The IMCOM G4 in partnership with ERDC is the Army's executive agent in scheduling, data reporting, development and sponsorship of ADTIP classes and funding for inspection equipment, research and development requirements for transportation infrastructureand dams. Dams on Army Installations are required to be inspected periodically IAW with AR420-1 and FEMA 93. Periodic inspections are conducted every 4 years and reported to the National Inventory of Dams annually. The program covers (1) development of emergency action plans (EAP) (2) underwater/ periodic inspections and (3)

ADTIP Website: https://transportati on.erdc.dren.mil/i mcomadtip/Default .aspx

maintenance and

recommendations.

repair

Contact Us: **IMCOM ADTIP PM** 210-466-0535 michael.r.andres. civ@mail.mil

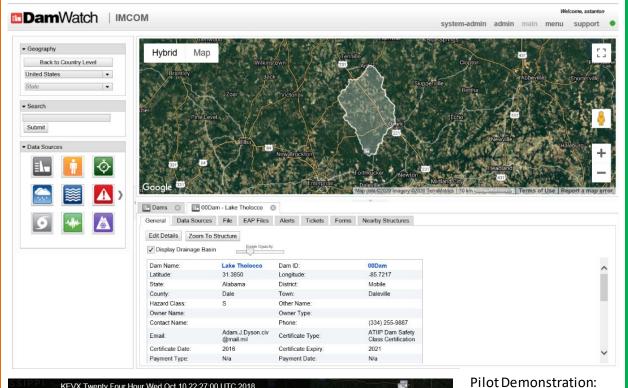
Dam Program POC 601-634-7443 shaun.r.stanton@ usace.army.mil

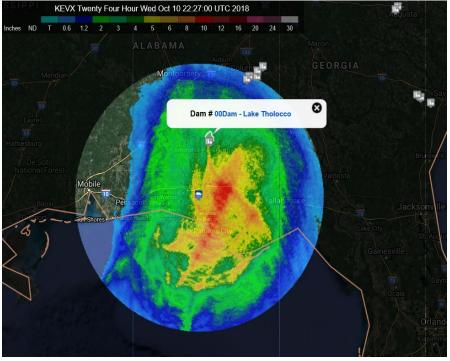
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IMCOM has funded the acquisition of the Dam Inventory Management Software DamWatch. The software will provide a platform to display various live sensor data, local weather data, and seismic data for each dam in the IMCOM portfolio. Event thresholds can be set allowing alerts to be sent out automatically in the event of an emergency.

The software will serve as a platform for DPWs to be able to store information on each of their dams to include Annual and Periodic inspection reports, photographs, instrumentation readings, as-built drawings, Emergency Action Plans (EAP) and video files.





Hurricane Michael hit the Florida Panhandle October of 2018. The event triggered an Alert on our pilot system and the image to the left is the radar reading at the time of the alert. The alert triggered our 2" accumulation in a 12hour period threshold. Hurricane Michael dropped over 7" of rainfall in the watershed of Lake Tholocco Dam.

Army Dam Safety Officer's (DSO)

APG- Charles Eckert, AAD- Jason Wynn, BGAD- Tim Hadley, FAVA- Brian Robinson, FBNC-Yusuf Sharif, FCKY-Jared Madewell, FCCO- James Bohall, FDNY-Zahid Jamil, FGGA-Francisco Perez-Blair, FHTX-Curtis Eickenloff, FHCA- Ronald Rosas, FJSC- Wayne Griffith, FKKY- Jay Schmidt, FLKS- Storm Savage, FLMO-Dillon Barks, FMMD- James Williams, FPLA-Russell Castillo, FRKS- Scott Sutherland, FRAL- Pat Gaddy, FSOK- Cindy Bateman, FSGA- Lewis Miles, JBLM- Sallie Donahue, MCAAP-Nathan Osborne, RRAD- Russell Meadows, RIA-Christian Hawkinson, USMA- Kevin Fitzgerald, USAG Bavaria-Jeffrey Heath, USAG Hawaii-Allen Wolfe

Army Dams Safety Management Program Guidance-**DSO Qualifications** The Installation DSO will be an Army government employee with dam safety assigned as part time duties. To be qualified, the DSO must have an engineering background and have attended and pass the U.S. Army Dams Safety Inspection certification course PW- 124 IMCOM Dam Safety Inspection.

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Preliminary DamWatch Warning/Alert Message:

IMCOM is currently compiling a list of the responsible individuals who will receive messages from DamWatch. The individuals will include the Dam Safety Officer and Director for each DPW that is in the system. DamWatch sends two types of messages: a Warning message and an Alert message. A Warning message is sent at a storm event level that precedes the Alert level storm. For example if the Alert level is a 100-year storm, DamWatch will send out a Warning when the 50-year storm is forecasted or observed and an Alert if the event exceeds the 100-year storm.

IMCOM will set the preliminary thresholds for all Army dams as follows: Low hazard dams will have the Warning issued at the 50-year storm and the Alert message issued at the 100-year storm. High and Significant hazard dams will have the Warning issued at the 25-year storm and the Alert message issued at the 50-year storm. These thresholds are preliminary and subject to review once the system is fully operational. Please feel free to reach out to IMCOM or ERDC to have them customized to your dams.

Upon receiving either a Warning or Alert from DamWatch, please begin interim risk reduction measures to ensure the safe operation of your dam. The following basic risk reductions measures are outlined below.

Risk reduction measures for a Warning:

- 1. Locate and review the dam's Emergency Action Plan or Standard Operating Procedure.
- 2. Visually inspect the dam within 24 hours of receiving this message.
- 3. Report lake elevations and estimated flow rate of discharge from outlet works/spillways.
- 4. Remain on standby in case the situation should escalate.
- 5. Report findings to IMCOM/ERDC.

Risk reduction measures for an Alert:

- 1. Locate and review the dam's Emergency Action Plan or Standard Operating Procedure.
- 2. Visually inspect the dam within 8 hours of receiving this message. Continue to inspect the dam every 12 hours or until the storm has passed.
- 3. Report lake elevations and estimated flow rate of discharge from outlet works/spillways.
- 4. Remain on standby in case the situation should escalate.
- 5. Report findings to IMCOM/ERDC.

For the time being, alerts and warning messages will not be aggregated. You may for example receive separate messages for a 100-year 12-hour storm AND a 100-year 24-hour storm. In addition, warning and alert messages will be separated for each structure. Refinements to the messaging format and frequency are anticipated and will be driven in part by user feedback. Please feel free to report changes or additions you would like to see. They may possibly be incorporated in future versions of the software.