



US Army Corps  
of Engineers®

# PLANNINGahead

WINTER 2016 - Issue 01

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# FROM THE CHIEF



THEODORE A. "TAB" BROWN, P.E., SES  
CHIEF, PLANNING AND  
POLICY, HOUSACE  
DIRECTORATE OF  
CIVIL WORKS

DISTRICT AND MSC  
PLANNING CHIEFS  
JOIN TAB AT THE  
PCOP NATIONAL  
WORKSHOP



**2**015 saw record accomplishments by your Civil Works Planning organization. Working together, we are managing a risk-informed planning program that delivers timely, cost effective and high quality water resources investments recommendations. These are a few highlights from a busy year:

### People

We continue to invest in our Planners' knowledge and experience – the heart and soul of the Planning Program. More than 200 planners have been certified as Agency Technical Reviewers in their discipline. The online Planner Database empowers you to maintain your planner profile – which in turn allows those assembling teams to identify the experience and expertise needed to deliver planning products. Our comprehensive update of the Planning Core Curriculum continues. This year we launched an all-new Planning Essentials. We also beta-tested the new Plan Formulation & Evaluation Capstone to good reviews. We continue to offer a bimonthly PCoP Webinar Series based on your interests and needs, sharing this information on the Toolbox.

### Process

We continued to drive implementation of SMART Planning within the constraints of 3x3x3. The passage of the Water Resources Reform and Development Act (WRRDA) in June 2014 legislated several changes for our Planning Program that were implemented in 2015: the elimination of recon studies; strict time lines and costs for conduct of feasibility studies; new contributed funds guidance; and new input to the authorization process. We are working closely with the Assistant Secretary of the Army to publish WRRDA Implementation Guidance; we have developed and issued implementation guidance for 85% of priority 1 WRRDA provisions. We also are updating the Planning Guidance Notebook to incorporate these changes.

### Projects

Working across disciplines and with greater Vertical Team integration earlier in the feasibility study process, the projects in our planning portfolio are identifying and managing risks throughout the feasibility study iterative planning process. The SMART Planning Milestones; the Alternatives Milestone; Tentatively Selected Plan Milestone; Agency Decision Milestone and the Civil Works Review Board, enable key decision-makers within the agency to engage with the PDT and endorse their decisions, and proposed next steps, throughout the study.

### Program

In 2015, we delivered on our commitments. We completed 16 Chief's Reports (\$3B) – a record number, and 12 Director's Reports. Twelve successful Civil Works Review Boards will lead to additional Chief's Reports in 2016 (an additional \$4.1B). Over the course of the year, 19 new feasibility studies were initiated. We were appropriated funds for up to 10 new start studies in FY16 with the Omnibus spending bill approved in December, part of a \$121M overall Investigations appropriation, 20% above the FY16 budget.

This improved execution rate is a function of: 1) the aggressive management of the Corps' study portfolio utilizing risk-based planning principles; 2) the establishment of vertical team alignment throughout the study process, ensuring corporately-supported studies; and 3) the efficient funding of studies and a commitment to funding studies to completion.

As we look ahead into 2016, I remain confident that we, as Planners, will continue to provide valuable solutions to the Nation and our partners. I look forward to the continued execution of our mission, and welcome your feedback on how it's going in the field. I am proud of the work you are doing and look forward to another year of growth and learning.



# 2015 PCoP NATIONAL WORKSHOP

WORKING TOGETHER TO MODERNIZE PLANNING



A DISTRICT, MSC AND HEADQUARTERS PANEL RESPONDS TO QUESTIONS IN THE "UNDERSTANDING THE 3X3X3 RULE" AND EXEMPTION PROCESS SESSION AT THE 2015 WORKSHOP.



LEIGH SKAGGS POSES A QUESTION AT THE WORKSHOP.

One of the most important goals we accomplished within the Planning Community of Practice (PCoP) last fiscal year was implementing a face-to-face training forum, bringing Planners across all Divisions and Districts together to share lessons and experiences in Planning Modernization and implementing SMART Planning.

This issue of Planning Ahead includes some of the memorable moments from the workshop, reflecting the talent, passion and diversity of our PCoP family. We include several articles about individual perspectives on plenary sessions for Dr. Monique Turner's Critical Thinking and Its Application to Civil Works Planning, and Dr. Charles Yoe's Risk Informed Decision Making in Civil Works Planning. We also highlight some examples of attendees bringing training and information from the Workshop back to their home regions across the nation.

I expect that all workshop attendees will continue to work within their regions to develop their own methods of delivery on

the training offered, sharing their hands-on lessons-learned with others. Please continue to take advantage of local opportunities that arise to discuss the training workshop breakout session themes, the keys to achieving Planning Modernization:

- 1 Delivering on Our Commitments:** Project Delivery and the Planning Program;
- 2 Aligning Expectations:** Decision-Making Roles and Responsibilities; and,
- 3 Sustaining Planning:** Supporting and Building Planner Capability.

Resources to assist you are available at the Planning Community Toolbox Training Resources <http://planning.usace.army.mil/toolbox/pcop.cfm> and the Civil Works Planning Policy PCoP Training Workshop SharePoint site <https://cops.usace.army.mil/sites/PLAN/PCoPtrn/default.aspx>.

*Sue*





# STRATEGIES FOR PROVIDING PCoP WORKSHOP REGIONAL TRAINING



PLANNERS PARTICIPATING IN "ATR IDOL" AT THE 2015 WORKSHOP.

INSET: HEADQUARTERS PANEL REPRESENTING ENGINEERING, PROJECT MANAGEMENT, REAL ESTATE, SAFETY PROGRAMS AND OPERATIONS DISCUSS INTEGRATION ACROSS USACE COMMUNITIES.

**W**orking Together to Modernize Planning National

PCoP Workshop attendees were presented with a pre-workshop challenge to decide not only how to ensure that their District and Division could cover as many of the workshop breakout sessions as possible with only a few attendees, but also think of creative ways to bring the training back to those that could not attend in their regions and home offices.

Here's a sampling of several recent efforts based on inquiries to our Division Planning Chiefs:

The **Mississippi Valley Division** is using their monthly regional Planning Community of Practice meetings to highlight workshop topics.

The **Southwestern Division** assigned specific Planning organizations within their region to prepare a "best of" highlight reel from slides and information presented in each of the breakout tracks, with the objective of developing of a one-hour training session for each track.

The **South Pacific Division** formed a workshop



organizing committee to develop and implement a regional training strategy, intending for all of their attendees to participate in sharing training highlights, tools and information with others. With these objectives in mind:

- Attendees will utilize a regional training SharePoint site to self-identify sessions attended, collect takeback form templates from each attendee and consolidate notes and key takeaways in folders for each of the 21 breakout sessions, plenary sessions, poster sessions, the Planning Advisory Board Meeting, All-Hands Planning Chiefs Meeting, Economics, Plan Formulation, Environmental Sub-CoP meetings, Planning Essentials meeting and Plan Formulation Evaluation and Capstone Meetings. (<https://team.usace.army.mil/sites/SPD/PDT/apwsrd/default.aspx>)

- Two volunteer attendees will consolidate notes

and takeaways for each plenary, breakout and poster session/category and develop 1-2 page executive summaries.

- Attendees will provide ideas for formal or informal sharing of the training information, both general and session-specific, in a suggestions folder on the SharePoint site.

We encourage all regions to continue to share ideas and success stories from Working Together to Modernize Planning. If you were not able to attend the Workshop in Atlanta, but have suggestions on how training can be delivered to your region, please share them with PCoP Workshop regional participants and send your thoughts to [hqplanning@usace.army.mil](mailto:hqplanning@usace.army.mil). We will post your suggestions on providing regional training, and useful products of your regional efforts to share with the entire community on the Planning Community SharePoint site.



# RISK INFORMED DECISION MAKING IN CIVIL WORKS PLANNING

*Kendall Zaborowski, 2014 Planning Associates Class, provides his views on the Plenary Session presented by Dr. Charles Yoe at the PCoP Workshop.*

**D**r. Charles Yoe, professor of Economics at Notre Dame of Maryland University and expert in risk analysis, discussed how USACE can embrace risk-informed decision making for the better. Dr. Yoe is also the co-author of the USACE Planning Manual.

The two principle messages I took from Dr. Yoe's presentation are to embrace uncertainty and focus on the outcome, not the rules, while conducting risk-informed decision making.

In my opinion, we struggle as an agency in how to address uncertainty. Do we really know what the cost of our projects will be down to the last dollar, all the changes that will occur within our project areas, or what the movement of commodities is going to be in 50 years? Of course not! A

"sensitivity analysis" alone isn't going to resolve uncertainties. In reality, we make informed assumptions and we think we have a pretty good estimate of how things will play out.

Up and down the USACE vertical team, we need to get better at talking about uncertainty. All levels of our organization need to improve our communication about what we don't know, where we think something is most likely to fall within a range, and how that we could be wrong.

Presenting uncertainty bounds around specific programming and budgeting outputs, such as costs and benefits, is difficult, but it can be done. The agency can potentially set tolerable levels of risk in cost estimates at certain percent confidence intervals for budget reporting. When USACE reports a

cost, we communicate that there is a certain chance that our cost estimate may be exceeded by the time we get to construction.

The second key message is that in a risk-informed decision making environment, there should be a focus on the outcome and not the rules. Teams and individuals should be focused on the decision they are trying to make and the information needed to make that decision. How can we as an agency empower ourselves and our teams to become outcome driven?

Dr. Yoe expressed that USACE was straddling the line of becoming an agency that manages risks, which can make us an agency that focuses on preventing problems and not only on solving them. But we have a few steps to take together before we get there.

THERE ARE TWO ASPECTS TO EMBRACING UNCERTAINTY. FIRST IS TO UNDERSTAND AND COMMUNICATE THAT UNCERTAINTY EXISTS IN THE RESULTS OF OUR ANALYSES. SECOND IS TO IDENTIFY THE ACTIONS THAT CAN BE TAKEN TO MANAGE UNCERTAINTY SO THAT THE COSTS, BENEFITS, AND IMPACTS OF OUR PROJECTS APPROXIMATE THE ESTIMATES MADE IN OUR ANALYSES.



DR. CHARLES YOE

A KEY ASPECT OF RISK INFORMED DECISION MAKING IS UNDERSTANDING WHEN AN ACTION SHOULD BE TAKEN AND BY WHOM. NOT ALL UNCERTAINTIES CAN BE EFFECTIVELY ADDRESSED DURING THE PLANNING STUDY. SOME ACTIONS WILL OCCUR DURING THE STUDY (ADDITIONAL ANALYSES: COMMUNICATE THE NEED FOR ACTIONS BY STAKEHOLDERS), SOME WILL OCCUR DURING DESIGN AND CONSTRUCTION (MANAGE COST RISKS; MODIFY DESIGN IN LIGHT OF ACTUAL FIELD CONDITIONS), WHILE OTHERS WILL OCCUR DURING THE OPERATING LIFE OF THE PROJECT (MONITOR FUTURE CONDITIONS AND PROJECT PERFORMANCE; ADAPT OPERATIONS; MODIFY PROJECT WHEN CHANGED CONDITIONS WARRANT). THE RISK REGISTER IS THE TOOL THAT SUPPORTS THIS DISCUSSION AND DECISION-MAKING ABOUT WHAT WILL BE DONE, WHEN, AND BY WHOM.



# Critical Thinking

It is easy to casually use buzzwords like “synergy” and “win-win” as a way to move a conversation along or to answer a burning question. Buzzwords can seem hollow if there isn’t a common understanding about what the terms mean. The term “critical thinking” seems to be headed towards a word that we use without really understanding what it means or how to apply it.

## and Its Application to Civil Works Planning

*Camie Knollenberg, Rock Island District/Regional Planning Division North, summarized the Plenary Session presented by Dr. Monique Turner at the Planning Community of Practice Workshop in Atlanta in June 2015.*



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At the recent National Planning Community of Practice Workshop, Working Together to Modernize Planning, Dr. Monique Turner presented a plenary session on the topic of critical thinking. In her presentation entitled Critical Thinking and its Application, Dr. Turner, a professor at George Washington University, addresses the heart of the issue.

**WHAT IS CRITICAL THINKING?** Well, according to Dr. Turner, it depends on who you ask. She offers the following definitions:

- Purposeful thinking in which individuals systematically and

BIASES ARE COMMON, EVEN NORMAL, BUT THE PLANNING PROCESS DEPENDS ON OUR OBJECTIVITY AS PLANS ARE FORMULATED AND EVALUATED. BE OPEN TO IDEAS FROM OUTSIDE THE TEAM AND OUTSIDE THE CORPS DURING INITIAL FORMULATION. THEN CAREFULLY CHECK THE TEAM’S OBJECTIVITY AS PLANS ARE SCREENED FROM CONSIDERATION. WOULD AN OBJECTIVE THIRD-PARTY UNDERSTAND THE BASIS FOR SCREENING?

habitually impose criteria and intellectual standards upon their thoughts.

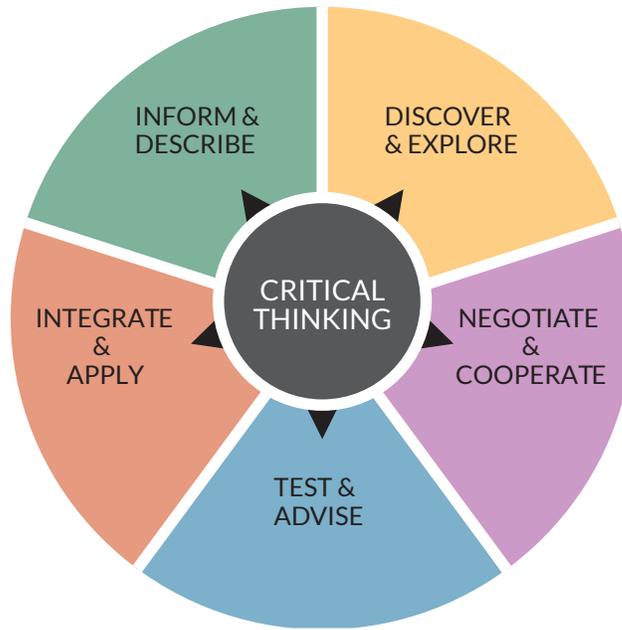
- A composition of skills and attitudes that involve the ability to recognize the existence of problems to support the truthfulness of the problems.
- The propensity and skill to engage in an activity with reflective skepticism.

- The process of purposeful, self-regulatory judgment.

The list of definitions of Critical Thinking could go on and on. The main point is that there isn’t just ONE right way to think critically. It depends on the person and the situation. It needs to be a somewhat “soft” definition to allow for some flexibility.

Dr. Turner also suggests that there isn’t a defined

beginning or end to critical thinking. Similar to the Six Step Planning Process, it would appear that critical thinking is more of a continuous process than something that happens once. This graphic in her presentation illustrates a circle with five sections representing stages or categories: Inform & Describe, Discover & Explore, Negotiate & Cooperate, Test & Revise, and Integrate & Apply.



KNOW WHEN TO BE A LEADER AND MAKE DECISIONS, KNOW WHEN TO LET OTHERS LEAD, AND KNOW WHEN TO ASK FOR HELP.

What is striking about those stage titles is that they are formed by key verbs that planners use in the planning process. So it shouldn't be too difficult for planners to apply this type of thinking.

**BUT WHY IS CRITICAL THINKING DIFFICULT?**

Dr. Turner maintains that practicing critical thinking is difficult because of our cognitive biases. A cognitive bias causes us to think in certain ways that can lead to what is called “systemic deviations” from a standard of good judgment. They are common phenomena in the fields of psychology and behavioral economics.

Biases are what individuals use to create their own

“subjective social reality.” In other words, it's what prevents us from being rational all the time. For example, the Herd Instinct Bias is the common tendency to adopt opinions and follow the behaviors of the majority to feel safer and to avoid conflict. This is an all-too-common situation when leading a team through the planning process. The Status Quo Bias is the tendency to defend or bolster the status quo. With this bias, existing social, economic, and political arrangements tend to be preferred and alternatives are disparaged even at the expense of collective self-interest.

There are so many recognized cognitive biases to fall victim to that it is

not possible to keep all of them out of our brains. But we can strive to improve the number of times we interject our own reality – our own biases – into a situation. As leaders of the planning process, it's up to us to banish biases as often as possible.

**SOME ARE BETTER THAN OTHERS AT APPLYING CRITICAL THINKING.**

According to Dr. Turner, successful critical decision makers tend to exhibit characteristics such as maturity, inquisitiveness, and self-confidence. They are open-minded, truth seeking, analytic, and systemic in their thought processes. It would appear that it takes both skills and habits to be successful.

Most of us likely possess the right stuff to be excellent critical thinkers! We just need to develop better habits. The presentation and handout Dr. Turner provided has examples of questions to ask ourselves to better apply critical thinking. This could be a good starting point for those looking to improve their critical thinking skills. It presents a continuum of the decision-making process beginning at knowledge identification and ending at evaluation and selection.

The crux of the tool is that at the beginning the questions and concepts are general: Who, What, Where, etc. Then the questions become more specific and directed such as “Why is this significant?” or “What evidence can you present?”

Our success in Planning Modernization hinges, in part, on our ability to make sound, informed decisions in less time, with less funding, and less information. Applying “critical thinking,” not just using the term, is a key. We should challenge each other to give critical thinking more than just lip service; we should really do it. It would be a shame for it to wind up as just a box in a Buzzword Bingo game when it can be such a useful tool.

*Dr. Turner's presentation from the workshop and handout can be found on the Workshop's SharePoint Site.*





# PLANNER SPOTLIGHT

## MSC PLANNING CHIEFS

This year we welcomed four MSC Planning Chiefs: Eric Bush, South Atlantic Division (SAD), Josephine Axt, South Pacific Division (SPD), Becky Moyer, Southwestern Division (SWD), and Noel Clay, Great Lakes and Ohio River Division (LRD). While Noel is new to LRD, she was previously the MSC Planning Chief at SWD.

The three new MSC Planning Chiefs come to us with a breadth of experience. We asked each of the new Chiefs to tell us a little about their background and what goals they have for their MSC.

### ERIC BUSH, SAD

I now have 14 years with USACE, mostly in Planning, but I spent three formative and extremely helpful years as Deputy Chief of SAJ's Everglades Program Management Office. I have a degree in biology, and have always had a curiosity about how natural systems work, especially wetlands. Prior to the Corps, I worked for Florida's Department of



**ERIC BUSH**

Environmental Protection on water quality and wetlands regulatory issues. This was my introduction to the Corps of Engineers; one of my duties was to regulate (or try) Mobile and Jacksonville Districts! In 1997, I was asked to join the interagency planning team developing the Comprehensive Everglades Restoration Plan. About six months into that job I had

a blinding revelation that water resources planning was a profession and I was now doing it! After we completed the Everglades plan in 1999, I jumped over to work for the Corps in 2001 because I wanted to be part of the agency leading the implementation of Everglades restoration, and that motivates me to this day. That was one reason I took my current job: I see it as an opportunity to push forward with Everglades restoration projects and other regionally and nationally significant infrastructure projects that are important for our economy and protecting our environment from a higher echelon. I have benefited tremendously from the friendship and mentorship of two former planning chiefs (now retired): Stu Appelbaum and Wilbert Paynes. There is no way I would have had this

opportunity without their interest and involvement in my career.

I would like to see our planning capabilities developed even further and applied broadly across our region (and nationally) to solve critical problems in infrastructure and environmental sustainability. My vision for planning in SAD is we will operate as one regional team of planners, economists, engineers, and scientists working across organizational lines to anticipate needs and be responsive to today's and tomorrow's problems. I have a two-word Position Description for all planners: "Be brilliant!"

### JOSEPHINE AXT, SPD

I started with the Corps in 1999 at New York District as a Biologist. My husband had



**JOSEPHINE AXT**

an artist residency grant in New York City, and the Corps was the only place I found that was hiring biologists! I completed my Ph.D. in Environmental Science and Public Policy, and had just returned from a postdoctoral fellowship in Denmark doing research on wetlands and water quality. I was excited to be part of an agency that had a wetlands restoration mission, and to be doing work that could end up as a project in the ground and not just a research paper. During my time at NAN, I did a detail at NAD and became a section chief in the Environmental Resources Branch. When my family exceeded the carrying capacity of our small Brooklyn apartment, I left the Corps and worked at an environmental consulting company as a program manager, primarily working on Corps studies and

projects for New York and Philadelphia Districts.

I returned to the Corps in 2008 as the Chief of Planning for Los Angeles District. The breadth of the mission and issues in SPL is extraordinary, and the seven years I spent there were a whirlwind of stakeholder meetings, Congressional interest, and studies spanning the breadth of Civil Works; throw in endangered species issues, sponsors lining up to provide contributed funds, and the drought, and there was never a dull moment. The highest profile study was the Los Angeles River Ecosystem Restoration study. In May of 2015, I joined SPD as the Chief of Planning and Policy. After five months on the job, I continue to be impressed by the dedication and commitment of the SPD Planning Community, not to mention productivity! We are on track for five Civil Works Review Boards in 2015, and our large planning program continues to grow, with five new starts in FY14 and 15. My first five months at SPD have shown me that the growth and vitality of water resources planning across the MSC will be aided by: 1) backfilling key positions at the Districts and MSC, 2) offering challenging, cross-fertilization assignments through details and regional workload sharing, 3) following through on the application of planning modernization with study-specific, real time lessons

learned, and 4) sharing best practices regionally when it comes to coordinating with resource agencies, especially in California. I know I didn't answer the question with one goal, but how can you ask a planner to limit to one goal!



**BECKY MOYER**

**BECKY MOYER, SWD**

I was promoted to SWD Planning Chief just over six months ago. It is a great job so far, and I feel fortunate to serve our organization in this capacity. In this position, I am also the director of the National Planning Center of Expertise for Water Management and Reallocation Studies (WMRS-PCX) and leader of the SWD Planning Community of Practice. Prior to this assignment, I held the position of SWD Senior Economist from 2011 to 2015. Over the course of my 28-year Corps career, I have held Planning positions at all levels of the organization, including assignments at HQUSACE in the Great Lakes and Ohio River Division Regional Integration Team (LRD-RIT),

and the Office of Water Project Review (OWPR); in both the Great Lakes and Ohio River Division (LRD) and Southwestern Division regional headquarters, as well as the Huntington, Jacksonville, and Mobile districts. I am a former lead instructor of the "Planning Principles and Procedures" course. I have a B.A. in economics and political science and a M.A. in public administration. My career has benefited with willingness to move geographically within our organization, as well as great counsel from a number of mentors over the years. I am always anxious to pay it forward, so reach out if you need a push.

Our challenges in SWD are to deliver innovative strategies and recommendations for decision-makers to sustain the Texas Gulf Coast, the McClellan-Kerr Arkansas River Navigation System, USACE multi-purpose reservoirs, as well as to aid in the development of state water plans. Meeting the commitments to non-federal sponsors and stakeholders on these critical efforts will require SWD to draw on the unique talents and expertise of the vertical team and Planners throughout the Enterprise. My goal is to accomplish these efforts by providing exciting and challenging career-developing opportunities for the Planning community. I'd call that a win-win.





# HAILS & FAREWELLS

## WE BID FAREWELL TO WILBERT PAYNES OF SOUTH ATLANTIC DIVISION

Mr. Wilbert Paynes retired in September 2015 after beginning his career in 1974 with USACE in New Orleans, LA. Mr. Paynes has not only been leading Civil Works Planning in the South Atlantic Division since 1998, but performing double duty as the Director of the Deep Draft Navigation Planning Center of Expertise (DDNPCX) since 2003. Wilbert has been a key player in the approval for improvements at many deep draft ports in the Southeast, including Savannah Harbor, Miami Harbor, Wilmington Harbor, Jacksonville Harbor, and most recently, the challenging study of Port Everglades. He is the predominant reason for the Corps' unprecedented success in expediting the modernization of major national ports included in the President's "We Can't Wait" initiative, through his

leadership to the vertical team and through his expert guidance of the DDNPCX. Wilbert isn't afraid to dive in to solve issues, which he proved when he provided regional and national leadership by engaging the National Marine Fisheries Service (NMFS) to ensure the completion of critical biological opinions for

Civil Works projects under the new Planning Modernization principles. He actively listened, kept all parties engaged, maintained a positive attitude, was respectful of all involved, and thoroughly worked through issues until they were resolved, reaching consensus and having a clear path forward. Rumor

has it that when Mr. Paynes successfully navigated the new exemption process for Charleston Harbor, he danced a little jig in the GAO Building. Wilbert's professionalism is shown clearly in his commitment to improving the diversity of the organization and helping others succeed.







## Feature News Items

# PCP NEWS FLASHES

## PLANNING COMMUNITY NEWS

**Planning Ahead is a quarterly publication of the Army Corps of Engineers Planning Community of Practice. Views and opinions expressed herein are not necessarily those of the Army Corps of Engineers or the Department of Defense.**

### PCoP Hot Topics

Can't wait for the next edition of Planning Ahead? Get the scoop on People, Process, Projects, and Program key initiatives and information from Headquarters in the new monthly Hot Topics. Find the latest in your email inbox or on the Planning and Policy SharePoint.

### New Guide to SMART Planning

The new SMART Planning Feasibility Studies: A Guide to Coordination and Engagement with the Services provides an overview of the SMART Planning process and demonstrates how key environmental coordination and compliance activities integrate into that process, highlighting opportunities for engagement and coordination at all stages of a planning study. Find it on the Planning Community Toolbox Homepage.

### Planning Training Opportunities

The FY16 Purple Book is available, with courses scheduled for the Planning Core Curriculum Courses Planning Essentials and the Plan Formulation Capstone,

as well other courses important for Planners. USACE Civil Works Project Development Process is available on-demand via an online distributed learning course. If you don't need credit or are just looking for a refresher, you can review the Civil Works Project Development course at your convenience by following the links on the Toolbox Training tab.

### Recent Chief's Reports & Civil Works Review Boards

Congratulations to the Little Diomed Harbor, AK and Charleston Harbor, SC project teams that saw Chief's Reports signed since the last Planning Ahead. Seventeen Chief's Reports have been signed and now await congressional authorization since WRRDA 2014.

Six studies have held successful Civil Works Review Boards since the last Planning Ahead, including projects across all three core mission areas. Congratulations to the teams that have been working on Skokomish River Basin Ecosystem Restoration

Project in Mason County, WA; South San Francisco Bay Shoreline Flood Risk Management and Ecosystem Restoration Project, CA; Craig Harbor, AK, Navigation Improvements project; American River - Common Features Flood Risk Management Project, CA and West Sacramento Flood Risk Management Project, CA; and the Princeville, NC, Flood Risk Management Project. Essays!

### New Guidance Impacting Planners

New guidance is emerging all the time. Find the latest on the Toolbox. Recent additions include a new Engineering & Construction Bulletin (ECB), "Technical Lead for E&C Deliverables," detailing the qualifications and roles and responsibilities for the Technical Lead; a guidance memorandum from the Director of Civil works clarifying application of the "federal standard" regulations related to federal maintenance dredging for federal navigation channels; and signed WRRDA 2014 Implementation Guidance.





# CONGRATULATIONS PAs



PICTURED HERE FROM LEFT TO RIGHT: DANNY ALLEN, KELLY KEEFE, KIM CARSELL, STEVE STOCKTON, JASON SMITH, MG DONALD E. JACKSON, GREG KOHLER, TAB BROWN, GREG LINKOWSKI, CHRIS BOUQUOT

**C**ongratulations to the Planning Associates Class of 2015. Each graduating PA presented their Critical Think Pieces (CTP) and received their program certificates at an awards ceremony held at USACE Headquarters GAO Building on September 1st. Over the course of the intensive year-long program, the PAs completed courses in leadership and communication, explored all the Corps business lines and mission areas, and had a unique DC experience working directly with Corps and other Army leaders.

Each of the 2015 PAs completed a Critical Think Piece to explore an issue of particular interest to them and importance to the Planning Community:

- Addressing Climate Change in Inland Ecosystem Restoration (Danny Allen, SWF)
- Explaining the Navigation Black Box (Chris Bouquot, LRH PCXIN)
- Deliberate Utilization of Informal Learning for Planner Development (Kim Carsell, SPK)

- Memo Masters – Fostering clear written communication across the Corps (Kelly Keefe, SAJ)
- Improving Study Issue Management (Greg Kohler, MVP @ MVS and Dan Linkowski, LRC)
- Watershed Planning and Partnerships: Confusion and Resolution (Jason Smith, MVP @ MVR)

In October, the 2016 Planning Associate class gathered to kick off another year of the program at the Institute for Water Resources. We would like to welcome to the program: Quana Higgins, Los Angeles District's Phoenix Area Office; Keith Keeney, Louisville District; Andrew MacInnes, New Orleans District; Michael Malsom, Mobile District; Valerie McCormack, Nashville District; Patrick Nowak, Omaha District; Patrick O'Donnell, South Atlantic Division; and Tatton Suter, Alaska District.

*Further information about the PA Program is on the Planning Community Toolbox, under the Training Tab.*



# USACE ECONOMISTS TACKLE A SERIOUS CHALLENGE AND A GREAT OPPORTUNITY

## GETTING TO KNOW THE NEW ECONOMISTS

- 2 SERVED IN THE PEACE CORPS IN PANAMA
- 3 WERE ALREADY WORKING IN THE CORPS IN RM, HR, PM
- 1 IS IN THE RESERVES
- 2 GOT MARRIED THIS YEAR
- 3 HAVE WORKED FOR OTHER FEDERAL AGENCIES
- 1 PLAYS BIKE POLO
- 2 HAVE WORKED AS CAR SALESPERSONS (BOTH HOPE TO NEVER DO IT AGAIN)

### What Muppet are you?

Susan Durden posed this ice-breaker question to new economists in September in Portland, Oregon. It generated some fun and insightful conversations.



During a monthly senior economist conference call in March, several MSC senior economists announced they had new economists on board in their districts. A boost from the DA intern program and active recruitment by Districts has resulted in 24 new economists throughout the Corps.

The total number of Corps economists with less than 2 years' experience was surprising. The senior economists realized they needed to have a centrally led development, training and mentoring program for such

a large group. Jim Fredericks (NWD), Naomi Fraenkel (NAD), Terry Stratton (SAD), and Susan Durden (IWR) composed a volunteer team to plan and implement a development and team-building program.

This new program has spearheaded:

- A welcome letter, including career development information, from Dr. David Moser, the USACE Chief Economist.
- Monthly phone calls with the new economists led by Dr. Moser and the Sub CoP.
- MSC-organized training on models
- A September in-person training with the senior economists.

- A process to facilitate rotations for the DA interns at IWR and HQ with three rotations having occurred and a fourth scheduled.

The September meeting provided an opportunity for the new economists to meet each other, network, and learn more about a career as a Corps economist. The first two days focused on technical presentations to help the new economists transition from “college economics” to Corps applied economics. A popular element of these discussions was forthright sharing of experiences and lessons learned by the senior economists.

During the next two days, the new economists participated in the senior economists’ meeting. They heard discussions of contemporary issues and challenges in economics and planning as well as perspectives from each of the MSCs.

The exchange of information in September was beneficial to both new and senior economists.



### What is optimization, and when does it occur in a study?

We can begin by understanding what optimization is not. Optimization is not formulation and evaluation. The 1983 Principles and Guidelines tell planners to formulate and evaluate alternatives that are “significantly differentiated” from one another, finding and comparing distinctly different approaches to solving the problem. The Tentatively Selected Plan (TSP) is identified on the basis of trade-offs between benefit, impact, and cost metrics, while considering policy, legal, and financial implications. Prior to identifying the TSP, we are answering multiple questions: Is action warranted to address the problem? Have we considered alternate actions that would avoid or minimize impacts? What tradeoffs are required? How do the alternatives compare in terms of efficiency, effectiveness, completeness, and acceptability? Can this TSP be improved?

The answer to this last question is always “Yes” - and the process of improving the plan is Optimization. When we optimize, we refine the scale and composition of the plan and its features to seek out the best balance of benefits, impacts, and costs. We take a closer look and refine the design to increase net benefits while decreasing impacts. This satisfies the requirement to identify the plan that “reasonably maximizes” net NED benefits. From this point on, additional optimization is only required in the feasibility

study if it is necessary to assure that the cost estimate is sufficient for authorization, impact characterizations are adequate for NEPA documentation and mitigation planning, and benefit estimates are sound. We continue to optimize the plan even after the feasibility study is complete; value engineering and cost risk management in the design phase are a form of optimization.

A real-world analogy: In the process of finding and buying a home, you typically begin with questions like what parts of town are appealing, how are the schools, what is the commute time/ cost, how do price levels vary between parts of town? The answers to these questions reveal the trade-offs among the things that you care about and allow you to zero in on the right neighborhood for you. Once you're in the neighborhood, you compare available houses to find the one that maximizes your satisfaction by balancing costs, aesthetics, size, etc. Formulation and evaluation helped you find the right neighborhood; optimization leads you to the right house in that neighborhood.

## WE WANT TO HEAR FROM YOU

**QUESTIONS, COMMENTS, CONCERNS, ANXIETIES — IF YOUR QUESTION CAN HELP FELLOW PLANNERS, SUBMIT IT ONLINE AND MAYBE YOU'LL SEE IT HERE.**

## What's New on the Planning Community Toolbox

**> You have questions?** We have answers. We have added a new Frequently Asked Questions section of the toolbox and added a series of Q/A about Optimization. If you have a question, let us know - [hqplanning@usace.army.mil](mailto:hqplanning@usace.army.mil) or submit it online. [Learn from the Community](#)

- the latest Planning Community Webinar presentations with a summary of the Question and Answer sessions from each webinar are on the toolbox - follow the link from the front page or on the Training tab. [Looking to spread your wings? Job openings across Planning](#)

are frequently posted on the Toolbox's home page under Notices. [Did you know the Toolbox has links to several other Corps Newsletters? Check out the latest under the People tab, including the October Flood Risk Management program newsletter that highlights](#)

a new Risk Communication toolbox developed by IWR. [Visit the Toolbox online at www.corpsplanning.us.](http://www.corpsplanning.us) **If you have questions or suggestions for the Toolbox, please email us at [hqplanning@usace.army.mil](mailto:hqplanning@usace.army.mil).**



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