



Van Stone Mine cleanup plan

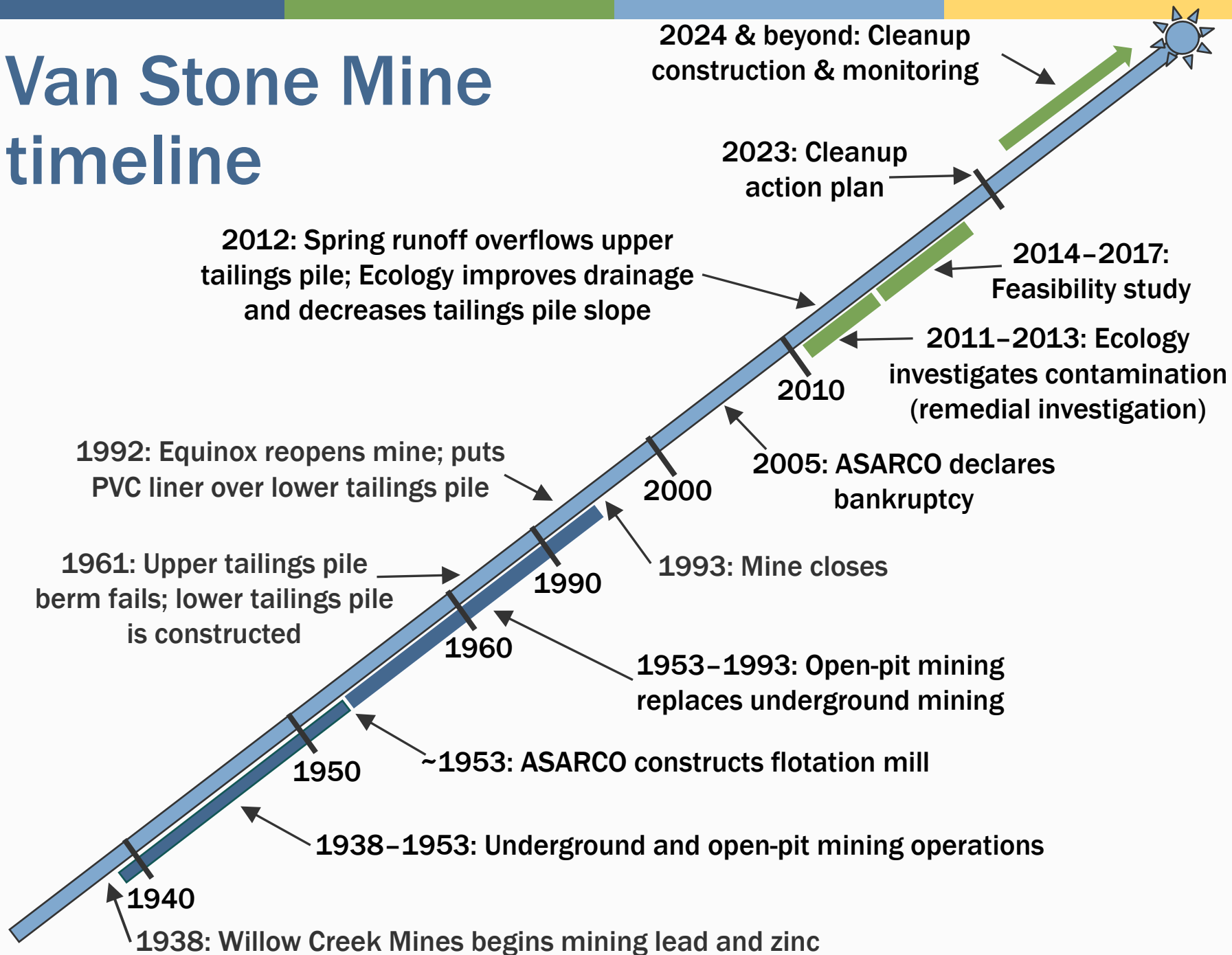
Brendan Dowling, Erika Beresovoy &
Nick Acklam

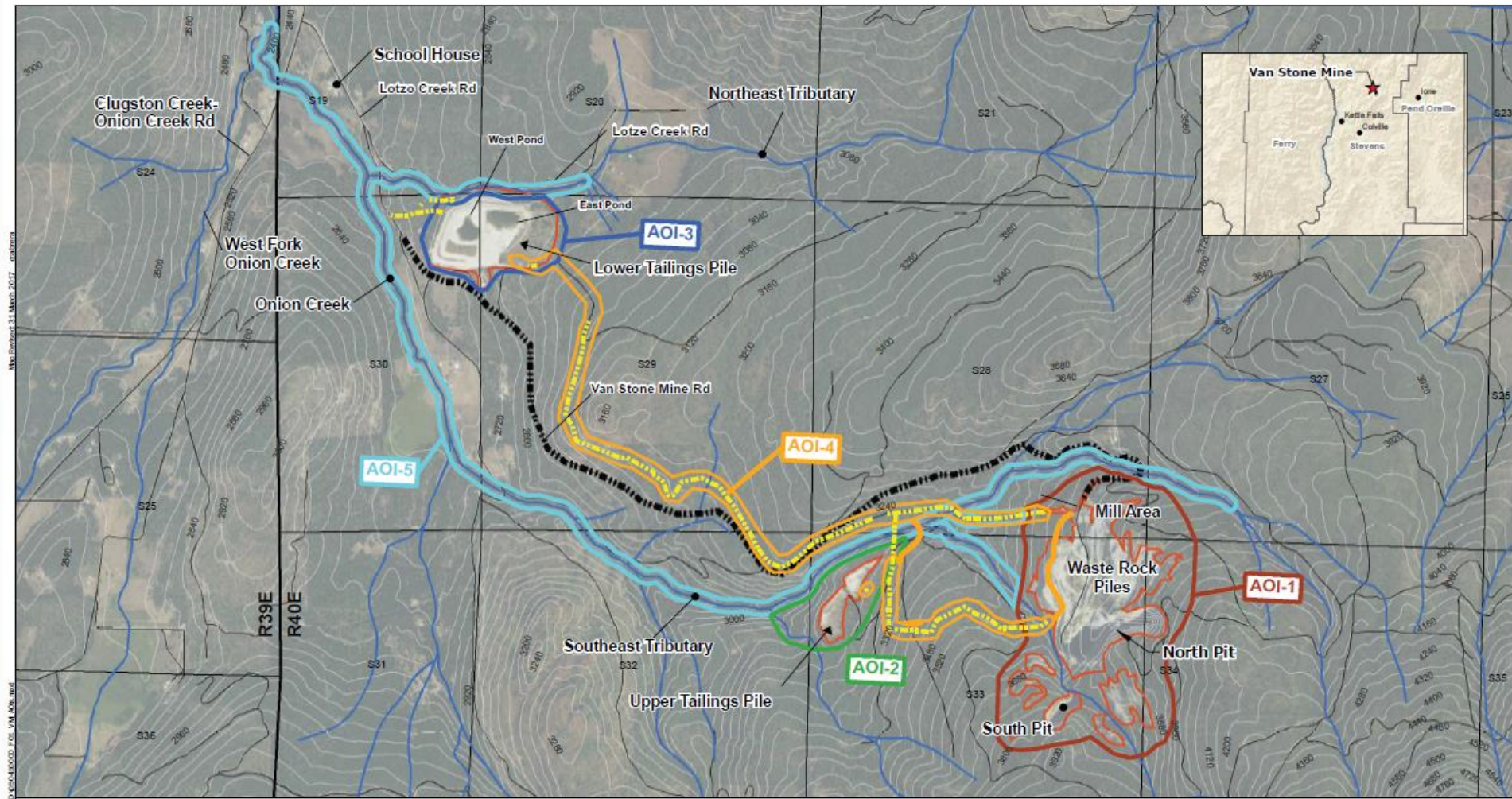
June 8, 2023

Agenda

- 1 Mining & cleanup history
- 2 Site map & photos
- 3 Cleanup plan & timeline
- 4 Next steps
- 5 Questions & answers

Van Stone Mine timeline





Data Source: Aerial and shaded relief background from ArcGIS Online. Base data from HartCrowser, Job No. 17800-11.3/13.
 Notes:
 1. The locations of all features shown are approximate.
 2. This drawing is for information purposes. It is intended to assist in showing features discussed in an attached document. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
 Projection: NAD 1983 UTM Zone 11N

<ul style="list-style-type: none"> Tailings Pipeline Van Stone Mine Road Roads Creeks Areas Disturbed by Mining Activities 	<p>Areas of Interest (AOI)</p> <ul style="list-style-type: none"> AOI-1, Mill Facility, Open Pits and Waste Rock AOI-2, Upper Tailings Pile AOI-3, Lower Tailings Pile AOI-4, Tailings Pipeline and Access Roads AOI-5, Onion Creek and Tributaries
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Vicinity Map and Area of Interest	
Van Stone Mine Onion Creek, Washington	
	Figure 1



Waste rock and mine/mill area



Upper tailings pile

Lower tailings pile



Production

- ASARCO – 7.5 million tons mined
- Equinox – 1.27 million tons mined

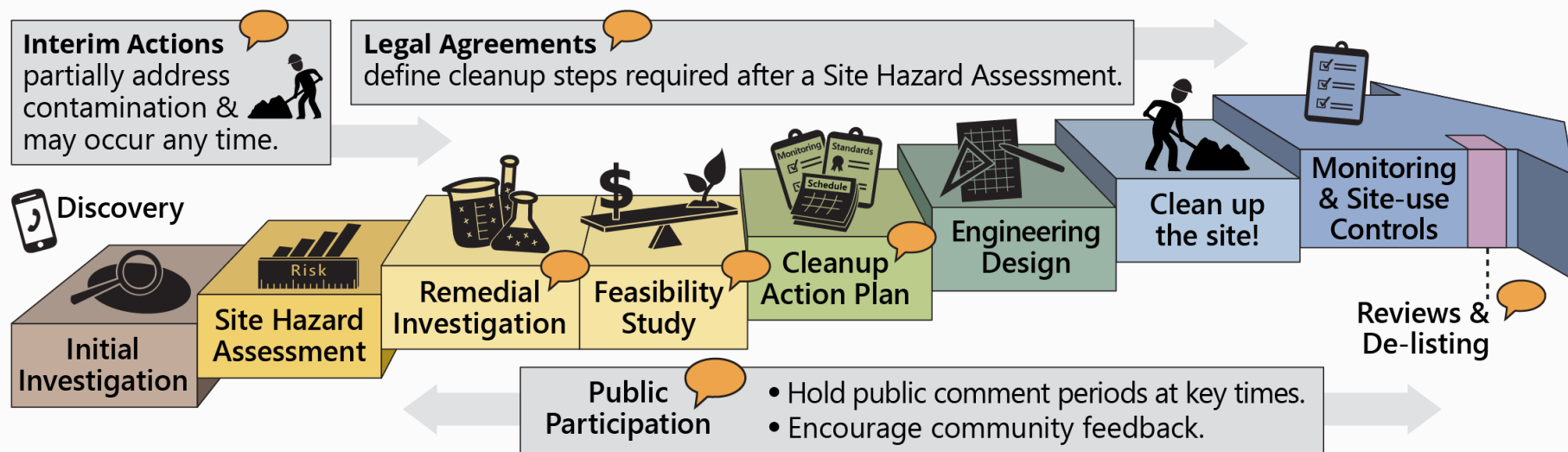
Tailings pile sizes

- Upper – 9.6 acres (780,000 tons)
- Lower – 35.1 acres (1.8 million tons)

Waste rock pile – 53 acres



Washington's cleanup process



Site contaminants

Contaminant	Soil	Surface water	Groundwater	Sediment
Antimony	X	X	X	
Arsenic	X		X	
Cadmium	X	X		
Copper	X			
Lead	X	X	X	X
Mercury	X			
Selenium	X			X
Silver	X			
Thallium	X			
Zinc	X	X		X



Cleanup participants

- Ecology's Toxics Cleanup and Dam Safety programs
- WA Dept. of Health
- WA Dept. of Natural Resources
- Stevens County
- Potentially liable persons

Proposed cleanup

- Improve dam at North Pit Lake
- Consolidate waste at Lower Tailings Pile from:
 - Upper Tailings Pile
 - Mill Area/Waste Rock Area
 - Tailings Pipelines
- Grade steep slopes at Lower Tailings Pile and Waste Rock Area
- Cover Lower Tailings Pile to prevent rain and snowmelt from infiltrating it



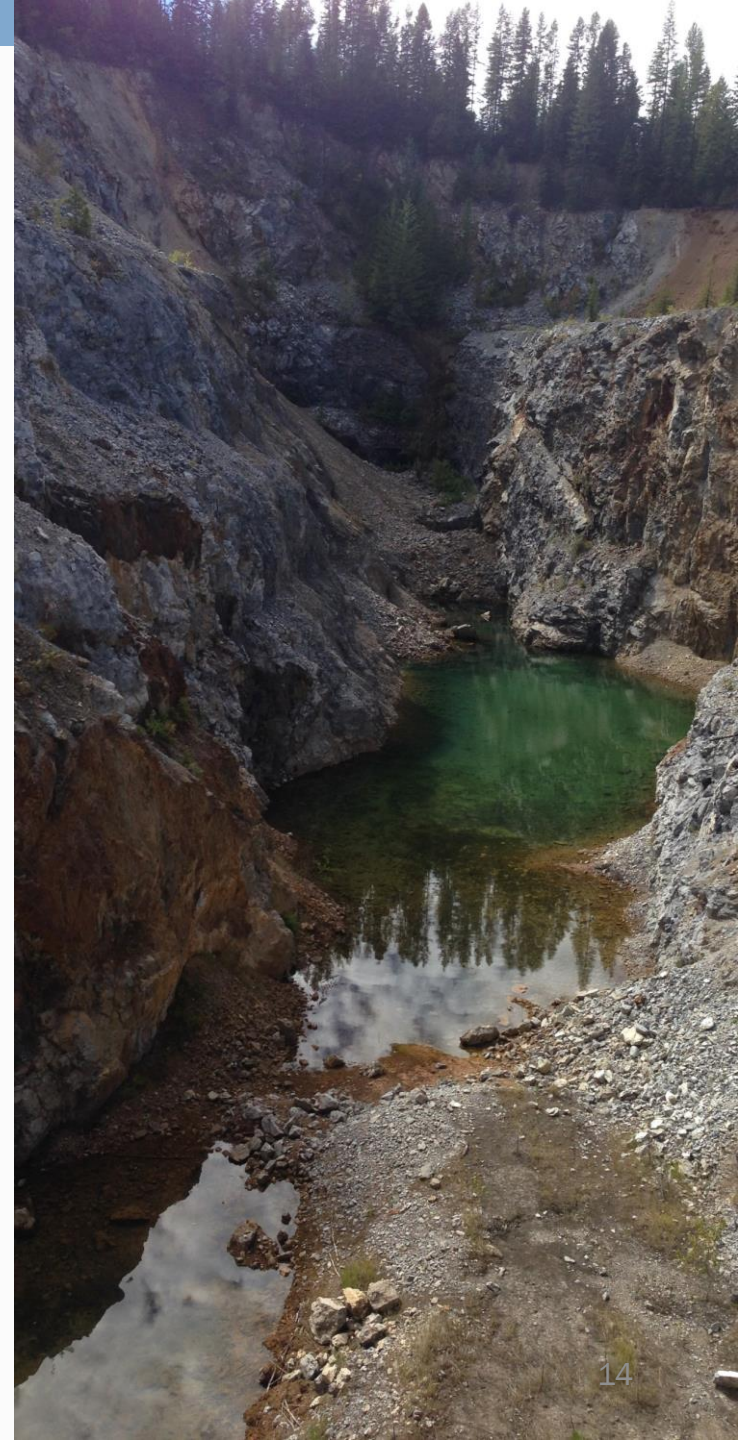
Estimated cost = \$14 million

Cleanup timeline



Next steps

- Submit comments by June 16
 - Online:
bit.ly/VanStoneComments
 - Email:
Brendan.Dowling@ecy.wa.gov
 - By mail, or handwritten tonight
- Respond to comments
- Revise plan, if needed





Thank you for coming
We welcome your questions!