

## **DOE/NYSERDA Phase 2 Decision Making**

### **Phase 1 Studies (Enviro Compliance Solutions, Inc.)**

- Erosion Working Group (EWG) activities completed this summer
  - Study 1
    - Field reconnaissance and site prioritization
    - Ground Penetrating Radar
    - Trenching for age-dating
    - Collection of age-dating samples and delivery to laboratories
    - Trench backfilling and site restoration
  - Study 2
    - Identification of analogue gullies
    - Soil moisture and infiltration testing
    - Soil erodibility testing
    - Measurement of other soil characteristics
  - Study 3
    - Develop topographic metrics
    - Extract model grids from LiDAR data
    - Erosion model design
    - Model component testing
- EWG Look Ahead:
  - Study 1: Complete study with several additional trenches near Buttermilk Creek landslide
  - Study 2: Collect soil material data in trenches made for study 1, evaluate LiDAR change detection model
  - Study 3: Continue building and testing model and evaluating uncertainty
- Exhumation Working Group (EWXG) activities completed this summer
  - Study 1
    - Update of waste inventories (report posted to Phase 1 Studies website)
  - Study 2
    - Geophysics prove-out study at SDA
      - Tested 5 geophysical technologies to identify waste forms, define the boundaries of trenches, define water within the trenches
    - Evaluation of protective measures for exhumation
    - Begin developing a proposal for a soil sampling investigation to reduce uncertainty in estimating soil volumes for exhumation at SDA and NDA
  - Study 3
    - Completed research and reports on 7 exhumation projects (7 different sites) to evaluate state-of-practice in exhumation and treatment technologies and methods for worker, public, and environmental protection; and related costs
- EXWG Look ahead:
  - Study 1: Evaluate selective removal scenarios with respect to updated inventory
  - Study 2: Evaluate geophysics results and potentially recommend further geophysics work at SDA and NDA

September 27, 2016

- Study 3: Evaluate applicability of precedent project findings to West Valley exhumation

### **Probabilistic Performance Assessment (Neptune and Co., Inc.)**

- Developed draft report on Features, Events, Processes
- Developed draft stakeholder plan
- Developed draft Conceptual Site Model
- Look ahead: Neptune plans to give a presentation on progress on the probabilistic performance assessment at the November 16 Quarterly Public Meeting

## **NYSERDA Projects**

### **Erdman Brook Erosion Control Repairs**

- Following erosion control installation in 2012, a portion of a concrete block retaining wall began leaning toward the stream due to slope movement and freeze/thaw cycles
- In 2015, NYSERDA installed temporary steel bracing to prevent further leaning or toppling of the concrete blocks
- Photo prior to repairs with steel bracing on retaining walls (October, 2015):



- In 2015 NYSERDA completed a design for replacement of the concrete block walls with a large culvert pipe
- NYSERDA completed installation of the culvert in late summer, 2016
- NYSERDA continues an Erosion Monitoring Program on both Erdman Brook and Frank's creek and will continue to inspect these erosion control structures on a monthly basis
- Photo of completed culvert installation (September, 2016):



#### **NYSERDA Soil Sampling and Dose Assessment Project**

- Soil sampling is complete at all five areas that were identified in the 2014 Aerial Radiation Survey as having radiation levels that are slightly above the background radiation that is found throughout the environment.
- Dose assessments are complete for the three areas that are near the Center property.
- Dose assessments for the three areas near the Center property were conducted for the current use of the property and for a conservative “reasonably foreseeable future use.”
- The dose assessment results for the three areas near the Center are low (less than one millirem per year to about eight millirem per year), and are well below the NRC’s 25 millirem per year standard for unrestricted use. Average background radiation dose to a person in the United States is 360 millirem per year.
- NYSERDA has been working with the Seneca Nation of Indians to obtain land use information for the two areas on the Cattaraugus Territory of the Seneca Nation of Indians that properly reflects the unique land uses of the Seneca Nation people.
- NYSERDA expects to present the dose assessment results for the two areas on the Cattaraugus Territory of the Seneca Nation of Indians at the November 16 Quarterly Public Meeting.