



# The Environmental Quarterly

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## LETTER FROM THE EDITOR

*Dear Environmental Colleague,*

*This issue of Environmental Quarterly is the last for which I will be Editor in Chief. I am retiring from the FHWA this fall. It was a pleasure serving you and bringing you the latest in Environmental news from FHWA through this publication. The Environmental Quarterly will continue to be published on the same schedule as before, only under new leadership.*

*As always, if you have comments about a story or story ideas, please let us know.*

Sincerely, **Don Cote**  
Environment Technical Service  
Team (TST) Leader &  
Editor-in-Chief

## FHWA's Exemplary Human Environment Initiatives: 2008 & Beyond

Gabe Russo, Office of Planning, Environment and Real Estate



*Congressman Mike Thompson at the signing of the Humboldt County Tribal Transportation Commission bylaws, one of the 2008 EHEI projects.*

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### **What are the Exemplary Human Environment Initiatives (EHEIs)?**

Try saying Exemplary Human Environment Initiatives fast five times. It's not easy! Just as it's hard to say these words fast, the FHWA Office of Natural and Human Environment recognizes the challenge of implementing projects that improve our transportation system while protecting or even improving environmental

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resources. The EHEIs promote innovative projects that succeed in striking a balance between transportation and environment so that other communities may learn from these examples.

The EHEI program began in 2007 with the intent of recognizing a number of projects that provided a variety of benefits to transportation system users. The six categories for the EHEIs are:

- 1) Encouraging Nonmotorized Transportation;
- 2) Enhancing the Environment for Human Activities;
- 3) Process Improvements;
- 4) Educational and Training Programs;
- 5) Product Development; and
- 6) Other innovative projects that demonstrate the characteristics of EHEIs.

### ***Who received recognition in 2008?***

April Marchese, the Director for the Office of Natural and Human Environment announced the 2008 EHEI recipients in July. This year it was possible for projects to be nominated as both an EHEI as well as an Exemplary Ecosystem Initiative. The aim is to demonstrate that these are not mutually exclusive possibilities. Transportation projects should strive to be sensitive to human environment needs while also protecting broader ecosystem resources as well. Three projects—in Utah, Florida, and Georgia—received this joint recognition. The complete list of EHEI recipients by category is presented below:

#### ***Education/Training***

- **Alaska:** *Partnership for Progress*. For using a collaborative approach to develop public service announcements to help citizens improve safety and protect environmental resources.

#### ***Enhancing Environment for Human Activities***

- **Kentucky:** *Newtown Pike Extension—Southend Park Redevelopment and Community Land Trust*. For a collaborative approach within the state that formed a community land trust to ensure community cohesion and environmental mitigation.
- **South Carolina:** *Preservation of the Fishdam Ford Revolutionary War Battle Site*. For finding and preserving a site of national historical interest while expediting roadway improvements.
- **Tennessee:** *Type II Noise Barrier Program*. For instituting a statewide review of their entire Interstate system to identify noise abatement needs.
- **Utah:** *Southern Corridor Sustainable Development Initiative*. For working on an innovative pilot project in conjunction with EPA and the City of St. George to protect the environment and identify sustainable development opportunities.

#### ***Nonmotorized Use***

- **California:** *Interstate 5/International Friendship Plaza*. For an innovative approach to create a bicultural transit, pedestrian, and bicycle plaza and gateway between the United States and Mexico.

#### ***Other***

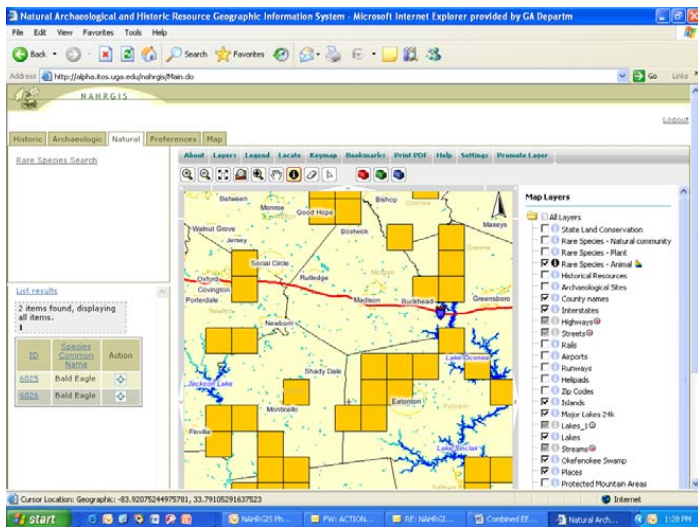
- **Illinois:** *US Business Route 20 Improvement*. For developing an innovative assistance approach to ensure community continuity before, during, and after roadway improvements.
- **North Dakota:** *Tribal Consultation Programmatic Agreement*. For developing a Tribal Consultation Committee and empowering tribes in North Dakota to protect their cultural resources and participate in transportation decision making.

## Process Improvement

- California: *Form and Formation of the Humboldt County Tribal Transportation Commission*. For forming a Tribal Transportation Commission involving all of the tribes in Northern California to ensure their involvement in transportation decision making.
- Florida: *Efficient Transportation Decision Making*. For developing a collaborative transportation decision making process that protects the natural, cultural, and built environment.

## Product Development

- Georgia: *Natural, Archaeological and Historic Resources Information System*. For developing an innovative web-based tool that includes mapping layers for archaeological, historical, and natural environment features.



Screen shot of quarter-quadrangle display of protected animal species in Georgia's EHEI project.

## What is the EHEI process for 2009?

The EHEIs will enter their third year in 2009. We hope to expand the number of projects submitted and the number of projects that we recognize. The call for submissions will occur in February and submissions will be due in April 2009.

The submission should include a two page write-up on the project, a letter or email of support from the FHWA office that submits the project, and any photos or other supplemental materials you want to include. Note that the submissions must be sent in by FHWA Division or Federal Lands Offices.

If you submitted a project that did not get selected, please feel free to resubmit it. We can provide feedback to help improve the application.

For more information, contact: Gabe Rousseau at [Gabe.rousseau@dot.gov](mailto:Gabe.rousseau@dot.gov) or (202) 366-8044. The EHEI web site is: [www.fhwa.dot.gov/environment/ehei](http://www.fhwa.dot.gov/environment/ehei).

## FHWA Climate Change News

In September 2008 FHWA's Office of Planning, Environment, and Realty launched a new monthly newsletter called *Transportation and Climate Change News* to keep transportation stakeholders up-to-date on transportation and climate change issues. The below items are excerpted from the first newsletter. Look for future issues via email and on our website at

<http://www.fhwa.dot.gov/hep/index.htm> in the "Topics of Special Interest" or the "What's New" sections. FHWA expects to launch a new Transportation and Climate Change Clearinghouse website in early 2009.

**AASHTO Releases Primer on Transportation and Climate Change.** AASHTO recently published an information report titled *Primer on Transportation and Climate Change*, which serves as an introduction to the issue of climate change and its implications for transportation policy in the U.S. The report summarizes the current state of scientific knowledge concerning the causes and impacts of climate change. It also provides an introduction to climate change policy issues, discusses trends in greenhouse gas emissions from road transportation, reviews potential measures to reduce greenhouse gas emissions and identifies issues for further research. To access this report go to: <http://www.transportation.org/news/121.aspx>.

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# Decongesting the NEPA/404 Merger Process

Brian Smith and Kevin Moody, FHWA Resource Center

## ACTION-FOCUSED AND RESOURCE-FOCUSED COMPONENTS OF ENVIRONMENTAL LAWS AND REGULATIONS

Environmental Law	Action-Focused Component	Resource-Focused Component
NEPA	Intensity	Context
Sec. 404(b)(1) Guidelines	Discharge of fill; presumption of non-wetland alternatives; discharge restrictions	Significant degradation
Endangered Species Act	Take	Jeopardy
Sec. 106, NHPA	Alter significant characteristics that make the resource eligible for the National Register	Diminish the integrity of the resource

Table 1. Action-focused and Resource-focused Components of Environmental Regulations

Transportation professionals who work in the environmental area often find that a conceptual understanding of one environmental law is applicable to other environmental laws. The NEPA and Section 404(b)(1) – the “merger process” described in the 1988 Red Book (*Applying Section 404 Permit Process to Federal-Aid Highway Projects*) is an example of this. One state’s (Illinois) long-term success with the NEPA/404 merger process is the result of evolving strategies, experience and knowledge into practice.

Effective evaluation of environmental impacts has been a prime interest of the FHWA and US Army Corps of Engineers (USACE), and a keen focus of the Section 404(b)(1) Guidelines (Guidelines). However, the Guidelines contain no outline or framework for conducting indirect and cumulative impact analysis and provide no discussion of the concept of reasonably foreseeable future actions (RFFAs), an often contentious issue. Even with the publication of the Red Book, the merger process is considered by most practitioners as less than a

complete success. Some DOTs have elected to abandon the merger process altogether.

To understand Illinois’ success with the NEPA/404 merger process, we must recognize that decision-making uses different species of knowledge. There are computational, propositional (or descriptive), and conceptual levels of understanding. Computational knowledge is obvious (e.g., performing activities such as Sudoku according to previously determined and generalized rules). Propositional knowledge means knowing how to identify what might be affected by a project. Most practitioners realize the difference between mere procedural and propositional knowledge. Conceptual knowledge is the ability to apply propositional knowledge to new situations and apply linkages between propositions. These various species of knowledge are encountered in the NEPA and 404 merger process. Managing a merged NEPA and 404 processes requires sound

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procedural, propositional and conceptual knowledge for identifying, discussing, and managing the uncertainty inherent in an environmental analysis. Many tools, better science and guidance (such as the joint agency publication *Eco-Logical: An Ecosystem Approach to Developing Infrastructure Projects*) have emerged to help manage these processes on a larger environmental scale.

Next, we must understand the distinction between assessment and analysis. Analysis refers to the tasks of identifying specific cause-and-effect interactions between resource attributes and project elements, as well as predicting whether or not that interaction alters the trends and conditions of the resource attribute over time and space. Assessment is the broader process of identifying, prioritizing, and disclosing important information and rationale used to reach conclusions about the spectrum of resources possibly affected by a transportation project. The latest version of Illinois' NEPA/404 merger agreement strives toward improved data collection through the Illinois Natural History Survey. "The USACE Regulatory and EPA will use the data to analyze the project's potential compliance with the Guidelines," reports Matt Fuller of Illinois Division. This revision of Illinois' NEPA and 404 merger agreement enhances the collaborative decision-making process.

Two publications, NCHRP Report 466 (Desk Reference for Estimating the Indirect Effects of Proposed Transportation Projects, 2002) and the CEQ's Considering Cumulative Effects (1997) have established stepwise frameworks for improving indirect impact analyses and cumulative impact analyses. The Guidelines which is, in fact, an environmental analysis could borrow from the recommended analysis steps in NCHRP Report 466 and the CEQ guidance that emphasize collection of relevant data as an essential component of determining potential impacts. NEPA and Section 404 processes similarly involve: evaluation of alternatives, analysis of the implications of project impacts on environmental resources, and balancing the relative costs and benefits of the action to society. The consideration of tradeoffs implicit with each alternative prompts consideration of options that avoid and minimize adverse impacts. The CEQ's NEPA implementation regulations and FHWA experts identify direct and indirect effects as

action-focused analyses and cumulative effects as a resource-focused analysis. Table 1 illustrates the action-focused and resource-focused components of other environmental laws. This two-part analysis is necessary because evaluating environmental effects requires describing the impact component and the resource response component. Such a distinction is not made in the Guidelines; however, the fundamental presumptions (non-wetland alternatives being less damaging, restrictions on the discharge, and preference for impact avoidance) may be viewed as action-focused component of the Guidelines. The resource response component of the Guidelines would then be the factual determinations and evaluations of Subparts C-F and Subpart G of the Guidelines. With this conceptual understanding, the Guidelines merge neatly with the analytical steps for indirect effect and cumulative effects evaluation. Table 2 illustrates the alignment of the three processes. Illinois' latest version of the NEPA/404 merger agreement is consistent with current state of the practice logic for evaluating environmental impacts. The three processes may be applied concurrently as the information collected in scoping should have relevance in all three processes.

Concurrence regarding Purpose and Need is facilitated by clear thinking, transparency and good communications. Concurrence requires the partners to engage in thorough scoping and appreciate project design rationale, area trends and goals while concurrence regarding Alternatives to be Carried Forward and Selected Alternatives is based on a combination of project design, and scoping and analysis information about resources potentially affected and stresses on those resources. Illinois' NEPA/404 merger puts emphasis on defining why the project must be implemented; the logical termini of the proposal and intermediate control points; and a description of the project's independent utility and independent significance, prior to negotiating concurrence on Purpose and Need. This information is essential to establishing the project's geographical scope, the context of societal (transportation) values to be addressed and insight regarding probable indirect and cumulative effects. Logical termini and independent utility/significance are not equivalent terms. Table 1 illustrates the scoping component of the three processes.

In the scoping process, it is important to not only

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identify the resources impacted by the project but how the resources vary in resilience to direct or indirect impacts and implications to the resource's sustainability and contributing values over time or space. Temporal and geographic locations of RFFAs provide the basis of the analysis approach and objectives. This decision-making process is greatly facilitated by collecting relevant resource-specific information.

For Tier I analysis, purpose and need, project performance criteria, costs, logistics, existing technology and environmental features can help guide a screening level action-focused analysis of project alternatives. Indiana included a Guidelines Consistency Analysis for its Tier I I-69 Indianapolis-Evansville project. According to Tom Bruechert, "In Texas' I-69/TTC and TTC-35 projects, the sheer scale and magnitude of these projects did not lend themselves to any meaningful indirect and cumulative analyses at Tier I. Texas used general avoidance and minimization techniques to locate 10-mile wide transportation corridors." These efforts did however validate the Tier I process and commencement of detailed Tier II studies where Section 404(b)(1) analysis will be performed. Meanwhile Melissa Toni is raising the standard in New York with a new 404(b)(1) Guidelines report template.

Lack of rigorous analysis and inadequate scope of alternatives are frequent issues with applying the Guidelines. NEPA environmental analyses encounter similar challenges. Mandelkar and Reading (2004) documented that plaintiff challenges for indirect and cumulative impact (ICI) analyses were often based on:

- 1) the scope of the cumulative impact analysis being too narrow and omission of important cumulative impacts;
- 2) cumulative impact analyses not adequately addressing in detail the cumulative effects mentioned, and
- 3) obviously conclusionary documentation and documentation lacking in analysis.

Understanding the function of the two-part analysis within various environmental laws help address

these issues and achieve the NEPA/404 merger process goals of improving overall efficiency of the FHWA NEPA process, improving early and active interagency coordination, and improving the use of transportation systems planning data.

The importance of scope and relevant RFFAs cannot be overstated as RFFAs eventually may affect negotiated avoidance, minimization and mitigation efforts. Generally, spatial information of RFFAs determines the relevance of and necessity for more specific design information as impact and stressor intensity is a function context. Thus, a successful watershed approach toward rehabilitating aquatic resources requires coordinated diagnosis of causes at multiple scales (Booth et al. 2004), Desired community goals, trends and activities not only influence the location of RFFAs but also the science, policies, and social awareness necessary for successful watershed management (Chess and Gibson 2001). The Rapanos and Carabell wetland cases, new guidance and the Corps'-EPA Mitigation Rule regulation emphasize viewing aquatic resource impacts on a watershed scale. The latest version of Illinois' NEPA/404 merger focuses on a clear vision at the project-scale and has the capacity to move impact evaluations toward a watershed approach by encouraging resource agency involvement in the transportation systems planning process. This is not only good stewardship but it also provides a greater capacity for developing sustainable on-site/off-site and in-lieu fee mitigation, and watershed planning and assures meeting the minimum one-to-one mitigation ratio established by the Corps'-EPA Mitigation Rule. Environmental stewardship during the systems planning process and conceptual understanding of required analytical steps of environmental regulations will facilitate the use of new technologies, better science, working relationships and approaches such as Eco-Logical that can increase the extent of environmental stewardship accomplishments.

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U.S. Department  
of Transportation

**Federal Highway  
Administration**

NEPA	404(b)(1) Guidelines	NCHRP 466	CEQ
	Wetland effects	Direct and Indirect effects	Cumulative effects
Scoping	Subpart B (screening)  404 Presumptions Avoidance and Minimization Non-wetland alternatives	1. Initial scoping, Purpose and Need, define study area, assess level of effort for study  2. Identify trends /goals in area and relevant RFFAs  3. Identify notable features and resources (wetlands, streams)	1. Identify resources affected and issues  2. Identify geographic scope of the analysis.  3. Establish time frame for the analysis  4. Characterize the resources, ecosystems and human communities (REC) affected  5. Characterize REC stresses
Describe Affects on the Environment	Subpart C-F Potential impacts  Subpart G-Evaluation and Testing	4. Analyze impact-causing activities related to project design, dimensions, alternatives, construction methods, etc.  5. Identify direct/indirect effects that merit analysis (time and space)  6. Analyze direct/indirect effects  7. Evaluate your results assumptions/uncertainty	6. Identify “other” actions affecting the RECs of concern  7. Identify cause-and-effect relationships between human activities and RECs  8. Describe the baseline condition  9. Determine magnitude/significance of cumulative effects
Describe Environmental Consequences	Evaluate Least Environmentally Damaging Preferred Alternative (LEDPA) (Subpart B)	8. Assess consequences and mitigation strategies	10. Evaluate alternatives to avoid, minimize and mitigate cumulative effects  11. Monitor and manage cumulative effects

Table 2. Alignment of the Section 404(b)(1) Guidelines with NEPA, Indirect Impacts and Cumulative Impacts analysis.

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References:

Council on Environmental Quality. Considering Cumulative Effects Under the National Environmental Policy Act. 1997

Booth, Derek B., Karr, J.R., Schauman, S., Konrad, C.P., Morley, S.A., Larson, M.G., and Burges, S.J. October 2004 Reviving Urban Streams: Land Use, Hydrology, Biology, and Human Behavior. Journal of the American Water Resources Association. p. 1351-1364.

Chess, Caron and Gibson, Ginger. August 2001. Watersheds are not Equal: Exploring the Feasibility of Watershed Management. Journal of the American Water Resources Association (37)(4), p. 775-782.

Mandelkar, Daniel and Reading Susan A. July 12-14, 2004. “Cumulative Impact Analysis Under the National Environmental Policy Act”, Cumulative Impacts Methodologies and Best Practices Workshop – Midwest Natural Resource Group in Chicago, Illinois (<http://www.mnrg.gov/accomplishments.htm>)

Transportation Research Board, National Research Council, 2002. NCHRP Report 466 -Desk Reference for Estimating the Indirect Effects of Proposed Transportation Projects

FHWA, NMFS, USACE, USEPA USFWS. Applying Section 404 Permit Process to Federal-Aid Highway Projects. 1988.

## *An Interview with Don Cote*

Don Cote, Team Leader of the FHWA Resource Center Environment Technical Service Team, will be retiring soon after this issue of Environmental Quarterly comes out. We wanted to capture his thoughts on working for FHWA as well as to find out what his plans are after retirement. Don will be missed by his friends and colleagues and we wish him luck as he moves onto the next stage of his life.

We sat down with him for a short interview.

**Q:** Why did you choose to work for FHWA?

I had over thirty years of experience in the environmental field with private consulting firms. Over the last ten to fifteen years of that private sector experience, I was very involved with the transportation and environmental community. I worked with a number of State DOTs, local transportation agencies and FHWA staff. I wanted to get a different perspective and do something different before I retired. When this opportunity came up, I saw it as a chance to do something a bit different and gain a different perspective.

**Q:** *What has been one of the more challenging aspects of working for the Resource Center?*

The most challenging thing for me was that for a large part of my career I was in Senior Management and had a lot of discretion over and control of budgets, staffing and the financial management of the firms I was with. The big challenge at FHWA was being in a position to accept having much less discretion and control over budget development and staffing. I didn't have the same degree of influence over how budgets were developed and allocated or what staffing level was available to me.

**Q:** *What would you describe as one of your greatest accomplishments at FHWA? Are there any particular programs or projects that you are most proud of?*



One of my biggest successes was coming into the organization, the Resource Center, at a time of reorganization and pulling together a new team of people. Success was developing the environment team into an effective, coordinated, well-functioning part of the organization.

I am so proud of the Environment Team. I would put up our team as an environmental training and technical assistance group against any private sector group I was responsible for in the past.

I also consider the development and growth of the *Environmental Quarterly* newsletter a success. I receive a lot of positive comments from the readership and people look forward to it every quarter.

**Q:** *What do you think is the greatest challenge to us today at the intersection of transportation and the environment?*

The big challenge in transportation and environment is the economic concerns that are on the minds of so many people in the country. When you get into a pinch between funding for economic recovery versus funding for environmental issues, it is difficult

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for people to choose long-term environmental concerns versus their own short-term financial well-being. The question in my mind is whether environmental issues will remain the priority they have been in the past, in the face of the economic downturn we are experiencing at this time.

*Q: What are you going to do in your retirement? What will you miss the least? What will you miss the most?*

When I retire I will be moving to Florida and my wife and I hope to do a lot of travel, especially to see my children and grandchildren who live in Wisconsin and Italy. I won't miss shoveling snow! But I will miss the daily interactions with a wide range of professional people who are honestly dedicated to making our country and world a better place to live.

*Q: Do you have any advice that you'd like to leave us all with?*

I love to read and particularly to read about the thoughts of others and the quotes they left behind. I love many quotes from Thomas Jefferson, Abraham Lincoln and Mark Twain. I am also something of a sports fanatic so I will leave you with three quotes from Jim Valvano, the former basketball coach at North Carolina State University who passed away from cancer at a far too young age in April of 1993.

*"No matter what business you're in, you can't run in place or someone will pass you by. It doesn't matter how many games you've won."*

*"There are 86,400 seconds in a day. It's up to you to decide what to do with them."*

*"To me, there are three things we all should do every day. We should do this every day of our lives. Number one is laugh. You should laugh every day. Number two is think. You should spend some time in thought. And Number three is, you should have your emotions moved to tears, could be happiness or joy. But think about it. If you laugh, you think, and you cry, that's a full day. That's a heck of a day. You do that seven days a week, you're going to have something special."*

## **Linking Freight with Planning and the Environment: New NHI Course (NHI #139005)**

Spencer Stevens, FHWA Office of Planning

In an early 2005 FHWA-sponsored charette we heard from State DOTs and MPOs that as freight issues and freight improvement projects become more mainstreamed, the complex nature of freight movements was raising some unique environmental consideration that were not well covered in existing training. Since that time, FHWA has been working on the development of a new NHI – instructor led course to address these issues.

We are pleased to announce that after piloting the course, we are ready to roll it out! The pilot was held in Denver, Colorado this past May with attendees from FHWA, DOTs and resource agencies. Many participants in the pilot noted that this course's effective use of case studies and best-practices help to maintain a good balance between introducing the topics to beginners, while not being too basic for an intermediate audience.

This two-day course teaches participants how to integrate freight and environmental considerations into project planning, programming, and development. The course is organized around the phases of transportation planning and programming, such as needs identification, plan development, project programming, project development, and project implementation. The course uses case studies and hands-on exercises to illustrate a range of options for integrating environmental considerations in each phase. The following are the outcomes for the course:

- List potential transportation improvement projects that balance freight mobility with community and environmental considerations.
- Identify strategies that balance statewide, regional, and metropolitan freight mobility needs with community and environmental goals.

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# Maintenance, Environment, and Asset Management – Finding Common Ground

Shari Schaftlein, Office of Project Development and Environmental Review

A rare opportunity was presented in Monterey, CA this past July: transportation and environmental professionals gathered in an AASHTO annual multi-committee meeting to check-in on progress in integrating environmental considerations into all stages of transportation decision-making. While many FHWA and State DOT employees feel like they live the words of Bob Dylan, “*the times they are a changing*,” participants in this energetic event would feel comfortable humming a variation, “*the times...they have changed!*”

Peruse the agenda and presentations posted to the AASHTO and Caltrans Websites and you can see by the Plenary sessions for the Subcommittee on Maintenance, the Subcommittee on Asset Management and the Standing Committee on Environment, that participants have moved on to advance problem solving and mainstreaming innovations.

(<http://www.transportation.org/?siteid=36&pageid=2878>;

<http://www.dot.ca.gov/hq/maint/AASHTO/index.htm> ) Topics covered included: environmental management systems, stormwater/wetlands, vegetation management and invasive species; and sustainability in energy and climate change.

The AASHTO Center for Environmental Excellence described the services available to foster communications, support best practices, and create opportunities for interdisciplinary problem solving. State DOT and AASHTO leaders were in unanimous agreement that the progress and stories coming from the meeting need to be told to the larger public. The debate on how to build and maintain an intermodal transportation system needs to be informed by the practitioners who are nimble in adapting and responding to emerging issues.

The first step to finding common ground started with months of pre-planning to figure out how each Committee could accomplish their usual business meeting functions and construct general sessions that appealed to everyone.

Organizational and administrative decision-making amongst 50+ members, as well as keeping up with, and responding to, research, policy, regulatory, and legislative changes on the local, state, and federal level, is a constant time juggling act. Since individual Committees get together only once a year as a group, the agendas get packed with presentations, breakouts for dialogue, and structured social

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- Incorporate freight and environmental considerations into transportation projects, programs, and policies.
- Locate available resources and tools to integrate freight and environmental considerations.

The target audience for the course is broad. It includes transportation environmental, freight planners and engineers from FHWA, State DOTs, as well as professionals from MPOs, local jurisdictions and other Federal agencies. Additional participants may represent port authorities, shippers, carriers, and other private sector stakeholders. The lessons learned from this course will benefit many as the importance of freight movement and especially freight management continues to increase.

If you are interested in registering or requesting the course, please log onto the NHI website at [www.nhitraining.dot](http://www.nhitraining.dot) or call 703-235-0534.

If you have questions on the content of the course, please contact either Spencer Stevens (FHWA Office of Planning) at 202-366-0149 or [spencer.stevens@dot.gov](mailto:spencer.stevens@dot.gov) or Carol Keenan (FHWA office of Freight Management & Operations) at 202-366-6993 or [carol.keenan@dot.gov](mailto:carol.keenan@dot.gov).

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time – organized meals, field trips, and poster sessions/info booths. Neel Vanikar of the FHWA Office of Environment and Planning (HEP) aptly shuttled information and ideas between FHWA HEP and the Planning Committee in an effort to ensure coordination between FHWA directives/initiatives and the needs of our State partners.

Per our FHWA Strategic National Leadership Goal – we are to identify emerging issues and lead the development of solutions to address national transportation needs. These annual meetings offer an excellent opportunity to communicate the Agency’s perspectives on new requirements, program initiatives, and positions on emerging issues. April Marchese, Director of the Office of Human and Natural Environment, shared aspects of the climate change program that appealed to all committees: how can environmental practitioners handle climate change in NEPA; what might maintenance staff do to reduce CO<sub>2</sub> emissions; and, how will we inventory and maintain transportation assets in the face of sea-level rise and increased storm intensity. Our ability to lead is dependent on listening and asking lots of questions of the early adopters being influenced by local and state initiatives. From these exchanges, we can support early adopters and figure out how to support, yet to be tried, innovations via our Research Programs.

In other areas such as water quality and vegetation management it was evident that past efforts to seed innovations have paid off. Sprinkled throughout the presentations were references to past FHWA program efforts and technical assistance. Webinars, award programs, training classes and the co-sponsoring and convening peer exchanges have built the capacity for the State DOTs to reach advanced levels of stormwater treatment and optimize investments. FHWA’s coalition with Water Environment Research Foundation (WERF), the Environmental and Water Resources Institute (EWRI) of the American Society of Civil Engineers (ASCE), the Environmental Protection Agency (USEPA) and the American Public Works Association (APWA)

to fund and manage the International Stormwater Best Management Practices (BMP) Database has proved successful. The database includes over 300 studies and the website has been recently updated to make it easier for stormwater professionals to evaluate best management practices (BMPs), improve BMP selection, design and performance. The database is currently accessible through the website at <http://www.bmpdatabase.org>.

Information exchange with our USACE and EPA liaisons, and Water and Ecosystems team presentations at conferences have helped with the transition to a watershed based, wetland banking system to mitigate for the impacts of our projects on aquatic resources. Bonnie Harper Lore’s book, ***Roadside Weed Management***, got kudos from maintenance presenters. While the push for low maintenance native plants continues, many states are moving on to figure out how to use the right-of-ways for carbon sequestration and energy production.

You know common ground has been met when, after the presentations, representatives of each committee were seamlessly carrying on a small group circle Q&A, in front of the plenary audience. You know interdisciplinary relationships have formed and folks are sharing a common language and working toward shared goals. Peer exchange, “fish bowl style”, occurred right before our eyes.

Each Committee also arranged concurrent technical sessions on specific issues. FHWA staff and our Headquarters Resource Agency Liaisons were called on to serve as panelists in these sessions. Carol Adkins demonstrated the FHWA Web Based Biological Assessment tool for endangered species consultations; Mike Savonis explained air quality compliance options; Lamar Smith explained the new 4(f) rule; and, Jennifer Moyer of the USACE provided updates on their rules and recent court cases.

As with any national conference, the presenters must take time to describe the context and circumstances that were at play in influencing a

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project or program activity. However, each year there is always some national event that has captured the collective interest of the audience and needs little context setting. This event has been replayed over and over again on CNN, examined in the national press, and condemned or condoned by Congress. Practitioners are anxious to hear the behind-the-scenes details from their colleagues going through the experience. This year Frank Pafko of MN DOT described the environmental streamlining lessons learned from the I-35 W Bridge Collapse. I expect everyone in the audience was thinking about “what if” scenarios in their own backyard, and what proactive steps they can take.

The balance of time was spent in small break-out sessions to conduct committee business. The SCOE divides up the breadth of issues into 4 Subcommittees: Air and Energy, Natural Systems and Ecological Communities, Environmental Process and Analysis, and Community and Cultural Resources. It was very beneficial for FHWA participants to attend, observe, and track the work of the Subcommittees. Each Subcommittee reviewed and discussed research priorities - this timed well with the FHWA Federal Register notice soliciting comments on lines of environmental research to pursue via STEP (FHWA research funds). There was time on each subcommittee agenda to obtain focus group feedback on new tools or initiatives. Cassandra Allwell of Volpe demonstrated the new Environmental Competency Tool. MaryAnn Naber gained her subcommittee’s consensus on phasing solicitations for pilot projects to address early consideration of cultural/historic issues in planning, until after an NCHRP synthesis report

on the subject comes out. KLynn Berry of the FHWA Resource Center Environment Team took the opportunity at each subcommittee meeting to outline FHWA’s national initiative for Context Sensitive Solutions and promote the website [www.contextsensitivesolutions.org](http://www.contextsensitivesolutions.org).

The sub-committees came back as a group for the closing business meeting. FHWA HEP Office Directors were given an opportunity to communicate important updates, take questions, and identify future opportunities to interact w/SCOE on policy matters. HEPE prepared a handout for the meeting that summarized all the current activities associated with National Program Areas.

For what the future holds...look to the SCOE break out groups on Transportation Authorization – sustainability, energy and climate change; project and program development and delivery; and performance measures. I expect next year that we will be engaged in validating emerging good practices in these subjects, figuring out how to leverage resources to accelerate national acceptance, and praising and offering the metaphorical band-aid to the colleague who has been on the bleeding edge of an issue.

At the tour and dinner event at Monterey Aquarium, we all had the ultimate common ground (sea) experience – awe and wonder at the natural world and concern about how we are doing in helping the built, human, and natural worlds co-exist. While Caltrans had us exploring the depths of the ocean, perhaps the Oregon DOT will have us scaling the peak of nearby Mt. Hood at next year’s meeting in Portland.



*Continued from page 3.*

**FHWA Hosts Federal Interagency Meeting on Climate Change, Transportation and Land Use.**

On June 5, FHWA hosted a meeting with several other Federal agencies to discuss overlapping roles and responsibilities with respect to transportation and land use that could play a role in reducing greenhouse gas emissions from transportation sources. Senior representatives from the EPA, DOE, USDA, HUD, DOI, and the USACOE participated in the meeting. As a result of the meeting, a Federal interagency working group was formed to begin formulating coordinated activities to address climate change. The next meeting of the interagency group will be held later this fall.

**EPA Releases Draft Report on Land Use Scenarios and Climate Change.**

On July 10, EPA issued a draft report titled "Preliminary Steps Towards Integrating Climate and Land Use: The Development of Land-Use Scenarios Consistent with Climate Change Emissions Storylines." The report is an effort to develop an integrated climate and land-use scheme to mitigate climate impacts, and to encourage smart development practices that limit impervious surfaces. The report can be found at:

<http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=153506>.

**New Mexico DOT selected for Carbon Sequestration Pilot Project.**

After a nationwide search, the Offices of Natural & Human Environment (HEPN) and Project Development and Environmental Review (HEPE) have selected the New Mexico DOT for a pilot project related to climate change. The goals of the project are to quantify the amount of carbon that can be captured (sequestered) using native vegetation management on DOT lands, and estimate the revenue that could be generated through the sale of "carbon credits." Marketable carbon credits could include not only carbon sequestered in plants, but also emissions reductions resulting from reduced mowing and other management actions. HEPN and HEPE have worked closely with the Offices of Real Estate Services, Asset Management, Infrastructure and Safety during project conception to ensure adherence to FHWA policy. The pilot is scheduled for completion at the end of CY2008. Results will be shared with Division offices and state DOTs, and could help inform future transportation and climate change legislation. Contact Steve Earsom

([steve.earsom@dot.gov](mailto:steve.earsom@dot.gov) or 202.366.2851) for more information.

**MPO Peer Workshop on Planning for Climate Change.** Representatives from 13 MPOs shared their experiences and challenges in their efforts to integrate climate change considerations into the transportation planning process at a FHWA funded workshop hosted by the Puget Sound Regional Council (PSRC) on March 6 and 7 in Seattle, WA. Each participant was given an opportunity to report on activities and approaches to climate change within their individual MPO. The full report/summary of this workshop is posted on the AMPO web site at

[http://www.ampo.org/assets/library/171\\_workshopclimatechgseattle.pdf](http://www.ampo.org/assets/library/171_workshopclimatechgseattle.pdf). Two additional climate change peer exchanges have been scheduled. The first is in Albany, NY on Sept. 24, 2008 and the second is on Oct. 27, 2008 in Seattle, WA – prior to the start of the AMPO Annual Meeting.

**New Transportation Planning/Climate Change Report.** A new report titled "Integrating Climate Change Considerations into the Transportation Planning Process" was posted on the HEP web site in August. Many DOTs and MPOs are beginning to incorporate climate change issues into their transportation plans including explicit references to the effects of transportation on climate change and the role of transportation in mitigating these effects. Plans are also beginning to address the threats that climate change poses to the transportation system and potential adaptive responses. The report explores the possibilities for integrating climate change considerations into long range transportation planning processes at state DOTs and MPOs; reviews the experience of a number of DOTs and MPOs that are already incorporating climate change into their planning processes and identifies their successes as well as challenges; and reviews the federal planning factors, regulations and statutes that govern transportation planning to determine where and how climate change could be considered. The report can be found on the Planning, Environment & Realty (HEP) homepage at:

<http://www.fhwa.dot.gov/hep/climatechange/index.htm>.

**If you have any suggestions for inclusion in future issues of *Transportation and Climate Change News*, please send them via email to Rob Kafalenos at [Robert.Kafalenos@dot.gov](mailto:Robert.Kafalenos@dot.gov).**

# What's Going On?

Here are a few of the upcoming events of interest to the environmental community:

## October 2008

October 21 - 25  
National Preservation Conference  
Tulsa OK  
<http://www.eshow2000.com/nthp/>

October 27 - 28  
TRB's Impact of Changing Demographics on the Transportation System  
Washington, DC  
<http://quest.cvent.com/EVENTS/Info/Summary.aspx?e=cbf6ef57-e85b-4aa5-80e7-62f460007f65>

October 28 - 29  
TRB's Rethinking Transportation for a Sustainable Future  
Louisville, KY  
<http://www.rethinkingtransportation.com/>

## November 2008

November 2  
Daylight Saving Time Ends

November 13 - 14  
Road & Dust Management Practices and Future Needs Conference  
San Antonio TX  
[www.meetingsnorthwest.com/dustconference.htm](http://www.meetingsnorthwest.com/dustconference.htm)

November 13-14  
Expanding Our Constituencies Workshop  
Little Rock, Arkansas  
[http://www.nationaltrailspartnership.org/08\\_NST\\_wk\\_s.asp](http://www.nationaltrailspartnership.org/08_NST_wk_s.asp)

## January 2009

January 11-15  
Transportation & Research Board Annual Meeting  
Washington, DC  
<http://www.trb.org/meeting/2009/default.asp>

## September 2009

September 13-17  
Int'l Conference On Ecology & Transportation  
Duluth, MN  
[www.icoet.net](http://www.icoet.net)

**For additional conferences and events, see [www.fhwa.dot.gov/hep/calendar.htm](http://www.fhwa.dot.gov/hep/calendar.htm).**



U.S. Department of Transportation  
Federal Highway Administration



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##### **Production Schedule:**

Due to our Quarterly publication schedule, all article submissions for future issues are due to the Editor-In-Chief by the 10th of March, June, September, and/or December

##### **Getting the news:**

\*If you would like to receive this newsletter electronically, please send your email address to: [marie.roybal@dot.gov](mailto:marie.roybal@dot.gov)