





# Local *Hanford* Geology Tour

## November 3rd, 2025



**Description:** This **4-hour tour** will explore the geological history, processes, features, and materials in the Hanford Site area, with a special focus on their relation to the fate and transport of contaminants and their remediation in the vadose zone and groundwater.

The exploration includes three main stops, requiring some walking up to 0.4 miles on unimproved gravel roads and uneven outcrop exposures, offering a hands-on opportunity to engage directly with the site's geological characteristics.



**Host:** The tour will be led by **George Last**, a renowned expert on Hanford's local geology and a former Pacific Northwest National Laboratory employee. George has over 40 years of experience in applied geology and hydrogeologic research and has expertise in geologic controls over contaminant transport, hydrogeology, quaternary geology, and site characterization and remediation.



**What to bring & wear:**

- Dress according to the weather.
- Wear sturdy shoes.
- Snacks and water will be provided.



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# Three Stops to Explore Hanford Geology



## STOP A

### Hanford Formation at Sagemore

The first stop of the tour offers a panoramic view of Hanford's 300 Area, where uranium fuel rods were historically manufactured for irradiation in production reactors. From this vantage point, participants will engage in a discussion about the stratigraphy and structural features of the Hanford Site including the Columbia River Basalts, the Pasco Basin, the basin-filling Plio-Pleistocene Ringold Formation and paleosol development, and the Pleistocene Missoula flood deposits.



## STOP B

### Ringold Formation at Baxton Canyon

The second stop involves a northward walk along the Ringold bluffs, offering a hands-on examination of the Ringold Formation gravels (Member Wooded Island).



## STOP C

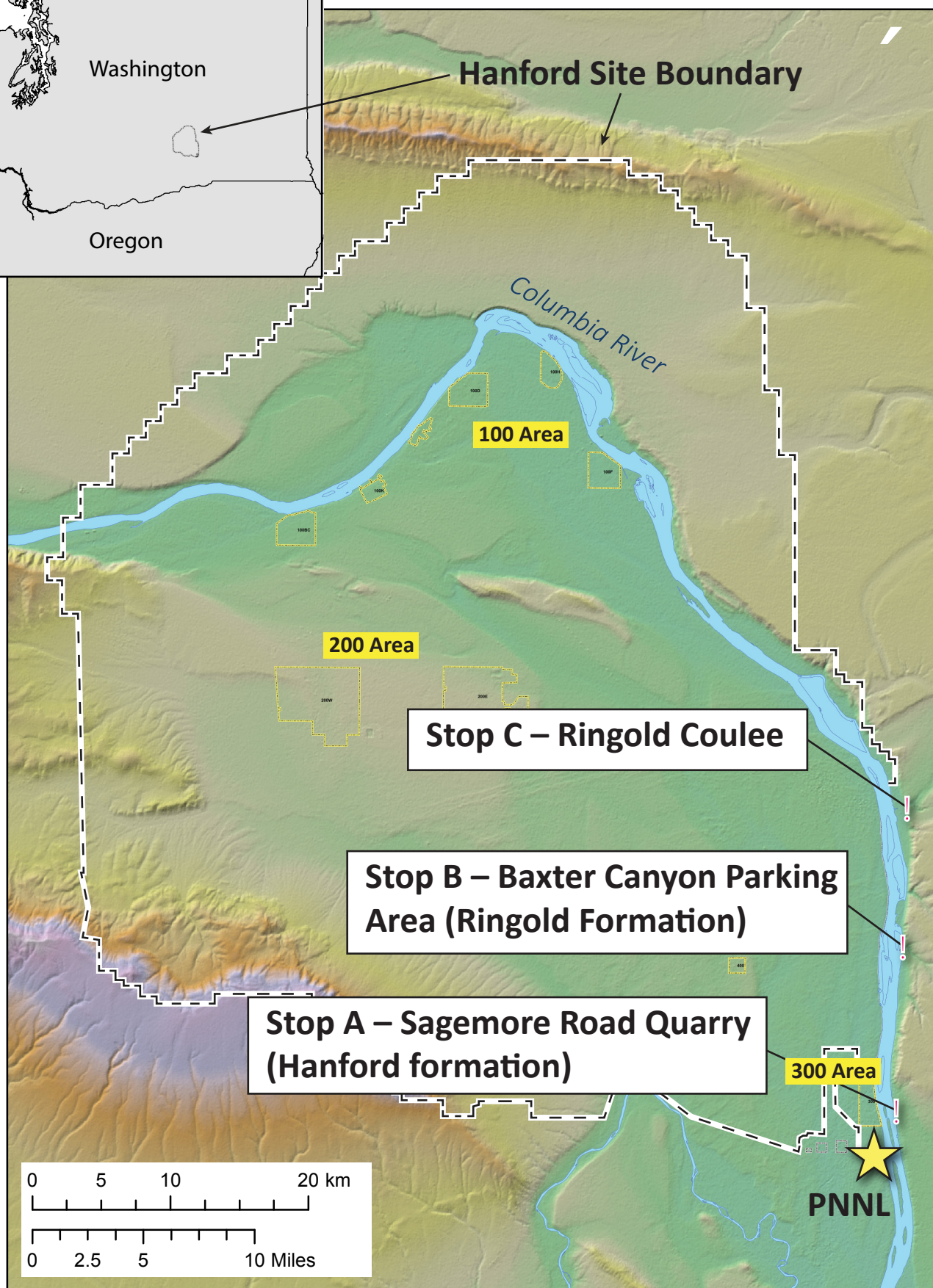
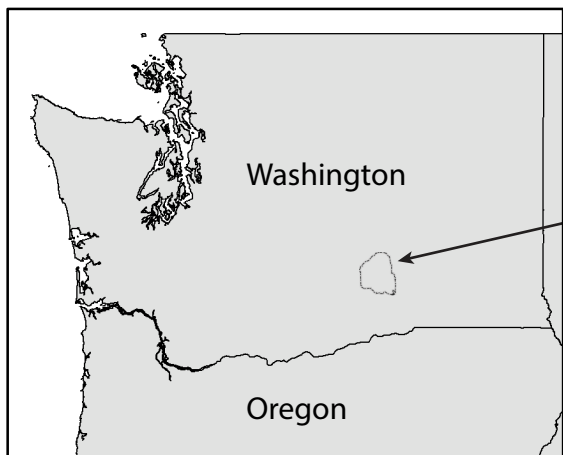
### Ringold Coulee

At the third stop, we will examine additional Hanford Formation deposits. This segment of the tour focuses on the Pleistocene outburst floods, known as the Missoula Floods, which resulted in extensive erosion of the Channel Scabland and fashioned the Ringold and Koontz coulees. Additionally, we will discuss the hydraulic ponding that formed temporary Lake Lewis and left behind massive amounts of sand and gravel that blanket the Hanford Site.



Ringold Fm





# Generalized Stratigraphy of Hanford

