



US Army Corps  
of Engineers®

# PLANNING ahead

FALL 2018 - Issue 03

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# FROM THE ACTING CHIEF



## MESSAGE FROM THE ACTING CHIEF OF PLANNING AND POLICY, JOE REDICAN

*Joe Redican, Deputy Chief of Headquarters Planning and Policy Division, has worked for the Corps of Engineers for 24 years. He began his career in the Planning Division in New York District and moved on to the Planning and Project Management Divisions in Jacksonville District. After 12 years in the Districts, he came to DC to serve as the Mississippi Valley Division (MVD) Regional Integration Team (RIT) Planner, and then as MVD RIT Deputy Chief. Currently, Joe is Acting Chief for the Planning and Policy Division in addition to his current duties as Deputy.*

SMART Planning has pushed us to be more efficient and effective in our studies – and in our communications – and we all need to continue to challenge ourselves and others further. This is where I see the strength of the vertical team and our allied counterparts in other Corps Communities of Practice. With each engagement, one-on-one and in meetings, we must always ask ourselves some important questions: “What is the value added and risk to what we are doing?” “Could I do it differently and still get to a reasonable answer in a more efficient manner?”

We are currently seeing the fruits of our study delivery successes since the advent of SMART Planning in the \$17 billion emergency supplemental that was received this year, along with our continued increase in Investigations appropriations by Congress. These appropriations are a result of the studies that have been completed and Congressional recognition of future studies that need to be completed.

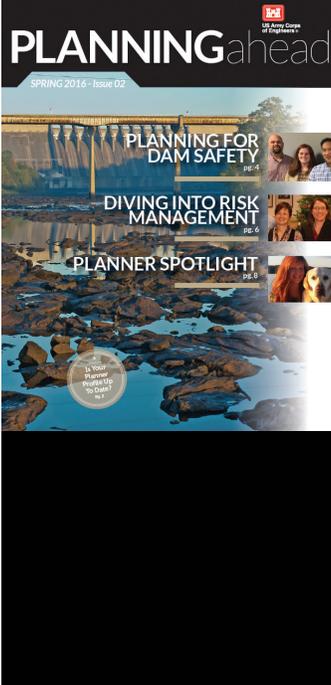
Delivering feasibility reports and planning studies that satisfy many different audiences is not an easy task.

What is needed to make the Corps – and ultimately you, as a planner – successful is continued positive communication. Most people who work for the Corps do their jobs because we believe in what we are doing, and there is passion in that belief. I realize that when most are challenged or consumed with our work, we scramble to find our way. But when I see and hear the folks in the field, I remember how important it is to have a good proponent and communicator at Headquarters. I strive every day to serve as a strong proponent and communicator for you all, and challenge each of you to do the same.

People have asked me what I like best about my job, and I can honestly say that nothing excites me more than being able to have a person from the field call me or the HQ staff to talk through an issue or ask for advice. This engagement shows me that we are acting – and communicating – as One Corps, something we can all be proud of. Thanks for all the great things you do. I look forward to the months and years ahead and the exciting opportunity before us. And remember, Planners provide the shovels that “Turn Dirt.”

**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.**

**Previous issues of Planning Ahead can be found on the Planning Community Toolbox: [www.corpsplanning.us](http://www.corpsplanning.us).**





## Feature News Items

# PCoP NEWS FLASHES

## PLANNING COMMUNITY NEWS

### Supplemental Execution Update

The Long Term Supplemental studies and projects have been cleared by the Administration and can be found on the HQ Civil Works Budget webpage. Effective execution of the feasibility studies funded is essential to getting these projects to construction. Resources for executing these Supplemental-funded studies can be found on the Planning Community Toolbox – see the link on the front page for “Emergency Supplemental Single Phase Feasibility Study Resources.” Getting projects done and turning dirt is a #1 priority for the Administration, the Chief, and the ASA(CW)!

### FY19 Planning Associates Program Changes

Significant changes are afoot for the Planning Associates Program. Starting in FY 2019, the PA Program will be

transitioning to a two-year program. Course work will be split over two fiscal years with the intent of reducing the impact to District-level workload and personal life. In addition, the two-year program will incorporate more on-the-job application of learning with opportunities to apply knowledge in multiple ways. The application period for the FY19 program ended in August; we hope these changes, highlighted in a recent PCoP Webinar, will lead to a larger number of interested and qualified applicants in future years.

### IWR Planning Suite II Certified

The Institute for Water Resources (IWR) Planning Suite has been a standard desktop tool used in the development and evaluation of project alternatives for over a decade. The previous certified

versions have primarily been used for ecosystem restoration studies; however, the software can be useful for many other Planning applications. IWR Planning Suite II (Version 2.0.9) builds upon the “tried and true” modules, such as the Cost-Effectiveness and Incremental Cost Analysis (CE/ICA) and Plan Generator and Annualizer, and adds new modules including Multi-Criteria Decision Analysis (MCDA), Uncertainty, and the Watershed Wizard. Links to the software, certification memo, and other related resources including all certified models can be found on the Planning Community Toolbox under the Tools tab or on the IWR website.

### Planning Assistance to States – Partner Eligibility Changes

Great news about the Planning Assistance to States (PAS) program! A new policy

memorandum describes how non-profits can serve as PAS study partners, and what is needed for the partnership to be successful. This opens up new opportunities in an already successful program. The policy memo can be found under the Guidance Memos section of the Planner’s Library on the Planning Community Toolbox. Please watch for an upcoming webinar on this topic.

### 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 monthly Hot Topics. Find the latest in your email inbox or on the Planning and Policy SharePoint. To be added to the newsletter email distribution list, email us at [hqplanning@usace.army.mil](mailto:hqplanning@usace.army.mil).

## > What’s New on the Planning Community Toolbox

The Planning Community Toolbox is the “go to” website for current Planning policy and guidance and links to the tools that can support planners and planning decision making.

The Toolbox contains helpful resources for planners who are working on project delivery teams for feasibility reports and other products. Recently added documents include a Review Plan Guide,

including a Word template and Excel checklist, on the Review section of the Templates and Checklists page.

On a new start study team – or a new start study funded by the Emergency Supplemental? We have gathered key resources to get those projects started right – find the links on the front page of the Toolbox.

Recent national policy changes and new guidance applicable to planning are available on the front page under

Policy and Guidance Updates. New additions to the Toolbox include newly signed implementation guidance for executing the Emergency Supplemental, Section 1001 of WRRDA 2014 (revised), Director’s Policy Memoranda, and more.

Interested in taking a deep dive on a specific planning topic? The Training tab contains links to the Planning Community Webinar Series

– and other CoPs’ webinar series, information in the Planning Corps Curriculum and other PROSPECT courses, the Planning Associates program, and more.

Looking to spread your wings? Job openings across Planning are frequently posted on the Toolbox’s home page under Notices.

Visit the Toolbox online at [www.corpsplanning.us](http://www.corpsplanning.us).



# PLANNER PERSPECTIVE: THE WATER RESOURCES CERTIFIED PLANNER EXPERIENCE



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KENDALL AT THE ACTIVE CENTER HILL DAM SAFETY MODIFICATION CONSTRUCTION SITE. SOURCE: KENDALL ZABOROWSKI,

**Kendall Zaborowski, Huntington District,** was selected as a Water Resources Certified Planner in 2018. Kendall is the Planning and Policy team lead for the Dam Safety Modification Mandatory Center of Expertise (MCX), located in the Huntington District. The Planning and Policy team advises dam

*safety teams around the country, provides production support for dams nationally and internationally, and develops policy for dam safety and planning studies. Kendall shared his perspective with Planning Ahead on the role of Water Resources Certified Planners in making a difference in the Corps.*

**W**hen I was a child I was fascinated by large and fantastic infrastructure projects. These were the hidden things that allowed us to live our lives. I may not have known the word at the time, but I always knew I wanted to be an engineer. The opportunity to work as a co-op for the Corps while I was in school was exciting. When it comes to large and unique infrastructure, especially in the realm of water, the Corps is the biggest game in town.

After a couple of years working in engineering I spent three months in planning and became enamored all over again. Here was the place where all those big ideas got their start. I was hooked – and I asked if they had a permanent spot for me shortly after my time there.

Since joining planning, it has been my goal to develop and produce positive and equitable access to water and water resources for all people. I realize that is



KENDALL WITH JAY AYA-AY (LEFT) AND MARCI JACKSON (CENTER) OF THE DAM SAFETY MCX PLANNING TEAM. SOURCE: KENDALL ZABOROWSKI, LRH

a rather broad and lofty goal, but I think it lines up with USACE’s mission to “Deliver vital public and military engineering services; partnering in peace and war to strengthen our Nation’s security, energize the economy and reduce risks from disasters.”

Water is arguably the most important piece of human survival. Our collective culture and society are built on our need for water. Water security is playing an increased role in global conflict and crisis – the droughts in Syria played a large role in internal conflict and the rise of ISIS that has led to global conflict. Cape Town, South Africa is currently experiencing a crisis due to a drought there. In the United States, recent droughts have crippled California, states are currently fighting each other in court rooms over access to water, and nationally we’re arguing about what qualifies

as a water body. Water security is the intersection of human well-being and national security, and USACE plays a vital role in keeping people healthy, safe, and prosperous.

One of the ways I work to achieve my goal in planning is building a common understanding. Everyone I’ve worked with, both internally and as a partner, wants the same thing: we all want the best outcomes for the people we serve. I see the Water Resources Certified Planner designation as a tool to help me continue to bridge gaps and build understanding.

The Water Resources Certified Planner program is an agency endorsement that the person who possesses it is an advocate for delivering the agency’s mission. Being recognized as a Water Resources Certified Planner helps empower me to challenge myself and the people I work with to find

those equitable and honest solutions to tough questions about water.

There are also opportunities to continue to expand the understanding and value of the planning process throughout the organization. I am trying to help planning by expanding the influence of planners across the agency, and designation as a Water Resources Certified Planner raises the credibility of the ideas I am bringing to many who are not familiar with planning’s role in the decision making process. For example, currently I am working with the Risk Management Center to update and create new guiding documents for Dam Safety Modification Studies, trying to incorporate many of the ideas outlined in the Planning Manual Part II: Risk-Informed Planning into this process.

Those of us recognized as Water Resources Certified Planners have an obligation to demonstrate the value of planning and risk-informed decision making to those both inside and outside the Corps of Engineers. And we should be excited about doing it! We have the magnificent opportunity, and the trust of the Nation, not just to ponder, but to deliver equitable access to water and water resources for all people.

**The Water Resources Certified Planner program** establishes a cadre of Corps planners with broad experience and training in Civil Works planning, who are capable of leading complex water resources planning efforts, technical reviews, and national-level planning task forces or workgroups. By identifying Water Resources Certified Planners, the organization can help resource managers match complicated, controversial, and highly visible studies and initiatives with a very capable lead planner, no matter where that planner is located.

The Water Resources Certified Planner program was announced by MG Jackson in April 2016. The first group of certified planners was announced in July 2017. This May, twenty-eight individuals were selected as Water Resources Certified Planners for a total of 62 certified planners.

We congratulate the planners recognized for their planning knowledge, experience, and leadership, and hope novice and journeyman planners will consider certification as a career goal. The next call for applications will open 1 October. If you have any questions about the Water Resources Certified Planner program, please contact Jodi Creswell.





# 2017 PLANNING ACHIEVEMENT AWARD WINNER: CHARLESTON HARBOR SECTION 204 STUDY TEAM, CHARLESTON DISTRICT

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**A**s a 2017 Planning Achievement Award winner, the Charleston Harbor 204 Project Study Team is recognized for its outstanding collaboration and innovation for formulating an efficient and effective plan to restore ecologically significant shorebird habitat on a site, Crab Bank Harbor Island, formally designated as a Globally Important Bird Area.

Crab Bank is one of six state-designated South Carolina seabird sanctuaries and is managed as part of the South Carolina Department of Natural Resources (SCDNR) Heritage Trust Lands. Shorebird populations have been in significant

*The Charleston District Charleston Harbor Section 204 Beneficial Use of Dredged Material (Charleston Harbor 204) Study Team was selected for a 2017 Planning Achievement award. The “Outstanding Planning Achievement Award” provides honorary recognition to a USACE team for the accomplishment of an outstanding planning activity in a District. This award is designed to recognize the achievement of any team or group of civilian employees serving in Civil Works professional planning positions working together toward a common goal to produce a better planning document, planning product, or to enhance the planning process in support of the Civil Works Strategic Plan. This year, USACE added a second category of Planning Achievement – for contributions to a Continuing Authorities Program (CAP) study or similar programmatic effort. The Charleston Harbor 204 study team was included in this inaugural category.*

decline in the region over the last three decades. Due to erosional forces and other factors, Crab Bank has been reduced from an estimated 23 acres in 2000 to its current size of 0.68 acres. The recommended plan resulting from the Charleston Harbor 204 feasibility study would result in the construction of an island approximately 80 acres in size, restoring habitat providing nesting, foraging, and loafing for multiple avian species.

The genesis for this highly innovative and collaborative study was the Charleston Harbor Deepening and Widening Project (Post-45) General Investigations Feasibility Study, where



PELICANS NESTING AND LOAFING ON CRAB BANK. SOURCE: USACE CHARLESTON DISTRICT

multiple stakeholders expressed the desire for dredged material to be used for beneficial uses at multiple locations throughout the harbor. Detailed analyses of beneficial use measures were developed during the Preconstruction Engineering and Design phase of the Post-45 project, and the final beneficial use plans were documented in a Supplemental Environmental Assessment (SEA). Alternatives that were least cost and environmentally acceptable – such as construction of artificial reefs – were incorporated into the Post-45 project's construction.

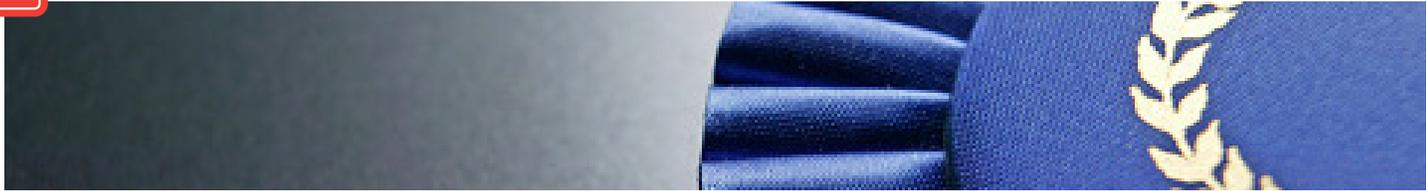
However, one alternative highly preferred by stakeholder agencies that was not included in the Post-45 plan was the placement of dredged material at Crab Bank, as it was an increased cost alternative. In order to realize the habitat benefits of this alternative plan, in November 2016 SCDNR requested the inclusion of beneficial use alternatives to be constructed concurrently with Post-45 under CAP Section 204, which allows for the increased costs of a project to be covered by cost sharing with a non-Federal sponsor. The CAP 204 study builds upon opportunities for beneficial use (including Crab Bank), evaluated in the

Post-45 Final Integrated Feasibility Report and Environmental Impact Statement and in the Post-45 SEA. The goal of this more detailed study was to refine beneficial use alternatives to ensure the final recommended plan provides the greatest ecosystem restoration benefits in the most cost-effective manner.

The Charleston Harbor 204 feasibility study was completed in approximately 24 months on a modest budget (\$260K) and involved intensive coordination and collaboration with multiple federal (USFWS, NMFS, USEPA, USFS, NPS, USCG) and state (SCPA, SCDNR,

### ECOSYSTEM RESTORATION IN CONNECTION WITH DREDGING (SECTION 204)

*Section 204 of the Water Resources Development Act of 1992 provides authority for the Corps of Engineers to plan, design, and build projects to protect, restore, and create aquatic and ecologically related habitats in connection with dredging of authorized Federal navigation projects. Typically, these projects involve the beneficial use of dredged material from navigation channels to improve or create wetlands or waterbird nesting habitats.*



SC SHPO) agencies and stakeholder groups. Initial formulation and screening for the feasibility study included over 30 alternatives, involving material to be obtained from either operation and maintenance (O&M) activities or channel deepening new work. The recommended plan from the 204 study incorporates new work dredged material from the Post-45 dredging project to restore habitat on Crab Bank. The Project Partnership Agreement (PPA) was executed with SCDNR for the design and construction of the project in July 2018. If sufficient federal and non-federal funds are available to correspond with the Post-45 Project timeline, material will be placed on Crab Bank in 2019 or 2020.

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Embracing integrated water resource solutions, the study team considered a range of agency and stakeholder preferences and economic and social benefits throughout the study process. The approved plan provides significant ecological lift and an efficient solution utilizing USACE dredged material. In addition, the multi-District and multi-agency makeup of the study team allowed it to draw on expertise from both around the region and outside the Corps, effectively

## CONGRATULATIONS TO THE CHARLESTON HARBOR 204 STUDY TEAM! THE FOLLOWING INDIVIDUALS PROVIDED SIGNIFICANT CONTRIBUTIONS TO THE STUDY AND RECOMMENDED PLAN:

<p><b>Holly Carpenter</b> <i>Project Manager (SAC)</i></p> <p><b>Diane Perkins</b> <i>Chief, Planning and Environmental Branch (SAC)</i></p> <p><b>Doug Wall</b> <i>Coastal Engineer (R, SAW)</i></p> <p><b>Colton Bowles</b> <i>Plan Formulation (SAC)</i></p> <p><b>Sara Brown</b> <i>H&amp;H Engineering (SAC)</i></p> <p><b>Patti Casey</b> <i>Real Estate (SAS)</i></p> <p><b>Jesse Helton</b> <i>Plan Formulation (SAC)</i></p> <p><b>Michael Sarhan</b> <i>GIS (SAC)</i></p>	<p><b>Dick Powell</b> <i>Plan Formulation (R, SAJ)</i></p> <p><b>Mark Messersmith</b> <i>Environmental (Former, SAC)</i></p> <p><b>Jeff Fersner</b> <i>Cost Engineer (R, SAC)</i></p> <p><b>Gretchen Ehlinger</b> <i>Senior Biologist (SAJ)</i></p> <p><b>Alan Shirey</b> <i>Environmental (SAC)</i></p> <p><b>Mary Creese</b> <i>Program Analyst (SAC)</i></p> <p><b>Kelley Kaltenbach</b> <i>Geologist (SAW)</i></p> <p><b>John Kochis</b> <i>Civil Engineer (SAC)</i></p>	<p><b>Krystle Miner</b> <i>GIS (Former, SAC)</i></p> <p><b>Hanna Collins</b> <i>Civil Engineer (SAC)</i></p> <p><b>Stacie Crowe</b> <i>SC Dept. of Natural Resources</i></p> <p><b>Lorianne Riggan</b> <i>SC Dept. of Natural Resources</i></p> <p><b>Felicia Sanders</b> <i>SC Dept. of Natural Resources</i></p> <p><b>Priscilla Wendt</b> <i>SC Dept. of Natural Resources</i></p>
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demonstrating that a team doesn't have to be working on a huge General Investigations study to use colleagues from other offices!

The team's notable focus on efficient completion of study tasks and incorporation of innovative solutions are in the best traditions of USACE Civil Works Planning and bring great credit upon themselves and the organizations they represent.

## ACRONYMS

- **USFWS** – U.S. Fish and Wildlife Service
- **USCG** – U.S. Coast Guard
- **NMFS** – National Marine Fisheries Service
- **SCPA** – South Carolina Ports Authority
- **USEPA** – U.S. Environmental Protection Agency
- **SCDNR** – South Carolina Department of Natural Resources
- **USFS** – U.S. Forest Service
- **SC SHPO** – South Carolina State Historic Preservation Office



# 2017 NATIONAL PLANNING AWARDS

Congratulations to all of the nominees for the national Planning awards; your contributions to planning efforts, large and small, make the U.S. Army Corps of Engineers a world-class organization. Enterprise awards recognize an individual's or team's contributions to a feasibility study or similarly-scaled life-cycle or enterprise-level Planning effort. Programmatic awards recognize an individual's or team's contributions to a Continuing Authorities study or similar programmatic effort, including but not limited to Planning Assistance to States, Flood Plain Management Services, and the Tribal Partnership Program.

## PLANNING EXCELLENCE

(Enterprise)

- Travis Creel, MVN
- Jon Sobiech, MVP

## PLANNING EXCELLENCE

(Programmatic)

- Mark Bierman, SPN
- Jason Glazener, SAW

## OUTSTANDING PLANNING ACHIEVEMENT

(Enterprise)

- Norfolk Coastal Storm

Risk Management Study PDT (NAO)

- Sabine Pass to Galveston Bay, TX PDT (RPEC)

## OUTSTANDING PLANNING ACHIEVEMENT

(Programmatic)

- Oroville and Feather River Basin Recovery Team (SPK)
- Crab Bank Section 204 Beneficial Use of Dredged Material Study Team (SAC)

We also created a new award this year, **Planning Champion**.

This award recognizes an individual (or individuals) instrumental to Civil Works Planning success by providing leadership, encouragement, and support while enabling a planning project delivery team to overcome obstacles in order to accomplish goals, and by facilitating group collaboration and decision making while demonstrating

personal courage, empathy, and respect for others.

This award may be given in recognition of an individual's contributions to a single planning effort, or to multiple activities. The Planning Champion may be nominated from any part of the organization. This year, we are proud to recognize Lisa Kiefel, HQ, and Brian Harper, RPEC (SWD) as Planning Champions.



## > Planning Community Webinars

The Planning Community of Practice (PCoP) webinar series offers planners and their colleagues an opportunity to share information and learn more about trending topics in Civil Works Planning and water resources development policy, guidance, processes, and tools.

The PCoP is hosting a series of seven business line specific webinars focusing on specific policies and guidance relevant to each type of business line study, as well as common challenges and risks related to risk-informed planning. These webinars are presented by Planning Centers of Expertise leads. The Water Management and Reallocation and Inland Flood Risk Management webinars were hosted in August; the remaining business line webinars will be hosted September through November. Videos of each webinar will be made available on the Planning Community Toolbox.

Other recent webinar topics include: interagency Floodplain Management Services opportunities, updated guidance for Civil Works Review (EC 1165-2-217), the Director's Policy Memorandum on Improving Efficiency and Effectiveness in USACE Civil Works Project Delivery, feasibility study execution and the 3x3x3 rule, recently released USACE Emergency Action Plan guidance, the FY19 Planning Associates Program, IWR Planning Suite II – and more.

Webinars are held the first and third Thursday of each month from 2-3 pm Eastern. Presentations and the Question and Answer sessions from each webinar are archived on the Planning Community Toolbox, and recent webinars are always on the front page of the Toolbox: [www.corpsplanning.us](http://www.corpsplanning.us).

If there is a webinar topic you believe the PCoP would benefit from, please email your ideas to [hqplanning@usace.army.mil](mailto:hqplanning@usace.army.mil).

**FIND MORE WEBINARS AT:**  
<http://planning.usace.army.mil/toolbox/resources.cfm?id=0&Option=Planning%20Webinars>





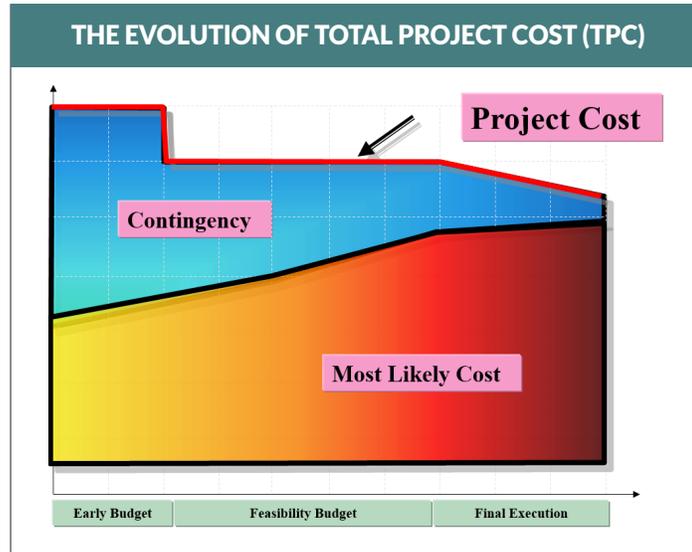
# MCX SPOTLIGHT: COST ENGINEERING

*The Walla Walla District Cost Engineering Branch houses the Civil Works Cost Engineering and Agency Technical Review Mandatory Center of Expertise (MCX). The MCX is structured to provide a mandatory Agency Technical Review center and Support for Others program for Civil Works projects. The Branch also has Technical Expertise (TCX) duties. The TCX roles include technical support and assistance, and development of various cost tools. The TCX provides resources to USACE Headquarters, Divisions, and Districts on cost engineering issues. Therefore, if you have a Cost Engineering question, the Walla Walla team can help address it!*

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**W**hat is cost engineering and when should cost engineers be engaged in a planning study? This can be a vexing question for many planning project delivery teams (PDTs) working to strike the balance of study schedules and budgets, and ensuring they are engaging the appropriate PDT members at the right time. As with so many other disciplines, the answer is “earlier than you think.”

For more than ten years, Corps guidance has directed



the use of cost risk analysis methods to develop cursory-level to more detailed cost and risk-based contingency estimates for Civil Works projects. In a feasibility study, this effort culminates in the development of a final “Total Project Cost” (TPC) estimate for the plan being recommended for authorization.

There is a prescribed process for identifying and measuring the cost and schedule impact of project uncertainties on the estimated TPC and schedule: the cost and schedule risk analysis (CSRA) – a quantitative tool to measure the impacts of project risks. The tool uses Monte Carlo analysis to arrive at a risk-based contingency value for both the cost and schedule of a project.

The CSRA identifies the areas of high cost/schedule uncertainty and assigns contingency values to the project cost and schedule. The outputs of this process show the probabilities that various TPCs and schedule durations will or will not be exceeded. The development of these contingencies gives the USACE management team an effective risk management tool to assist in the decision making process associated with project planning and design. The Cost Engineering MCX is required to certify, as the culmination of the Agency Technical Review of the study cost products, the final TPC Summary so that decision makers can have confidence in the analysis.

The categories of CSRA risks the PDT considers should

sound familiar; these are many of the same risks that the lead planner and project manager are managing in the execution of the planning study, including organizational and project management risks, general technical risks, lands and damages risks, regulatory and environmental risks, etc. Information from the planning study’s risk register and associated Decision Management Plans should be used to inform the CSRA. Ensuring the cost engineer – working on behalf of the PDT in the completion of the CSRA – is aware of the documented risks and risk management strategies associated with the study will minimize the duplication of work and provide opportunity for coordination and communication.

PDT members – and particularly cost engineers – need to think critically about data collection efforts that help to inform development of cost estimates during the planning process, and eventually assumptions on level of detail of analyses that inform the development of the CSRA. While more detailed information may not be necessary for the planning decisions (e.g., to distinguish among alternatives and



THE OLMSTED LOCKS AND DAM PROJECT IS LIKELY A FAMILIAR CASE STUDY FOR ENGINEERS AND COST ENGINEERS IN THE CORPS. FIRST AUTHORIZED IN 1988, A 2012 POST AUTHORIZATION CHANGE REPORT ESTABLISHED A TOTAL PROJECT COST (TPC) RECOMMENDATION OF NEARLY \$3.1 BILLION. THE 2016 CERTIFIED TPC IS \$3.06 BILLION. THE PROJECT IS EXPECTED TO BE COMPLETED AT OR BELOW THE CERTIFIED TPC AND AHEAD OF SCHEDULE, WITH THE DAM OPERATIONAL BY OCTOBER 2018 AND OTHER PROJECT COMPONENTS COMPLETED BY DECEMBER 2020, INCLUDING REMOVAL OF DAMS 52 & 53.) SOURCE: USACE LOUISVILLE DISTRICT

identify the Tentatively Selected Plan), the study's cost engineer will know what information is key to inform the development of the cost contingencies for the study.

With that input, the project manager and lead planner can decide how to manage the overall cost and schedule risks. This approach will help support a more efficient cost certification process and provide documentation of cost and schedule assumptions for the PDT to refer to in case any decisions are questioned later on in the process.

The Cost Engineering Community of Practice's (CoP) CSRA tool can be used to calculate and communicate cost distributions in a

similar format as the range of benefit outputs from the Economics team. You may have heard the risk-informed planning mantra of "there is no number." Understanding and communicating the range of potential costs and benefits of a project – and the uncertainties associated with that range – enables the PDT, TCX, and MCX to make more informed decisions.

Ensuring quality cost engineering products, which are designed to provide a high-confidence calculation of TPC – a key piece of information to decision makers – requires a concerted effort by all to communicate, think critically, and document project risks and their associated consequences.

Working as a team, keep the following tips and best practices in mind as you engage with cost engineers and other key disciplines throughout the study process:

- Ask critical questions up front regarding potential scenarios that might have a large impact on scope down the road.
- Include cost engineering PDT members in scoping discussions.
- Involve cost engineers in the development of the study risk register, including the risk characterization and potential consequences – these same inputs will likely be needed for the CSRA.
- When developing and comparing cost estimates for the alternatives array, be sure to include all the components of a TPC estimate (Real Estate, Preconstruction Engineering and Design, Supervision and Administration, Monitoring and Adaptive Management, etc.).
- Include discussion of TPC estimates and contingencies at milestone meetings and other decision meetings.
- Document pertinent discussions and assumptions regarding potential construction measures, alternatives, or selected plans.





# PCoP Q+A

## I'm hearing a new acronym. What's the LDRIP, and how does it affect Planning?

LDRIP stands for the "Long-Term Disaster Recovery Investment Program" – the Investigations, Construction, and Mississippi Rivers & Tributaries projects being funded by Emergency Supplemental appropriations in the Bipartisan Budget Act of 2018.

This suite of studies and projects is being funded by Congress in direct response to the impacts of Hurricanes Harvey, Irma, and Maria in 2017. The Program may also be referred to as the "Emergency Supplemental," or the HIM (Harvey, Irma and Maria) program.

The initial list of projects and studies to be funded under the LDRIP has been cleared by the Office of Management and Budget and published on the HQUSACE Civil Works Budget website. The list includes 38 study activities funded to completion: five active studies; 31 new feasibility studies; one comprehensive study; and one watershed study.

Subject to all applicable laws and policies, these studies will be managed with a focus on project delivery. These studies are fully federally funded and expected to complete within three years and for \$3 million or less.

To get started on the right foot, Headquarters will allocate \$100K for each selected study to establish the study team, hold a scoping meeting, and negotiate a supplemental-specific model study agreement with a non-federal study sponsor. This model agreement is available on the Planning Community Toolbox. MSC and District Planning Chiefs for named LDRIP studies have been working together to assemble the core study teams and identify planning mentors to facilitate the application of risk-informed planning techniques and processes.

Because the LDRIP watershed study and comprehensive study will not result in a

recommendation for an authorized project, signing a study agreement with a non-federal sponsor will not be required for these two efforts. Funding will be requested and provided in as-needed increments, as documented in each study's vertically aligned memos.

## **SUBJECT TO ALL APPLICABLE LAWS AND POLICIES, THESE STUDIES WILL BE MANAGED WITH A FOCUS ON PROJECT DELIVERY.**

Execution of LDRIP studies is akin to a marathon, and the starting gun has gone off – each new study effort is expected to be started immediately, the agreement will be signed within 60 days, and each study will be completed within three years. Active studies that are being funded to completion are expected to be completed based on their current vertically-aligned schedules. As with the rest of the planning portfolio, there are no pauses or rests in the three-year schedule!

Planning studies are the subject of intense focus inside and outside of the government to confirm whether the Corps has transformed itself to be able to deliver risk-informed solutions efficiently and effectively. We are dedicated to managing the entire planning program, and the LDRIP studies are an important segment of the Civil Works portfolio.

## **WE WANT TO HEAR FROM YOU**

**QUESTIONS, COMMENTS, CONCERNS, ANXIETIES — IF YOUR QUESTION CAN HELP FELLOW PLANNERS, EMAIL US AT [HQPLANNING@USACE.ARMY.MIL](mailto:HQPLANNING@USACE.ARMY.MIL) AND MAYBE YOU'LL SEE IT HERE.**