



AUGUST/SEPTEMBER 2019

# NEWS FOR THE ENVIRONMENTAL PROFESSIONAL

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## NEWS FOR THE ENVIRONMENTAL PROFESSIONAL

### Newsletter of the National Association of Environmental Professionals

News for the Environmental Professional aims to provide stimulating research and commentary on significant environmental issues, and publishes papers that reflect the highest standards of professional work on questions linking environmental science and policy. It is published by NAEP in February, May, August and November. Deadline for submissions is the end of the month prior to publication – for example, the deadline for the February issue is January 31.

NOTE: Membership in the NAEP includes a subscription to News for the Environmental Professional. For more information on membership, visit [www.naep.org](http://www.naep.org).

### National Association of Environmental Professionals New Headquarters

**Effective September 1, 2018 NAEP Headquarters has moved.  
Please update your records:**

#### NAEP Office

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National  
Association of  
Environmental  
Professionals

Be Connected

# LETTER FROM THE PRESIDENT



The National Association of Environmental Professionals (NAEP) is a multi-disciplinary association for professionals dedicated to the advancement of the environmental professions, a **forum for state-of-the-art information** on environmental planning, research and management, and a **network** of professional contacts and exchange of **information** among colleagues in industry, government, academia, and the private sector. (<https://www.naep.org/>).

As the new President of NAEP, I would like take this opportunity to introduce myself. I am Betty Dehoney and have served the NAEP Board of Directors since 2014 in various capacities including Vice President and Publications Pillar Chair. A self-proclaimed NEPA-nerd with a strong focus on natural resources, I spend my days navigating major infrastructure projects through the environmental regulatory processes. One of the driving messages that the NAEP Board has focused on for several years is providing benefits to our members and that will be an on-going mission while I serve as your President.

The News for the Environmental Professional (Newsletter) is one of NAEP's tools that is intended to serve as a forum for our profession to network and exchange information with colleagues. The editorial team looked at how we could improve the Newsletter and enhance communication, while encouraging an exchange among environmental professionals. One idea that floated to the top was to have a greater emphasis on technical articles included in the Newsletter that are authored by our membership.

#### Some more ideas to consider:

- **Presentations at NAEP Conference** - you have done the hard work, now prepare a summary article for inclusion in the Newsletter.
- **Case studies** - Do you have a project that you are working on that would be interesting for others?
- **Notes** - New information based upon surveys or monitoring. How about a quick note on how you are assessing future climate change or effects of climate change evidenced by extension in the ranges of species. If we get enough interest, we can create a special column.
- **Ideas** - Changes to regulatory process, approaches to

regulatory enforcement, responding to proposed changes to regulatory process, a new approach that provides better or quicker information, etc.

- **Point-Counterpoint** - Consider an on-going column. Is there a friend that you meet and discuss if either one of you were in charge, you know how to fix the problem? You know who I mean, the after 5pm meeting in which there is a free exchange of ideas, sometimes different opinions.
- **Community Outreach** - what are the new tools for engaging the public in meaningful and effective ways.

If you have any ideas, bring them forward. The only guideline is that NAEP Code of Ethics apply (<https://www.naep.org/>). Essentially, no misinformation (dishonesty, fraud, deceit or misrepresentation) and we expect the conduct to be civil. Take a few minutes, get some ideas together and submit an article to [newsletter@naep.org](mailto:newsletter@naep.org). We are looking forward to engaging our network of professionals and expanding the exchange of information. Another opportunity for your involvement is the establishment of the **Cultural Resources** and **Water and Coastal Resources Working Groups**. Announcements for those two working groups are included later in the newsletter.

Yours in Service,

**Betty Dehoney CEP, PMP, ENV SP**  
NAEP President



# NAEP AWARDS COMMITTEE

The NAEP Awards Committee was proud to present the Environmental Excellence Awards, Jim Roberts Scholarship, Zirzow Student Award, and the first annual Norm Arnold Award at the NAEP Annual Conference that took place in Baltimore, Maryland in May 2019.

## Environmental Excellence Awards:

Recognizes projects or programs that represent national or major environmental achievements in four different categories. Selected award winners receive a plaque, invitation to briefly address participants at the Annual NAEP National Conference, complimentary article space in the summer NAEP newsletter, and recognition on the NAEP website. More information about the winning projects can be found on the NAEP website.



Photo Left to Right: Jason DuPont, Lochmueller Group; Meghan Hedeem, Georgia DOT; Julie Vogel, City of Lakeland Florida; Stacy Woodson, NAEP Awards Co-Chair, HR Green; John Duschang, HDR; Katie Patterson, EMPSi.

Award	Presented to	Name of Project	Location	Receiving Award
<b>Public Involvement &amp; Education Award</b>	City of Lakeland Se7en Wetlands, Water Utilities and Parks and Recreation	City of Lakeland Se7en Wetlands	Lakeland, Florida	Julie Vogel, City of Lakeland, FL
<b>Best Available or Innovative Technology Award</b>	Holland Board of Public Works	Holland Energy Park	Holland, Michigan	John Duschang, HDR
<b>Environmental Management Stewardship, Conservation &amp;/or Protection Award</b>	Lochmueller Group, Inc.	I-69 Section 4 Mitigation Services	Evansville, Indiana	Jason DuPont, Lochmueller Group
<b>NEPA and/or Planning Integration Award</b>	US Bureau of Reclamation, Bureau of Indian Affairs, and EMPSi	Pojoaque Basin Regional Water System for Four Pueblos and Santa Fe County, NM	Santa Fe County, NM	Katie Patterson, EMPSi
<b>Honorable Mention</b>	Georgia Department of Transportation	Georgia Plant Conservation Alliance	Atlanta, Georgia	Meghan Hedeem, Georgia DOT

## Jim Robert Scholarship:

Recognizes students who are pursuing careers in the environmental field. Selected scholarship winners receive a check for \$1,000 made payable to the college or university to help with the expenses of furthering his/her education.



### EMILY TAYLOR

**Program:** Masters of Science candidate in the Sustainable Human and Ecological Development Program at the University of Florida

**Focus:** Studying effects of urbanization on stream ecosystems, particularly effects on stream water quality and metabolism



### JULIA FIELD

**Program:** Master of Science candidate in City Planning at Massachusetts Institute of Technology

**Focus:** Focusing on environmentally sustainable urban development and preparing cities for the impacts of climate change

## Charles F. Zirzow Student Award:

The recipient for 2019 is Donald DeAlwis who is studying at the University of Maryland College Park.



Photo Left to Right: Bill Plumpton, Audrey Binder, Donald DeAlwis, Student and Ron Deverman.

Donald De Alwis, an undergraduate student at the University of Maryland, College Park Maryland, was selected as this year's Zirzow Student Award recipient, at the 2019 National Association of Environmental Professionals (NAEP) Annual Conference, held at the Lord Baltimore Hotel, Baltimore Maryland. Donald is in his senior year in the Department of Environmental Science and Technology. He was nominated by Dr. Stephanie Yarwood, Associate Professor, and Dr. William Bowerman, Professor

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and Chair of the department.

With his interest in both the environment and public health, Donald is entering his senior year and has already accomplished so much. As the Subgroup Leader and Media Chair for Engineers Without Borders, he assists in developing a tangible, sustainable source of clean drinking water in Suma Ahenkro, Ghana, by helping lead a team of students seeking to research and design a water treatment system.

Donald is also founder of "The Motion Project", a non-profit organization supporting the social welfare of child amputees in Sri Lanka, not receiving financial aid from the government. He raised over \$4000 to support educational grants for more than 30 children in Colombo, Sri Lanka. As an accomplished photographer, Donald placed 1st in C-SPAN's Student Cam Documentary Competition, and also received 1st prize in the American Film Institute Environmental Film Festival.

He is the 18th recipient of the Zirzow Student Award, presented in honor of Charles F. Zirzow, one of the founding members of the NAEP, who passed away in 1997. Navy Commander Zirzow was the Director of the U.S. Navy's Natural Resources Management Branch when it was created and saw it through its development years. Among his many accomplishments to the NAEP was the development of the Environmental Professional Certification Program, which became the Academy of Board Certified Environmental Professionals (ABCEP), built on the premise that environmental education and career development is a continuing and lifelong process. The Zirzow Student Award was established in 2001 and is presented to a college student or recent graduate, who has been recognized by their department for their academic achievement.

Donald was formally recognized on Tuesday, May 21, 2019 during the Keynote Address morning session at this year's NAEP Annual Conference, in Baltimore Maryland. The Zirzow Award included his Conference attendance fee, a one-year Student Membership, a cash award, and a plaque of recognition. The award was presented by Audrey Binder, Zirzow Awards Committee Chair, and by committee members Ron Deverman and Bill Plumpton.

## Norm Arnold Award:



*Photo Left to Right: John Daugherty, Audrey Binder, Helene Merkel (center), Peggy Ostrove, Robert Ostrove and Bill Arnold.*

At the 2019 NAEP Annual Conference, long-time NAEP member Helene Merkel was awarded the first Norm Arnold Award for her contributions and dedication to the NAEP.

The Norm Arnold Award is a commemorative service award recognizing outstanding contributions to the NAEP, in honor of longtime NAEP member, Norm Arnold, who passed away in 2013. The award was initiated and developed by NAEP Fellow member

John Daugherty, and further refined by the members of the Fellows Committee.

The Arnold Award specifies minimum criteria of NAEP General Membership of over 10 years; positions of responsibility with the NAEP for 5 years; must be a Certified Environmental Professional (CEP), unless individually exempt. The individual must have also demonstrated extraordinary support of the NAEP specifically, not the profession as a whole, for 5 years or more. This support could be through any combination of actions to maintain and move the NAEP forward and relevant over the years.

This award is in honor of Norman Arnold, one of NAEP's founding members. Norm was active in the NAEP since 1975. Over the years he held the offices of Secretary, Treasurer, Vice-President, and President. He was also NAEP's Parliamentarian for many years. He was a Certified Environmental Professional and served on the Certification Review Board. Norm, along with Chuck Zirzow, were the first NAEP Fellow Members, NAEP's highest level of service recognition. Norm remained active in the NAEP for most of his life, attending almost every NAEP Conference with his wife Margaret, who was NAEP's first Executive Secretary.

Helene Merkel worked with Norm Arnold on many NAEP projects. Helene served multiple years on NAEP's Board of Directors, and at different times, as Secretary, and as Vice-President. Helene has also been a member of the NAEP Working Group and has served on the National Conference Committee. She chaired the 2004 Elections Committee and was a member of the Awards Committee from 2000-2017.

Helene's multiple avenues of service to the NAEP reflect the appreciation of its members for her inspiration and leadership. Her outstanding service to NAEP has been recognized by multiple NAEP Presidents in 1997, 1999, and 2005. During some challenging times in the late 1990's, Helene adapted to the circumstances and oversaw an excellent National Conference, despite the extremely tight budgets.

She has also served to enhance NAEP's image to a broader audience. Fellow member John Perkins noted her willingness to teach a class on low-impact development to his graduate students, an important outreach activity that encourages young professionals to meet high standards.

Helene also supported NAEP's peer-reviewed Journal, as a Board Member and a peer-reviewer of manuscripts, another example of her efforts to keep NAEP at the highest standards of knowledge-based environmental work.

Helene has a Masters Degree in Urban and Regional Planning from George Washington University in Washington, D.C. and is employed by Colorado State University's Center for Environmental Management on Military Lands. She is a Program Manager for the National Environmental Policy Act Program at the Air National Guard Headquarters, Joint Base Andrews, and the Program Manager/Training Center Coordinator at the Army National Guard Headquarters in Arlington, Virginia.

She was presented the Arnold Award at the Conference Plenary Luncheon, May 20, 2019, by NAEP Fellows Audrey Binder and John Daugherty. In attendance were members of the Fellows Committee, Helene's husband Jim and her son Corey. Also in attendance were members of the Arnold family, Peggy Ostrove (Norm's daughter), Robert Ostrove (son-in-law) and Bill Arnold (son). Norm's wife Margaret, who was hoping to attend, passed away shortly before the Conference and she was acknowledged during the award presentation.





# I-69 SECTION 4 MITIGATION SERVICES: EFFECTIVE ENVIRONMENTAL STEWARDSHIP FOR 26.7 MILES OF NEW TERRAIN INTERSTATE

## Jason DuPont, PE

Director of Environmental Services,  
Lochmueller Group

### Environmental Stewardship for a 26.7 Mile New Terrain Interstate

Lochmueller Group was selected to serve as the Project Management Consultant (PMC) overseeing each of the six Section Consultants during the Tier 2 Environmental Studies for the 142-mile I-69 corridor from Evansville to Indianapolis. Two key responsibilities of the PMC included Endangered Species Consultation and the mitiga-

tion efforts for the entirety of I-69, including Section 4 from Naval Support Activity-Crane to Bloomington, Indiana.

I-69 Section 4 is a 26.7-mile, new-terrain interstate highway from US 231 to SR 37. The interstate crosses two unique geologic regions. The terrain in these regions is steeply dissected and dominated by forest with karst geology. It is also an ideal habitat for a variety of wildlife including the federally-endangered Indiana bat with defined critical habitat within the project vicinity. This article details the plan developed and implemented to mitigate I-69 Section 4's impacts to

approximately 1,100 forest acres, 9.4 wetland acres, and 88,000 linear feet of stream impacts.

Lochmueller Group, working closely with the Indiana Department of Transportation (INDOT) I-69 Section 4 Team and its Project Manager, Janelle Lemon, was responsible for developing a mitigation plan, coordinating with involved resource agencies, and implementing the approved plan. The primary challenges in delivering a successful mitigation plan for this section of interstate came down to four elements: magnitude, geological issues, Indiana bat habitat, and time.

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## I-69 Section 4's Unique Challenges

Unlike mitigation plans for most traditional transportation projects, the plan for I-69 Section 4 required mitigation for impacts to over 1,100 acres of forests in prime bat habitat with karst geology, and it had to be delivered with an aggressive schedule.

Impacts to these unique areas compelled resource agencies, INDOT, and the Federal Highway Administration (FHWA) to commit to significant replacement and preservation ratios for forested lands and wetlands. Another area of concentration included preserving and protecting caves and large tracts of contiguous property that serve as critical bat habitat. Additionally, the caves and karst geology required unique approaches to protect water quality. Over 4,100 acres of mitigation property was acquired at 38 sites to address these commitments.

Beyond the sheer magnitude of acquired mitigation property, the timing requirements were unique as well. The environmental studies for I-69 were completed with a tiered approach. A general corridor was selected with initial agency coordination during Tier 1. During the first tier INDOT, FHWA, and the resource agencies agreed that the project team would need to demonstrate a high probability of success for meeting mitigation commitments during the second tier of the project development process. As an example, the U.S. Fish and Wildlife Service (USFWS) wanted some level of assurance that the project team would be able to secure beneficial bat habitat, including forest and caves, before issuing a Biological Opinion. This meant our team had to initiate an early property identification process, receive agency approval, and begin acquiring properties during the environmental studies process.

Further, state officials, including the governor, and INDOT pushed for an accelerated project development schedule. This meant the project team would have to accelerate the Section 404 United States Army Corps of Engineers (USACE) and 401 (Indiana Department of Environmental Manage-

ment or IDEM) Permit process. The permit approvals relied on the successful development of the mitigation plan, including site acquisition and preliminary designs for those sites requiring construction. This was accomplished within a condensed 18-month schedule that was critical to the client and the overall project development.

The Lochmueller Group Team moved quickly to deliver this plan with implementation beginning soon after the completion of the Draft Environmental Impact Statement (EIS) in July 2010. The team completed the site selection, agency approvals, environmental clearance, property acquisition, preliminary/final design, construction letting, and construction/oversight prior to the opening of the road to traffic in December 2015.

In total, the 38 mitigation properties accounted for 2,970 acres of forest preservation, 1,120 acres of reforestation, 99 acres of wetlands, and the preservation and restoration of 110,000 linear feet of streams. These totals significantly exceeded agency expectations for forest preservation and reforestation, wetland preservation and construction, as well as stream preservation and restoration. It also accomplished USFWS's goal to preserve and protect large tracts of critical bat habitat. With karst terrain prevalent in the region, the interstate construction impacted both the winter and summer habitat for multiple bat species, including the federally-endangered Indiana bat. This made cave preservation paramount. Two Priority 1A caves were protected that have been used by over 30,000 Indiana bats and many other species. One Priority 2 and one Priority 3 cave were also protected, and normal air flow was reestablished in a previously closed cave to improve potential for use as a hibernaculum.

## Social, Economic & Sustainable Development

Of the over 4,100 acres of mitigation property, approximately 1,900 acres were acquired through conservation easements, each of which is a recorded perpetual easement. The easements preserve the natural ecosys-

tems by restricting development and outlining management practices to be followed by the property owners. The remaining approximately 2,200 acres were acquired through a fee simple purchase. INDOT, FHWA, and resource agencies agreed to success criteria prior to handing off permanent property management to a long-term management. Efforts were made to identify mitigation parcels contiguous to other managed lands to enhance large habitat areas and long-term management. Two large tracts of protected properties were created near the Garrison Chapel Valley (1,291 contiguous acres) and Koleen (1,570 contiguous acres). These consist of existing managed lands combined with mitigation properties acquired for I-69. They constitute prime Indiana bat habitat, including spring staging and fall swarming habitats, along with summer maternity habitat and winter hibernacula.

## Understanding I-69 Section 4 Environmental Complexity

Karst terrain, springs, limestone and sandstone bedrock bluffs, steep slopes, caves, forested wetlands, threatened and endangered species, Indiana bat maternity colonies, and winter hibernacula areas are just a few of the unique natural challenges that this project presented. Agency coordination was initiated during the Tier 1 environmental studies and continued during Tier 2 environmental studies into design and construction. This coordination set the framework for environmental commitments and guidelines to ensure appropriate mitigation for the impacts of construction of the interstate project. A prime example of that was a commitment to follow the Karst Memorandum of Understanding (MOU).

In 1993, INDOT entered into a MOU with the Indiana Department of Natural Resources (IDNR), IDEM, and USFWS to provide guidelines for highway construction in areas containing karst features. The MOU area includes all of Section 4 northeast of Koleen. The Karst MOU dictates what appropriate measures INDOT should imple-

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ment to avoid impacts and properly treat drainage into karst features from transportation projects. Each time the project encountered a karst feature, our team navigated through the Karst MOU terms, which involved identifying and documenting karst features and detailing construction practices. The Lochmueller Group Team performed this task for over 300 karst features (sinkholes, caves, springs, etc.).

I-69 Section 4's Indiana bat studies serve as another example of the unique, complex challenges our team had to accommodate with the mitigation program. For the entire I-69 project, a total of 148 mist net sites were surveyed in 2004, and 49 sites were surveyed or resurveyed in the summer of 2005 along with pre-construction surveys in 2011 and 2012.

Surveys of Indiana bat habitat in the Section 4 Summer Action Area identified four Indiana bat maternity colonies. Eleven sites were identified

and established for mist netting and monitoring efforts. Post-construction monitoring is ongoing.

Bat mist netting and monitoring commitments provide for mist netting pre-construction, during construction, and post-construction for at least five summers. These commitments also included tree clearing restrictions during construction activities and preparing threatened and endangered species training videos to train all construction personnel in each section, with additional stormwater management training included for Section 4.

### Fulfilling the Client's & the Environment's Needs

I-69 Section 4 from US 231 near Naval Support Activity-Crane to SR 37 south of Bloomington, Indiana was open to traffic on December 9, 2015, successfully meeting INDOT and former Governor Mike Pence's completion schedule.

The successful implementation of the mitigation plan was the mechanism that delivered all necessary agency approvals. Ultimately, the Record of Decision and necessary permits for construction hinged on this team's ability to provide sufficient and successful mitigation.

There were two other key indicators of success for the client: schedule and budget. The project team met INDOT's aggressive schedule as is indicated by the roadway opening before the end of 2015. This was accomplished through a strong partnership with INDOT, FHWA Indiana Division, and Lochmueller Group. Together, this team established an open and clear line of communication with the primary resource agencies, including IDNR, IDEM, USFWS, USACE, and United States Environmental Protection Agency (USEPA) in order to establish levels of expectations and a means to achieve them within the desired time-

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frame. Just as important to the client and the taxpayers, the mitigation plan was delivered \$16 million under budget.

### Future Value to Engineering & Enhancing Public Awareness

Lochmueller Group's work throughout I-69 Section 4's mitigation services provided a myriad of opportunities to enhance the public's awareness for the need to provide such extensive, in-depth mitigation services for the development of this Section 4 corridor and mentorship opportunities for students attending Purdue University.

On April 17, 2015, the I-69 INDOT Project Team hosted representatives from the Purdue University Lyles School of Civil Engineering. Students, faculty members, and INDOT mentors were given a tour of portions of Section 4 mainline and mitigation construction activities. The tour was part of the INDOT EVOLVE mentoring program, a joint training program between INDOT, Purdue's Civil Engineering School, and the Joint Transportation Research Program.

Students were able to interact with INDOT engineers, staff, and consultants throughout the tour, which included an

extended tour of the Plummer Creek 2 mitigation site.

In October 2015, INDOT hired Lochmueller Group to utilize drones to fly and video the Section 4 corridor documenting construction progress. Our firm was tasked with producing a video of the Section 4 project to be used for various public engagements and as a tool for recruiting college graduates. The video was broadcast at the I-69 Regional Summit and it was posted to INDOT's YouTube where it has amassed over 36,000 views.

On July 19, 2013, INDOT hosted local media outlets on a mitigation site tour in Greene County to showcase extensive efforts to mitigate construction impacts associated with Section 4. Outlets were provided packets of information outlining mitigation efforts and given a first-hand opportunity to see how wetland construction and reforestation efforts were progressing. Stories were written or broadcast by 10 different regional media outlets.

### Ensuring the Cohabitation of the Human & Natural Environment

Developing, receiving approval for, and implementing the Section 4 Mitigation

Plan was a massive undertaking in itself. This was exacerbated by an accelerated development schedule, which required the mitigation plan of 4,100 acres to be developed from initial site identification to overall plan design within 18 months. Our team met the INDOT and regulatory agencies expectations, secured necessary permits, delivered preservation, and constructed sites by the December 2015 open to traffic deadline. The Lochmueller Team also delivered this project \$16 million under budget, without ever losing sight of upholding environmental stewardship and its role in the development of infrastructure.

*Jason DuPont serves as Lochmueller Group's Director of Environmental Services. He is an environmental engineer with 21 years of experience in ecological studies and NEPA-related documentation, bioengineering, wetland and natural channel design, as well as water resources engineering. Since 2007, Jason has overseen permitting activities, including mitigation efforts, and karst evaluation and mitigation for all six sections of the Indiana I-69 project - a major interstate project that increased accessibility to the southwest Indiana region by connecting Evansville, IN to Indianapolis, IN. Contact him at (812) 759-4129 or [jdupont@lochgroup.com](mailto:jdupont@lochgroup.com).*

## POJOAQUE BASIN REGIONAL WATER SYSTEM PROJECT EIS WINS NAEP ENVIRONMENTAL EXCELLENCE, NEPA PLANNING AWARD

### POJOAQUE BASIN REGIONAL WATER SYSTEM HIGHLIGHTS

-  Prepared under terms of the Aamodt Litigation Settlement Act
-  Transparent, inclusive EIS process; coordinated with 11 cooperating agencies
-  Provides 4,000 acre-feet/year of potable water for Tribal and County residents
-  Over 26,000 acres in the area of analysis for cultural, wetland, and biological surveys
-  Negotiated a Programmatic Agreement signed by representatives of the four Pueblos and the State Historic Preservation Officer

### Katie Patterson, JD

*Environmental Management and Planning Solutions, Inc. (EMPSI)*

**Lead Agencies:** Bureau of Reclamation, Albuquerque Area Office; Bureau of Indian Affairs, Southwest Regional Office

The nation's longest standing Indian water rights lawsuit was resolved in February 2006 with the Aamodt Settlement Agreement between the Pueblos of Nambé, Pojoaque, Tesuque and San Ildefonso, the United States of America, the State of New Mexico, the City of Santa Fe, and Santa Fe County. In addition to clarifying Pueblo and other water rights in the Pojoaque Basin, the Agreement included funding for construction of a Regional Water System to supply treated water to Pueblo and non-Pueblo parties, thereby ensuring that the water rights provided for in the Agreement could actually be used on the ground. To implement this portion of the Agreement, the Bureau of

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Reclamation (Reclamation) contracted Environmental Management and Planning Solutions, Inc. (EMPSi) to prepare an Environmental Impact Statement (EIS) and associated permits and special studies for the construction and operation of the Pojoaque Basin Regional Water System in Santa Fe County, New Mexico.

The water system will deliver clean drinking water, promised in the Agreement, to Pueblo and County residents in the Pojoaque Basin by diverting and treating water from the Rio Grande. The water will then be transmitted, stored, and delivered to local residents. Delivery of this water will reduce reliance by Basin residents on contaminated groundwater sources for drinking water. Many existing groundwater wells in the Basin are contaminated with high levels of arsenic, uranium, and other pollutants. The water system will also improve groundwater and surface water supplies. Access to these water supplies is important in the Basin, not just for domestic uses, but for cultural and ceremonial purposes.

Because the water system will serve so many diverse stakeholders, collaboration was critical during the design and National Environmental Policy Act compliance process. Reclamation, the Bureau of Indian Affairs (BIA), and EMPSi effectively engaged with each of the four Pueblos to learn about their goals and needs for the project. Each Pueblo would be both providing land for project facilities and receiving water from the project. It was critical to recognize this give and take for each stakeholder. Other involved parties, such as the City and County of Santa Fe and other federal agencies, provided essential input and design considerations for the water system.

Thanks to the proactive outreach and collaboration conducted by Reclamation, the BIA, and EMPSi, the alternative selected in the Pojoaque Basin Regional Water System EIS was approved by the four Pueblos in the Basin and the BIA, as well as Santa Fe County and Reclamation.

*Katie Patterson is an environmental planner and project manager specializing in natural resource planning and environmental compliance for controversial and time-sensitive projects. An expert in public involvement and stakeholder collaboration, Katie has contributed to 40 environmental impact statements, environmental assessments, and resource management plans for federal agencies and commercial clients. Contact her at (303) 495-2795 or [katie.patterson@empai.com](mailto:katie.patterson@empai.com)*

## GEORGIA PLANT CONSERVATION ALLIANCE: A MODEL FOR THE FUTURE OF PLANT CONSERVATION IN THE U.S.



### **J. Mincy Moffett, Jr., Ph.D.**

*Botanist, Wildlife Conservation Section,  
Georgia Department of Natural Resources*

### **Jennifer Ceska**

*Conservation Coordinator, Public Service & Outreach Faculty, State Botanical Garden of Georgia*

Environmental professionals in Georgia have collaborated to create a powerhouse network that safeguards imperiled species and furthers environmental stewardship initiatives. The Georgia Plant Conservation Alliance (GPCA) is a professional network of botanical gardens, state and federal agencies, non-profit organizations, universities, utilities, and large land-owning companies working together on statewide, and increasingly regional and national, plant conservation projects. The GPCA addresses the challenge of expeditiously connecting the right people on the right projects and allows participants to: (1) connect with subject matter experts and resources statewide; (2) share information on projects to avoid redundancy; and (3) implement and track projects collaboratively.

Over the last two decades, the GPCA has achieved incredible successes, including 101 high-priority

species (per the Georgia State Wildlife Action Plan) in active recovery; 49 species safeguarded in-situ in protected sites; and the withdrawal from petition of numerous species for federal protection due to these safeguarding and networking efforts. The GPCA has mentored 12 undergraduate and graduate students who have gone on to careers in conservation. It is estimated that all GPCA members, working collectively through the GPCA, have contributed over \$2.3 million towards plant conservation in the state of Georgia since 1995.

The GPCA has created and maintains a Safeguarding Database, centralizing and documenting ex-situ collections, in-situ augmentations and reintroductions, repeated monitoring data and survivorship, and collaborative management for priority species across Georgia. The GPCA has also created a network of "Botanical Guardians" who monitor safeguarded populations across the state. By connecting with these local volunteers, the GPCA has 'boots on the ground' in the remote corners of the state monitoring areas that have been managed for conservation. In addition to coordinating the safeguarding

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of populations across Georgia, the GPCA has also initiated numerous outreach programs. The [Connect to Protect](#) program combines beautiful public displays of native plants with educational materials to foster an understanding of the role that native plants play in maintaining biodiversity in urban and suburban landscapes. The [Georgia Native Plant Initiative](#),

spearheaded by the GPCA, launched the Georgia Milkweed Initiative to get [Georgia milkweeds](#) into cultivation. The GPCA is also working with states across the southeast on conservation efforts. The GPCA was a driving force behind the creation of the [Southeastern Partners in Plant Conservation](#) (SePPCon), which is functionally a Southeastern Plant Conservation Al-

liance. It brings together government agencies, land managers, botanical gardens, university programs, and interested plant enthusiasts and conservation volunteers from across the southeast to support regional efforts for at-risk plant species.

This collaborative and motivated network has expanded gradually over the last 23 years, becoming a deeply integrated network for statewide conservation and consultation projects. The GPCA, which is the first state-based plant conservation network in the US, has grown to include 49 member groups. As a result of its successes, the GPCA has been invited to provide expertise in networking to other states interested in forming similar PCAs including Alabama, Arizona, Colorado, Florida, Hawai'i, Indiana, Kentucky, Mississippi, North Carolina, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, and Washington.

## NEW NAEP GROUPS

Recently, NAEP has established two new working groups to engage membership and provide subject matter updates – the Cultural Resources Workgroup and the Water and Coastal Resources Workgroup. The objective of each group is described below and will join the already-established NEPA Practice Workgroup.

In the near future, NAEP members will be able to register for these groups through their Member Center profiles found on the NAEP website. Communication will occur via subscription-based listserv. NAEP is excited to offer another opportunity to stay current on the latest developments in the profession, and to provide a forum for peer-to-peer contact. Additional details, including a Call to Action, are coming soon.

### NAEP Cultural Resources Workgroup

#### PURPOSE:

Facilitate professional development through periodic work sessions to collaborate and inform participants about the changing landscape of heritage management in the US, the application and intersection of Section 106 and NEPA, as well as changes to federal legislation and agency approaches.

### Water and Coastal Resources Workgroup

#### PURPOSE:

Provides leadership and guidance on best practices for water and coastal resources across the country, including Waters of the US/wetlands, floodplains, permitting, coastal resiliency, and other relevant water resources.

The Committee identifies relevant policies, legislation, and regulatory changes to water and coastal resources and provides broader context for these changes to the NAEP community. Project reviews and insights are used to provide lessons learned and cultivate institutional knowledge within NAEP. Participants are active in addressing legislative issues associated with water and coastal resources, including climate change. Regional projects are also highlighted to promote innovative discussions on problem solving. For more information, please contact Nic Frederick via email: [nfrederick@dawson8a.com](mailto:nfrederick@dawson8a.com).





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**SAVE THE DATE**

# NAEP Annual Conference and Training Symposium

May 18 – 22, 2020  
Westin Fort Lauderdale Beach Resort  
Fort Lauderdale, Florida

NAEP invites you and other environmental professionals from across the United States to participate in the 2020 NAEP Annual Conference and Training Symposium in sunny Fort Lauderdale!

The 2020 Conference will cover a variety of topics including NEPA, Resiliency and Adaptation.



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# CALL FOR ABSTRACTS

## NAEP Annual Conference and Training Symposium

May 18 – 22, 2020  
Westin Fort Lauderdale Beach Resort  
Fort Lauderdale, Florida

NAEP is currently accepting abstracts to showcase your work to an audience of national and Florida environmental professionals at its 2020 conference.

Abstracts can be submitted for oral presentations, posters, workshops, and special sessions of national and Florida concern. The following are suggested topics but others may be submitted: NEPA, air quality, climate change, cultural and historical resources, ecological restoration, endangered species, energy, the Everglades, infrastructure, planning, permitting, potable water supply, public involvement, remediation, resiliency, stormwater, sustainability, transportation, water resources, and more!

### **Deadline for abstracts will be announced soon!**

Abstracts must be 300 words or less and in Microsoft Word (Time New Roman 12 font). Include one or two keywords that describe the general category of the paper. If known, identify a moderator or session chair and provide contact information. Visit [www.naep.org](http://www.naep.org) for the application form.

Contact Nic Frederick for any abstract submittal questions or if you want to volunteer to lead a track or session.

**Sponsorships now being accepted!**

## NAEP Webinars

<https://naep.memberclicks.net/webinars-new>

The National Association of Environmental Professionals (NAEP) hosts several webinars throughout the year. Keep an eye on our event calendar to see what's coming up next!

### Upcoming Webinars

09/05/2019 **NAEP Webinar: NEPA Case Law Update**

09/19/2019 **Holland Board of Public Works**

## Advanced NEPA Workshops

<https://naep.memberclicks.net/advanced-ne-pa-workshops>

Advanced NEPA Workshops are intended to provide participants with practical tips and tools about how to refine preparation and review of environmental documents prepared pursuant to the National Environmental Policy Act (NEPA), in light of guidance related to "One Federal Decision," and 2018 cases. This eight-hour intensive workshop will focus on training environmental professionals related to tips and tools to assist practitioners in implementing "One Federal Decision" and refining their practice related to recent cases, including project management, Purpose and Need Statements; using available data and modeling to characterize baseline conditions; decisions related to segmentation; and direct, indirect, and cumulative impact analysis.

The target audience for this workshop would include experienced NEPA planners, managers, decision-makers, environmental engineers/scientists/ specialists, consultants, regulators, applicants and attorneys who require an in-depth understanding of NEPA law, policy, and project management within their area of environmental expertise, especially those who serve on NEPA interdisciplinary teams, work with NEPA planners, or those who review/edit NEPA documents. This workshop will also benefit those professionals who work in related natural resource disciplines who work with federal land management or real estate transactions, federal agency projects or permitting, and transportation or other infrastructure projects with a NEPA review component.

Eligible for 3.5 CM | 1.5 Legal | 1.5 Ethics

### Upcoming Workshops

**September 18, 2019 | Tampa, FL**

[Register Today](#)

**September 27, 2019 | Chicago, IL**

[Register Today](#)

**October 4, 2019 | Phoenix, AZ**

[Register Today](#)

**October 16, 2019 | San Diego, CA**

[More Information Soon!](#)

**October 17, 2019 | Los Angeles, CA**

[More Information Soon!](#)

Stay tuned. More 2019 workshops will be announced soon!

[View the Full Event Calendar](#)

## CHAPTER SPOTLIGHT:

# IDAHO ASSOCIATION OF ENVIRONMENTAL PROFESSIONALS

The Idaho Association of Environmental Professionals (IdAEP) was kick-started in 2018 by long-time NAEP member, John Irving and Vicky Jewell. John has had a goal for quite some time to develop an Idaho Chapter, citing the numerous positive professional and person benefits NAEP has given him. John and Vicky talked about the benefits of having a local Idaho Chapter at the NAEP annual conferences for a few years before deciding action was in order. With Johns enthusiasm at the helm, and Vicky navigating the details on the business side, the newly formed group quickly gained traction and became officially affiliated in 2019.

The forming of IdAEP has truly been a grassroots effort with selfless contributions from board and chapter members. IdAEP has seen early success with multiple well attended meet-and-greet social events having been held across the state. Initial goals for the new chapter include increasing membership throughout the state with an emphasis on offering discounted student memberships. The interim board is looking forward to holding its first ever in-person annual meeting in Boise this fall!

### Board of Directors/Meetings

The IdAEP Board of Directors consists of seven interim board members with official elections planned to occur at the first annual meeting in September. Monthly board meetings are held via video teleconference as our board is spread throughout the state! The current IdAEP Board of Directors are:

- President: John Irving, Idaho National Laboratory
- Vice President: Keri Hill, Sundance Consulting
- Treasurer: Victoria Jewell, Idaho Transportation Department
- Secretary: Laura Speerhart, HDR
- At-Large Director: Dave Aizpirtarte, Bionomics Environmental
- At-Large Director: Ann Miracle, Pacific Northwest National Laboratory
- At-Large Director: Wendy Savkrans, Flour Idaho

### Chapter Facts

- The current interim-Board is comprised of seven active NAEP/IdAEP members
- General Membership is at 35 with a growing mailing list that is up to approximately 80 people.

- Chapter leadership has arranged for corporate sponsorships of the NAEP hosted webinars to provide IdAEP members and friends with the opportunity to attend at no cost.

### Idaho Facts

- Nearly 70% of Idaho is public land, 64% of that is managed by the federal government (most USFS and BLM).
- Idaho is split in to two time zones horizontally across the state, accommodating for the Northwest's most inland seaport at Lewiston, ID.
- Only 22 of Idaho's 221 cities have a population over 10,000.
- Aside from potatoes, Idaho also boasts as the lentil capital of the world and has one of the largest hops farms in the US.
- The Boise metropolitan area topped Forbes' list of the fastest growing cities of 2018. Idahoans like to say we are full!
- Hell's Canyon National Recreation Area along the Idaho/Oregon border is the nation's deepest river gorge in North America.



# CELEBRATING TEN YEARS OF SHOREBIRD CONSERVATION IN FLORIDA



## Niki Desjardin

*Ecological Associates, Inc.*

## Shea Armstrong

*Florida Fish and Wildlife Conservation Commission*

**S**horebirds and seabirds face many challenges in Florida and protecting them is no small task. Although the coastline stretches nearly 1200 statute miles, 13 million people live on or near the coast and another 50 million people visit the beaches annually on vacation. Because of widespread coastal development, Florida's shorebirds and seabirds have few places left to go. Native coastal habitat is now largely confined to public lands where conservation is a high priority, but not the only one. Even within these remnants, shorebirds and seabirds must regularly contend with multiple human-related challenges (e.g. pollution, pets, foot traffic). Due to the multitude of pressures, some of Florida's imperiled shorebirds and seabirds are management-dependent species. If they are not actively protected, their popula-

tions may not thrive into the future.

Fortunately, there are many dedicated organizations and individuals throughout the state diligently working to protect Florida's amazing diversity of shorebirds and seabirds. Realizing that the conservation and management of these species is beyond the reach of any one agency or organization, the Florida Shorebird Alliance (FSA), a network of local and regional partnerships comprised of individuals and groups from the public and private sector, and a wide range of government agencies was created. The FSA while diverse, shares the same overall vision of supporting viable shorebird and seabird populations that are managed in balance with human activities. The most recent edition of the Wrack Line highlighted the Treasure Coast Shorebird Partnership.

This year the Florida Shorebird Alliance (FSA) is celebrating 10 years of partnership success! The FSA is a statewide network of local partnerships that coordinate on-the-ground conservation of shorebirds and seabirds (shorebirds) across the state. The FSA is unique among Florida

conservation initiatives in the degree to which we harness a broad array of individual and institutional efforts to move the conservation needle for these species.

Most shorebirds in Florida nest directly on Florida's popular beaches, making them susceptible to a myriad of familiar challenges (habitat loss, chronic disturbance, predators). Surveys from the 1990's indicated declining shorebird populations in Florida and highlighted their conservation plight. By the early 2000's, local, informal collaborative efforts were working to conserve these species. By 2006, these collaborations were coalescing into more formal partnerships but generally operated in isolation from one another. To catalyze this conservation momentum, FWC officially launched the FSA in 2009, creating a dedicated coordinator position to help galvanize efforts across the state.

There are now 12 FSA partnerships whose geographic ranges span from single county coordination such as the Volusia County Shorebird Partnership, to regional orga-

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nizations such as the Florida Shorebird Panhandle Working Group. While we are diverse and include concerned citizens, professional biologists and land managers, non-government organizations, businesses, and government agencies, we share the same overall vision of supporting viable shorebird and seabird populations that are managed in balance with human activities.

Each breeding season, our partners undertake a coordinated, multi-faceted approach to support management-dependent shorebirds and seabirds. In 2018, almost 200 individual partners monitored more than 330 beach routes covering nearly 900 miles of beach-nesting habitat. Additionally, more than 100 monitors surveyed more than 400 rooftops across the state. In the same year, 150 acres of nesting habitat were posted with rope and sign, protecting 4,738 total nests.

In areas where posting alone is not enough to reduce disturbance at nesting areas, a special group of volunteers mediate successful beach nesting through outreach and edu-

cation. Bird Stewards work to minimize disturbance to shorebirds by informing beach-goers about the birds and their conservation challenges. In 2018, 750 volunteers spent over 8,000 hours stewarding 283 sites, including both beaches and rooftops.

In 2016, our partners set an ambitious goal of increasing populations of five focal species by 10% in 10 years. Well-defined actions, strategies, and funding mechanisms are outlined in Florida's Imperiled Beach-nesting Bird Plan. During the next 10 years of shorebird conservation, we will continue to adaptively manage Florida's unique shorebird and seabird populations in a way that conserves habitat and increases viable populations.

Thank You to each and every partner for your priceless contributions to the previous 10 years of shorebird conservation. We look forward to working together during another decade of success! To keep up with the latest FSA news, subscribe to the Wrack Line Newsletter and join the FSA Facebook Group.



*Niki Desjardin of the Treasure Coast Shorebird Partnership has dedicated her life to conserving coastal wildlife. She is a Senior Project Manager for Ecological Associates Inc. (EAI) where she oversees hiring, training and coordinating all field staff for sea*

*turtle and shorebird monitoring projects from Indian River County to Palm Beach County. Beginning this spring, she is also the new coordinator for the Treasure Coast Shorebird Partnership. Niki received her B.S. in Biology from the University of Richmond and her M.S. in Marine Biology from Florida Atlantic University. Although originally from Shrewsbury, Massachusetts, she moved to Florida to pursue a career as a marine biologist. Niki initially studied and worked with leatherback sea turtles, conducting nesting surveys and supporting rehabilitation efforts. As a coastal project manager, Niki has seen considerable overlap between the conservation needs of sea turtles and shorebirds. She uses this experience and expertise to educate beach-goers about our impact on coastal wildlife. She is especially interested in educating people about the impacts that lighting, beach holes, and monofilament have on sea turtles and shorebirds.*

## ADVERTISING IN THE NEWSLETTER

The *News for the Environmental Professional* now have opportunities for advertisement, including a newly-established pricing structure. This structure continues the tradition of providing a "business card" -sized advertisement for each article that is published. For other advertisements, the pricing structure is as follows:

QUARTER PAGE  
**\$100**

HALF PAGE  
**\$150**

FULL PAGE  
**\$250**

Please contact the Executive Director at [office@naep.org](mailto:office@naep.org) for additional details.



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# JUST TELL US WHAT THE RULES ARE

## Andrew T. Der, C.E.P

Principal, Andrew T. Der & Associates, LLC,  
Environmental Consulting

The proposed new draft federal “clean water rule” is less about clean (or dirty) water and more about simply where water is, or is not. Nor is it that new.

Everyone clamors for predictability and uniform definitions of federally regulated Waters of the United States (WUS), so why do they change? If they need fixing, were they broken?

One thing is certain. When a science-based topic is deliberated by those less immersed in the science, ultimately abstract concepts of good or bad are gradually attributed to what should primarily be a technical dialogue.

Many of those in our industry are familiar with prominent 1972 Clean Water Act (CWA) amendments which have been the basis for many of the ways WUS are regulated at the site level. They include the U. S. Army Corps of Engineers (COE)-administered Section 404 waterway and wetland permitting process (jointly combined with a state program in many jurisdictions); Section 401 state Water Quality Certification (WQC) which goes with - and can veto - a 404 permit; Section 402 Phase I and II National Pollutant Discharge Elimination System (NPDES) stormwater General Construction and Municipal Separate Storm Sewer System (MS4) programmatic permits; and the Section 303 Total Maximum Daily Load program. They all reference and regulate WUS unifying and catalyzing meaningful deliberation - and also food for thought for those who may not be aware or customarily involved. What may get lost in the shuffle is, regardless of how WUS are defined, most states’ and localities’ own laws and regulations (especially in my home state of Maryland) exceed them - and preserve preferential state rights as intended. So maybe the media can

relax, just a little?

Anyone working in CWA-related disciplines usually needs to know the extent of site-level WUS limits - comprised of navigable water, open water, streams, and wetlands contiguous to these waters, both tidal and nontidal - but it doesn’t end at the COE/ state permitting process. For example, Maryland additionally regulates the nontidal 100-year floodplain, 25-foot nontidal wetland buffer, 100-foot buffer to state-designated rare and sensitive waters and wetlands, and isolated waters not federally jurisdictional. Maryland also regulates “non-COE”, or “non-fill”, activities in all waters such as vegetative clear cutting and excavation.

By further example, Maryland’s groundbreaking Chesapeake Bay Critical Area law places their own additional 100-foot buffer to waters, including wetlands, via delegated local planning overlays within 1000 feet from tidal waters. And outside of the Critical Area, Maryland’s Forest Conservation Act by pass-through delegated ordinances, add their own water and stream setback buffers of usually 100 feet. These are further expanded by sensitive habitat, steep slopes, and erodible soils. Most other states and local governments have like-minded criteria and initiatives.

WUS have zero buffers from federal agencies.

COE-regulated activities also require the corresponding Section 401 WQC from that state, which certifies the federal Section 404 permit will not violate the state’s water quality standards - providing every state, tribe, and the District of Columbia with complete federal permit veto ability. Despite current media-reported executive branch intentions to potentially modify this process (regardless of whether good or bad), a substantial change to a federal act is not possible without Congress.

Moving on to stormwater management (SWM), Section 402 NPDES is the basis of the country’s and states’ SWM MS4 permits as well as the Construction General Permit Notice of Intent (NOI) process. As such, it also drives acceptable state and local SWM and erosion and sediment control (ESC) compliance. Current ESC and SWM criteria require contemporary best management practice (BMP) designs to disconnect stormwater runoff. Maryland for example requires environmental site design (ESD) to the maximum extent practicable (MEP) so that any water leaving post-development lands must mimic “woods in good condition” so that is what the receiving WUS must “see”. This is huge.

But wait, there’s more. CWA Section 303 mandates TMDLs for stream segments putting them on a pollution diet with the most recent being the Chesapeake Bay TMDL - the largest in the country - achieved by state and county Watershed Implementation Plan (WIP) compliance.

This layers on more state waters criteria even while its assumptions may not adequately account for Maryland’s other progressive criteria already in place prior to the WIP. In light of “pre-Bay TMDL” water quality management and restoration requirements coupled with a robust SWM law of ESD to the MEP, any further regulation of WUS could achieve a redundancy or even a net gain with redevelopment of pre-regulation lands.

Many states have more than got it covered regardless of whatever the final federal rules will be. The sky is not falling. Rather, our most prominent challenges and lowest hanging fruit continues to be compliance with the contemporary criteria already in place - and is where our efforts and attention should focus the most.

Since other processes may key off of WUS

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limits by ripple effect, uniform federal rule-making is a good thing – and achieving consensus on what those are on the ground is the critical issue. Clarified and uniform WUS definitions were generically welcome when the U.S. Environmental Protection Agency (EPA) proposed the 2015 federal rules currently in effect (not in all states now). So what happened?

Some of the jury may still be out on that while the rule's merits continue to be deliberated in all three branches of government.

Prior to the current 2015 rules, the COE for example historically struggled to make practicable determinations of WUS limits based on policy, the ordinary high water mark, a generic 1986 waters definition, and a 1987 wetland delineation manual. This left some debates settled by the U. S. Supreme Court – somewhat reducing the COE's jurisdiction. Among numerous rulings, two notable ones include that jurisdiction cannot extend to some ephemeral channels ("Rapanos"), nor can it ex-

tend to isolated waters ("SWANCC").

The current rules also reveal confusion and potential for expanded federal jurisdiction beyond what may be viewed as technically substantiated – or what the Supreme Court intended. For example, certain ditches and isolated waters non-jurisdictional under Rapanos and SWANCC respectively may now be subject to regulation. And the primary 2014 scientific analysis used to technically document the basis for the 2015 rules is considered by some to be incomplete and inadequate.

Despite intentions to clarify definitions, newly introduced 2015 rule interpretations of the terms tributary, neighboring, abutting, floodplain, and riparian area can be also be vague in how they establish "nexus" – a term that can be even more subjective in the field and potentially allow more waters to come under federal authority than has been customary – and predictable.

Predictability is something we all

can agree is desperately needed.

Others assert that an unanticipated outcome is some stormwater BMPs and upland swales may now be subject to WUS regulation; bringing stormwater management and land use into the purview of a federal water permitting program.

A myriad of lawsuits resulted in some courts overturning the 2015 rules in 28 states. Proponents of the new draft rules expect they would likely refine the current rules to be more compatible with the courts as well as customary pre-2015 criteria and agency policy – and on a more global level, support the affirmation of federalism principles.

Meanwhile, legislators and stakeholders continue to clash over the clarity of water rules that may not be so clear. While the draft rules are still in process, a court in May overturned the current 2015 rules in three more states. Will other courts find this persuasive?

Stay tuned.

# NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) FAKE NEWS

## Owen L. Schmidt, BA, MA, JD

When we open an Environmental Assessment (EA) or Environmental Impact Statement (EIS) we should not expect to see fake news.

### Purpose and need

Fake News: There is a purpose and need section up front, typically, and they are treated as a statement that lists benefits.

"The purpose and need is ..." Purpose and need are two words that should be plural and should read "The purpose and need are ....."

Using the singular "is" – as in "The purpose and need is ....." – indicates a reference to a phantom, singular, "statement" – such as "The statement of purpose and need is ....." But it is

not necessary to refer to a statement when the reader is already reading a statement.

Many EAs and EISs present a list of expected "benefits" in the purpose-and-need section to be realized if the proposed action were taken. Purposes and needs will be expressed as benefits, almost certainly, because an agency would never, or almost never, have a purpose or need to take detrimental action. But multiple benefits, all lumped into the section called purpose-and-need, is not transparent or informative for what the reader really wants to know.

The real news, and what the reader wants to know, would be an answer to the "why" question: Why is the agency proposing to take action? This question gets to the need for action, the

justification for proposing and taking action, and the basis to investigate alternative actions. Ideally, the proposal for action, the purpose, would be paired with the need for the action.

### No action

Fake News: A no action alternative should include continuing action and the actions of others. The no action alternative should also be represented in EAs.

The no action alternative is mandatory for an EIS (40 CFR 1502.14(d); 1508.25(b)(1)). There is no mention for this in an EA (40 CFR 1508.9(b)), so it is plainly not required. Yet each EA seemingly has a no action alternative. Some say it's because there has to be a baseline which is also not required. It's not

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the comparison to baseline that matters, but rather whether the proposed action would significantly affect the quality of the human environment.

Comparison against the baseline have been considered to inform the decision even though it is not mandatory in the regulations for EAs. The assumption, probably, is that at the end of the EA/Finding of No Significant Impact (FONSI) process a decision will be made whether to proceed with the proposed action or whether to take no action. However, this comparison should have been embedded in the need statement as why the action is proposed, citing that if the proposed action were not taken, bad things would happen or continue to happen, or good things would not happen. This would bolster the need for the action. Proof of the need for action should already inform the eventual choice between acting and not acting.

The real news would be “inaction,” not “no action,” because an agency can always desist discretionary decisionmaking to simply not act. Leave the need un-met. NEPA only bears on decisionmaking so long as there is a proposal for action and the agency is actively considering a proposal to act. If the proposal disappears, so does NEPA. In short, the no-action alternative is only a part of the NEPA process because it is mandatory by regulations in an EIS – a mistake in the regulations even for EISs that shouldn’t be repeated in our EA practice.

### Mini-EIS

**Fake News:** An EA is typically a “mini-EIS” including reasonable alternatives to the proposal.

There isn’t supposed to be a range of reasonable alternatives in an EA. Re-read the definition for an EA (40 CFR 1508.9(b)). There are four items of discrete content. Alternatives are one of them, but these are alternatives as required by NEPA 102(2)(E) (“appropriate alternatives”), not “alternatives to the proposed action” (NEPA 102(2)(C)(iii)), as is necessary for an EIS.

The EA is supposed to give the necessary evidence in order to answer the question whether the proposed action would significantly affect the quality of the human environment.

This is a yes or no question. If yes, then the agency moves to an EIS process, which introduces the requirement for “alternatives to the proposed action.” If the answer is no, for reasons given in the FONSI, then the agency is done with the procedures of NEPA for the EA.

The real news for an EA would be a straightforward answer to the question, “Would the proposed action significantly affect the quality of the human environment?” This is a far different structure from the EIS.

### Range of alternatives

**Fake News:** An EA or EIS will often have a “range” of alternatives, typically a proposed action and then alternatives that are larger and smaller, to the left and the right, to the north and the south, etc. In other words, a “bracket” of alternative actions that can be called a “range” of alternatives as though a “range” were a minimum necessity.

There is no legal mandate for a “range.” The word “range” appears in the NEPA-implementing regulations a three times – each time as a descriptor of what might be present but not as a minimum requirement.

The legal mandate is to include reasonable alternatives to proposed actions. Reasonable would have to be understood under the circumstances. To be reasonable, an alternative course of action would have to accomplish the same thing as was intended for the proposed action. It might be perfectly reasonable to consider that there is no reasonable alternative action. It might be reasonable that there are only yes or no options – two alternatives. It might be reasonable that there is only the proposed action in situations, for example, where there really is only one way to accomplish something. Or, it might be reasonable to consider and analyze a full sweep of actions from zero to 100 percent, for example – a true “range.”

The real news is that a “range” is necessary only when there is in fact a possibility for a “range” of reasonable alternatives. When there is no range, the NEPA document should explain the case and why.

Nearly 50 years into NEPA, agen-

cies have learned to lead with the green and the lean. Many proposals for action are already scrubbed and trimmed to be as environmentally protective with as little harm as is reasonably possible. A “range” of alternatives may have made more sense in the first few years of NEPA before agencies learned to go out from the start with proposals for action that cannot reasonably be environmentally improved.

### No EIS will be prepared

**Fake News:** A typical modern EA is the size of an EIS, has the format and content for an EIS, costs as much as an EIS and can take as long to prepare, but then concludes in the FONSI – wait for it – no EIS will be prepared.

Setting aside the original expectations for a 15-page EA and a 150 or 300 page EIS (40 CFR 1502.7), EAs for decades have commonly exceeded a hundred to several hundred pages. When all is said and done, the content of a modern EA oftentimes exactly matches the content of an EIS if one had been prepared.

The difference between the EA and the EIS, then, is in the process. EISs get 3 Federal Register notices (Notice of Intent, Notice of Availability for Draft, and Notice of Availability for Final). The EIS is followed by a ROD at the time of decision (40 CFR 1505.2). Scoping might be more formal for an EIS.

If there were no requirement for Federal Register notices for EISs, an agency should always opt to prepare an EIS: (1) the content is the same as for an EA under today’s practice; (2) circulating a draft EIS for comment is no different from circulating an EA; (3) for these reasons an EIS should cost no more and take no more time than an EA; (4) an EIS avoids the lawsuit over why an EIS was not prepared; and (5) an EIS avoids the sometimes-difficult giving of reasons and added mitigation for why the environmental effects are “not significant.” There would be no comparative downside to an EIS but there are several downsides to an EA/FONSI.

The real news is that a concept called “mini-EIS” has emerged in the nearly 50 years of NEPA, a concept without cita-

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tion or legal merit. An EA that looks like an EIS and has the content of an EIS, but is not an EIS, is fake news. This raises the overall time and cost of NEPA-implementation without the added benefits of an EIS.

### No significant impact

**Fake News:** We find no significant impact in a FONSI but then on close examination we see in the EA that environmental consequences will be limited, minor, temporary, small, short-term, and within legal constraints – all of which exhibit some significance, hardly no significance.

There is no quantitative threshold for significance. Significance is not derived by looking it up on a table, or researching the question, or asking an expert. Significance is derived through the process of giving reasons – reasons why the environmental consequences of that kind and at that size are “not significant.” This is the exact same process for any legal finding, such as when an agency is asked for a certificate of public convenience and necessity, or when an agency makes a public interest finding.

How much significance can there be if the agency finds there is “no” significance? Well, none. No means no. “Some” significance isn’t “no” significance.

An EA might describe a few or possibly quite a few adverse environmental consequences. Familiarly, there might be one to two dozen, possibly more or less. Each of these consequences is by custom characterized as minor, short-term, small, etc. All of these words are intended to create an impression or illusion of “no big deal.” But synonyms for non-significance are not reasons for non-significance.

The real news is found in the giving of reasons. Agencies are expected to say what the effects will be, how big they will be, and then give reasons why those consequences of that size are “not significant.” So, the project will convert part of a wetland to a parking lot, but the wetland will still function as a migratory stopover. The point of non-significance is wetland function. So, the project will pave wildlife habitat, but all wildlife species will persist. Species persistence is the point of

non-significance.

### Direct indirect and cumulative

**Fake News:** Environmental science recognizes cause-and-effect, that is, consequences may occur in chains of consequences. Each consequence is the direct result of its cause or causes. Yet we attempt to divide environmental consequences into directs, indirects, and cumulatives. There are not and cannot be those three different kinds of effects.

The Supreme Court has compared environmental effects in NEPA documents to cause-and-effect in torts – causation “akin to tort law.” Tort law has a long history. It is crystal clear that a chain of causation cannot have a break, or, if there is a break, that is the end of causation. Each link in the chain is the proximate and direct result of its cause or causes – or there is no chain.

The problem for NEPA comes from the definition of “scope” (40 CFR 1508.25(c)): “Impacts, which may be: (1) Direct; (2) indirect; (3) cumulative.” Nearly everyone who recites this line from memory inserts an “and” between items (2) and (3), and thus we have the problem. A fake problem. There are directs, there are indirects, and there are also the cumulatives. “It says so right there in the regulations.”

Well, it doesn’t say so. It says impacts “may be” direct, indirect, cumulative. They may be. And then they may not be. They may be just “direct.” And they are. Adding up the directs in all the chains of consequences, the ones that can be added, would make them incremental and cumulative in the dictionary and regulatory sense of the word. They are incremental and they add up. The so-called “cumulatives” are merely the sum of the directs that can be added. They aren’t a third kind.

The real news is that there are only direct consequences and once all the directs are traced out in all the chains there is nothing left over. True, consequences down a chain of consequences could be labeled “indirect” in second, third, fourth place. Indirect of the initial cause. But all “indirects” are also “directs” in a properly drawn chain of consequences, direct of their cause

at each link in the chain. There are not three different kinds of effects. The regulations don’t say there are.

### The duty to investigate and consider mitigation

**Fake News:** The biggest fakery of all, perhaps, is today’s normalization for almost all EAs and EISs to the effect that if we disclose the proposed action, reasonable alternatives to the proposed action, plus a no-action alternative, and the environmental consequences of all those in comparative format – then we’ve done a good job. That’s all there is. We overlook NEPA §102(2)(E), the duty to investigate the possibility of mitigation even when adverse environmental consequences are not significant. Even when adverse environmental consequences fall within legal constraints.

For EAs, the citation for the duty to investigate mitigation is NEPA 102(2)(E), “appropriate alternatives” for “unresolved conflicts.” An adverse environmental effect is adverse because of a conflict of some kind. 102(2)(E) is not pegged to significance, like 102(2)(C). The duty to investigate mitigation applies equally to non-significant effects in an EA as well as to significant and non-significant effects in an EIS.

For EISs, the citation for the duty to investigate mitigation is NEPA 102(2)(E) the same as for an EA, as well as 102(2)(C)(ii), “any adverse environmental effects which cannot be avoided should the proposal be implemented.” An EIS must disclose which of the adverse effects, if any, cannot be avoided. And, of course, it is impossible to determine if they cannot be avoided unless they are investigated for their avoidance.

In either case, EA or EIS, there is a place for mitigation that is not already included in the proposed action. It’s 40 CFR 1508.25(b)(3), the third “type” of alternative, “Mitigation measures (not in the proposed action).” In other words, a mitigation measure that would avoid or lessen an adverse environmental consequence could be, by itself, an “appropriate alternative” in an EA, and could answer, by itself, the avoidance question for EISs. There are citations for it and there is a place for it.

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The real news is the avoidance and lessening of adverse environmental effects. It does not and should not matter whether the agency is preparing an EA or an EIS, whether or not there are “significant” environmental consequences. The policy objective of NEPA is to “attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences,” NEPA 101(b) (3). An investigation into avoidance is necessary in order to “insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decision-making which may have an impact on man’s environment,” NEPA 102(2)(A). The real news is the policy in the National Environmental Policy Act.

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# NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) REFORM: REAL-WORLD PERSPECTIVES ON STREAMLINED SCHEDULES, LESS EXPENSIVE PROCESSES, AND MORE CONCISE DOCUMENTS

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## Introduction

A strong case can be made that the NEPA process, specifically the Environmental Impact Statement (EIS) development process, in current practice, takes too long, costs too much, and often produces overly lengthy documentation. This article reviews the history of NEPA streamlining, identifies challenges faced in completing NEPA documentation efficiently, and presents examples of how to successfully accomplish streamlining.

## Prior Streamlining Guidance

The current NEPA process is too slow and expensive, often resulting in indigestible, cumbersome, and lengthy documents. However, the initiative to streamline the NEPA process is not new. Various measures, directives, memoranda, guidance, and orders have been promulgated in support of streamlining the NEPA process over the last 30+ years.

In fact, as early as 1978 when Council on Environmental Quality’s (CEQ) NEPA implementing regulations were established, CEQ instructed practitioners to prepare concise, analytical documents that foster better informed decisions and excellent action: “Ultimately, of course, it is not better documents but better decisions that count. NEPA’s purpose is not to generate paperwork—even excellent paperwork—but to foster excellent action. The NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment. These regulations provide the direction to achieve this purpose” (40 CFR Part 1500.1(c)).

As NEPA practitioners, we are also encouraged to focus our NEPA analyses to “identify and eliminate from detailed study the issues which are not significant

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or which have been covered by prior environmental review (40 CFR § 1506.3), narrowing the discussion of these issues in the statement [EIS] to a brief presentation of why they will not have a significant effect on the human environment or providing a reference to their coverage elsewhere” (40 CFR 1501.7(a)(3)). In short, we are supposed to focus our NEPA analyses to relevant issues, and not prepare “kitchen sink” documents primarily designed to minimize litigation risk (i.e., “injunctophobia”).

Since about 2010, similar directives have included: various CEQ Memoranda for Heads of Federal Departments and Agencies since the American Recovery and Reinvestment Act of 2009 (ARRA, or “Stimulus” Act), including *Improving the Process for Preparing Efficient and Timely Environmental Reviews under the National Environmental Policy Act* (March 6, 2012); the FAST Act of 2015 (December 4, 2015); Executive Order (EO) 13766 – *Expediting Environmental Reviews and Approvals for High Priority Infrastructure Projects* (January 24, 2017); EO 13807 – *Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects* (August 15, 2017); Department of Interior (DOI) Order #3355 – *Streamlining NEPA Reviews and Implementation of EO 13807* (August 31, 2017); and the White House’s *Legislative Outline for Rebuilding Infrastructure in America* (January 31, 2018), to name just a few. While there has been an increased focus on this initiative under the Trump Administration, NEPA practitioners have grappled with this issue for years.

A December 14, 2018 report from the CEQ identified that, of 1,161 EISs for which a Notice of Availability (NOA) of a Final EIS was published between 2010 and 2017, the average completion time was 4.5 years; half of these took longer than 3.5 years. Of the agencies listed, the Department of Defense (DOD) (165), DOI (314), and Department of Transportation (DOT) (170) had the longest average preparation times, ranging from 4.8 to 6.7 years.<sup>1</sup>

Although success stories exist on how to streamline the NEPA pro-

cess, and additional measures are in the works as directed by the current Administration under EO 13087 (e.g., CEQs recent identification of all agency categorical exclusions<sup>2</sup> and request for input concerning CEQ’s NEPA implementing regulations<sup>3</sup>), many are quick to identify a litany of justified reasons as to why the NEPA process is more cumbersome and costly than intended. As such, there is a critical difference between our general streamlining goals here, and the current reality at the practice and project-specific level.

### Examples Of Successful Streamlining

The following provides three examples of EISs recently completed by AECOM that achieved streamlining reductions in time, length, and or cost, and a summary of the “how” this was accomplished.

#### **Rebuild by Design (RBD): Meadowlands Flood Protection EIS/ROD (June 20, 2016 – December 28, 2018)**

Over a span of 31 months (2.58 years) from NOI to ROD, this complex and important NEPA process was successfully completed, well under the 4.5-year average. The New Jersey Department of Environmental Protection (NJDEP) served as the Lead Agency for the EIS, in close coordination with the New Jersey Department of Community Affairs and US Department of Housing and Urban Development (HUD). Cooperating agencies included the US Army Corps of Engineers, US Environmental Protection Agency, Federal Emergency Management Agency, Federal Aviation Administration, Federal Transit Administration, National Railroad Passenger Corporation (Amtrak), and Port Authority of New York and New Jersey.

HUD launched the RBD competition on July 29, 2013, (78 Federal Register [FR] 45551), which sought to promote innovative resiliency projects in the regions affected by Hurricane Sandy. The State of New Jersey proposed a comprehensive urban water management project designed to reduce the risk of coastal flooding from storm surges and systemic inland flooding from large rainfall events in

the project area. The approximately 5,400-acre project area in Bergen County, New Jersey included the Boroughs of Little Ferry, Moonachie, Carlstadt, and Teterboro, and the Township of South Hackensack. HUD allocated \$150 million of Community Development Block Grant – Disaster Recovery (CDBG-DR) funding to the State of New Jersey for the planning, design, and implementation of the proposed action.

The EIS analyzed the potential impacts on 21 technical resource areas that could result from three very different flood reduction alternatives, as well as from the No Action Alternative. Concurrently, as part of the NEPA process, extensive fieldwork was conducted, consultation was held with numerous Federal and State agencies and Native American Tribes, several technical reports and appendices were prepared, and a robust public involvement program was initiated. Furthermore, throughout the NEPA process, the EIS team worked closely with the design and engineering teams that designed the initial flood reduction alternatives, and completed the feasibility study and analysis for each.

The NEPA process was successfully completed in an accelerated manner, enabling the NJDEP to maintain its aggressive, congressionally mandated schedule to have the project constructed and operating by September 2022. The following NEPA streamlining techniques were applied:

- Consistent, dedicated NEPA project managers (PMs) and subject matter experts (SMEs) on both the consulting and government sides who worked in tandem through every step of the process on a daily basis to resolve problems and identify solutions collectively.
- Close internal coordination between the EIS team and the project’s design and engineering teams resulting in the assimilation of NEPA considerations into the design and alternative development process, the avoidance and minimization of environmental effects, and concurrent NEPA analysis.
- Implementation of a robust Public Involvement and Engagement Program (e.g., monthly Citizen Advisory Group

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[CAG] meetings, monthly Executive Steering Committee [ESC] meetings, monthly newsletters, project website, etc.) designed to identify and address concerns and integrate the public and public concerns into the analysis and decision-making process.

- Extensive early and on-going consultation and coordination with agencies, local mayors/representatives, and other stakeholders to identify and mitigate environmental issues of concern.
- Concurrent, comprehensive field investigations for biological resources, wetlands and other waters, cultural resources, noise and traffic concerns, and other key technical resources areas to identify potential environmental effects early in the process and allow for design modifications.
- Identification and consideration of stakeholder concerns through extensive internal and external scoping to minimize the number of comments and concerns identified during the Draft and Final EIS public review periods and the potential for unanticipated issues to arise.
- Adherence to an aggressive internal schedule on both the consulting and government sides, particularly during review periods.

Within 31 months of the notice of intent (NOI) publication, the record of decision (ROD) was signed on December 28, 2018, the project is now in final design stages, and the mandated construction-complete date of September 2022 is planned and achievable.

**Site Acquisition and Campus Consolidation for the Centers for Disease Control and Prevention/ National Institute for Occupational Safety and Health (CDC/NIOSH) in Cincinnati, Ohio EIS/ROD (July 14, 2017 – August 20, 2018)**

Over a span of 15 months (1.25 years) from NOI to ROD, this important NEPA process was successfully completed, well under the 4.5-year average. The General Services Administration (GSA) oversaw the project, in close coordination with both CDC and NIOSH. CDC needed to provide NIOSH with a modern, single consolidated campus facility that fully

supported the agency's current and future research activities in Cincinnati, consolidating multiple, outdated facilities in the city.

CDC proposed to acquire an approximately 15-acre site in the city. The new campus would provide approximately 235,000 gross square feet of office, laboratory, and support space, and include several connected laboratories, administrative buildings, and a transshipping/warehousing facility. Issues of concern included traffic, socioeconomics, cultural resources, and hazardous materials and wastes (HTRW). Gentrification of the neighborhood was of concern to local residents.

The overall NEPA process was expedited through application of the following techniques:

- Early site selection work and clear screening criteria that limited alternatives.
- Robust, early, and often public outreach and engagement to incorporate stakeholders into the decision-making process and address concerns.
- Early consultation and coordination with regulatory agencies to set path to success for environmental issues of concern, based on extensive internal and external scoping.
- Concurrent HTRW field investigations, traffic studies, cultural resources analyses, and other key impact area investigations to identify and mitigate issues.
- Dedicated and streamlined government review team and review periods.
- Integration of NEPA considerations with the design process to minimize environmental effects.
- Consistent, dedicated NEPA PMs and SMEs on both consulting and government sides who worked in partnership, quickly, to overcome obstacles and implement collaborative decisions.

These measures not only accomplished this process in 15 months, but resulted in an approximately 350-page EIS that focused on areas of environmental concern. The project is now in the formal design phase.

**Secretary of the Interior Order #3355: Case Study - Reservoir Ex-**

**pansion EIS/ROD (Bureau of Land Management) (September 29, 2017 – pending [December 1, 2018])**

As part of the Secretary of the Interior's Order #3355, EIS preparation to evaluate the enlargement of a small, existing water storage reservoir to increase the irrigation water storage capacity by tenfold began in September 2016, with an NOI published September 29, 2017. Cooperating agencies included the US Army Corps of Engineers, the US Environmental Protection Agency, and various state and local agencies.

The initial schedule proposed a Notice of Availability (NOA) of the Draft EIS on December 28, 2018, with the NOA of the ROD to be published December 10, 2019, resulting in an approximate 26.5-month period for completion. As the NOI was issued after Order #3355, the agencies initially did not evaluate streamlining, either in terms of timing or page limits, as the agency had begun drafting the EIS at least six months prior to issuance of the Order. When the Order was released on April 27, 2018, the BLM reviewed on-going projects to determine how to bring them into compliance with Order #3355. For the reservoir expansion EIS, the BLM determined that the schedule could be shortened by approximately 11 months and the Draft EIS would be required to meet the page limitations of the Order.

The steps taken to meet Order #3355's timeline and the page limits on this project included:

- Shortening the original schedule to reduce the overall project timeline. In particular, the timing between the end of the Draft EIS public comment period and the NOA for the Final EIS was shortened from 180 days to 45 days, and the timing for preparation of the ROD was reduced from 77 days to 35 days.
- Agency review times were reduced to reflect the Memorandum on the NEPA Document Clearance Process.
- The Affected Environment section was critically reviewed to include only the baseline information needed to support the impact analysis; the Environmental Consequences section was

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critically reviewed to include only the analysis and discussion necessary to support the impact conclusions.

- Acronyms and abbreviations, references, most tables and figures, and the list of preparers were moved to the EIS appendices.
- Other appendices provided additional details regarding resources of most concern to stakeholders (i.e., stream flows, construction noise, visual effects, and special status species).

## Time, Cost, And Length

The goal of the NEPA process has always been to foster better decisions, recognize potential environmental effects and implement environmental protective measures to the extent feasible. This has not changed.

Along the way, numerous additional, often overlapping environmental regulations and duplicative agency review cycles have emerged; inconsistent agency-level NEPA implementing regulations have evolved; “injunctophobic” NEPA processes have become the norm; and longer, more expensive, and more time-consuming NEPA documents have resulted. Longer documents also generally equal longer internal review times, and higher costs.

### Time

Practitioners responsible for implementing the NEPA process and completing an EIS for a specific proposed action are responsible for combining multiple components to achieve a ROD. These components include their experience; current case law; NEPA; CEQ regulations; agency-specific NEPA implementing regulations and guidance; multiple other Federal, State, and local regulations; various permitting requirements; site-specific circumstances; public (and agency) involvement; public controversy over environmental amenities and effects; and unique proposed action or alternative characteristics. Blending these elements, the NEPA team must predict the future, anticipate effects and methods to mitigate effects, and carve a pathway through all of these factors to a successful outcome.

The three most common sources

of delay (and cost escalation) in the NEPA process are **indecision, indecision, and indecision**:

1. *Indecision about the details of the proposed action and/or alternatives early on in the process and during document development.*
2. *Indecision about the methodologies, data, and/or information necessary to fully characterize the affected environment, potential effects, and/or corresponding mitigation measures.*
3. *Indecision about how conflicting missions, policies, and opinions will be resolved early and throughout the process when barriers are encountered, such as staff turnover, new information coming to light, or disagreements over process, substance, analysis, or other measures of adequacy. Public controversy can further complicate this.*

The only method to address these challenges within a finite timeline (e.g., 2 years, as currently envisioned under the White House’s proposal, including permitting) is to have, starting early in the process and as part of robust internal and external scoping, and then transcending the entire process, a clear understanding of: 1) the proposed action and alternatives; 2) involved stakeholders; 3) areas and sources of potential controversy; 4) the area of potential effect and region of influence; 5) potential environmental effects and resources of concern; 6) applicable regulations and regulatory requirements; 7) responsible agencies; and 8) how all of these components interplay in time and space to result in an outcome. This clarity can help reduce the indecision factors noted above.

The Fixing America’s Surface Transportation (FAST) Act requirements have proven successful in this regard, requiring an engagement plan, a commonly accepted schedule, and clear timelines and responsibilities for involved agencies and stakeholders (e.g., in the form of a Public/Agency Coordination Plan) at the start of the process, tracked through a publicly accessible permitting “dashboard” that ensures transparency and accountability, and serves to usher along potential delay-makers. Through

clear and complete upfront internal and external scoping, as well as open communication between stakeholders throughout the process, more aggressive timelines become real and achievable. This approach requires substantial “heavy lifting” upfront in the process, coupled with all stakeholders agreeing to timely reviews and collaborating to address and resolve areas of controversy whenever possible.

By investing effort in these methods, timelines can be maintained and achieved, overcoming the primary time-consumers in all NEPA processes that are primarily due to a lack of clear and open communication. The White House’s draft streamlining plan, set forth in the *Legislative Outline for Rebuilding Infrastructure in America* (January 31, 2018), sets forth additional measures, such as regulatory reforms and reductions in review duplications, that would further serve to achieve more aggressive NEPA performance timelines.

### Cost

Costs often go hand-in-hand with time, and escalate with indecision. Through a clear, upfront understanding of all project requirements and issues, costs can be more accurately predicted as responsibilities, issues, timelines, involved participants, and processes become equally clear. Escalated costs generally result from uncertainty and delay. By maintaining and enforcing clear, accelerated timelines, coupled with greater certainty of requirements early in the project planning process, costs are better controlled.

### Length of documents

CEQ has been clear since 1978: the NEPA process is not intended to result in longer documents; the NEPA process is designed to result in better decisions (40 CFR Part 1500.1(c)). At multiple points, CEQ has encouraged NEPA preparers to focus on issues significant to the decision, which would serve to limit the girth of documents, avoiding cumbersome “kitchen sink” analyses.

Specifically, in accordance with CEQ regulations, scoping should be used to narrow

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NEPA analyses “identify and eliminate from detailed study the issues which are not significant or which have been covered by prior environmental review (40 CFR Part 1506.3), narrowing the discussion of these issues in the statement [EIS] to a brief presentation of why they will not have a significant effect on the human environment or providing a reference to their coverage elsewhere” (40 CFR § 1501.7(a) (3)). Document size can be reduced by focusing on such critical and relevant environmental issues.

## The Path Forward

Since January 1, 1970 when President Nixon signed NEPA into law, the goal of the NEPA process has always been to foster better decisions. However, since 1970, many elements have evolved that have served to lengthen NEPA documents and timelines, and increase costs, as touched upon above.

As such, our proposed solutions should seek to overcome these trends. The White House’s draft streamlining plan, for example, sets forth elements, such as performance-based and negotiated mitigation pilot projects and alignment of judicial review authority, which could combat the tendency toward more lengthy, time-consuming, and expensive documents.

It’s also important to note that most NEPA implementing regulations and guidance have aged over the course of the last several decades, and have not taken advantage of modern technologies related to data presentation, public involvement, and converting from a more text-heavy presentation to a more visual-heavy presentation. In short, a “picture is still worth 1,000 words” and our NEPA processes have not evolved to match the speed of available technologies to convey information in more user-friendly, digestible, visual, and condensed formats. Addressing just this one factor will substantially evolve the NEPA process and serve to streamline the process.

There are many opportunities to reform Federal permitting and streamline the NEPA process. While differences in opinion and public/agency controversy concerning Fed-

eral proposed actions persist, they do not have to result in delays or longer, more costly documents.

Options to streamline the NEPA process, many of which were introduced in the *Legislative Outline*, may include the following:

- Developing a “master list” of categorical exclusions for all (or like groupings, e.g., DOD) of Federal agencies to use, eliminating the need for many EAs.
- Providing a clear definition of “significance” that triggers the need to prepare an EIS.
- Establishing a consistent, universal system or roadmap to guide Federal agencies into and through the NEPA process, including within the critical initial phases of the process before and during scoping, including developing strong DOPAAs.
- Using social media and the internet to effect faster, more meaningful, and more effective public involvement.
- Using visualization and modeling tools and software to convey information, as opposed to words.
- Cataloging and databasing prior or completed NEPA documents to provide ready access to sources for adoption (40 CFR § 1506.3) and incorporation by reference (40 CFR § 1502.21).
- Encouraging tiering through programmatic processes, where relevant and appropriate (40 CFR § 1502.20 and § 1508.28).
- Encouraging and promoting (rewarding) cooperation between Federal agencies (40 CFR § 1501.6, § 1506.2, and § 1508.5) – i.e., the “One Federal Decision” concept.
- Homogenizing agency NEPA implementing regulations, document formats, and guidance for consistency across Federal agencies.
- Developing agency-specific templates for NEPA documents.
- Setting hard deadlines and time limits for internal reviews, as well as page limits for documents.
- Providing appropriate Government staffing and funding to meet NEPA obligations.
- Ensuring and encouraging integration of NEPA considerations earlier in the planning and design process, such as during development of mas-

ter plans and in concert with the conceptual design process.

- Focusing more on outcome-based processes, rather than processes – bundling mitigation, applying resources to outcomes as opposed to studies, and providing for corrective actions post-mitigation. As suggested in the *Legislative Outline*, performance-based and negotiated mitigation pilot projects should be tested.

CEQ regulations have now been in place for over 40 years; NEPA turns 50 in December. CEQ is currently in the process of a much-needed revision to, and updating of, their implementing regulations. We look forward to the next generation.

<sup>1</sup> CEQ Environmental Impact Statement Timelines (2010-2017); December 14, 2018; [https://ceq.doe.gov/docs/nepa-practice/CEQ\\_EIS\\_Timelines.xlsx](https://ceq.doe.gov/docs/nepa-practice/CEQ_EIS_Timelines.xlsx).

<sup>2</sup> CEQ Fact Sheet: CEQ List of Federal Agency Categorical Exclusions, 14 December 2018.

<sup>3</sup> CEQ’s Update to the Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act, Advance Notice of Proposed Rulemaking; 11 July 2018.

<sup>4</sup> Advance Notice of Proposed Rulemaking (Advance Notice) in the Federal Register, June 20, 2018.

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