor not always available*. The NEPA contractor was not always available at critical times during the EA process. This caused delays in the preparation of the document.
- *Differing NEPA regulations*. Different NEPA implementing regulations and different styles of NEPA documentation between agencies proved to be confounding.
- *Busy staff*. Staff were often very busy or out of the office on travel. Therefore, attendance at meetings and on conference calls was inconsistent.

Process

Successful Aspects of the Public Participation Process

- *Field trips*. After scoping and release of the draft EIS, there were field trips for the public and the regulatory agencies involved in the project to tour the proposed project site.
- *Focused public meetings*. Holding poster sessions in conjunction with public meetings led to more focused meetings and a more casual opportunity for interface between DOE and the public.

Usefulness

Agency Planning and Decisionmaking: What Worked

- *Addressing statutory responsibility*. The EIS addresses statutory responsibility to protect, mitigate, and enhance fish and wildlife habitat affected by the development of the project, as well as obligations under the Endangered Species Act.
- *Informed decision*. The NEPA process led to environmental clearance for the project. Additionally, certain impacts like transportation were flagged that will need to be closely managed.

Enhancement/Protection of the Environment

- *Enhanced environment*. As a result of the EIS process, the project area will be enhanced for fish and wildlife, as well as for the local economy.
- *Mitigation of environmental impacts*. Conservation and mitigation measures were developed during the EIS process to address potential adverse impacts to natural resources.
- *Protection of environment*. The resource protection measures listed in the EA would result in environmental impacts being avoided or minimized.

Other Issues

Guidance Needs Identified

- *Property transfers*. Additional guidance is needed regarding the applicability of categorical exclusions versus the need to prepare EAs for property transfers.
- *Noise and vibration assessment*. More guidance is needed on assessing the impacts of noise and vibration in NEPA documents.

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What Worked and Didn't Work *(continued from previous page)*

Effectiveness of the NEPA Process

For the purposes of this section, "effective" means that the NEPA process was rated 3, 4, or 5 on a scale from 0 to 5, with 0 meaning "not effective at all" and 5 meaning "highly effective" with respect to its influence on decisionmaking.

For the past quarter, in which 2 EA and 1 EIS questionnaire responses were received, 3 respondents rated the NEPA process as "effective."

- A respondent who rated the process as "5" stated that the NEPA process assessed potential impacts to environmental resources in the project area.
- A respondent who rated the process as "4" stated that the NEPA process facilitated the avoidance or minimization of potential environmental impacts that were disclosed in the EA.
- A respondent who rated the process as "4" stated that the NEPA process disclosed the potential environmental impacts of implementing the project and informed the DOE decision to fund it.