

# East Branch Dam Safety Modification Project

**PUBLIC INFORMATION MEETING  
November 08, 2017**

**Johnsonburg, PA**

*US Army Corps of Engineers,  
Pittsburgh District*



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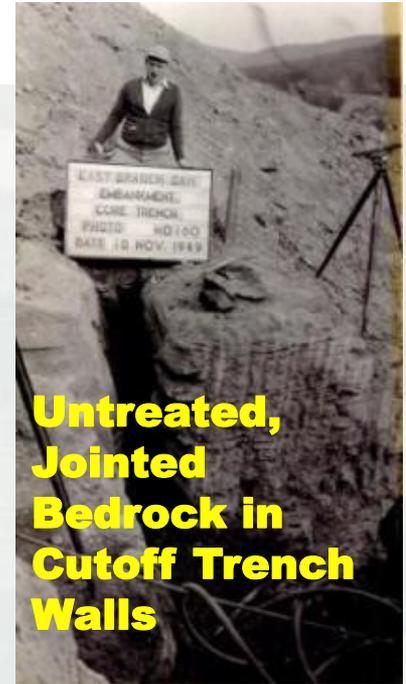
# MEETING AGENDA

- **Opening Remarks** – Acting District Commander, MAJ Cornelius Batts
- **Project History** – Terry Durbin, Project Manager
- **Construction Update** – Denise Polizzano, Area Engineer
- **Emergency Management** – Mike McAllister, Elk County Emergency Services Director
- **East Branch Lake Facilities** – Autumn Rodden, East Branch Lake Resource Manager
- **Questions**



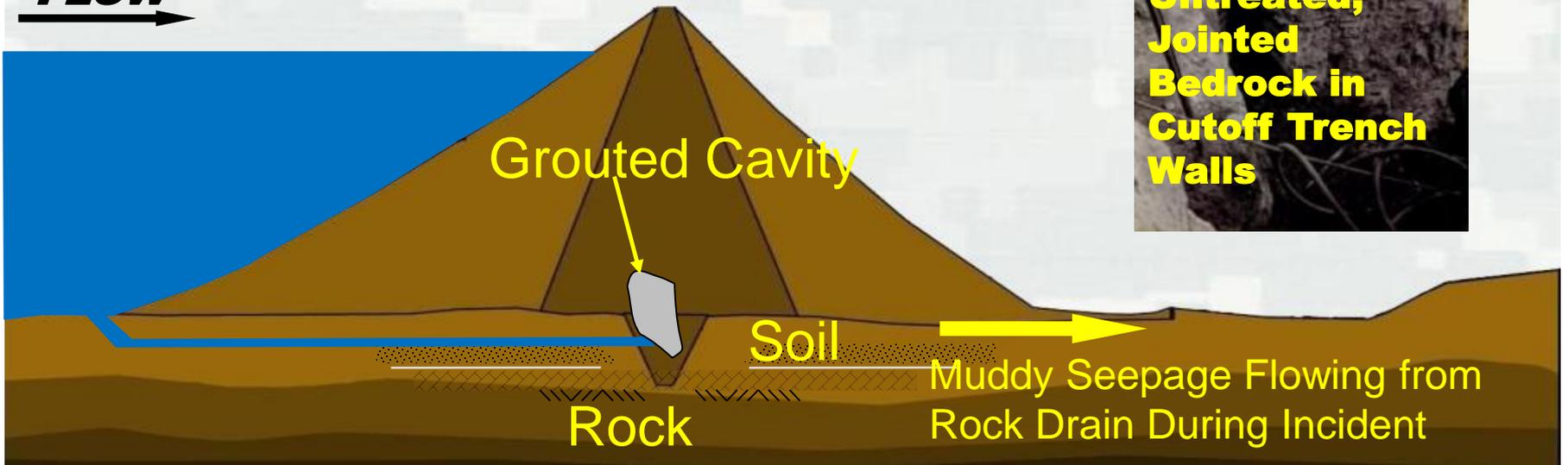
# PROJECT HISTORY 1957 Emergency Repair

Dam failure averted in 1957, but risk for re-initiation of internal erosion remains.



**Untreated, Jointed Bedrock in Cutoff Trench Walls**

**FLOW**  
→



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# PROJECT HISTORY

- **1957** – Emergency Repair
- **1957 to 2008** – Monitor Dam
- **2008 to 2019** – Interim Risk Reduction
- **2008 to 2010** – Dam Safety Study
- **2010 to 2014** – Preconstruction, Engineering & Design



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# PROJECT HISTORY

## Site Development Construction Contracts 2011 - 2014



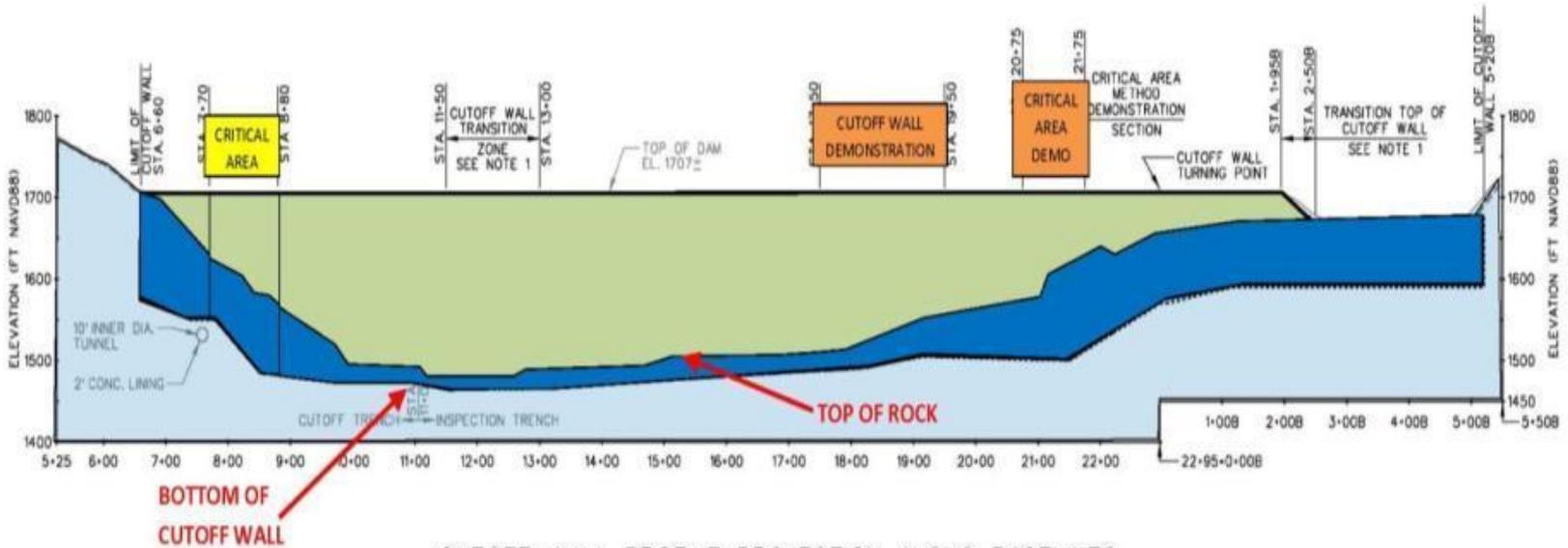
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# PROJECT HISTORY Cutoff Wall Design



CUTOFF WALL PROFILE PROJECTION ALONG BASELINES

STA. 5+25 TO 22+95 AND STA. 0+00B TO 5+50B

(FACING UPSTREAM)  
SCALE: 1"=100'

- Bedrock
- Cutoff Wall Excavation (Soil)
- Cutoff Wall Excavation (Rock)
- Critical Area (Special Precautions in Soil and Rock)
- Demonstration Sections

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# PROJECT HISTORY Cutoff Wall Contract Award

- **26 Aug 2014** – Award made to Layne Christensen Company
  - Amount: \$132,504,348
- **17 Sep 2014** – Notice To Proceed
  - 1740 day Period of Performance
- **04 Feb 2016** – Contractor's Name Change to Bencor Global, Inc



# Bencor Global Inc.

## Frisco, TX

- **Tim Myers**  
Director of Operations
- **Jeff Garon**  
Project Manager



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# CONSTRUCTION UPDATE



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# CONSTRUCTION UPDATE

## DAM SAFETY MONITORING

- **Instrumentation**
  - Automated & manual readings
- **Visual Inspection**
  - Continued 24-hour government presence
- **USACE & Contractor Emergency Action Plans**
- **Joint Instrumentation Monitoring Plan**
- **Data Management System**



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# CONSTRUCTION UPDATE

## Truck Traffic

- **Amount of traffic is dependent upon construction activity.**
- **Road Permits & Bonds are in accordance with PennDOT and local requirements.**
- **Previous Activities: 331,000 tons of stone delivered**
- **Current Activities: Concrete deliveries to the work platform**



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# CONSTRUCTION UPDATE

## Drilling & Grouting

- Soils
- Rock



## Work Platform Construction



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# CONSTRUCTION UPDATE

## Cutoff Wall Demonstration Section



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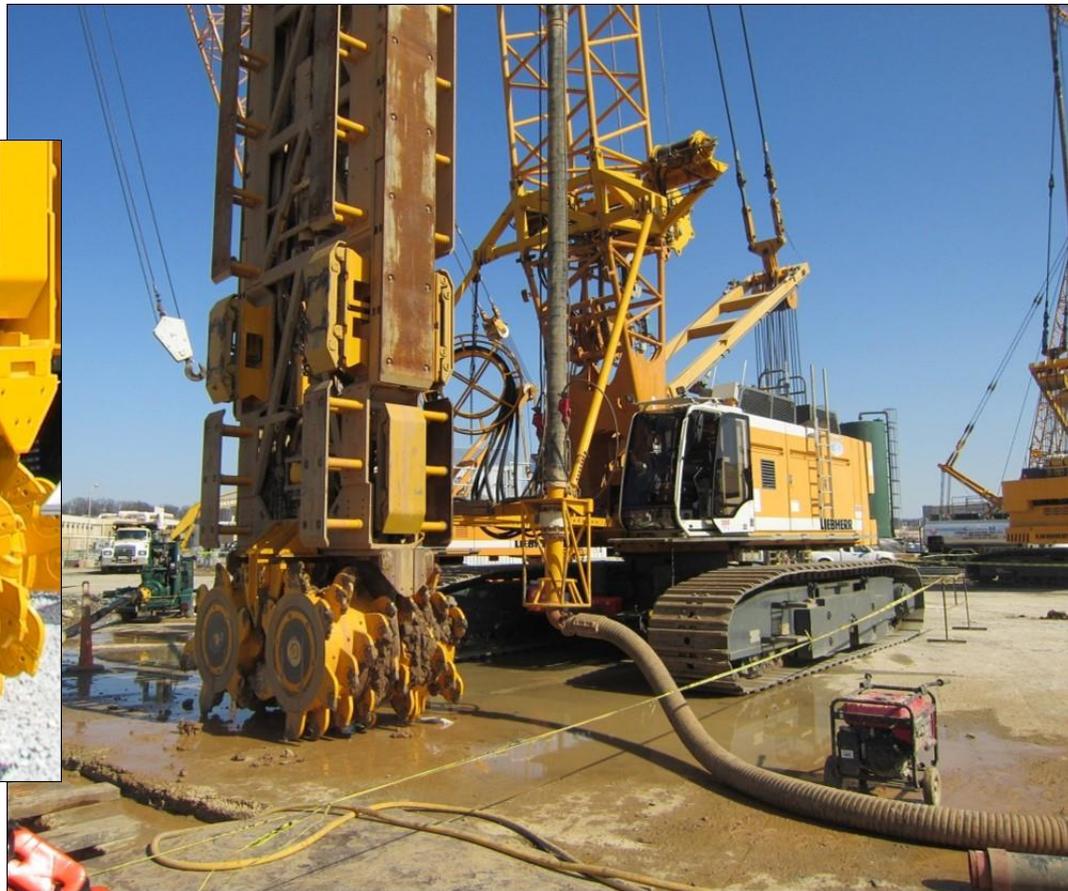


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# CONSTRUCTION UPDATE

## CUTOFF WALL DEMONSTRATION SECTION



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### Hydromill



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# CONSTRUCTION UPDATE

## CUTOFF WALL DEMONSTRATION SECTION



Desander

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# CONSTRUCTION UPDATE

## CUTOFF WALL DEMONSTRATION SECTION



Panel Verification

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# CONSTRUCTION UPDATE

## Critical Area Secant Construction Demonstration Section



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# CONSTRUCTION UPDATE

## Upcoming Activities

- **Complete Drilling & Grouting Operations**
- **Spillway Area Work Activities**
- **Cutoff Wall Full Production**
- **Critical Area Full Production**



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# CONSTRUCTION UPDATE

## Cutoff Wall Panel Layouts/Grout Hole Layouts



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# CONSTRUCTION UPDATE

## Cutoff Wall Contract Status Update

DATE	CONTRACT % COMPLETE*	CONTRACT EARLY FINISH	CONTRACT COST
17 Sep 2014 NTP	0	23-Jun-19	\$132,504,348
14 Oct 2015 Public Meeting	11%	23-Jun-19	\$132,953,001
20 Apr 2016 Public Meeting	26%	30-Jun-19	\$135,511,185
09 Nov 2016 Public Meeting	39%	30-Jun-19	\$138,629,627
08 Nov 2017 Public Meeting	53%	22-Mar-20	\$158,659,452

**\* Subject to change depending on weather, on-site conditions, geologic conditions, etc.**



# ECONOMIC POSITIVES

- **Upgraded roads and facilities at East Branch.**
- **Local hiring.**
- **Use of Local Contractors & Suppliers.**
- **Housing Rentals, Hotels.**
- **Restaurants, grocery, gas stations, etc.**
- **Fuel & oil, machine parts, equipment rentals.**
- **Road Repairs on SR 1001 and 1004.**
- **East Branch Lake still contributes to flood protection, fisheries and water quality benefits while under repair.**



# EMERGENCY MANAGEMENT



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# EMERGENCY MANAGEMENT

**MR. MIKE MCALLISTER, ELK COUNTY EMERGENCY MANAGER**

- **Future Activities:**
- **Swift 911 warning system ongoing registration**
- **Continued planning meeting with Jones, Johnsonburg, and Ridgway Emergency Managers.**
- **Co-ordination of County and Twp. Emergency Action Plans for Dam Failure Emergency Notification and Evacuation.**
- **Exercising of above Emergency Action Plans.**

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# EMERGENCY MANAGEMENT

WWW.ELKOES.COM



**SWIFT 911** EMERGENCY NOTIFICATION SERVICES

Add your contact information to our emergency notification list so you can be contacted with important information and announcements.

[Add/Remove Yourself](#) ▶

VOICE TEXT EMAIL FAX

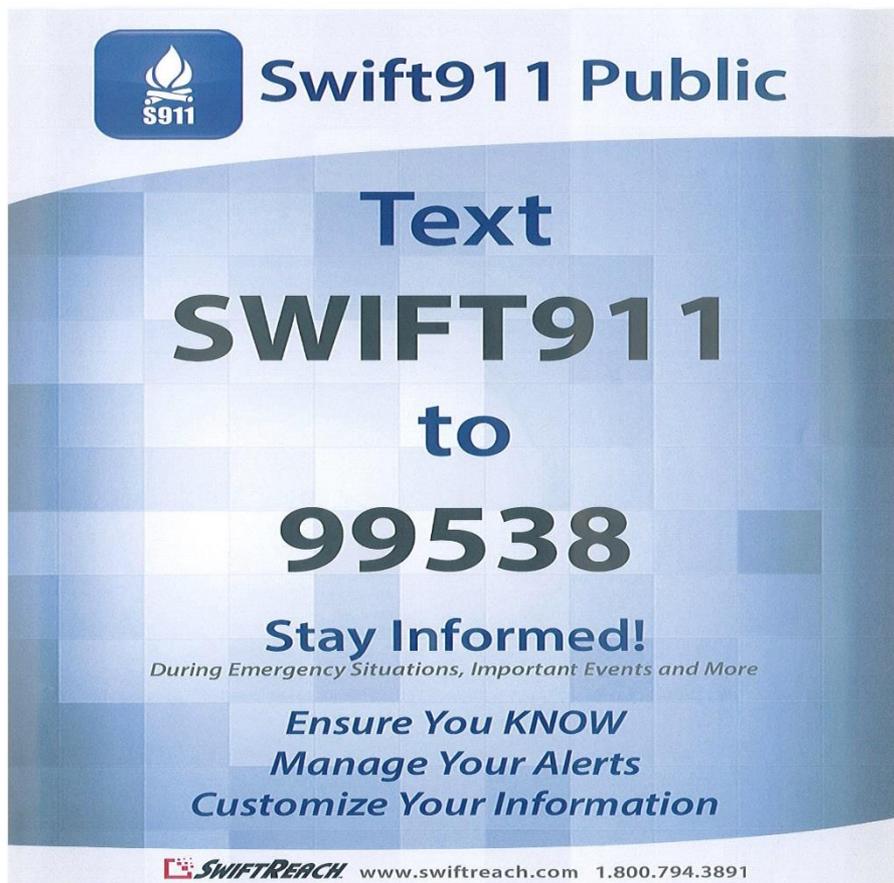
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# EMERGENCY MANAGEMENT



 **Swift911 Public**

**Text**  
**SWIFT911**  
**to**  
**99538**

**Stay Informed!**  
*During Emergency Situations, Important Events and More*

*Ensure You KNOW  
Manage Your Alerts  
Customize Your Information*

 **SWIFTRREACH** [www.swiftreach.com](http://www.swiftreach.com) 1.800.794.3891

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# EMERGENCY MANAGEMENT SWIFT 911 MOBILE APP



- **ANDROID**
- **APPLE**
- **WINDOWS**

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# EAST BRANCH LAKE FACILITIES



**41 Site Campground**  
– Closed for Construction

**Overlook Day Use Area**  
– Closed for Construction



**No public access across the dam.**

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# EAST BRANCH LAKE FACILITIES



## Boat Launch

- **Closed for the season**
- **Expected to reopen in mid-April**

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# EAST BRANCH LAKE FACILITIES



## Instanter Boat Launch Elk State Park

- **Closed for the season**
- **Expected to reopen in mid-April**

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# ALTERNATIVE RECREATION OPPORTUNITIES



## Kilgus Road Canoe/Kayak Launch

- Open year- round

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# ALTERNATIVE RECREATION OPPORTUNITIES

- **KILGUS ROAD CANOE/KAYAK BOAT LAUNCH & FISHING, *Wilcox, PA***
- **BENDIGO STATE PARK, *Wilcox, PA***
- **TWIN LAKES RECREATION AREA, *Wilcox, PA***
- **KINZUA BRIDGE STATE PARK, *Mt. Jewett, PA***
- **KINZUA DAM AND ALLEGHENY RESERVOIR, *Warren, PA***
- **TIONESTA LAKE, *Tionesta, PA***
- **COOK FOREST STATE PARK, *Cooksburg, PA***



# **EAST BRANCH LAKE FACILITIES**

## **Authorized Project Purposes**

- **FLOOD RISK REDUCTION**
- **LOW-FLOW AUGMENTATION**
- **WATER QUALITY**
- **FISH & WILDLIFE MANAGEMENT**
- **RECREATION**



# 2017 LIMESTONE SAND TREATMENTS: SPRING AND FALL

## **Bendigo State Park**

- **Seven Mile**
- **Borgardy Run**

## **Elk State Forest**

- **Whittaker Run**

## **Domtar Paper Company**

- **County Line**
- **Doe Run**
- **East Branch**

## **U.S. Army Corps of Engineers**

- **Straight Creek**



# INSTALLED NEW STORAGE BUILDING ROOF



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# RE-SEALED TOWER ROOF

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# POLLINATOR SEED PACKET SCHOOL PROGRAM



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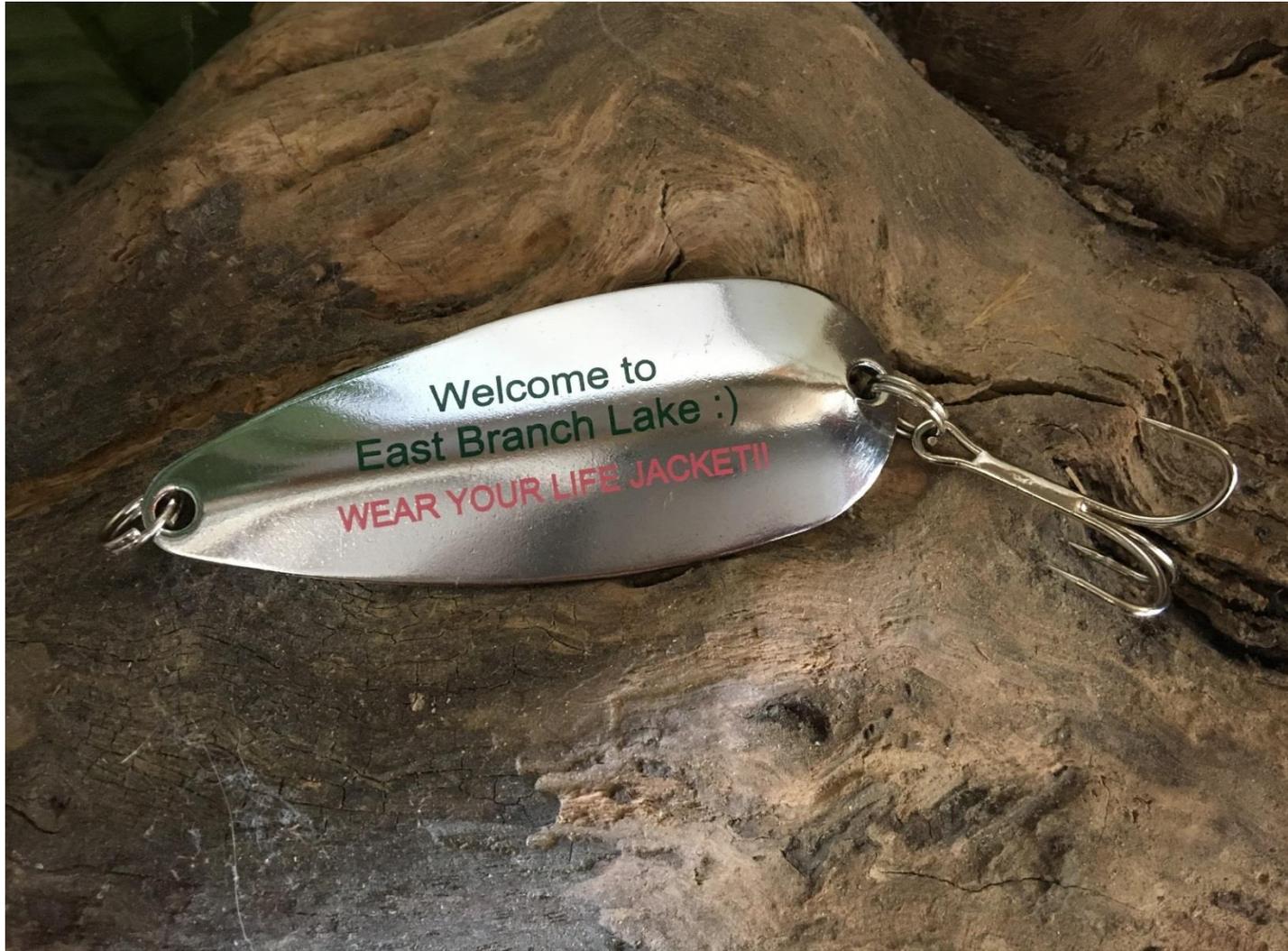


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# ANGLER WATER SAFETY FISHING SPOONS



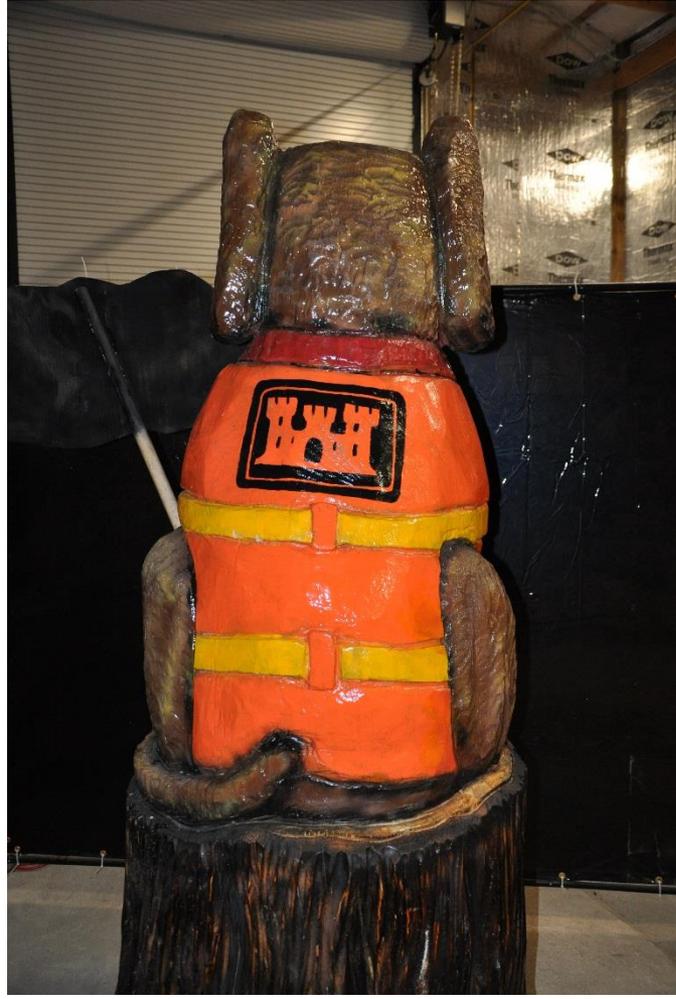
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# BOBBER THE WATER SAFETY DOG CHAINSAW CARVING



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# LEPIDODENDRON FOSSIL



# OUTFLOW FISHING TRAIL



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# HEALTHY FISHERY



**NO OBSERVED ADVERSE IMPACTS  
DUE TO LOW WATER LEVELS**

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# 60,000 LAKE TROUT FINGERLINGS STOCKED 18-OCTOBER-2017



# FY18 3<sup>rd</sup> Quarter Milestones:

- **Electrical Upgrades to the Campground**
  - ✓ **Repairing excavator**
  - ✓ **Coordinating hookup with electric company**
- **Campground Paving Contract**
  - ✓ **Engineering Design / Contracting phase**
- **Campsite Improvements**
  - ✓ **Jersey barriers with rock fascia to replace rotten railroad ties**
  - ✓ **Leaf blowing**
  - ✓ **Widow maker removal**



## FY18 4<sup>th</sup> Quarter Milestones:

- **Proposal to create fishing campsites on Kilgus Rd**
  - ✓ **NEPA, market, and logistics research phase**
- **Proposal to create cabin campsites**
  - ✓ **Market and logistics research phase**
- **Boat Launch Culvert Replacement**
  - ✓ **Engineering Design / Contracting phase**
- **Potable Well Upgrades**
  - ✓ **Engineering Design / Contracting phase**
- **Market research for campground improvements**
  - ✓ **Seeking great ideas! Please let us know in the suggestion box tonight or feel free to call or visit!**



# WATER MANAGEMENT



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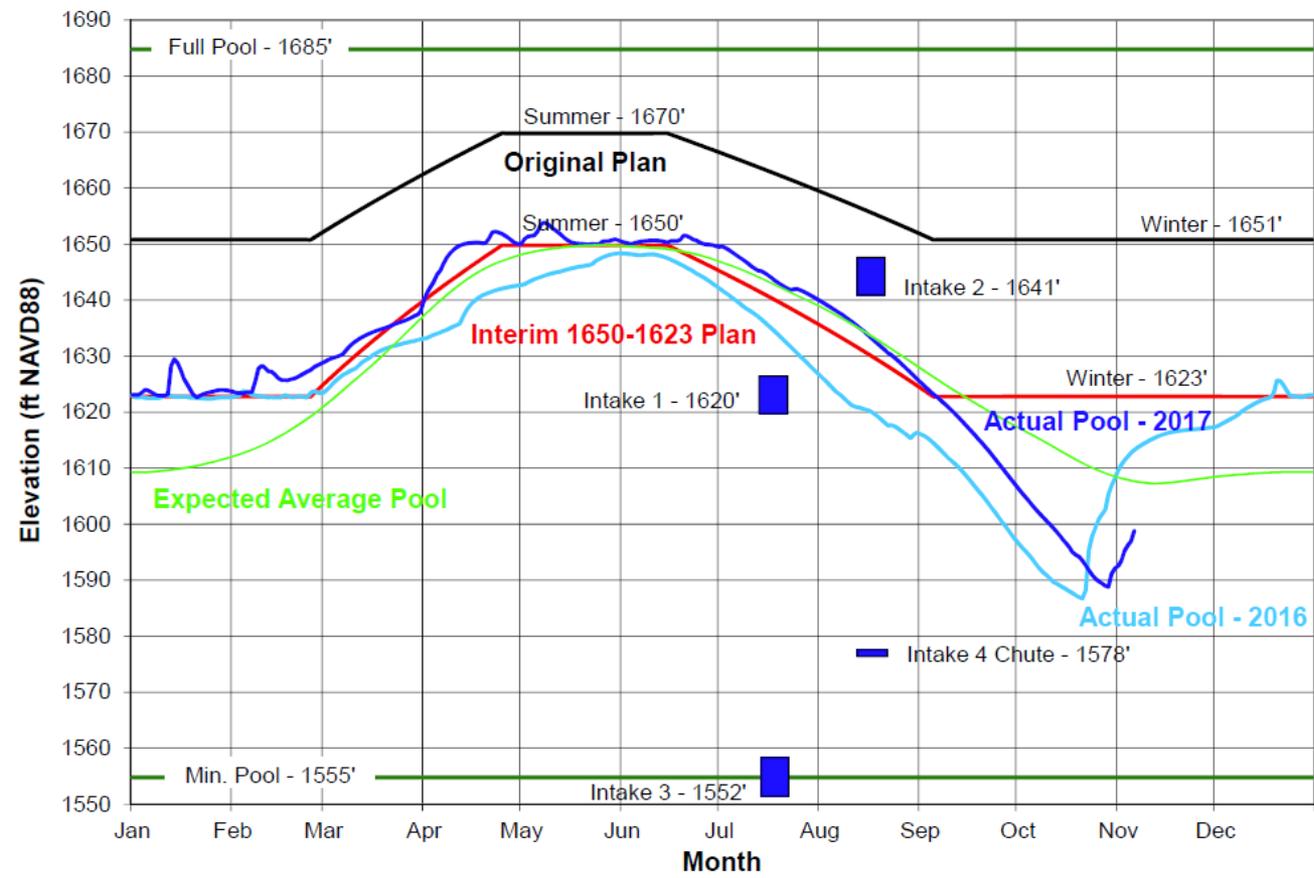


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6 November 2017

### East Branch Clarion River Lake 1650-1623 Interim Water Control Plan



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# CONTACT INFORMATION

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## Websites:

[www.lrp.usace.army.mil/Missions/Planning,ProgramsProjectManagement/HotProjects/EastBranchDamRepair](http://www.lrp.usace.army.mil/Missions/Planning,ProgramsProjectManagement/HotProjects/EastBranchDamRepair)

[www.facebook.com/EastBranchLakeUSACE](http://www.facebook.com/EastBranchLakeUSACE)

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# QUESTIONS?



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