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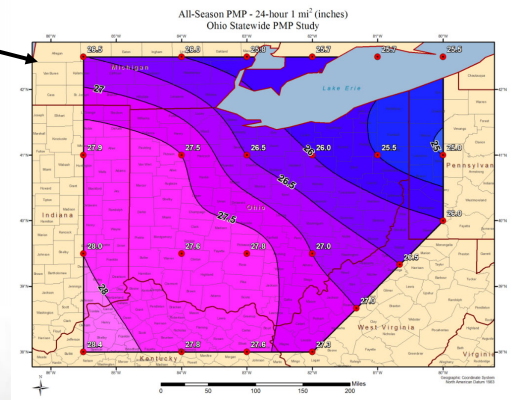
**DAM BREACH ANALYSIS: A STUDY  
OF PROPER TECHNIQUE**

Presented by: Ryan J Olson



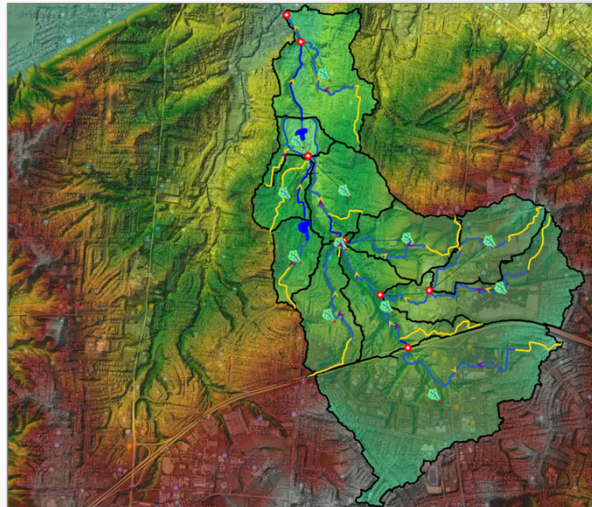
## Data Gathering

- Inspection Reports, Dam Construction Plans, FEMA FIS
- Probable Maximum Flood (PMP) 
- Survey & Publicly Available LiDAR
- Downstream Bridge Plans
- Level Pool (HECHMS Breach)
- Dynamic Routing (HECRAS Breach)
- Breaching in Series?
- Breach Parameters

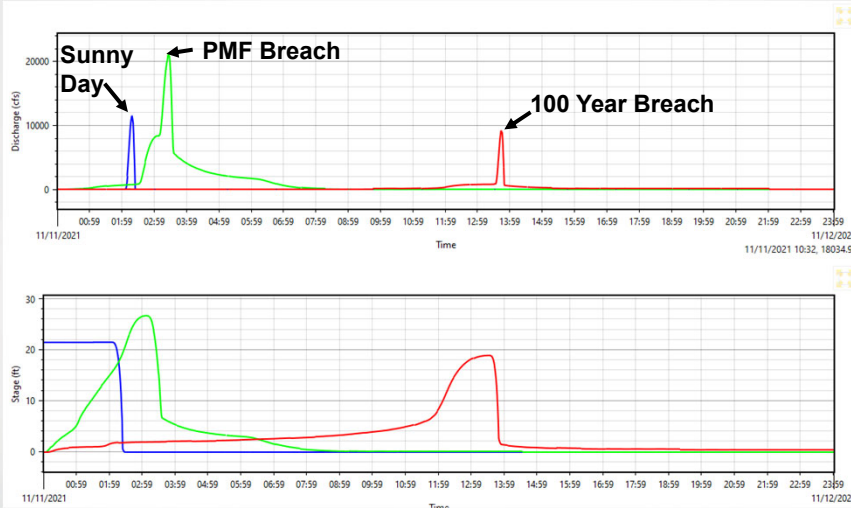


## Fairfield Dam C and Golf Course Lake Dam

- Five Scenarios
  - PMF
  - PMF Breach
  - 100 Year
  - 100 Year Breach
  - Sunny Day
- Level Pool
- GeoHECHMS Model Breach
- Not Breached in Series



# Dam C Breach Results



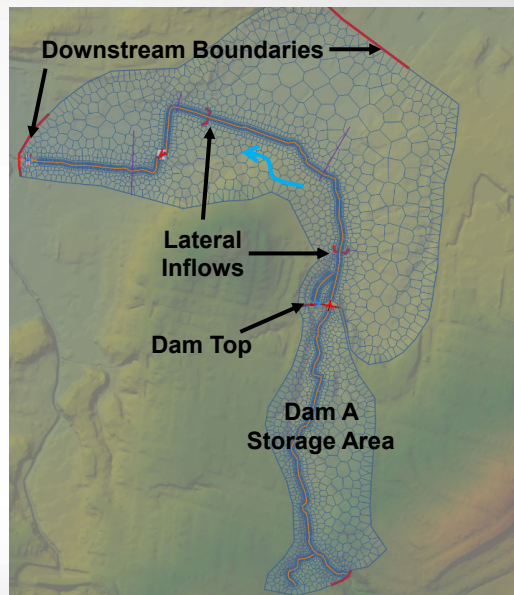
# Fairfield Dam A

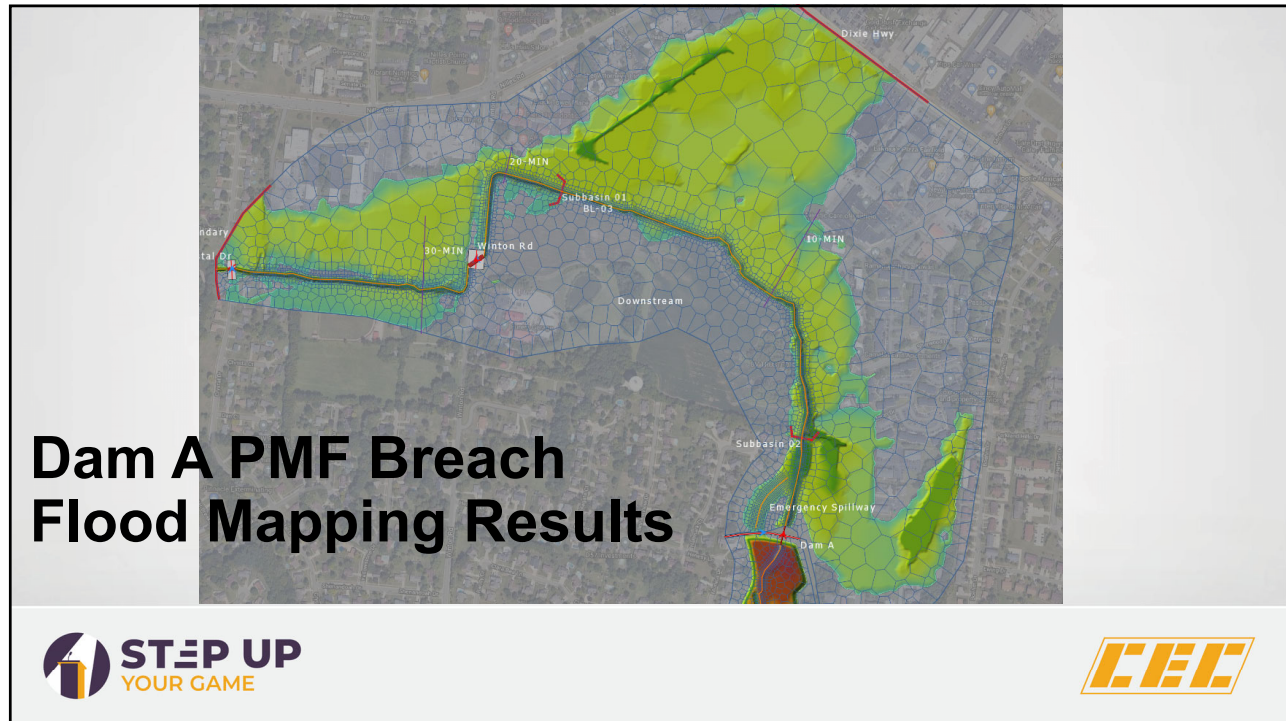
— Five Scenarios

- PMF
- PMF Breach
- 100 Year
- 100 Year Breach
- Sunny Day

— Dynamic Routing

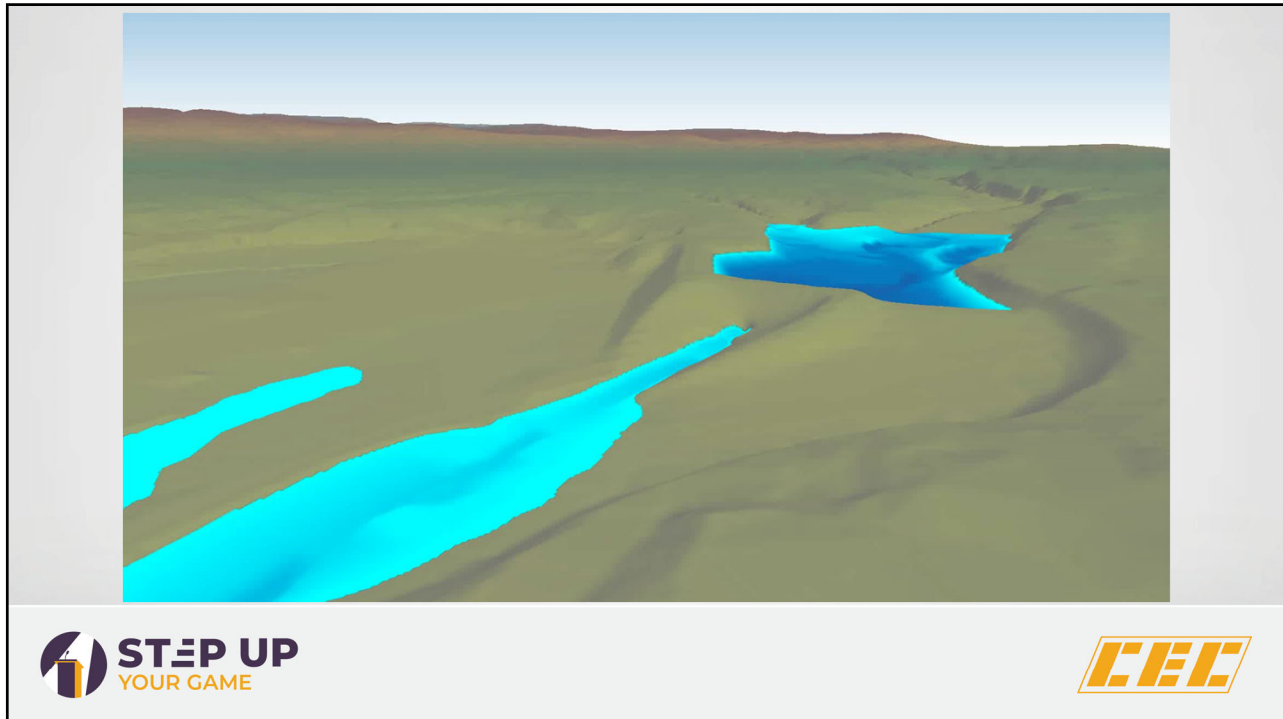
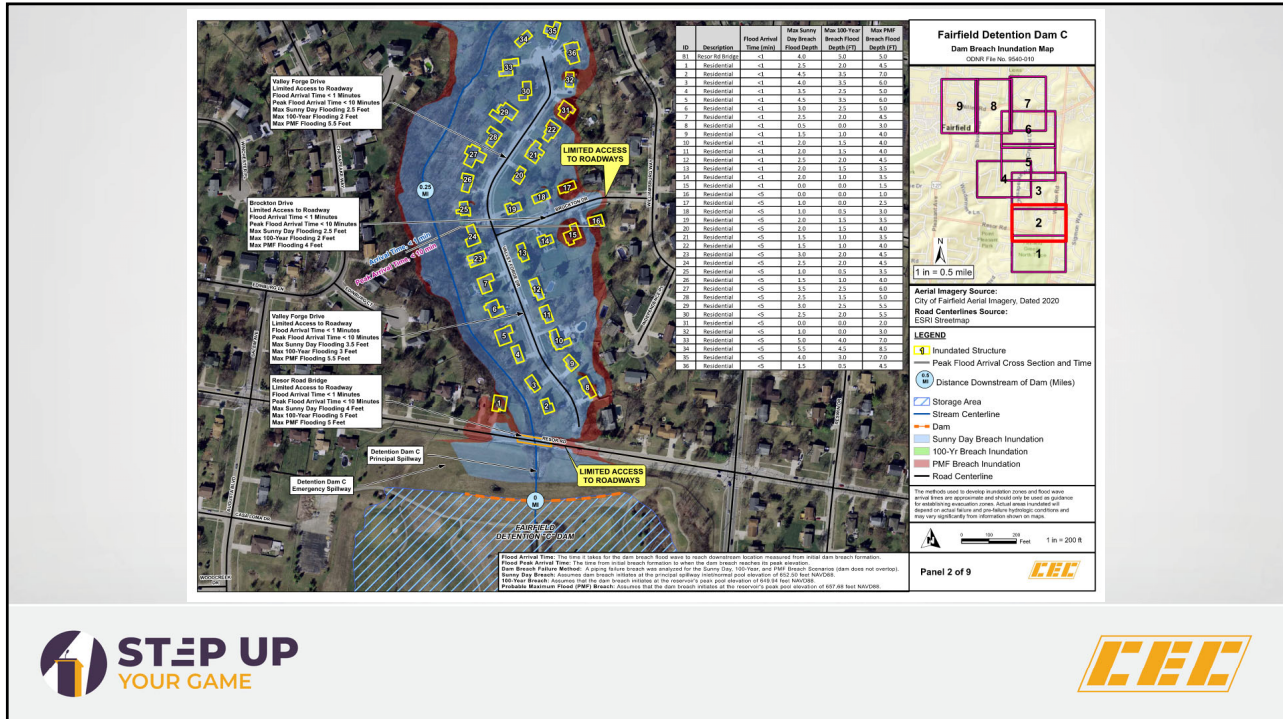
— GeoHECRAS Model Breach

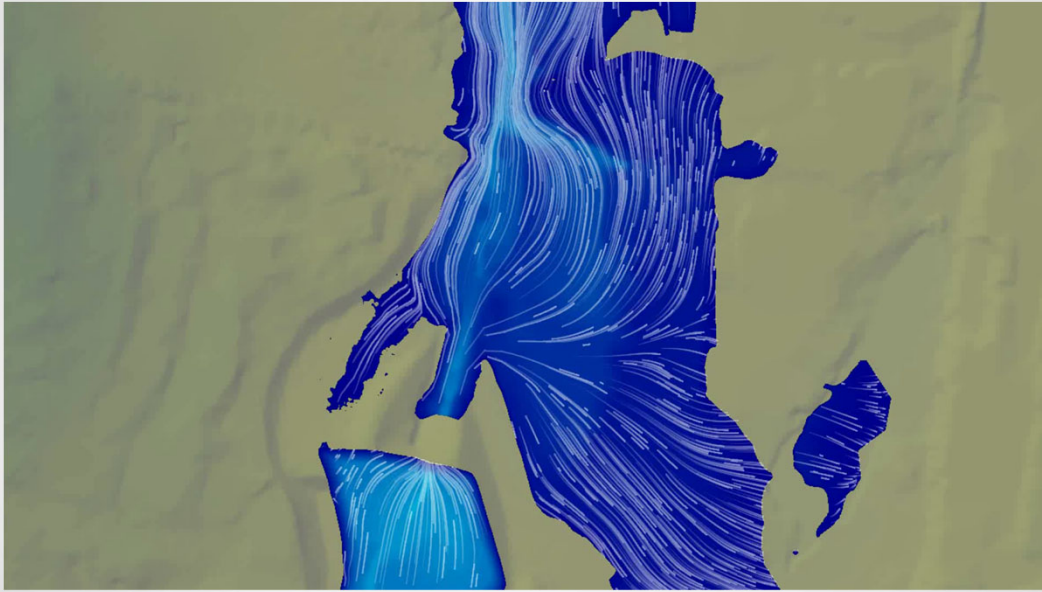




## Deliverables and Results

- Dam Assessment Reports
- Hydrology and Hydraulics Technical Reports
- Emergency Action Plans (EAPs)
- Operation, Maintenance, & Inspection Reports
- Inundation Mapping
- GIS Figures
- Dam Breach Animations





## Presenter

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HERE

Ryan J Olson, E.I.



- CEC Cincinnati Water Resource Project Consultant
- 1.5 years of experience
- Bachelor Degree in Civil Engineering from University of Dayton
- [rolson@cecinc.com](mailto:rolson@cecinc.com)



# QUESTIONS?

