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CEQ Issues Guidance on Consideration of GHGs and Climate Change in NEPA Reviews



The Council on Environmental Quality (CEQ) recently released its *Final Guidance on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews.* The Guidance recommends that agencies quantify a proposed action's projected direct and indirect greenhouse gas (GHG) emissions when tools and data inputs are reasonably available, and use these emissions as a proxy for assessing potential climate change effects. The Guidance also recommends that where

New York City and Sea Level Rise



Sea level rise may affect the resilience of projects and infrastructure. According to the Guidance, agencies should "take into account the ways in which a changing climate may impact the proposed action and any alternative actions, change the action's environmental effects over the lifetime of those effects, and alter the overall environmental implications of such actions." (Image: U.S. Climate Resilience Toolkit) agencies do not quantify such emissions, agencies should include a qualitative analysis and explain the basis for determining that quantification is not reasonably available.

The Guidance is CEQ's effort to ensure that agencies consider how federal actions may impact climate change and to identify opportunities to build climate resilience (i.e., consider alternatives that would make the proposed actions and affected communities more resilient to the effects of a changing climate). The Guidance provides a level of predictability and certainty on how agencies describe potential climate change impacts in NEPA reviews, and will help agencies make informed decisions about the potential impacts of climate change associated with their actions. The Guidance emphasizes consideration of the rule of reason and proportionality in preparing GHG and climate change analyses. The Guidance does not establish new requirements, but courts may reference the document as a persuasive authority.

Consideration of climate change in NEPA reviews will improve the quality of decisionmaking by identifying "practicable opportunities to reduce GHG emissions, improve environmental outcomes, and contribute to safeguarding communities and their infrastructure against the effects of extreme weather events and other climaterelated impacts," states the Guidance. CEQ issued the Guidance on August 2, followed by an announcement in the *Federal Register* on August 5 (81 FR 51866).

Use Existing NEPA Tools and Principles

The Guidance states that climate change impacts should be analyzed using existing NEPA tools and practices. It further states that, "Agencies should be guided by the principle that the extent of the analysis should be

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Inside Lessons Learned

Welcome to the 88th quarterly report on lessons learned in the NEPA process. This issue highlights the Council on Environmental Quality final guidance on climate change, U.S. Fish and Wildlife Service migratory bird training, an updated Environmental Protection Agency screening tool for environmental justice analysis, and contributions by our summer interns. 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 October 17, 2016, to Yardena Mansoor at yardena.mansoor@hq.doe.gov.

Quarterly Questionnaires Due November 7, 2016

For NEPA documents completed July 1 through September 30, 2016, NEPA Document Managers and NEPA Compliance Officers should submit a Lessons Learned Questionnaire as soon as possible after document completion, but not later than November 7. 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 is available, send your email address to yardena.mansoor@hq.doe.gov. (DOE provides paper copies only on request.)

NEPA Compliance Officers To Meet

DOE's NEPA Compliance Officers (NCOs) will meet October 18–19 at DOE Headquarters in Washington, DC. The meeting will feature discussion on approaches for working with decisionmakers and NEPA document teams, ensuring document quality, making categorical exclusion (CX) determinations, and CEQ's recent climate change guidance.



DOE established the NCO position in 1990 "in each headquarters office having NEPA responsibilities and in each operations office." The responsibilities of an NCO are listed in the DOE NEPA Order (DOE O 451.1B, NEPA Compliance Program) and include:

- Developing NEPA procedures for the NCO's office, coordinating the office's NEPA compliance strategies, assisting with the NEPA process and document preparation, and advising on the adequacy of NEPA documents.
- Making CX determinations and approving and issuing associated floodplain and wetland documents.
- Participating in periodic NEPA meetings and workshops conducted by the Office of NEPA Policy and Compliance, providing NEPA training, and disseminating NEPA guidance and related information.

Training: Migratory Bird Conservation for Federal Partners

Environmental professionals from across the DOE complex gathered in Washington, DC, in late May for the U.S. Fish and Wildlife Service (FWS) training Migratory Bird Conservation for Federal Partners. FWS staff provided an overview of the Migratory Bird Treaty Act (MBTA) and related laws, and recommended use of the FWS "stressor management approach" in the NEPA process to analyze and reduce potential impacts to migratory birds. "One of the key takeaways from the training," said Susan Lacy, NCO for the National Nuclear Security Administration's Sandia Field Office, "is that NEPA often is the best process for assessing ways to protect birds."

What is a "Migratory Bird"?

Enacted almost a century ago, the MBTA is one of the nation's oldest wildlife protection laws. The FWS maintains a list of species protected under the MBTA at 50 CFR 10.13. Most native bird species belong to a protected family and are therefore protected by the MBTA. The FWS also tracks Birds of Conservation Concern (BCCs), which are species that "without additional conservation actions, are likely to become candidates for listing under the Endangered Species Act of 1973."

Birds are under pressure from the potential cumulative effects of habitat loss, cat predation, building/structure collisions, electrocution, hunting, and pollution, which can



cause devastating population declines. "A key NEPA lesson from the training,"

said Brad Mehaffy, Office of NEPA Policy and Compliance, "is that addressing migratory bird vulnerabilities over their full life cycle is essential to reducing potential impacts."

FWS Stressor Management Approach

FWS staff explained that NEPA reviews should analyze potential impacts to migratory birds in accordance with the MBTA as well as the Bald and Golden Eagle Protection Act, the Endangered Species Act, the Fish and Wildlife Conservation Act, and Executive Order 13186, *Responsibilities of Federal Agencies to Protect Migratory Birds*.

Affected Environment: For developing the discussion of migratory birds and their habitat in a NEPA document's affected environment section, FWS staff recommended: coordinating with FWS at an early stage and on an ongoing basis, consulting the BCC lists, and using the "Information for Planning and Conservation" (IPaC) online tool (*LLQR*, March 2014, page 6). Other potentially useful resources include the Avian Knowledge Network, state natural heritage databases, public information, and direct field assessments.

Environmental Consequences: FWS staff recommended using a stressor management approach when assessing potential environmental impacts. A stressor is defined as any alteration of or addition to the environment that

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The FWS's Effects Pathway distinguishes between "impacts" and "effects." This approach deconstructs an action and links cause-and-effect relationships between an activity and bird demography to avoid or minimize impacts and identify conservation measures that target the activity-related stressor. (Source: FWS Migratory Bird Conservation for Federal Partners Webinar) Note: "Effects" and "impacts" are synonymous in the CEQ NEPA regulations (40 CFR 1505.8).

Climate Change Guidance (continued from page 1)

commensurate with the quantity of projected GHG emissions...." As with all potential environmental impacts, the agency should use expertise and experience to determine the focus and depth of analysis, as well as the appropriate level (programmatic, project- or site-specific) of NEPA review.

Quantification of GHG Emissions

According to the Guidance, agencies should analyze potential impacts over the "life of the proposed action and its effects." This includes both the potential effects of a proposed action on climate change, using emissions as a "proxy" for impacts, and the effects of climate change on both the proposed action and the potential impacts of that action.

The Guidance advises that agencies analyze both the short- and long-term adverse and beneficial effects of the proposed action, recognizing that some projects may have short-term negative climate effects that are ultimately outweighed by the long-term benefits of the project. Agencies should quantify emissions as long as "tools, methodologies, or data inputs" are "reasonably available." Otherwise, agencies should describe emissions qualitatively and explain the basis for determining that quantification is not reasonably available. The Guidance explains that a "qualitative analysis can rely on sectorspecific descriptions of the GHG emissions of the category of Federal agency action that is the subject of the NEPA analysis."

The Guidance eliminates the 25,000 metric ton CO_2 -equivalent annual emission reference point for quantification that had been included in the 2014 revised draft Guidance. This change expands the suite of projects for which the Guidance recommends quantification of projected direct and indirect GHG emissions. To support implementation of the Guidance, CEQ has updated its list of GHG accounting tools, including five developed by DOE.

When [an existing, timely, objective, and authoritative analysis of estimated direct and indirect emissions] or information for quantification is unavailable, or the complexity of comparing emissions from various sources would make quantification overly speculative, then the agency should quantify emissions to the extent that this information is available and explain the extent to which quantified emissions information is unavailable while providing a qualitative analysis of those emissions.

- CEQ Final GHG Guidance

According to the Guidance, "for the purposes of NEPA, the analysis of the effects of GHG emissions is essentially a cumulative effects analysis.... Therefore, direct and indirect effects analysis for GHG emissions will adequately address the cumulative impacts for climate change...and a separate cumulative effects analysis for GHG emissions is not needed."

Agencies are not expected to "fund and conduct original climate change research" or "undertake new research or analysis" of local impacts. Instead, the Guidance stresses that agencies should use existing information and science in NEPA reviews. Further, the Guidance notes that "agencies can rely on basic NEPA principles to determine and explain the reasonable parameters of their analyses in order to disclose the reasonably foreseeable effects that may result from their proposed actions."

The Guidance also recommends discussing relevant approved federal, regional, state, tribal, or local plans, policies, or laws for GHG emission reductions or climate adaptation and making it clear "whether a proposed project's GHG emissions are consistent" with them. For example, by FY 2025, DOE has committed to reducing greenhouse scope 1 (direct) and 2 (direct – purchased energy) emissions by 50 percent and scope 3 (indirect) emissions by 25 percent from a FY 2008 baseline (*2015 Strategic Sustainability Performance Plan*).

"Agencies should not limit themselves to calculating a proposed action's emissions as a percentage of sector, nationwide, or global emissions in deciding whether or to what extent to consider climate change impacts under NEPA." CEQ explains that "these comparisons are also not an appropriate method for characterizing the potential impacts associated with a proposed action and its alternatives and mitigations because this approach does not reveal anything beyond the nature of the climate change challenge itself: the fact that diverse individual sources of emissions each make a relatively small addition to global atmospheric GHG concentrations that collectively have a large impact."

Examination of Alternatives

Rather than focusing on sector, nationwide, or global emissions, the Guidance advises agencies to use their quantification of GHG emissions to compare GHG emissions across alternative scenarios and alternatives to both lessen net GHG emissions (e.g., carbon sequestration, energy efficiency) and improve resiliency to future climate change impacts (e.g., avoiding development in floodplains). "Considering alternatives, including

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Climate Change Guidance (continued from previous page)

alternatives that mitigate GHG emissions, is fundamental to the NEPA process," states the Guidance.

In addition, CEQ notes that "[a]gency decisions are aided when there are reasonable alternatives that allow for comparing GHG emissions and carbon sequestration potential, trade-offs with other environmental values, and the risk from – and resilience to – climate change inherent in a proposed action and its design." "For example, a proposed action may require water from a stream that has diminishing quantities of available water because of decreased snow pack in the mountains, or add heat to a water body that is already warming due to increasing atmospheric temperatures."

The Guidance is consistent with Administration efforts to promote sustainability (Executive Order 13693, *Planning for Federal Sustainability in the Next Decade*) (*LLQR*, June 2015, page 4) and improve resilience (E.O. 11988 as amended, *Floodplain Management*) (*LLQR*, December 2015, page 1). The Guidance notes that NEPA does not require selection of the alternative with the lowest net level of GHG emissions or greatest resilience. The Guidance

[T]he effects of climate change observed to date and projected to occur in the future include more frequent and intense heat waves, longer fire seasons and more severe wildfires, degraded air quality, more heavy downpours and flooding, increased drought, greater sea-level rise, more intense storms, harm to water resources, harm to agriculture, ocean acidification, and harm to wildlife and ecosystems.

- CEQ Final GHG Guidance

Key Climate Change References

states, "When conducting the analysis, an agency should compare the anticipated levels of GHG emissions from each alternative ... and mitigation actions to provide information to the public and enable the decision maker to make an informed choice."

DOE's Approach to GHG and Climate Change Analysis

DOE has analyzed GHG emissions and climate change in its NEPA reviews for almost 30 years, beginning with the 1989 *Programmatic Environmental Impact Statement for the Clean Coal Technology Demonstration Program* (DOE/EIS-0146). DOE has honed its approach since then based on its experience and consideration of draft versions of the Guidance. DOE will discuss the Guidance at this fall's NEPA Compliance Officers Meeting (page 2), and will continue to monitor developments in climate change analysis in NEPA and the need for additional guidance. "We'll continue to encourage DOE to be at the forefront of considering climate change in NEPA," said Carol Borgstrom, Director, Office of NEPA Policy and Compliance.

Past issues of *LLQR* have described DOE's approach to GHG and climate change analysis (December 2007, page 1) and the development of Guidance (March 2010, page 3; March 2015, page 1). For more information, contact Bill Ostrum at william.ostrum@hq.doe.gov or 202-586-4149.

Available resources include references such as the U.S. Global Change Research Group *National Climate Assessment* and Intergovernmental Panel on Climate Change *Fifth Assessment Report*. They also include regional and site-specific documents such as vulnerability assessments and site sustainability plans.



Now available / Ahora disponible: Guía para el Ciudadano sobre NEPA

The DOE NEPA Website now offers CEQ's *A Citizen's Guide to NEPA: Having Your Voice Heard* in Spanish as well as English. Developed by an interagency work group, the Guide provides an orientation to NEPA to facilitate public involvement (*LLQR*, March 2008, page 8).

El sitio web de NEPA del Departamento de Energía (DOE) ahora ofrece la *Guía para el Ciudadano sobre NEPA: Lograr que se eschue tu voz* en español y en inglés. Desarrollado por un grupo de trabajo interinstitucional, la guía ofrece una orientación a NEPA para facilitar la participación pública (*LLQR*, marzo 2008, página 8).

EJSCREEN 2016: EPA's Enhanced EJ Screening Tool

The Environmental Protection Agency (EPA) recently updated EJSCREEN with additional data and features. EJSCREEN can be used by agencies and the public when considering potential environmental justice (EJ) impacts, such as during the NEPA process.

The web-based mapping tool provides environmental and demographic information for locations across the United States and allows comparisons, including to the rest of a state, EPA region, or the nation. This can help identify locations that may have higher environmental burdens and vulnerable populations than the surrounding areas.

EPA began working on EJSCREEN in 2010 and released it for public use last year (*LLQR*, September 2015, page 12). Following that release, EPA conducted "hundreds of outreach events to a broad range of stakeholders" and "worked with other federal and state partners to assist in incorporating EJSCREEN into various activities, analyses, and programs," recalled Matthew Tejada, Director of EPA's Office of Environmental Justice, in a blog post describing the update. The recent changes were based on feedback received during those efforts and include:

- Inclusion of National Air Toxic Assessment environmental indicators for cancer risk, respiratory hazard, and diesel particulate matter exposure
- Scalable maps that summarize data at the Census block group or tract, or county level
- New layers such as parks/green spaces and unemployment rates
- The ability to save sessions and print maps

- A side-by-side view of different datasets
- Inclusion of data for Puerto Rico
- An updated interface to improve usability

Uses in NEPA Reviews

EJSCREEN can be helpful in the NEPA process, including during scoping and in evaluating public comments. For example, the recent report of the NEPA Committee of the Interagency Working Group on Environmental Justice, *Promising Practices for EJ Methodologies in NEPA Reviews*, notes that EJSCREEN "can be used to help identify the location and concentrations of minority populations and low-income populations" at the beginning of the scoping process. (See *LLQR*, March 2016, page 1.)

EPA uses EJSCREEN to support agency work to inform public outreach and involvement; implement aspects of permitting, enforcement, compliance, and voluntary programs; develop reports of EPA work; and enhance geographically based initiatives. In addition, EPA points out that EJSCREEN can be used to share information with state and tribal partners and the public, and to support educational programs, grant writing, and community awareness efforts. EPA cautions that screening-level results "do not, by themselves, determine the existence or absence of environmental justice concerns in a given location." Results from EJSCREEN should be supplemented with detailed local information and experience.

For more information, see EPA's EJSCREEN Contact Us webpage.



A screenshot illustrates the distribution of population below the poverty level in the Washington, DC, area.

Migratory Bird Training (continued from page 3)

affects birds and/or their resources, and is expressed in plain language that needs little or no interpretation, such as "vegetation removal" or "noise."

This approach uses a detailed effects pathway analysis to link activities associated with a proposed project to demographic impacts on receptor species of migratory birds. For example, a construction project's activities (e.g., clearing vegetation, grading, establishing access roads, and excavating holes) may create stressors (e.g., reduced habitat, dust, noise, runoff, and vibration) that affect the resources essential for breeding, feeding, or sheltering. Species-specific responses may include vulnerability to predators, area avoidance, and barriers to migration. Potential resulting effects are reduced reproductive success, injury, and death.

Mitigation: FWS staff recommended that NEPA reviews identify the specific conservation measures that could be used to mitigate potential project-related impacts to migratory birds. A mitigation measure may:

- Avoid the production of a stressor/impact to birds altogether by not taking a certain action
- Minimize the exposure of birds and their resources to project-related stressors by limiting the degree or magnitude of the action and its implementation
- Rectify the effects of an impact by repairing, rehabilitating, or restoring the affected environment
- Reduce or eliminate the stressor/impact over time
- Compensate for the impact by replacing or providing substitute resources or environments

The FWS Conservation Measures webpage provides a reference on nationwide conservation measures, 11 sets

of mitigation measures specific to an activity or type of structure, and species-specific measures for eagles and sage-grouse.

The FWS MBTA training supports fulfillment of the 2013 Memorandum of Understanding (MOU) between DOE and FWS pursuant to the MBTA and Executive Order 13186. In that MOU, DOE committed to coordinate closely with the FWS during NEPA review of DOE proposals to identify and analyze potential impacts, and develop strategies to protect migratory birds and their habitats. (See *LLQR*, December 2013, page 13.)

The FWS looks forward to collaborating with DOE to build a strong partnership on behalf of migratory birds.

- Dr. Eric Kershner, Ornithologist FWS Division of Migratory Bird Management

The Office of the Associate Under Secretary for Environment, Health, Safety and Security (AU) is the lead for implementing the DOE Migratory Bird Protection Program. For additional information, contact Beverly Whitehead, Office of Sustainable Environmental Stewardship (AU-21), at beverly.whitehead@hq.doe.gov. In addition, DOE's Powerpedia page (accessible to DOE staff) on the Migratory Bird Protection Program provides links to resources and references. For questions regarding migratory bird issues in NEPA reviews, contact Brad Mehaffy at bradley.mehaffy@hq.doe.gov or 202-586-7785.

The FWS training helped us understand the MBTA and related avian protection laws. Using the Avian Power Line Interaction Committee guidance, reference materials from the training, and networking with individuals we met, Southwestern was able to draft its Avian Protection Plan. We are excited about moving it forward.

- Mistie Pilcher, Contract Environmental Specialist Southwestern Power Administration



(Photo: U.S. Fish and Wildlife Service)

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NEPA Office Issues 2016 Stakeholders Directory

Approximately 45 percent of listings in the 2016 *Directory of Potential Stakeholders for DOE Actions under NEPA* changed in the past year. The Office of NEPA Policy and Compliance issued the 33rd edition of the directory in July after verifying contact information with federal agencies; states, territories, and state government associations; and nongovernmental organizations. The directory also lists updated DOE points of contact for tribal issues and NEPA document websites and public reading rooms.

"Check your distribution lists," encouraged Juliet Bochicchio, who conducted the update for the NEPA Office. NCOs and NEPA Document Managers should ensure that they are using the most current contact information. "While updating the directory, we received feedback from one organization that an EIS of high interest to them was sent to an outdated address," she said.

When planning to distribute an EA or EIS, or initiate other NEPA public involvement and consultation activities, use the directory to help identify potential recipients and confirm their mail and email addresses. The NEPA Office updates the entire directory each July and may issue updates throughout the year as new contact information is received. The most current directory is available on the DOE NEPA Website. Send updates and questions to askNEPA@hq.doe.gov.

Coordinating with the Department of the Interior

The Department of the Interior (DOI) has updated its procedures for the review of other agencies' environmental documents.

- Send requests for review of a draft or final EIS to the DOI Office of Environmental Policy and Compliance, which will provide it to DOI bureaus and regional offices. The Office of Environmental Policy and Compliance requests a web address to download the documents or to receive the files on a CD, DVD, or thumb drive, rather than paper copies. The contact for DOE issues is Lisa Treichel (lisa.treichel@ios.doi.gov or 202-208-7116).
- Consult with DOI Regional Environmental Officers and Bureau contacts on other environmental matters, including early coordination and scoping, EAs and FONSIs, preliminary or working draft EISs, and matters of a regional nature. Regional offices and contacts are listed in the DOE Stakeholders Directory and on the DOI website.

NAEP 2017 Conference Abstracts – Due September 15 Environmental Awards Nominations – Due October 14

The National Association of Environmental Professionals (NAEP) seeks abstracts for speakers, panels, and posters to be presented at its 42nd annual conference, which will be held March 27–30, 2017, in Durham, North Carolina. With the theme of *An Environmental Crossroads: Navigating our Ever Changing Regulatory Landscape*, the conference will cover NEPA and related subjects and is open to environmental professionals in all levels of government, academia, and the private sector. Abstracts for the 2017 conference are due by September 15, 2016. Questions may be directed to Lynn McLeod at naep2017@battelle.org or 781-681-5510.

NAEP also invites nominations for its annual Environmental Excellence Awards, which recognize outstanding NEPA achievements and exceptional performance in environmental management, stewardship, education, and other categories. The nominator and nominee need not be members of NAEP, and nominations may include projects or programs recognized by others. Award nominations are due by October 14, 2016. Questions may be directed to Abby Murray at 856-470-4521.

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.



Transitions: NEPA Compliance Officers

Carlsbad Field Office

George Basabilvazo and **Anthony Stone** have been designated as temporary NEPA Compliance Officers (NCOs) for the Carlsbad Field Office. Mr. Basabilvazo, Director of the Environmental Protection Division, can be reached at george.basabilvazo@cbfo.doe.gov or 575-234-7488. Mr. Stone, Resource Conservation and Recovery Act Program Manager, can be reached at anthony.stone@cbfo.doe.gov or 575-234-7475.

Susan McCauslin, who served as the Carlsbad Field Office NCO since 2008, now supports environmental, contracting, and procurement activities in the Office of Technical Support and Asset Management at the Environmental Management Consolidated Business Center in Cincinnati.

NNSA, Los Alamos Field Office

Jane Summerson, Ph.D., the National Nuclear Security Administration's (NNSA's) lead NCO, is now also the NCO for the NNSA's Los Alamos Field Office. Dr. Summerson is a longtime DOE NCO and NEPA Document Manager. Past issues of *LLQR* reflect her many contributions. See, for example, her article on "Early Detailed Planning and Integrated Teamwork: Keys to Yucca NEPA Success" (December 2008, page 4) and her advice on "How to Manage an EIS Schedule Successfully" (June 2012, page 1). Dr. Summerson can be reached at jane.summerson01@nnsa.doe.gov or 505-845-4091.

Oak Ridge Office of Environmental Management

Michael Rigas is the new NCO for the Oak Ridge Office of Environmental Management (OREM). He also serves as the Facilities Information Management System coordinator. He previously worked as a project manager at OREM for several groundwater projects and as the nuclear maintenance program manager. Before joining DOE, Mr. Rigas worked as an engineering intern for a nongovernmental organization that designed facilities in the developing world. He earned a Bachelor of Science in Civil Engineering and a Master of Engineering in Environmental Engineering Sciences from the University of Florida, and is a licensed professional engineer in environmental engineering. He can be reached at michael.rigas@orem.doe.gov or 865-576-7070.

Southwestern Power Administration

Danny Johnson has been designated the new NCO for Southwestern Power Administration (SWPA), where he serves as Director, Division of Environment, Security, Safety and Health. He joined SWPA over 30 years ago as an electrical engineer and recently moved to his current position after serving as the Director of Maintenance of Electric Power Transmission Facilities. Mr. Johnson can be reached at danny.johnson@swpa.gov or 417-891-2625.

Aiden Smith, Vice President for Power Marketing and Transmission Strategy and SWPA's previous NCO, will continue to have a NEPA role in managing the newly created Section 1222 Project Management Field Element, which is responsible for large electric power transmission

infrastructure projects evaluated or selected by the Secretary of Energy for participation under Section 1222 of the Energy Policy Act of 2005.









NEPA Summer Interns Look Ahead

The Office of NEPA Policy and Compliance was fortunate to have two outstanding interns assisting the staff this summer. We asked them to share their thoughts on their experiences in the NEPA Office and their future plans.

Julianna Hitchins is a rising senior at Pomona College majoring in Environmental Analysis.

In June, I transplanted myself from the humid, green, Amazonian jungle of Ecuador, where I spent the spring semester studying ecology and conservation, to the only slightly less humid, gray, concrete jungle of Washington, DC, to begin my internship with the NEPA Office. I hoped to apply and build on what I learned in the diverse ecosystems of Ecuador and in the classroom at Pomona College. I arrived in DC eager to gain exposure to federal environmental and energy policymaking and implementation. I'm confident I've achieved those goals and so much more.

During my time at the NEPA Office, I contributed to a diverse range of projects that gave me the opportunity to understand NEPA from three different perspectives. First, I saw how NEPA can inform the development of projects early in the planning process through the Office of Nuclear Energy's Consent-Based Siting Initiative for interim storage and disposal of spent nuclear fuel and high-level radioactive waste. Second, I had the opportunity to apply NEPA to projects and national policy issues currently underway by contributing to DOE's Environmental Justice strategy. Third, I learned about NEPA's progression over time, as I studied DOE's NEPA compliance over the past 20 years by analyzing NEPA document completion time and cost metrics.

My internship at the NEPA Office undoubtedly contributed to both my professional and personal development. I formed a new appreciation of and a clearer perspective on DOE's day-to-day functions and how these functions play a critical role in the nation's development. This experience complemented my academic and field-based experiences and provided a broader understanding of environmental work at the federal level. I also gained new perspective on my career goals. I began this internship feeling uncertain about my future professional and academic interests, desperately searching for a clear path. While working in the NEPA Office, I had the opportunity to work with professionals with a wide array of backgrounds and experiences. Now, as I begin my final year at Pomona College, I feel more confident about my professional goals knowing that there is no such thing as a clear-cut path. I leave the NEPA Office with an armory of experiences, great advice, new connections, and the principles of NEPA forever etched in my mind, all of which will help me adapt to other new environments as I move forward in my career. **Morgan Gray** graduated with a BA in Political Science from Texas A&M in May 2016, and will pursue a Master of Public Service and Administration there this fall.

Freshly graduated with a BA and a desire to return to Washington, DC, for my second summer, I applied to the Washington Internships for Native Students program in hopes that an internship within the federal government would help guide me in my search for a career path. As a citizen of the Chickasaw Nation, it is of the utmost importance to me that a portion of my professional efforts be dedicated towards promoting an effective governmentto-government relationship between the federal and tribal governments. The Office of NEPA Policy and Compliance gave me the opportunity to hone in on this objective through an in-depth exploration of tribal consultation within the NEPA environmental review process.

During my 8 weeks in DC, I studied the intersection of NEPA and Section 106 of the National Historic Preservation Act, which requires federal agencies, in consultation with tribal governments, to take into account the effects of their actions on historic properties. My research focused on identifying ways to increase participation of tribal communities in the NEPA process. I also provided suggestions for improving the DOE NEPA Website to better facilitate meaningful engagement in the NEPA process. In addition, I conducted research on programmatic NEPA documents and assisted in updating the *Stakeholders Directory* (page 8).

As I transition into pursuing a master's degree this fall, I hope to tailor my graduate-level studies to include coursework in environmental and energy policy. Without the experiences and guidance provided to me by mentors within the NEPA Office, I may not have discovered my interest in statutes, policies, and other federal requirements mandating environmental review. I am now

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Julianna Hitchins (left) and Morgan Gray made valuable contributions to the NEPA Office this summer.

A Successful Training Tool for Working Effectively with Tribal Governments

By Morgan Gray, Intern, Office of NEPA Policy and Compliance

During my summer internship with the NEPA Office, I explored the role that tribal governments play in the NEPA process. As part of this effort, I took online training, Working Effectively with Tribal Governments, which provides an in-depth guide to understanding the requirements¹ for, and the benefits of, meaningful, efficient, and respectful tribal consultation. The training was created by an interagency working group in 2008 and updated in 2013 (*LLQR*, December 2013, page 7).

The training focuses on the history of the relationship between the U.S. Government and federally recognized tribal governments, and describes this relationship as "a political one, based on this historic and evolving relationship between sovereign governments...." Its description of seven eras of U.S.-tribal relations, beginning in 1778, provides critical context that can inform consultation efforts in the present. The training emphasizes that while this relationship began with instances of conflict and removal, both parties continue to work towards a positive and effectual relationship that recognizes tribal sovereignty and self-determination.

Many of the shared beliefs and practices within Native American culture, the training explains, involve religious and cultural connections to the environment. The training states that "one important theme within many Native American cultures is a strong connection to all aspects of the natural world. It is important for federal employees to understand that the vitality of Native American cultures and religions is often inextricably linked to the environment. In fact, there are culturally important or sensitive resources." For such reasons, it is crucial that federal agencies engage tribal governments when actions may impact the environment, and make an effort to understand their unique perspectives.

The training concludes with tips for successful tribal consultation, including the use of mutually agreed upon protocols, taking time to learn about each respective tribe's culture and history prior to consultation, and respecting traditional customs and laws while visiting with tribes. As the relationship between the federal and tribal governments continues to evolve, communication remains an imperative aspect of maintaining a true government-to-government relationship. Overall, this training provides an effective and thorough guide for tribal consultation built upon mutual understanding and respect for culture and history.

¹ For example, the Council on Environmental Quality NEPA regulations require federal agencies to engage tribes in the NEPA process (40 CFR 1501.7(a)(1), 1503.1(a)(2)(ii), and 1508.5).

Summer Interns (continued from previous page)

confident in my ability to effectively serve the Chickasaw Nation as a proponent of self-determination, mutual respect, and understanding within tribal consultation practices.

With a new lens, I find myself moving forward towards a career path where I can incorporate both my passion for

championing self-governance within Tribal Nations, and my newfound appreciation for NEPA. In the future, I hope to follow the example of statutes like NEPA by working to provide a voice for tribal governments within the federal environmental review process.

EAs and EISs Completed April 1 to June 30, 2016

EAs¹

Bonneville Power Administration

DOE/EA-1952 (4/19/16) Lane-Wendson No. 1 Transmission Line Rebuild Project, Lane County, Oregon Cost: \$200,000 Time: 40 months

Brookhaven Site Office/Office of Science

DOE/EA-2010 (6/24/16) Alternating Gradient Synchrotron Complex, Upgrades for Continued Operation, Upton, New York Cost: \$60,000 Time: 14 months

Pacific Northwest Site Office/Office of Science DOE/EA-2026 (4/4/16)

Biomedical Research at Existing Biosafety Level 3 Laboratories with Registered Select Agent Programs, Richland, Washington Cost: \$70,000 Time: 6 months

EISs

No EISs were completed during this quarter.

NEPA Document Cost and Time Facts²

EA Cost and Completion Times

- For this quarter, the median cost for 3 EAs for which cost data were applicable was \$70,000; the average was \$110,000.
- For this quarter, the median completion time for 3 EAs for which time data were applicable was 14 months; the average was 20 months.
- Cumulatively, for the 12 months that ended June 30, 2016, the median cost for the preparation of 15 EAs for which cost data were applicable was \$200,000; the average was \$406,000.
- Cumulatively, for the 12 months that ended June 30, 2016, the median completion time for 21 EAs for which time data were applicable was 20 months; the average was 23 months.

EIS Cost and Completion Times

- There were no EISs completed during this quarter.
- Cumulatively, for the 12 months that ended June 30, 2016, the median cost for the preparation of 5 EISs for which cost data were applicable was \$1,930,000; the average was \$5,070,000.
- Cumulatively, for the 12 months that ended June 30, 2016, the median completion time for 10 EISs for which time data were applicable was 43 months; the average was 47 months.

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

² 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. Costs shown are the estimated amounts paid to contractors to support preparation of the EA or EIS, and do not include federal salaries.

Questionnaire Results

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.

Scoping

What Worked

• *Internal meeting*. An internal project scoping meeting was held at the start of the project that included DOE and EA contractor staff to establish clear expectations regarding EA scope and schedule.

Data Collection/Analysis

What Worked

• *Use of previous data.* Use of data from several previous NEPA assessments for similar actions helped expedite the EA process.

What Didn't Work

• *Inaccurate GIS data*. GIS data on road locations was inaccurate and led to difficulties in analyzing impacts. Because this data inaccuracy problem was not corrected early enough in the permitting process, this also led to some permitting delays.

Schedule

Factors that Facilitated Timely Completion of Documents

- *Concurrent reviews*. Having concurrent reviews of draft sections of the EA helped facilitate timely completion of the document.
- *Establishing realistic EA milestones*. Establishing realistic interim milestones and adhering to them facilitated timely completion of the EA.
- *Ensuring adequate staff availability*. Ensuring staff resources were available and committed to the specific EA schedule was important.
- Use of Web-based document management. Efficient EA document management was facilitated through shared access to project files.

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.

- *Good EA contractor support*. The support of several good environmental contractors working throughout the EA process helped facilitate timely completion of the EA.
- *Management commitment*. Commitment by management to provide timely document reviews facilitated timely completion of the EA.
- *Knowledgeable contractors*. The EA contractors were very knowledgeable about projects similar to the EA proposed action.
- *Comment resolution meeting*. An all-day meeting on the draft EA was held for the NEPA team to resolve comments and to ensure that the final document met management expectations.

Factors that Inhibited Timely Completion of Documents

- *Coordination with cooperating agencies*. Coordination with cooperating agencies over land rights proved to be difficult and time consuming and caused a one-year delay in the completion of the EA.
- *Several reviews*. The project had a relatively short time period for completion. Due to the sensitive nature of the work, there were several rounds of management reviews and comments, which inhibited timely completion of the EA.

Teamwork

Factors that Facilitated Effective Teamwork

- *Monthly team meetings*. Monthly team meetings, and weekly (or more) conversations between the NEPA Document Manager and DOE Project Manager ensured that most problems were resolved quickly.
- *Open communication*. Open communication between the DOE NEPA Document Manager and EA contractor manager facilitated effective teamwork.

(continued on next page)

Questionnaire Results

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

- *Cooperating agency plan*. The plan that worked for coordination with the cooperating agency was to start early, define specifically what the NEPA team expected of the cooperating agency, and work diligently to resolve disagreements.
- *Efficient and experienced team.* An efficient and experienced NEPA production team, consisting of DOE and contractor staff, facilitated effective teamwork.
- *Flexible team*. The flexible strength of the NEPA team to act on each other's individual behalf was important in quickly addressing issues when some team members had schedule conflicts.

Process

Successful Aspects of the Public Participation Process

- *Courtesy clarification calls*. Brief phone calls were made directly to a few commenters to ensure clear understanding of their comments before addressing/ incorporating DOE responses into the EA.
- *Public interest.* The public was very interested in the scientific aspect of the project. This resulted in requests for additional presentations and interaction with the public.

Unsuccessful Aspects of the Public Participation Process

• *Low public agency attendance at public meetings.* The public meetings were not well attended by public agencies.

Usefulness

Agency Planning and Decisionmaking: What Worked

• *Informed decision*. The EA process informed the decisionmakers that the public had been educated about the project and was okay with the project moving forward.

Enhancement/Protection of the Environment

• *Mitigation of air emissions impacts*. The NEPA process identified potential radiological air emissions impacts that could be mitigated.

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 3 EA questionnaire responses were received, 2 respondents rated the NEPA process as "effective."

- A respondent who rated the process as "4" stated that the NEPA process facilitated continued NEPA coverage for a facility that will operate into the foreseeable future.
- A respondent who rated the process as "3" stated that the environment for this project was as protected or enhanced as it would have been regardless of the NEPA process.
- A respondent who rated the process as "1" stated that the NEPA process did not add much, if anything, to the decision point.