LAPRELE DAM

CONTACT INFO

PETE RAUSCH // PETER.RAUSCH@RESPEC.COM // 605.394.6543

CORY FOREMAN // CORY.FOREMAN@HDRINC.COM // 605.791.6111

SELECT WATER COMMITTEE
WYOMING WATER DEVELOPMENT COMMISSION
MAY 2022 JOINT MEETING

LAPRELE DAM

MAY 12, 2022

RESPEC

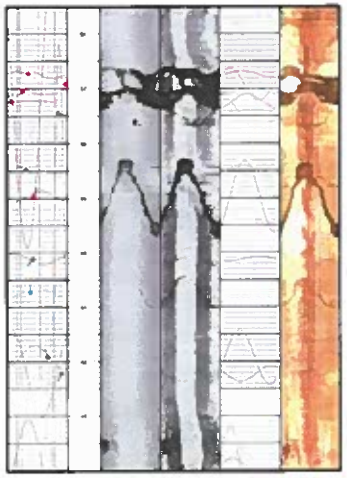
HDR

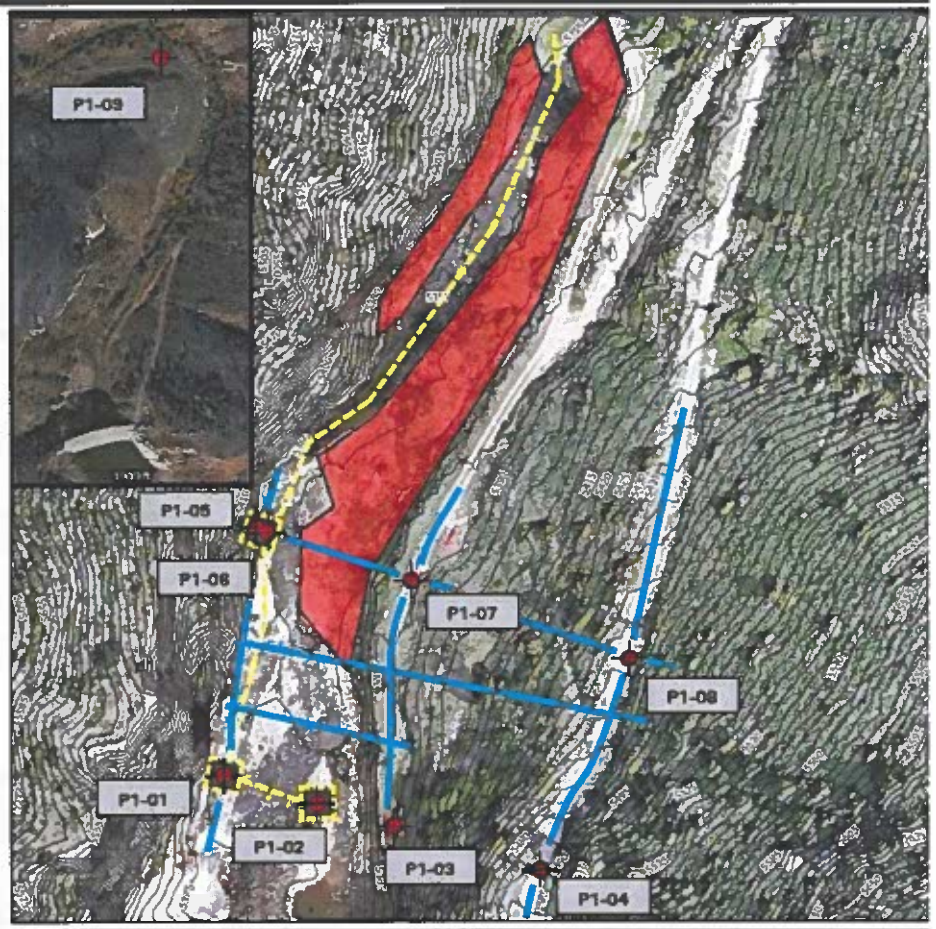
Wyoming Water Development Office

PROJECT UPDATE – PHASE 2

2021 – SITE CHARACTERIZATION

- **EXPANDED GEOTECHNICAL INVESTIGATION**
  - Geologic Mapping
  - 9 Drill Holes
    - Core Samples
    - Downhole Televiewer
    - Seepage Testing
  - Geophysical Survey
- **STARTED SUNDAY, AUGUST 15**

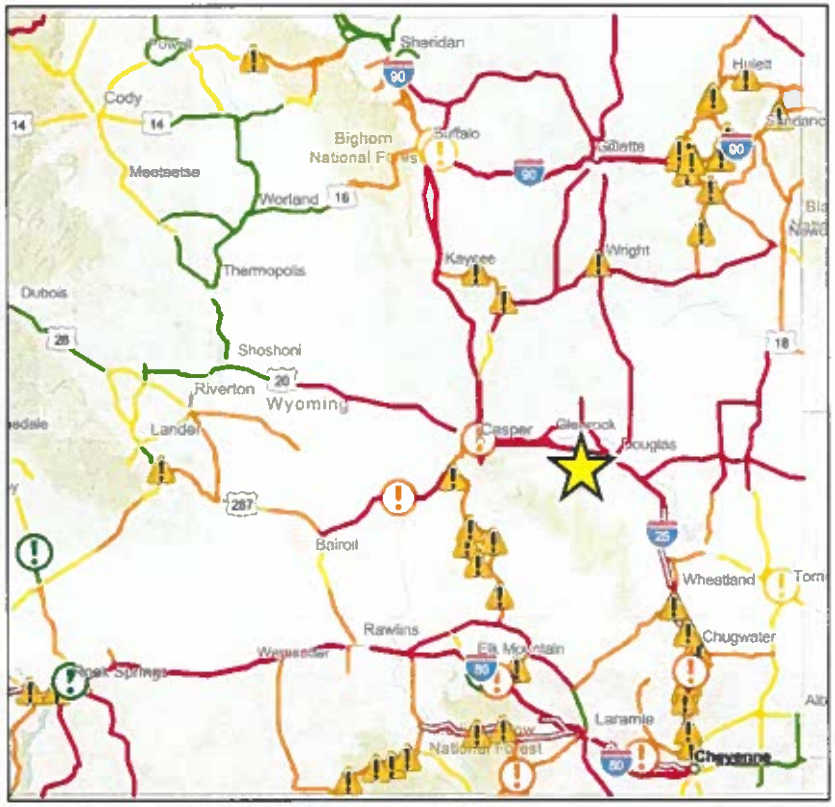




2021 – SITE CHARACTERIZATION

DRILLING PROGRAM – PHASE 1; COMPLETED OCTOBER 11

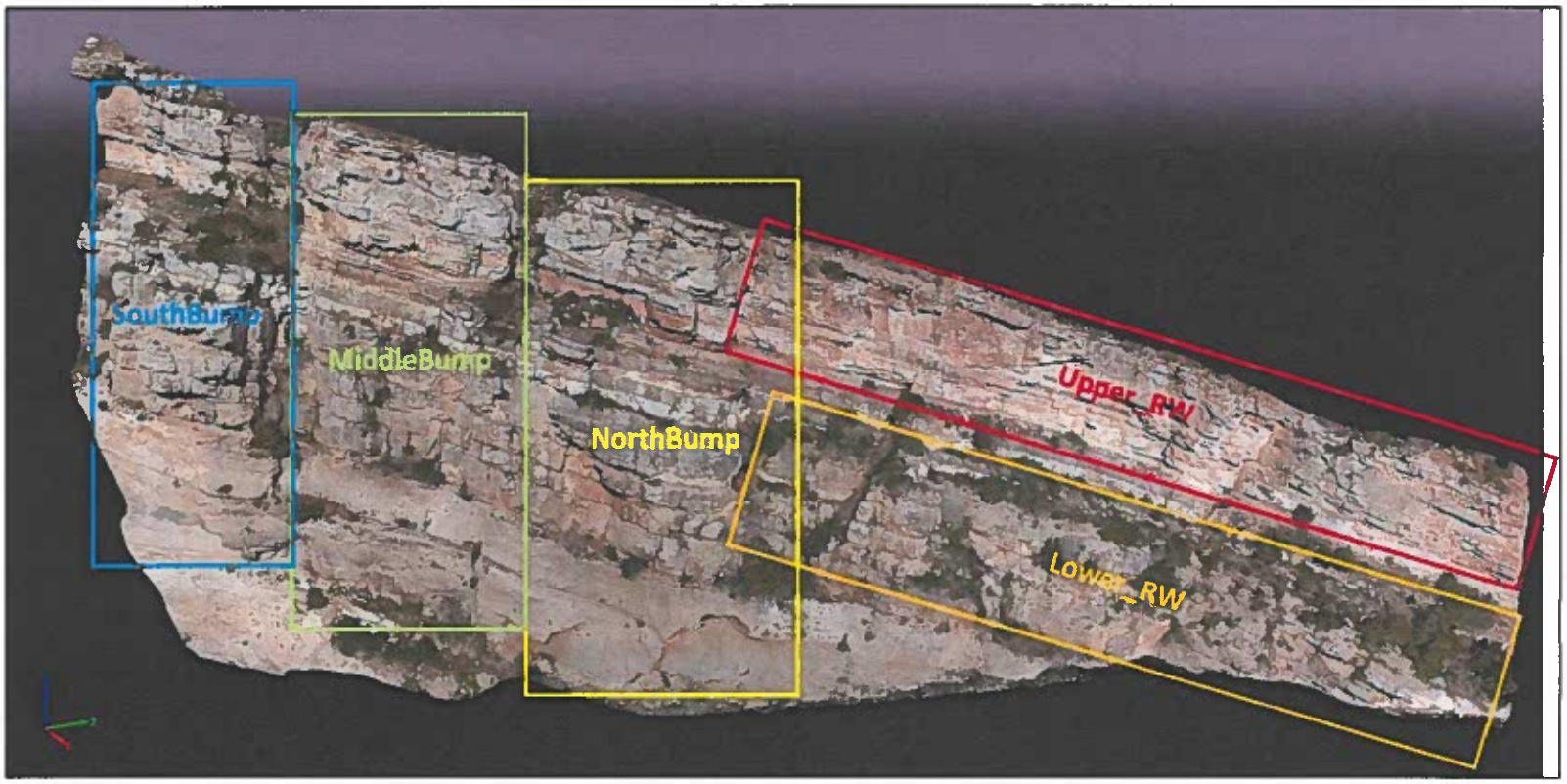
WINTER STORM, OCTOBER 12-13



Courtesy WYDOT 511 Travel Information Map

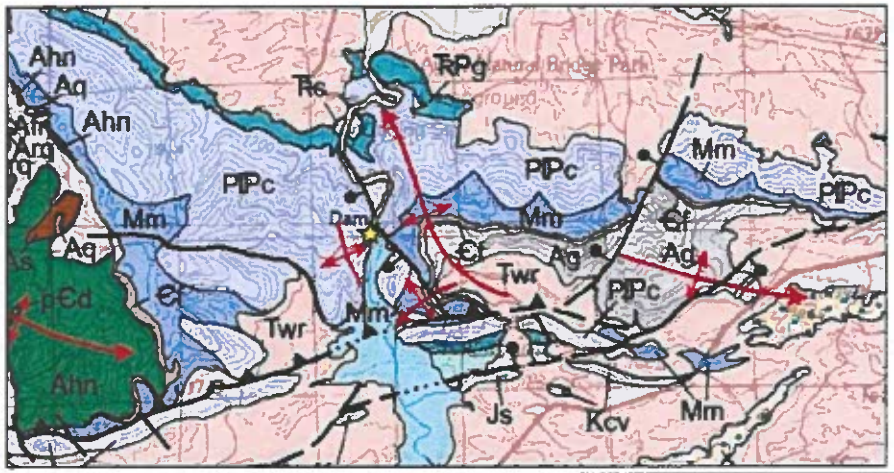
2021 – SITE CHARACTERIZATION

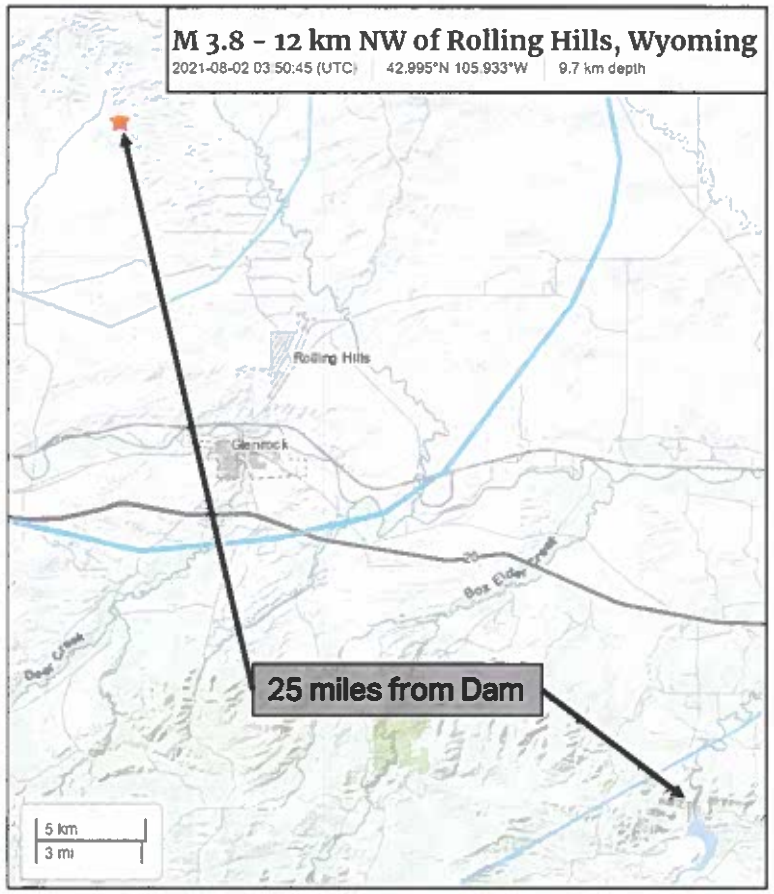
DOWNSTREAM ROCK WALL – LIDAR MODEL



2022 ONGOING WORK

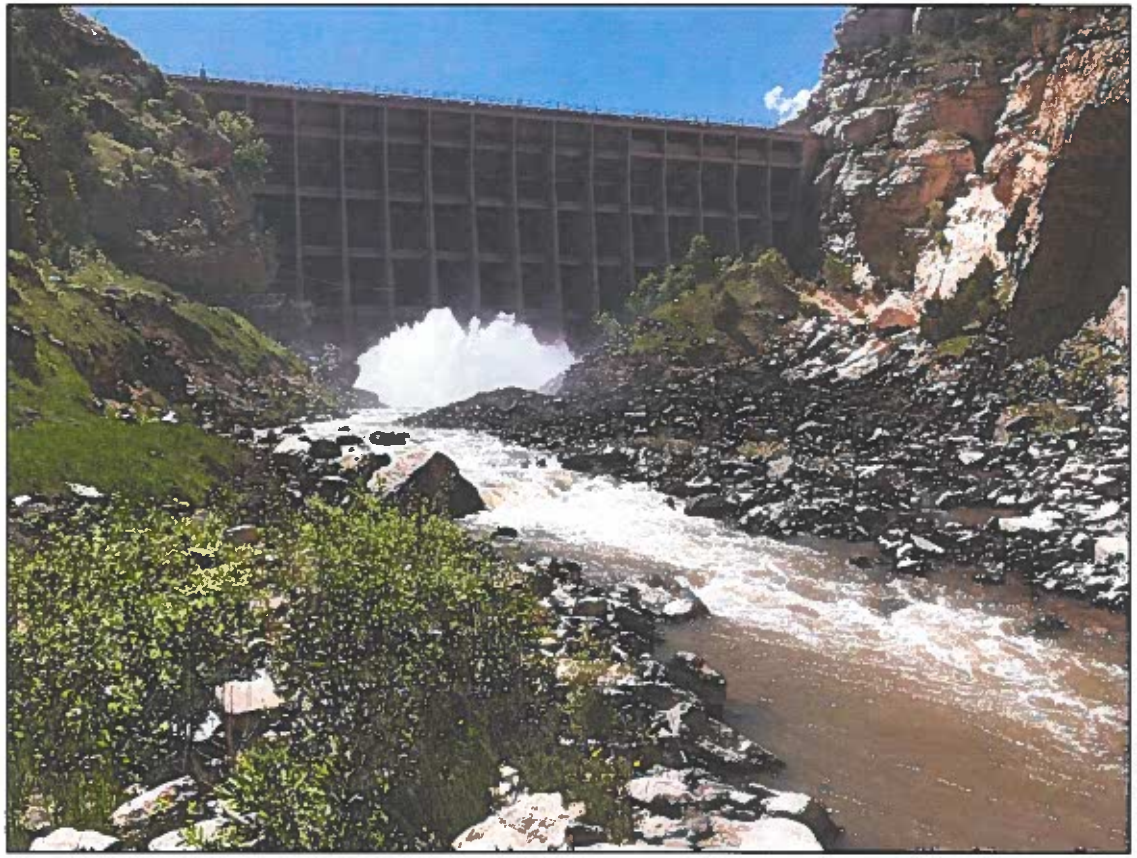
- **ADDITIONAL SITE CHARACTERIZATION**
  - Site-Specific Seismic Study
  - Fault Assessment
- **SEO – RISK ASSESSMENT**
  - Hydrologic Risk
  - Seismic Risk (Existing Dam)





2022 AMENDMENT 5 – PHASE 3

- PROJECT MANAGEMENT
- SITE CHARACTERIZATION
- DESIGN ANALYSIS
- ENVIRONMENTAL INVESTIGATIONS
- PHASE III REPORT



2022 AMENDMENT 5 – DESIGN ANALYSIS

- **STRUCTURAL MODEL**
  - Seismic Stability
  - Potential Curvature
- **PHYSICAL SCALE HYDRAULIC MODEL**
  - Stability
  - Flip Bucket Spillways
  - Plunge Pool Progression