## 2023 TECHNICAL ASSISTANCE WORKSHOP

Leveraging Technical Assistance Programs to Engage and Support Communities and Deliver Outcomes





## WELCOME AND INTRODUCTION

Mr. Eric Bush, HQ Chief of Planning & Policy Lisa Kiefel, FRM BLM Kelli Phillips, National Preparedness PM Mindy Simmons, Sr Policy Advisor

JULY 11, 2023 1:00 – 2:00 PM EDT



US Army Corps U.S. ARMY of Engineers





## FLOOD RISK MANAGEMENT BUSINESS LINE

Technical Assistance Workshop July 2023

**Lisa Kiefel** HQUSACE Flood Risk Management Business Line Manager









# **USACE PROJECT PORTFOLIO TRENDS**

- USACE is delivering a record number of new Chief's Reports annually recommending projects for authorization
- Water resources development projects recommended for authorization are increasingly larger, more complex, and more expensive to implement
- As constructed infrastructure ages, the costs of O&M continues to increase to provide the same benefits – impacts USACE and Sponsor
- Implementing non-traditional solutions Non-Structural, NNBF...
- Working to better serve disadvantaged communities, requires listening and revising our process and prioritization criteria



# **ADMINISTRATION PRIORITIES**

- Build innovative, climate-resilient infrastructure to protect communities and ecosystems
- Modernize civil works programs to better serve the needs of disadvantaged communities
- Strengthen communications and relationships to solve water resource challenges

**Executive Orders** 

- Climate Resilience
- Justice40

Continued support for FPMS and PAS shown in FY24 Passback as well as prioritization of work identified through Silver Jackets teams



# **CURRENT FLOOD RISK MANAGEMENT INITIATIVES**

- Proactive portfolio management
  - Reviewing our existing infrastructure based on climate science
  - Incorporating resilience project, system and community
  - Exploring resource options to be able to "finish what we start"
- Actively improving service to disadvantaged communities
  - Funding criteria, Outreach strategy, Delivery of Technical Assistance
- Expanding Flood and Coastal solutions
  - Non-Structural
  - Natural and Nature Based
- Increased focus on Research and Development near term and strategic
- Communication
  - Internal and external

## **TECHNICAL ASSISTANCE TO ACHIEVE INITIATIVES**

#### **Climate Resilience**

- PAS and FPMS can both be utilized to help communities plan and prepare for climate change.
- FPMS examples: Evacuation planning, tabletop exercises, H&H analysis, updated floodplain mapping, sea-level change analysis, etc.
- PAS examples: Drought planning, water quality impacts planning, ecosystem services planning, etc.

#### **Social Equity**

- FPMS makes USACE expertise available to communities at no charge to provide them data and analysis to better manage their floodplains and flood risk.
- PAS new cost-share waiver allows PAS expertise in water resources available to disadvantaged communities.
- Silver Jackets teams can be a great resource to help identify other federal programs and grants to help with implementation of solutions identified under FPMS and PAS.

#### **Nature-Based Approaches**

• These programs can be utilized to identify potential opportunities, complete high-level planning, and identify other sources of funding for implementation.

#### **Advanced Tools and Modeling**

- Floodplain Mapping- for non-federal public lands or smaller geographic regions.
- Identifying larger R&D needs.

#### **Community Oriented Processes**

• PAS and FPMS are scoped with states or local communities to identify the greatest technical assistance needs. These programs make USACE knowledge in floodplain management and water resource planning available to communities for little to no cost.

#### USACE FLOOD RISK MANAGEMENT PROGRAMS

This document is intended to provide general guidelines to identify common USACE programs and authorities that may be appropriate to address flood risk management issues. For details, please visit the listed websites or reach out to the district point of contact.

| US Army Corps<br>of Engineers.                                                                                                                       | FRM-SILVER<br>JACKETS<br>COORDINATION                         | FLOODPLAIN MANAGEMENT<br>SERVICES (FPMS)                                                                                         |                                                                                                                        | PLANNING                                                                                                                                                          | CONTINUING AUTHORITIES PROGRAM (CAP)*                                                                                                                                                      |                                                                                                                  |                                                                                                             |                                                                                                                                 |                                                                                                                                                                                                                                              |                                                                                                |                                                                                                                                                                                  | 7010.01                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                          |
|------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                      |                                                               | INTERAGENCY<br>(most have at least heo<br>generatestal partices in<br>addition to USACE)                                         | BASE                                                                                                                   | ASSISTANCE<br>TO STATES<br>(PAS)*                                                                                                                                 | STREAMBANK<br>STABILIZATION<br>(SECTION 14)                                                                                                                                                | HURRICANE &<br>STORM DAMAGE<br>REDUCTION<br>(SECTION 103)                                                        | FLOOD DAMAGE<br>REDUCTION<br>(SECTION 205)                                                                  | PROJECT MOD.<br>FOR IMP. TO THE<br>ENVIRONMENT<br>(SECTION 1135)                                                                | FEASIBILITY<br>STUDY/<br>INVESTIGATIONS <sup>+</sup>                                                                                                                                                                                         | INTERAGENCY &<br>INTERNATIONAL<br>SUPPORT (IIS)                                                | WATERSHED<br>STUDIES<br>(SECTION 729)                                                                                                                                            | TRIBAL<br>PARTNERSHIP<br>PROGRAM <sup>+</sup>                                                                                                                                                                                               | EMERGENCY<br>ASSISTANCE<br>(PL 84-99)                                                                                                                                                                                                                    |
| SHORT DESCRIPTION                                                                                                                                    | Coordination<br>(not to support<br>projects)                  | Multi agency<br>nonstructural                                                                                                    | Planning and<br>technical<br>assistance                                                                                | Water<br>resources<br>planning/<br>technical<br>assistance                                                                                                        | Protection<br>of public<br>infrastructure<br>from erasion<br>(construction)                                                                                                                | Protection of public<br>infrastructure on<br>small beaches<br>against erosion<br>and damages<br>caused by nature | Flood risk<br>management<br>structural &<br>nonstructural<br>assessment<br>that can lead to<br>construction | Modification<br>of an existing<br>USACE project<br>for the purpose<br>of improving the<br>environment in the<br>public interest | Large complex<br>water resources<br>project that<br>may lead to<br>construction<br>Note: their sector 200 of<br>NOTE 1000, scholar con to<br>performed by non-heimel<br>sporence and indentified<br>diverty to the Secondary of<br>the Army. | Reimbursable<br>technical services<br>to other federal<br>agencies                             | Watershed scale<br>planning focusing on<br>multiple objectives<br>and tradeoffs,<br>accounting for<br>uncertainty,<br>stakeholder<br>collaboration<br>and adaptive<br>management | Collaboration with<br>Tribes for flood,<br>hurricane and storm<br>damage reduction,<br>including erasion;<br>environmental<br>restoration and<br>protection; and<br>protection; and<br>preservation of<br>cultural and natural<br>resources | Disaster preparedness,<br>emergency operations,<br>rehabilitation of eligible<br>flood/coastal risk<br>management projects<br>(FRM/CSRM), provision of<br>emergency water, advance<br>measures, and participation<br>in the hazard mitigation<br>program |
| CAN A MULTI-PURPOSE<br>EFFORT (MORE THAN<br>FLOOD RISK) BE<br>COMPLETED UNDER<br>THIS PROGRAM?                                                       | NO                                                            | NO                                                                                                                               | NO                                                                                                                     | YES                                                                                                                                                               | NO                                                                                                                                                                                         | NO                                                                                                               | NO                                                                                                          | YES                                                                                                                             | YES                                                                                                                                                                                                                                          | YES                                                                                            | YES                                                                                                                                                                              | YES                                                                                                                                                                                                                                         | NO                                                                                                                                                                                                                                                       |
| CAN THIS AUTHORITY<br>DIRECTLY RESULT<br>IN APPROVAL FOR A<br>USACE COST-SHARED<br>CONSTRUCTION<br>PROJECT?<br>"Repairs: additional<br>authoritation | NO                                                            | NO                                                                                                                               | NO                                                                                                                     | NO                                                                                                                                                                | YES                                                                                                                                                                                        | YES                                                                                                              | YES                                                                                                         | YES                                                                                                                             | YES*                                                                                                                                                                                                                                         | N/A                                                                                            | NO                                                                                                                                                                               | YES*                                                                                                                                                                                                                                        | NO                                                                                                                                                                                                                                                       |
| DOES THE PROGRAM<br>REQUIRE THE<br>COMMUNITY/SPONSOR<br>TO PROVIDE FUNDING<br>OR WORK-IN-KIND?                                                       | NO                                                            | NO                                                                                                                               | NO                                                                                                                     | YES                                                                                                                                                               | YES                                                                                                                                                                                        | YES                                                                                                              | YES                                                                                                         | YES                                                                                                                             | YES                                                                                                                                                                                                                                          | YES                                                                                            | YES                                                                                                                                                                              | YES                                                                                                                                                                                                                                         | NO                                                                                                                                                                                                                                                       |
| COST SHARE<br>(FED/NON-FED)                                                                                                                          | Full Federal cost<br>for USACE support                        | Can be Full<br>Federal cost for<br>USACE support                                                                                 | Full Federal<br>cost for USACE<br>Support -<br>voluntary<br>contributions<br>can be provided<br>to expand the<br>scope | 50/50<br>(can utilize<br>work-in-kind,<br>unless technical<br>assistance). Cost-<br>share woiver for<br>economically<br>disadvantaged<br>communities<br>applies.* | \$100k Full Federal to determine Federal Interest,<br>Feasibility 50/50, Design & Initial Construction 65/35* 50/50, Design &<br>Construction 75/25*                                       |                                                                                                                  |                                                                                                             |                                                                                                                                 | Feasibility 50/50,<br>Design & Initial<br>Construction<br>65/35*                                                                                                                                                                             | Fully Paid by<br>Requesting<br>Agency                                                          | 75/25                                                                                                                                                                            | First \$200k Full<br>Federal, than 50/50<br>Cost share woiver<br>from section 1156 of<br>WRDA 86 as amended,<br>available. Then Ability<br>to Pay may opply.*                                                                               | Temporary Flood Response<br>or Advance Measures<br>Assistance =<br>Full Federal Cost<br>Eligible Post Flood Repairs =<br>Full Federal Cost for Federal<br>FRM/CSRM, 80/20 for Non-<br>Federal FRM                                                        |
| TYPICAL SCALE OF<br>FEDERAL (USACE)<br>COSTS                                                                                                         | N/A                                                           | <\$150k for<br>Studies                                                                                                           | <\$150k for<br>Studies                                                                                                 | <\$500k<br>for Studies                                                                                                                                            | Less than \$10M Construction Cost (limit)                                                                                                                                                  |                                                                                                                  |                                                                                                             |                                                                                                                                 | Typically greater<br>than \$10M<br>Construction                                                                                                                                                                                              | N/A                                                                                            | Depends on Scope                                                                                                                                                                 | Depends on Scope.<br>Up to \$26M for<br>the programmatic<br>authority                                                                                                                                                                       | Varies based on assistance<br>provided and applicable<br>criteria                                                                                                                                                                                        |
| TIMELINE TO<br>COMPLETE                                                                                                                              | N/A                                                           | 12-18 months                                                                                                                     | 12-18 months                                                                                                           | "12-24 months                                                                                                                                                     | "1 Year to Determine Federal Interest and<br>Sign Cost Share Agreement. 18-24 M<br>"2 Years to develop Decision Document followed Fer<br>by Project Partnership Agreement and Construction |                                                                                                                  |                                                                                                             | 18-24 Months from<br>Feasibility                                                                                                | Study "3 years.<br>Detailed design<br>& construction<br>following<br>Congressional<br>Authorization                                                                                                                                          | N/A                                                                                            | Depends on Scope                                                                                                                                                                 | Study "3 years.<br>Detailed design &<br>construction following<br>study approval<br>(Congressional<br>Authorization needed<br>if over \$26M)                                                                                                | Expedited due<br>to emergency nature                                                                                                                                                                                                                     |
| TIMELINE TO<br>RECEIVE STUDY<br>FUNDING                                                                                                              | Annual Funding<br>Provided for<br>USACE Staff<br>Coordination | Annually/<br>Competitive                                                                                                         | Annually/<br>Competitive                                                                                               | Rolling Start                                                                                                                                                     | CAP New Start Needed                                                                                                                                                                       |                                                                                                                  |                                                                                                             |                                                                                                                                 | Congressional<br>Authorization &<br>Funding Needed<br>for New Start                                                                                                                                                                          | As soon as<br>requesting agency<br>can provide it                                              | Funding Needed<br>for New Start                                                                                                                                                  | New Start needed if<br>over \$26M                                                                                                                                                                                                           | Usually funds are available<br>within 24 hours                                                                                                                                                                                                           |
| ADDITIONAL<br>INFORMATION<br>AVAILABLE AT:                                                                                                           | www.iwr.usoco.army.<br>mit/Silver-Jackets                     | https://team.usace.amy.mil/sites/HO-CO/PDT/FRMP/USACE_<br>Flood_Risk_Mgmt_Portal/Technica%20Assistance%20and%20<br>Services.aspx |                                                                                                                        |                                                                                                                                                                   | www.nws.usace.ormy.mit/Missions/Civit-Works/Programs-and-Projects/Authorities/<br>Continuing-Authorities-Program                                                                           |                                                                                                                  |                                                                                                             |                                                                                                                                 | https://planning.<br>ordc.dron.mil/<br>toolbax/index.ctm                                                                                                                                                                                     | www.usoco.ormy.<br>miUNdissions/<br>Midtary-Missions/<br>Interagoncy-<br>International-Support | https://planning.ordc.<br>dron.mi/toolbac/<br>guidance.ctm?<br>Option=8L&BL=<br>Watershed&Type=None<br>&Sort=Default                                                             | https://www.usace.<br>army.mi/Missions/<br>Civil-Works/Tribal-<br>Nations/Tribal-<br>otherpolicies/                                                                                                                                         | https://www.usoco.army.mit/<br>Missians/Emorgoncy-<br>Operations/                                                                                                                                                                                        |

\* Tribal and Territory Ability to Pay and/or Cost Share Waivers May Apply

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# Discussion



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## **EMERGENCY MANAGEMENT PURPOSE**









**DEFINITION:** The reason for which something is done or created or for which something exists.

<u>PURPOSE STATEMENT</u>: To leverage and apply the highest standards of engineering excellence within the U.S. Army Corps of Engineers to advance national efforts to mitigate disaster risks and increase community resilience prior to, during and after disaster events.







### THE CONSTRUCT UNDER WHICH WE OPERATE (LIFE-CYCLE RISK MANAGEMENT)



#### "Getting Ready"

Actions taken **BEFORE** the event, including planning, training, and preparations

Train, Equip, & Exercise Teams Improve & Sustain Readiness Capture Lessons Learned Update Doctrine Develop All Hazards Plans

Flood Risk Management syste assessment / inspections

Monitoring / forecasting threat

State and Local Coordinatio

Reservoir operations

Flood Fight Preparation

#### "Driving Down the Risks"

Activities that **PREVENT** a disaster, reduce its chance of happening, or reduce its damaging effects.

Modify mitigation plans

Identify future mitigation opportunities



#### "The Flood Fight"

Actions taken DURING the initial impact of a disaster, including those to save lives and prevent further property damage Emergency system strengthening ..... Monitor and report flood impact ..... Monitor system performance ..... Support State / Local FF

#### "Getting back on our feet"

Actions taken AFTER the initial impact, including those directed toward a return to normalcy. Short-term and long-term recovery

Repair damaged systems

Assess and document

system performance

Implement mitigation measures / system improvements

Develop system improvements

## PLANNING ASSISTANCE TO STATES-ECOSYSTEM RESTORATION AND ENVIRONMENTAL APPLICATIONS

### **Technical Assistance Workshop**

## Mindy Simmons HQ Senior Policy Advisor

11 July 2023



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## 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



Flooded Bosque along the Rio Grande River, NM



### AQUATIC ECOSYSTEM RESTORATION: MAJOR PROGRAMS

Coastal Louisiana

### **Priority Ecosystems:** California Bay-Delta Chesapeake Bay Everglades Great Lakes Gulf Coast

### **USACE Key Watersheds:**

Columbia River Puget Sound Upper Mississippi River Missouri River Hudson-Raritan



Chesapeake Bay Oysters



## USACE RESTORATION STUDIES AND PROJECTS: MUCH MORE THAN JUST MAJOR PROGRAMS



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







- <u>Watershed studies/planning efforts:</u> Where are and what are the factors limiting watershed health? Where are there opportunities for restoration? What are the priorities? Who are potential partners?
- Fish and wildlife conservation: Where are there populations of sensitive and/or culturally significant species? How will management actions affect them?? How can we map where invasive species could affect restoration efforts?
- <u>Coastal assessments</u>: Where might nature-based solutions like living shorelines be beneficial to restore ecosystems, protect land, and improve resilience to sea level rise?
- Many more!!



### PAS CAN SUPPORT ADMINISTRATION PRIORITIES AND USACE PROGRAMS



- Fish Passage and Barrier Removal: Numerous Federal agencies (including USACE) received funding for fish passage and barrier (e.g., dam or culvert) removal via Bipartisan Infrastructure Law (BIL). Many local governments are competing for funding and need additional assistance to support barrier removals...PAS can fill gaps, such as:
  - Partner with state fish and wildlife agencies to survey habitat upstream of barriers prior to barrier removal
  - Conduct fish tracking surveys to document movement of fish into reconnected habitat after dam removal
  - Document changes in habitat downstream of a dam after dam removal



Green River Lock and Dam 5



Floodplain survery near Missoula, MT



### IMPROVE PARTNERING AND STRENGTHEN RELATIONSHIPS – BIG SANDY FISH MOVEMENT STUDY, PAS



**SUMMARY:** On May 3<sup>rd</sup> and 4<sup>th</sup>, David Potter assisted Minnesota Department of Natural Resources in capturing walleye on Big Sandy Lake as part of a fish movement study throughout this system.

#### **COMMUNICATION OBJECTIVES:**

 Minnesota Department of Natural Resources has concerns about the walleye population in Big Sandy Lake and have engaged lowa State University and the Corps to study this. The Planning Assistance to States is providing financial assistance to learn more about localized fish movements as related to key life history requirements.

#### **KEY TAKEAWAYS**:

- Walleye were captured using a variety of methods including trap nets and electrofishing. Fish were measured, sexed, tagged, and released. Information from this assessment will be used to estimate the population size in the lake.
- A subset of captured walleye were implanted with acoustic tags. An array of receivers have been deployed throughout the lake and tributaries. Detections recorded within this array will show seasonal movements.
- This study will provide an understanding of how walleye move in the system relative to life history requirements. As a result, management recommendations may actively target ways to facilitate movement.











### PAS SUPPORTING ENVIRONMENTAL WORK: WHAT OTHER EXAMPLES CAN YOU THINK OF??