

John Kessler Annual Presentation Chief Dam Safety Engineer

June 23, 2026



Skills and Experience

- 40+ years of broad Hydropower experience ... O&M, engineering, dam safety, relicensing and license compliance, environmental assessment and permitting
- Hydrologist, Hydrographer & Hydro Project Manager for PG&E – 14 years
- Project Engineer for NCPA supporting the NF Stanislaus River Project
- Hydroelectric Director for EID – 5 years
- Engineering & Environ. Consultant – Kessler & Associates (since 2000)
- Chief Dam Safety Engineer for Utica and EID
- Hands-on project experience in managing projects with dams, reservoirs, canals, penstocks and powerhouses - Provides me insight to understand and support Utica needs

Skills and Experience

Darby Fire restoration of $\frac{3}{4}$ Mile Flume



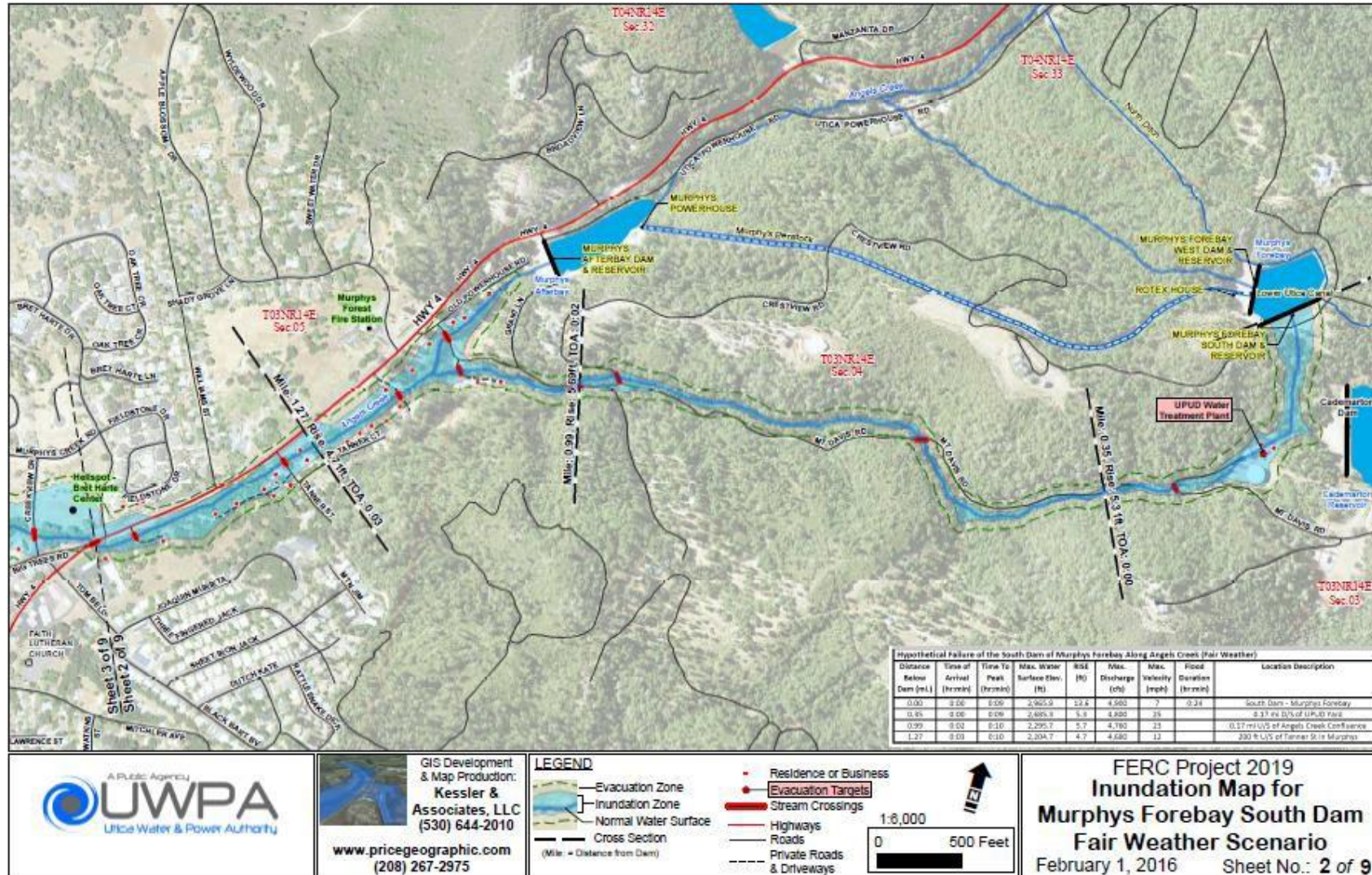
Skills and Experience

Assessment/report of leakage occurring below the West Dam at Murphys Forebay
& restoring normal operations



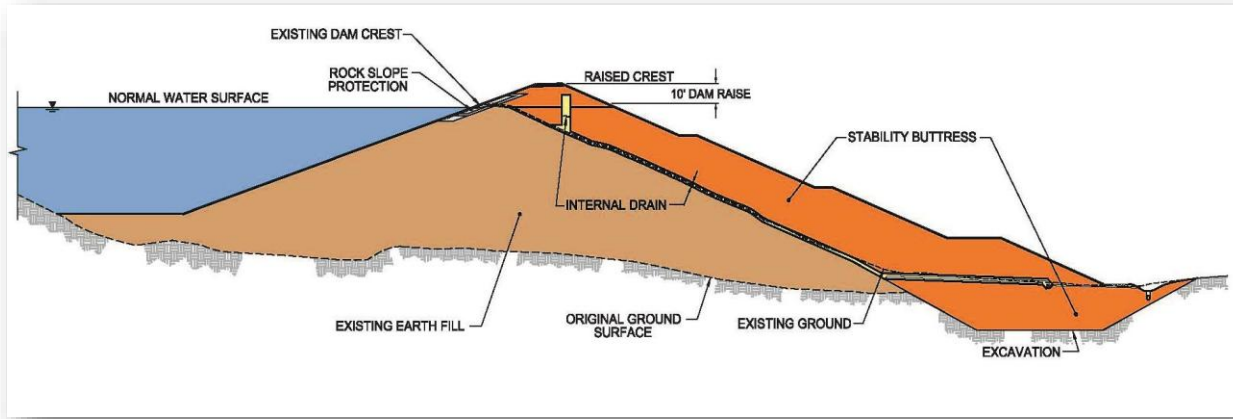
Skills and Experience

Updating the inundation maps, EAP and facilitating EAP Exercises



Skills and Experience

El Dorado Forebay Modification – Project Manager



Skills and Experience

Outingdale Dam Rehabilitation – MF Consumnes River – PM, Designer, Inspector



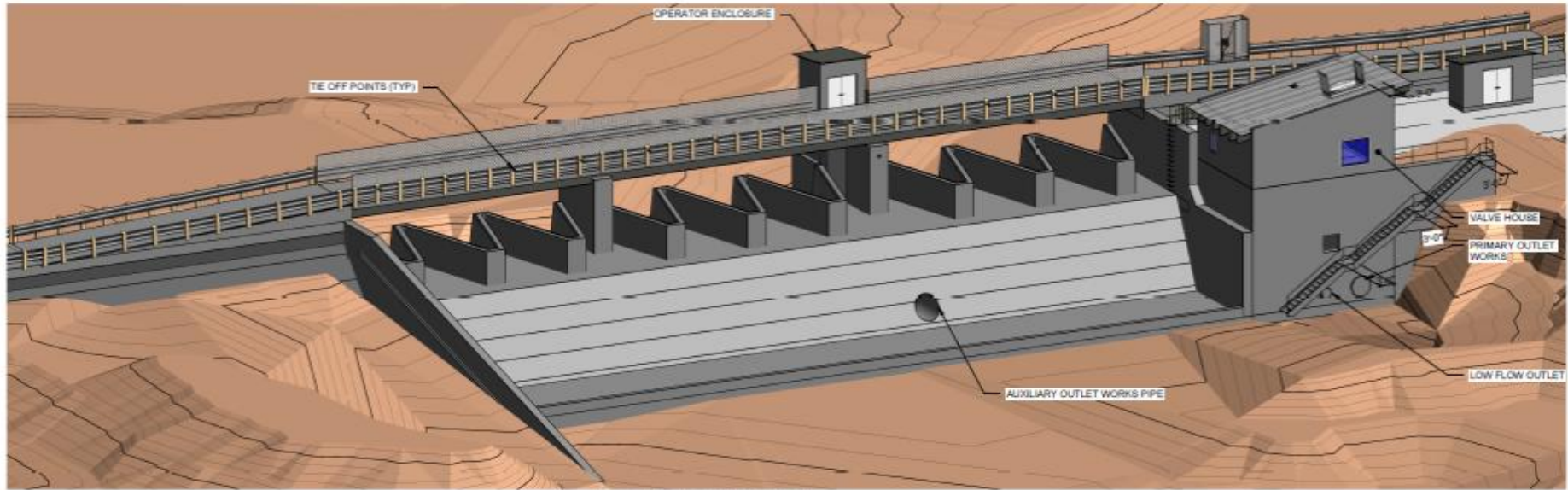
Skills and Experience

Silver Lake Dam Replacement – Silver Fork American River

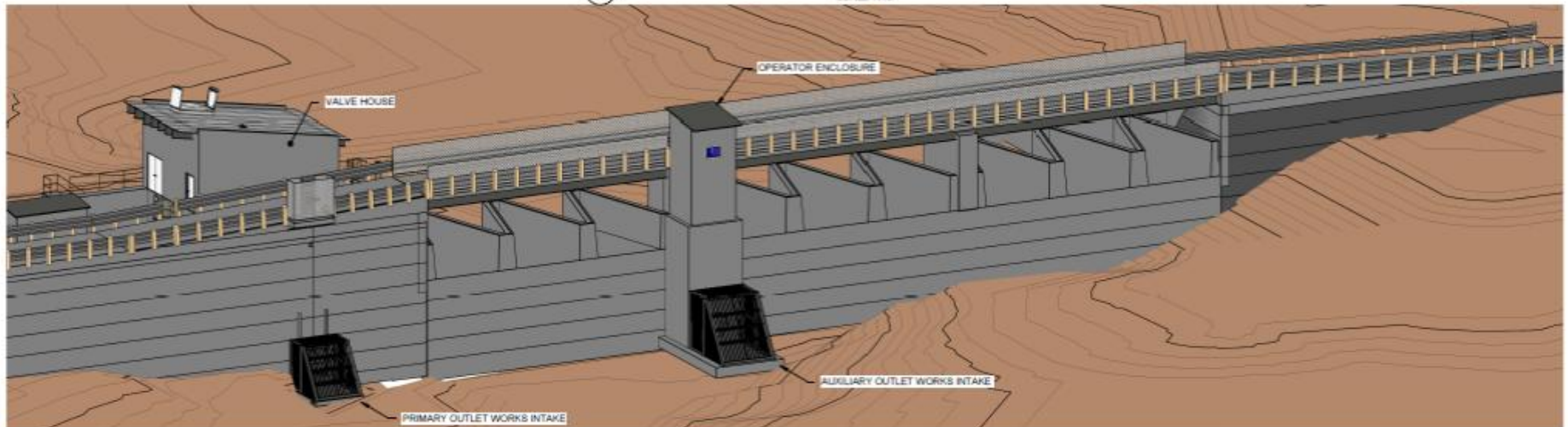


Skills and Experience

Silver Lake Dam Replacement – Managed Design of New Dam



1 OVERALL DOWNSTREAM SCALE: NTS

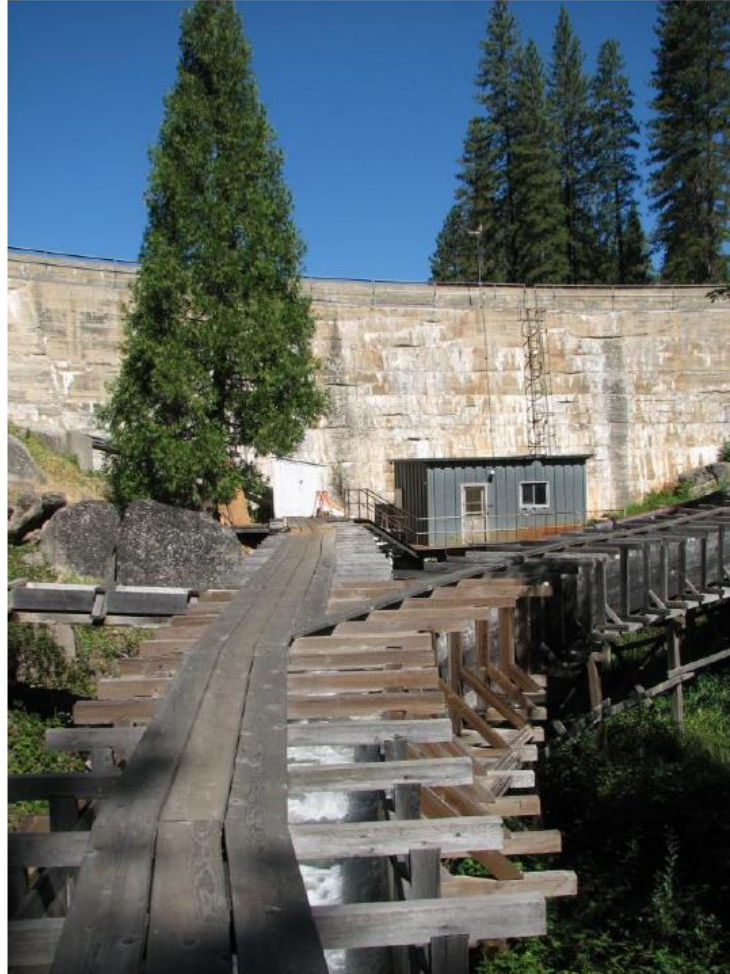


Dam Safety Program

Utica and Angels Hydroelectric Projects

FERC Project Nos. 2019 and 2699

(Critical Infrastructure Information – Not for Public Disclosure)



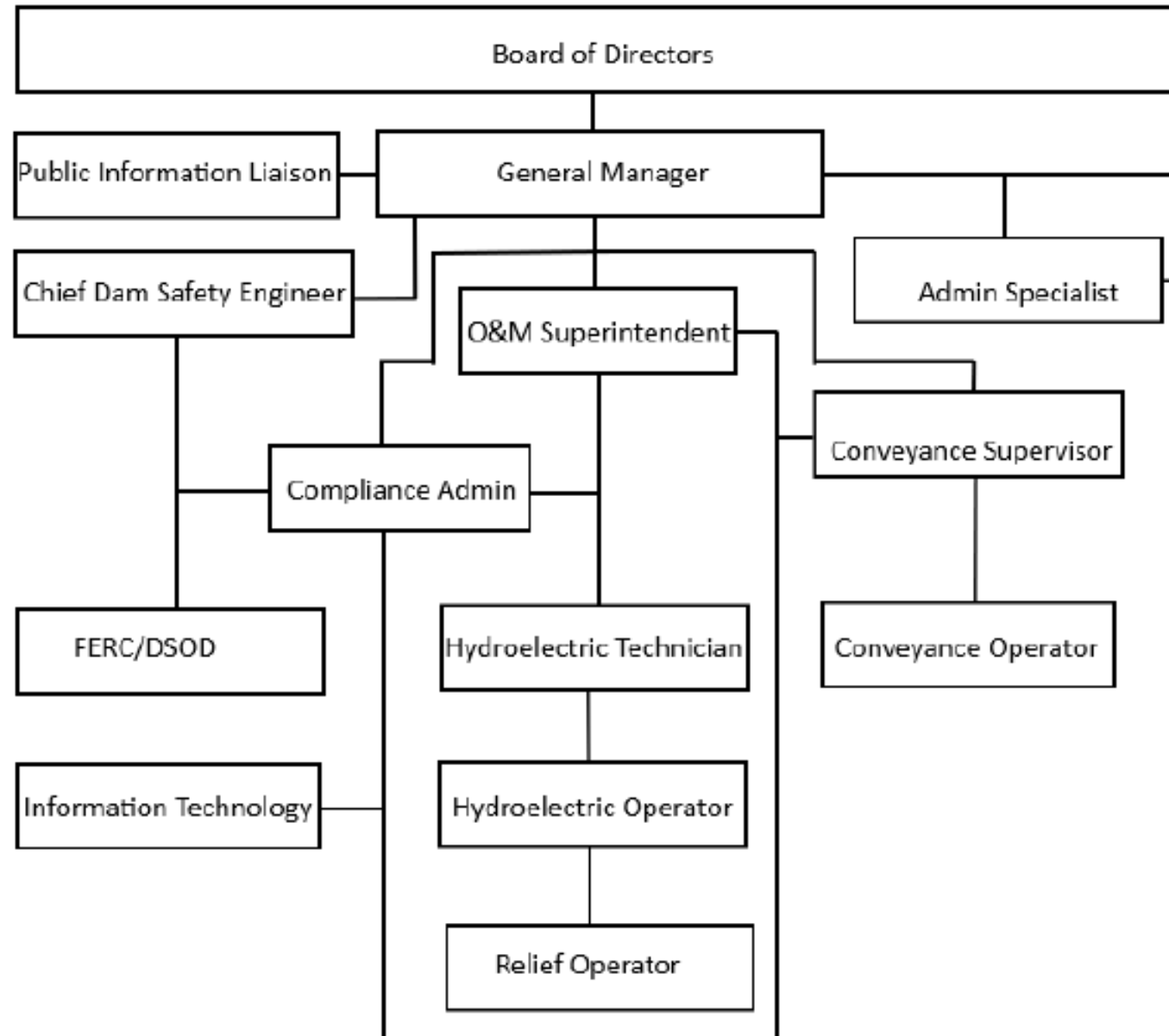
DAM SAFETY POLICY, OBJECTIVES AND EXPECTATIONS

Policy: To ensure the safety of Utica's dams on Mill Creek, Angels Creek, and off-stream as associated with the Utica and Angels Hydroelectric Projects in Calaveras County for protection of life and property, Utica will maintain a multi-faceted and comprehensive Dam Safety Program.

Objectives:

- 1.) Maintain dams in good operating condition and keep them safe at all times.
- 2.) Monitor dams and appurtenances so that changing conditions which could affect dam safety are detected early, and carry out the appropriate responses and notifications.
- 3.) Comply with all applicable federal and state dam safety regulations at all times.

UWPA's Organization Supporting the Dam Safety Program



ODSP Updates - Utica Board Responsibilities

- Accountability to Utica member agencies consisting of Union Public Utilities District (UPUD) and the City of Angels, and its customers, and together with the General Manager, they are responsible for developing general policies and for promoting a culture of dam safety and regulatory compliance to all employees covered by this dam safety program;
- Approving Utica's dam safety philosophy and other policies upon recommendation from the General Manager, and accepting the life safety and financial risk liability which accompany ownership of a dam;
- Reaffirming the dam safety policy annually and when there is a change in Board membership through adoption of a resolution; and
- Reviewing and approving fiscally-acceptable annual budgets for dam safety activities.

5-Year ODSP External Audit Recommendations

ODSP Self-Assessment Checklist

1. GM's Letter
2. Annual Dam Safety Presentation to Board
3. Annual ODSP review and update
4. Inspections and Monitoring
5. EAP annual review, training, drill, and status reporting
6. Dam Safety training
7. Physical and Cyber Security measures and certification
8. Public Safety
9. Regulatory Compliance
10. Records and Succession Planning

ODSP Self-Assessment – GM’s Annual Letter

GM’s Annual Letter to Staff renewing our Dam Safety commitment

- Letter distributed 6-18-26
- Staff reviewing December 2026 ODSP update
- Letter also conveys Utica’s updated Mission, Vision and Values:
 - U – Upholding Public Trust
 - T – Thoughtful Stewardship
 - I – Integrity in Compliance
 - C – Commitment to Dam Safety
 - A - Accountability

ODSP Self-Assessment

*Annual Dam Safety Presentation to Board – 6/23/26

*Annual ODSP review and update – Completed

*Physical and Cyber Security measures and certification – Annually in December

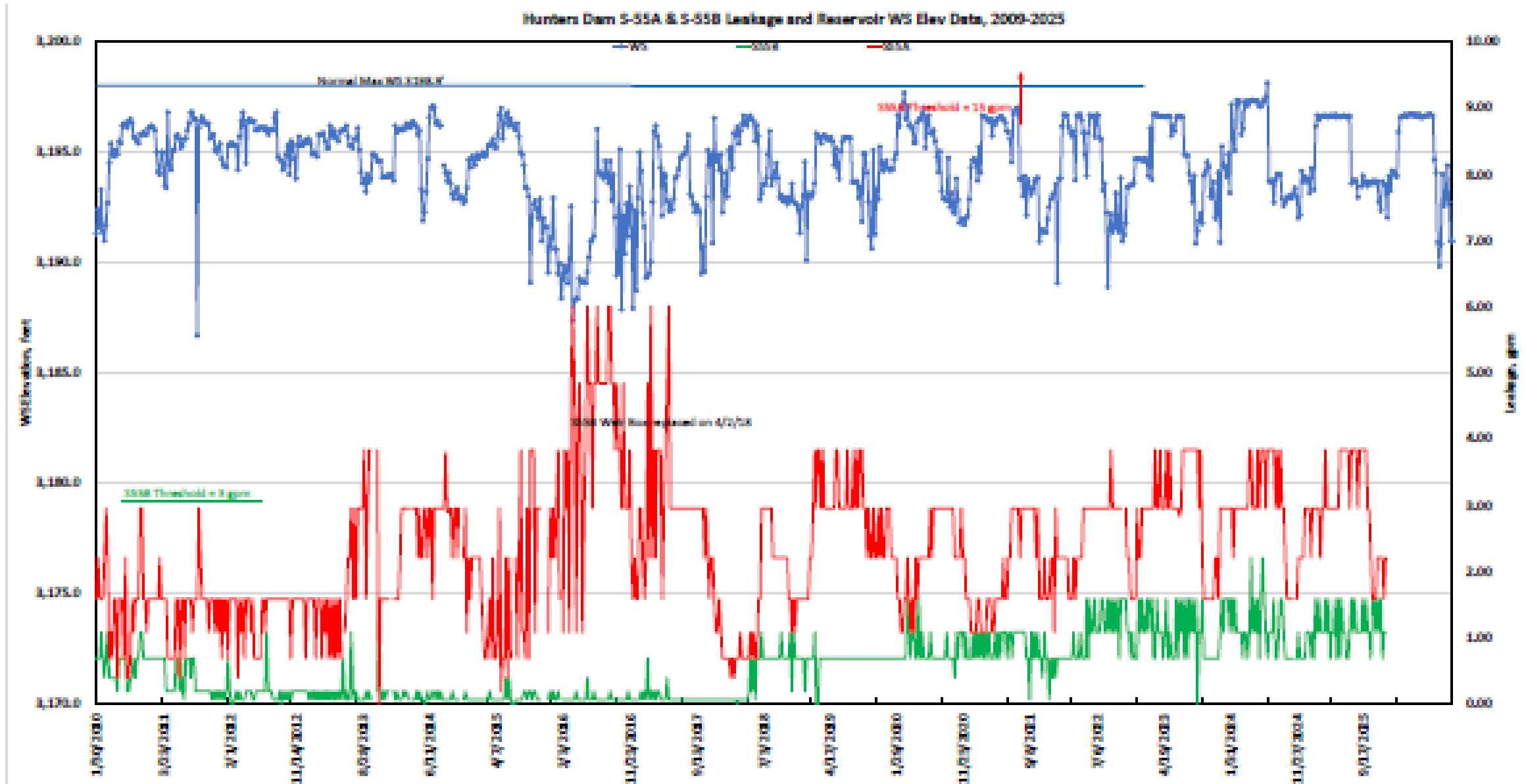
ODSP Self-Assessment - Public Safety

*Signs and public safety measures were reviewed and damaged public safety signs replaced last August



ODSP Self-Assessment - Inspections and Monitoring

*Conditions in 2025 and 2026-to-Date are normal



ODSP Self-Assessment

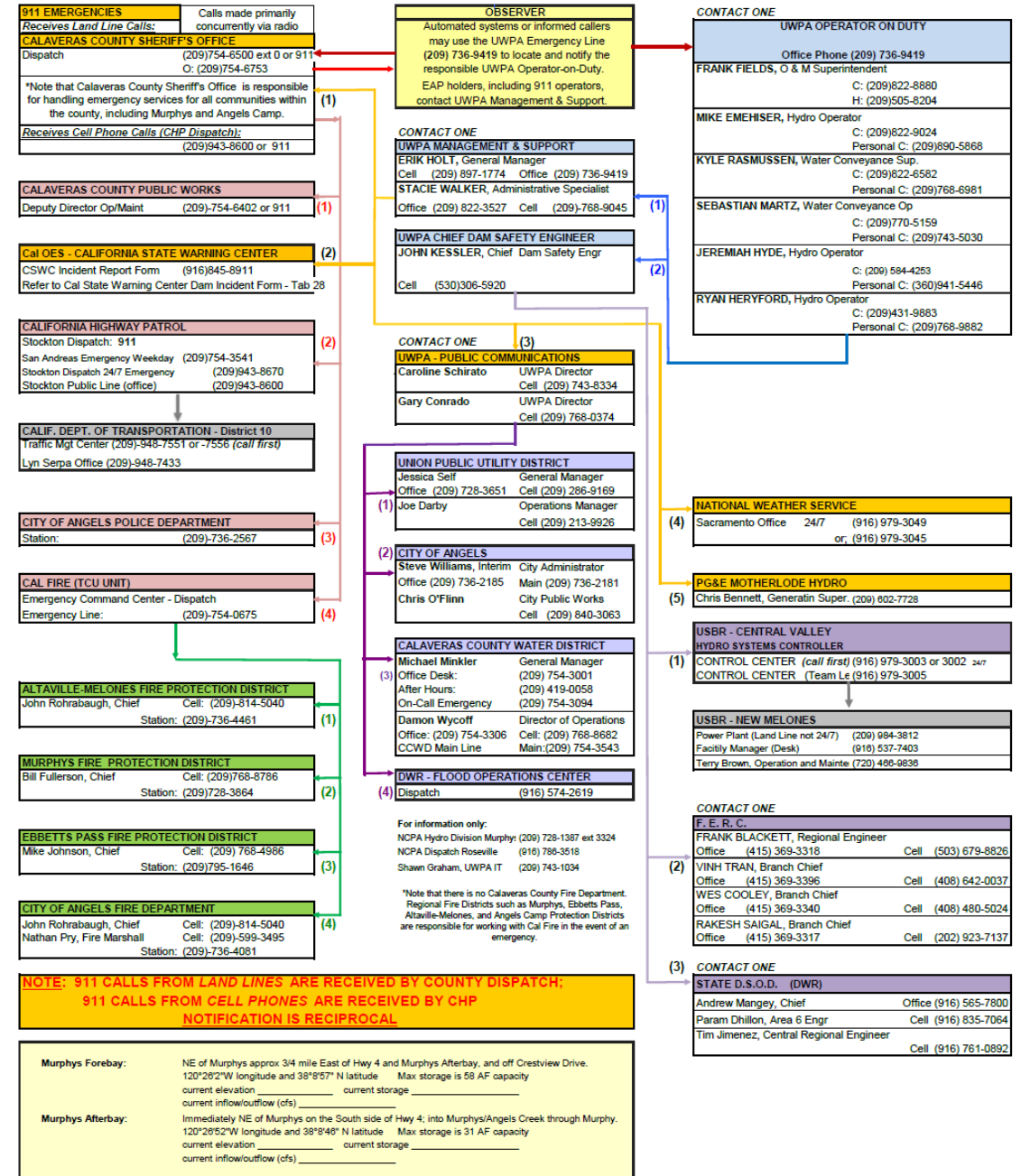
EAP annual review, training, drill, and status reporting –
*Completed 2-4-26

*CalOES accepted Utica's 2025 EAP Reprint as complying with their latest regulations

MURPHYS FOREBAY AND AFTERBAY DAMS - FERC# 2019-CA

EMERGENCY ACTION PLAN NOTIFICATION FLOWCHART

For High Flow, Non-Failure, Potential Failure and Imminent Failure Emergency Levels



ODSP Self-Assessment - Regulatory Compliance

*Compliance Record has been excellent during 2025 and 2026-to-date



eLibrary

Federal Energy Regulatory Commission

Category	Accession	Filed	Document	Docket	Description	Class/Type	Security Level	Files
Submittal	20280816-5129 Document Component	06/16/2026	06/16/2026	P-2019-000 P-2699-000	Utica Water and Power Authority submits Cultural Resources Evaluations and Finding of Effect Analysis report re the Utica Hydroelectric Project et al. under P-2019 et al.	Report/Form Cultural Resources Inventory - Report/Archaeological Study	Public	Generate PDF +Public_Utica-Angels_P2019-P2699_FOE_Report_T-Ltr.pdf
Submittal	20280802-5073 Document Component	06/02/2026	06/02/2026	P-2019-038	The Utica Water and Power Authority submits Five-Year Noxious Weed Survey and Monitoring Report re the Utica Hydroelectric Project under P-2019.	Report/Form Environmental and Recreational Compliance Report	Public	Generate PDF +P-2019 2026 Noxious Weed Survey Title Letter.pdf

ODSP Self-Assessment - Record Retention Policy & Data Management Practices

Purpose:

- Preserve complete and reliable dam safety records for operational, technical, regulatory, and historical use;
- Support timely access to current information during inspections, emergencies, exercises, audits, design reviews, and regulatory submittals;
- Ensure continuity of institutional knowledge during staff transitions;
- Protect critical dam safety information from loss, unauthorized alteration, or improper disclosure; and
- Support annual self-assessment, annual dam safety reporting, and continuous improvement of the ODSP.

*All records are saved electronically on the server and are accessible in their respective folders (Will support the 2027 Part 12 Periodic Inspection)

ODSP Self-Assessment - Dam Safety Training

- Modules for initial and continuing training
- Participation in Utica EAP exercises and drills
- Participation in EAP exercises of neighboring Licensees
- Recognition of potential dam safety deficiencies
- Participation in CDSE inspections including review of inspection, monitoring techniques and PFMs
- Training Aids for Dam Safety
- Association of State Dam Safety Officials (ASDSO) Dam Owner Academy Videos
- Attendance in dam safety seminars and FERC training programs

*CDSE conducted training for staff on 12-19-25

FERC Inspection Follow-up Items

- Last Part 12 Independent Consultant Inspection (2022) Recommendations - Murphys Penstock interior inspection every 10 years – Next due 11-30-2027
- Last FERC Annual Inspection on August 6, 2025 – Backfill small void behind the Upper Utica Canal liner directly upstream of the bypass flume - Completed

DSOD Follow-up Items – 3/11/26 Inspections

Hunters

- Continue to monitor the deterioration of concrete surfaces of the crest parapet wall and downstream face

Murphys Forebay

- Breakup, backfill, and compact existing rodent burrows - Ongoing
- Cycle the TSV during next DSOD inspection – To be scheduled in 2027

Murphys Afterbay

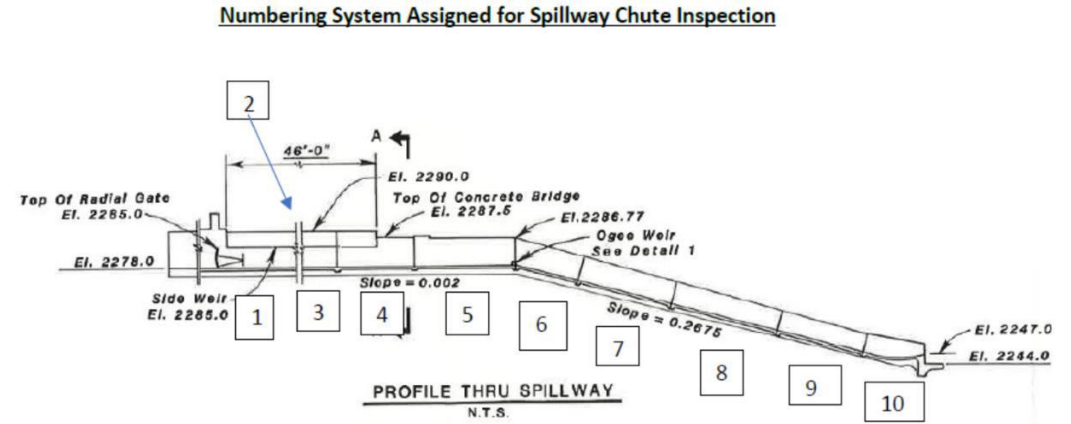
- Breakup, backfill, and compact existing rodent burrows - Ongoing

Ross

- Continue vegetation maintenance at the downstream toe near the rockfill buttress, below the outlet pipe platform, and from the upstream face waterline of the embankment section

Dam Safety – Upcoming Activities

- 2026 DSSMRs
- MAB Spillway Chute Inspection Program – Last comprehensive inspection & maintenance on October 10-12, 2023; Next due Fall 2028, or within 1 year after Significant Spill Event



Dam Safety Projects In-Progress

Hunters Dam Concrete Repair – Comprehensive Assessment & Repair Plan in 2026/2027



Dam Safety Projects In-Progress

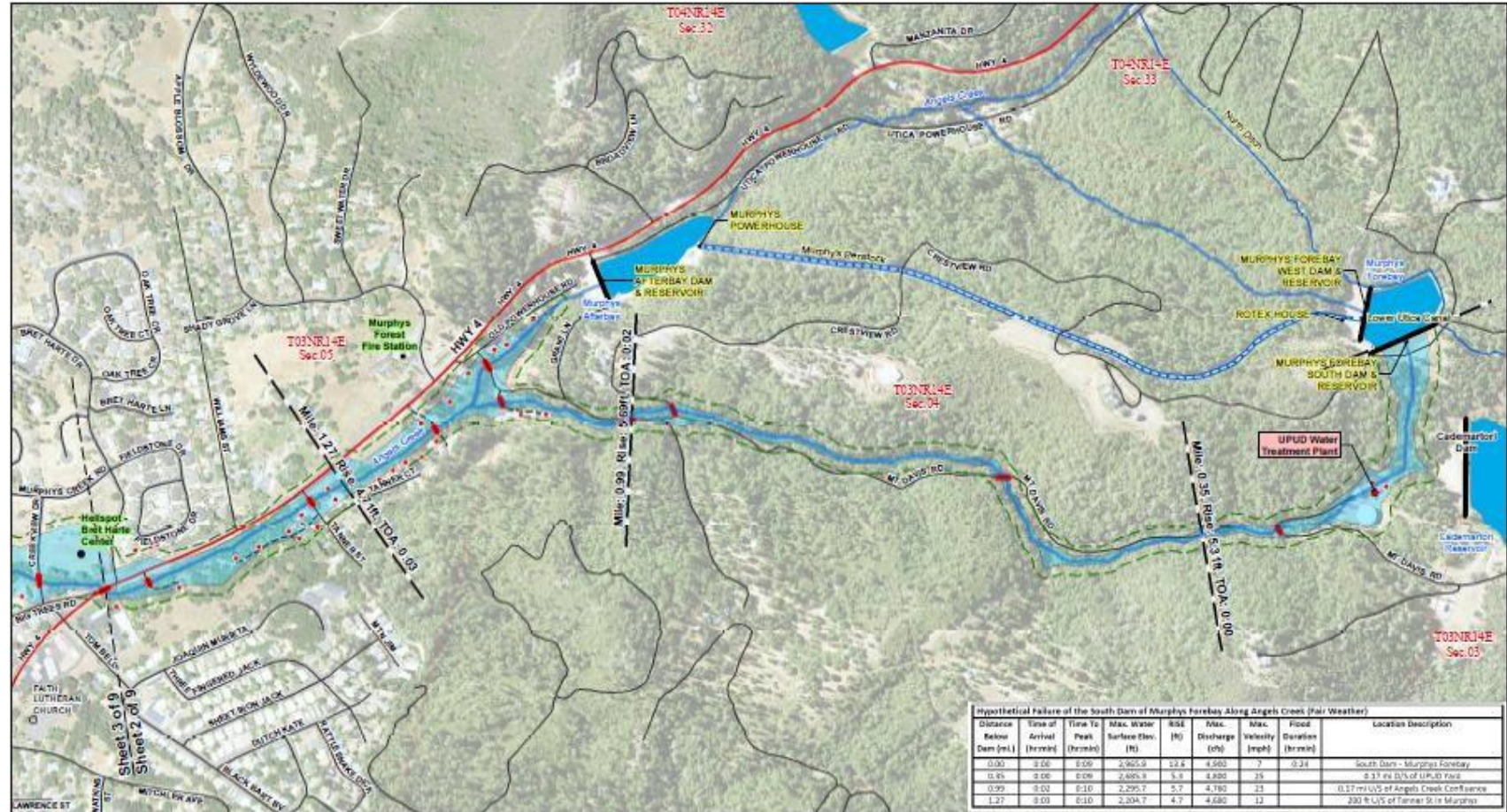
Ross Dam Hazard Classification – DSOD determination of Significant Hazard;
FERC determination pending results of updated hypothetical Dam-Break Study;
Will likely require EAP




Dam Safety Projects In-Progress

2026 Dam Break Modeling & Inundation Map Update – Nearly completed

Hunters
Murphys Forebay
Murphys Afterbay
Ross





A Public Agency
UWPA
Utica Water & Power Authority



GIS Development & Map Production:
Kessler & Associates, LLC
(530) 644-2010

www.pricegeographic.com
(208) 267-2975

LEGEND

- Evacuation Zone
- Inundation Zone
- Normal Water Surface
- Cross Section
- Residence or Business
- Evacuation Targets
- Stream Crossings
- Highways
- Roads
- Private Roads & Driveways

1:6,000

**FERC Project 2019
Inundation Map for
Murphys Forebay South Dam
Fair Weather Scenario**

February 1, 2016 Sheet No.: 2 of 9

Dam Safety Projects In-Progress

Preparations for 2027 Part 12 Independent Consultant's Inspection

FERC approved Utica's request to replace Comprehensive Assessment with Periodic Inspection – Expected Savings > \$0.5 Million

Scope of Periodic Inspections:

- Hunter – incl. establishing threshold & IC opinion for concrete degradation
- Mill Creek Tap
- Upper & Lower Utica Canal – Representative sections
- Murphys Forebay
- Murphys Powerhouse
- Murphys Afterbay – incl. spill channel



Questions?

