USACE INUNDATION MAP POLICY AND IMPLEMENTATION UPDATE EC 1110-2-6075

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For Nevada Dam Safety & Emergency Action Plan Workshop
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"The views, opinions and findings contained in this report are those of the authors(s) and should not be construed as an official Department of the Army position, policy or decision, unless so designated by other official documentation."





ENGINEER CIRCULAR (EC) 1110-2-6075 INUNDATION MAPS AND EMERGENCY ACTION PLANS

The EC should publish in AUG/SEP 2020

Inundation Maps

- Shared with public
 - Provides for security exemption
- Scope USACE produced maps, most programs
 - Excludes feasibility studies, continuing authorities program
- Authoritative sources
 - USACE flood inundation map (FIM) database
 - National Inventory of Dams / National Levee Database
 - Access to Water Resources

Emergency Action Plans (EAPs)

- Scope USACE operated and maintained dams and levees
- EAP maps shared with emergency managers, other agencies and the public via National Inventory of Dams
- Minimal change from 2018
 EC 1110-2-6074





INUNDATION MAPS - IMPLEMENTATION TIMELINE

Immediate – Districts share EAP maps and flood event maps

OCT '20 – Policy rollout webinars

National Inventory of Dams (NID) USACE-only

Flood Inundation Mapping Standard Operating

Procedures (FIM SOP) update published

Implementation webinars/training

Publish maps to USACE FIM database

NOV '21 – NID & Access to Water Resources public rollout



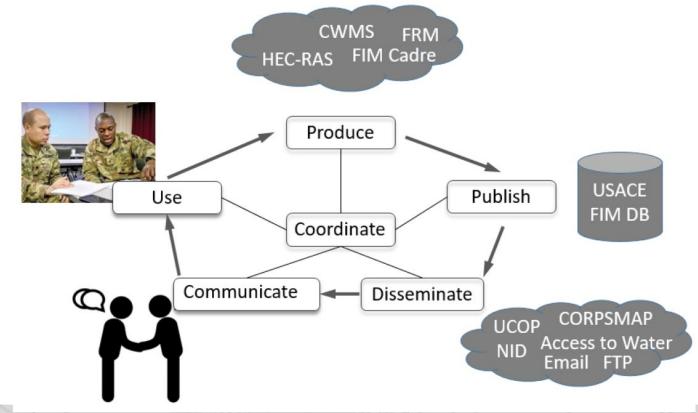


IMPLEMENTATION - FIM SOP OVERVIEW

Intent – local production by staff with knowledge of basins & projects

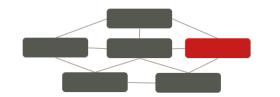
- Clear lines of responsibility
- Consistent standards
- Tiered capability to facilitate timely response during flood incidents
- Consistent processes used throughout USACE

Concept of Operations

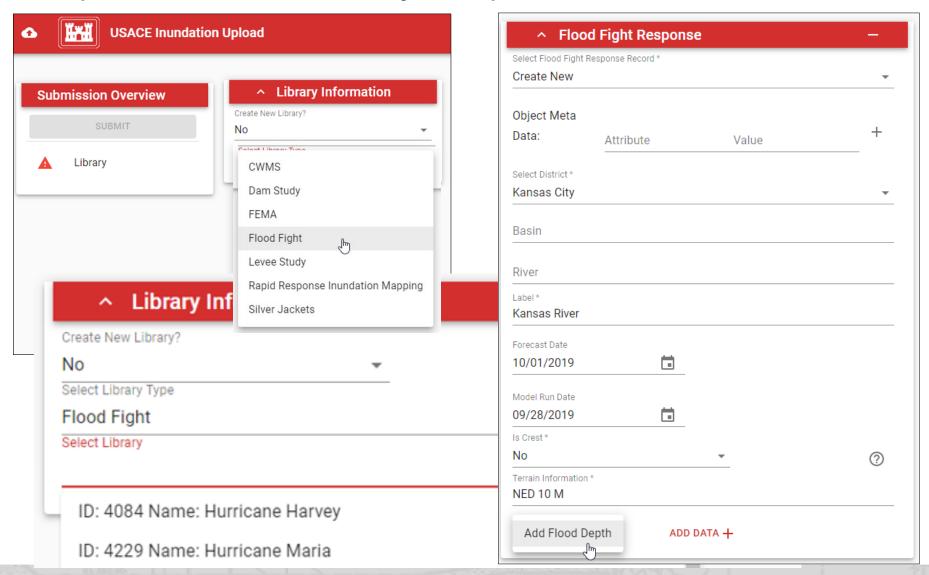




INUNDATION MAP PUBLISHING



https://fim.sec.usace.army.mil/uploader/





DEMONSTRATION

Publishing

USACE FIM database viewer https://fim.sec.usace.army.mil/viewer/

USACE access only



Dissemination

ArcGIS Portal – public flood event viewer

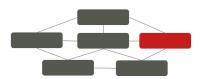


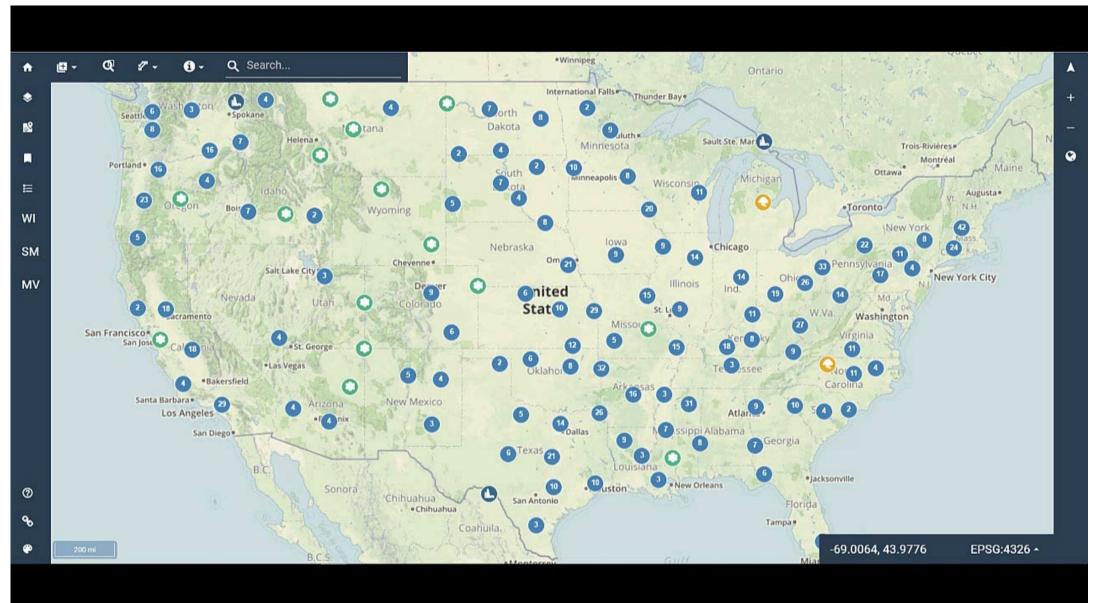




USACE INUNDATION MAP DATABASE VIEWER

Inundation maps accessible upon publishing





ARCGIS PORTAL VIEWER

Example custom viewer for dissemination

Mississippi River and Yazoo Backwater - April, 2020 - Public Accessible Website Shared With Stakeholders Vicksburg 2020 Flood Event ▶ ✓ Lower Miss Levees Find address or place 02 Apr 2020 Model Run - Red River Backwater Forecast Inundation V 02 Apr 2020 Model Run - Mississippi River Forecast Inundation 28 Feb 2020 Model Run - Yazoo Backwater Forecast - 96 ft 20 Feb 2020 Model Run - Pearl River Crest Inundation 0 ▶ 2019 Yazoo Backwater Peak - 98.2ft ▶ ✓ AHPS River Gage **Lower Miss Levees** Floodwalls Closures Levee embankments 02 Apr 2020 Model Run - Red River Backwater Forecast Inundation 02 Apr 2020 Model Run Red River Backwater Forecast Inundation 0.1 - 2ft 2ft - 6ft 6ft - 15ft >15ft 02 Apr 2020 Model Run - Mississippi River Forecast Inundation 02 Apr 2020 Model Run Mississippi River Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS | NOAA/NWS/NWC 0.1 - 2ft