

Rules of Conduct

- Please **sign in** especially if you desire to speak
- Comments are limited to 3 minutes
- Be respectful of/to others
- This is an **informational** meeting – we are all learning about this project and what it may mean for Tucker County
- The county officials have no more information than what is being posted on the county website for this effort:
<https://tinyurl.com/TCPSH>
- You may send additional comments to
TuckerCountyComments@gmail.com

Tucker County Commission Informational Meeting

January 9, 2019

Proposed Big Run Pumped Hydropower Storage
Project Discussion

Agenda

- Call to Order
- Pledge of Allegiance
- Opening Remarks - TC Commission
- Presentation - Tim Williamson, FreedomWorks, LLC
- Comments by public officials
- Public Discussion
- Adjournment – 8 pm



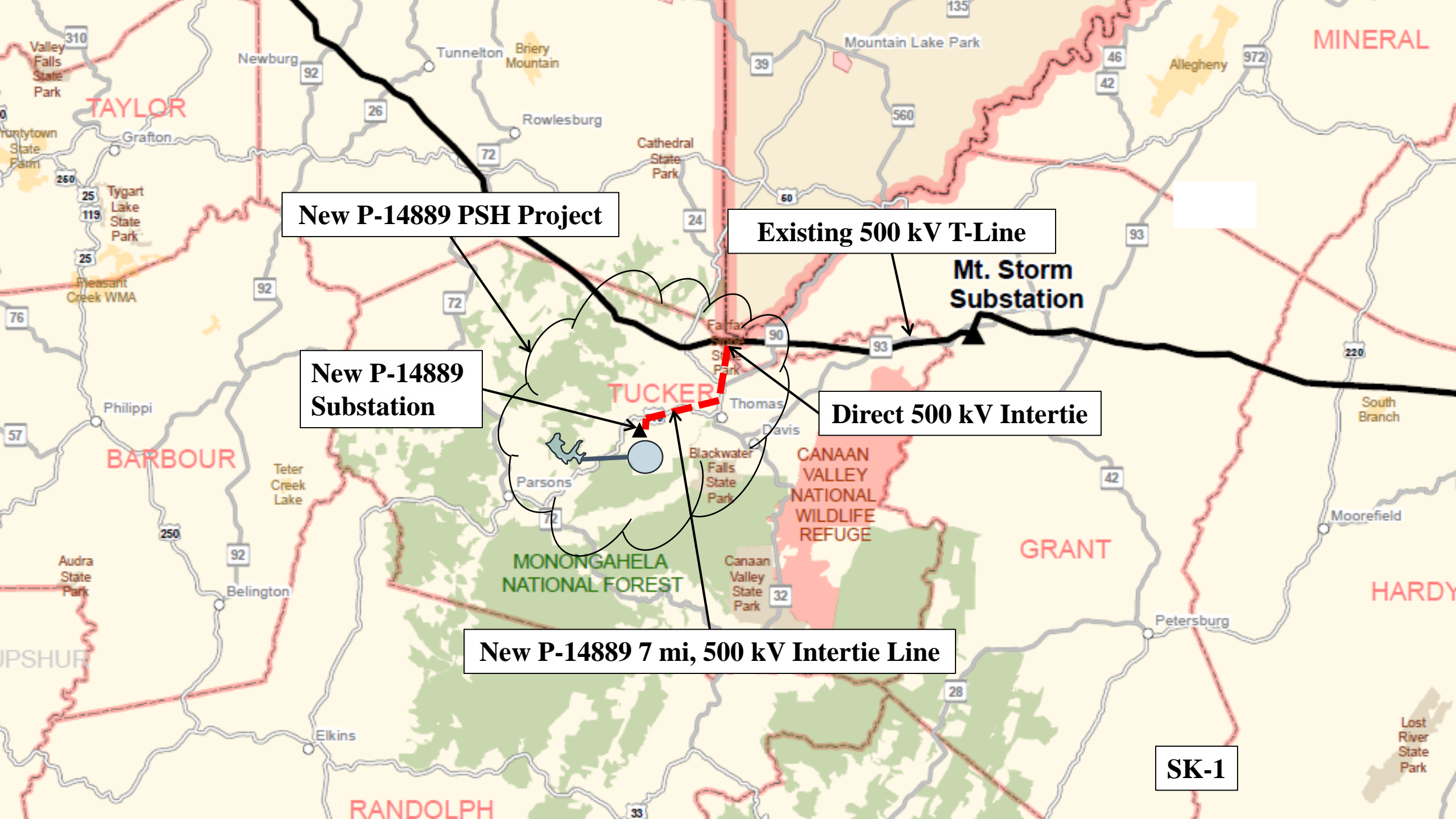
PROPOSED PUMP STORAGE HYDROPOWER PROJECT

FERC P-14889

Presentation to Tucker County



January 9, 2019



New P-14889 PSH Project

Existing 500 kV T-Line

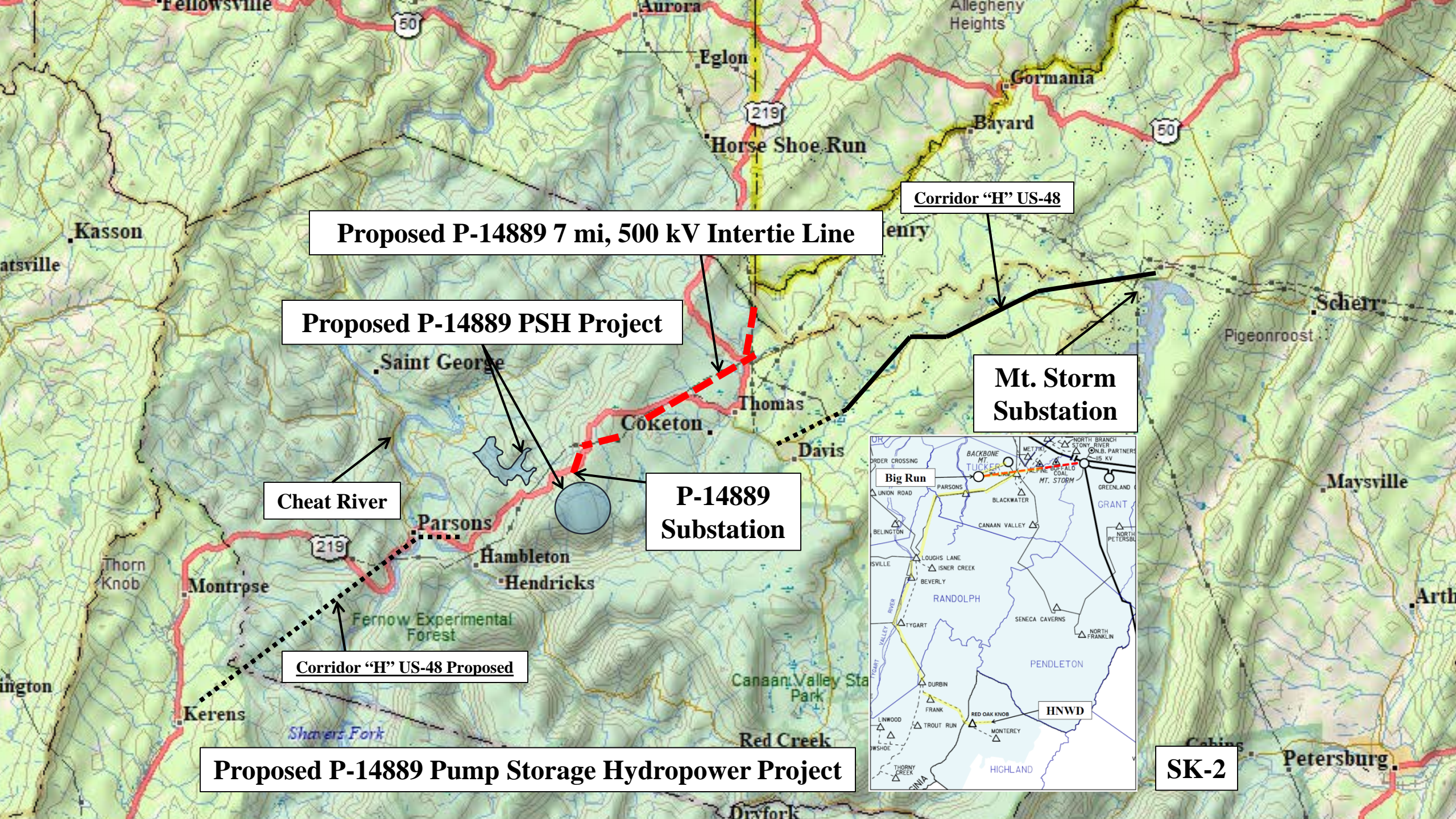
Mt. Storm Substation

New P-14889 Substation

Direct 500 kV Intertie

New P-14889 7 mi, 500 kV Intertie Line

SK-1



Proposed P-14889 7 mi, 500 kV Intertie Line

Proposed P-14889 PSH Project

Corridor "H" US-48

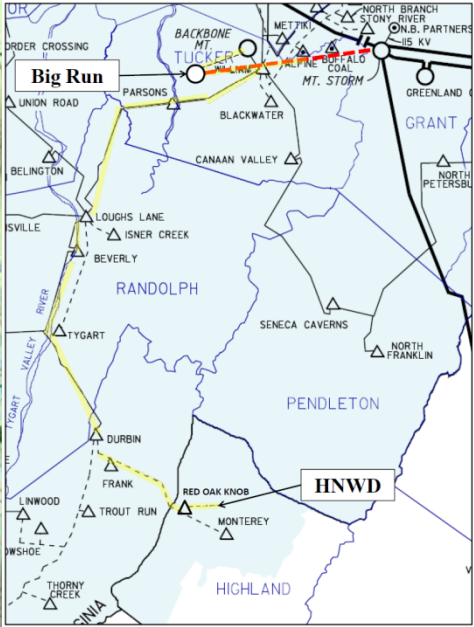
Mt. Storm Substation

Cheat River

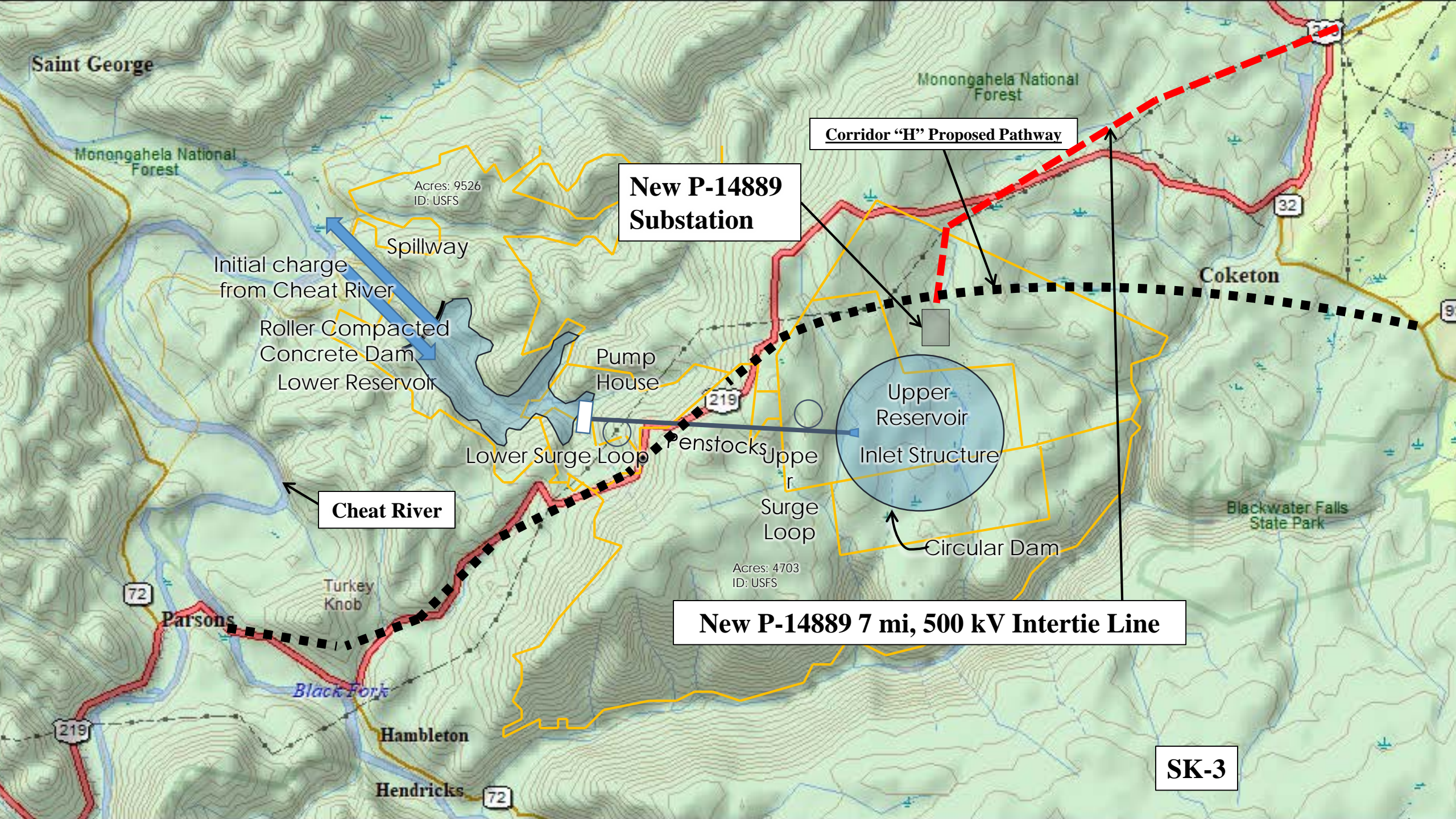
P-14889 Substation

Corridor "H" US-48 Proposed

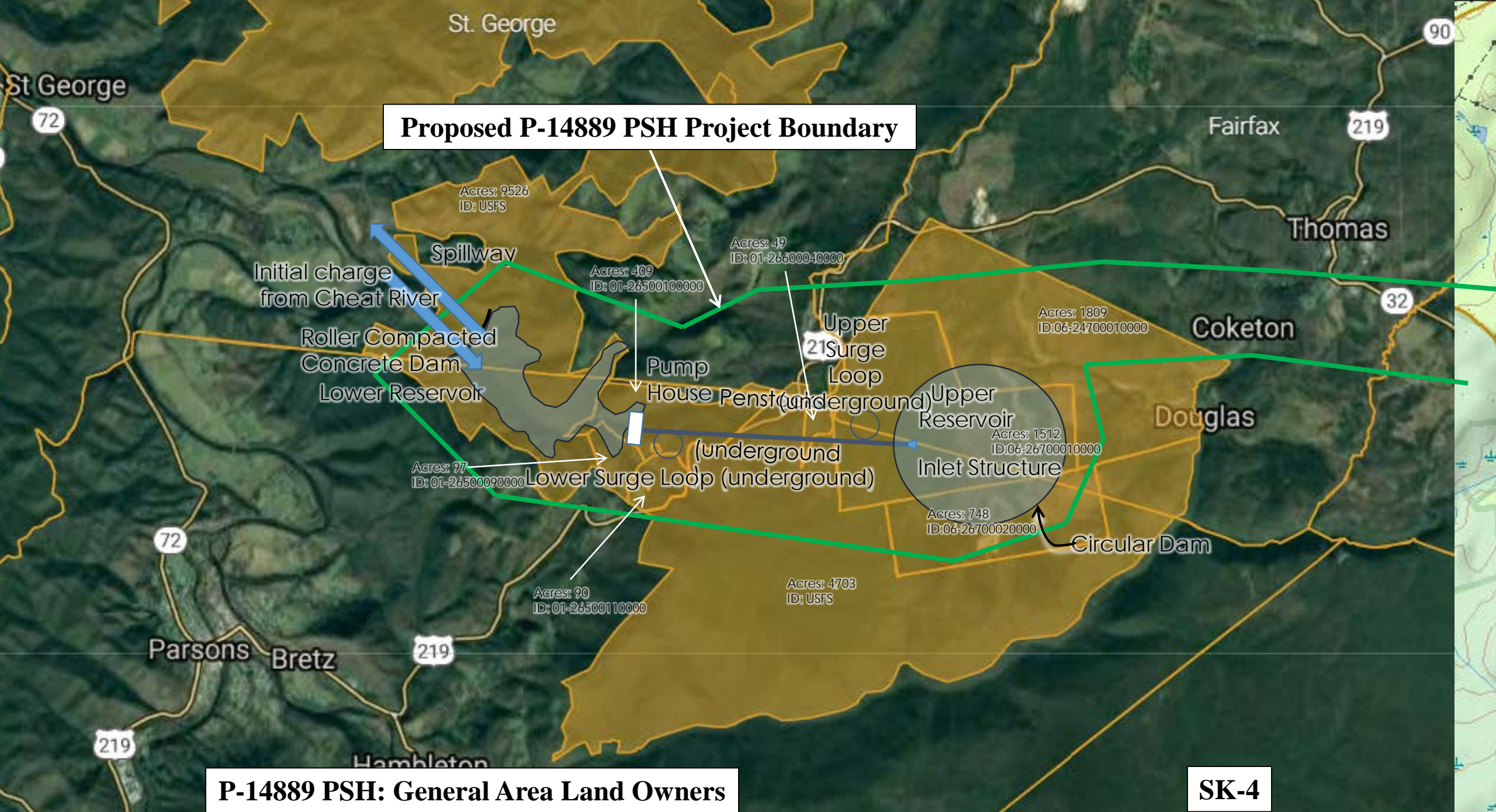
Proposed P-14889 Pump Storage Hydropower Project



SK-2

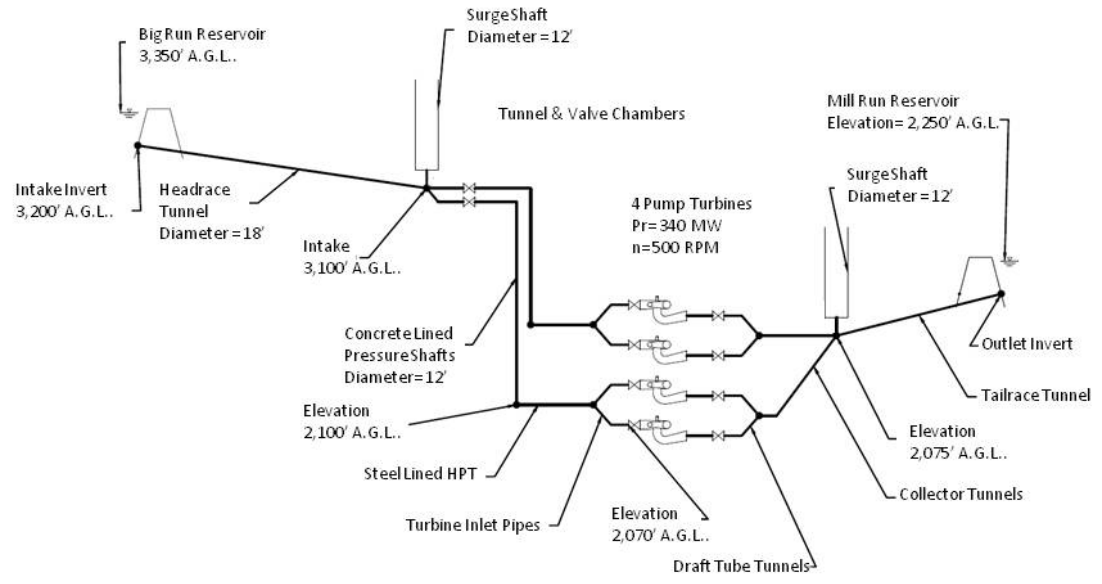
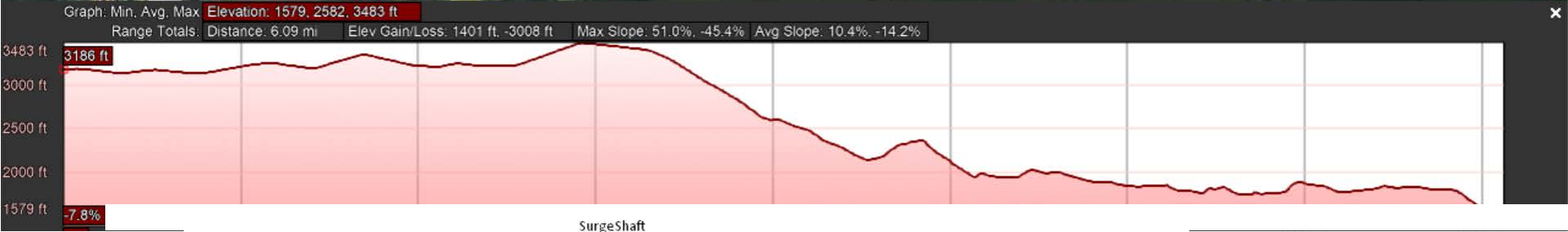
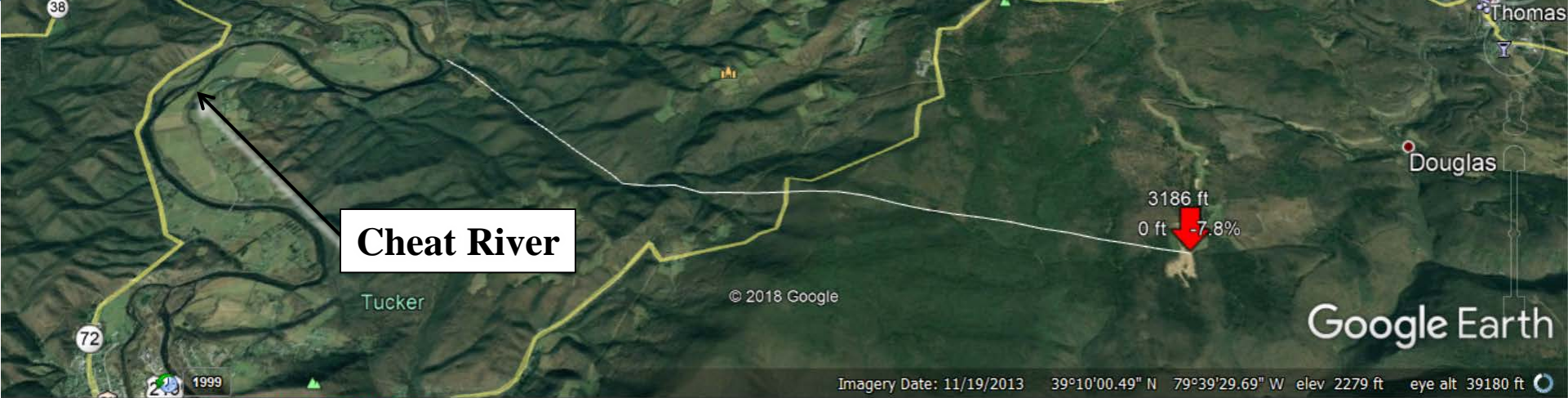


Proposed P-14889 PSH Project Boundary



P-14889 PSH: General Area Land Owners

SK-4



SK-5



P-14889 Upper Reservoir: Cylinder

Maximum Area = 4,910,000 m²

Or, maximum 1213 acres water at 3,350' msl

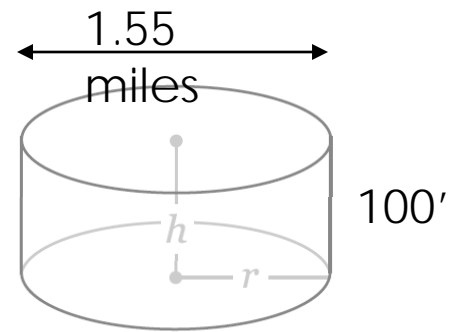
Maximum Volume = 147,262,155 m³

Or, maximum 119,387 acre-feet of water

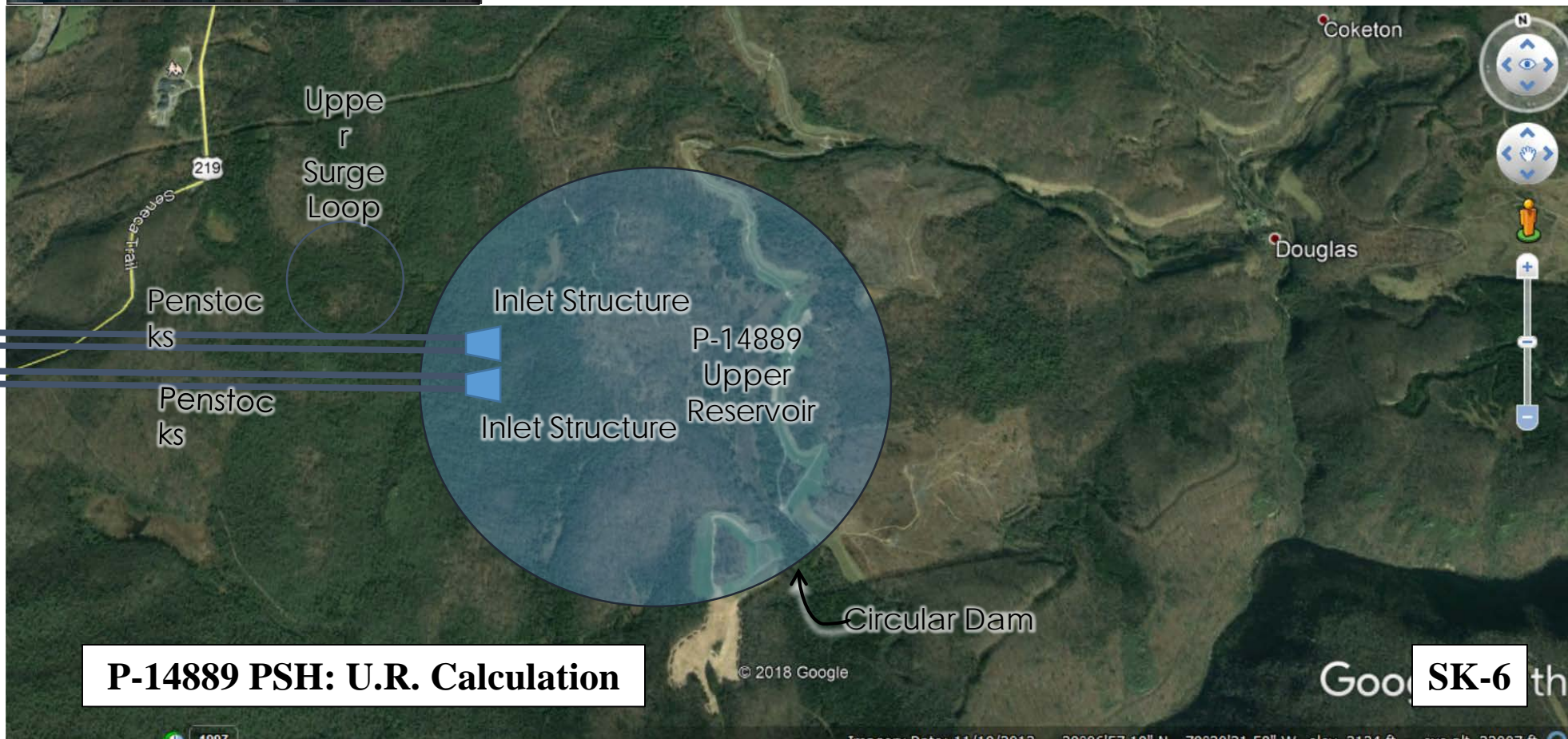
where: π is Pi, approximately 3.142

r is 1,250 meters radius

h is 30 meters height of the cylinder

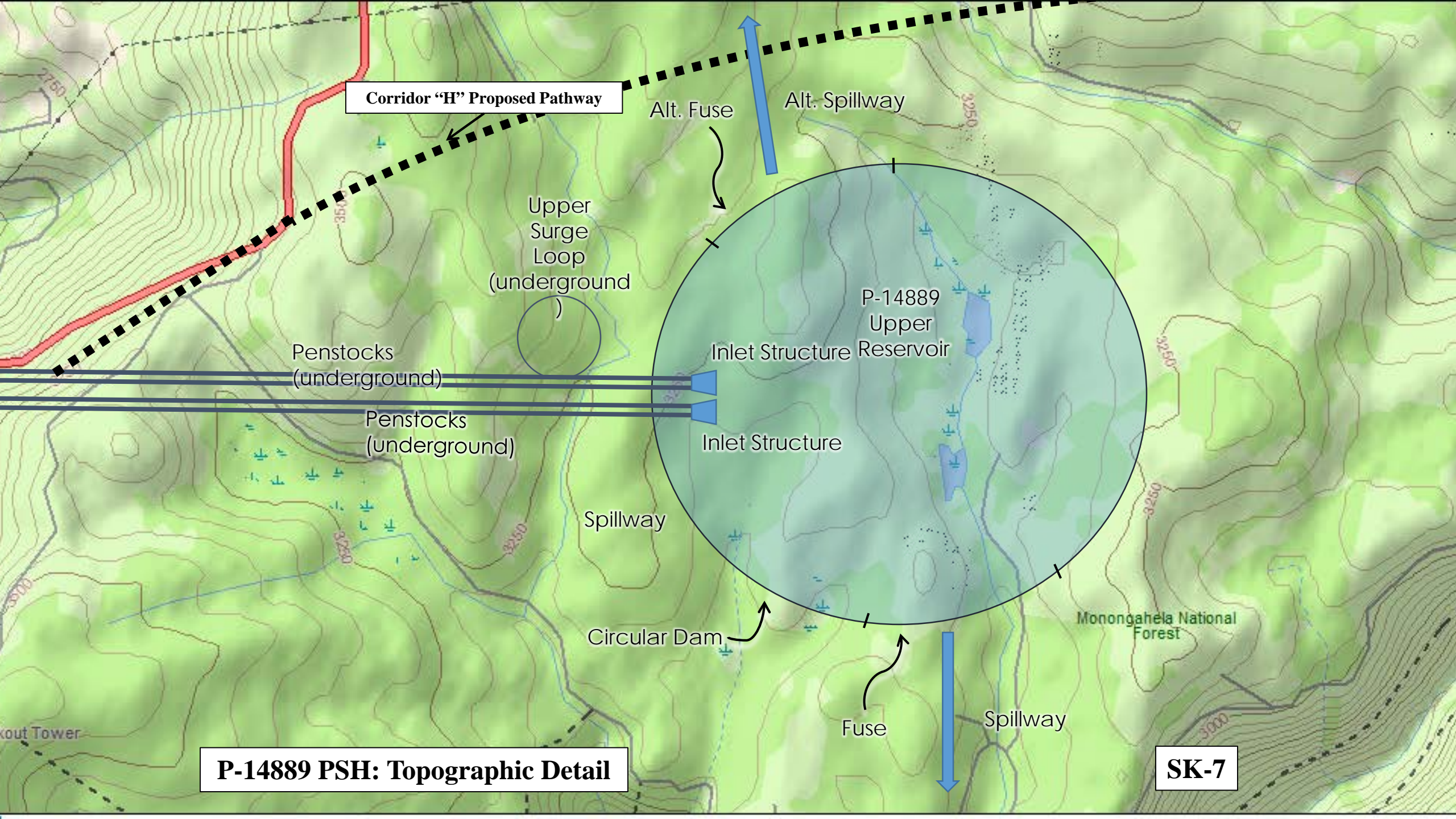


$$V = \pi r^2 h$$



P-14889 PSH: U.R. Calculation

SK-6



Corridor "H" Proposed Pathway

Alt. Fuse

Alt. Spillway

Upper Surge Loop (underground)

Penstocks (underground)

P-14889 Upper Reservoir

Inlet Structure

Penstocks (underground)

Inlet Structure

Spillway

Monongahela National Forest

Circular Dam

Fuse

Spillway

P-14889 PSH: Topographic Detail

SK-7

Western Pocahontas Properties
520 Irwin Rd,
Huntington, WV 25705
(304) 522-5757
Acres: 49 (surveyed)
ID: 01-26600040000

Corridor "H" Proposed Pathway

Western Pocahontas Properties
520 Irwin Rd,
Huntington, WV 25705
(304) 522-5757
Acres: 1809
ID:06-24700010000

Upper Surge Loop
(underground)

Western Pocahontas Properties
520 Irwin Rd,
Huntington, WV 25705
(304) 522-5757
Acres: 1512
ID:06-26700010000

P-14889
Upper Reservoir

Penstocks
(underground)

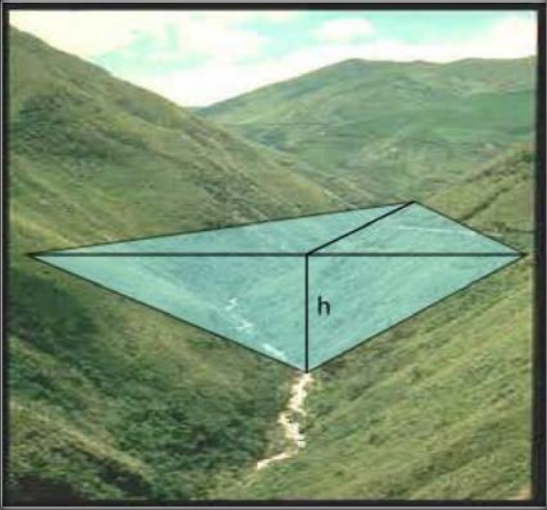
Penstocks
(underground)

Inlet Structure

U.S. Forest Service - Monongahela N.F.
200 Sycamore St,
Elkins, WV 26241
(304) 636-1800
Acres: 4703
ID: USFS

Western Pocahontas Properties
520 Irwin Rd,
Huntington, WV 25705
(304) 522-5757
Acres: 748
ID:06-26700020000

Circular Dam



Mill Run Lower Reservoir: Triangular Prism

Maximum Area = 4,295,522 m²

Or, maximum 1061 acres water at 2,250' msl

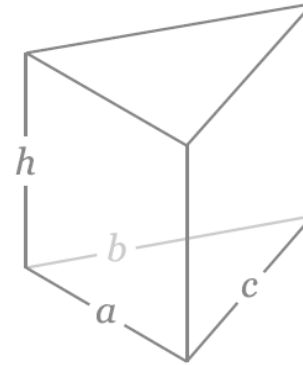
Maximum Volume = 139,875,000 m³

Or, maximum 113,398 acre-feet of water

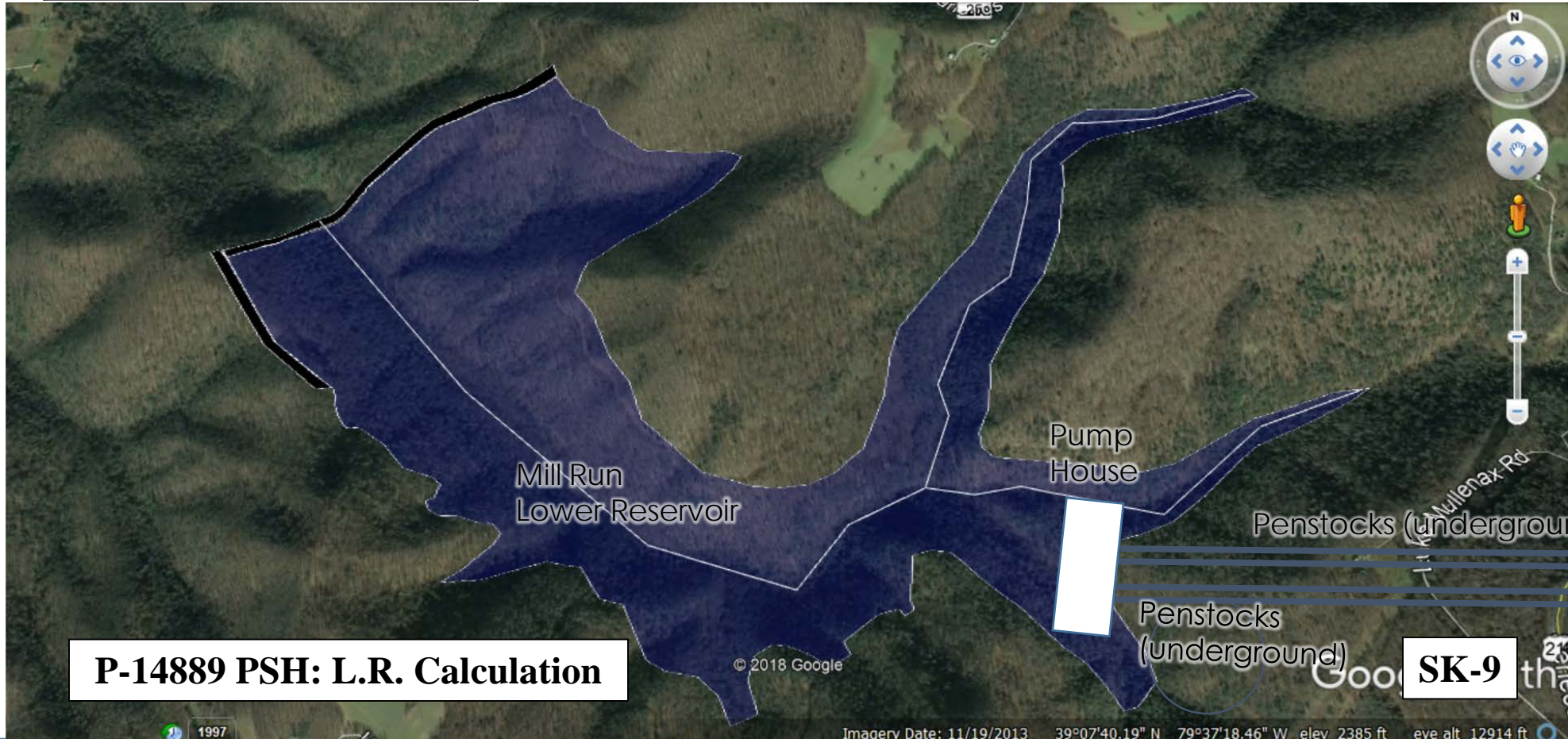
Where: $a = 500$ meters

$b, c = 3.73$ kilometers

$h = 150$ meters

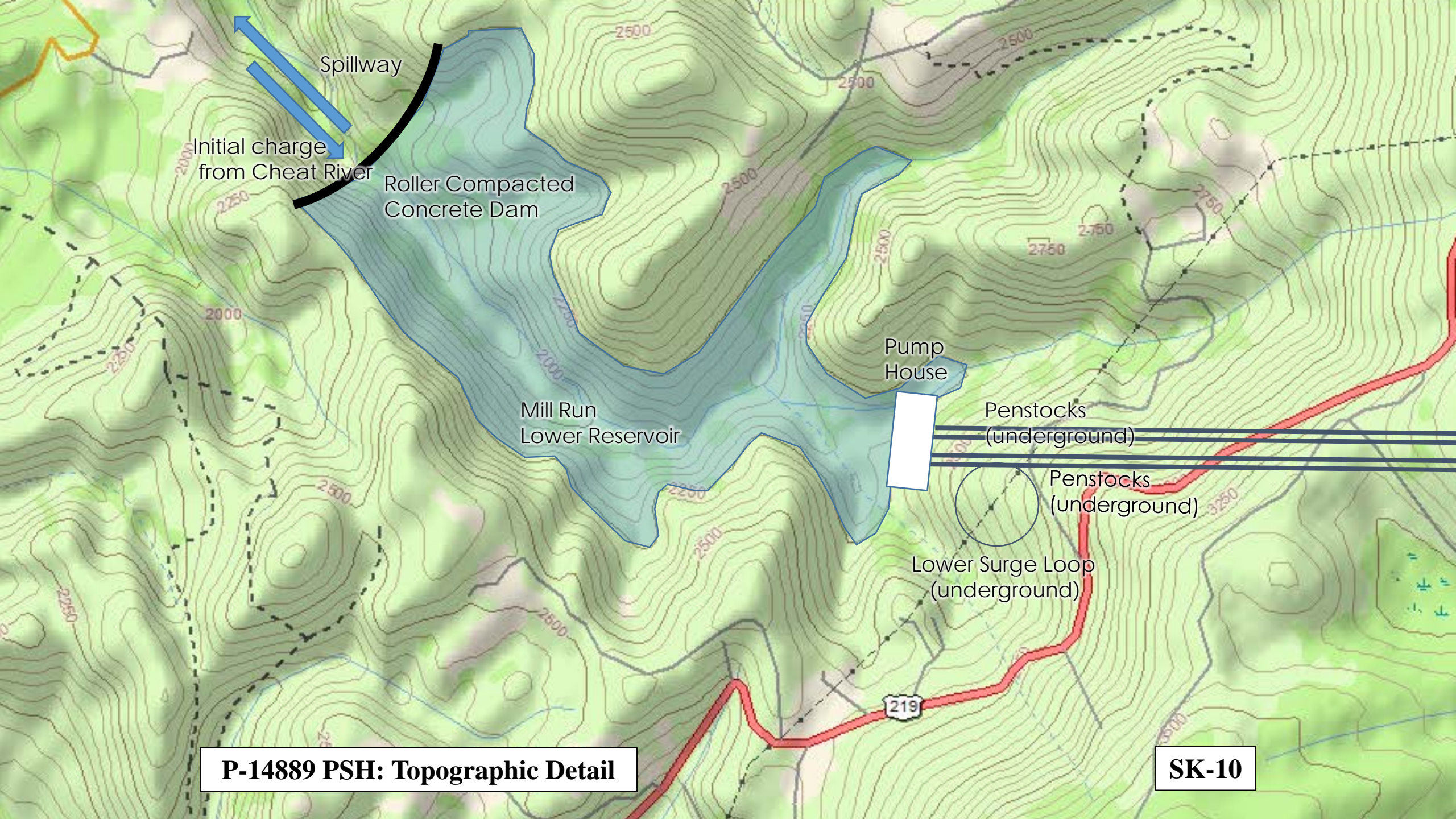


$$V = \frac{1}{4} h \sqrt{-a^4 + 2(ab)^2 + 2(ac)^2 - b^4 + 2(bc)^2 - c^4}$$



P-14889 PSH: L.R. Calculation

SK-9



P-14889 PSH: Topographic Detail

SK-10

Roller Compacted
Concrete Dam

U.S. Forest Service
-
Monongahela
N.F.
200 Sycamore St,
Elkins, WV 26241
(304) 636-1800
Acres: 9526
ID: USFS

Mary A Mullenax,ET AL
1332 Luke Mullenax
Road Hambleton, WV
26269
(304) 478-4832
Acres: 409
ID: 01-26500100000

Reta Jan Harper
431 Luke Mullenax
Road Hambleton,
WV 26269
(252) 208-2695
Acres: 2.
ID: 01-26500100001

Pump
House

Mill Run
Lower Reservoir

Penstocks (underground)

Penstocks
(underground)

Lower Surge Loop
(underground)

Herman Esser Revocable
Trust
1300 Altimira Court
McLean, VA 25705
(703) 760-9240
Acres: 97
ID: 01-26500090000

31

William K & Moody E
Collette
319 Silver Fox Road
Hambleton, WV 26269
(304) 000-0000
Acres: 90
ID: 01-26500110000

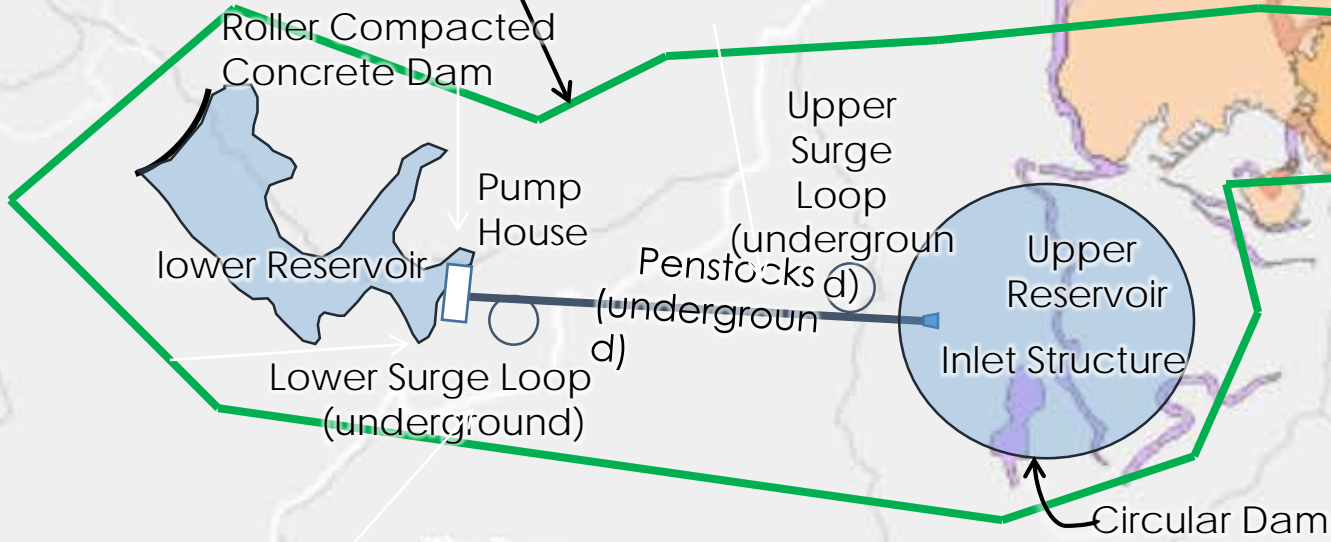
U.S. Forest Service
-
Monongahela
N.F.
200 Sycamore St,
Elkins, WV 26241
(304) 636-1800
Acres: 4703
ID: USF

SK-11

7

Place

Proposed P-14889 PSH Project Boundary



Tucker

Note: Subject to the approval of the authority having jurisdiction, Big Run PSH project plan includes installation of a compacted asphalt concrete liner at upper reservoir to mitigate surface mine minerals from leaching into nearby waterways.

Layer/Legend Tools Basemap

Use the slider bar to adjust transparency.

Reference

- Mask Other States
- Tax Districts
- Tax District Labels
- County Labels
- Counties
- Planning & Development Regions
- State Boundary

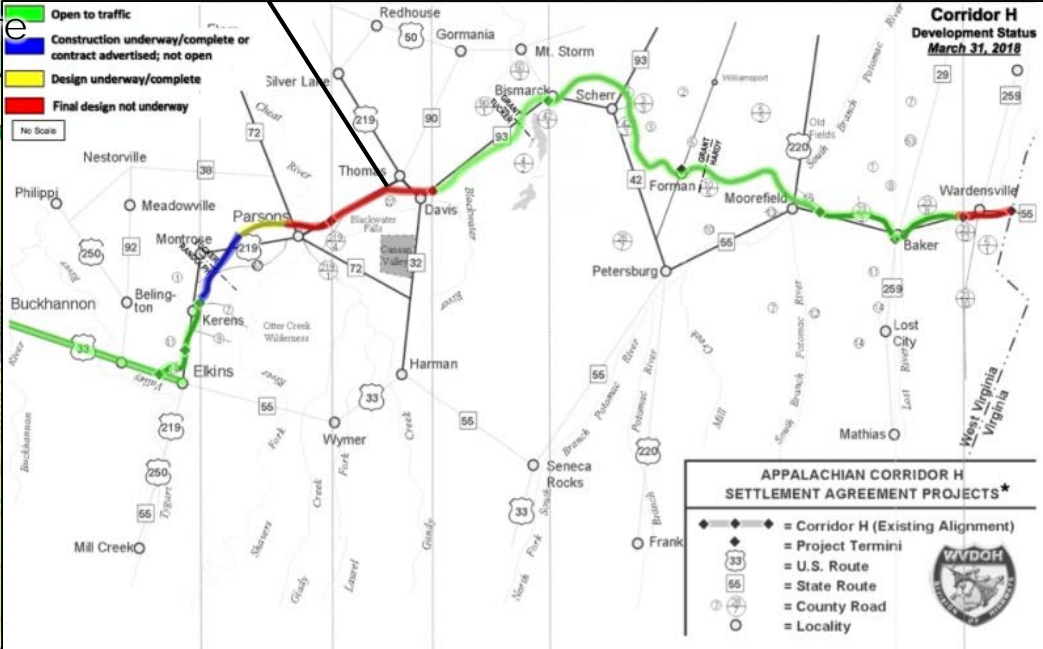
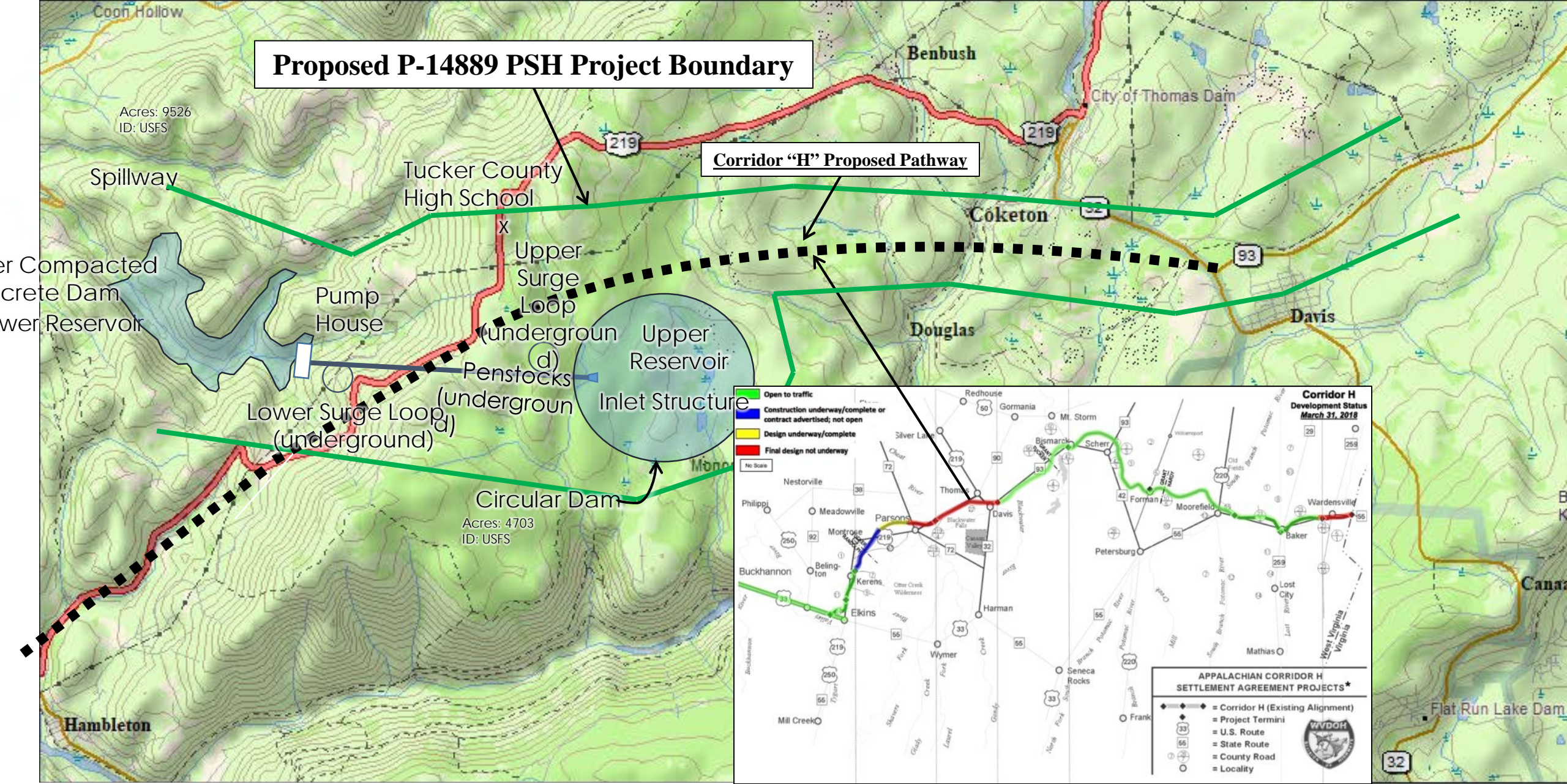
WV Coal Mining

- Underground Mining Labels
- Underground Mining
- Surface Mining
- Surface Mined
- Auger Mined
- Highwall Mined

P-14889 PSH: Former Strip Mine Under Upper Reservoir

SK-12

Proposed P-14889 PSH Project Boundary

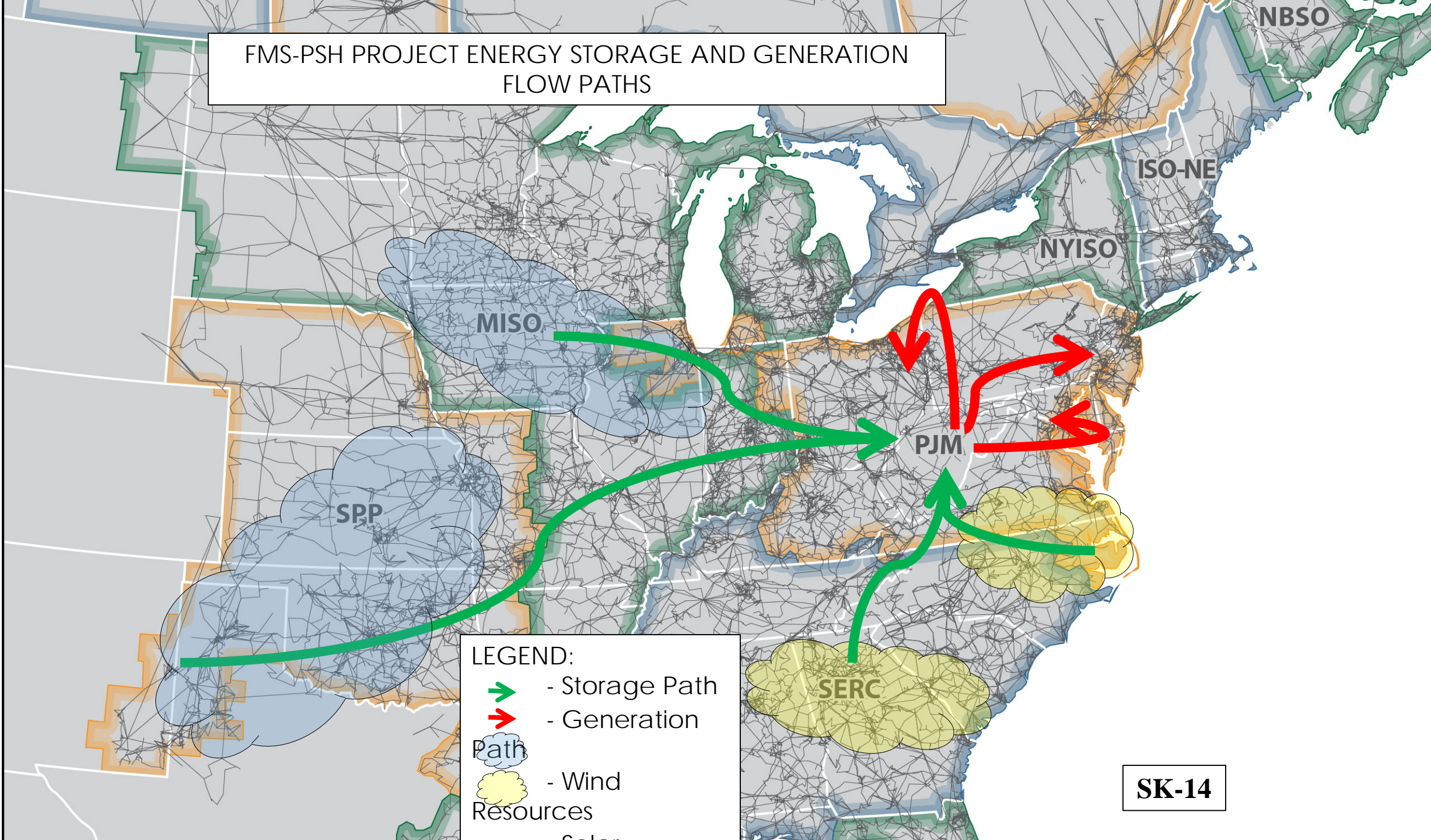


P-14889 PSH: Indications of Corridor "H" Proposed Pathway

SK-13



FMS-PSH PROJECT ENERGY STORAGE AND GENERATION FLOW PATHS



- LEGEND:
- ➔ - Storage Path
 - ➔ - Generation
 - ☁ - Wind Resources
 - ☀ - Solar Resources