

Spokane Valley -  
Rathdrum Prairie  
(SVRP)  
Aquifer Protection Area  
(APA)

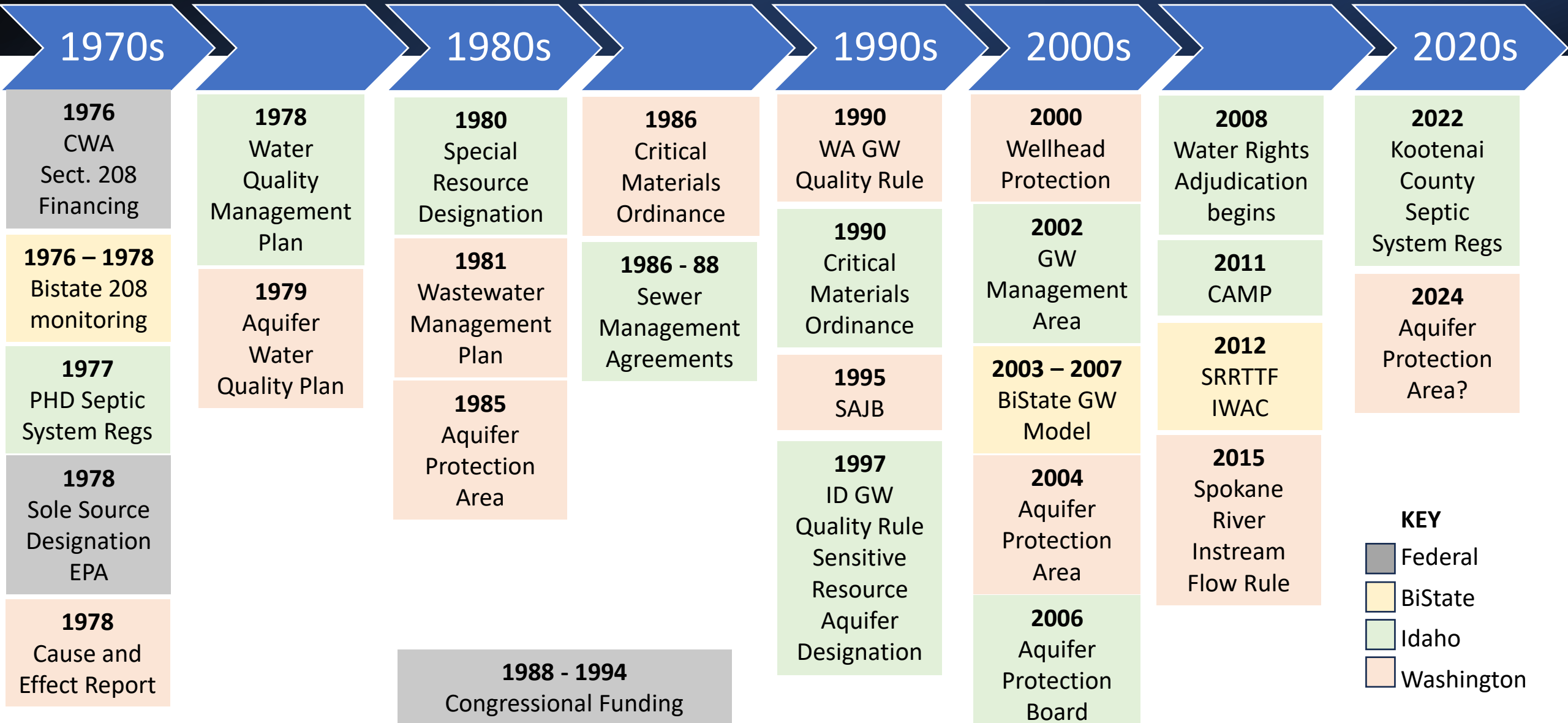
Amy Sumner  
Spokane County

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Celebrating  
Tomorrow's  
Fresh, New  
Environment



# Brief History of Aquifer Protection/Collaboration



**KEY**

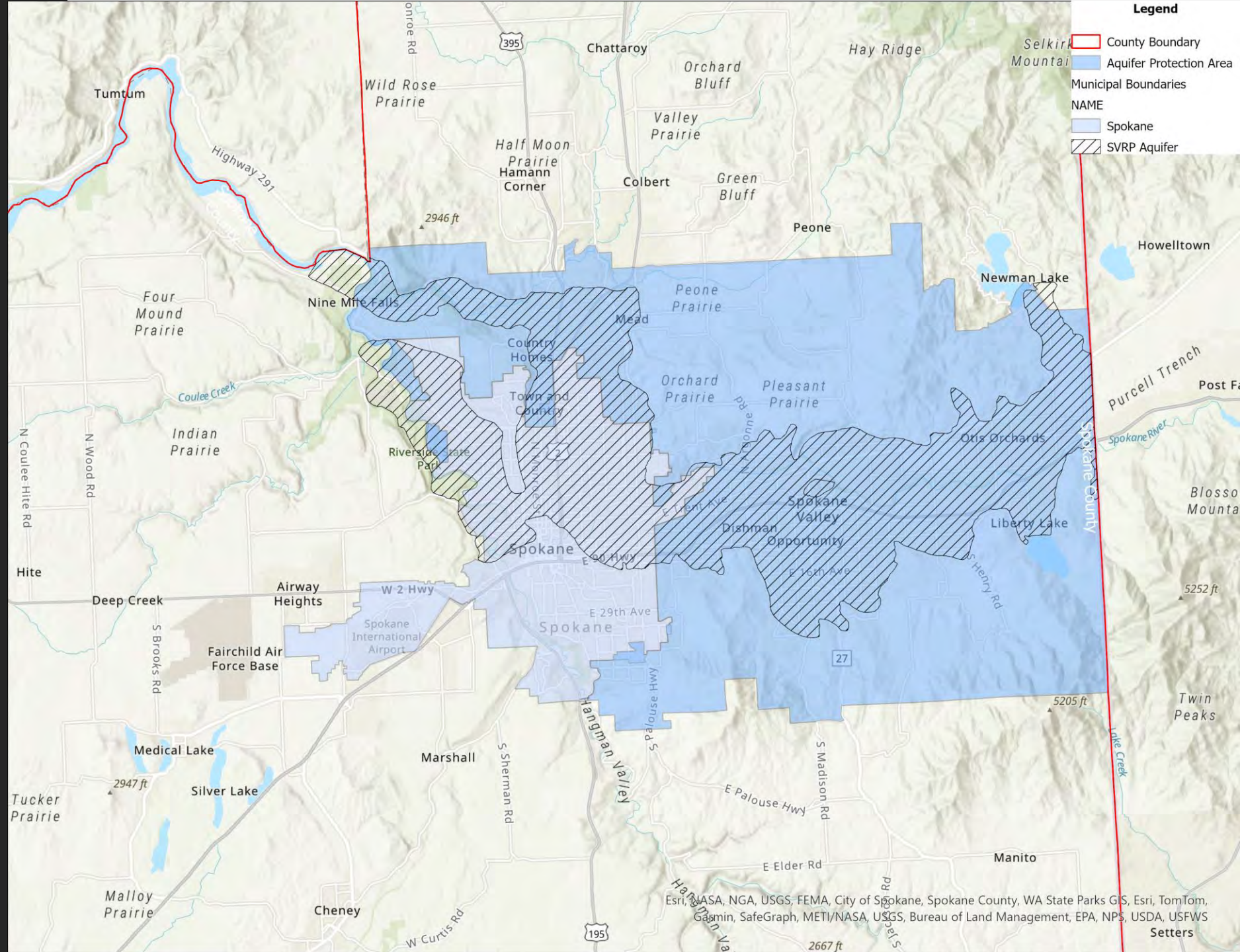
- Federal
- BiState
- Idaho
- Washington

# Aquifer Protection Area

1985

2004  
(excluding  
City of  
Spokane)

2025??

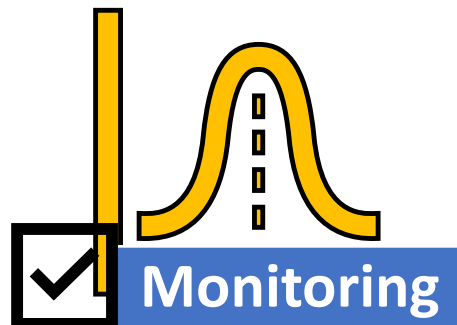


Esri, NASA, NGA, USGS, FEMA, City of Spokane, Spokane County, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS Setters

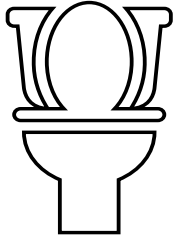
# APA Fees

**~\$15 per parcel per year & has NOT increased since 1985**

**Allowable expenditures (RCW 36.36.040) include:**



# APA Accomplishments



## Sanitary Sewer Infrastructure

Spokane County Regional Water  
Reclamation Facility (SCRWRF) in 2011

Sewered ~30K homes

Replaced 75% septic systems over SVRP

Treat ~7 MGD wastewater

First in region to use membrane filtration

Agreement with City of Spokane for  
treatment of N. Spokane wastewater



# APA Accomplishments



## Water Resources Education

Served 55.7K students since 2010

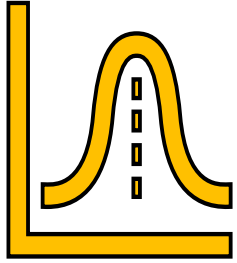
This represents 14 of 19 Spokane County School Districts

60% of the students are from the 5 School Districts overlying the SVRP Aquifer

Since 2018 onsite education at the WRC has doubled



# APA Accomplishments



## Monitoring Program

Routine sampling of 51 locations

21 parameters

~59.4K data points

Coordination with 12 water purveyors

Annual reporting of data

20-yr (1999 – 2019) Analysis







SVHM Photo Collection. Stateline, 1940



Google Earth. Stateline, 2019



SVHM Photo Collection. Sullivan Rd., 1965



Google Earth. Sullivan Rd., 2019

Spokane County Water Resources (2023). Spokane Valley Rathdrum Prairie Aquifer, Spokane County WA Long-term Monitoring Program 20-Year Analysis (1999 – 2019).

**Legend**

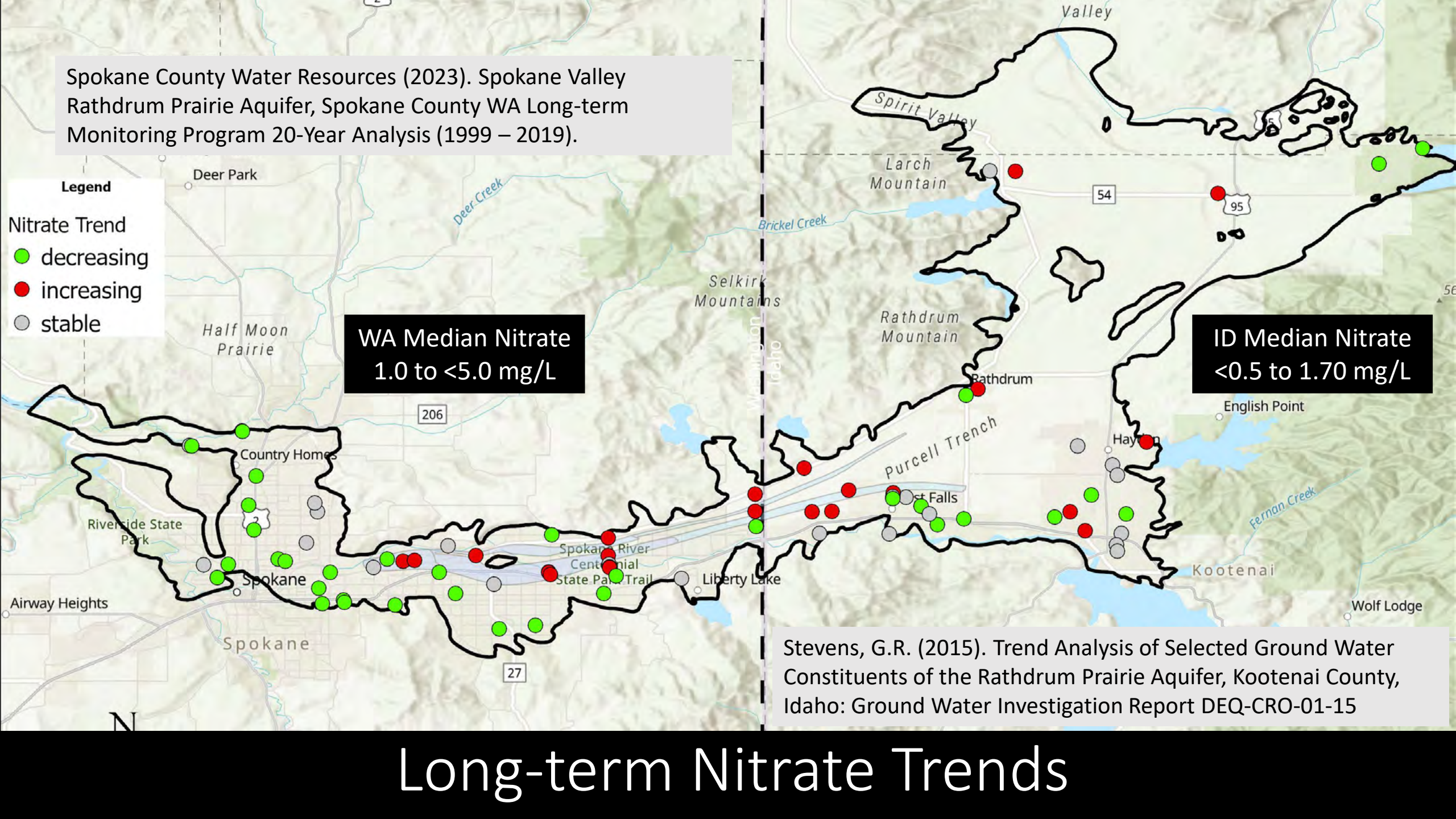
- Nitrate Trend
- decreasing
  - increasing
  - stable

**WA Median Nitrate  
1.0 to <5.0 mg/L**

**ID Median Nitrate  
<0.5 to 1.70 mg/L**

Stevens, G.R. (2015). Trend Analysis of Selected Ground Water Constituents of the Rathdrum Prairie Aquifer, Kootenai County, Idaho: Ground Water Investigation Report DEQ-CRO-01-15

# Long-term Nitrate Trends



Spokane County Water Resources (2023). Spokane Valley Rathdrum Prairie Aquifer, Spokane County WA Long-term Monitoring Program 20-Year Analysis (1999 – 2019).

**Legend**

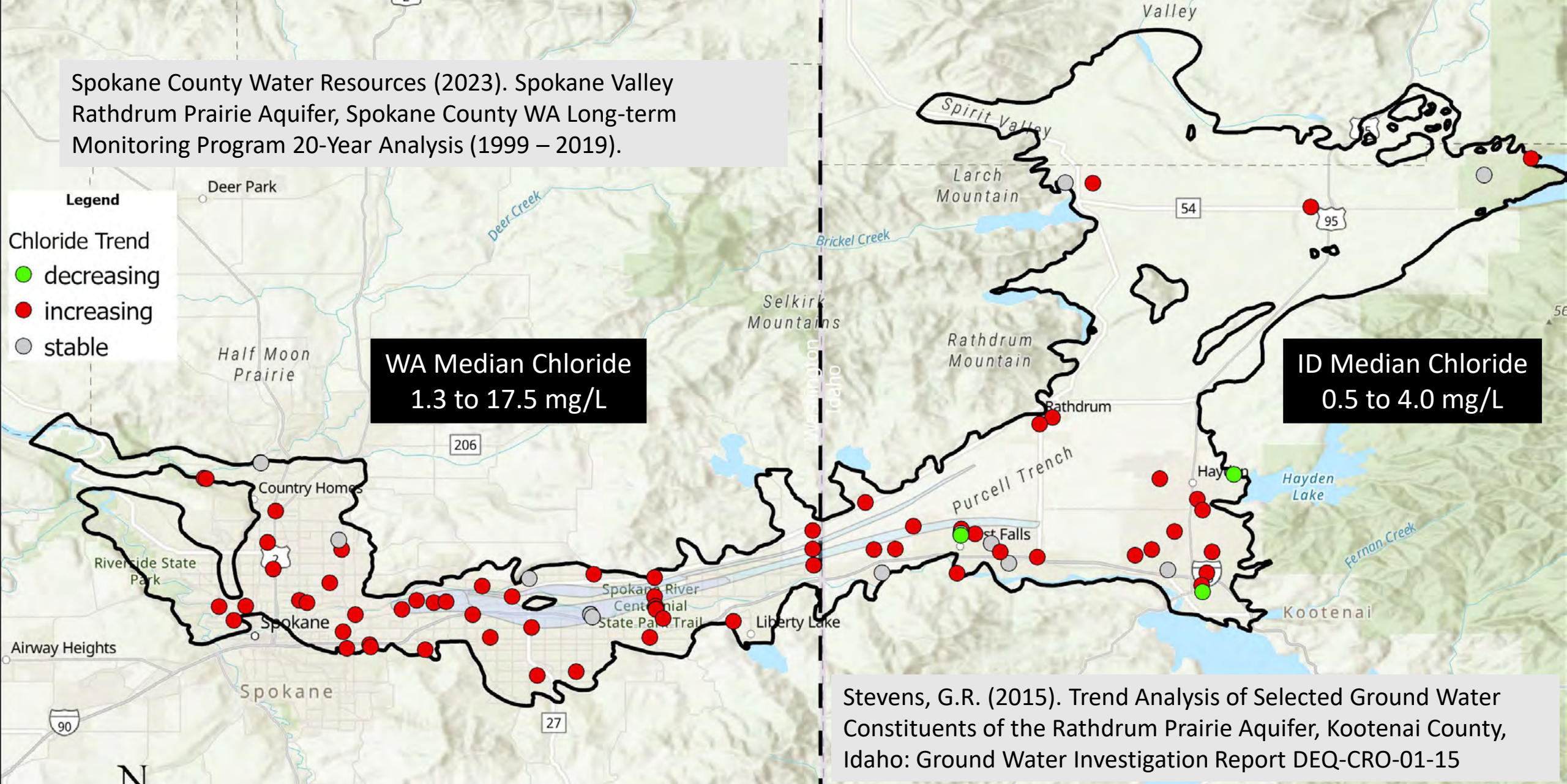
- Chloride Trend
- decreasing
  - increasing
  - stable

**WA Median Chloride  
1.3 to 17.5 mg/L**

**ID Median Chloride  
0.5 to 4.0 mg/L**

Stevens, G.R. (2015). Trend Analysis of Selected Ground Water Constituents of the Rathdrum Prairie Aquifer, Kootenai County, Idaho: Ground Water Investigation Report DEQ-CRO-01-15

# Long-term Chloride Trends





**Spokane County**  
WASHINGTON



**WHITWORTH**  
WATER DISTRICT



DEPARTMENT OF  
**ECOLOGY**  
State of Washington

**MODERN ELECTRIC**  
**WATER COMPANY**



**CONSOLIDATED**  
**IRRIGATION**  
DISTRICT 19

**North Spokane Irrigation District**

**Orchard Ave Irrigation District**

**Pasadena Park Irrigation District**

**Irvin Water District**

NOTE: These organizations were not involved in the making of this presentation and are not responsible for its contents.

# Questions?



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