### ECOSYSTEM RESTORATION PLANNING CENTER OF EXPERTISE

PCoP Webinar 8 February 2024

Kat McCain, Ph.D. Operating Director, ECO-PCX

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US Army Corps U.S. ARMY of Engineers®



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### WHO HAS WORKED WITH THE ECO-PCX?



Click on the Annotation option  $\mathcal{N}$  in the top right-hand corner of your screen (to the left of the participant list if open) and then use the Pencil Tool or checkmark to mark your response.



### IF YOU HAVE WORKED WITH THE ECO-PCX, HOW SO? CHECK ALL THAT APPLY

Review Plans/ VTAM		ATR Lead identification / ATR Staffing / IEPR Support		Training/ Mentoring		R&D Proposals/ Work
	cological Models		Subject Matter Expertise		Other	

Click on the Annotation option  $\mathcal{N}$  in the top right-hand corner of your screen (to the left of the participant list if open) and then use the Text Tool (T<sub>T</sub>) to type your response.

"The Army Corps of Engineers excels at wasting money." Taxpayers for Common Sense

"Traditionally, Corps projects come about from a combination of lobbying, pork, and questionable analyses of costs and benefits." John McQuaid



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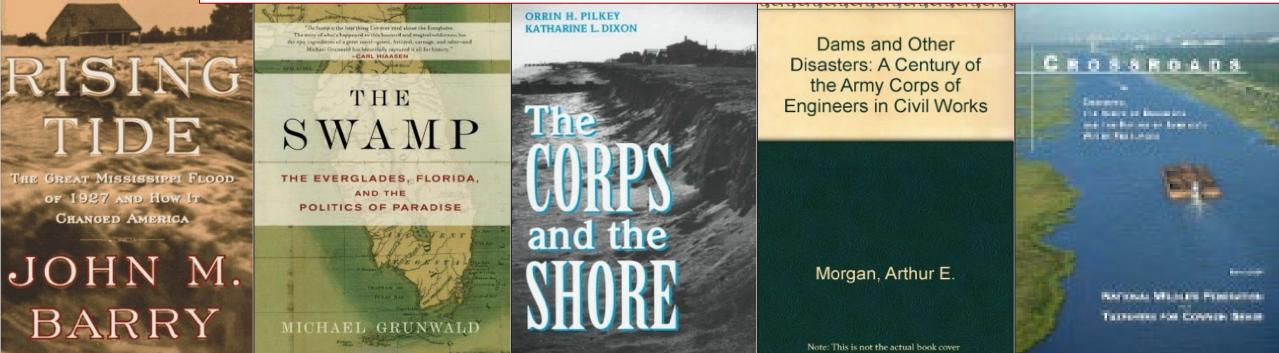


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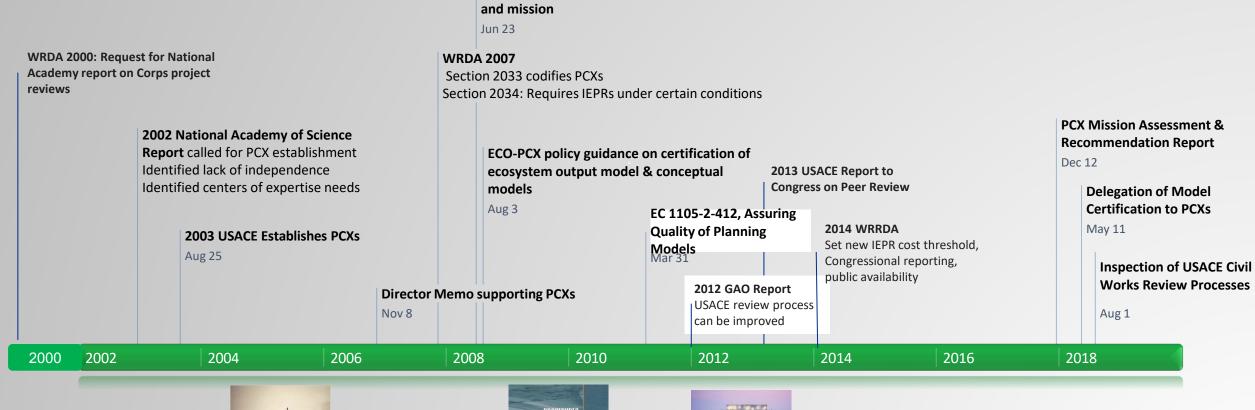
I remember Army Secretary Louis Caldera telling me he wished it was the Navy Corps of Engineers. 17

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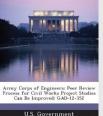


**Director Memo: PCX roles, responsibilites,** 



ngressional Research Service: Th rary of Congress, Nicole T. Cart





oility Office (GAO

### **PLANNING CENTERS OF EXPERTISE (PCX) U.S. ARMY**



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https://planning.erdc.dren.mil/toolbox/people.cfm?Id=0&Option=Planning%20Centers%20of%20Expertise





To enhance the Corps of Engineers' planning capability... [and] strengthen planner core competencies by assisting Project Delivery Teams

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

Source: 2008 Memo from Mr. Stockton – PCX Missions, Roles and Responsibilities Statement





Provide subject matter experts to PDTs					
Support HQUSACE and others on regional/nationwide planning issues					
Assist ATRs					
Function as the Review Management Organization					
Assist in identifying R&D priorities					
Conduct training opportunities					
Develop training for the Planning Associates Program					
Certify or approve for use planning models					
Support HQUSACE with policy development or review draft policy					
Provide policy trainings to the field					
Develop standard processes and procedures to support District execution					
Share lessons learned, tech transfers, and best practices through coordination with HQUSACE and MSC experts					





### PCX focused on the Aquatic Ecosystem Restoration Mission Area

### **ADDRESS the RESTORATION OF ECOSYSTEMS!**









### AQUATIC ECOSYSTEM RESTORATION: A VERY BROAD MISSION



"The objective of ecosystem restoration is to *restore degraded ecosystem structure, function, and dynamic processes* to a less degraded, more natural condition."



Oaks Bottom Reconnection (Portland, OR)

# ECO-PCX VIRTUAL TEAM



% FTE supporting ECO-PCX (FY24)

15%

2-3%

2-5% each

<1%

<1%

100% (MVD GE Funded position)

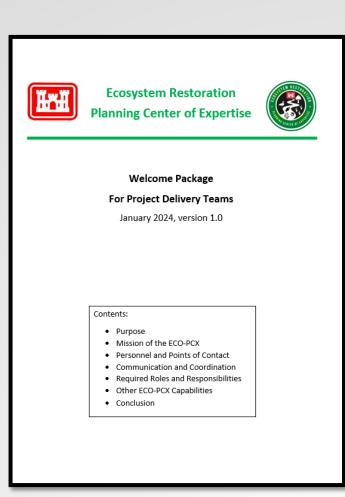
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	<u>Director</u> Dr. Kelly Keefe RATING DIRECTOR*	Generalized ECO-PCX Budget Breakdown	Approximate Distribution of Planning Support Funds	
Dr. Kat McCain REGIONAL ACCOUNT MANAGERS		Ecological Model Review Manager**	35%	
POD/SWD	Kat Herzog	IEPR Manager**	5%	
NWD SPD	Dr. Brad Foster Jesse Ray	Regional Account Managers (n=7)**	50%	
MVD	Dr. Angie Sowers (term)	Budget Support	<5%	
LRD Sierra Keenan NAD Chip Hall		Priority Initiatives – Labor for additional district support	<5%	
SAD	Megan McGuire <u>IEPR Manager</u>	Operating Director*	0%	
	Andy MacInnes	Director	0%	
Mod	<u>el Review Manager</u> Kip Runyon	<ul> <li>* Only full-time position</li> <li>** Also supported by project funds based</li> </ul>	d on need	
	<u>Budget</u> Adrienne Stark	FY24 Estimated Budget PSP Funds: \$1	53,000	







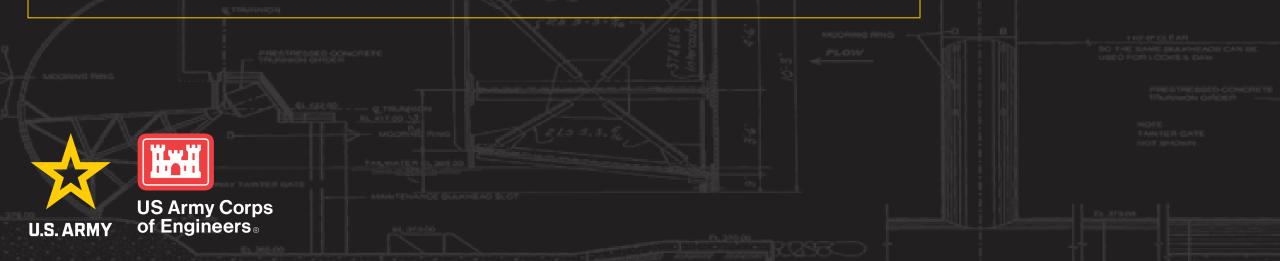
- The ECO-PCX Team are subject matter experts in USACE Aquatic Ecosystem Restoration!
- Engage the ECO-PCX early (can help PDT scope)
- Provide SME to PDTs
- Include the ECO-PCX Operating Director and Account Manager in Planning Charettes
- The ECO-PCX Operating Director is GE-funded, so please reach out if you have a question!
- The ECO-PCX district team members do receive some ECO-PCX funds to support PDTs for initial engagement (project funds will be requested and negotiated during review plan development)
- Check out the ECO-PCX Welcome Package for more information on when and how to engage the ECO-PCX (available on the ECO-PCX KMP Site: <u>https://usace.dps.mil/sites/KMP-PLAN/SitePages/Ecosystem-Restoration-PCX.aspx</u>)





### **ROLE: PEER REVIEW**

#### Review Management Organization, Review Plans, ATR, IEPR



## **REVIEW MANAGEMENT ORGANIZATION**

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- Designated USACE organization overseeing quality reviews
- Endorses Review Plan
- Manages review efforts for ATR, IEPR, SAR
- Ensures independent review

### **ECO-PCX** serves as the RMO for:

- Decision Documents with primary project purpose of Ecosystem Restoration
- General Investigations, General Re-evaluations

The MSC serves as the RMO for:

- Ecosystem Restoration CAP studies, O&M, and economic updates/902 updates
- MSC may coordinate with ECO-PCX

For Multi-Purpose Studies, when AER is secondary

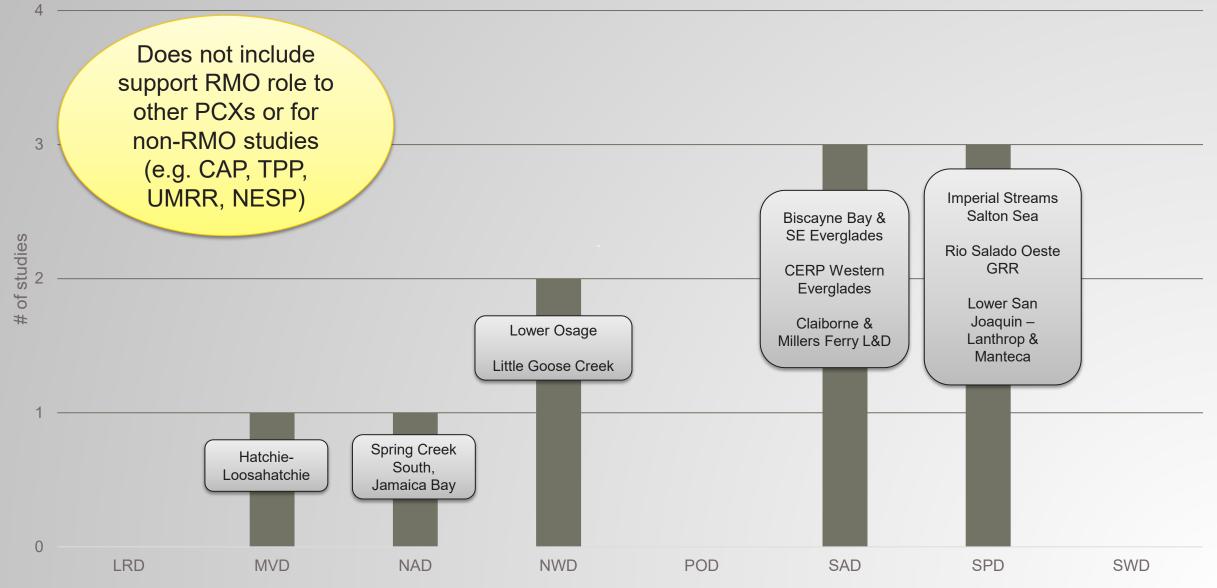
ECO-PCX coordinates with lead PCX as appropriate





### **VALUATE OF COMPANY AND STREET OF COMPANY AND SET TO A SET OF COMPANY AND SET OF COMPANY**

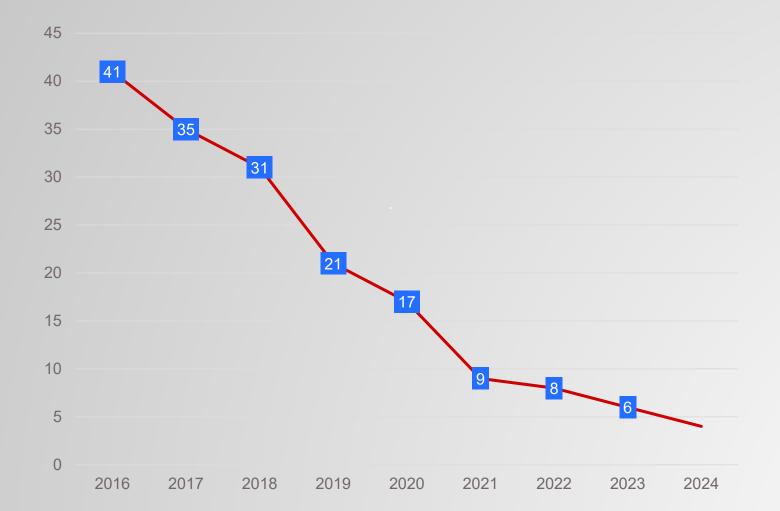
#### **U.S. ARMY**



As of January 2024 n = 10

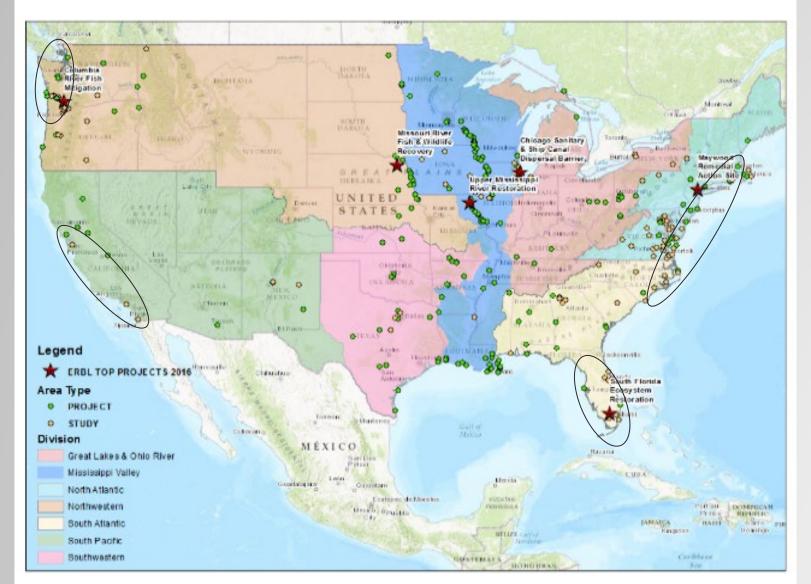
# AER GENERAL INVESTIGATIONS FEASIBILITY





### USACE RESTORATION STUDIES AND PROJECTS: MUCH MORE THAN JUST GENERAL INVESTIGATIONS!



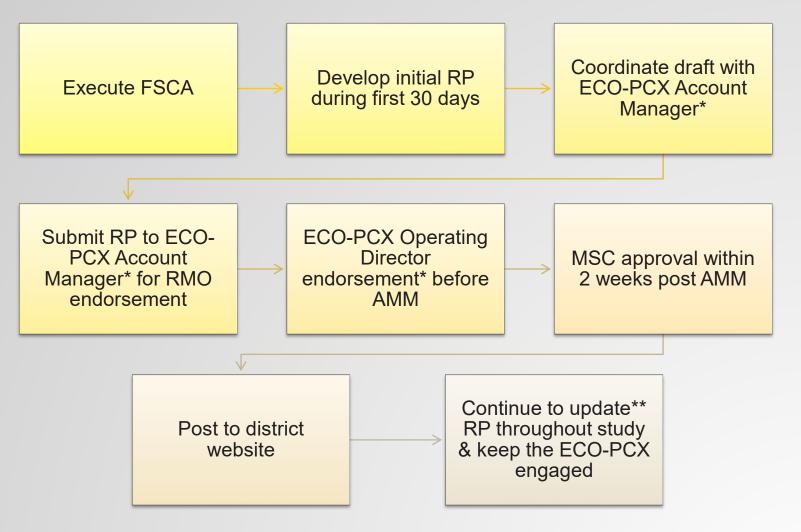


- Individually authorized
  projects, Continuing
  Authorities Program (CAP)
  Sec 1135 and 206, Estuary
  Restoration Program
- NESP
- UMRR
- Estuaries AND the watersheds that feed them

ECO-PCX is available to assist all AER study teams!

# REVIEW PLAN (ER 1165-2-217, CHAPTER 3)

- Ensures quality of work
- Documentation of accountability
- Identifies review steps to produce quality work
- Living document
- Lists all requirements, costs, and schedules for reviews
- Use the <u>Template</u>
- Update the Review Plan at each Milestone
- Include <u>Model User</u> <u>Coordination Questionnaire</u>



\*when ECO-PCX is the RMO

\*\*substantive changes need to be reapproved by RMO



#### **ECO-PCX Account Manager can help the PDT:**

- Review Plan development
- Review Plan schedule coordination
- ATR Lead identification
- Serve as ATR Lead

### **ECO-PCX Account Manager can help the ATR Lead:**

- Staffing full ATR team
- Developing ATR Charge to Reviewers
- Ensure completion of DQC prior to start of ATR
- Ensure completion of ATR
- Resolve issues between ATR Team and PDT
- Coordinate vertical elevation of concerns



#### USEFUL RESOURCE:

<u>Agency Technical Guide for</u> <u>Ecosystem Restoration</u> <u>Projects</u>

<u>https://planning.erdc.dren.</u> <u>mil/toolbox/library/Guidance</u> /ER%20Review%20Guide. <u>pdf</u>

CURRENTLY BEING UPDATED by ECO-PCX

Include your ECO-PCX Account Manager in all coordination



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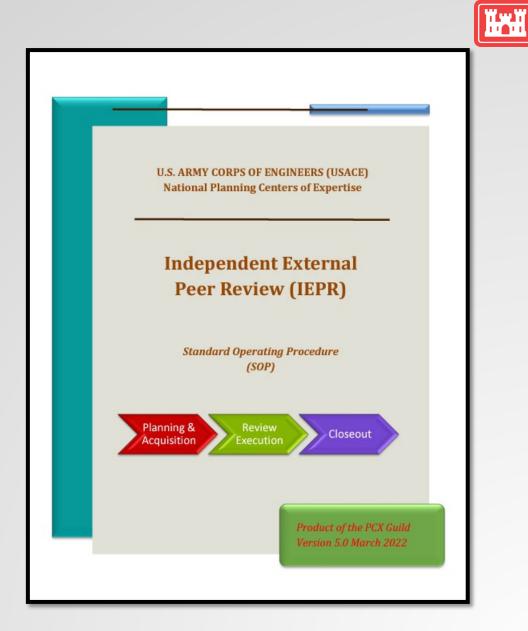
#### **ECO-PCX IEPR Lead can help the PDT:**

- Scope the IEPR in Review Plan
- Assist team in IEPR Kickoff Call
- Assist team in IEPR exclusions
- Manage IEPR contracts
- Ensure proper documentation of review

#### USEFUL RESOURCES:

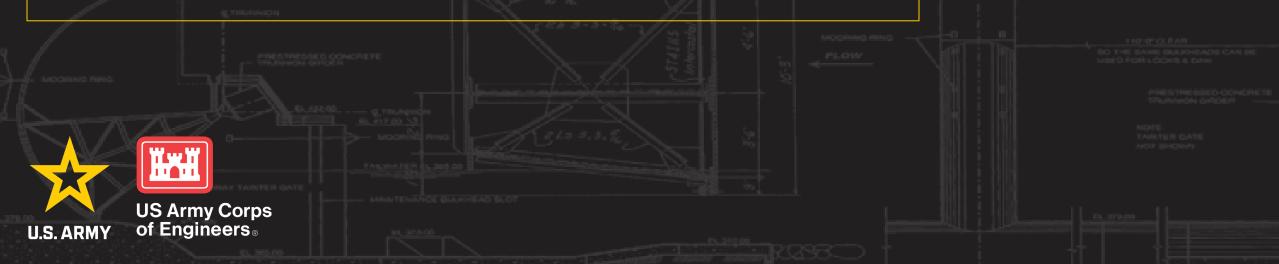
IEPR Standard Operating Procedure

Interim Guidance on Streamlining IEPR for Improved Civil Works Delivery (2019)



### **ROLE: MODEL CERTIFICATION**

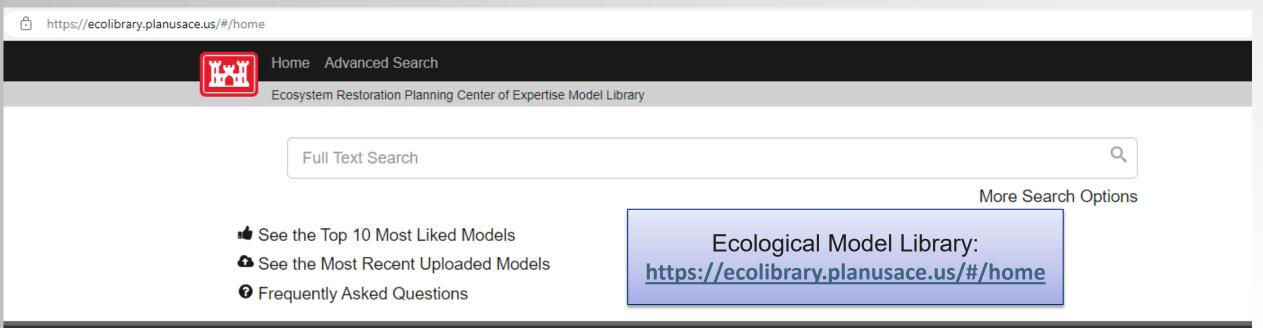
#### Kip Runyon, ECO-PCX Model Review Manager

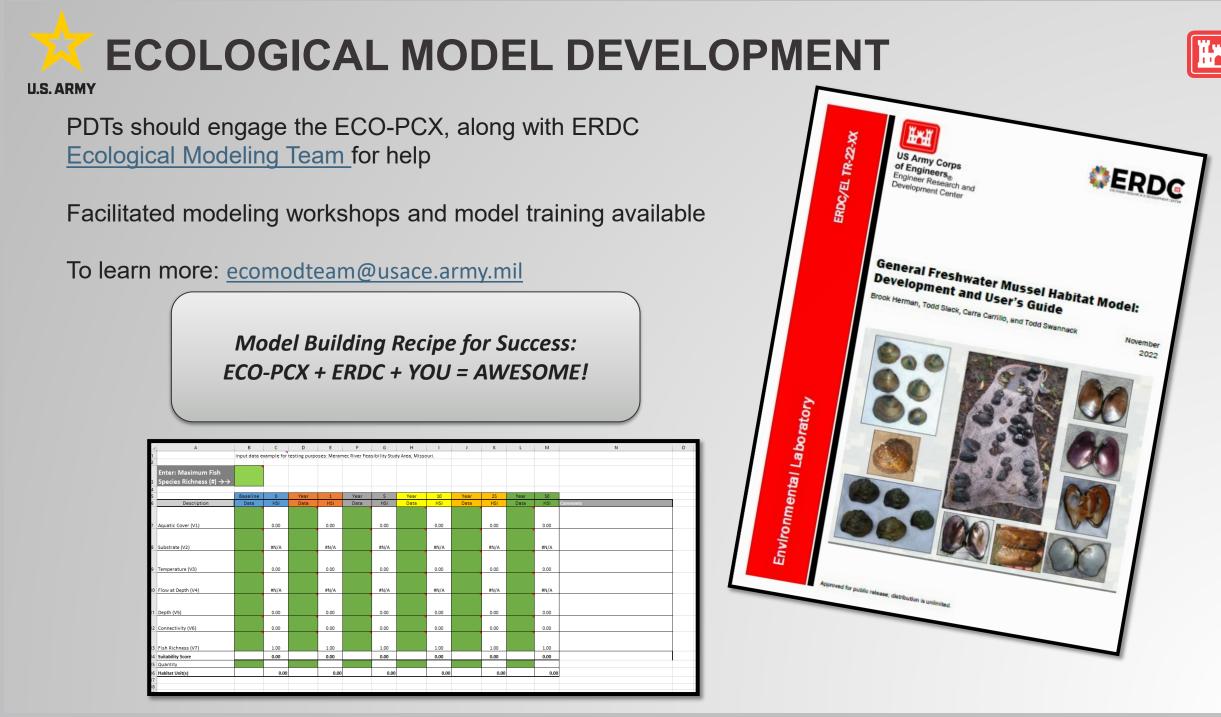


### **COLOGICAL MODELS**



- ECO-PCX reviews and certifies all ecological models used for Civil Works planning decisions, this includes spreadsheet calculators and ecological models used for mitigation planning
- ECO-PCX Model Review Lead provides technical expertise to PDTs with model selection and applications
- ECO-PCX Account Manager and Operating Director can assist with Conceptual Ecological Model Development
- ECO-PCX stores all model documentation and maintains Ecological Model Library
- ECO-PCX coordinates with ERDC and IWR with new model development





# ECOLOGICAL MODEL REVIEW – WHAT TYPE?



SINGLE, ONE-TIME REGIONAL **USE APPROVAL CERTIFICATION** Model only will Model anticipated REVIEW ever need to be to be used on PROCESS used for a given future studies; THE SAME broader region study; Local region

**NOTE:** Per EP 1105-2-58, *Continuing Authorities Program*, the use of certified planning models is not required.



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**WHAT IS IT?** Review to ensure models are technically sound, computationally correct, usable for Civil Works planning, and policy compliant.

WHO DOES IT? An independent review team managed by the ECO-PCX.

**WHEN DOES IT HAPPEN?** Model approval or certification should be done prior to a decision being made. Typically, that is prior to the Tentatively Selected Milestone.

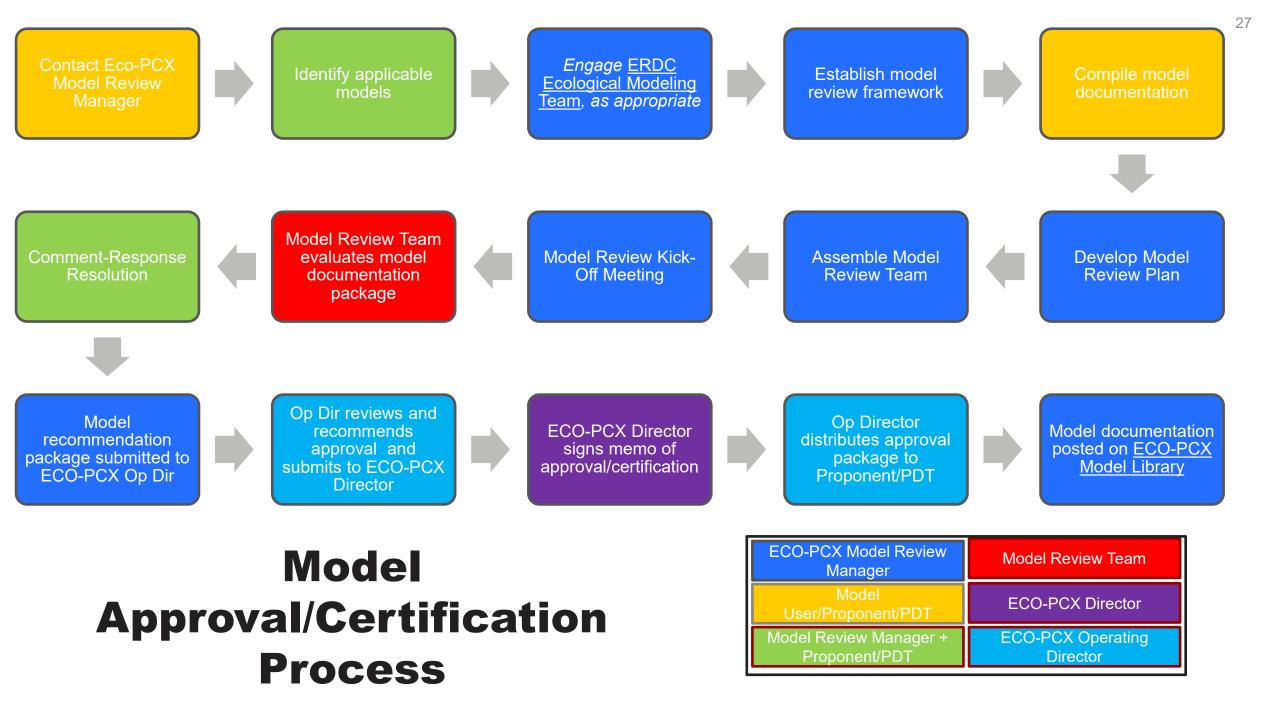
**HOW LONG DOES IT TAKE?** Depends on the complexity of the model, but typically model review and approval is 3-6 months upon receipt of complete model documentation package. Model approval/certification is valid for 7 years.

**HOW MUCH DOES IT COST?** Cost varies based on the complexity of the model. Reviews have ranged from \$10K to \$65K depending on the review scope and method.

WHY DO IT? Quality assurance!



RELEVANT **GUIDANCE:** EC 1105-2-412, Assuring Quality of Planning Models; Director of Civil Works (DCW) Memo 4 Dec 2017, Modification of the Model Certification Process and Delegation of Model Approval for Use and DCW Memo 11 May 2018, Delegation of Model Certification modified the EC related to delegation. EC 1105-2-412 remains in effect until permanent planning model guidance is issued.







- U.S. ARMY
- Provide technical training and mentoring to PDTs
- Flexible delivery (In-person, virtual, on-demand, pre-recorded, etc.)

### **TRAININGS DEVELOPMENT UNDERWAY**

- Planning Associates Aquatic Ecosystem Restoration Course (July 2024; accepting auditor applications now)
- PROSPECT 348, Planning for Ecosystem Restoration (coming in FY25)
- Ecological Modeling Training (Workshop in-person delivery for NWD May 2024)
- AER-Related Training Vignettes (under development)
- NEPA-Related Training Vignettes (under development)
  - ➢ In Draft, "NEPA 101" to be used across PROSPECT courses

Check out the ECO-PCX KMP Site to learn more! : <u>https://usace.dps.mil/sites/KMP-PLAN/SitePages/Ecosystem-Restoration-PCX.aspx</u>





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### 



- Mitigation Planning
- Monitoring and Adaptive Management
- Conceptual Modeling
- Alternative Formulation Strategies
- Comprehensive Benefits for AER
- Tradeoff Analysis for AER
- NEPA and other environmental compliance



### ROLE: RESEARCH AND DEVELOPMENT

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	US Army Corps					
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#### The ECO-PCX assists in identifying R&D Priorities:

Operating Director and Model Review Manager are voting members to the Environmental Research Area Review Group (ERARG)

Works with the ERDC EcoMod Team with model development

The ECO-PCX can help Districts with ERARG Statement-of-Need development



The ERARG is a group of USACE professionals informing the direction of the research conducted under the EMRRP program

### ROLES: POLICY DEVELOPMENT SUPPORT & PROCESS IMPROVEMENTS

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- U.S. ARMY
  - Assisted with Non-Standard Estate for reforestation for St. Louis Riverfront-Meramec River
  - Member of the HQ ER Easement Development Team (*Kick-off Feb 21*)
  - Supported review of EP 1105-2-70 Aquatic Ecosystem Restoration Evaluation Procedures
  - Created Model Coordination and Model User Questionnaire to comply with CECW-P memo (28 July 2023), *Model Coordination for Civil Works.* (Available <u>here</u> on ECO-PCX KMP site)
  - ATR Guide for Ecosystem Restoration Update (*Currently Under Development*)
  - ECO-PCX members are actively engaged with:
    - Chief of Engineer's Environmental Advisory Board
    - HQ Environmental CORE Team
    - IWR-HQ-AER Liaisons
    - Planning Workforce Development Committee
    - > PCX Guild
    - Senior Formulator Group
    - Environmental Chiefs
    - > ERARG
    - PROSPECT Course Instructors

### ROLE: SHARE LESSONS LEARNED

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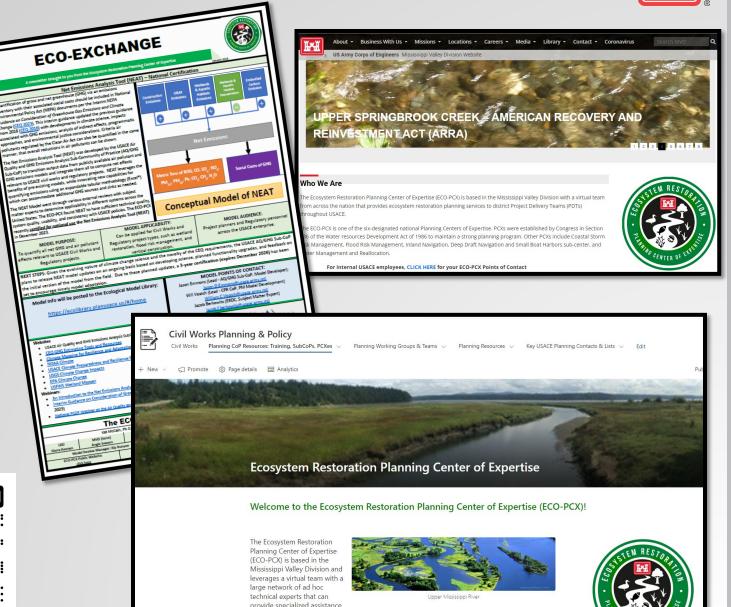
ECO-PCX delivers *ECO-Exchange*, a monthly newsletter to the PCoP

**PCoP** Webinar

ECO-PCX Public-facing website: https://www.mvd.usace.army.mil/About /Ecosystem-Restoration-Planning-Center-of-Expertise/

ECO-PCX KMP Site: https://usace.dps.mil/sites/KMP-PLAN/SitePages/Ecosystem-Restoration-PCX.aspx





with aquatic ecosystem restoration planning



ECO-PCX KMP Site: <a href="https://usace.dps.mil/sites/KMP-PLAN/SitePages/Ecosystem-Restoration-PCX.aspx">https://usace.dps.mil/sites/KMP-PLAN/SitePages/Ecosystem-Restoration-PCX.aspx</a>





### WATER MANAGEMENT AND REALLOCATION STUDIES PLANNING CENTER OF EXPERTISE

Meredith LaDart Technical Director, WMRS PCX Southwestern Division 08 FEB 2024



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> PRESTRESSES-CONORET TRUNNON GROEP





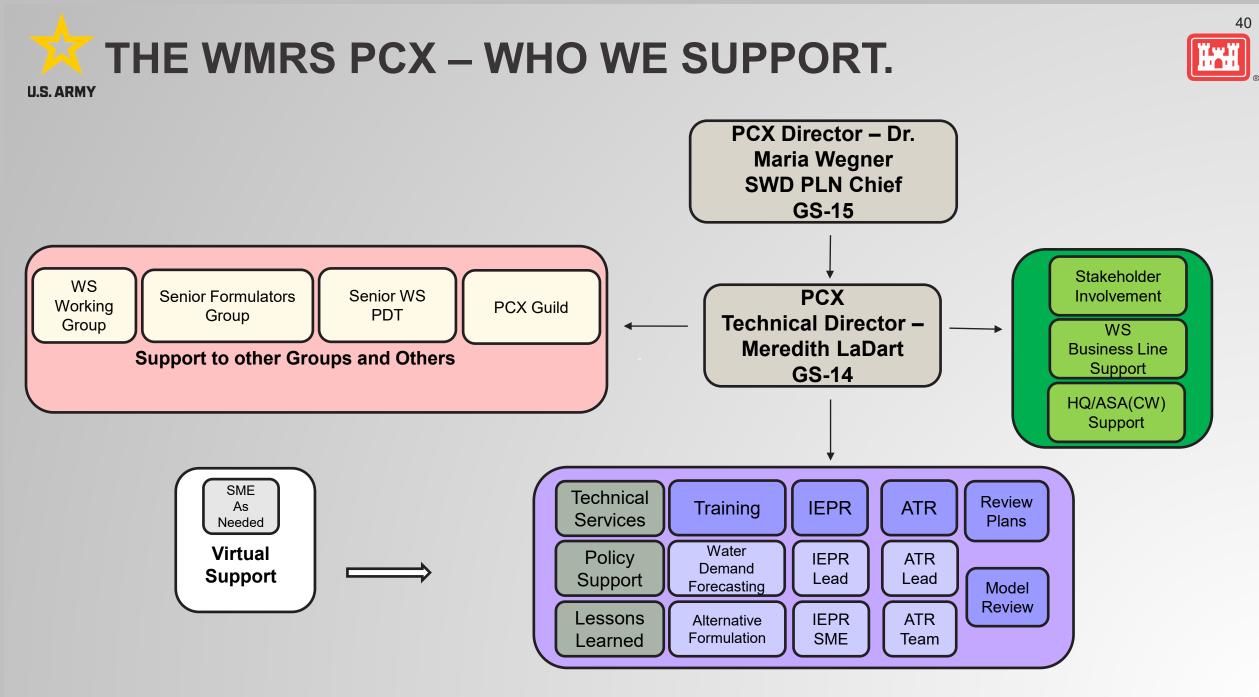




The Centers enhance the Corps of Engineers' planning capability and strengthen planner core competencies, and promote high quality decision documents by assisting district Project Delivery Teams through:

- Peer review
- Model certifications
- □ Training
- Lessons Learned

- R&D
- Technical services
- Policy Development Support
- ned **Process Improvement**







# WMRS-PCX aligned with the water supply business line

Some of the efforts that would lead you to our door:

- Reallocation studies
- Related feasibility studies and planning reports
- Water storage agreements and policy
- Watershed planning studies
- Controversial water control manual updates
- Planning Assistance to States



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#### What we do:

- Oversees quality reviews
- Endorses Review Plan
- Manages review efforts for ATR, IEPR, SAR
- Ensures independent review

### Keys to successful engagement for review:

- Please send your review plan before the AMM
- If you are unsure about something in the RP just give me a call.
- As the RP is a living document, please coordinate changes as the study progresses.
- We can help you find qualified reviewers, outside of ATR review

### \*Model Certification/Approval for Use:

- This need should be documented in your review plan.
- This should be discussed **early**.
- If is it is a non-water supply model, the PDT and the WMRS PCX need to coordinate with the appropriate PCX
- For Water Demand Models this can vary from 10-30K and take from a few weeks to ~ 4 months



## **GETTING OUR SUPPPORT**

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### Step 1:

- Get in contact with Meredith LaDart
  - Teams, Email, Phone Call

### Step 2:

- Work with your team to identify the level of engagement you need.
- Do you need a Planning Mentor?
- Training on specific topics?
- Water Demand Forecasting?
- ResSim model help?
- Scoping your study?
- Hydropower questions?
- Policy and guidance questions?
- I just need to talk about a problem!

### Step 3:

• Set up funding if needed

#### Step 4:

• Don't be a stranger!



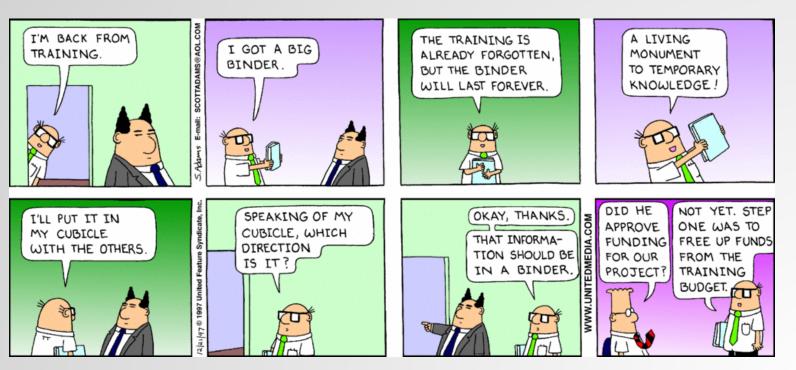


## Some examples of what we offer:

- Water Supply 101
- PA Course Module
- Advanced Plan Formulation
- Water Demand Forecasting and Model Evaluation
- Hydropower Evaluations for Water Supply
- ATR Shadowing and review training i.e. How to Be a Good Reviewer

#### **Methods of Delivery:**

- Webinars
- 1 on 1, in person or virtual
- Classroom delivery in person





## **STAKEHOLDER ENGAGEMENT AND OUTREACH**



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### **Power Marketing Agencies**

- Methods of Engagement:
  - Monthly calls
  - Federal Hydropower Council
  - Regional Meetings

### What is discussed:

- Study updates
- PMA concerns
- Guidance updates

### National Water Supply Alliance

- Methods of Engagement:
  - Annual Meeting (Aug/Sep) location varies
  - Federal Roundtable (March/April) Washington D.C.
  - Ad Hoc webinars

### What is discussed:

- Study updates
- Policy questions
- Process questions and improvements

## **ONGOING EFFORTS THE PCX SUPPORTS**

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#### SME Support

- Philpot Reallocation Study
- Bear Creek Reallocation Study
- F.E. Walter Section 216 Study
- Hartwell Reallocation Study
- Allatoona Water Supply Agreements
- Stockton Reallocation Study
- Whitney Dam Reallocation Study
- Washington Aqueduct
- Aquilla Dam Reallocation Study
- Wright Patman URC Implementation
- Copan Lake Agreement
- Lake Texoma Agreement
- Summersville Nonfederal Hydropower Evaluation
- Lower Mississippi River Comprehensive Study
- Mark Twain Agreement Package

#### People

-ATR training

-Planning Workforce Development Committee

#### **Other Federal Work**

-Support for Las Vegas, NM Wildfire Recovery

#### Process

- Water Supply Handbook Update
- Water Supply EP
- WDRA EPW RFI, Technical Effects Statements
- PMP and Schedule Templates for Reallocation Studies
- Audit of Water Supply Billing Practices
- Reallocation 101 for Senate EPW

#### International Support

- Brazil (ANA) Water Supply and Reservoir Evaluations Guidance Development
- Panama Canal Study









- Contact: Meredith LaDart
- SharePoint:

https://team.usace.army.mil/sites/SWD/pdt/ wmrs/default.aspx

