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A Note from the Leader of the Planning Community of Practice

This month I would like to share some thoughts I presented to Corps project managers at the 2007 Program and Project Management Community of Practice conference recently held in St. Louis, Missouri.

Never before in the nation's history has there been a time where the role of the Corps has taken on greater importance and significance. Due to a variety of factors (aging infrastructure; competing uses of water; climate change; increased emphasis on environmental restoration; etc.) the Corps is being called on to provide more services to the Nation than ever before, while at the same time accomplishing its missions with a smaller workforce.

This necessitates that project managers and planners work together in closer coordination to ensure that the Corps delivers on the projects that it says it will deliver. Frequently, the urgency to "Git-R-done" demands a focus on today's projects and problems.

My primary message to our project managers was that "Git-R-done" must have a future component. We must have dedicated capabilities and skills in the Corps to ensure that we continue to assist the Nation identify and solve future water resources problems.

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This is about the relevance of the Corps. In this context, the planning skill set is essential. It is imperative that our organization recognizes its importance and ensures that the skill set is built, sustained and honed.

More and more programs and projects are being conceived in a watershed context within a collaborative environment, where the Corps works closely with other federal, state, and local project partners. These conditions necessitate that Corps project managers and planners maintain and hone their skills in the areas of communication, partnering, and establishing strategic relationships with project partners and stakeholders.

Both planners and project managers have a shared responsibility to not only execute today's projects, but to plan for the future. I am pleased to see the planning and project management communities working closely together to carry out the important work.

Thanks for the very important contributions you make every day.

Tom Waters Planning CoP Leader Thomas.W.Waters@usace.army.mil

WORDS FROM THE EDITOR

In this month's issue of *Planning Ahead*, two members of the Corps' National Center of Expertise for Inland Navigation (PCXIN), **Wes Walker** and **Mark Hammond** describe the roles and activities of the Center in the Corps' examination of issues associated with transportation system analysis. The Center's ability to draw on the talents of individuals both locally at its Huntington, West Virginia headquarters and at other offices within the Corps and outside the agency reflects PCXIN's multidisciplinary approach to addressing inland navigation issues.

The second article, written by **Jeff Tripe** of the Fort Worth District and a member of the current class of Planning Associates, discusses the Planning Associates travels to Portland, Oregon and Davis, California to learn about the Corps hydropower program, endangered species activity, recreation activity, and flood damage reduction program.

Other items of interest in the current newsletter include information on an upcoming symposium on the challenge of managing vegetation along California's Central Valley levees. The symposium will be held in Sacramento, CA on August 28 and 29 and will bring together scholars, engineers, and policy makers and the federal, state and local levels to examine the science, review on the ground local case studies and discuss policy issues related to this topic.

Thank you for your continued interest in, and support of, *Planning Ahead*.

Ken Lichtman, Editor Institute for Water Resources Kenneth.e.lichtman@usace.army.mil

PLANNING COP NEWS

I encourage all members of the Planning Community of Practice to visit the **Planning CoP's EKO web site** at https://eko.usace.army.mil/usacecop/planning/ as we work on making it a useful and vital tool for Corps Planners. It will not replace the existing publicly accessible web site, but will supplement it and contain information such as names/phone numbers or drafts of items such as regulations and guidance that is beneficial to Corps planners, but not suitable for the dissemination to the general public.

Included on the site are announcements and an events calendar that can offer a quick means of finding suspenses and instructions on items like applications for the Planners' Associates (PA) Program, the National Planning Awards, etc. There is currently a single forum for discussion but we hope to expand the number in the near future.

We are in the process of including the research papers developed by PAs and by those completing the Masters of Water Resources programs as means of fostering discussions on the forum(s) and using our wide diversity to gain new perspectives and insights on the challenges and opportunities we face.

We encourage the leaders of the PCX's and sub-CoPs to utilize the site as a means of communication with planners throughout the Corps.

In the future, we will include a registration feature that will allow us to better maintain rosters of the CoP and sub-CoPs and the interests of our members.

Please check out the site and check it frequently as we will be using it as one (but not the only one) of the PCoP's communication tools. Please send your ideas and suggestions for improvement to Henri Langlois at Henri.A.Langlois@usace.army.mil.

THOMAS W. WATERS, PE, SES Chief, Planning and Policy Chief, MVD Team HOUSACE



FEATURED ARTICLES

The National Center of Expertise for Inland Navigation

By Wes Walker, Supervisory Regional Economist and Mark Hammond, Regional Economist and Regional Technical Specialist (PCXIN)

In August 2003, Headquarters U.S. Army Corps of Engineers (HQUSACE) designated the national Planning Center of Expertise for Inland Navigation (PCXIN) to the Great Lakes and Ohio River Division (LRD). LRD designated the LRD



Navigation Planning Center (the Center) as the location of

(the Center) as the location of the PCXIN, though the Center encompasses the talents and expertise of a virtual team of engineers, economists, geographers, planners, environmental specialists, operations research analysts and statistical assistants throughout the Corps, other federal agencies, and regional university centers.

The primary mission of the PCXIN is to improve the quality and timeliness of Corps inland navigation planning studies and products. All aspects of the navigation program benefit from the activities and capabilities of the PCXIN. While the Center is vital for successful completion of feasibility reports and project authorization, its support of pre-construction engineering and design (PED), construction and operations and maintenance (O&M) activities is equally important. The PCXIN was established to support the Corps' inland navigation planning needs at both the national and international levels.

The Center's recently completed Ohio River Mainstem System Study (ORMSS) was a landmark look at the Ohio River's aging infrastructure from a watershed perspective. The study successfully integrated engineering reliability with economic and environmental consequences to quantify risks associated with aging infrastructure. The Center is currently working on a maintenance investment study for the Great Lakes and St. Lawrence Seaway. Transport Canada and the Detroit District (LRE) are co-leads for the study. The Center is also managing the independent technical review (ITR) and external peer review (EPR) for the Upper Mississippi River Navigation Ecosystem Sustainability Project (UMR-NESP) and the Upper Ohio River Feasibility Study.

Other roles and responsibilities of the PCXIN include:

- Develop, maintain, and refine navigation and economic data bases and computer models to improve evaluation techniques required to conduct navigation studies;
- Provide inland navigation planning consulting services to Corps districts and major subordinate commands, non-federal interests and international customers;
- Work with the Navigation Economic Technologies Program (NETS) to establish research and development priorities for Corps inland navigation planning;
- Implement the certification process for all inland navigation planning models as defined by EC 1105-2-407:
- Conduct key analytical components of inland navigation planning studies, or entire studies, as determined by higher authority;
- Coordinate the development of and participate in training related to inland navigation planning (i.e. Planning Associates);
- Provide advice to HQUSACE, Corps' laboratories and other stakeholders on significant regional and nation-wide inland navigation planning issues;
- Collect and process domestic waterborne commerce statistics for vessel operators headquartered within LRD, and transfer the traffic data to the Waterborne Commerce Statistics Center (WCSC) in New Orleans for inclusion in the national database;
- Partner with the Navigation Data Center (NDC) to maintain and improve processes and supporting databases involved in the collection and processing of navigation data;
- Provide LRD Districts with navigation budget EC metrics on an annual basis;
- Supplement HQUSACE staff in policy compliance review for inland navigation planning as requested;
- Sponsor and coordinate Inland Navigation Community of Practice (CoP) activities;
- Maintain a web site <http://
 inlandwaterways.lrh.usace.army.mil/> displaying capabilities, activities and products.

The national PCXIN is working to develop and expand its national capabilities by broadening efforts at teaming with regional universities and strengthening the Inland Navigation Planning Community of Practice. To that end, Regional Technical Specialists in LRD and the Mississippi Valley Division have teamed to host a conference that will be held this September 19 and 20



immediately following the Smart Rivers 2007 Conference.

Presenters will discuss topics that include: the current state of the inland waterways, waterways' role in addressing national transportation issues, asset management, OMBIL and navigation budgets, current policy guidance and legislation, the economic research agenda, and discussions on specific modeling efforts. Additional details on the workshop are provided in the following announcement.

Inland Navigation Workshop Louisville, KY September 19-20, 2007

The Corps' Planning Center of Expertise for Inland Navigation (PCXIN) will be holding a workshop on September 19 and 20 at the Seelbach Hilton in Louisville, KY immediately following the Smart Rivers 2007 Conference.

The two-day workshop will focus on the role of inland

waterways and the management of inland waterway assets. It will engage participants in discussions on new guidance affecting inland navigation studies and the Corps agenda for research, data and model development. The **Inland Navigation Workshop** is hosted by the Inland Navigation Community of Practice and will feature a variety of policy and technical experts both within and outside the Corps.

For more information on the workshop and a copy of the detailed agenda, please contact Mr. Mark Hammond at mark.r.hammond@lrh01.usace.army.mil.

Stream and Riparian Corridor Restoration Workshop Springdale, AR September 10-13, 2007

The U.S. Army Engineer Research and Development Center (ERDC), and the Arkansas Game and Fish Commission announce a 3.5-day workshop scheduled for Sept 10-13, 2007 in Springdale, Arkansas. This will be an excellent opportunity to look at constructed and disturbed stream and riparian systems in a range of conditions and settings.

The objectives of this workshop are to introduce the methodology and procedures for initiating, planning, analyzing, and ultimately designing long-term sustainable river corridor and stream stabilization/restoration projects.

Innovative, environmentally sensitive, and cost-effective approaches to aquatic and riparian habitat will be discussed. Comprehensive case studies will also be presented. Two days of field trips to local stream sites will be conducted. Rain gear and appropriate field clothes are recommended for the field trip. Two weeks before class registered participants will be e-mailed instructions on how to download class notes from a dedicated FTP site. Participants can then print & bring notes to class, or bring a laptop.

The cost of the workshop is \$50.00. For additional information concerning the workshop, contact the Arkansas Game and Fish Commission, Russellville Regional Office, 1266 Lock and Dam Road, Russellville, AR 72802, phone: 1-877-967-7577 or (479) 967-7577.

Water Research Symposium Oklahoma City, OK October 23-25, 2007

The Oklahoma Water Resources Research Institute will be convening its annual Water Research Symposium on October 23-25, 2007 in Oklahoma City, OK. Dr. Edwin J. Rossman, Assistant Chief of the Planning and Environmental Division at the Tulsa District office of the Corps of Engineers will be chairing a session on "Science and Policy." The session is multidisciplinary in nature

and is intended to focus on how the social and biophysical sciences contribute to managing water resources in the present and in the future. If anyone is interested in presenting a paper at the symposium, please contact Dr. Rossman at Edwin.j.rossman@usace.army.mil. For additional information about the Oklahoma Water Resources Institute's Water Research Symposium, please go to the following website:

http://environ.okstate.edu/OKWATER/index.asp



Planning Associates Update: Hydropower, Water Supply, Endangered Species Act, Recreation, and Flood Damage Reduction

By Jeffry A. Tripe, Fort Worth District

The adventures of the 2007 Planning Associates (PAs) continued during the month of June with tours of duty in the Pacific Northwest and California's Central Valley. Week one of the tour was in Portland, Oregon, which is home to the Northwestern Division (NWD), Portland District, and Hydropower Planning Center of Expertise. Davis, California and the Hydrologic Engineering Center (HEC) was the host for the second week of training.

The PAs were greeted with a warm welcome from Colonel Thomas O'Donovan, Portland District Commander, and the hosts of the Hydropower, Water Supply, Endangered Species Act, and Recreation training course, Ms. Andrea Walker of USACE HQ, and Mr. Jeremy Weber of the Portland District. During the icebreaker, the PAs were not only introduced to some of the course instructors but also to the Pacific Northwest culture and flavor with a sampling of locally caught wild salmon, Tillamook white cheddar cheese, and regionally produced wines.

Hydropower was the topic of discussion for the first day of training at the Portland District office. Mr. Kamau Sadiki of Headquarters provided some interesting facts regarding the scope of the Corps of Engineers hydropower mission, which produces approximately \$1.5 billion in annual revenue; over 21,000 megawatts of electricity; 75 major hydropower plants in 16 Districts; and is the owner and operator of 24% of the nation's hydropower generating capacity. Mr. Mike Roll and Mr. James Kerr (Portland District), and Mr. Brian Shenk (Northwest Division) provided an overview of the two national hydropower centers of expertise that maintain capability within the Corps, the Hydroelectric Design Center (HDC) and the Hydropower Analysis Center (HAC). Mr. Ron Rodewald of the Bonneville Power Administration (BPA) completed the day's coursework with discussion on how electricity is marketed and transmitted throughout the Pacific Northwest via the Bonneville Power Administration (BPA) and the Federal Columbia River Power System.

Day two centered on the Corps Water Supply mission with instruction from Ms. Jan Hotubbee of the Tulsa District, Mr. Ted Hillyer from the Institute for Water Resources (IWR), and Mr. Jim Fredericks of NWD. The Corps has 184 lakes with water supply storage for

municipal, industrial, and irrigation uses. The Planning Center of Expertise for Water Supply and Reallocation is managed through the Southwestern Division (SWD) and is the leader in water supply storage with 5,071,838 acrefeet. To gain a better understanding of water supply and the reallocation process, the class completed the day by performing a water reallocation exercise on the "Always Full Lake and Dam".

On the third day, the PAs received a break from class work and piled into a bus to view and enjoy local Corps projects and points of interest. The winding road through the Columbia River Gorge to our first stop, Multnomah Falls, was a treat in itself with views of the Columbia River, Mount Hood, and the Yakima basalt mountain sides. Multnomah Falls is the second highest year-round waterfall in the nation after Yosemite Falls with an upper falls of 542 feet and a lower falls of 69 feet. There is an



Enjoying the view below the Benson Footbridge, at Multnomah Falls, Oregon

American Indian legend that explains the origins of the falls. In this legend, a tribe was infected with a deadly disease and was in danger of dying. The daughter of the chief went to the top of a cliff and prayed to the Great Spirit to find how she could stop the epidemic. She was told that to stop the epidemic, she would have to throw herself off the cliff and sacrifice herself. The next day, the chief found his daughter's body at the bottom of the cliff. He wept bitterly and cried out to the Great Spirit to give him a sign if this sacrifice was not in vain. At that moment, water began to fall from the top of the cliff, forming Multnomah Falls. The legend also says that under the right conditions, you can see the daughter's face in the waterfall.

The second stop was at the Columbia River Treaty Fishing Access Site and Celilo Village, where Mr. Louis Pitt, Jr. from the Confederated Tribes of the Warm



Springs Reservation provided some historical perspective on how American Indians were impacted with the development of the river basin. Prior to the completion of The Dalles Dam and the inundation of Celilo Falls in 1957, the area was a major cultural and trading center that thrived on salmon fishing. The commercial and subsistence fishing practices of the Nez Perce Tribe, Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes of the Warm Springs Reservation, and Confederated Tribes and Bands of the Yakama Nation were impacted by the loss of these historical fishing sites. To mitigate Federal water project impacts on treaty reserved fishing access rights, the Corps has substantially completed 29 treaty access fishing sites. In addition, due to substandard material on the first relocation of Celilo Village, the Corps has begun redevelopment with completion of a new tribal long house in 2006, water, sewer and temporary housing in 2007, and 14 permanent houses in 2008.

The PAs next stop was to Columbia Hills State Park, also known as Horsethief Lake State Park, to view some of the oldest petroglyph and pictograph artwork in the Northwest. Due to the construction of The Dalles Dam, existing artifacts would have been inundated, so the Corps worked with local tribes and the state to develop plans for relocating the artwork to a safe and secure location. Following the tour of the park, the PAs took



A relocated petroglyph at Columbia Hills State Park, Oregon

their lunch break at the historic Baldwin Saloon, which was established in 1876. The saloon has a storied history including uses as a brothel, restaurant, steamboat navigational office, warehouse, coffin storage site, and a state employment office.



Hydropower turbine located at the Bradford Island Visitor Center, Bonneville Lock and Dam, Oregon

To complete the field trip, the class traveled to the Bonneville Lock and Dam to view hydropower and endangered species conservation in action. Corps park ranger, Mr. Ronald McDonald gave the class a tour of the facilities as well as an in-depth narrative of the project's history. The PAs were able to view the Bradford Island Visitor Center, Bonneville Fish Hatchery, fish viewing and counting building, sea lamprey and fish ladders, the generator bay, and the hydropower control room.



Outlet gates (background) and fish ladder (foreground) at the Bonneville Lock and Dam, Oregon

Day four of the training continued with the endangered species module. Instructors included Mr. Lonnie Mettler of the Walla Walla District, Ms. Jane Ledwin from the U.S. Fish and Wildlife Service (USFWS), Mr. Gary Bunn from NWD, Mr. Dave Ponganis from NWD, Ms. Kathryn Harris from the Portland District, and Ms. Lynne Krasnow of the National Marine Fisheries Service. In 2006, the Corps spent approximately \$264 million for threatened and endangered species related work. Of the ten species with the highest reported expenditures in 2004, seven were fish species located in the Pacific



Northwest. Class work focused on an overview of the Endangered Species Act of 1973, Section 7 consultation, USFWS coordination, regulatory perspectives, and the "God Squad", which is made up of representatives of various resource agencies that have the final decision on species listing and delisting. A lively and informative panel discussion concluded the day's activities.

The final day of class work involved discussion on the Corps role in recreation. Ms. Andrea Walker provided an introduction to recreation policy/planning and a case study on the Patapsco River Open Space Study. Mr. Don Dunwoody of NWD provided a brief history of the Corps recreation mission and current statistics for operating facilities. The take home message was then even though the Corps owns only 2% of all Federal land; Corps recreation sites have the highest visitation rates of any other Federal agency. Mr. Jim Fredericks provided discussion and exercises on the different types of recreation economic analysis methods. Mr. Matthew Rea of the Portland District provided information and a case study regarding recreation measures in ecosystem restoration projects.

During the weekend break before starting the second half of the training, several of the PAs took advantage of the opportunity to view several of the tourist destinations in the Central Valley and along the California coast. Any trip to the Central Valley is not complete without a tour of a local winery and complementary wine tasting. There was a unanimous decision to stop at the world famous Korbel Champagne Cellars. Did you know that each glass of champagne has approximately 40 million bubbles?

The next stop was to view the redwood forests at the Armstrong Woods State Park. While at the park, we



A 1400 year old redwood tree at Armstrong Woods State Park, California that fell during the San Francisco Earthquake of 1906

were introduced to Colonel Armstrong, standing 308 feet tall and over 1400 years old. Our final destination for the day was a trip to the California coast with grandiose views of the Pacific Ocean.

The second week of training occurred in Davis, California, home to HEC, the designated center of expertise for technical areas of surface and groundwater hydrology, river hydraulics, and reservoir system analysis. The course was hosted by Mr. Clark Frentzen of the South Pacific Division (SPD) and Mr. Roger Setters of Louisville District. Instructors throughout the week included our course owners. Mr. Tom Evans from HEC, Mr. Boni Bigornia of SPD, Ms. Beth Faber of HEC, Mr. Fauwaz Hanbali of HEC, Mr. Jay Pak of HEC, Mr. Larry Buss of Omaha District, Mr. Gene Barr of Huntington District, Mr. Gary House of Sacramento District, Mr. Kevin Knight of San Francisco District, Ms. Carol Hollaway from IWR, Mr. Pete Rabbon from IWR at HEC, Ms. Laurie Parker of Sacramento District, Mr. Ken Zwickl from Headquarters, and Ms. Alicia Kirchner from the Sacramento District.

Day one of the course centered on background material, the history of Flood Damage Reduction (FDR) and how the Corps viewpoint and terminology has evolved from the original use of "Flood Control" to the current uses of "Flood Damage Reduction" and "Flood Risk Management". The class learned that the majority of flood damages are caused by the smaller more frequent floods versus the larger infrequent events, due primarily to the fact that there are so many people currently living in floodplains. The class was introduced to the large variety of models, programs, and analysis tools that HEC developed to evaluate hydrologic, hydraulic, reservoir, watershed and other characteristics for Corps projects. Additional information regarding exceedence probabilities, levee certification, and dam safety assurance was also provided. Following the day's activities the PAs and course instructors enjoyed dinner at the Sudwerk Restaurant in Davis.

Non-structural flood reducing and proofing measures were the topics for day two of the FDR module. A variety of non-structural measures such as structural elevation, buyout/relocation, dry flood proofing, wet flood proofing, flood warning systems, and minor flood walls/levees were examined and discussed throughout the day. Non-structural measures use a different approach to FDR as they aim to move potential damages away from floodwaters rather than traditional structural measures that try to alter/move floodwaters away from potential damages. Examples of multipurpose projects that



incorporate FDR, ecosystem restoration, and recreation measures were also discussed.

The third day of training was spent out in the field viewing active FDR projects within the Sacramento area. The first stop was at the Black Butte Lake project office where Mr. Brad Long provided a history of the project and a tour of the facilities.



Tour of the Black Butte Dam, California with Mr. Brad Long, Sacramento District and Mr. Clark Frentzen, South Pacific Division

The second stop was at the City of Tehama, California where non-structural measures were incorporated into a Section 205 FDR project to reduce flood damage risk from the Sacramento River. Ms. Carolyn Steffan, City of Tehama, and Mr. Ron Warner, Tehama County, discussed the main points of the planning and implementation phases of the project from a sponsor's viewpoint. The overall result of elevating the structures



Ms. Carolyn Steffan, City of Tehama, California talks about the non-structural measures used in the city's Section 205 project (note the elevated home in the background)

was an improvement in the city's score under the National Flood Insurance Program (NFIP) Community Rating System (CRS).

PAs and local sponsors from Hamilton City and various resource agencies had lunch at the El Patio Restaurant to discuss background material on the Hamilton City FDR and Ecosystem Restoration Project. Following lunch the group took a trip to a portion of the project area with further discussion on project features. The main component of the project is a setback levee that would increase flood protection and reconnect approximately 1,500 acres of native vegetation to the floodplain. Mr. Burt Bundy, Sacramento River Conservation Area Forum, also discussed his agency's involvement in projects within the Sacramento River basin to protect, restore, and enhance both fisheries and riparian habitat near the Sacramento River.

Discussion of non-structural measures and individual case studies was continued during day four of the training. Mr. Kevin Knight provided a discussion on non-typical FDR benefits that are typically overlooked and underutilized when justifying a project. Examples of these types of costs include: increased healthcare costs, evacuation costs, increased living expenses, damages to environmental resources, search and rescue costs, temporary shelter needs, debris removal, traffic control, and business losses. These overlooked benefits can represent 25-35% of the benefit base. In addition, Other Social Effects (OSE) due to flooding such as drowning, infection, homicide, injury, vandalism, and fraud are hard to quantify. Mr. Pete Rabbon provided some information on the National Flood Risk Management Program. One key discussion point from his presentation was that based on the Water Resource Development Act (WRDA) of 1990 - Section 308 - Floodplain Management, no FDR



Mr. Larry Buss, Omaha District, discusses a nonstructural flood damage reduction measure at the course in Davis, California



benefits should be claimed for items or structures that have been placed in the 100-year floodplain after 1991.

The final day of class work concluded with talks and panel discussions on "geriatric" projects within the Corps, the Planning Assistance to States program, and flood risk management in the United States. Some of the key points to close out the week on FDR included: 1) a large percentage of dams, levees and other Corps infrastructure have or will soon exceed their project life ("geriatric projects"), resulting in the need for significant evaluation and a high potential for investment of future funds, 2) the Planning Assistance to States program can be a useful tool to open the door to the Corps for additional projects and studies under other authorities, and 3) the problem of flooding/hurricane amnesia - where after enough time has elapsed following a significant flood/hurricane event, communities will eventually rebuild in the same flood/hurricane prone areas.

On behalf of the 2007 Planning Associates, I would like to thank the course owners, instructors, panel members, tour guides, and people behind the scenes who helped make the Portland and Davis training sessions a success.

We are also looking forward to the next PA trip which will be in Anchorage, Alaska to discuss small boat harbors, intergovernmental affairs, and to present our draft Critical Think Practicum.

Where are the PAs in their year long journey?

The bold items show the courses just completed.

- 1. Cultural Resources Management and Tribal Affairs
- 2. Team Building, Leadership, and Communication
- 3. Washington DC Experience
- 4. Deep Draft Navigation
- 5. Inland Navigation
- 6. Hurricane and Storm Damage Reduction
- 7. Ecosystem Restoration
- 8. Endangered Species Act, Hydropower, Water Supply, Recreation
- 9. Flood Damage Reduction and Hydrologic Engineering
- 10. Small Boat Harbors and Intergovernmental Affairs
- 11. Engineer Research and Development Center
- 12. Watersheds

SMART RIVERS 2007 CONFERENCE

Registration is now open for the **Smart Rivers 2007 Conference** to be held on September 16-19, 2007 in Louisville, KY. The conference will focus on "Positioning Inland Navigation as a Powerful Link in the Global

Supply Chain." Professionals interested in sharing knowledge and experience in order to achieve a better and more efficient integration of inland waterways (rivers and channels) into an integrated intermodal transport system are invited to register and attend this important conference.

The three-day conference will include a strong technical agenda and a preconference workshop on "The Future of the US Inland Navigation System -Meeting the Challenges" (see a description of the workshop on the next page). Tours will be offered to the McAlpine Locks and Dam, Jeffboat Shipyard, Falls of the Ohio, and on a Historic Steamboat Cruise on the Ohio River. The conference will also feature industry exhibits and



McAlpine Locks and Dam

networking events, and is expected to draw more than 200 port and waterway executives, policy and technical professionals from the U.S. and Europe.

The 2007 conference, organized by PIANC USA, will be the third in a series of international joint conferences on synergies for an efficient waterway system in Europe and the U.S.

For registration information and the detailed conference agenda, please go to http://www.pianc.us.



Technical Workshop: The Future of the US Inland Navigation System -Meeting the Challenges

This workshop will be held at the **Smart Rivers 2007 Conference** in **Louisville**, **Kentucky** on **Sunday**, **September 16**, **2007 from 1:00 pm to 5:00 pm**. The cost is \$150. Please register at: http://www.pianc.us

Course Instructors:

- Dr. William A. McAnally, *Mississippi State University*
- Nicholas Pansic, MWH & Chair, ASCE/COPRI Waterways Committee
- Charles Spitzack, U.S. Army Corps of Engineers
- Dr. Dennis Wichelns, *Hanover University*, *Indiana*

WHY ATTEND? A stimulating interactive workshop, to learn, share ideas, and explore the unique challenges facing the 12,000 miles of US waterways.

LEARN – The 10 guiding principles for sound design of navigation projects;

EXAMINE – Key performance metrics that measure multimodal systems and their impacts on waterway investment and management;

EXPLORE – Case studies of North American and European approaches to balancing functional, environmental, and financial interests to create sustainable waterways; and

SHARE – Ideas on how professional and personal ethics guide organizational behavior in waterway systems.

THE CHALLENGE: The U.S. inland waterway system is but one element of a large-scale intermodal transportation system that is planned, built, operated, and maintained through a unique public/private partnership. Unlike the more integrated European systems, overall U.S. policy is implemented through separate Federal government entities with overlapping yet divergent missions. This "portfolio" approach to asset management has led to inadequate and often misplaced infrastructure investment, and incremental advances that do not always serve the larger public good.

WHY METRICS MATTER: Current performance metrics for the US waterway system provide no guidance for balancing conflicting objectives of efficient transport of goods with environmental sustainability. What can be done to improve how we measure transportation system performance so that desirable outcomes are attained?

SUSTAINABLE NAVIGATION: Learn how the innovative Navigation and Environmental Sustainability Program (NESP) seeks to balance needed infrastructure improvements with ecological restoration and enhancement in the vital Upper Mississippi River System.

THE ROLE OF ETHICS: Do professional codes of practice and ethics provide sufficient guidance for decision-making on future investments in waterways? How do we properly recognize and address the competing interests of efficiency and environment? What guidance does our personal or professional code of ethical conduct provide when the decision is not clearcut? How will we know if the "right thing" is being done?

TAKE-AWAYS: Participants will receive a syllabus containing:

- Hard & Soft Copies of All Presentations
- American Society of Civil Engineers' Code of Ethics
- Fact Sheet on the US Inland Navigation System
- Primer on Transportation System Metrics, from Dr. McAnally's Report
- Handout on the Upper Miss NESP
- Though-Provoking Questions and Guidelines for Your Personal Action Plan

You will earn 4 Professional Development Hours (PDHs) for this course.

Questions?

Kelly J. Barnes, PIANC USA 703-428-9090 Kelly.J.Barnes@usace.army.mil



PLANNER'S FREQUENTLY ASKED QUESTIONS

What is the legitimate Unit Day Value for beach recreation?

Question: Regarding the Economic Guidance Memorandum on recreation benefits, is it legitimate to say that the Unit Day Value for a beach recreation is between \$3.32 and \$9.97?

Response: By Bruce Carlson, Office of Water Project Review

It's legitimate to recognize that the Unit Day Value (UDV) for generalized recreation falls within the range of \$3.32 to \$9.97, per EGM 07-03. Whether or not that would apply to a particular beach depends on the circumstances of the project being studied.

UDV is basically a short cut method that is only used under certain conditions, basically in smaller studies or in cases where the recreation component is not particularly important to the overall project. More rigorous methods would be required for bigger decisions. The conditions for selecting an appropriate recreation evaluation method are more explicitly discussed in ER 1105-2-100, Appendix E, starting on page E-184, including this excerpt from page E-187:

(a) Restrictions on UDV Use. The general principle for the recreational analysis is the more important recreation benefits are in plan formulation and/or plan selection and the more costly recreation components are, the more important is economically sound and empirically defensible analysis. The arguments for employing the user day approach can be based on two foundations: (1) Infeasibility for technical reasons or due to study cost considerations; or, (2) formulation or plan selection not materially affected by willingness to pay value or by expected visitation. Study cost considerations do not simply mean the least study cost method is chosen; quality of analysis and results must be considered. The reasons for choosing a particular benefit evaluation method must be documented in the planning reports.

When considering what the UDV numbers mean, remember that the benefit values in NED recreation benefit assessment represent NET value (consumer surplus) - net of expenses needed to support the experience, also reflecting only the incremental benefit of choosing this site rather than a substitute site, or alternately reflecting the increased quality to be created at an existing site, depending on the particulars of the project being assessed. So the benefit of adding a federal project is viewed only at this margin, not reflecting the entire willingness to pay, expenditure tally, or other information that you might see in a regional economic analysis, for example.

This is by no means a fully satisfactory explanation of the frequently complicated analytics of recreation benefit assessment - the procedures are much better explained in Appendix E as cited above. Note that documenting changes in visitation (shifts of visitors among sites, capacity and access, etc.) is often as challenging as identifying the value per visit.



EMPLOYMENT OPPORTUNITIES

These are but a few of the many available positions advertised on the Army's Civilian Personnel on line

website: http://cpol.army.mil

DEPARTMENT OF THE ARMY

Vacancy Announcement Number: WTKC07072998

Opening Date: July 05, 2007 Closing Date: August 06, 2007

Position: GS-12: Environmental Manager (0401), General Engineer (0801), General Physical Scientist (1301)

Salary: \$66,993 - \$87,094 Annual

Place of Work: US Army Engineer District, San Francisco, Engineering & Technical Services Div, Planning Br, Environ-

mental Sciences Section, San Francisco, CA

Position Status: Temporary Position Not to Exceed: 5 years -- Full Time

Number of Vacancy: 1

DEPARTMENT OF THE ARMY

Vacancy Announcement Number: SWKD07154037

Opening Date: July 26, 2007 Closing Date: August 15, 2007

Position: Supervisory Program Manager, YC-0340-3

Salary: \$96,148 - \$154,380 Annual

Place of Work: US Army Engineer District, Detroit, Planning, Programs and Project Management, Detroit, MI

Position Status: This is a Permanent position. -- Full Time

Number of Vacancy: 1

NSPS Position: This position is covered by the National Security Personnel System. For more information on NSPS, please

visit the website at http://www.cpms.osd.mil/nsps/index.html.

DEPARTMENT OF THE ARMY

Vacancy Announcement Number: SWGJ07929498R

Opening Date: July 11, 2007 Closing Date: August 10, 2007

Position: GS-14:Economist (0110), Geographer (0150), Social Scientist (0101)

Salary: \$92,865 - \$120,723 Annual

Place of Work: US Army Engineer Division, Great Lakes and Ohio River, Programs Dir, Programs Support Division, Cin-

cinnati OH.

Position Status: This is a Permanent position. -- Full Time

Number of Vacancy: 1

DEPARTMENT OF THE ARMY

Vacancy Announcement Number: NCFL07163986

Opening Date: July 30, 2007 Closing Date: August 19, 2007

Position: YA-3: Community Planning (0020), Social Scientist (0101), Economist (0110), Geographer (0150), Sociologist

(0184)

Salary: \$89,985 - \$150,645 Annual

Place of Work: US Army Corps of Engineers, Institute for Water Resources, National Capital Region - Group I, Alexandria,

VA

Position Status: This is a Permanent position. -- Full Time

Number of Vacancy: 1

NSPS Position: This position is covered by the National Security Personnel System. For more information on NSPS, please

visit the website at http://www.cpms.osd.mil/nsps/index.html.



DEPARTMENT OF THE ARMY

Vacancy Announcement Number: NCFL07163983

Opening Date: July 30, 2007 Closing Date: August 19, 2007

Position: YD-3:Environmental Planner (0401), Ecologist (0408), Civil Engineer (0810), Environmental Engineer (0819),

Physical Scientist (1301), Architect (0808) **Salary**: \$89,985 - \$150,645 Annual

Place of Work: US Army Corps of Engineers, Institute for Water Resources, National Capital Region - Group I, Alexandria,

VA

Position Status: This is a Permanent position. -- Full Time

Number of Vacancy: 1

NSPS Position: This position is covered by the National Security Personnel System. For more information on NSPS, please

visit the website at http://www.cpms.osd.mil/nsps/index.html.

DEPARTMENT OF THE ARMY

Vacancy Announcement Number: SWBG07123885

Opening Date: July 23, 2007 Closing Date: August 22, 2007

Position: Supervisory Program Manager, YC-0340-3

Salary: \$89,115 - \$143,088 Annual

Place of Work: US Army Engineer District, Rock Island, IL. Planning and Policy Br., Planning, Programs & Project Man-

agement Div., Duty Location: Rock Island, IL.

Position Status: This is a Permanent position. -- Full Time

Number of Vacancy: 1

NSPS Position: This position is covered by the National Security Personnel System. For more information on NSPS, please

visit the website at http://www.cpms.osd.mil/nsps/index.html.

DEPARTMENT OF THE ARMY

Vacancy Announcement Number: WTGH07135292

Opening Date: July 27, 2007 Closing Date: August 27, 2007

Position: Program Manager, YC-0340-2 **Salary**: \$56,301.00 - \$107,991.00 Annual

Place of Work: US Army Engineer District, Kansas City, Planning, Programs and Project Mgmt Div, Civil Works Branch,

Kansas City, MO

Position Status: This is a Permanent position. -- Full Time

Number of Vacancy: 1

NSPS Position: This position is covered by the National Security Personnel System. For more information on NSPS, please

visit the website at http://www.cpms.osd.mil/nsps/index.html.

TRAINING COURSES

Upcoming PROSPECT training courses of interest to the members of the Planning CoP include:

RISK ANALYSIS-FLOOD DAMAGE REDUCTION PROJECTS (Control #209) September 10-14, 2007 Davis, CA

This course introduces Corps of Engineers field office staff to risk-based analysis for flood damage reduction projects. Participants will know the methodologies for determining uncertainty in discharge, stage, and damage and how to evaluate project size and performance accounting for the uncertainty in these parameters. Project function, safety, and workability are reviewed to increase awareness of how these issues affect the formulation of project features. The course presents current policy and technical procedures for conducting risk-based analysis of typical flood damage reduction projects such as levees, channels, and reservoirs. Included are lectures and case studies describing procedures for determining uncertainty in discharge-frequency, stage-discharge, and stage-damage relationships for various project site characteristics. Procedures for conducting Monte Carlo simulations for evaluating project reliability and size are described using current software developed for the personal computer. Concepts and procedures are demonstrated and practiced in classroom workshops. Current Corps policy related to risk-based analysis is also discussed.



PCC3 ENVIRONMENTAL CONSIDERATIONS (Control #408) October 22-26, 2007 Jacksonville, FL

This class surveys environmental topics needed for new planners to pursue civil works planning studies. Participants learn to recognize the basis for and key components of NEPA documents consistent with applicable environmental laws, regulations, and procedures necessary to conduct civil works planning studies. Students will also receive basic information regarding the Corps ecosystem restoration authorities and guidance on partnership development. Course includes field trip and experiential exercises. The class consists of a series of modules summarizing the many laws, regulations, and planning processes governing environmental aspects of the Corps of Engineers civil works planning process. Modules include an overview of the process and its relationship to compliance under the National Environmental Policy Act, and the contents and procedural requirements for the preparation of Environmental Impact Statements. Regulatory discussions address the: Endangered Species Act, Fish and Wildlife Coordination Act, National Historic Preservation Act, Clean Water Act, Clean Air Act, Coastal Zone Management Act, Magnuson-Stevens Fishery Management Act, and the Wild and Scenic Rivers Act. Other topics include mitigation, cost effectiveness analysis, environmental sustainability, and guidance on ecosystem restoration under the continuing authorities and general investigation programs. Ecosystem and other impact assessment methods are reviewed, with exercises focused on the selection of assessment procedures for wetland evaluations.

PLANNING FOR ECOSYSTEM RESTORATION (Control # 348) May 5-8, 2008 Phoenix, AZ

Ecosystem restoration is a priority mission in the Corps' Civil Works program. Together with traditional environmental mitigation, restoration spans the range of resources from fish and wildlife to watersheds and ecosystems. The formulation and evaluation that leads to restoration projects require a collaborative approach that also involves local sponsors and other stakeholders. This course explores key issues related to the current practice of ecosystem restoration planning: current and evolving policy, definition and measurement of ecosystem outputs, resource significance, plan formulation, and cost effectiveness/incremental cost analyses. Case studies and a half-day field trip to a local Corps restoration project will be utilized to illustrate current practices.

Within the context of the six-step planning process, the following topics will be discussed: (a) Authorities for Corps involvement in ecosystem restoration projects, (b) Environmental outputs and tools available for measuring them, (c) The meaning of resource significance and the importance of the evaluation criteria of efficiency, effectiveness, acceptability and completeness in ecosystem restoration, (d) Fundamentals of ecological principles and processes, (e) Management measures, (f) How risk and uncertainty factor into ecosystem restoration evaluation, (g) The purpose of Cost Effectiveness and Incremental Cost Analysis, (h) How to formulate jointly for ecosystem restoration (NER) and National Economic Development (NED) benefits. (NOTE: Although this course addresses evaluation tools and procedures for ecosystem restoration planning, this is not a course in the theory/mechanics of ecological or habitat models such as HEP or HGM).

PCC7 COLLABORATIVE PLANNING (Control # 407) May 12-16, 2008 Portland, OR

Corps of Engineers planners typically work in multi-disciplinary teams, often involving project sponsors, other federal and state agencies, and occasionally stakeholder groups or private individuals. These teams, in turn often consult with a broader public, identifying and addressing public concerns as the agencies proceed through the planning process. This environment requires skills for successfully designing and conducting processes that effectively draw together the different partners and stakeholders throughout the planning process, resulting in decisions that enjoy broad public support. This course will concentrate on the methods, techniques, and skills which assist Corps planners and project managers with developing a high-functioning team and maintaining effective communication with sponsors, stakeholders and interested parties throughout the life of the study. Participants will learn ways to effectively consult with or include others in raising awareness of on-going studies and efforts, integrating stakeholder values and concerns into the formulation and evaluation of projects, managing conflicts and disputes, and developing strategies to align participation activities with the Corps 6-Step Planning Process. By the end of the course the student will be able to identify the characteristics of effective public involvement processes, facilitate a team or public meeting, design an interactive team or public meeting or workshop, identify behaviors that escalate conflict during a dispute with other agencies or the public and identify behaviors that halt this escalation, develop a public participation plan, and select appropriate techniques for a participatory process.

To attend these courses or to receive additional information about these or other PROSPECT training courses, please contact the USACE Learning Center at http://pdsc.usace.army.mil.





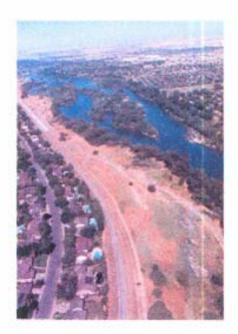






Please join us for "The Vegetation Challenge: A scientific and engineering examination of managing vegetation along California's Central Valley levees that protect urban and rural areas from devastating floods." This symposium will be held August 28-29, 2007 in Sacramento, California.

The U.S. Army Corps of Engineers (Corps) has circulated a draft white paper regarding maintenance standards for vegetation on levees. Proposals contained in the white paper would require removal of trees and shrubs along the waterside and landside of Corps program levees nationwide, including 1600 miles of Central Valley levees, to be in compliance with existing standards. The Sacramento Area Flood Control Agency (SAFCA), the Corps, the California Department of Water Resources and the State of California Reclamation Board are working with other interested agencies to host a symposium to foster discussion of the challenges of managing vegetation along the levees of California's Central Valley. The symposium will bring together distinguished scholars, engineers, and policy makers at the federal, state and local levels to examine the science, review on-the-ground local case studies and discuss policy issues related to this topic.



When: August 28-29,2007 from 8:00 a.m. to 5:00 p.m.

Where: Sacramento Convention Center

1400 J Street, Sacramento, CA

Cost: \$75 per day (includes continental breakfast and lunch)

through August 20, 2007 and \$100 after August 20,

2007 (if space is available).

Registration: To register please go to www.safca.org click on link to

Levee Vegetation Symposium August 28-29.

Questions: For questions regarding registration or logistics contact

Lizette Crosbie with SAFCA at (916) 874-7606 or crosbiel@)saccounty.net. For information regarding the agenda contact **Peter Buck** with SAFCA at

buckp@)saccounty.net .



CONFERENCES

The Center for Strategic Leadership. United States Army War College Proteus "Futures" Academic Workshop

August 14-16, 2007 Carlisle Barracks, PA Additional information: https://www.carlisle.army.mil/proteus

The Vegetation Challenge: A scientific and engineering examination of managing vegetation along California's Central Valley levees that protect urban and rural areas from devastating floods

(a symposium sponsored by the Sacramento Area Flood Control Agency, the California Department of Water

Resources, the U.S. Army Corps of Engineers, and the California Reclamation Board)

August 28-29, 2007 Sacramento, CA

Additional information: http://www.safca.org/2007Levee-VegSymposium.htm

Floodplain Management Association Annual Conference

September 4-7, 2007 South Lake Tahoe, NV Additional information: http://www.floodplain.org

Association of State Dam Safety Officials, 2007 Annual National Conference

September 9-13, 2007 Austin, TX

Additional information: http://www.damsafety.org/

Smart Rivers 2007

September 16-19, 2007 Louisville, KY

Additional information: http://www.pianc.iwr.usace.army.mil/smart_rivers2007.htm

Western States Water Council Annual Water Information Management Systems Workshop

September 24-26, 2007 Seattle, WA

Additional information: http://www.westgov.org/wswc/wims07.html

USACE – Nature Conservancy, Third Partnership Conference: Developing Sustainable Aquatic Solutions

October 1 - 4, 2007 Wheeling, West Virginia

National Association of Flood and Stormwater Management Agencies Annual Meeting and Workshop

October 1-4, 2007 Newport, RI Additional information: http://www.nafsma.org

International Commission on Irrigation and Drainage, Fourth International Conference on Irrigation and

Drainage

October 3-6, 2007 Sacramento, CA Additional information: http://www.icid2007.org/

Water Policies and Planning in the West: Ensuring a Sustainable Future

October 10-12, 2007 Salt Lake City, UT

Additional information: http://www.westgov.org/wga/initiatives/water07.pdf

American Shore and Beach Preservation Association and Texas General Land Office Fall Conference

October 22-24, 2007 Galveston, TX

Additional information: http://www.asbpa.org/conferences/conf fall 07.htm

National Oceanic and Atmospheric Administration 32nd Annual Climate Diagnostics and Prediction

Workshop

October 22-26, 2007 Tallahassee, FL

Additional information: http://www.cpc.noaa.gov/products/outreach/CDPW32.shtml



Interstate Council on Water Policy Annual Meeting

October 23-25, 2007 New Orleans, LA

Additional information: http://www.icwp.org

Water in the Pacific Northwest: Moving Science into Policy and Action

November 7-9, 2007 Stevenson, WA

Additional information: http://capps.wsu.edu/WaterPolicy/index.html

AWRA Annual Water Resources Conference

November 12-15, 2007 Albuquerque, NM

Additional information: http://www.awra.org/meetings/New Mexico2007/index.html

The Center for Strategic Leadership. United States Army War College

"Threats at Our Threshold: Securing and Defending the United States in the 21st Century" Symposium

November 14-15, 2007 Carlisle Barracks, PA Additional information: http://www.carlisle.army.mil/usacsl/events.asp

Riparian Habitat Joint Venture Conference

December 4-6, 2007 Sacramento, CA

Additional information: http://www.prbo.org/calpif/rhjvconference/index.htm

4th International Symposium on Flood Defense

May 14-16, 2008 Toronto, Canada Addition information: http://www.flood2008.org/flood/

PUBLICATIONS

The following is a list of recently published reports, studies, or articles prepared by the Corps of Engineers, other Federal agencies, or other research organizations:

Confronting Climate Change in the U.S. Northeast – Science, Impacts, and Solutions, available at http://www.climatechoices.org/assets/documents/climatechoices/confronting-climate-change-in-the-u-s-northeast.pdf>

Our Changing Climate – Assessing the Risks to California, available at http://www.energy.ca.gov/2006publications/CEC-500-2006-077/CEC-500-2006-077.PDF

"Knocking Back Biological Invaders" (Coastal Heritage, Volume 21, Number 4, Spring 2007), available at http://www.scseagrant.org/oldsite/pdf_files/ch_spring_07.pdf

"Rising Tide – Will Climate Change Drown Coastal Wetlands" (Coastal Heritage, Volume 21, Number 3. Winter 2007), available at: http://www.scseagrant.org/Content/?cid=149

Facing the Hard Truths about Energy – A comprehensive view to 2030 of global oil and natural gas available at http://www.npc.org/



HOW TO CONTRIBUTE TO PLANNING AHEAD

Planning Ahead is designed to foster communication amongst the members of the Planning community of practice within the Corps, with those other members of the Corps family with which planners interact on a daily basis, and with members of the general public outside of the Corps. It is our goal that future editions of the newsletter will include information and perspectives of those members of the planning community on the front lines of the Corps' planning efforts, the District and Division offices. We hope that this newsletter becomes a forum to share your experiences to help the entire planning community learn from one another. We welcome your thoughts, comments, questions, suggestions, success stories, and lessons learned, so that we can share them with the broader community. Submissions should be moderate in length (4-5 paragraphs), except in cases where the article is compelling and circumstances warrant a lengthier treatment of the subject. The article should be prepared as a MS Word document. Pictures accompanying submitted articles are welcome. Pictures must be in JPEG format.

The deadline for material to be published in the next issue of *Planning Ahead* is Wednesday, August 22, 2007

Planning Ahead is an unofficial publication authorized under AR 25-30. It is published by the Planning Community of Practice, U.S. Army Corps of Engineers, 441 G Street, NW, Washington, D.C. 20314-1000

HOW TO SUBSCRIBE TO PLANNING AHEAD

To subscribe to our distribution list, send an e-mail message to majordomo@lst.usace.army.mil with no subject line only a single line of text in the message body. That single line of text should be: "Subscribe ls-planningahead"

(Note: In the email address, the character following the @ sign is a lowercase "L". This is also true for the single line of text. The character immediately following "subscribe" is also a lowercase "L". If these are not typed correctly, you will receive an error message.)

To obtain a "help" file, send only the word "help" in the text of the message (nothing in the subject line) and address it to majordomo@usace.army.mil.

To read past issues of the *Planning Ahead* newsletter, please visit http://www.usace.army.mil/cw/cecw-cp/news/pa_newsletter/pa_news.html

