

How do we Capitalize on Mineralization Momentum?

Basalt CO₂ Sequestration in the Columbia Basin



WASHINGTON STATE DEPT OF
**NATURAL
RESOURCES**
WASHINGTON
GEOLOGICAL SURVEY

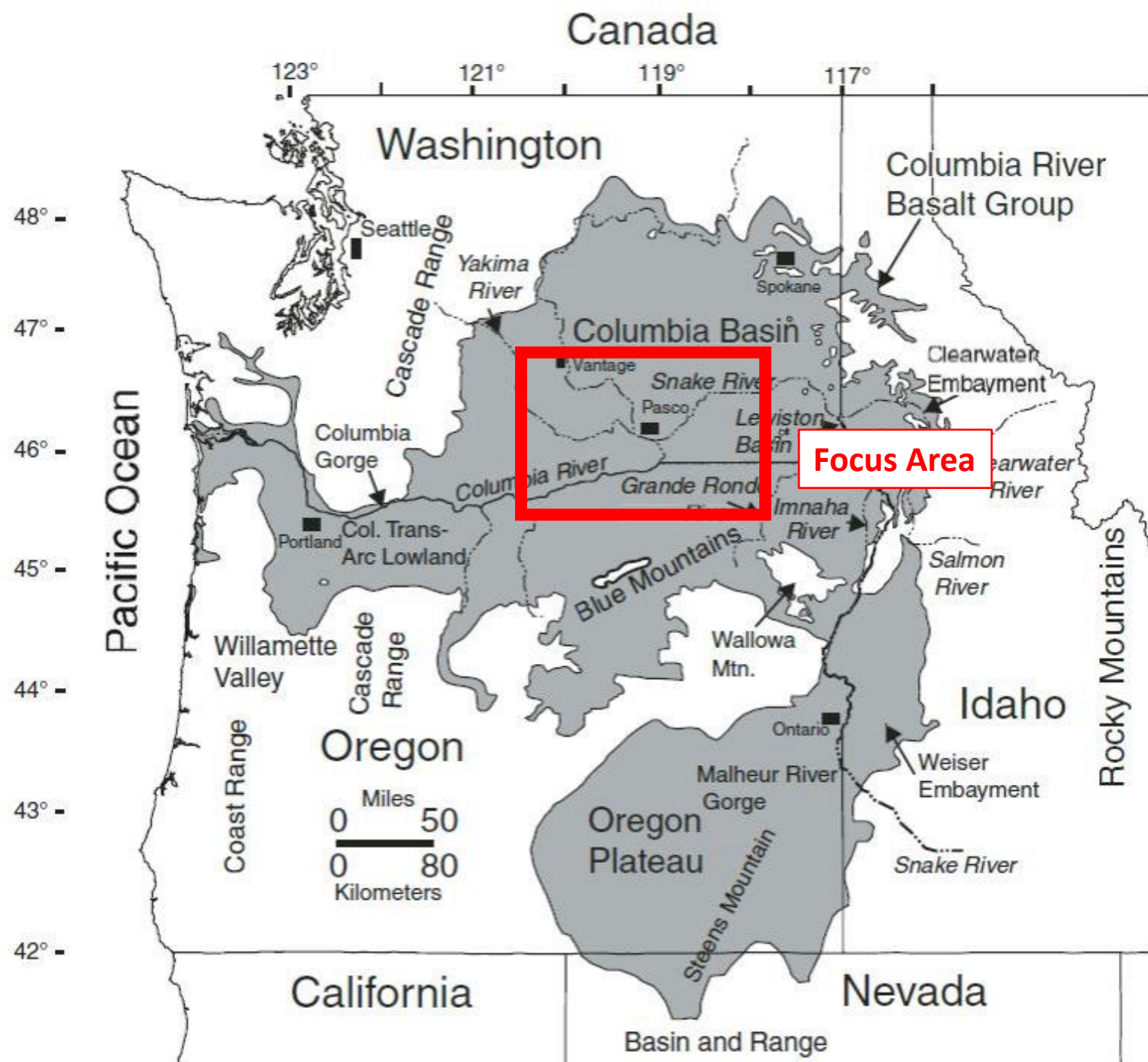


June 21st, 2023

Sponsored by Department of Energy DE-FE0031837, Subaward P0019698







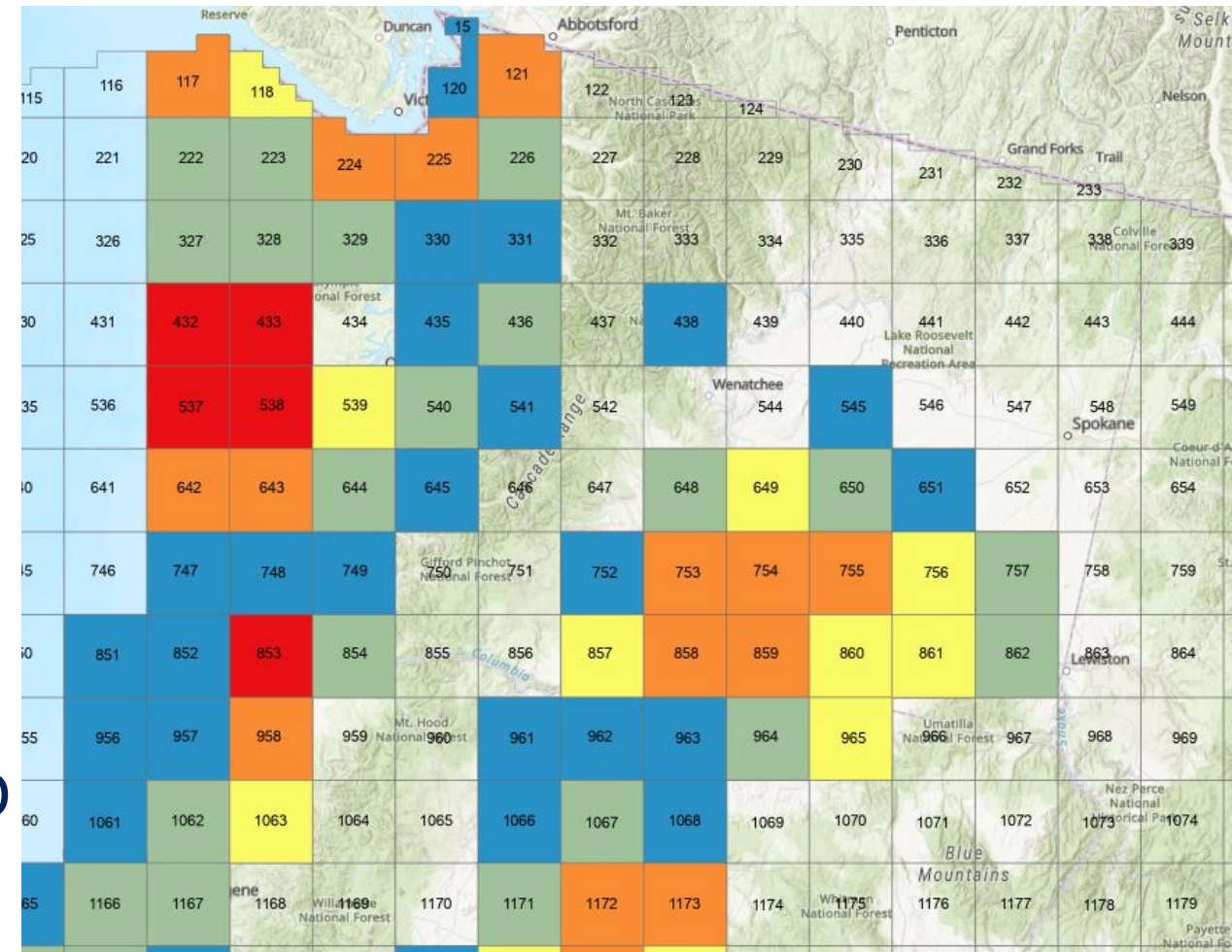
WGS basalt work **complements PNNL expertise** by planning gravity and seismic acquisition, focused outreach, and hydrogeochemical analysis of hydrocarbon and water wells.

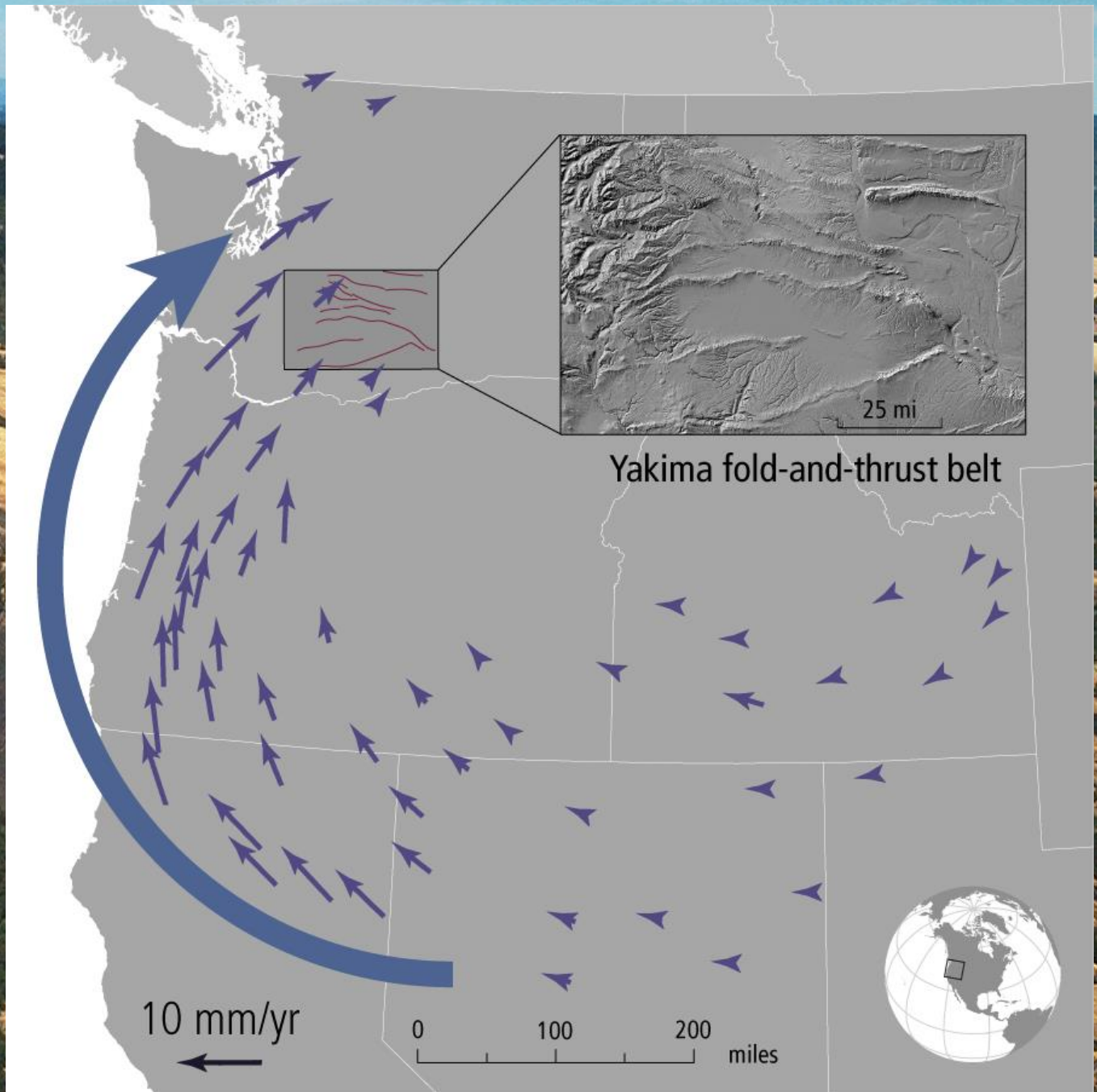
Our publicly accessible data will help prove leads and benefit exploration in the Columbia Basin **by lowering entry barriers.**

Past Work 2020-2023

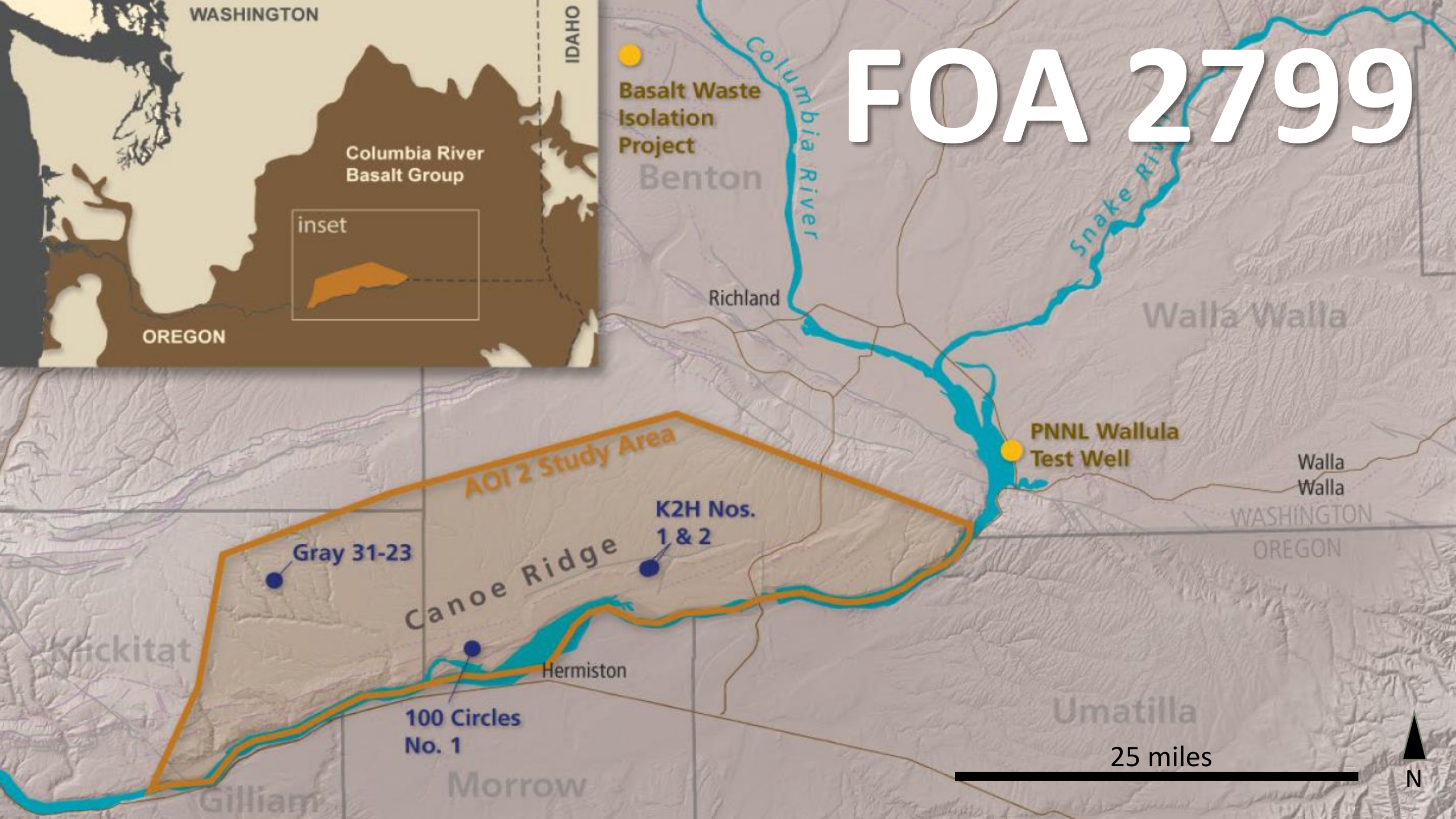


- SCO2T pilot project for PNW
- Stakeholder engagement
 - Industry / NGO
 - Public outreach
 - Regulators / Policymakers
- 500 well logs digitized to LAS format
- Created WA CCUS website
- WA legislative bill analysis
- Emissions matrix ranking for WA, OR, ID
- Basalt Big Questions workshop
- Water quality, geochem, mud, and pressure from old well files

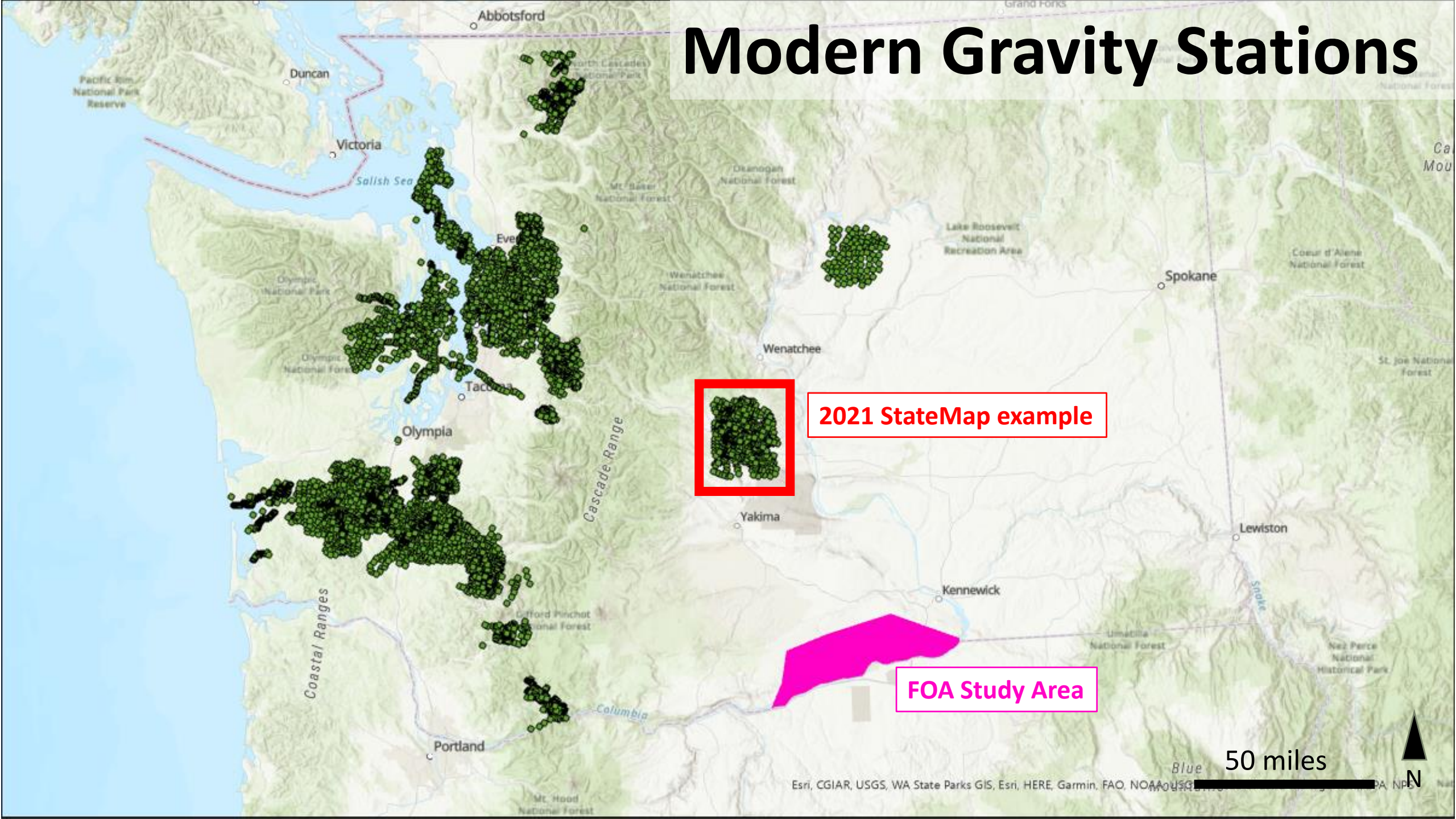




FOIA 2799



Modern Gravity Stations



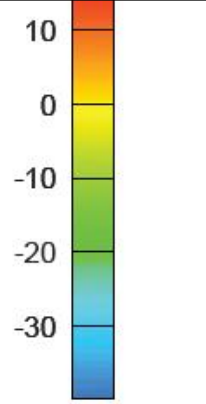
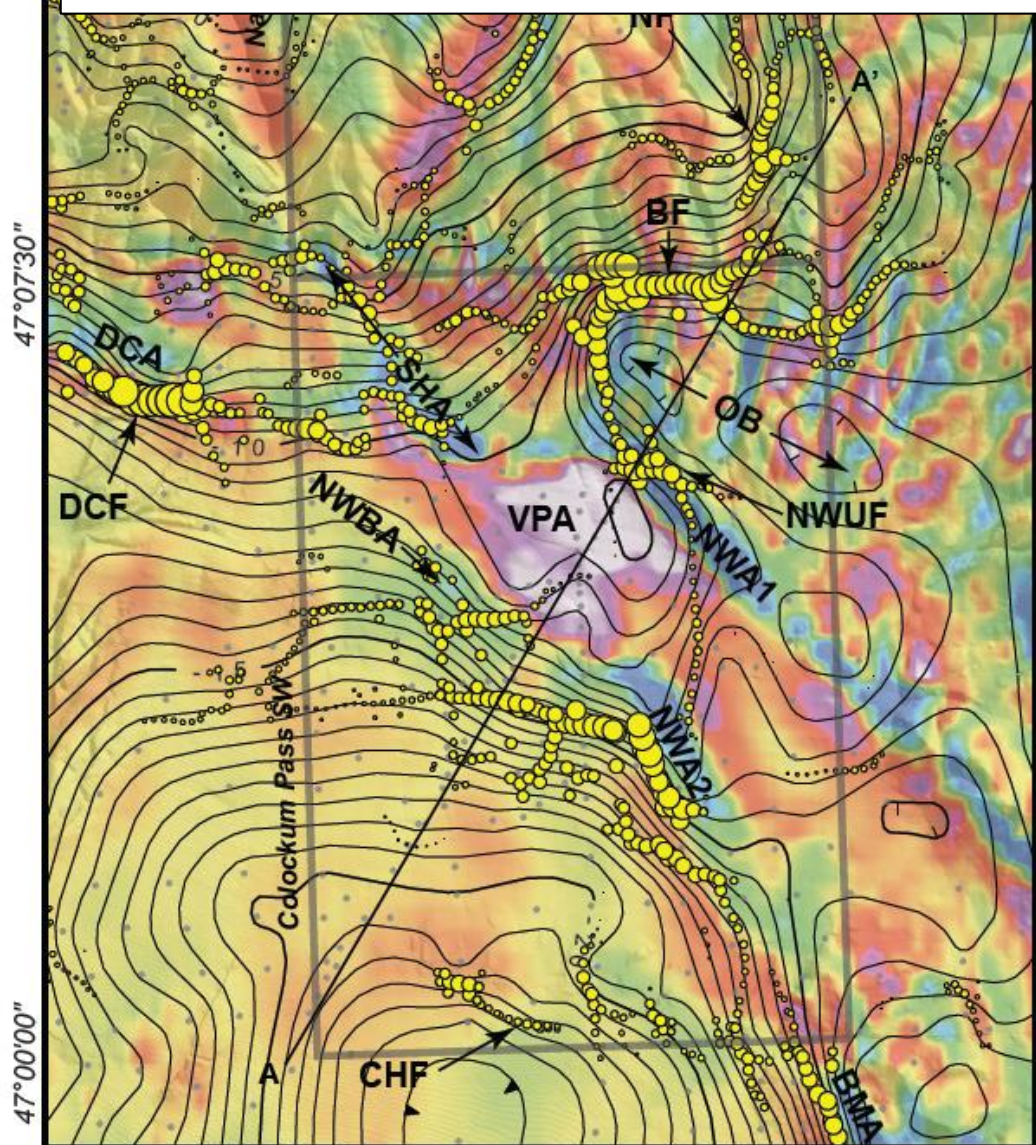
2021 StateMap example

FOA Study Area

50 miles



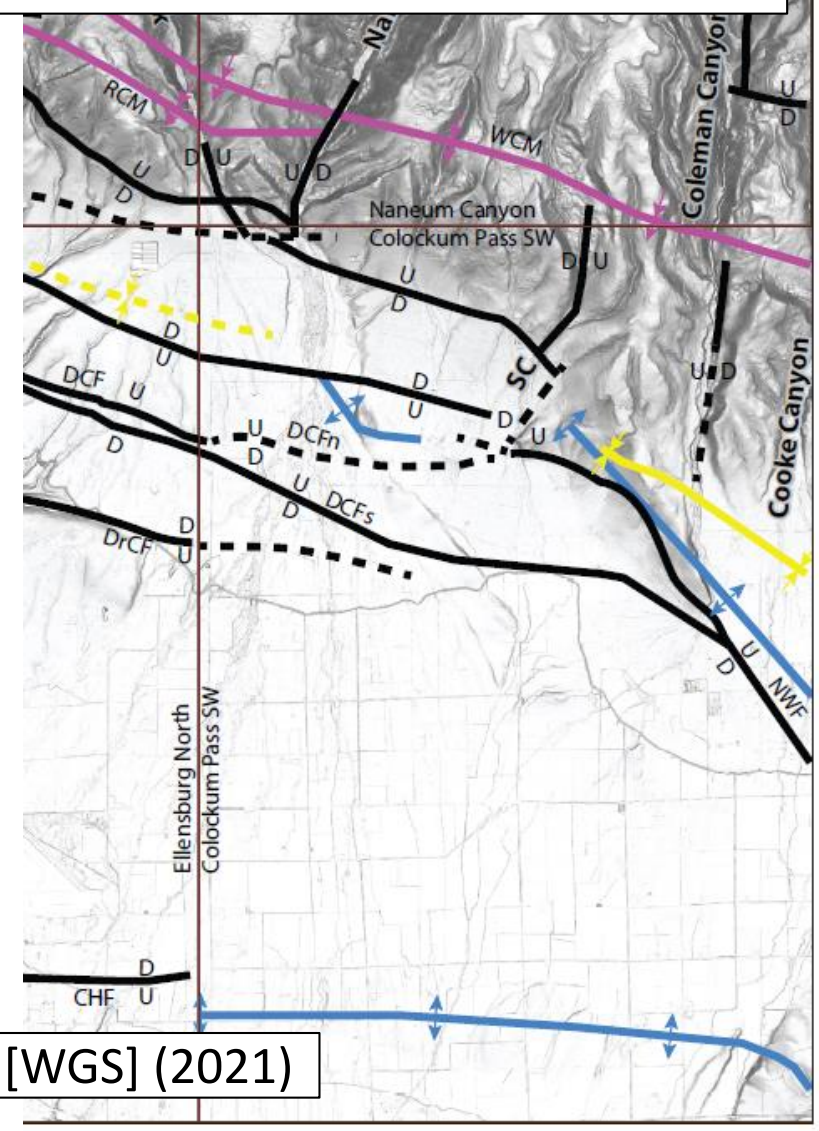
Fault interpretation from gravity / magnetics



Residual Aeromagnetic Anomaly nT

● high ○ low

● Gravity "max spot"

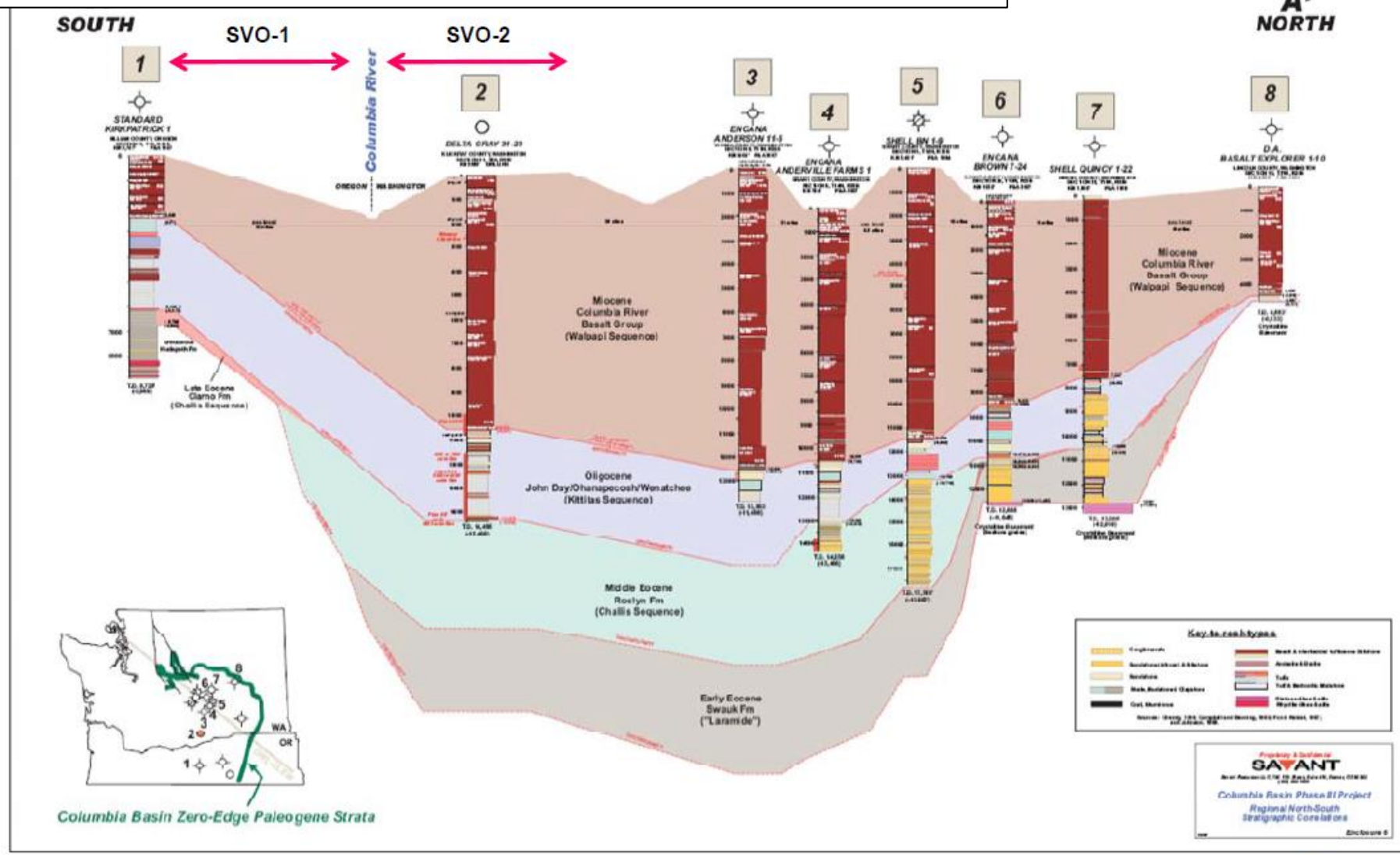


Sadowski et al. [WGS] (2021)

Seismic Acquisition Discussions

COLUMBIA BASIN

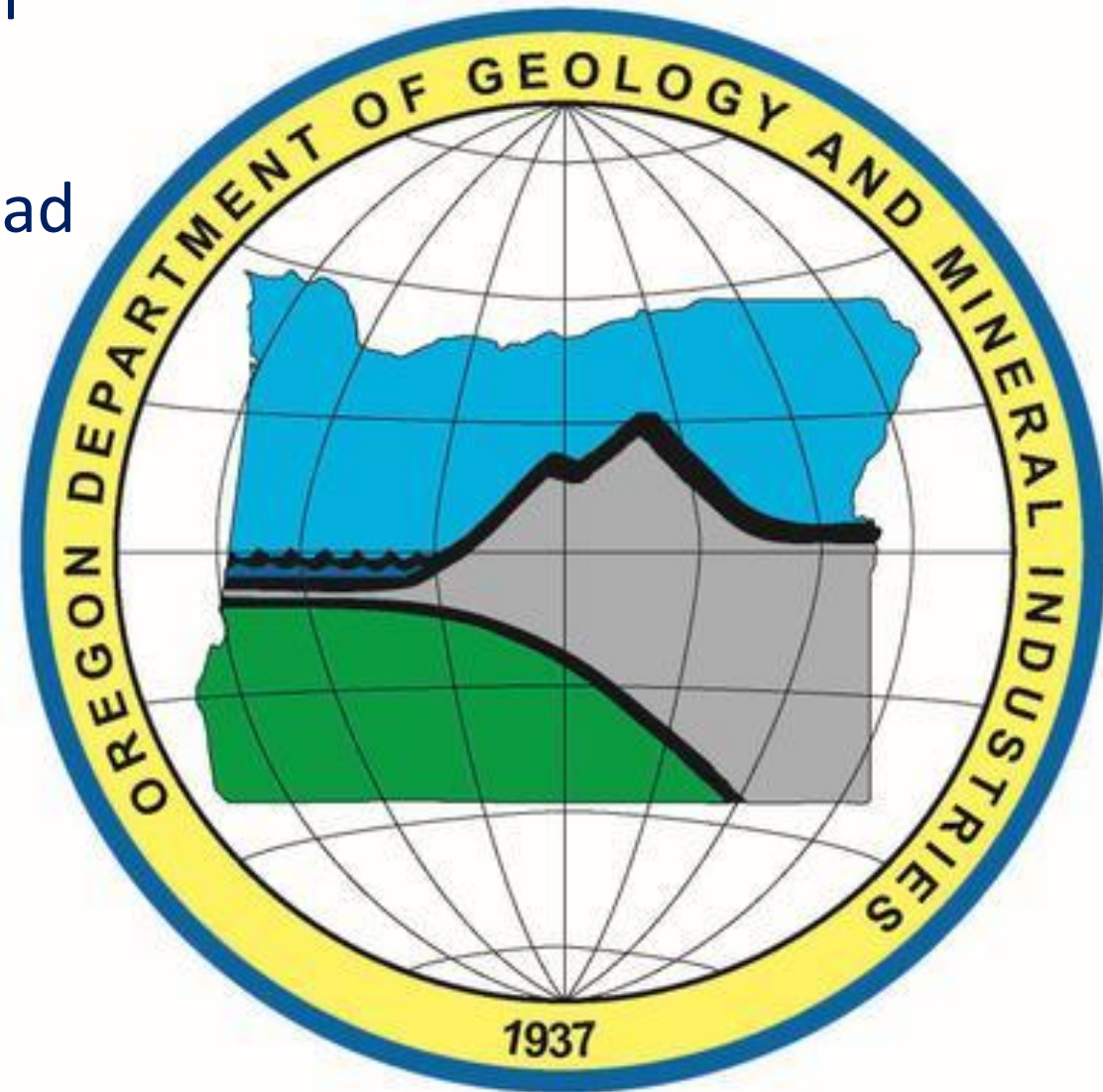
A' NORTH



Collaboration with DOGAMI



- Proposed community benefits plan
- Public outreach
- DOGAMI StateMap (7.5 minute quad mapping) team straddles border



Ankeron DAC Hub - FOA 2735

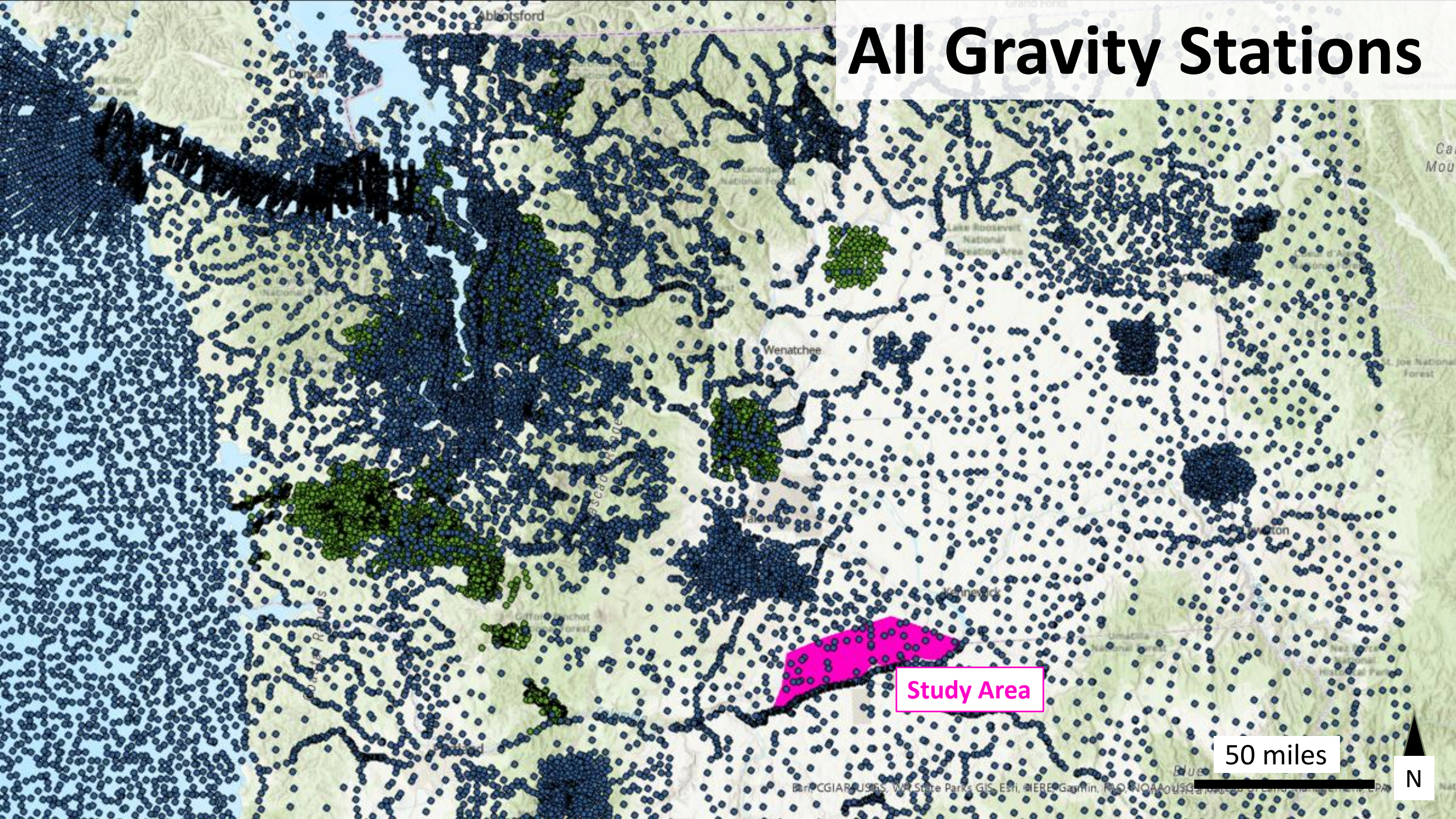
Leading & emerging **DAC** technology corporations,
basalt sequestration experts, engineering &
construction, and utility & **power** generation
firms focused on the **Pacific Northwest**

WGS basalt work **complements PNNL expertise** by planning gravity and seismic acquisition, focused outreach, and hydrogeochemical analysis of hydrocarbon and water wells.

Our publicly accessible data will help prove leads and benefit exploration in the Columbia Basin **by lowering entry barriers.**



All Gravity Stations



Study Area

50 miles





WILL GALLIN



Site in the Rain
WORKSITE LEVEL

William

