

Four Lakes Task Force

Smallwood Lake Update

August 24, 2020



Four Lakes Task Force

Virtual Public Meeting

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- We received questions via email prior to the meeting and have structured the presentation to address most of them
 - ▣ We are working on responding to everyone's email
- If you have questions or comments you have not yet submitted, you can do so using the “questions” feature in GotoWebinar
 - ▣ We will answer public questions for the final 30 minutes of this meeting

Agenda

1. Introduction and Welcome (Mark Mudge)
2. FERC Letters and FAQ (Dave Kepler)
3. FLTF Dam Restoration Concept (Ron Hansen)
3. Erosion (Terry Kram)
4. Question and Answer (Dave Kepler)

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Smallwood Lake – FERC Letter and FAQ

Dave Kepler
August 24, 2020



Four Lakes Task Force

Recent FERC Letters

- ▣ May 20, 2020 FERC letter from Dave Capka, Director of Dam Safety
 - Lower reservoir in a safe manner
 - Perform a dam safety inspection within 3 days after flows recede
 - Maintain fully lowered reservoir levels until safe reservoir elevation can be established and implemented
 - Form a fully Independent Forensic Investigation Team within 7 days (May 27)

- ▣ July 1, 2020 FERC letter from CarLisa Linton, Director of Hydropower Administration and Compliance
 - Outlines overdue dam safety and public safety information
 - Dam safety inspection report
 - Incident report for the flood and subsequent damage

Recent FERC letters

- ▣ July 15, 2020, FERC letter from John Zygaj, CRO
 - Boyce belatedly submitted the June 26 Smallwood Dam Emergency Inspection Report prepared by TRC
 - Requests a plan and schedule to implement the Critical and recommended maintenance actions outlined in the June 26 Report.
 - Questions the adequacy of interim repairs already made by Boyce and requests supporting design and construction information.
 - Outlines 23 additional items TRC must address in a Supplemental Report
- ▣ Letter concludes: “The reservoir cannot be returned to normal levels until you receive authorization from FERC and unless all of the outstanding dam safety items are satisfactorily addressed.”

Frequently Asked Questions on Smallwood

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- Will Smallwood have to pay for Sanford and Wixom Repair Costs?
 - ▣ **NO**, while it makes sense to share operating and implementation costs, the plan is to allocate the upgrades/Acquisition Cost by Lake.
- Does Smallwood need expanded Spillways;
 - ▣ Under FERC - **YES** and likely under state jurisdiction. Spillway capacity is not under State Jurisdiction as it's not under their jurisdiction and they have no facts to base a decision; AND the dam did not maintain containment in the last flood

What is the status of the bankruptcy filing?

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- On July 31, 2020, Boyce Hydro, LLC and Boyce Hydro Power, LLC, filed for bankruptcy protection pursuant to Chapter 11 of the US Bankruptcy Code.
 - ▣ Boyce Hydro Power, LLC is the Boyce entity that owns the three Federal Energy Regulatory Commission (FERC) licenses for the Sanford, Secord and Smallwood dams. Boyce Hydro, LLC is the Boyce entity that operates the dams.
 - ▣ A separate limited liability company owns each of the dams, and certain lands are owned by other Boyce entities (e.g. Boyce Michigan, LLC). At this time, none of these other Boyce entities have filed for bankruptcy.
- In a Chapter 11 bankruptcy proceeding, in most cases, the business remains open and operational. When a bankruptcy case is filed, all efforts to collect on a debt are halted (“stayed”), and anyone having a claim on a creditor must proceed in the bankruptcy court to receive what is owed to them.
 - ▣ FLTF has claims against Boyce Hydro Power
- In this case, Boyce Hydro Power, LLC and Boyce Hydro, LLC, (the “debtors”) are seeking relief from the bankruptcy court that would allow them to restructure and remain in business.

How does the bankruptcy filing impact FLTF's ability to acquire the properties through eminent domain (condemnation)?

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- On July 31, 2020, FLTF filed condemnation lawsuits in Midland and Gladwin county circuit courts. There will be a hearing to determine the just compensation concerning the properties. In the end, we are confident FLTF will be able to acquire the properties.
 - ▣ At this time, The only two entities that filed are Boyce Hydro, LLC and Boyce Hydro Power, LLC. The real property interests are held by other Boyce entities that did not file for bankruptcy protection.
 - At the present time, the counties are proceeding with efforts to acquire the property by condemnation
 - If Boyce bankrupts the other companies, this might delay the timing
 - ▣ We are confident the counties will acquire the property

Frequently Asked Questions on Smallwood

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- Why is the FLTF estimated schedule so much longer than Boyce's?
 - ▣ The Boyce estimate is a 'band-aid' on a few obvious items and does not address all 21 deficiencies identified by FERC in their July 21 letter.
 - ▣ The GEI Timetable was based on repairs with 75+ year useful Life, additional spillway capacity for the future, engineering design that can start in a year when there is a financing Plan.
- Can Smallwood Dam come up before that?
 - ▣ **If deemed safe.** FERC has asked for an operational plan to address lack of spillway capacity. There may be other specific repair requirements and a determination will need to be made if repairs and operational issues can be managed to be able operate on an interim basis while making long-term upgrades.

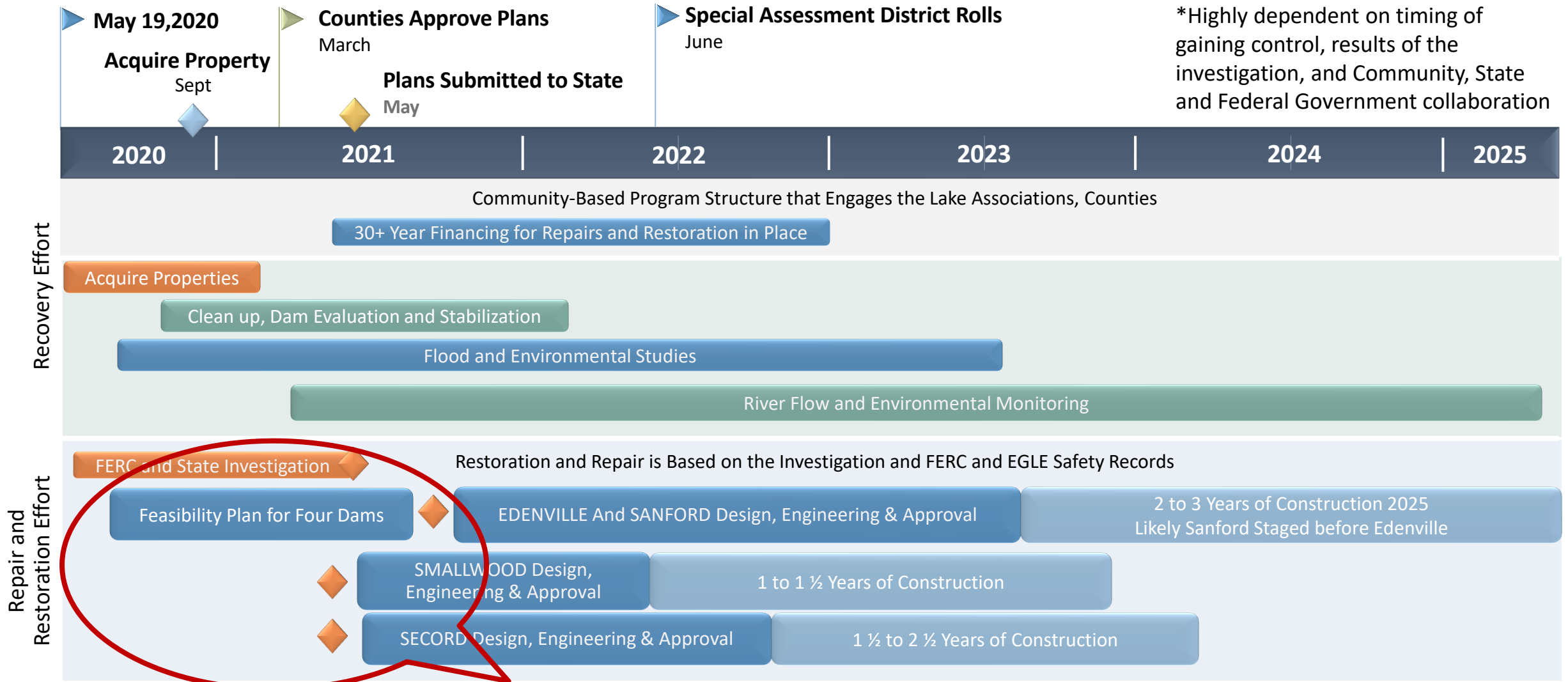
When will know? Once we get the facts

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- There is no order from FERC or Boyce on what repairs are needed
 - ▣ The inspection reports FERC requested were submitted late, and FERC found those reports incomplete, and have a clear set up requirements on Boyce, those reports are due later this month,
 - ▣ The independent investigation agreement is still being negotiated with Boyce.
- FERC or the State normally will require:
 - ▣ A fix on critical issues and a plan on others and a commitment with a financial plan
 - ▣ It should be expected that FERC takes a position with Boyce on the Spillway, Embankment and other compliance items.
- IN ALL CASES
 - ▣ There will need to be a long-term plan of engineering, operations, and financing, to on how any owner will safely manage the lake levels.
- The disposition of the Property needs to be determined.

Recovery and Restoration Timeline*

Four Lakes Program: Gain Community and Government Support for a Plan to Acquire, Restore and Rebuild the Four Lakes and Dams



POINT OF FOCUS TO KEEP TO A 3-6year time-table

Four Lakes Task Force

Smallwood Lake – Restoration Estimate Summary

Ron Hansen, P.E., P.S.
August 24, 2020



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Summary of GEI Consulting Report

- ❑ After the May 19th event, Four Lakes Task Force requested GEI Consulting to prepare a report for planning purposes. This was done with Spicer Group and Essex Partnership input and review
 - This Presentation summarizes that report, which is posted on the FLTF website
 - Report is for planning level purposes and include design concept assumptions
 - Detailed engineering and studies must be completed to confirm assumptions
- ❑ Design criteria assumptions include:
 - Provide 75+ year service life
 - Meet current standard of practice for dam engineering
 - Pass the 1/2 Probable Maximum Flood (PMF)
- ❑ Restoration assumptions
 - Restoration of Existing Spillway
 - New Gates
 - New Auxiliary spillway
 - Improved flood control
 - No Hydro Power, based on Economics and time, but potential future option

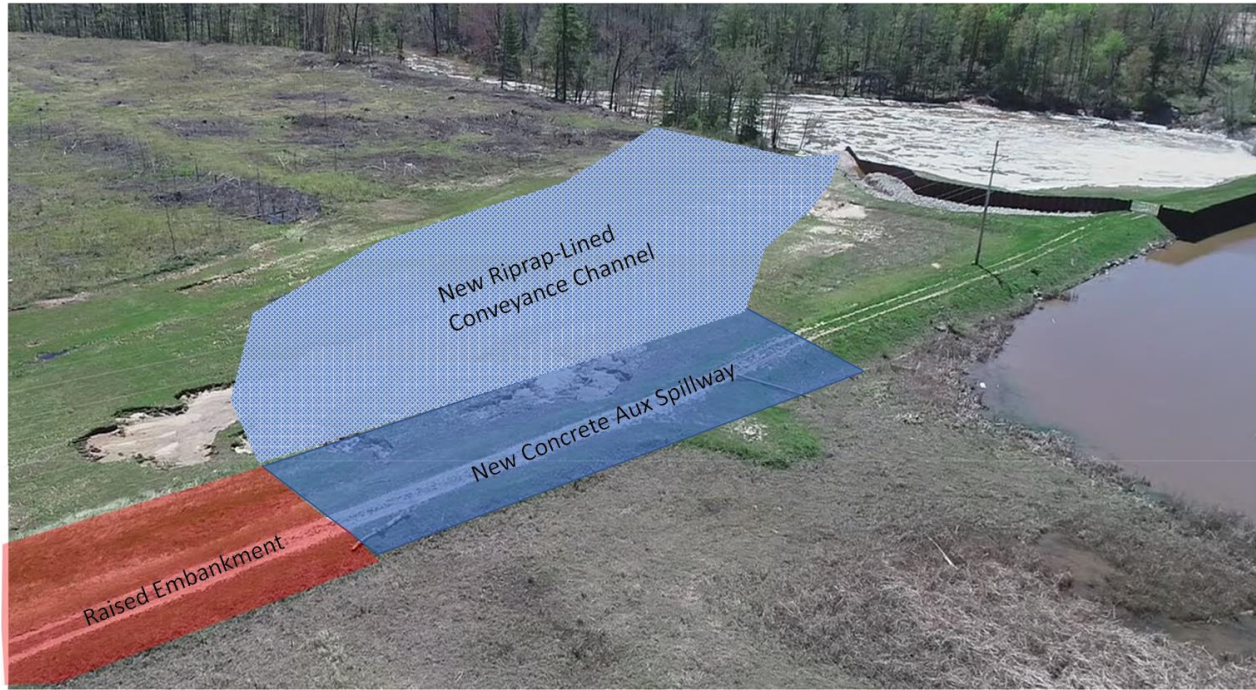
Concepts for Smallwood Dam Restoration

- Pass 1/2 Probable Maximum Flood
 - ▣ PMF Study ongoing – initial estimate 20,000 cfs
- Decommission powerhouse
- Embankment repairs and upgrades
- Primary (Gated) spillway rehabilitation
 - ▣ Improve spillway capacity
 - ▣ Add new crest gates
 - ▣ Rehabilitate concrete
- New auxiliary spillway

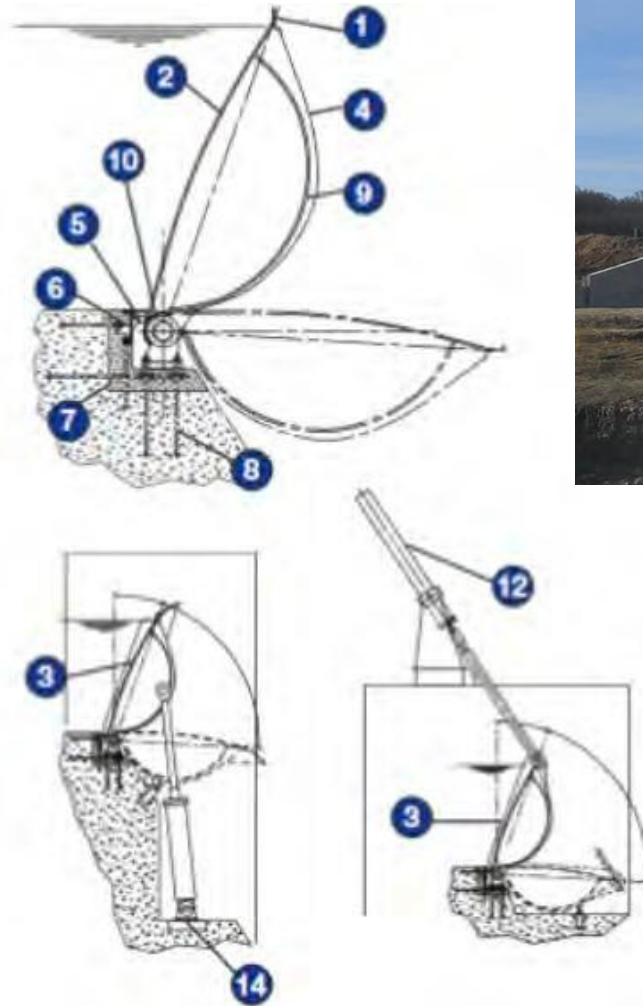
Smallwood Dam – Rehabilitation

- Replace tainter gates with Obermeyer or crest gates
- Lower spillway crest to increase capacity
- Rehabilitate embankment
- Rehabilitate existing primary spillway with cellular grout fill and underpinning
- Construct passive auxiliary spillway
- Increase spillway capacity to pass without flooding homes
- Install shoreline armor protection for high exit velocities and high tailwater

Smallwood Dam – Rehabilitation

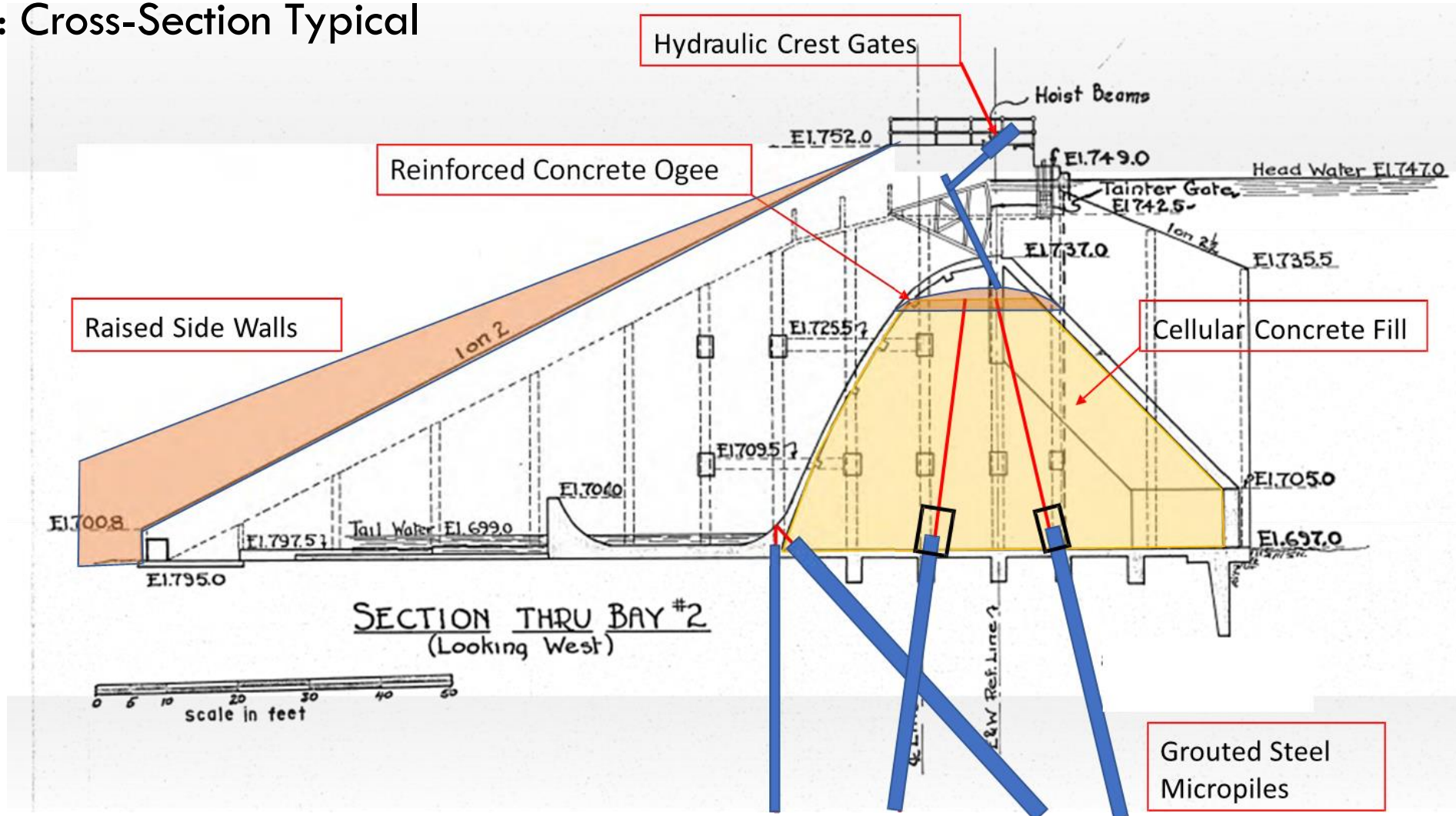


Typical Crest Gate Detail



Smallwood Dam – Primary Spillway Concept

Note: Cross-Section Typical



Planning Level Opinion of Costs

- \$14 million to have dam pass the $\frac{1}{2}$ PMF
 - ▣ Meet or exceed State requirements
 - ▣ Confidence levels at this phase are between -30% to +50%
- Planning level opinion of cost includes:

General conditions

Site preparation

Demolition/abandonment

Embankment repair and stabilization

Gated spillway rehab

Powerhouse rehab

New labyrinth spillway structure

Site restoration

Factors That Could Impact Costs

- Increasing spillway capacity to full PMF will increase costs
- Basin wide flood studies could:
 - ▣ Establish an Inflow Design Flood (IDF) which would decrease costs
 - ▣ Identify the need to armor embankments which could increase costs
 - ▣ Identify flood protection measures for downstream communities
- Findings of the Independent Forensic Investigation Team could identify additional operational or physical measures.
- Value Engineering – opportunity to optimize design and reduce costs
- Environmental restoration

Erosion Report

Gladwin and Midland County Four Lakes

Dave Rothman and Terry Kram

FLTF Board Member and FLTF Leader on Erosion Control



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Shoreline Erosion

- ❑ Four Lakes Task Force hosted two Erosion Engineering fairs, one in Midland and one in Gladwin counties
 - ❑ If you attended the erosion fair and spoke to an engineer, your property is already entered in GIS
- ❑ FLTF is collecting data on properties with erosion damage in the Midland County GIS system
- ❑ NRCS will inspect those properties for funding eligibility
- ❑ FLTF volunteers will contact property owners when FLTF has plans for approved sites and cost estimates

Contact for Shoreline Erosion

- ❑ FLTF encourages individuals with Erosion Concerns that have not already reached out to do so ASAP
- ❑ Email is the preferred method of communication:
kaylas@fourlakestaskforce.org
 - ❑ In your email please include your name, address, phone number and a brief description of your erosion concern
- ❑ You may also call: (989) 941-3005

Cost Sharing

- ❑ Working on preliminary engineering cost estimates
- ❑ 75/25 Cost Sharing on NRCS funds
 - ❑ Homeowner's should be prepared to pay 25% of erosion expenses
- ❑ Neighborhoods can work together to raise funds
- ❑ SBA Loans 1 1/4 - 2 1/2 %
 - ❑ Call SBA (571) 422-8013, (571) 422-6016 or (571) 422-0331
 - ❑ SBA application deadline is Sept. 4, 2020
 - ❑ Only available to primary homeowners



Questions?