



# Spokane Aquifer Joint Board

## SVRP Model Update

Spokane River Forum, April 23<sup>rd</sup>, 2025



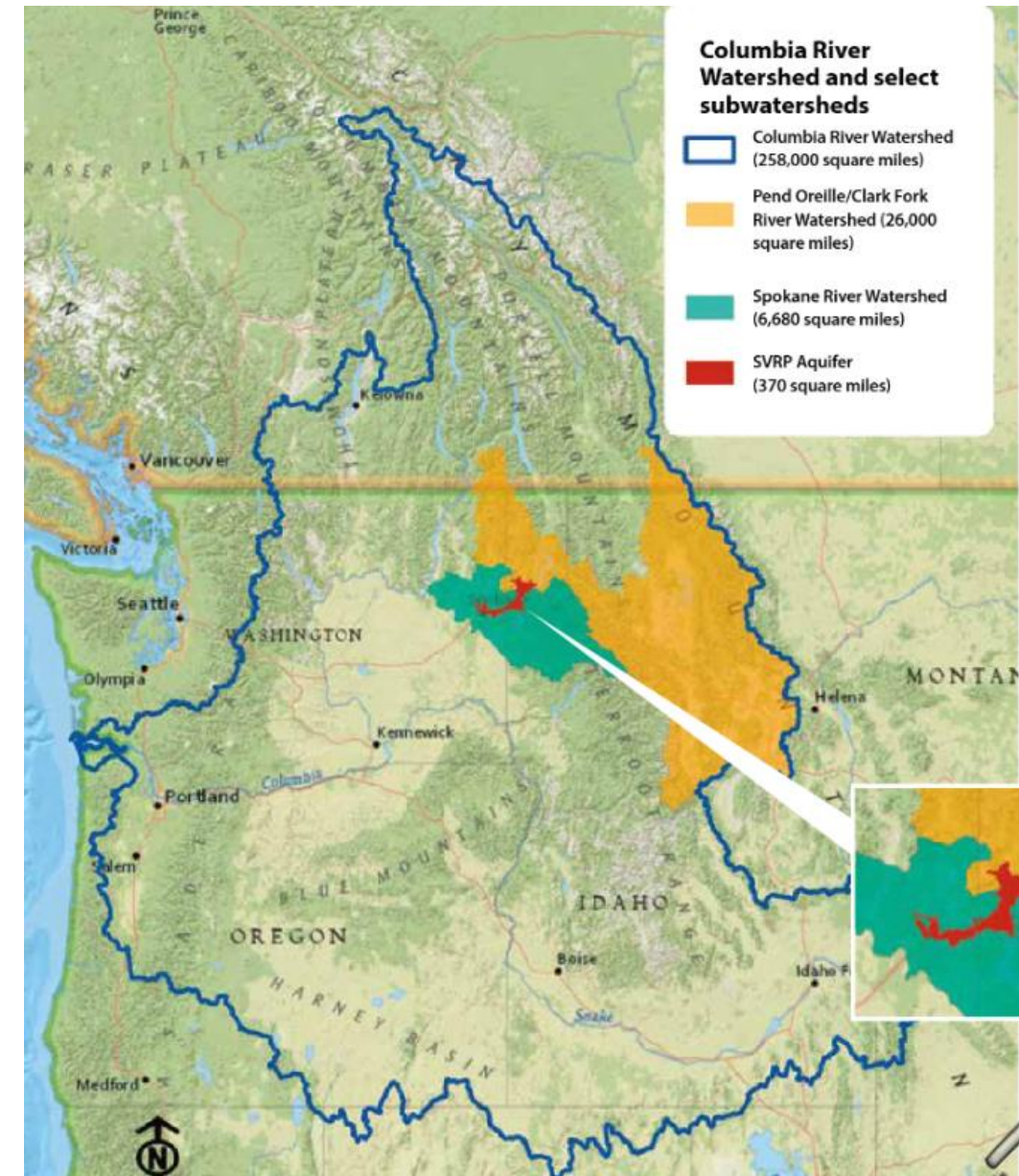
# Members

- CARNHOPE IRRIGATION DISTRICT 7
- CONSOLIDATED IRRIG DIST 19
- EAST SPOKANE WATER DIST 1
- HONEYWELL ELECTRONIC MFG LLC
- HUTCHINSON IRRIGATION DIST #16
- IRVIN WATER DISTRICT #6
- KAISER ALUMINUM TRENTWOOD
- LIBERTY LAKE SEWER & WATER DISTRICT
- CITY OF MILLWOOD
- MOAB IRRIGATION DIST #20
- MODEL IRRIGATION DIST #18
- MODERN ELECTRIC WATER CO
- NORTH SPOKANE IRRIGATION DISTRICT 8
- ORCHARD AVENUE IRRIGATION DIST 6
- PASADENA PARK IRR DIST 17
- SPOKANE COUNTY WATER DIST 3
- SPOKANE BUSINESS & INDUSTRIAL PARK
- CITY OF SPOKANE
- TRENTWOOD IRRIGATION DISTRICT 3
- VERA WATER & POWER
- WHITWORTH WATER DISTRICT 2

# Who We are

- 21 water purveyors
- Formed in 1995 under RCW 39.34 – Washington Interlocal Cooperation Act
  - ~\$250,000 annual budget
- We all pull from the Spokane Valley-Rathdrum Prairie Aquifer
  - EPA designated Sole-Source Aquifer, serving over 600,000 people between CdA, ID & Spokane, WA
  - One of the most transmissive aquifers in the world

[Spokaneaquifer.org](http://Spokaneaquifer.org)



# Why Update

- Current model framework is out dated and unsupported
  - \$\$\$ To Run
- Need to bring into current age to leverage for the future
  - Able to incorporate past and present modelling efforts into this model version
- Crazy growth happening aquifer-wide
  - We need to understand, as best we can, the dynamics of our sole-source aquifer now
  - 200,000 to 400,000 more people drawing from this waterbody will change .....
- Ability to “plug-in” new modules in the future

# Funding

- SAJB applied for a Washington State Department of Health – Source Water Protection Grant
- Was awarded \$60,000 to complete the analysis
- SAJB Matching ~\$25,000
- Completed by end of 2025

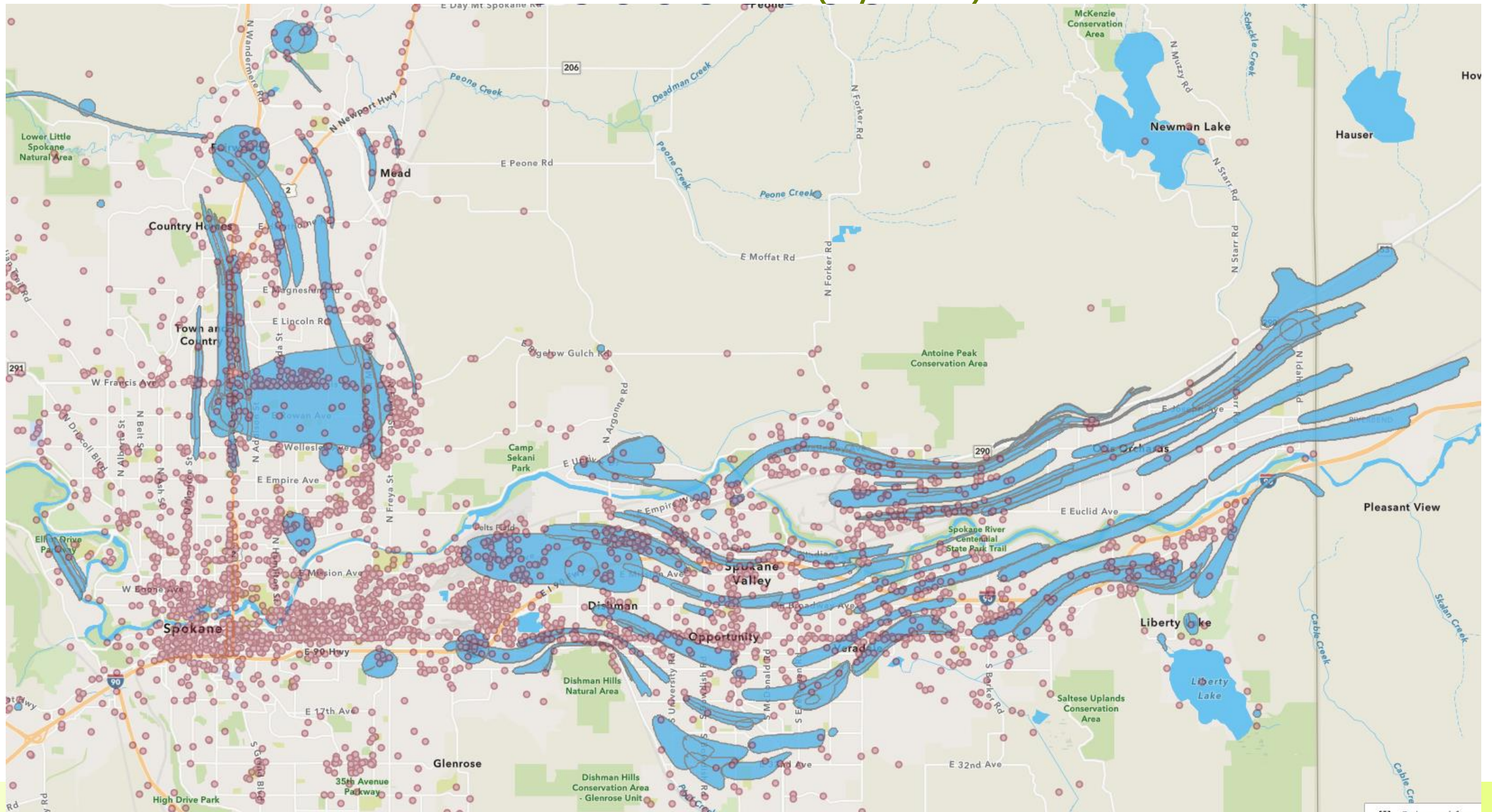


# What we are going to do

- Update wellhead protection zones
  - Recognized by DOH as regulatory
  - Since last model run, member wells have been added, pumping practices have changed, and more wells are in the works
- Climate Change analysis
  - Need to understand range of possibilities to plan for infrastructure adjustments
  - Quantity issues?
- Incorporate recent hydrogeologic data to fill in gaps/inferred
- Train local professionals to use model software
  - (Jeremy is excited!)



# Potential Contaminant Sources (1yr tot)

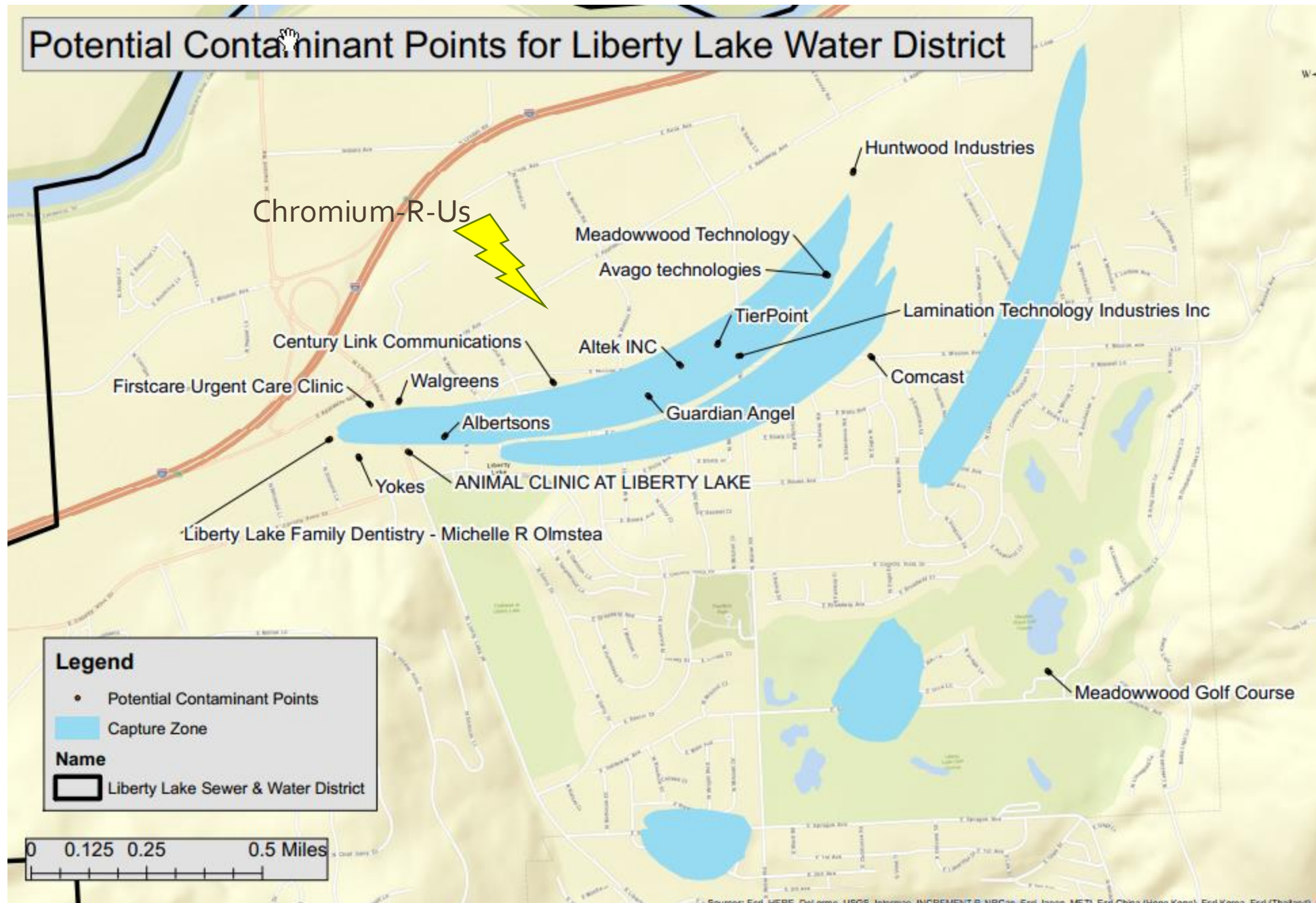


# Wellhead Protection

- ACCURATE CAPTURE ZONES ARE CRITICAL
- Potential Contaminant Source Inventory
  - Annual survey of businesses and development in SAJB member service-areas
  - Long-running database
- Groundwater monitoring
  - DOH required water system compliance sampling
  - Spokane County Water Resources monitoring program
  - **Spokane County Aquifer Protection Area (vote!)**
- Working together with agencies and municipalities to bolster rules/ordinances which protect groundwater



# Potential Contaminant Points for Liberty Lake Water District



# Gravel Pit Problem

- Exposed sole-source aquifer
- Land Uses adjacent
- Potential contamination
- Current and future wellhead capture zones intersect
- Jurisdictional ???
- Post-mining reclamation plans

Quarry	Exposed Acres	Distance to Railroad	Intersecting Well Capture Zones
Lawrence B Stone Lake	5.96	235 feet	2
CPM - Havana	9.67 & 7.02	260 feet	1
Broadway/Sprague	59.5	200 feet	6
CPM - Sullivan	67.1	275 feet	16



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ish stocking





## Broadway & Sprague

Visible from I-90

Very Deep

Reports of fish stocking



# Sullivan CPM





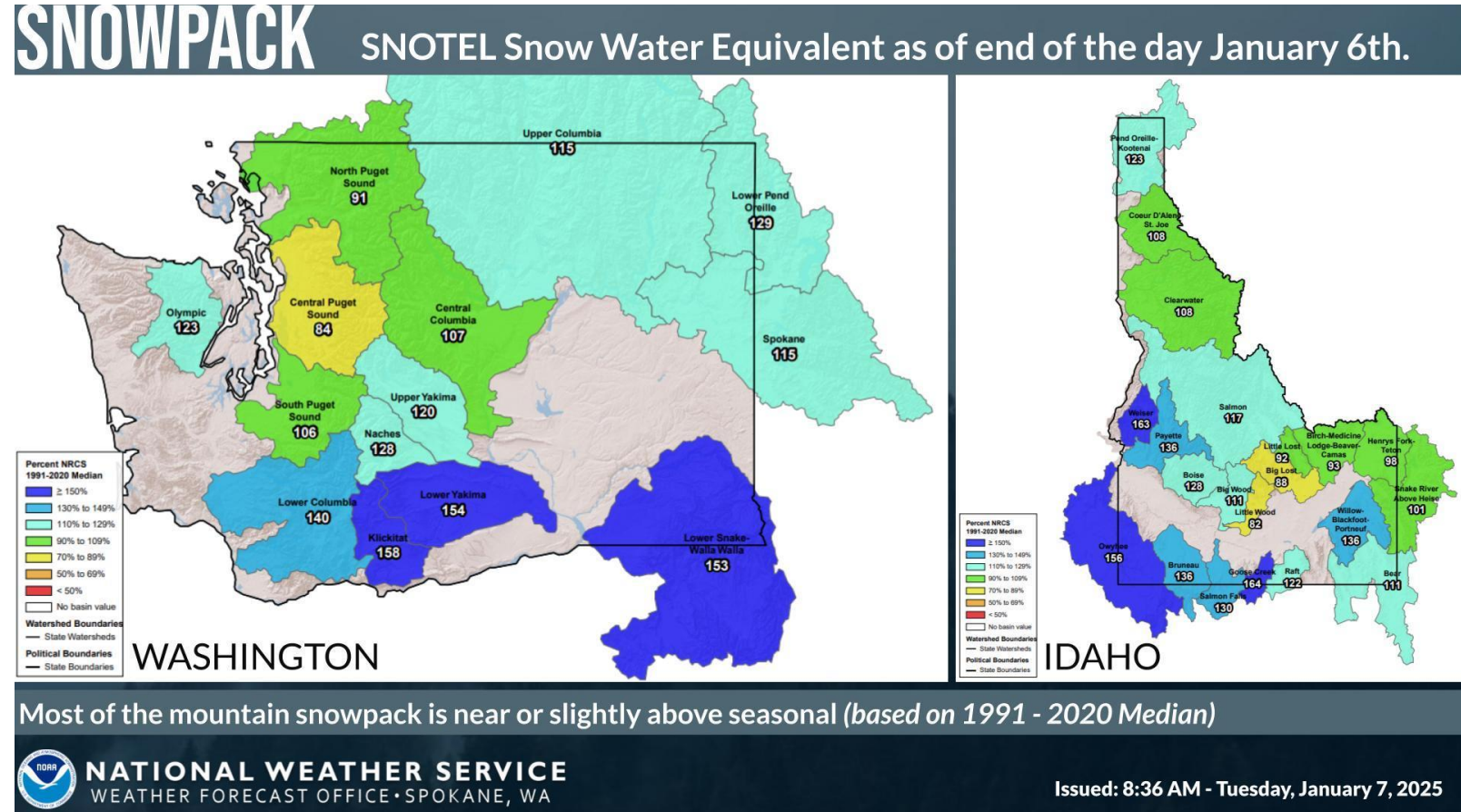


# Long Range Planning

- Quantity
- Quality
- Infrastructure
- Climate Change

# Worst Case Scenarios

- Contamination event
  - Local
  - Widespread
- Low to no snow accumulation
- WA/ID conflict







Thank You!

Jeremy Jenkins

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Sewer and Water District

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