



PFAS

Dealing with “Forever” Chemicals

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Water Quality

- ▶ City of Spokane has a robust Water Quality monitoring program
 - ▶ Thousands of tests for a variety of contaminants completed annually
- ▶ For 2024, as in previous years, the City has met all federal and state water quality requirements
- ▶ In 2023, the City added new testing for PFAS contaminants
- ▶ In 2024, EPA adopted new requirements for PFAS



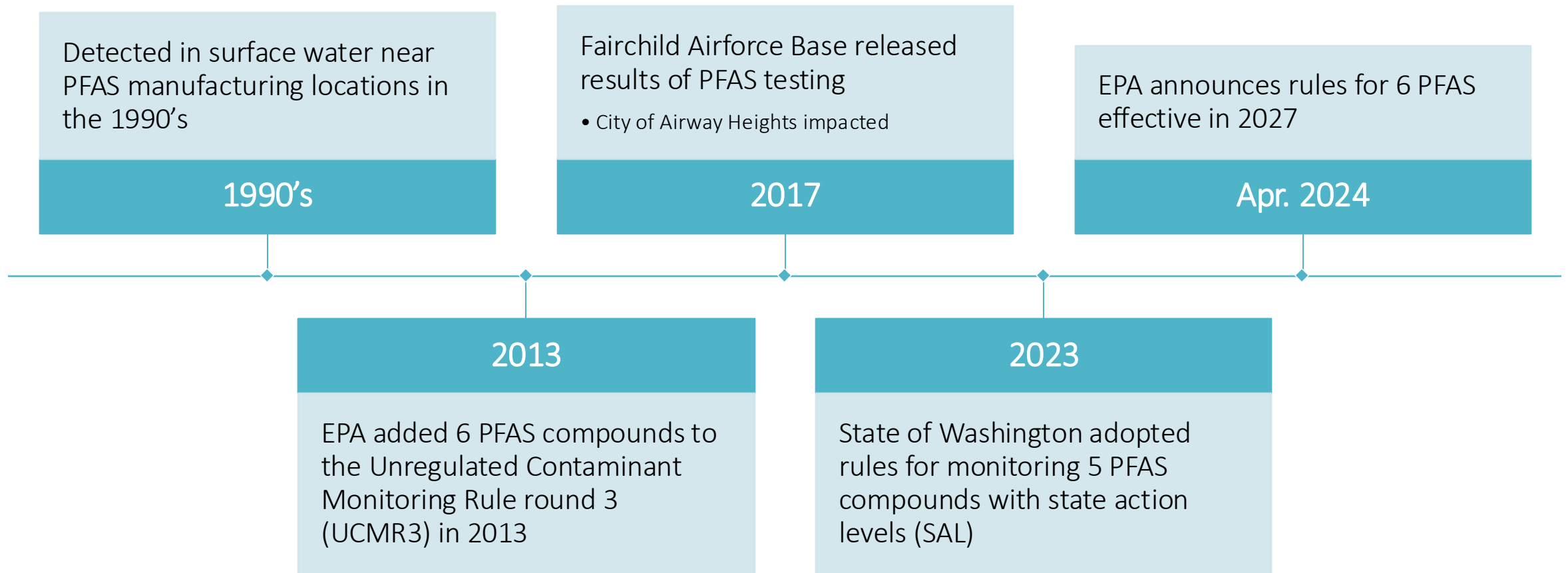
Background of PFAS

▶ PFAS – per-PolyFluoroAlkylSubstances

- ▶ PFAS chemistry was discovered in the late 1930's
- ▶ The Fluorine – Carbon bond is one of the strongest in chemistry
- ▶ In the early 1950's they began to appear in consumer and industrial products
- ▶ Now more than 11,000 compounds
- ▶ The chemistry contributes to their non-stick and friction-reducing properties
- ▶ Used to repel water, resist stains & grease, smother fire
- ▶ **Examples:** firefighting foam, ski wax, carpets, flame-resistant clothing, non-stick pans, etc.
- ▶ In May 2000, the major producer of PFOS announced a voluntary phase out of production of PFOS, PFHxS, and PFOA

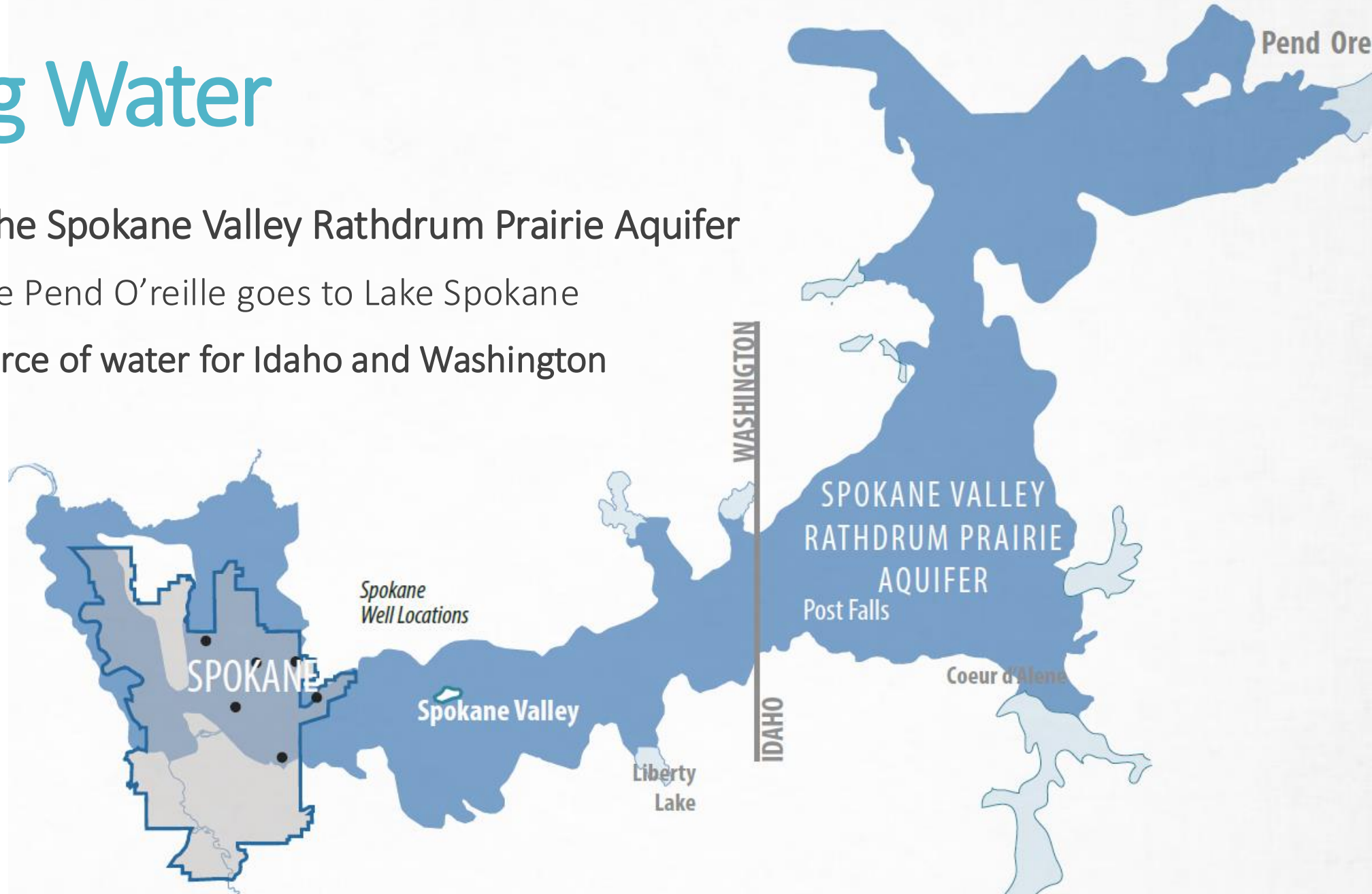


History of PFAS in water



Drinking Water

- ▶ Our source is the Spokane Valley Rathdrum Prairie Aquifer
 - ▶ Starts at Lake Pend O'reille goes to Lake Spokane
 - ▶ Amazing source of water for Idaho and Washington
 - ▶ Very clean



Testing at the Source

- ▶ The City has 8 wells
 - ▶ Havana added in July 2024
- ▶ All located in the east part of the City
- ▶ Not all are used year round



City Testing

- ▶ 2015 - City tested 5 wells Central, Hoffman, Nevada, Parkwater, and Ray Street
 - ▶ No PFAS detected
 - ▶ Test method not as sensitive with limits of 10 to 90 parts per trillion (ppt).
- ▶ 2023 – City tested 7 wells under new State rule with new testing method
 - ▶ Detections at Grace and Ray Street.
 - ▶ Test is sensitive down to 2 ppt
- ▶ 2024 - City tested 6 wells for 29 PFAS compounds
 - ▶ Detections at Ray Street and Havana
- ▶ 2025 - Will sample Ray, Grace, Havana, Well Electric every quarter in 2025



EPA compliance

Rule compliance for PFOA and PFOS is based on running annual average (RAA) of 4 consecutive quarters

Ray Street results

	Sample Date								
Compound	3/20/2023	4/25/2023	7/25/2023	10/24/2023	2/20/2024	6/6/2024	8/27/2024	10/22/2024	1/28/2025
PFBS Perfluorobutanesulfonic acid	2.89	2.9	2.22	3.49	3.9	2.48	0	2.93	4.37
PFHxS Perfluorohexanesulfonic acid	< 2	< 2	< 2	< 2	< 3	< 2	0	0	2.14
PFNA Perfluorononanoic acid	< 2	< 2	< 2	< 2	< 4	< 2	0	0	0
PFOS Perfluorooctanesulfonic acid	4.44	4.74	0	4.9	6.1	0	0	0	6.29
PFOA Perfluorooctanoic acid	2.75	2.97	0	2.82	0	2.44	0	0	0
HFPO-DA Hexafluoropropylene oxide dimer acid	< 2	< 2	< 2	< 2	< 5	< 2	0	0	0

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PFOS RAA				3.52	3.94	2.75	2.75	1.53	1.57



Putting Results in Perspective



City's detections are at **very low levels**

By **comparison**, Airway Heights had test results as high as **1,500 and 1,700 pp/trillion** for PFOA and PFOS

Fairchild Air Force Base had test results that were **magnitudes higher** than Airway Heights



What else

- ▶ City has a long-term, expanded water supply agreement with Airway Heights
- ▶ City also directly serves many properties in the West Plains
- ▶ Evaluating what else we can do
- ▶ City has sued PFAS manufacturers as part of Multi-District Litigation
 - ▶ 3M, DuPont, Tyco, BASF
 - ▶ Similar to litigation we were involved in related to PCBs
 - ▶ Funding would be used to address contamination in our system



Aquifer Protection Area



City has an opportunity
to join Spokane
County's Aquifer
Protection Area (APA)



The current
authorization for the
County's APA expires at
the end of 2025



County will ask voters
to renew the APA



Council voted to allow
County to put the item
before City voters




Possible uses for APA funds by City

- **Protection** of our sole source **aquifer** is important to the **City of Spokane**
 - *We operate the **largest drinking water utility** in the region!*
 - *Deliver up to **150 million gallons a day!***
- **Potential uses** of APA funding:
 - *Investing in **infrastructure that addresses pollutants** of concern, such as **PFAS***
 - ***Controlling stormwater** in both our separated and combined sewer areas*
 - ***Delivering projects** that would mitigate the impacts of climate change on the aquifer*
 - ***Public education** relating to the aquifer and best management practices*
- **APA would raise** about \$1.8 M/year for the City



What's Next



More closely evaluate requirements and timelines under new EPA rule

- Determine needed additional testing and monitoring needs
- Develop a plan to address levels of PFAS in our water



Investigate technologies and approaches to address concerns



Support Spokane Aquifer Joint Board in investigating potential sources

- Review results of other water purveyors in our region



Continue work on plans to:

- Support **Airway Heights**
- Monitor concerns at **Spokane International Airport** and **West Plains**





Questions?