

# Meet Your Navigation Planning Centers of Expertise:

Deep Draft Navigation (DDNPCX)  
Small Boat Harbor (SBH-PSCX)  
Inland Navigation (PCXIN-RED)

Russell Iwamura, Planning Chief, POD, SBH-PSCX

Todd Nettles, Technical Director, DDNPCX

Erin Stockdale, Planning Chief, POA, SBH-PSCX

Patrick PJ Donovan, Chief, PCXIN-RED

25 January 2024



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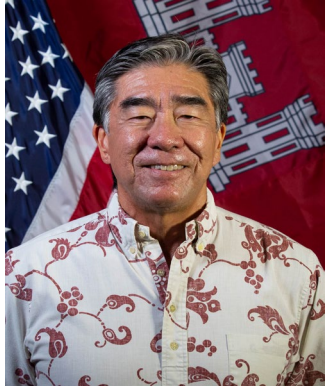
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# PRESENTERS



Russell Iwamura,  
Planning Chief, POD,  
SBH-PSCX



Todd Nettles,  
Technical Director,  
DDNPCX



Erin Stockdale, Planning  
Chief, POA, SBH-PSCX



Patrick PJ Donovan,  
Chief, PCXIN-RED



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# WHICH PCXS HAVE YOU WORKED WITH?



Use the Annotation tool!



**Small Boat Harbor Planning  
Sub-Center of Expertise**

No Navigation or  
Nav PCX  
Experience ☹️



- **2000 Water Resources Development Act**
  - Request for National Academy report on Corps project reviews
- **2002 National Academy of Sciences Report**
  - Identified lack of independence
  - Identified Centers of Expertise needs
- **2003 USACE creates Planning Centers of Expertise**
- **2007 Water Resources Development Act**
  - Requires independent peer review under certain conditions (Sec. 2034)
  - Establishment of specialized centers of planning expertise (Sec. 2033e)



**WATER RESOURCES DEVELOPMENT ACT**





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# PCX STRATEGIC MISSION



Focus on technical evaluations and policy reviews associated with plan formulation during the preparation of decision documents

Strengthen planner core competencies by assisting Project Delivery Teams

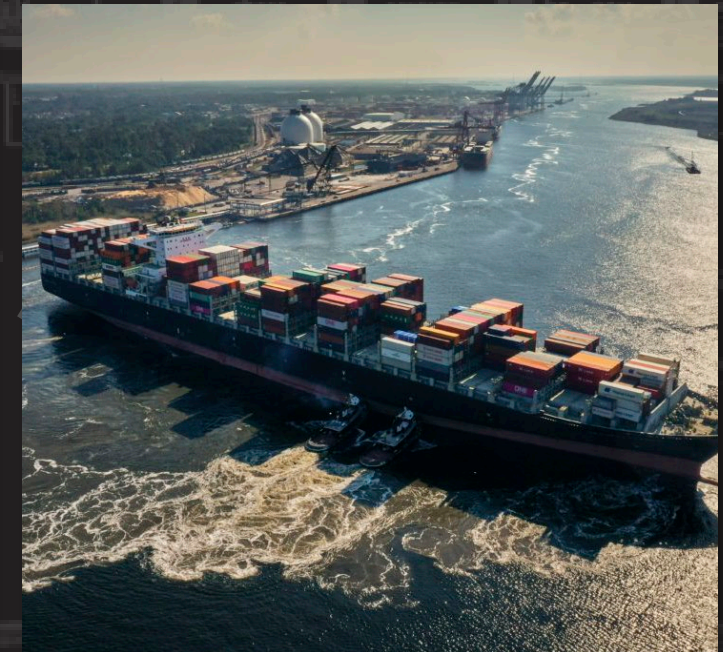
- ▶ Technical Services
- ▶ Peer Review
- ▶ Research & Development
- ▶ Training
- ▶ Model Certification
- ▶ Policy Development Support
- ▶ Process Improvement
- ▶ Lessons Learned

Source: 2008 Memo from Mr. Stockton, PCXs - Mission, Roles, and Responsibilities Statement

# DEEP DRAFT NAVIGATION PLANNING CENTER OF EXPERTISE (DDNPCX)

Todd Nettles  
DDNPCX Technical Director

25 January 2024



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# MISSION: DDNPCX HIGHLIGHTS



*Seven PCXs established August 2003 – DDNPCX assigned to CESAD*

## ***Common to All PCXs:***

- Technical Services
- Peer Review
- Research and Development
- Training
- Planning Model Certification
- Policy Development Support
- Process Improvement
- Lessons Learned





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# DDNPCX EXPANDED MISSION



- CECW-CP MEMORANDUM, Subject: Planning Centers of Expertise – Mission Roles and Responsibilities Statements and Small Boat Harbor Designation, 23 June 2008
- Operation Order (OPORD) 2012-15 signed 24 February 2012 - ***Mandatory that economic analyses for deep draft navigation and small boat harbor studies are performed by the DDNPCX***







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# MANDATORY PRODUCTION CENTER



- OPORD 2012-15 assigned the economic analyses for all pre- and post-authorization decision documents to the DDNPCX and the SBH-PSCX.
- The economics for all studies resulting in Chief's Reports or Director's Reports will be produced by the DDNPCX or SBH-PSCX. The same goes for the economics related to post-authorization decision documents like General Reevaluation Reports.
- Continuing Authorities Program and Planning Assistance to States studies are covered by OPORD 2012-15, per CECW-P Economic Analyses for DDN and SBH Feasibility Studies, 8 Jan 2018.
- Workload: 17 General Investigations Studies, 10 Continuing Authorities Program Section 107 studies, 6 Dredged Material Management Plans, 7 economic updates, and 4 other studies/efforts



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# DDNPCX ORGANIZATION / LOCATION

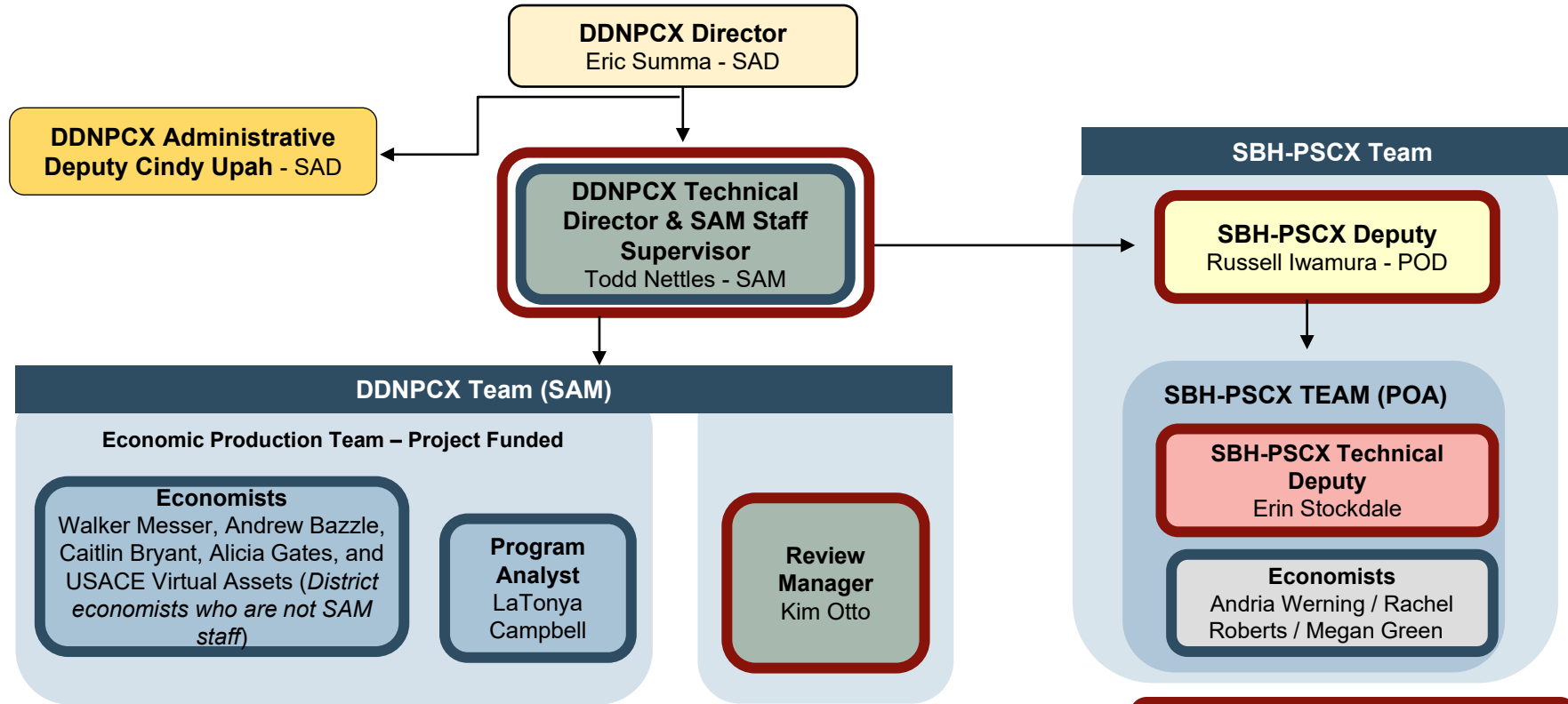
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- Headquartered in CESAD
  - Director – Planning and Policy Chief (Eric Summa)
  - Administrative Deputy (Cindy Upah)
- Technical Center in CESAM
  - Operational / Technical Director (Todd Nettles)
  - Review Manager (Kim Otto)
  - Economists (Walker Messer, Caitlin Bryant, Andrew Bazzle, and Alicia Sellers)
  - Program Analyst (LaTonya Campbell)
- USACE - Virtual support (5 to 10 USACE Economists in several other Districts)



# DDNPCX / SBH-PSCX STRUCTURE AND PERSONNEL



**PCX Positions:**

Position Type	Permanent					
	5-10%	25%	100%	100%	10-15%	5-10%
PCX Commitment (~% FTE)	5-10%	25%	100%	100%	10-15%	5-10%
Primary Funding Source(s)	GE Funded	GE Funded	Project, PSP, & SAM OH Funded	95% Project 5% SAM OH Funded	Project, PSP, & POA OH Funded	Project Funded

*Performs PCX Roles and Responsibilities Common to all PCXs*

*Dedicated to Economic Production – Labor is Direct Charge to Navigation Studies*



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# DDNPCX FUNDING

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- Direct project funds for review (e.g., Agency Technical Review, Independent External Peer Review - Review Management Organization activities), consulting services, economic production, and model certification
- HQUSACE funding for development of guidance, training classes, etc.
- Research & Development funding for technology transfer and field review – Institute for Water Resources / Engineer Research and Development Center



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# TOP CHALLENGES FOR DDNPCX

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- Funding for Administrative Functions (not Admin Assistant)
- Relationships with other Corps Districts, Divisions, and non-Federal partners
- Implementing Production Center OPOD – Mandatory Economic Production Center for DDN & SBH
- Resources related to Environmental and Cultural Resources
- Comprehensive Benefits



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# COMMUNICATIONS STRATEGY FOR DDNPCX

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- Deep Draft Planner Roster
- Conference / Workshop Attendance
- Presentations
- Monthly conference calls with Division/District offices
- Monthly conference calls with PCX Guild (annual face to face)

# Small Boat Harbor Planning Sub-Center of Expertise (SBH-PSCX)

Russell Iwamura, Planning Chief, POD  
Erin Stockdale, Planning Chief, POA

January 25, 2024



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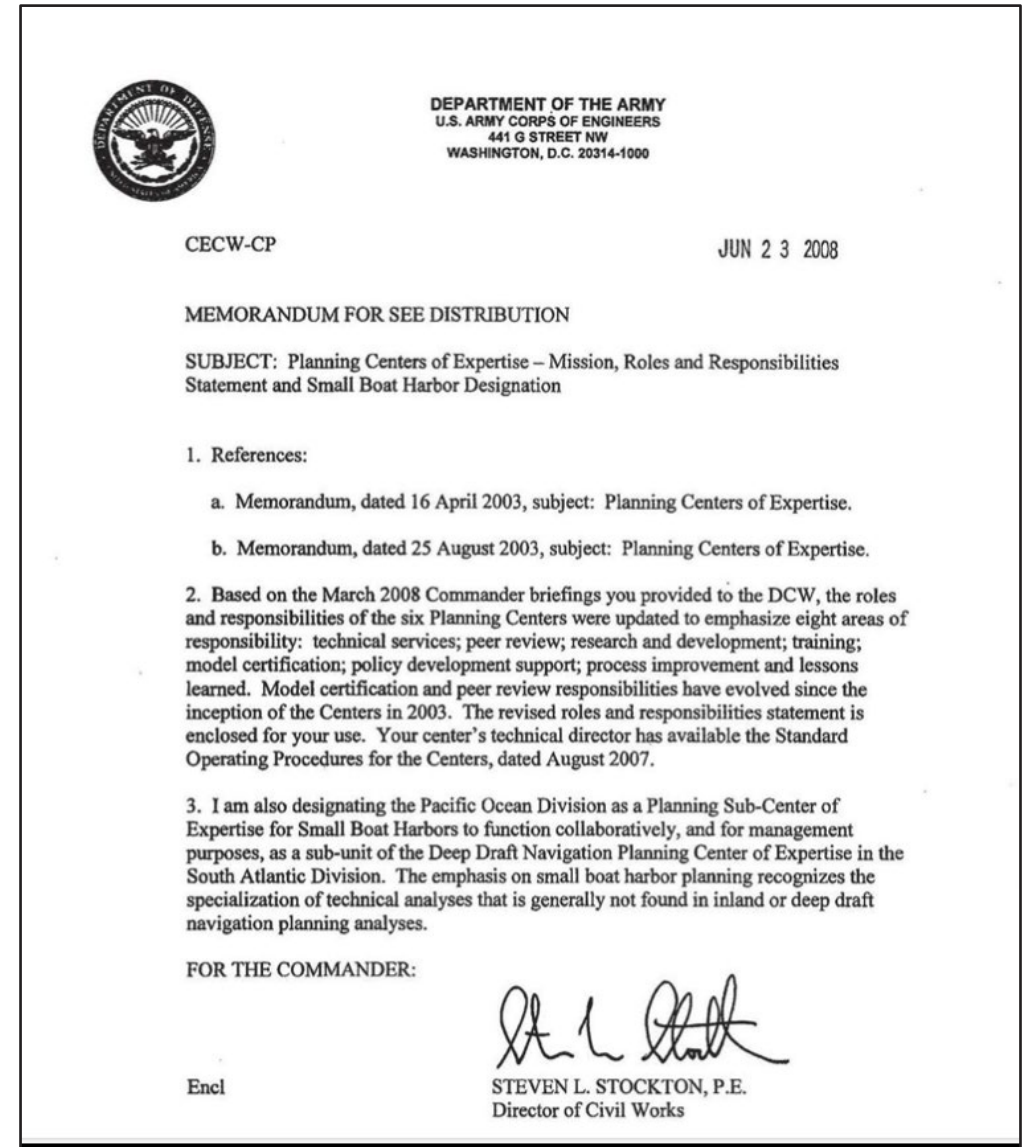


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# HISTORY – SMALL BOAT HARBOR PSCX



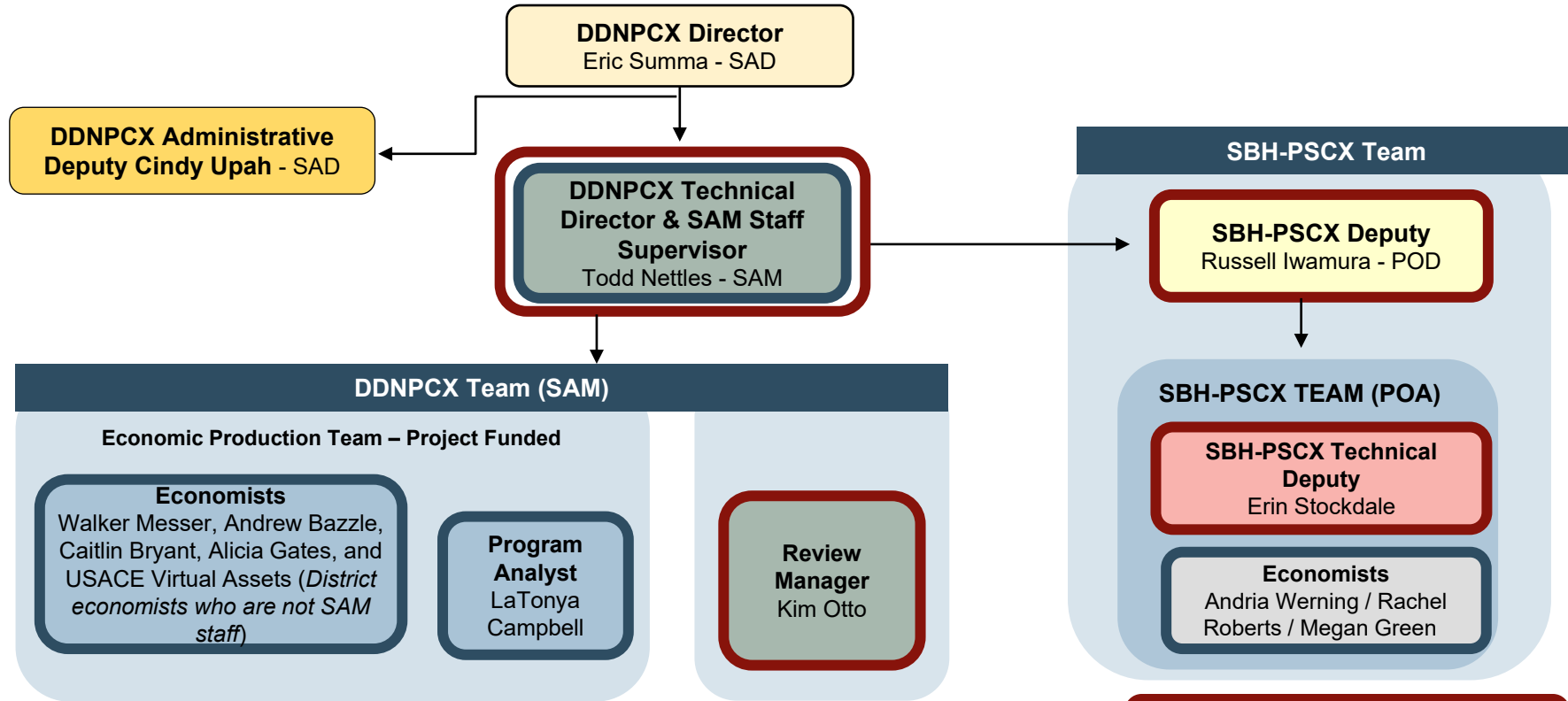
- Seven MSCs designated as Planning Centers of Expertise in the 25 August 2003 memo signed by MG Griffin.
- Eighth center of expertise for small boat harbor studies was established at POD 23 June 2008 as a sub-unit of the DDNPCX.
- The purpose for establishing the SBH-PSCX was in recognition of the “...specialization of technical analyses that is generally not found in inland or deep draft navigation planning analyses.”







# DDNPCX / SBH-PSCX STRUCTURE AND PERSONNEL



### PCX Positions:

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PCX Commitment (~% FTE)	5-10%	25%	100%	100%	10-15%	5-10%
Primary Funding Source(s)	GE Funded	GE Funded	Project, PSP, & SAM OH Funded	95% Project 5% SAM OH Funded	Project, PSP, & POA OH Funded	Project Funded

*Performs PCX Roles and Responsibilities Common to all PCXs*

*Dedicated to Economic Production – Labor is Direct Charge to Navigation Studies*



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# MISSION: SBH-PSCX HIGHLIGHTS

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- The mission of the SBH-PSCX is to strengthen planner core competencies in small boat harbor planning by assisting district Project Delivery Teams with the following:

- Technical expertise
- Peer reviews
- Model certification
- Research and Development
- Planner training
- Policy development support
- Providing lessons learned and best practices.



Port of Nome, AK

- In addition, the SBH-PSCX has been designated the mandatory production center for economics for small boat harbor studies through OPORD 2012-15.



- OPORD 2012-15 assigned the economic analyses for all pre- and post-authorization decision documents to the DDNPCX and the SBH-PSCX.
- The economics for all studies resulting in Chief's Reports or Director's Reports will be produced by the DDNPCX or SBH-PSCX. The same goes for the economics related to post-authorization decision documents like General Reevaluation Reports.
- Continuing Authorities Program (CAP) and Planning Assistance to States studies are covered by OPORD 2012-15, per CECW-P Economic Analyses for DDN and SBH Feasibility Studies, 8 January 2018.
- 2023/2024 Workload
  - Three Investigations studies that will result in Chief's Reports – Akutan, Atka and Savoonga.
  - Several CAP Section 107 studies – Back Creek, Hyder, Nome, Ocean City, Kaskaskia Port, Palatka Barge Port



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# WHEN TO ENGAGE THE SBH-PSCX

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- For all pre- and post-authorization studies, the SBH-PSCX should be involved from the beginning of the study. If a charette is held, the SBH-PSCX should be invited to participate.
- Draft Review Plans should be submitted to the SBH-PSCX for review and endorsement.
- The economics for these studies should be coordinated through the SBH-PSCX to determine the availability of resources to complete the analyses. This includes the capability of district economists, the need to supplement district resources if necessary, and to coordinate model certification for the studies.
- Continuing Authorities Program related studies should also engage the SBH-PSCX early in the study process. The SBH-PSCX can help with not only economics, but with other aspects of planning as well.



**Small Boat Harbor Planning  
Sub-Center of Expertise**

# Planning Center of Expertise for Inland Navigation and Risk-Informed Economics Division (PCXIN-RED)

Patrick Donovan

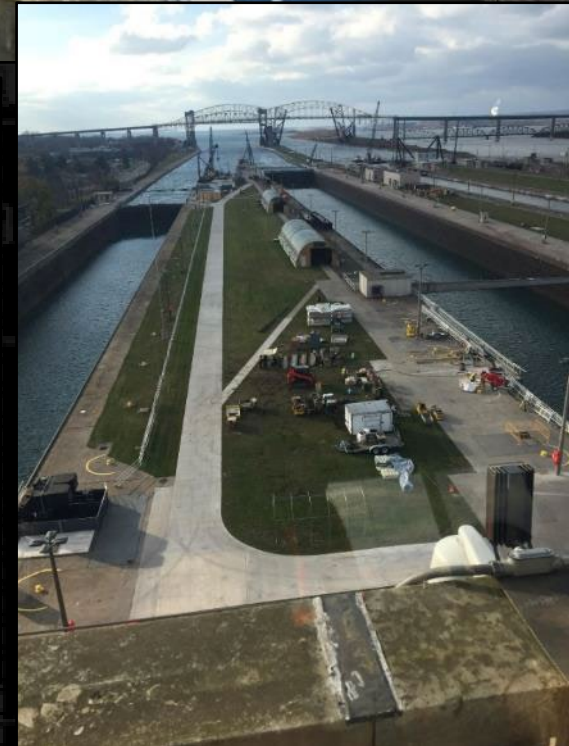
January 25, 2024



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# PCXIN-RED

## PLANNING CENTER OF EXPERTISE FOR INLAND NAVIGATION AND RISK-INFORMED ECONOMICS DIVISION

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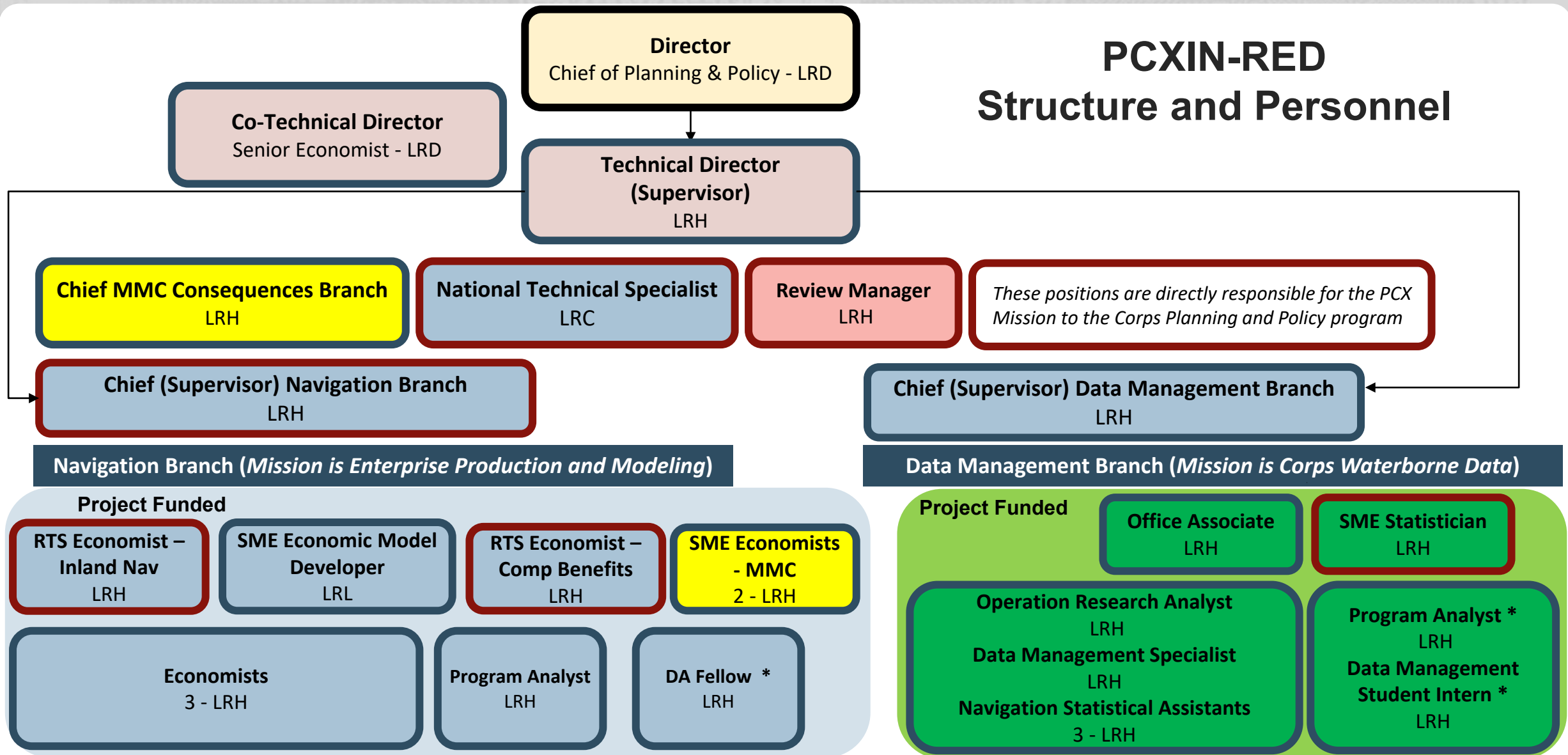


The primary mission of the PCXIN-RED is to improve the quality and timeliness of Corps inland navigation planning studies and products

The purpose is to develop, maintain and apply the best and most appropriate national and regional expertise and science and engineering technology to the planning of inland navigation projects across the nation.



# PCXIN-RED Structure and Personnel



**BUILDING STRONG<sup>®</sup>**  
*and Taking Care of People!*

\* Developmental/Strategic Hire Positions





# PCXIN-RED OVERVIEW



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Planning Center of Expertise for Inland Navigation and Risk-Informed Economics Division (PCXIN-RED)

Located in Huntington District (LRH), Lakes and Rivers Division (LRD)

Director: Chief of Planning & Policy – Lakes and Rivers Division

**National**

Mandatory Review Management Organization (RMO) for Inland Navigation Decision Documents (**ER 1165-2-217**)

Mandatory Center for Inland Navigation Economic Updates (**CWPM 12-001**)

**Regional**

Mandatory Production Center for Inland Navigation Economic Analysis (LRD)

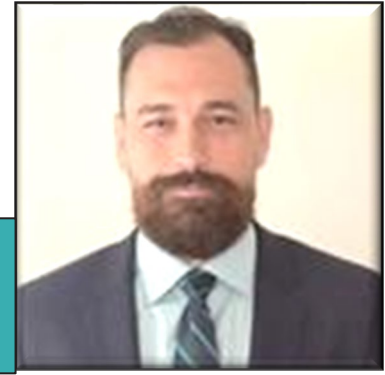
**USACE PCX Roles and Responsibilities**

Technical Services	Research & Development	Training	Process Improvement
Peer Review	Model Certification	Policy Development & Support	Lessons Learned

History	
Two Ohio River Division (ORD) Navigation Centers in 1982	FY 92 - One Navigation Center in LRH System Funding Plan Started
LRH - System Models/Data & LRP LRL - Capacity/Environmental & LRN	
FY 99 - LRD Navigation Planning Center Great Lakes and the Ohio River Systems	August 2003 - Planning Center of Expertise for Inland Navigation (PCXIN) included the Great Lakes (1 of 7 Planning Centers)
September 2013 – Renamed and Realigned to <b>Planning Center of Expertise for Inland Navigation and Risk-Informed Economics Division</b>	



**Patrick "PJ" Donovan,  
Technical Director/  
Chief**



**Lance Awsumb,  
National Technical  
Specialist**





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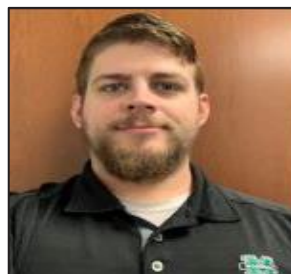
# PCXIN-RED NAVIGATION PLANNING BRANCH



- The Navigation Planning Branch consists of economists and planners specializing in formulation and production of economic analyses for inland navigation projects across the nation.
- Mandatory Review Management Organization (RMO) for Inland Navigation Planning Products
  - ATR, IEPR, Model Review and Certification

RMO Lead – Beth Cade

- 1 RTS (LRD) Inland Navigation Economist – Eric Singley
- 1 Economic Model Developer – Alex Ryan
- 1 RTS (LRD) Comprehensive Benefits Economist – Steven Yates



**James Nowlin**  
Chief



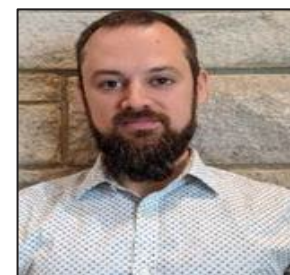
**Beth Cade**  
RMO Lead/Planner



**Eric Singley**  
LRD RTS



**Steven Yates**  
LRD RTS



**Alex Ryan**  
SME Modeler



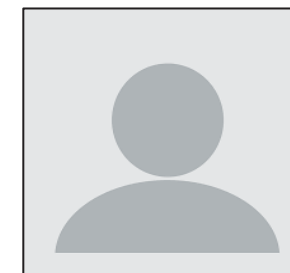
**Angela McClellan-Perry**  
Program Analyst



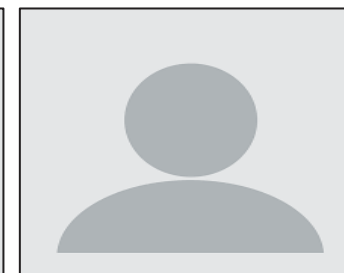
**Lin Prescott**  
Economist/COR



**Jennifer Thomas**  
Economist



**Nate Pfisterer**  
Economist



**DA Fellow/Developmental**  
Economist

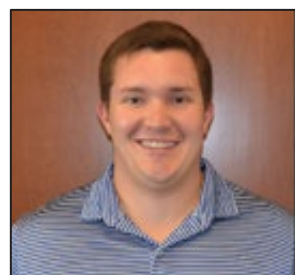
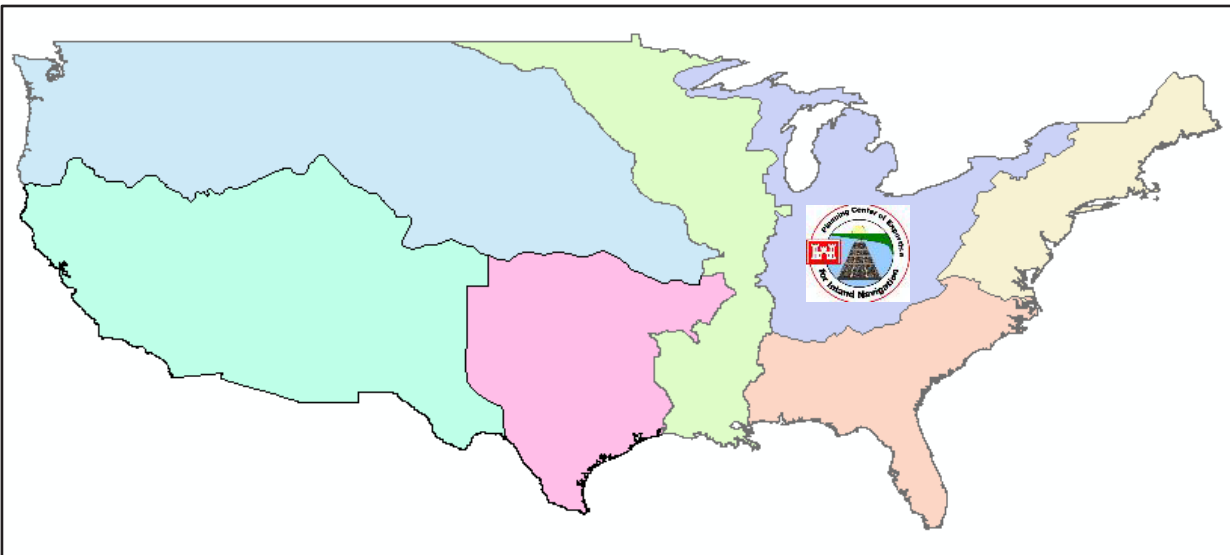


# PCXIN-RED DATA MANAGEMENT BRANCH



The Planning Center of Expertise for Inland Navigation (PCXIN), Data Management Branch (LRH-PX-DM)

- Collects statistical data for vessel movements
- Conveys value of the inland waterway system
- Provide technical advice regarding navigation data



**Ryan Caudill**  
Chief



**Justin Carlson**  
SME Statistician



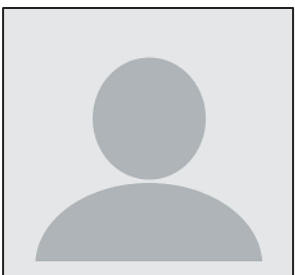
**Carolyn Jones**  
Navigation Management Analyst



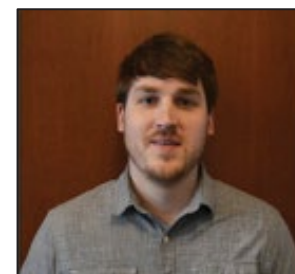
**Melanie Reynolds**  
Navigation Management Analyst



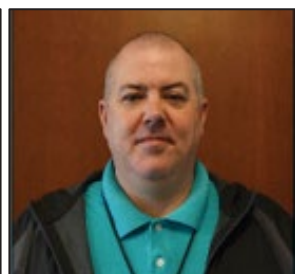
**Melissa Berry**  
Navigation Management Analyst



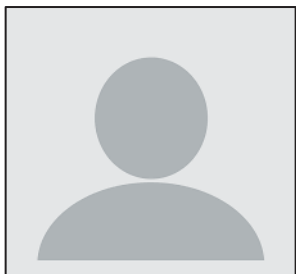
**Vacant**  
Operations Research Analyst



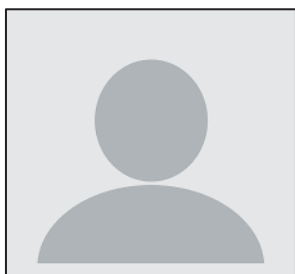
**Joshua McFarland**  
Statistician



**Jared Hodge**  
Office Associate



**Chase Smith**  
Student Intern



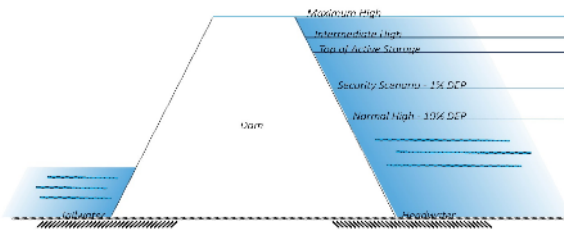
**Strategic Over-hire**  
Program Analyst

# **PCXIN-RED** **(MMC) CONSEQUENCES BRANCH**



- Provides support to the Critical Infrastructure Protection and Resilience (CIPR) and Dam and Levee Safety programs
- Develops consequence assessment studies.
- Results of these studies are used to assist in implementing a Dams consequence-based top screen (CTS) methodology within USACE and identifying critical facilities within the USACE dams and locks portfolio.

Mapping, Modeling and Consequences Mandatory Center of Standardization and Production (MMC): ER 10-1-54



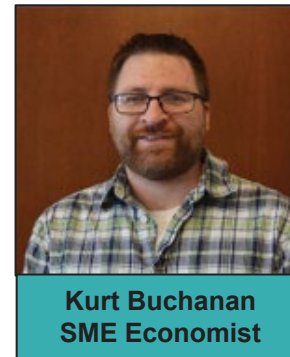
	A	B	I	J	K	L	M
	Warning: Minimal Warning		Reach 2				
Scenario Name	Scenario Base Flow (cfs)	Reach Flow	Structures Inundated	PAI Day	PAI High	Total Damages	
Keys_100k	100,000	100,000	0	0	0	0	
Keys_200k	200,000	200,000	0	0	0	0	
Keys_225k	225,000	225,000	0	0	0	0	
Keys_250k	250,000	250,000	2	0	3	5,838	
Keys_275k	275,000	275,000	6	5	12	24,120	
Keys_300k	300,000	300,000	11	9	24	65,600	
Keys_1000k	1,000,000	1,000,000	175	284	565	20,789,807	
VerdHigh_PF1_50k	50,000	50,000	0	0	0	0	
VerdHigh_PF2_60k	60,000	60,000	0	0	0	0	
VerdHigh_PF3_70k	70,000	70,000	0	0	0	0	
VerdHigh_PF4_80k	80,000	80,000	0	0	0	0	
VerdHigh_PF5_90k	90,000	90,000	0	0	0	0	
VerdHigh_PF6_100k	100,000	100,000	0	0	0	0	
VerdHigh_PF7_110k	110,000	110,000	0	0	0	0	
VerdHigh_PF8_120k	120,000	120,000	0	0	0	0	



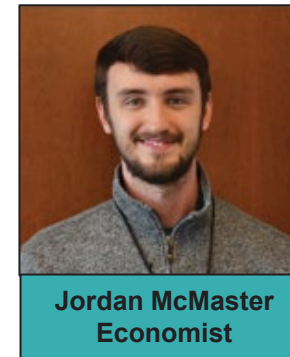
**Tim Smith**  
Consequences Lead



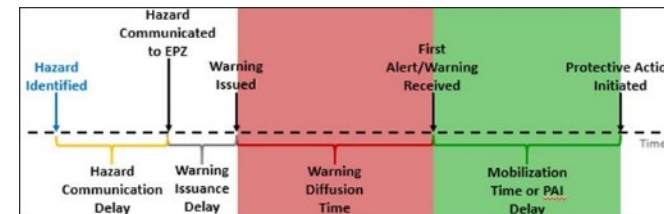
Modeling | Mapping | Consequences



**Kurt Buchanan**  
SME Economist



**Jordan McMaster**  
Economist



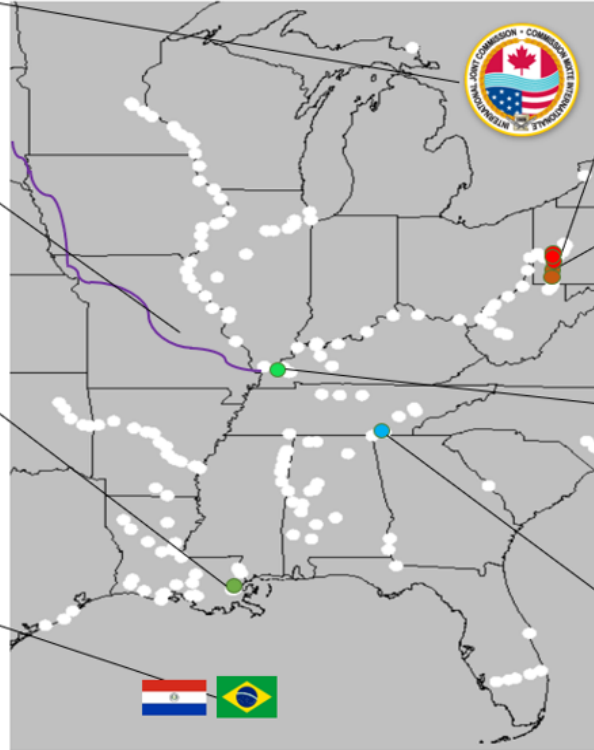


**Great Lakes Adaptive Management**

**Lower Missouri River Navigation**

**IHNC Lock GRR**

**South America Navigation Development**



**Upper Ohio Navigation Study**

Economic Update Due – Feb 2025

**Lower Monongahela Navigation Project**

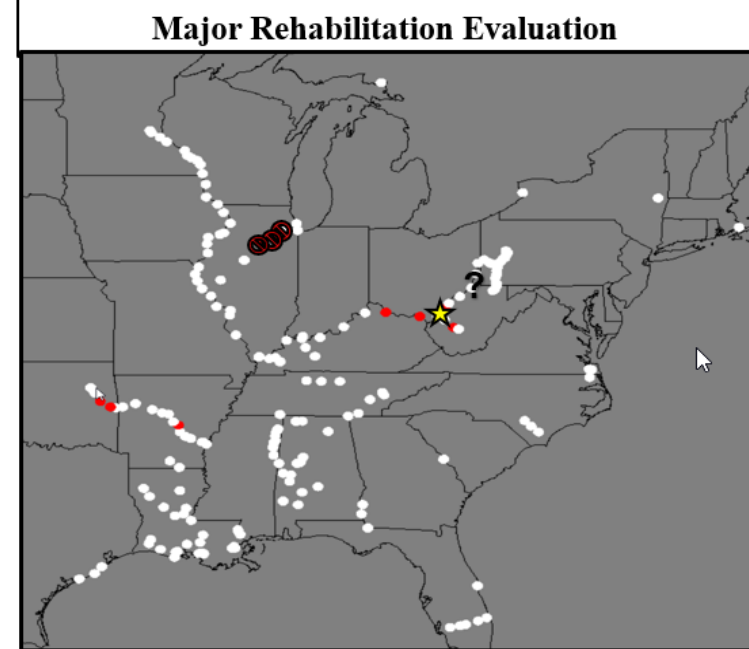
Economic Update Due – Feb 2024

**Kentucky Lock**

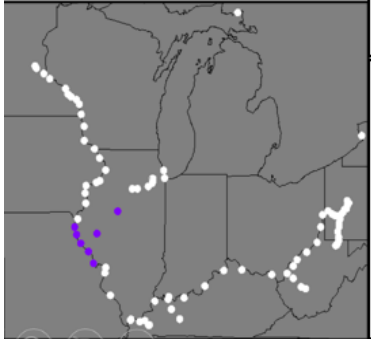
Economic Update Due – Feb 2025

**Chickamauga Lock**

Economic Update Due – Feb 2024



- 7 active MRER analyses ●
  - (4 – LRH / 2 – SWT / 1 – SWL)
- 1 recently completed ★
  - (Winfield L&D – LRH)
- 1 unresolved ?
  - (Pike Island L&D - LRP)
- 3 (recently) Terminated ⓧ
  - (Starved Rock, Dresden Island, Brandon Road - MVR)



**NESP Economic Update**

Mississippi River Locks –  
 - 24 & 25 (MVS)  
 - 22, 21, 20 (MVR)

Illinois Waterway Locks –  
 - LaGrange & Peoria (MVR)

Due – Feb 2025

PED navigation modeling support for MI LD 25

**CAP 107**

- St. Johns River: Palatka, FL

**Consulting**

- Lower Mississippi River Basin Comprehensive Study
- Menominee Harbor, WI Feasibility Study

Development Lead –  
 Engineer Pamphlet (EP) 1105-2-66  
*Planning Procedures for Inland Navigation*

# Thank You



**Small Boat Harbor Planning  
Sub-Center of Expertise**



Kanawha River,  
Charleston, W.Va



Mobile Harbor,  
Mobile, AL



Akutan Harbor,  
Akutan, AK