

Rehabilitation of Aging Flood Control Dams

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Area I JED

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Where are we now?

- In 2016, the District Dam Rehabilitation Committee reconvened
- October 31, 2016 an interim report was submitted to:
 - Governor McAuliffe
 - Senator Hanger (Co-Chairman, Senate Finance Committee)
 - Senator Norment (Co-Chairman, Senate Finance Committee)
 - Delegate Jones (Chairman, House Appropriations Committee)

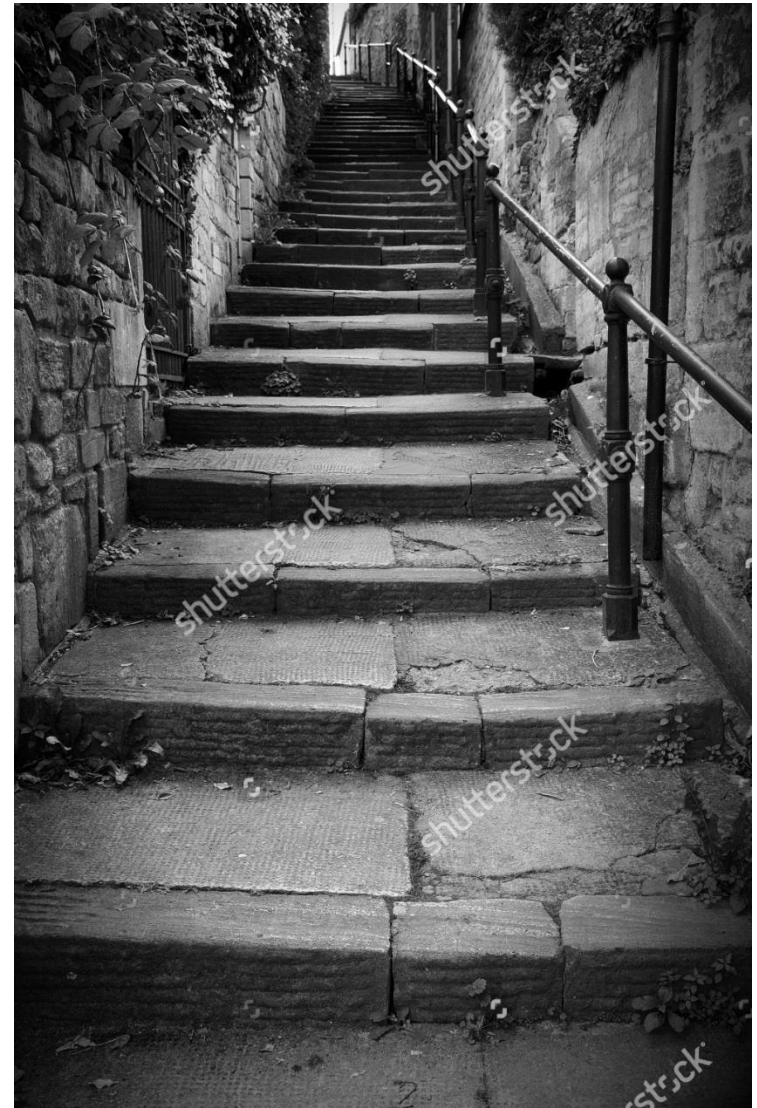
Interim Report

- Outlined the five tasks required to complete a final report
- Resources needed:
 - Staffing
 - Funding
- Final report will include:
 - Prioritized list of High Hazard Dams in need of rehabilitation
 - Staffing levels/contractors needed to implement dam rehabilitations
 - Estimated cost of rehabilitations

Even the biggest jobs have to start somewhere!

- First, we need to know what we are dealing with:
 - Virginia has new Probable Maximum Precipitation (PMP) values
 - Most of these 46 dams have not had Incremental Damage Analysis conducted, either for reduction in Hazard Classification or reduction in SDF

**One step at
a time!**



Task 1-Evaluate New PMP values

- Has the PMP for the dam watershed increased or decreased (or even stayed the same!)?
- How significant in the reduction in PMP?

Task 2-ACER-11 Analysis

- ACER-11 is a Hazard Classification document published by the Bureau of Reclamation
- An Incremental Damage Analysis approach to Hazard Classification
- Not all dams will qualify for this analysis

Task 3-IDA for SDF Reduction

- Virginia Impounding Structure Regulations allow the use of an Incremental Damage Analysis for reduction in SDF
- Would be done concurrently with Task 2
- Not all dams would qualify

Task 4-Dam Prioritization

- Will be done using the *Priority Ranking System for Rehabilitation of Aging Watershed Dams*, developed by the USDA-Natural Resources Conservation Service
- Considers threat to downstream public analyzing a number of factors

Task 5-Preliminary Engineering

- Hydraulics and Hydrology
- Alternatives Analysis
- Geotechnical Analysis
- Survey
- Result in 35% design
- Would only be done for the top prioritized dams, used to get a more accurate cost estimate

**Aren't Government studies just
a way to kick the can down the
road?**

You could say that, but the legislature is not in the business of handing out money, unless you show a need. And even then...

2017 Progress Report

- List of dams reduced from 66 to 63
- Hired Project Manager
 - David Warriner, PE
- Hired Modeler
 - Aaron Bish, EIT

2017 Progress Report

- Completed preliminary analysis of new PMP values
- 9 dams identified as potentially benefitting from lower PMP values
- 11 dams identified as potentially benefitting from ACER 11/IDA analysis
- 3 dams are getting new DBIZ studies

Questions?

