Bolivar Dam Seepage Barrier Construction Contract

US Army Corps of Engineers

Huntington District

June 2014

U.S.ARMY

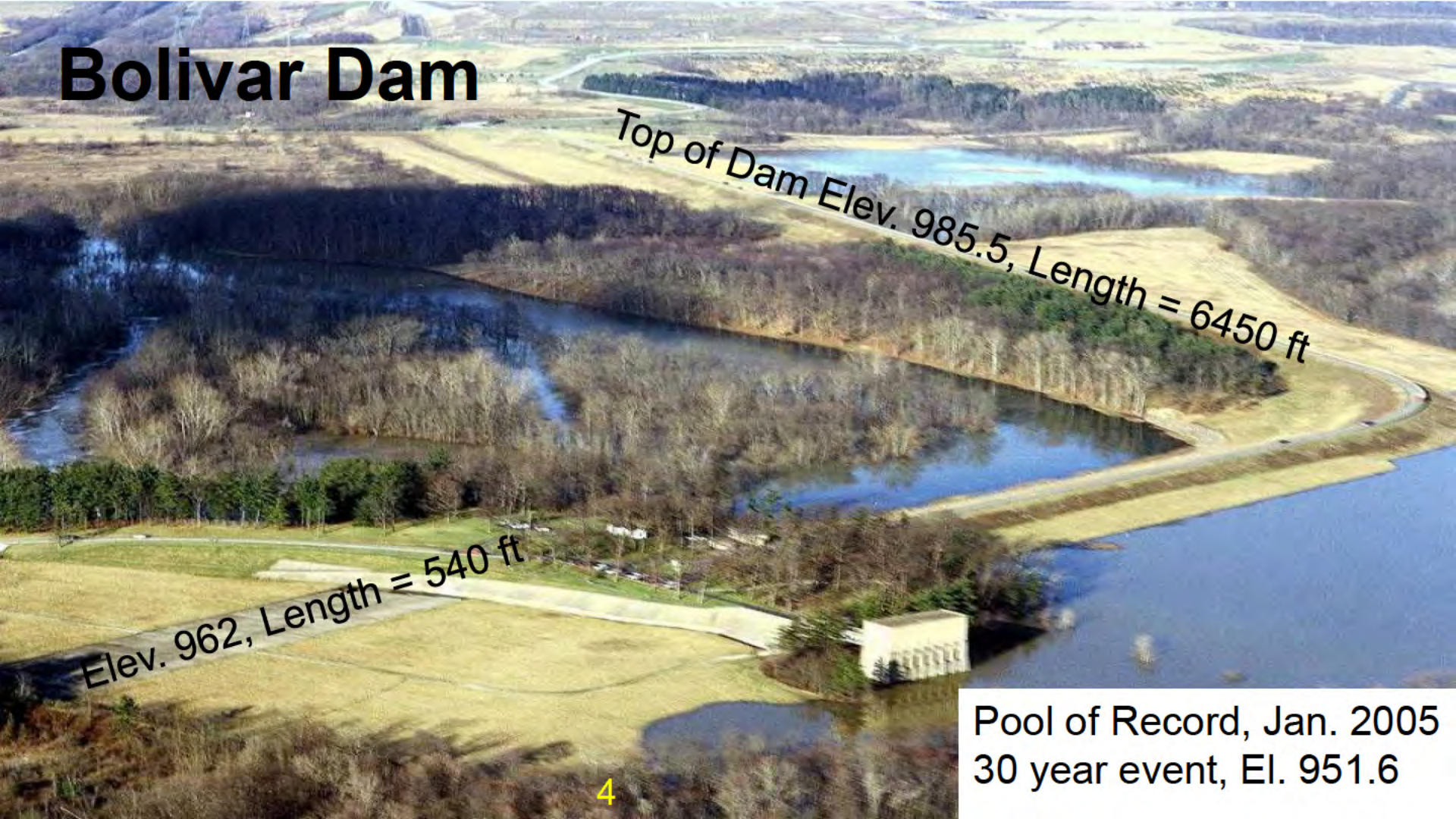
US Army Corps of Engineers

BUILDING STRONG®

Aerial of Bolivar Dam
Dry dam – does not normally hold water behind it
6,400 feet long

Intake structure during construction - 1937

Bolivar Dam



Pool of Record, Jan. 2005
30 year event, El. 951.6

Dam Safety Concerns

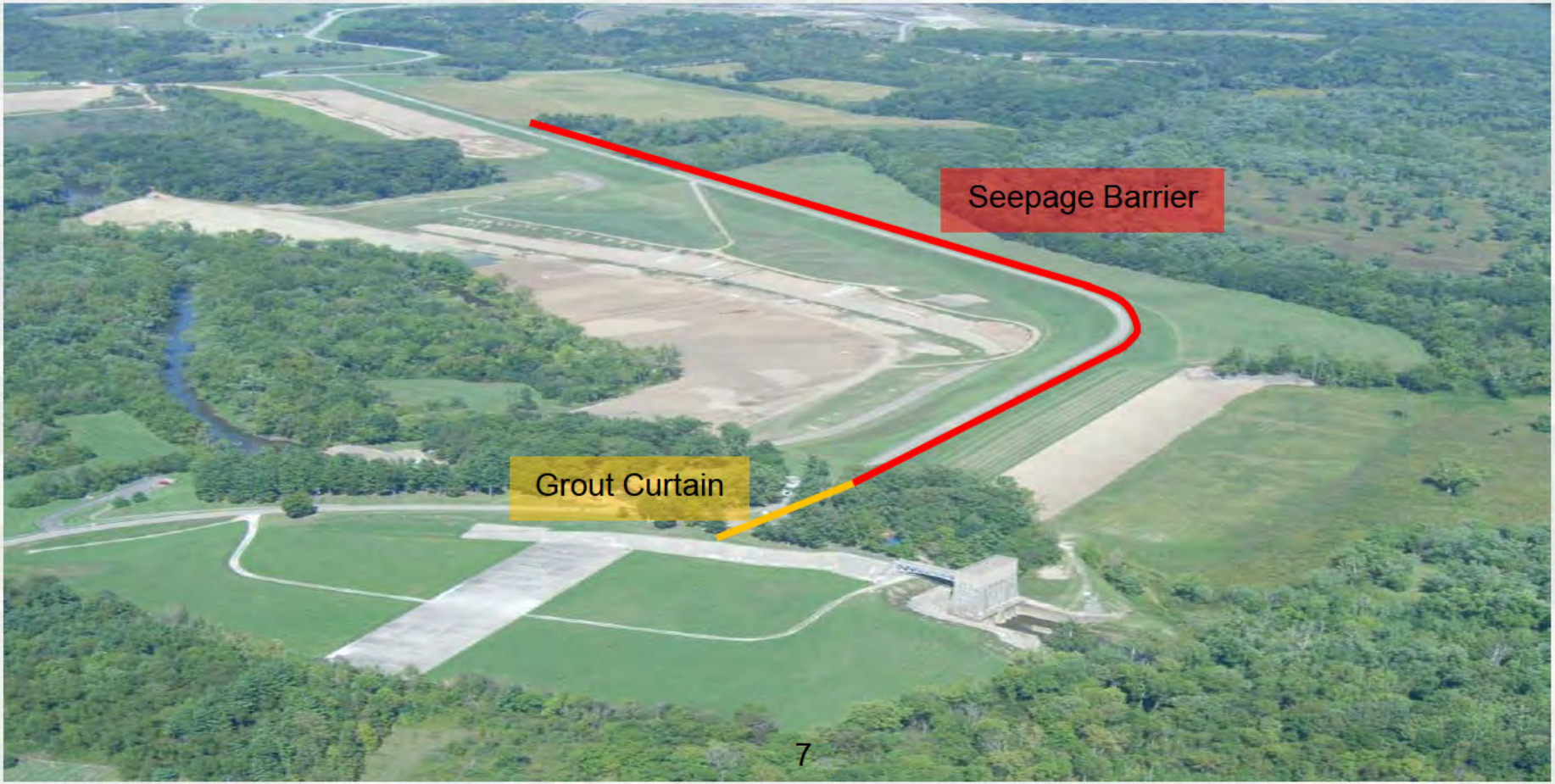
- Seepage could undermine the dam and eventually cause it to fail
- Failure would impact tens of thousands of people and cause billions in damages

2008 seepage photos

Recent Work

- Fabricating new service gates and rehabilitating hoist machinery
- Seepage blanket and tree clearing
- Additional instrumentation

Bolivar Seepage Barrier



Seepage Barrier

- Concrete barrier will greatly reduce seepage
- Barrier dimensions
  - ▶ 4,500 feet long
  - ▶ Up to 145 feet deep
  - ▶ 3-feet thick

Grout Curtain

- Drill and grout through rock in the left abutment near the intake structure and the spillway to “plug” potential seepage pathways
- Length: 300 feet
- Depth: 60 feet

Seepage Barrier Contract

- Awarded Feb 2014 for $44.3M to Trevi Icos of Boston
- Notice to Proceed issued on May 21
- Site work began June 2014
- Groundbreaking ceremony will be held on August 27 with Congressman Gibbs
- Seepage barrier construction expected to begin November 2014
- Contractor has till July 2018 to complete all work

Impacts to the Public

- Construction period of up to 4 years
- Road across dam will be closed to the public starting on or about July 14
  - ► Will be opened on a limited basis during flooding
- Playground area near project office will be closed
- Contractor required to bring in materials & equipment via the landfill end of the dam (Gracemont)
- Fishing access will remain open

Corps Contact

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