



Date: August 15, 2024

Commissioner French's PFAS/PFOA Timeline

This timeline is being provided at the request of some of my constituents.

Prior to 2017 there was no general knowledge about the presence or health complications derived from PFAS substances. PFAS substances were created in 1938 as a "forever chemical" and incorporated into industrial processes in 1940 and then in consumer products in the 1950's. **Attachment A** identifies the evolution of the product and ultimate determination that it was a health risk to humans. While I had no knowledge of PFAS prior to the revelation of Fairchild Air Force Base (FAFB) in 2017 a representative of the Washington State Department of Ecology acknowledged at the June 3, 2024, Annual meeting of the West Plains Water Coalition that Ecology has known about the presence of PFAS on the West plains for over 20 years.

In 2017 Fairchild Air Force Base acknowledges that the levels of PFAS in the aquifer under and from the Base had reached unhealthy level. This acknowledgement created a public health crisis, distressing many in the community, including me. Prior to that notice I, like many in the community, had no idea of the presence of PFAS or the potential health risk from it in our systems. The initial response was to immediately get bottled water to individuals for drinking purposes. The next step was to determine if the PFAS was in the water system for Airway Heights. When it was discovered that the wells serving Airway Heights were contaminated then the connection to the wells had to be terminated and the municipal water system needed to be converted to the City of Spokane's system. While that effort helped City of Airway Heights residents, it did not help those in the rural areas downstream from the Base. Fairchild started the process of testing wells for contamination and providing filtration systems for domestic water service but not for agricultural use. The area designated by Fairchild was limited in scope and many whose wells tested positive were outside of the zone for mitigation by Fairchild.

Because of the proximity of Spokane International Airport (SIA) to Fairchild Air Force Base (FAFB) the leadership of SIA retained the services of environmental consultants to determine if PFAS from FAFB had contaminated SIA property. Four monitoring wells were tested with three of them testing positive for PFAS and the fourth was below health standards. Additional monitoring wells were then ordered to be installed and a monitoring program established to track the presence of PFAS on SIA property.

Initial testing results were shared with Whitney Ward of KREM 2 News by Todd Woodard, Public Information Officer for SIA via email on November 22, 2017. Mrs. Ward acknowledged receipt of the information in a return email. This email exchange is attached as **Attachment B**.

The email also acknowledges that the amount of PFAS chemical used by SIA over a 20-year period was in the range of less than 30 gallons. The chemical was used by SIA to respond to required testing of equipment by the Federal Aviation Administration (FAA). Training for firefighters occurs in Moses Lake and there is no other use for the product on SIA property. As Mr. Woodard responds the product is no longer used on SIA property.

This exchange was the first public notice of the presence of PFAS on SIA property. At the time of this disclosure there was no requirement from any state or federal agency to report the results of the testing. SIA was forthright in the initial disclosure and every request since then as to the status of the presence of PFAS on SIA property. This information has been available to the public upon request ever since the initial disclosure.

The original suspicion about contamination on SIA property from FAFB comes from the fact that there is an existing storm-water drainage easement allowing FAFB to drain stormwater onto SIA property. That stormwater drainage is at both the surface and sub-surface levels allowing the transfer of PFAS from FAFB to SIA.

SIA is significantly different that FAFB in its operations. The air refueling tankers KC-135's carry aircraft fuel, 10,000's of gallons per aircraft. Aircraft using SIA property carry passengers. FAFB trains firefighting personnel on the base and uses 1000's of gallons per year verses 30 gallons in 20 years.

The Washington State Military Department through the state of Washington did own and use a portion of the SIA property for an Air National Guard station. While under the State's ownership the Air National Guard did use toxic chemicals on the

property. **Attachment C** describes the nature of the contaminate and the remediation conducted to address the contamination. Basically, the Department of Ecology said in Section 1, Paragraph 1, don't drink the water.

The extent of the contamination from FAFB and the impacts on Airway Heights and the adjacent rural property owners consumed a great deal of time and effort for 2018-2019. I engaged at all levels to advocate for expanded testing and mitigation. That advocacy included trips to Washington DC to meet with our federal delegation, FAA and the Pentagon. The universal response was "we are still in a learning mode".

On March 5, 2020, I joined SIA CEO Larry Krauter on a trip to Washington D.C. to meet with Senators Murray, Cantwell, Congresswoman McMorris Rodgers and FAA representatives. The goal was to get the federal agencies to address the presence of PFAS on commercial airports across the country. While there was research underway there was no technology to remove PFAS. On March 18, 2020, Governor Inslee signed a ban on the use of PFAS containing firefighting foam in the State of Washington.

March 19, 2020, began the COVID-19 epidemic response. Mass agency shutdowns across the country caused state and federal agencies to become non-responsive to any issues for almost two years.

In mid-2021 Spokane County staff briefed me about a grant opportunity from Ecology to study the geology and hydrology of the West Plains and specifically around SIA. **Attachment D** includes internal emails about the potential grant opportunity. On September 7, 2021, County CEO Scott Simmons and I discussed this grant opportunity from Ecology to conduct a "*Spokane County West Plains PFAS Transport and Fate Groundwater Study*." This study was clearly designed to provide data for future regulatory action.

SIA is jointly owned by the City of Spokane (50%) and Spokane County (50%) through an Interlocal Agreement. The Operation of SIA is controlled by an Airport Joint Operation Agreement Between Spokane County and the City of Spokane, **Attachment E**. Section 1.1 of that Agreement states "The Parties intend to vest the Board, to the fullest extent permissible by State and Federal law, with complete authority for the management and operation of the Airport for aeronautical and industrial development purposes subject to the specific limitations herein contained". The reference to the Board is the SIA Board. Under advice from legal counsel that clause meant that anything affecting SIA had to go to SIA.

The curious element about the grant offer was that Ecology was offering the County a grant to do Ecology's work. Ecology is a regulatory agency; they enforce the environmental laws of the State of Washington. Spokane County is a municipal corporation that delivers services to its citizens, we are not by state statute a regulatory agency. Even with the grant the county did not and does not have the resources to do the job of Ecology at the same level that Ecology can do. Ecology in partnership with the State Board of Health and the Environmental Protection Agency (EPA) has been able to bring resources and expertise that the County could not have done.

As the 50% owner of SIA the County clearly has a Conflict of Interest in doing the study. If the County conducted the study and it was determined that SIA was not a point source for any contamination, the credibility of the study would have fallen into question as it was clear the study would be used to identify the source of contamination and seek remediation.

SIA had already retained consultants and was conducting its own monitoring on the property. To have two studies being paid for with taxpayer dollars would have been a waste of taxpayer dollars.

After consultation with SIA leadership and legal counsel I indicated to County staff that the County was not the right agency to accept the grant or do the study. Commissioner Kuney came to the same conclusion without any interaction with me and suggested that the grant opportunity be presented to the Spokane Regional Health District (SRHD) for their consideration. At that point Ecology could have and should have moved forward with another entity to do the study. Had Ecology moved forward at that point the study and support for property owners impacted by PFAS but outside FAFB study area could have received help three years earlier.

The emergence from COVID in 2022 placed issues pre-COVID back on the table. On July 19, 2022, I met with representatives of the Palisades Neighborhood and agreed to take Ecology's grant offer to the full Board of County Commissioners which I did on July 26. After considering a variety of potential issues the Board of County Commissioners unanimously declined the grant. The Board of County Commissioners did recommend again that the grant opportunity be taken to the SRHD for their consideration. At the time, Commissioner Kuney was part of the leadership of the Health Board and carried the grant to the Health District. The Health District ultimately decided again that they were not able to fulfill the requirements of the grant and passed on the opportunity.

After some coordination with Ecology the City of Medical Lake notified Ecology that the city would accept and administer a modified grant. The study work would be performed by Dr. Chad Pritchard, a professor at Eastern Washington University with a doctorate in hydrology and a Medical Lake Councilmember. In my opinion, Ecology in partnership with EPA,

Washington State Board of Health and Dr. Pritchard are doing an excellent job. The County could not bring the resources to the table that Ecology is bringing and there is no taint of a conflict of interest.

During the balance of 2022 and into 2023 I continued my advocacy with FAFB, FAA and our federal delegation, see Attachment F, a letter to all three of our federal delegation. Awareness of the presence of PFAS contamination across the country was growing. PFAS was now a dominate element in every part of our lives as illustrated on Attachment A. The technology to be able to remove PFAS from water systems was growing but the science to remove it from an aquifer was not.

September 1, 2023, and again on September 5, 2023, in a public meeting I stated my support for the creation of an Aquifer Protection Assessment (APA) for the West Plains, similar to what was in place for the Spokane-Rathdrum Prairie Aquifer. This would provide needed resources to protect the West Plains aquifer. This is a voter approved assessment so it would require placement on a ballot for voter consideration.

Attachment F. On December 12, 2023, I penned a letter to each member of federal delegation seeking help to bring federal dollars to the West Plains since PFAS is a federal issue, whether for FAFB/DOD or SIA/FAA.

As I surveyed the opportunities for new water sources, they were very limited. I was then contacted by Albert Tripp, City Manager for Airway Heights asking if the County had any water rights that Airway Heights could purchase. He indicated that FAFB had offered a grant to drill a new well for the City of Airway Heights next to FAFB's wells behind the Community College. I had County staff identify all water rights that the County controlled. Staff surveyed park lands, Conservation Futures land and any other surplus property under county control and the results were disappointing.

The County had the Water Reclamation Facility in the Valley, and we were processing 8M gallons per day and placing it back into the river. I needed to find a mechanism to transfer that water to the West Plains. On February 21, 2024, I and Rick Desimone, the County's national political consultant met with the Region 10 Director for EPA to discuss opportunities and processes to bring resources to the West Plains. As part of that meeting, I presented my idea to bring clean water to the West Plains. It was his suggestion that I present the plan to Ecology for direction.

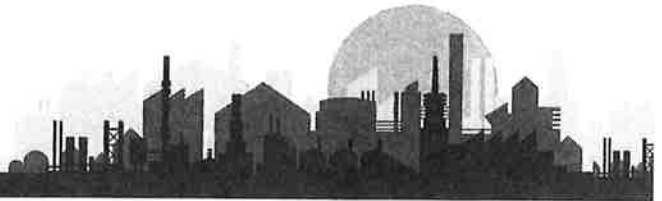
On March 28, 2024, Jeff Johnson of FAFB, John Culton, County federal consultant and I met with Brook Beeler, Regional Director for Eastern Regional Office of the Department of Ecology to present my idea for a new source of drinking water for the West Plains. After presenting the plan we discussed options for being able to get the right to drill a new well. It was during this conversation that the idea of a Trust Agreement was brought up. We discussed engaging with the tribes or another entity with senior water rights.

I have met with leadership of both tribes and presented the idea to them for their consideration. I have also reached out to a holder of water rights in Northern Idaho. Since then, the County has retained the legal services of an attorney that specializes in water rights and Trust Agreements to assist in creating this agreement for presentation to Ecology. The plan has also been presented to some of the State Legislators and federal delegation as I prepare to seek financial assistance for property owners that are out of reach of the municipal water system. The assistance sought would pay for filtration systems and mitigation.

Despite others being on SIA Board and receiving same information as I did, I am the only individual spearheading a new way to bring a new source of clean, drinking water to West Plains.

ATTACHMENT A

PFAS Timeline



1938:

- Per- and polyfluoroalkyl substances (PFAS) are invented.

1940s:

- PFAS industrial production begins.

1950s:

- PFAS start being used in consumer products.

1970s:

- Company scientists learn that two types of PFAS chemicals, perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS), are toxic from animal and workplace studies.

Early 2000s:

- Independent scientists discover several types of PFAS are widely present in people's blood.
- Studies show widespread PFAS contamination in the outdoor environment.
- PFOA and PFOS start being phased out of production in the U.S.

2008:

- State scientists start looking for PFAS in Washington's outdoor environment.
- State scientists find PFAS in surface water.
- State scientists find PFAS in osprey eggs and freshwater fish.

2009-2010:

- Scientists find PFAS in marine water and freshwater near wastewater treatment plants.

2013-2015:

- PFAS detected in drinking water in Issaquah, DuPont, and at Joint Base Lewis-McChord.

2016:

- Dept. of Health and Dept. of Ecology start work on State Chemical Action Plan.
- PFAS detected on Whidbey Island near military base.
- Military starts sampling drinking water at other bases for PFAS.
- Second statewide study of PFAS in surface water begins.
- EPA establishes Lifetime Health Advisory Level (HAL) at 70 parts per trillion for PFOA and PFOS.

2017:

- PFAS discovered in drinking water at Fairchild Airforce Base and Airway Heights.

2018:

- State bans PFAS in paper food packaging.
- State bans PFAS in AFFF firefighting foam.

2020-2022:

- PFAS found in drinking water around Yakima Training Center.

2021:

- State Action Levels for drinking water are adopted for 5 types of PFAS by State Board of Health.

2022:

- State adopts recommended cleanup standards for 6 types of PFAS.
- EPA releases interim Lifetime Health Advisory Level for PFOA and PFOS. For PFOA, the new interim level is 0.004 parts per trillion. For PFOS, the new interim level is 0.02 parts per trillion.
- PFOS Fish Consumption Advisory issued for Lake Washington, Lake Sammamish, and Lake Meridian.

2023:

- Public comment period opens on proposed rule to ban PFAS in 3 types of consumer products in our state.

What if my water has PFAS in it?

If PFAS in your water is higher than safe drinking water standards (we follow state and federal standards, whichever is lower), Ecology can provide a water dispenser and weekly water delivery to your home at no cost. Ecology is working with the Washington Department of Health to provide point-of-use (POU) filters at no cost, which would replace water delivery.

You will receive instructions for requesting safe water with your well sample results.

What are PFAS?

PFAS are manufactured chemicals that never disappear from the environment, which is why they are called “forever chemicals.” PFAS are water soluble and highly mobile. They are known to contaminate groundwater. They have been used in firefighting foam, furniture, carpet, clothing, electronics, and building insulation since the 1940s.

PFAS have been found in the blood of people and animals all over the world. Some studies on people exposed to PFAS over a long period of time indicate that exposure may have health effects.

Project background

Two potential PFAS sources in the northeast West Plains have been identified:

- Fairchild Air Force Base (FAFB) is investigating PFAS in groundwater and monitoring offsite drinking water wells in their study area. FAFB provides in-home treatment or alternative water to homes with wells above federal drinking water standards. For more information, please visit <https://www.fairchild.af.mil/Information/Restoration/>.
- Spokane International Airport has PFAS contamination, and Ecology is requiring the airport to investigate whether PFAS is leaving its property. For more information, please visit <https://bit.ly/EcologySIA-PFAS>.

To ensure people are drinking clean water, Ecology, EPA, the Washington State Department of Health, the Spokane Regional Health District, and Eastern Washington University are studying groundwater quality in the northeast West Plains to better understand the extent and severity of PFAS contamination.

Results from the well sampling will inform community members about the quality of their sole source of drinking water and will provide the agencies with necessary data to help inform future cleanup efforts. **To aid the investigation, Ecology invites you to share your results with us, even if PFAS wasn't detected in your water.**

Join the West Plains PFAS updates email list

Ecology maintains the West Plains PFAS updates email list to share information about:

- This no-cost drinking water sampling for PFAS
- Cleanup at the Spokane International Airport PFAS site
- The City of Medical Lake's area-wide groundwater investigation grant to develop a model of PFAS contamination in the West Plains
- Other PFAS-related topics of potential interest

To join the email list, please subscribe online at <https://bit.ly/EcologyWestPlainsPFASupdates>, or contact Erika Beresovoy.

Contacts

- **Ecology contact:** Erika Beresovoy, 509-385-2290, erika.beresovoy@ecy.wa.gov
- **EPA contact:** Laura Knudsen, 206-553-1838, knudsen.laura@epa.gov

ADA accessibility

To request an ADA accommodation, contact Ecology by phone at 360-407-6831 or email at ecyadacoordinator@ecy.wa.gov, or visit ecology.wa.gov/Accessibility. For Relay Service or TTY, call 711 or 877-833-6341.

Is it safe to eat meat, eggs, and milk from animals that have PFAS in their drinking water?

Not necessarily. If consumed, PFAS, like PFOS, PFOA, and PFHxS, can be absorbed by chickens, meat and dairy animals, and transferred into their eggs, meat, and milk. Eating or drinking these animal products regularly could be an important source of an individual's or family's PFAS exposure over time.

There are no regulations or advisories to guide consumption of animal products. However, you can reduce your exposure if you:

- avoid eating organ meats. PFAS tend to build up in the liver, kidney, and blood.
- switch your animals to clean water or install a filter to remove PFAS from their drinking water. This will allow the animals to begin getting rid of PFAS from their bodies, eggs, and milk.

Can I eat my home-raised fruits and vegetables if PFAS are in the irrigation water?

Limited data suggests that eating garden fruits and vegetables is not a significant source of PFAS exposure when garden water meets federal or state advisory levels for PFAS in drinking water. We're still learning about how plants in a home garden might take in PFAS when water levels of PFAS are higher.

In general, PFAS from soil or irrigation water can be absorbed through the roots of plants. Some types of PFAS tend to stay in the roots, while other types of PFAS more easily distribute to shoots, leaves, and fruits. Specific plants also vary in how much PFAS ends up in the edible portions.

If you are concerned, here are some ways to minimize exposure:

- Wash or scrub all dirt off produce before eating to avoid swallowing soil. PFAS may be in soil particles.
- Peel and wash root vegetables before eating.
- Add clean compost to your garden soil. Increasing the organic content of your garden soil can reduce the amount of PFAS your plants pick up from the soil.
- Use rainwater or install a filter to remove PFAS from garden irrigation water.

Where can I find more information on PFAS?

- **Washington State Department of Ecology** – visit ecy.wa.gov and search for 'PFAS'
- **Washington State Department of Health** – visit doh.wa.gov and search for 'PFAS'
- **U.S Food and Drug Administration:** fda.gov/food/chemical-contaminants-food/questions-and-answers-pfas-food
- **U.S. Environmental Protection Agency (EPA):** epa.gov/pfas
- **Centers for Disease Control and Prevention (CDC) Agency for Toxic Substances and Disease Registry:** atsdr.cdc.gov/pfas

COMMERCIAL OPERATIONS

Can I sell meat, eggs, and milk from animals that consumed drinking water with PFAS in it?

There are no currently established standards that limit PFAS in commercial animal byproducts. The WSDA Food Safety Program will address concerns about PFAS in the water of commercial food production and processing operations on a case-by-case basis.

Can I sell crops if they were irrigated with water that contains PFAS?

There are no current standards for allowable PFAS in irrigation water or in commercial crops. If you raise and sell crops, contact the Washington State Department of Agriculture for guidance.

Can I process and sell food and beverages if the water ingredient had PFAS in it?

If water was used in food or beverage production and later found to have PFAS, an individual evaluation is needed to address whether those products can be sold. The WSDA Food Safety Program will work with commercial food operations to address this concern on a case-by-case basis.

There are no current standard for levels of PFAS in food products. WSDA Food Safety staff can be reached at: foodsafety@agr.wa.gov or (360) 902-1876.

ATTACHMENT B

From: Todd Woodard <todd.woodard@spokaneairports.net>
Sent: Wednesday, November 22, 2017 2:09:32 PM
To: Ward, Whitney
Subject: Airport AFFF Use

External Email ♦ Be Suspicious of Attachments, Links and Requests for Login Information

Whitney:

I thought it was easier to answer your questions in email form as a opposed to taking a risk of character limitations of text messaging.

How often was AFFF used and for how many years?

Over the last twenty years, the Airport's Aircraft Rescue Firefighting Department expended less than 30 gallons of AFFF (Aqueous Film-Forming Foam Concentrates) during their FAA-required biannual equipment calibration sessions. The calibration sessions ensured the foam-to-water ratio was 3% AFFF and 97% water and these tests are typically conducted on a paved surface. AFFF has been around since the 1960s and is widely used in the firefighting industry for addressing hydrocarbon (i.e., gas, diesel, jet fuel, etc.) fires. We do not possess specific information that provides a timeline for the types of AFFF that have been used at Spokane International Airport other than what we know from the past several years. In April of 2017, given the emerging information about PFOA/PFOS in Airway Heights' public drinking water intake wells near Fairchild Air Force Base, we decided to voluntarily change our AFFF product to an FAA-approved C-6 formulation. CHEMGUARD, the manufacturer of the AFFF product currently used by the Airport, states, "The environmentally-minded CHEMGUARD C306-MS Concentrate formulation contains short-chain, C-6 fluorochemicals manufactured using a telomere-based process. The telomere process produces no PFOS, and these C-6 materials do not breakdown to yield PFOA. The fluorochemicals used in the concentrate meet the goals of the U.S. Environmental Protection Agency 2010/15 PFOA Stewardship Program."

Has the groundwater ever been tested?

In June 2017, we sampled four existing monitoring wells on Airport property, which had been installed years ago as part of the Airport's State Stormwater Discharge Permit. PFOA/PFOS was detected at levels in three of the four wells at higher than the established screening levels. The three wells are located on the northeast end of the Airport's property. The fourth well, located west of Hayford Road, had low PFOA/PFOS levels beneath screening level. We are expanding our analysis and are installing two additional wells further to the northeast edge of the Airport's property. We expect analytical results in December 2017. The Airport will be sampling at all four corners of the Airport property in an effort to understand the condition of groundwater as it relates to PFOA/PFOS. We believe that it is important to collect data to better understand the presence of PFOA/PFOS in the environment.

It is important to note, the Airport has been on City of Spokane-supplied water since the mid-1960s and there are no public domestic water intake wells on Airport property. As a former military base (Gelger Field), the Airport has long been established as a FUDS (Formerly Utilized Defense Site) and DERP (Defense Environmental Restoration Program) site. As such, there are significant levels of subsurface contamination that have been in existence since the 1940s, which remains the responsibility of the Department of the Defense.

As last week's Spokesman-Review article discussed, PFOA/PFOS is a nationwide challenge. The PFOA/PFOS is a chemical compound found in a myriad of products including carpets, textiles, paper wrappers for fast food and microwave popcorn, tubing, wire insulation, metal roof coatings, paint adhesives, pesticides, cleaning agents, printing ink, releasing agents, metal plating industry products, and fuel additives.

Please let me know if you have any additional questions or if I can be of further assistance.

I hope you enjoy a safe and relaxing Thanksgiving holiday!

Thanks again,

Todd S. Woodard, C.M.
Director, Marketing/Public Affairs
Spokane International Airport
9000 West Airport Drive, Suite 204
www.spokaneairports.net

Direct: 509.455.6470
Mobile: 509.998.7265
Email: todd.woodard@spokaneairports.net

Date: Thu, 23 Nov 2017 01:14:17 +0000
From: Todd Woodard <todd.woodard@spokaneairports.net>
To: Larry Krauter <lkrauter@spokaneairports.net>
Subject: Fwd: Airport AFFF Use

FYI

Todd S. Woodard, C.M.
Director, Marketing/Public Affairs
Spokane International Airport
9000 West Airport Drive, Suite 204
Spokane, Washington 99224
www.spokaneairports.net

509-998-7265 Mobile
509-455-6470 Direct
todd.woodard@spokaneairports.net

----- Original message -----
From: "Ward, Whitney"
Date: 11/22/17 5:02 PM (GMT-08:00)
To: Todd Woodard
Subject: RE: Airport AFFF Use

Have a great Thanksgiving!

Whitney Ward
Anchor/Reporter
KREM 2 News | 4103 S. Regal St. | Spokane, WA | 99223
W (509) 744.8505 | C (509) 464.9428
E wward@krem.com | @KREMWhitney

From: Todd Woodard [<mailto:todd.woodard@spokaneairports.net>]
Sent: Wednesday, November 22, 2017 4:34 PM
To: Ward, Whitney
Subject: Re: Airport AFFF Use

External Email ♦ Be Suspicious of Attachments, Links and Requests for Login Information

Thanks, Whitney! I appreciate the confirmation.

Todd S. Woodard, C.M.
Director, Marketing/Public Affairs
Spokane International Airport
9000 West Airport Drive, Suite 204
Spokane, Washington 99224
www.spokaneairports.net

509-998-7265 Mobile
509-455-6470 Direct
todd.woodard@spokaneairports.net

----- Original message -----
From: "Ward, Whitney" <wward@krem.com>
Date: 11/22/17 4:30 PM (GMT-08:00)
To: Todd Woodard <todd.woodard@spokaneairports.net>
Subject: Re: Airport AFFF Use

This is great! Thank you, Todd!

Whitney Ward
Anchor/Investigative Reporter
KREM 2 News
(509) 464.9428 c.

Date: Wed, 22 Nov 2017 22:13:39 +0000
From: Todd Woodard <todd.woodard@spokaneairports.net>
To: Larry Krauter <lkrauter@spokaneairports.net>
Subject: FW: Airport AFFF Use

Below is the email I sent to Whitney Ward, Reporter, KREM,

Thanks,

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Director, Marketing/Public Affairs
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9000 West Airport Drive, Suite 204
www.spokaneairports.net

Direct: 509.455.6470
Mobile: 509.998.7265
Email: todd.woodard@spokaneairports.net

From: Todd Woodard
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Direct: 509.455.6470
Mobile: 509.998.7265
Email: todd.woodard@spokaneairports.net

Date: Wed, 22 Nov 2017 19:45:48 +0000
From: Todd Woodard <todd.woodard@spokaneairports.net>
To: Jennifer West <jenniferwest@gmail.com>, Larry Krauter <lkrauter@spokaneairports.net>
Subject: Statement

Whitney:

How often was AFFF used and for how many years?

Over the last twenty years, the Airport's Aircraft Rescue Firefighting Department expended less than 30 gallons of AFFF (Aqueous Film-Forming Foam Concentrates) during their FAA-required biannual equipment calibration sessions. The calibration sessions ensured the foam-to-water ratio was 3% AFFF and 97% water and these tests are typically conducted on a paved surface. AFFF has been around since the 1960s and is widely used in the firefighting industry for addressing hydrocarbon (i.e., gas, diesel, jet fuel, etc.) fires. We do not possess specific information that provides a timeline for the types of AFFF that have been used at Spokane International Airport other than what we know from the past several years. In April of 2017, given the emerging information about PFOA/PFOS in Airway Heights' public drinking water intake wells near Fairchild Air Force Base, we decided to voluntarily change our AFFF product to an FAA-approved C-6 formulation. CHEM GUARD, the manufacturer of the AFFF product currently used by the Airport, states, "The environmentally-minded CHEM GUARD C306-MS Concentrate formulation contains short-chain, C-6 fluorochemicals manufactured using a telomere-based process. The telomere process produces no PFOS, and these C-6 materials do not breakdown to yield PFOA. The fluorochemicals used in the concentrate meet the goals of the U.S. Environmental Protection Agency 2010/15 PFOA Stewardship Program."

Has the groundwater ever been tested?

In June 2017, we sampled four existing monitoring wells on Airport property, which had been installed years ago as part of the Airport's State Stormwater Discharge Permit. PFOA/PFOS was detected at levels in three of the four wells at higher than the established screening levels. The three wells are located on the northeast end of the Airport's property. The fourth well, located west of Hayford Road, had low PFOA/PFOS levels beneath screening level. We are expanding our analysis and are installing two additional wells further to the northeast edge of the Airport's property. We expect analytical results in December 2017. The Airport will be sampling at all four corners of the Airport property in an effort to understand the condition of groundwater as it relates to PFOA/PFOS. We believe that it is important to collect data to better understand the presence of PFOA/PFOS in the environment.

It is important to note, the Airport has been on City of Spokane-supplied water since the mid-1960s and there are no public domestic water intake wells on Airport property. As a former military base (Gelger Field), the Airport has long been established as a FUDS (Formerly Utilized Defense Site) and DERP (Defense Environmental Restoration Program) site. As such, there are significant levels of subsurface contamination that have been in existence since the 1940s, which remains the responsibility of the Department of the Defense.

As last week's Spokesman-Review article discussed, PFOA/PFOS is a nationwide challenge. The PFOA/PFOS is a chemical compound found in a myriad of products including AFFF, carpets, textiles, paper wrappers for fast food and microwave popcorn, tubing, wire insulation, metal roof coatings, paint adhesives, pesticides, cleaning agents, printing ink, releasing agents, metal plating industry products, and fuel additives.

Todd S. Woodard, C.M.
Director, Marketing/Public Affairs
Spokane International Airport
9000 West Airport Drive, Suite 204
www.spokaneairports.net

Direct: 509.455.6470
Mobile: 509.998.7265
Email: todd.woodard@spokaneairports.net

ATTACHMENT C



After Recording Return to:
State of Washington
Real Estate Services
P.O. Box 41015
Olympia, Washington 98504-1015

Environmental Covenant

Grantor: Washington State Military Department
Grantee: State of Washington, Department of Ecology
Legal: a portion of Section 5, Township 24 N, Range 42 EWM NW 1/4
Tax Parcel Nos.: 24052 9011
Cross Reference: None

Grantor, Washington State Military Department, hereby binds Grantor, its successors and assigns to the land use restrictions identified under this environmental covenant (hereafter "Covenant") made this 2nd day of November, 2009 in favor of the State of Washington Department of Ecology (Ecology). Ecology shall have full right of enforcement of the rights conveyed under this Covenant pursuant to the Model Toxics Control Act, RCW 70.105D.030(1)(g), and the Uniform Environmental Covenants Act, Chapter 64.70 RCW.

This Declaration of Covenant is made pursuant to RCW 70.105D.030(1)(f) and (g) and WAC 173-340-440 by Washington State Military Department, its successors and assigns, and the State of Washington Department of Ecology, its successors and assigns (hereafter "Ecology").

A remedial action (hereafter "Remedial Action") occurred at the property that is the subject of this Covenant. The Remedial Action conducted at the property is described in the following documents:

Environmental Resources Management (ERM). 2009. Final Record of Decision
(ROD) Amendment, 242nd Combat Communication Squadron, Spokane Air

National Guard Station, Washington Air National Guard, Spokane, Washington.
Date Pending.

ERM. 2008. Final April 2008 Groundwater Monitoring Report, 242nd Combat
Communication Squadron, Spokane Air National Guard Station, Washington Air
National Guard, Spokane, Washington, 18 November 2008.

ERM. 2006. Final Remedial Action Report, 242nd Combat Communications
Squadron, Spokane Air National Guard Station, Washington Air National Guard,
Spokane, Washington. June 2006.

These documents are on file at Ecology's Main Office in Lacey, Washington. An
administrative record containing these documents is also available at the Cheney Community
Library, 610 First Street, Cheney, Washington.

This Covenant is required because the Remedial Action resulted in residual
concentrations of carbon tetrachloride that are greater than the Model Toxics Control Act
Cleanup Level(s) for Non-Potable Groundwater established under WAC 173-340-720(6) (i.e.,
MTCA Method B surface water criteria). This is as further described in the ROD Amendment
dated February 29, 2008. As a result this Environmental Covenant is required to ensure that
groundwater is not used for drinking water.

The undersigned, Washington State Military Department, is the fee owner of real
property (hereafter "Property") in the County of Spokane, State of Washington that is subject
to this Covenant. The Property is legally described in Attachment A of this Covenant and
made a part hereof by this reference.

Washington State Military Department makes the following declaration as to
limitations, restrictions, and uses to which the Property may be put and specifies that such
declarations shall constitute covenants to run with the land, as provided by law and shall be
binding on all parties and all persons claiming under them, including all current and future
owners of any portion of or interest in the Property (hereafter "Owner").

Section 1. This Section describes with particularity the restrictions to be placed on the property.

1. No groundwater may be taken for any human consumption or use from the Property.

Section 2. Any activity on the Property that may interfere with the integrity of the Remedial Action and continued protection of human health and the environment as relates to the Remedial Action is prohibited. Such action would include any activity that results in extraction of groundwater for any purpose.

Section 3. Any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Remedial Action, or create a new exposure pathway, is prohibited without prior written approval from Ecology.

Section 4. The Owner of the property must give thirty (30) day advance written notice to Ecology of the Owner's intent to convey any interest in the Property. No conveyance of title, easement, lease, or other interest in the Property shall be consummated by the Owner without adequate and complete provision for continued monitoring, operation, and maintenance of the Remedial Action.

Section 5. The Owner must include in any lease a restriction as incorporation the restriction set for this Section 1 and notify all lessees of the restrictions on the use of the Property.

Section 6. The Owner must notify and obtain approval from Ecology prior to any use of the Property that is inconsistent with the terms of this Covenant. Ecology may approve any inconsistent use only after public notice and comment. Inconsistent use would include extraction of groundwater for any purpose.

Section 7. The Owner shall allow authorized representatives of Ecology the right to enter the Property at reasonable times with reasonable notice for the purpose of evaluating the Remedial Action; to take samples, to inspect remedial actions conducted at the property, to determine compliance with this Covenant, and to inspect records that are related to the Remedial Action.

Section 8. The Owner of the Property reserves the right under WAC 173-340-440 to record an instrument that provides that this Covenant shall no longer limit use of the Property or be of

any further force or effect. However, such an instrument may be recorded only if Ecology, after public notice and opportunity for comment, concurs. Such concurrence will not be unreasonably withheld.

Grantee:

STATE OF WASHINGTON

Department of Ecology

By: 

Date: 1/19/2010

Grantor:

STATE OF WASHINGTON

Military Department

Acting through the
Department of General Administration

By: 

Howard S. Cox, Chief Property Officer
Real Estate Services

Date: 1-28-10

APPROVED AS TO FORM:

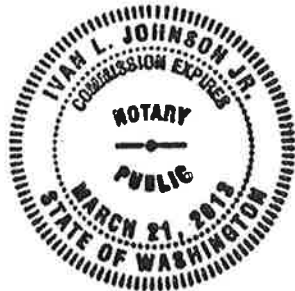
By: 

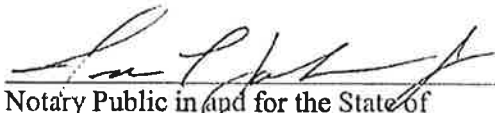
Assistant Attorney General

Date: 1/26/10

STATE OF WASHINGTON
COUNTY OF THURSTON

On this 28th day of ~~November~~ ^{January}, 2009, I certify that Howard S. Cox personally appeared before me, acknowledged that he signed this instrument, on oath stated that he was authorized to execute this instrument, and acknowledged it as the Chief Property Office, Real Estate Services, of the Department of General Administration, acting on behalf of the Military Department to be the free and voluntary act and deed of such party for the uses and purposes mentioned in the instrument.




Notary Public in and for the State of
Washington, residing at Olympia.
My appointment expires 3-21-13.

Project No.09-09-004
(Spokane) SJF/cns
Date: January 29, 2010

EXHIBIT "A"

Exhibit "A" of the Environmental Covenant dated November 2, 2009 is not in recordable format. To obtain a copy of Exhibit "A" contact the Department of General Administration at the following address:

Department of General Administration
Real Estate Services
Post Office Box 40105
210 11th Avenue S.W., Room 230
Olympia, Washington 98504-1015
Phone: 360-902-7285

Parcel Number: 24052.9011

Data As Of: 6/20/2024

Site Address: 0 VACANT LAND

SCOUT Map (<https://cp.spokanecounty.org/SCOUT/Map/?PID=24052.9011>)

Printer Friendly ([SummaryPrint.aspx](#))

[Collapse All](#)

Seg/Merge



Type	Parcel No.	Seg Document No.	Tax Year
+ Child	24052.9070	20100445	2011
+ Child	24052.9071	20100445	2011

Disclaimer: Spokane County does not warrant the accuracy, reliability or timeliness of any information in this system, and shall not be held liable for losses caused by using this information. Portions of this information may not be current or accurate. Any person or entity who relies on any information obtained from this system, does so at their own risk. RCW 42.56.070 (9) (<https://apps.leg.wa.gov/rcw/default.aspx?cite=42.56.070>) prohibits releasing and/or using lists of individuals gathered from this site for commercial purposes. More... ([Disclaimer.aspx](#))

Assessor's Office (<https://www.spokanecounty.org/Assessor/>)

1116 West Broadway Avenue
 County Courthouse, 1st Floor
 Spokane, WA 99260

Assessor's Information

Owner, Site Address, Appraisal, Levy, Characteristics, Sales

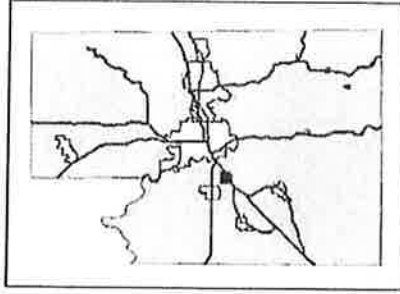
Hours: Monday - Friday 8:00am - 4:00pm
 (excluding holidays)

Phone (Phone) (509) 477-3698

Fax: (Fax) (509) 477-3697

Email: (Email) Contact the Assessor (<mailto:Assessor@spokanecounty.org>)

Before Map For
ACO# 20100445

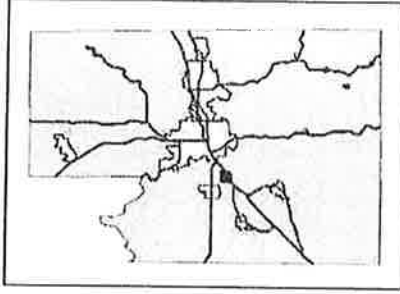


Legend

- Parent Arcs
- - - Road Centerlines
- Surrounding Parcel Lines
- State Roads
- Municipal Boundaries
- Section Lines



After Map For
ACO# 20100445

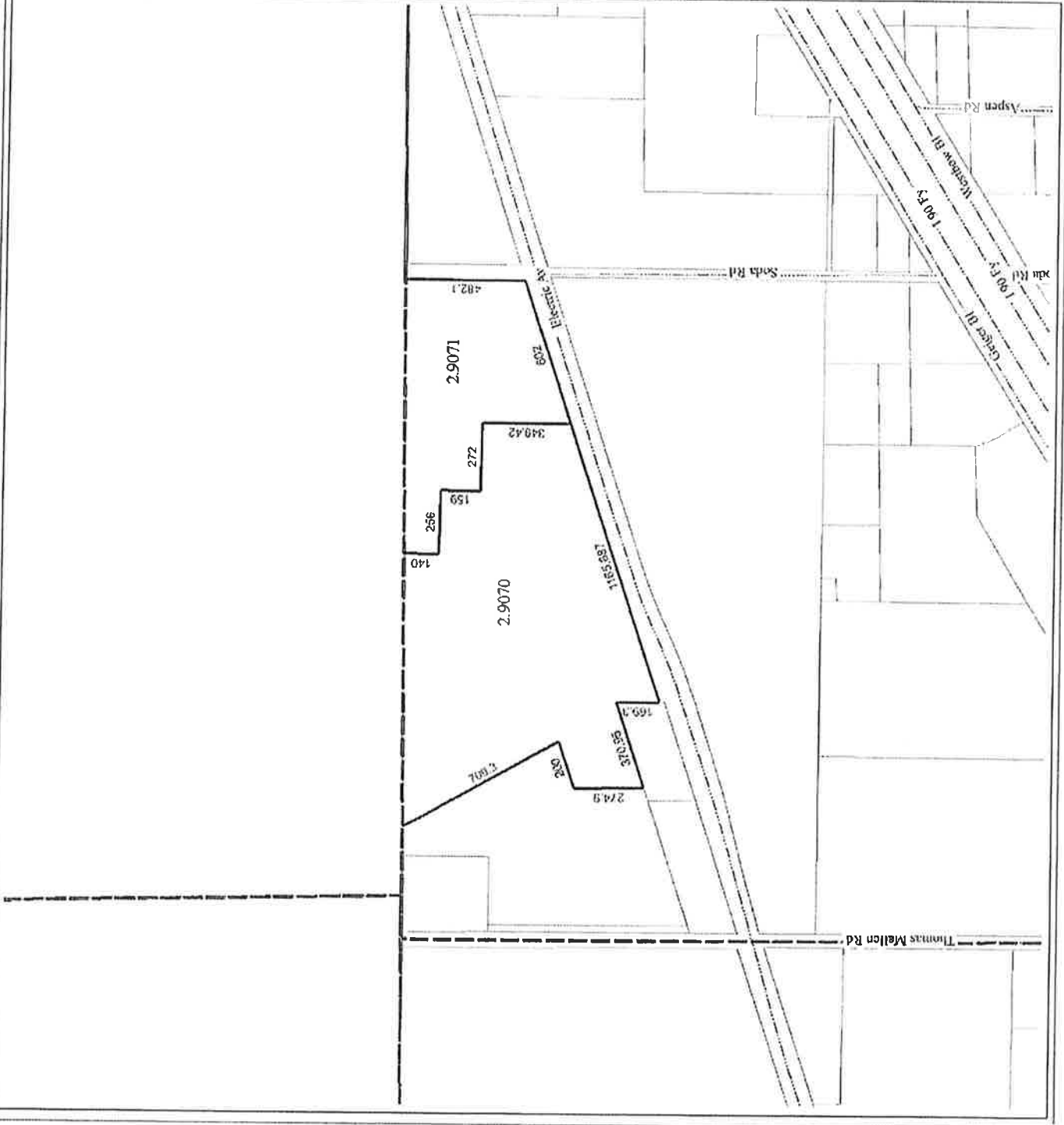


Legend

- Children Arcs
- - - Road Centerlines
- Surrounding Parcel Lines
- State Roads
- Municipal Boundaries
- Section Lines



Map Produced by Spokane County Assessor, GIS Department



ATTACHMENT D

Comegys, Rebecca

From: Simmons, Scott
Sent: Wednesday, September 8, 2021 5:11 PM
To: Lindsay, Robert; Cooke, Kevin
Cc: Hermanson, Mike
Subject: RE: Your Area-wide Groundwater Investigation Grant: West Plains PFAS Groundwater Transport & Fate Study

I had a chance to discuss with Al yesterday. He indicated he would like to discuss further with Airport prior to our committing to get involved. I'll let you know more after I hear back from Al.

Scott

From: Lindsay, Robert <RLindsay@spokanecounty.org>
Sent: Thursday, September 2, 2021 1:51 PM
To: Simmons, Scott <SSIMMONS@SpokaneCounty.org>; Cooke, Kevin <KCooke@spokanecounty.org>
Cc: Hermanson, Mike <MHERMANSON@spokanecounty.org>
Subject: FW: Your Area-wide Groundwater Investigation Grant: West Plains PFAS Groundwater Transport & Fate Study

Scott/Kevin,

Am following up on this grant extended to SRHD from Ecology (offer letter attached). I spoke with Commissioner French about this project in July and also mentioned this to Commissioner Kuney, noting that we are interested and prepared to conduct the technical sections of the project.

Since then, SRHD has notified us they don't have the staff/resources to manage the grant but are available to conduct the public participation and outreach portions. They have requested we manage the grant. Spokane County Environmental Services / Water Resources have staff and resources available to manage the grant, and to conduct the technical portions of the work.

Ecology is aware of the SRHD's limitations and are amenable to the County accepting the grant. They are awaiting our response.

I am aware this grant will need BOCC authorization. Please advise if a briefing is requested before bringing this to the Board.

Thank you,

Rob Lindsay - Water Programs Manager
Spokane County Environmental Services
509.477.7576 rlindsay@spokanecounty.org

Environmental Services: Keeping your Water Clean and the Environment Green!

From: Lindsay, Robert
Sent: Thursday, July 15, 2021 4:25 PM

To: French, Al <AFRENCH@spokanecounty.org>; Kunev, Mary <MKUNEY@spokanecounty.org>

Cc: Kerns, Josh <JKERNS@spokanecounty.org>; Valencia,

From: Gordon, Lyndsay (ECY) <LGOR461@ECY.WA.GOV>

Sent: Thursday, July 15, 2021 2:54 PM

To: Mike LaScuola <mlascuola@srhd.org>

Cc: Mike LaScuola <mlascuola@srhd.org>; Ray Byrne <rbyrne@srhd.org>; Trujillo, Shanyese (ECY)

<STRU461@ECY.WA.GOV>; Falconer, Kathy (ECY) <kfal461@ECY.WA.GOV>; Justice, Tami (ECY)

<tday461@ECY.WA.GOV>

Subject: Your Area-wide Groundwater Investigation Grant: West Plains PFAS Groundwater Transport & Fate Study

Dear Lisa,

Please find your attached funding notification for the Area-wide Groundwater Investigation Grant you submitted entitled West Plains PFAS Groundwater Transport & Fate Study.

Your Ecology Grant Manager will contact you to review your grant application and begin writing your grant in the coming weeks. If you have any questions, please contact your regional section manager.

Best Regards,

Lyndsay Gordon

Budget Analyst

Toxics Cleanup Program | Department of Ecology

PH: 360.810.1636 | P.O. Box 47600 Olympia, WA 98504

lgor461@ecy.wa.gov | 300 Desmond Dr, Lacey, WA 98503

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From: Hermanson, Mike <MHERMANSON@spokanecounty.org>
Sent: Friday, August 21, 2020 9:31 AM
To: Mike LaScuola <mlascuola@srhd.org>
Subject: RE: Thank you! Your 2021-23 grant & loan application was successfully submitted to Ecology

Mike,

I was wondering if I could get a copy of the grant submission-just curious what was submitted. My understanding is this grant is from the capital budget, which might not be as impacted as the operating budget, so there is still a decent chance of receiving funding.

Thanks,

Mike Hermanson
Water Resources Manager
Spokane County Water Resources
509.477.7578

Please take a moment to answer 5 questions about your most recent interaction with the Division of Environmental Services. Thanks!
<http://www.spokanecounty.org/ESSurvey>

From: Mike LaScuola <mlascuola@srhd.org>
Sent: Friday, March 20, 2020 10:20 AM
To: chadpritchard@gmail.com; Hermanson, Mike <MHERMANSON@spokanecounty.org>; Lindsay, Robert <RLindsay@spokanecounty.org>
Subject: FW: Thank you! Your 2021-23 grant & loan application was successfully submitted to Ecology

FYI.

Happy Friday Gents

At some point I would like to do a little collaborating to see how this grant was intended to proceed. Realizing that there can be no commitment at present by the County I still need your help in understanding what you had in mind for implementation.

Assuming that the Board of Health is amenable, I'm hoping that this will be reconsidered to allow County Water Resources to assume what was intended in the first place. However, I don't think the Board will be discussing this at its next meeting and you can imagine why.

I think we have a really good shot at getting this by my conversations with Shanyese (below)

Let me know what you all think

Stay Well

Michael F. LaScuola REHS/RS | Technical Advisor Environmental Resources | Environmental Public Health
509-324-1574 | 509-324-3603 fax | mlascuola@srhd.org
Spokane Regional Health District | www.srhd.org
1101 W. College Ave. Spokane, WA 99201

Always working for a safer and healthier community



Always working for a safer and healthier community



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From: Trujillo, Shanyese (ECY) <STRU461@ECY.WA.GOV>
Sent: Friday, March 20, 2020 9:29 AM
Cc: Wirkkala, Angie (ECY) <awir461@ECY.WA.GOV>
Subject: Thank you! Your 2021-23 grant & loan application was successfully submitted to Ecology

On behalf of Angie Wirkkala, Ecology's Financial Services Manager for the Toxics Cleanup Program, you are receiving this email because you have applied for the 2021–23 Remedial Action Grant & Loan solicitation for one or more of the following grant & loan opportunities: Area-wide Groundwater Investigation Grants, Safe Drinking Water Action Grants, and Oversight Remedial Action Grants and Loans.

Hello cleanup community:

Thank you for taking the initiative to apply for a grant or loan for your community's cleanup. We have received your submitted application for a **2021-23 Remedial Action Grant & Loan** and will review all applications in the coming weeks.

We will submit our biennial budget request to the Governor and Legislature in the Fall of 2020. Once the Legislature passes the biennial budget (approximately Spring 2021) our Grant Managers at the Toxics Cleanup Program will notify you whether we were able to **fund or not fund** your project. At that time, we'll also change your application's status in EAGL to "funded" or "unfunded."

- If you have questions or would like more information about Ecology's Remedial Action Grants & Loans, please contact **Shanyese Trujillo**, Remedial Action Grant Manager, Shanyese.Trujillo@ecy.wa.gov or (360) 628-2451.
- If you would like to give us feedback on your experience applying for a 2021–23 Remedial Action Grant or Loan, we would love to hear it. Please take a few moments to complete this short survey: https://www.surveymonkey.com/r/RAG_2021-23.

Regards,

Comegys, Rebecca

From: Lindsay, Robert
Sent: Wednesday, October 6, 2021 12:21 PM
To: Simmons, Scott
Cc: Hermanson, Mike; Cooke, Kevin
Subject: Regional gw study on West Plains
Attachments: West Plains PFAS grant final.docx

Hi Scott,

Thank you for your time yesterday to discuss the subject project. I attach the scope for the project for your information. The grant-funded project is for \$450K; the majority of the funding would go to the technical part of the work, including PFAS fate and transport modeling.

A few points:

1. Concurrent with this proposed project, a similar project was proposed by EWU. That proposal was not funded. I bring this to your attention because that may come up in discussions with the Board and/or SIA.
2. You inquired the scope and purpose of the work. This text is taken directly from the proposal submitted by SRHD:
 - a. The attached proposed project will include public outreach, PFAS groundwater sampling and analysis, PFAS source identification analysis, and groundwater flow and contaminant fate and transport modeling.
 - b. This project will help the population, environment, and commercial entities of the West Plains by building a transport model, delineating PFAS contamination, and using unique PFAS distribution at different locations to identify PFAS sources. This project is will also be in collaboration with Eastern Washington University (EWU), with consultative assistance by Washington State Department of Health (WA DOH), Agency for Toxic Substance Disease Registry (ATSDR), and Spokane County Water Resources, which will add to the collaborative knowledge to better understand the influences of PFAS on communities and the environment.
3. Since 2013, there have been at least 70 new rural drinking water wells drilled in the proposed study area. Figure 1 on Page 3 of the attached document shows the extent of the study area, wells in the study area, and the boundary of Fairchild's study area.
4. Currently, there is an ongoing study with University of Indiana to collect samples from private residences on the West Plains. I'm not sure the current status of that work, but there was an article in the S-R paper recently where SRHD staff spoke to the sampling efforts by UI and also mentioned this upcoming project.

As I noted, I met with Commissioner French about this last July when the SRHD was awarded the grant. At his request I shared this with SRHD Board Pres Kuney, who shared it with Administrator Ms. Clark. It is my understanding that SRHD lacks the staff and resources to administer the grant, thus their interest to have Spokane County Environmental Services / Water Resources administer. We have the staff and resources to administer this grant. Personally, I am comfortable with either organization administering the grant, and recognize the limitations on the SRHD.

Let us know if you need additional information. Mike and I are available to meet to discuss this with the Board, SRHD, etc., if there is interest in performing the work.

Thank you,

Rob Lindsay - Water Programs Manager

Spokane County Environmental Services
509.477.7576 rlindsay@spokanecounty.org

From: Hermanson, Mike <MHERMANSON@spokanecounty.org>
Sent: Wednesday, October 6, 2021 11:15 AM
To: Lindsay, Robert <RLindsay@spokanecounty.org>
Subject: FW: Thank you! Your 2021-23 grant & loan application was successfully submitted to Ecology

Mike Hermanson
Water Resources Manager
Spokane County Environmental Services
509.477.7578

From: Mike LaScuola [<mailto:mlascuola@srhd.org>]
Sent: Friday, August 21, 2020 9:57 AM
To: Hermanson, Mike <MHERMANSON@spokanecounty.org>
Subject: RE: Thank you! Your 2021-23 grant & loan application was successfully submitted to Ecology

Here you go Mike.

Let me know if you need anything else
Stay Well

Michael F. LaScuola REHS/RS | Technical Advisor Environmental Resources | Environmental Public Health
509-324-1574 | 509-324-3603 fax | mlascuola@srhd.org
Spokane Regional Health District | www.srhd.org
1101 W. College Ave. Spokane, WA 99201

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West Plains PFAS Groundwater Transport and Fate Study

Washington State Department of Ecology Area Wide Groundwater Grant, March 2020

Introduction

Assessing the impacts of poly- and perfluoroalkyl substances (PFAS) contamination across multiple aquifers and from multiple sources requires a detailed understanding of the hydrogeologic framework to quantifiably determine PFAS sources. The West Plains of eastern Washington is an ideal natural laboratory to study the fate and transport of PFAS because the general geohydrologic framework has been established and collaboration with a number of related PFAS projects will maximize the use of grant funds. This project will help the population, environment, and commercial entities of the West Plains by building a transport model, delineating PFAS contamination, and using unique PFAS distribution at different locations to identify PFAS sources. This project is will also be in collaboration with Eastern Washington University (EWU), with consultative assistance by Washington State Department of Health (WA DOH), Agency for Toxic Substance Disease Registry (ATSDR), and Spokane County Water Resources, which will add to the collaborative knowledge to better understand the influences of PFAS on communities and the environment.

In May of 2017 PFAS was identified in drinking water of Airway Heights due to past use of aqueous film-forming foams (AFFF) at Fairchild Airforce Base (FAFB). Immediately after identifying PFAS contamination levels of up to 100 ug/L for some PFAS constituents at FAFB the Air Force began testing existing wells in the immediate area, referred to in this grant proposal as the “FAFB study” (Figure 1). Detectable levels, often exceeding the 0.07 ug/L EPA recommendation for drinking water were identified within the FAFB study indicating that people working and living at FAFB and the neighboring City of Airway Heights were likely exposed to elevated levels of PFAS for decades (CDC, 2019). Shortly after identifying PFAS contamination in the FAFB study, multiple PFAS contamination locations have been discovered that are outside the FAFB study area. These locations with public/private groundwater wells contaminated by PFAS include an elementary school, county fire station, and several rural residences.

Table 1 - PFAS Sampling Results outside of FAFB Study Area

	Proposed WADOH Standards	Palisades Residence	Great Northern Elementary School	Fire District 10 Station 5
Perfluorobutanesulfonic acid - PFBS	1300			86.3
Perfluoroheptanoic acid - PFHpA	0			336
Perfluorohexanesulfonic acid - PFHxS	70	6.4	74	638
Perfluorononanoic acid - PFNA	14			1010
Perfluorooctanesulfonic acid - PFOS	15		115	1930
Perfluorooctanoic acid - PFOA	10	9.6	12.6	360

all values in ng/L

Those contaminated wells located outside the FAFB study area indicate a high probability that there are additional and unaccounted sources of PFAS impacting area groundwater. Residents in these locations

(West Plains/Palisades) have asked local officials for any assistance that can be provided to cover water testing costs.

PFAS well water testing by these affected locations that are outside the FAFB study area are in the proposed project area, and analytical results (Table 1.) display PFAS levels above EPA health advisory and above Washington State proposed PFAS health standards.

The West Plains is an ideal location to study PFAS because of the amount of work that has already been completed through watershed planning in WRIA 54 and 56 (a series of projects outlined at <http://spokanewatersheds.org/>) including the West Plains Hydrogeologic Framework and 3D projections of the paleochannels (GSI et al., 2012 and Pritchard et al., 2020). Many of these studies are based on existing Water Well Reports stored with the Washington Department of Ecology and will be some of the existing private and monitoring wells that will be monitored for this study. Wells within the project area currently in the West Plains Hydrogeologic database are shown in Figure 1. The goal of this project is to evaluate PFAS contamination outside of the FAFB study area and develop a groundwater flow, fate and transport model to identify potential sources and future contaminant migration.

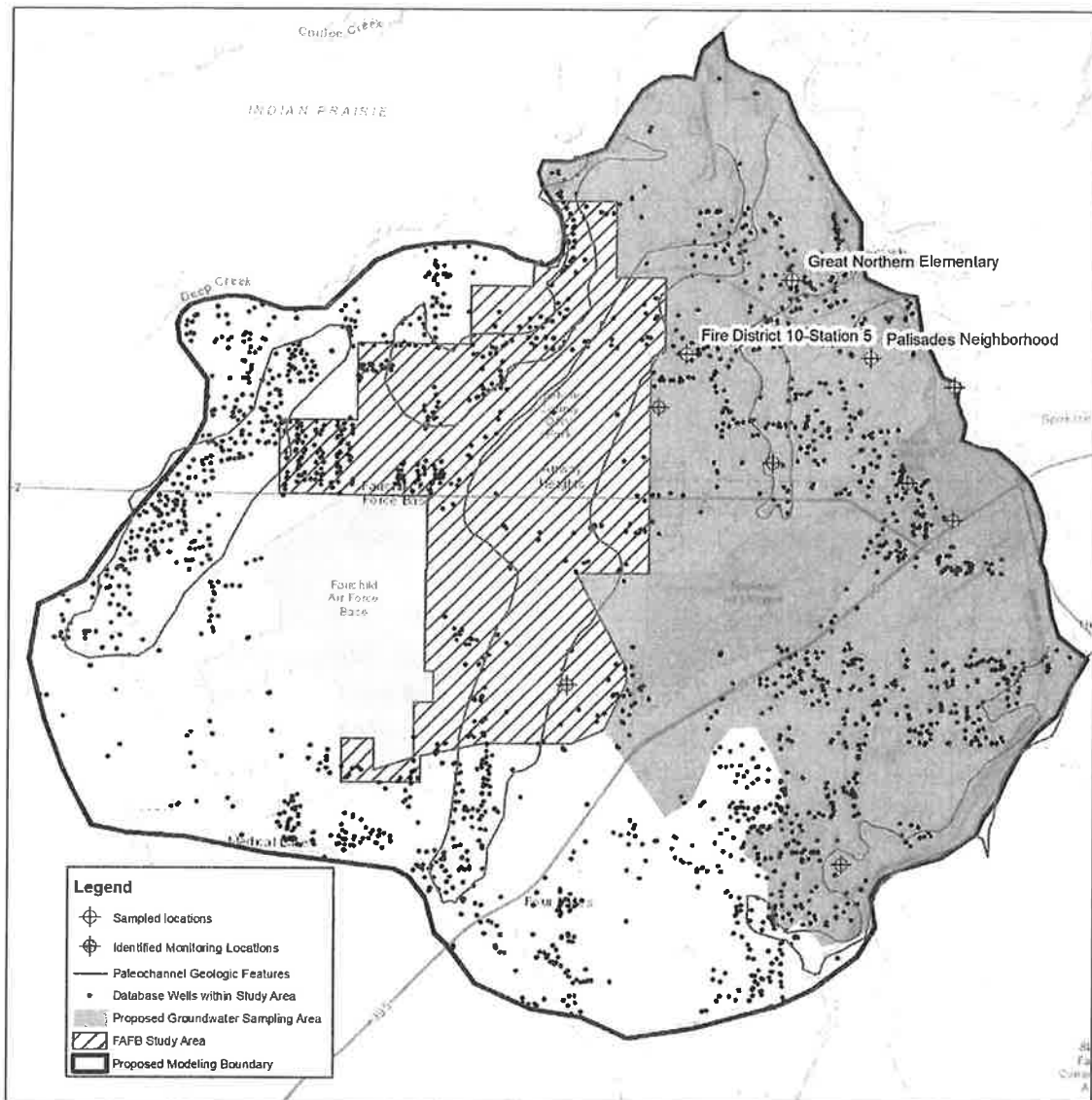


Figure 1: Map of the West Plains of eastern Washington. Fairchild Air Force Base (FAFB) is a site of documented AFFF use with PFAS levels of over 5,000 ng/L. The study site of FAFB PFAS delineation is outlined in a dashed blue line. The Great Northern Elementary School (GNES) and Spokane County Fire District 10, Station 5 (Sta. 5) have preliminary results indicating PFAS contamination. Residents in the rural Palisades area also have preliminary results with PFAS contamination in private wells. This project will use a detailed hydrogeologic framework to better define the extent of PFAS contamination in rural and agricultural areas, including farms and waste water treatment plants. As well as using PFAS analytes to fingerprint potential other sources including Spokane International Airport (GEG), county fire districts, and light industry in the City of Airway Heights

Background

Rural residences in the proposed project area principally withdraw water from three aquifer systems 1. shallow Wanapum Basalt, paleochannels filled with sedimentary deposits, and the deeper Grande Ronde Basalt. Currently PFAS contamination has been found near FAFB in the shallow Wanapum Basalt that underlies the FAFB and continues to the north. PFAS contamination, however, also exists on the eastern West Plains outside of the FAFB study area and likely continues into the lower Grande Ronde Basalt. Though the lower Grand Ronde Basalt aquifer is regionally confined, in the West Plains younger groundwater ages and other parameters indicate that infiltration and potential contamination reaches the lower aquifer, likely due to the paleochannels incised through basalt units (shown in Figure 2), but

also from leaky wells, complex basalt flow-unit geometries along the CRB margins, and fractures (Griggs, 1976; Pritchard and Cebula, 2016; GSI et al., 2012; Pritchard et al., 2020). Hence, a robust MODFLOW/MT3DMS model using data from this project are needed to help decipher the fate and transport of PFAS in the West Plains.

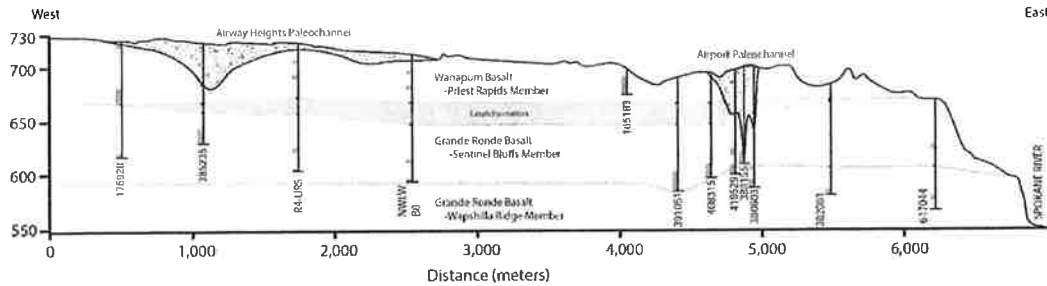


Figure 2: Cross Section across the West Plains showing the general stratigraphy and basaltic aquifers, interbeds of the Latah Formation that can be either aquifers or aquicludes and the Quaternary Paleochannels that may allow for cross-contamination between aquifers. Water wells with Washington State Department of Ecology Well ID #'s. The transect line is presented on the map on the following page. (Modified from Pritchard et al., 2020).

A preliminary look at PFAS analyses (Fig. 3), using analytes from EPA method 537 shows that contamination at Spokane County Fire District 10, Station 5 is much different than other PFAS locations in the West Plains, though the Fire Station is over 7 km away from FAFB and farther west than general models of groundwater flow directions show. We have learned from property owners that have tested their personal wells that some wells in the Palisades area, over 8 km away, have documented higher values of PFAS, and the Great Northern Elementary School currently utilizes bottled water as a result of PFAS contamination in their water supply well. As shown in Figure 3, the presence of PFNA and other elevated PFAS concentrations suggest this contamination is either from a completely different source or some environmental factors have degraded other PFAS substances, such as long-chain breaking down to short-chain (e.g. Buck et al., 2011).

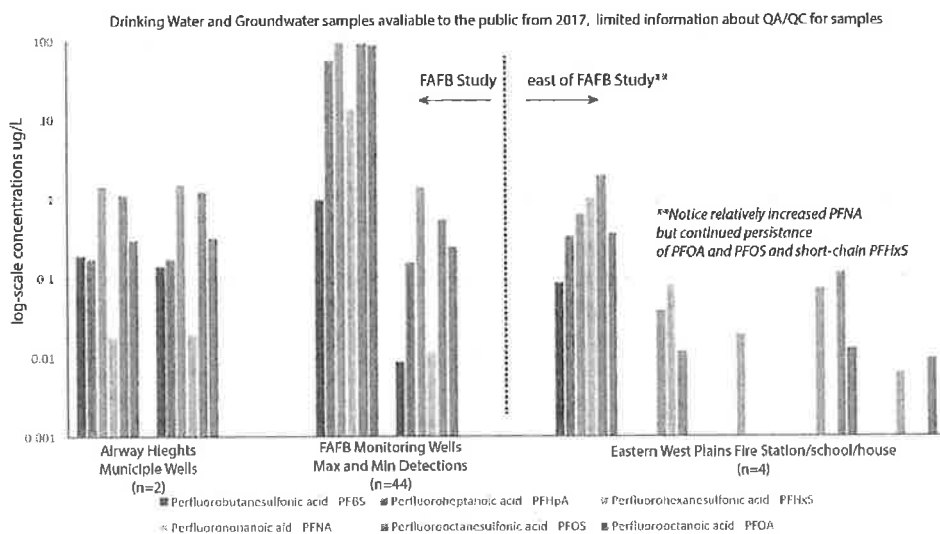


Figure 3: Bar graph of sites in the West Plains with known PFAS contamination, a more thorough public records request and visiting community groups will provide more private well testing results and more detailed information about the FAFB testing.

In partnership with FAFB, EWU, and Spokane County, SRHD will manage the development of a fate and transport model for PFAS that covers the entire West Plains region. Models should assist with

geochemical fingerprinting PFAS sources over great distances, which can be difficult to decipher due to retention and partitioning of PFAS in different parts of an aquifer, interaction with the biosphere, recycling of PFAS by waste water treatment and irrigation, and mixing from multiple sources (Anderson et al., 2019; Boone et al., 2019; Brusseau, 2019, Buck et al., 2011).

Project Goals

The goals of this project are to:

1. Conduct groundwater sampling in the area adjacent to the east side of the FAFB PFAS study area that has not been systematically evaluated for PFAS contamination.
2. Evaluate PFAS groundwater data using statistical techniques to identify potential source areas.
3. Develop a groundwater flow and contaminant fate and transport model to predict probable PFAS migration in aquifers used for drinking water and identify potential source areas.

Project Approach

The proposed project will include public outreach, PFAS groundwater sampling and analysis, PFAS source identification analysis, and groundwater flow and contaminant fate and transport modeling.

Public outreach will be conducted in three ways.

- 1.1 Public meetings will be held to notify and inform property owners within the study area and other interested community members about the project goals, approach, schedule, and results.
- 2.1 Individual outreach will be used to identify property owners interested in participating in the study and to communicate sampling results to participants.
- 3.1 A technical advisory group will be convened to solicit feedback on various technical topics such as sampling and analysis, data evaluation, modeling approaches, etc. There is currently significant work underway at FAFB and this group will be utilized to coordinate efforts.

The proposed project will conduct PFAS sampling at 30 locations quarterly over a 1-year period. This will include 10 known locations that are affected by PFAS that are outside the FAFB study area and 20 additional residential locations. Wells will be selected based on well construction, aquifer the well is completed in, and spatial distribution. There may be interest from property owners beyond the proposed 20 locations, therefore a budget contingency has been included to add additional sampling locations.

Analytical results will be analyzed utilizing environmental forensic techniques similar to methods used with other complex mixtures such as PCBs, PAHs, and TPH. This information will be coupled with a historical land use review and the analytical results to further understand potential source areas.

A groundwater flow model with contaminant transport (MT3DMS) will be developed using (data from) the Hydrogeologic Framework and Conceptual Groundwater Flow Model Review of Groundwater Conditions in the West Plains Area, Spokane County, Washington June 2015. The proposed model will be developed to specifically identify PFAS fate and transport in groundwater using varying groundwater depths, variable PFAS analyte levels, and to model releases from potential source locations to identify possible sources.

Scope of Work

Task 1 – Project Administration

Responsibilities will include, but not be limited to: maintenance of project records; submittal of requests for reimbursement and corresponding backup documentation, progress reports and recipient closeout report (including photos); compliance with applicable procurement, contracting, and interlocal agreement requirements; application for, receipt of, and compliance with all required permits, licenses, easements, or property rights necessary for the project; and submittal of required performance items.

Task 2 – Project Management

Efforts will include: conducting, coordinating, and scheduling project activities and assuring quality control include development of consultant scope of work, laboratory RFPs, consultant selection, contract management, stakeholder communication, and associated activities.

Task 3 – Public Outreach

- 3.1 Public Meetings – There will be two public meetings. The first will be at the beginning of the project to explain the project goals and objectives. The second meeting will be after the project is complete to present the results.
- 3.2 Sample Collection Outreach – Selected property owners will be contacted and invited to participate in the study. Property owners will be selected based on well construction, aquifer that the well is completed in, and spatial location.
- 3.3 Historical Outreach – during and following the initial meetings we expect to hear from residence about past land uses, such as pre-landfill dump sites or past industrial uses of properties. Since past land uses may be sources of PFAS, locations will be identified with the community to run commercial environmental reviews (e.g. EDR studies).
- 3.4 Communication of Results – Results will be communicated to the property owners and could include in person meetings to discuss the implications of the results
- 3.5 Technical Advisory Group – SRHD will convene an advisory group to guide groundwater sampling activities, PFAS Fingerprinting, modeling, and other technical aspects of the project. This group will provide review of draft technical documents including QAPPs, analytical result reports, modeling reports, etc. There is currently a significant ongoing effort within the FAFB study area. This group will provide a venue for project coordination and collaboration.

Task 4 – Groundwater Sampling

- 4.1 QAPP Development – A quality assurance project plan (QAPP) will be developed in accordance with Ecology guidelines, including the sampling and analysis plan, analytical methods, quality assurance goals, and data management procedures.
- 4.2 Groundwater sampling
 - 4.2.1 Designated Locations – Sampling will be conducted at 10 locations (to be determined) including existing Spokane County monitoring wells, previously sampled locations, and springs that discharge from the West Plains Wanapum aquifer. Sampling will be conducted quarterly for one year.
 - 4.2.2 Property Owner Wells – Wells identified in Task 3.2 will be collected quarterly for one year.
 - 4.2.3 Property Owner Wells contingency – Additional wells may be added to the project dependent on property owner interest

Task 5 – Data Analysis & Reporting

- 5.1 Data validation – Upon receipt of laboratory results data validation will be conducted in accordance with the QAPP.
- 5.2 Data management – Data will be managed using appropriate database software such as Microsoft Excel and/or Access. Some property owners may wish to keep their results confidential. In these instances, the data will be utilized in all analysis, but specific address and point location data will not be made publicly available.
- 5.3 Data reporting – All sampling activities and results will be documented in a report which will include a description of sampling methods, problems encountered, analytical results, data validation methods and results, and data interpretation

Task 6 – PFAS Source Analysis and Historical Land Use Review

- 6.1 Statistical analysis will be utilized to associate the concentrations of individual compounds analyzed by EPA Method 537 in groundwater samples with various PFAS chemical mixture source profiles.
- 6.2 A historical review of land use will be conducted to determine associations between analytical results, source profiles, and potential sources.

Task 7 – Groundwater Modeling

7.1 Data Compilation and Project Database – Significant data has been collected in recent projects that will support model development. The projects include the following:

- West Plains Hydrogeologic Framework and Conceptual Groundwater Flow Model
- West Plains Hydrogeologic Database
- West Plains Groundwater Elevation Monitoring and Mapping
- West Plains Groundwater Recharge Assessment
- WRIA 54 & 56 Groundwater Age Dating & Stable Isotopes
- WRIA 54 Hydrogeologic Characterization & Monitoring Well Drilling
- Subsurface Projection of the Columbia River Basalt Group & Paleodrainage Study
- Delimiting Geologic Structures Affecting Water Movement of the CRBG West Plains Aquifer
- West Plains Delineation of Aquifer Zones within Basalt Formations
- Spokane County Water Use Inventory and Demand Forecast

After a comprehensive review of available data a project database including, but not limited to, the following will be developed:

- | | |
|--|--|
| <ul style="list-style-type: none"> • Climate and meteorological data • Land use • Soil types • Topography • Surface water hydrology • Water use <ul style="list-style-type: none"> ○ Surface water withdrawals ○ Groundwater withdrawals ○ Return flows • Geologic and hydrostratigraphic units <ul style="list-style-type: none"> ○ Occurrence ○ Lateral extent and thickness ○ Hydraulic properties | <ul style="list-style-type: none"> • Three dimensional hydrogeologic framework • Groundwater flow system <ul style="list-style-type: none"> ○ Groundwater gradients and flow directions ○ Recharge and discharge ○ Boundary conditions ○ Surface water and groundwater interaction ○ Lateral and vertical continuity of groundwater flow • Groundwater levels |
|--|--|

- Horizontal and vertical continuity
- Long-term
- Water quality data
- Interannual
- Seasonal

7.2 Development of Three-Dimensional Geologic Model – The three dimensional hydrogeologic model developed as part of the Hydrogeologic Framework and Conceptual Groundwater Flow Model project will be improved upon to add the level of geologic detail necessary to accurately represent groundwater contaminant fate and transport.

7.3 Groundwater Flow and Contaminant Transport Modeling - An appropriate numerical model will be selected for this study in consultation with SRHD staff. The preferred choice is the U.S. Geological Survey finite-difference MODFLOW model coupled with the MT3D code for solute transport. The code is open-source and is available at no cost from the USGS. Open-source and proprietary graphical user interfaces are available.

Modelling will begin with a review of the water balance for the study area based on an analysis using climate, soil data, and baseflow data. Results of the three-dimensional geologic modelling will be used to create the layering needed for the numerical groundwater flow and transport model. The model will have sufficient vertical resolution to represent the variations in the thickness and continuity of the stratigraphic units and to represent the vertical movement of contaminants to depth as a result of recharge. The model will extend to natural hydrologic boundaries (e.g., the Spokane River and the larger streams). Grid spacing used in the contaminated area will be sufficient to reduce the effects of numerical dispersion.

Initial estimates of aquifer properties will be based on results of hydraulic testing reported in earlier investigations. These estimates will be refined during the process of model calibration. The transient flow model will be calibrated to match observed to measured groundwater levels and groundwater flow rates (estimated to be between 40 to 160 m/yr). The key test of the flow model calibration will be the ability to reproduce the observed groundwater levels and flow patterns.

Groundwater velocities derived from the steady-state flow model will be used in the contaminant transport analysis. The contaminant transport model will be calibrated to match measured concentrations gathered in Task 4 and 5. Flow model parameters (i.e. hydraulic conductivities, porosity, and recharge), dispersion coefficients, and source properties will be adjusted as needed to improve the match between observed and simulated concentrations.

Once the model is calibrated, it will be tested on a set of simulations designed to evaluate the probable evolution of the PFAS plume from the present day forward; and evaluate possible source areas for PFAS in groundwater. The model will be used to simulate changes in concentrations of miscible contaminants in groundwater considering advection, dispersion, diffusion, and some basic chemical reactions, with various types of external sources. The chemical reactions considered will include adsorption and first-order irreversible kinetic reactions.

Proposed Project Schedule

Task	FY 2021				FY 2022			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1 – Project Administration								
2 – Project Management								
2.1 Consultant Selection and Contracting								
2.2 Analytical Laboratory RFP								
3 – Public Outreach								
3.1 – Public Meetings								
3.2 – Sample Collection Outreach								
3.3 – Communication of Results								
4 – Groundwater Sampling								
4.1 QAPP								
4.2 Groundwater Sampling								
5 – Data Analysis and Reporting								
5.1 – Data Validation								
5.2 – Data Management								
5.3 – Data Reporting								
6 – Source Analysis								
7 – Groundwater Modeling								

Proposed Project Budget

Task	SRHD Salaries & Benefits, Overhead	Partner Agency Salaries and Benefits	Consultants	Analytical and other sampling expenses
1 - Project Administration (including overhead)	\$20,000			
2 - Project Management	\$8,000			
3 - Public Outreach	\$10,000	\$10,000		
4 - Groundwater Sampling	\$20,000	\$5,000		\$ 50,000
Sampling Contingency	\$5,000			\$20,000
5 - Data Analysis and Reporting	\$22,000	\$5,000		
6 - Source Analysis	\$5,000	\$10,000	\$20,000	
7 - Groundwater Modeling	\$10,000	\$5,000	\$225,000	
TOTAL	\$100,000	\$35,000	\$245,000	\$ 70,000
			TOTAL	\$ 450,000

7.4 Model Report Preparation – A comprehensive model construction and results report will be prepared. The report will detail study objectives, construction of the groundwater flow and contaminant fate and transport model, model calibration and limitations, and results from modeling simulations. Report preparation will include a draft report, comment period, response to comments and a final report.

Comegys, Rebecca

From: Lindsay, Robert
Sent: Wednesday, November 10, 2021 9:32 AM
To: Cooke, Kevin; Simmons, Scott
Cc: Hermanson, Mike
Subject: FW: CathyMcMorris_EWU EPA grant - Final (1).pdf
Attachments: CathyMcMorris_EWU EPA grant - Final (1).pdf

Kevin, Scott:

Just FYI.

Mike shared with me this previous letter of support from CMR for an EWU-led West Plains regional PFAS study in 2020.

This EWU-led study was not accepted by the EPA; however, the Ecology grant currently in-hand at SRHD is a subset of the EWU project.

Thank you,
Rob Lindsay

From: Hermanson, Mike <MHERMANSON@spokanecounty.org>
Sent: Wednesday, November 10, 2021 8:48 AM
To: Lindsay, Robert <RLindsay@spokanecounty.org>
Subject: CathyMcMorris_EWU EPA grant - Final (1).pdf



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000
711 for Washington Relay Service • Persons with a speech disability can call 877-833-6341

July 15, 2021

Lisa Maeder
Spokane Regional Health District
1101 W. College Ave, Room 402
Spokane, WA 99201

Re: Area-wide Groundwater Investigation Grant is funded for the following project:

- **Site Name:** West Plains PFAS Groundwater Transport & Fate Study
- **Site Address:** 1101 W College Ave, Spokane, WA 99201
- **Grant Number:** TCPRA-2123-SRHDEP-00048
- **Amount:** \$450,000

Dear Lisa Maeder:

We are very pleased to relay that your Area-wide Groundwater Investigation Grant for the project requested during the solicitation for the 2021–23 biennium has been funded. The Department of Ecology’s Toxics Cleanup Program receives funding from the Washington State Legislature making it possible for our program to fund your project.


Thank you for your initiative to clean up contamination in your community. We look forward to assisting you in this critical effort, and are committed to working with you to achieve the site’s prompt and effective cleanup.

Your Ecology Grant Manager (below) will contact you to review your grant application and begin writing your grant. If you have any questions, please contact your regional section manager (below).

<p>Shanyese Trujillo Remedial Action Grant Manager Shanyese.Trujillo@ecy.wa.gov</p>	<p>Kathy Falconer Eastern Section Manager kfal461@ecy.wa.gov</p>
--	---

Thank you again for taking this crucial step that will help protect human health and Washington’s environment.

Regards,

DocuSigned by:

 Brock Milliern, Program Manager
 Toxics Cleanup Program
 7/15/2021
 CE51DD3B0530427...

Comegys, Rebecca

From: Lindsay, Robert
Sent: Thursday, March 23, 2023 5:17 PM
To: French, Al; Jordan, Chris; Kerns, Josh; Kuney, Mary; Waldref, Amber
Cc: Twohig, Kyle; Simmons, Scott; Brattebo, Ben
Subject: FW: Update on West Plains PFAS groundwater investigation grant
Attachments: Groundwater Investigation Grant Letter of Intent.pdf

Commissioners;

Am sharing a letter I received earlier today where the City of Medical Lake has expressed interest to accept and administer the subject grant. For background, this grant was awarded to the Spokane Regional Health District, but was not formally accepted due to staff limitations. EWU Geology dept. has expressed interest to conduct the work and is developing a revised scope of work. As I understand, Medical Lake would simply administer the grant.

You'll see in the email below, and the letter, references to *working with Spokane County Water Resources*. To be clear, this would be EWU's project. Spokane County staff would not be conducting the work, but will be available to share information as available from previous studies and watershed planning work, and would make the Water Resource Center available for meetings.

Ecology will need to review and accept the revised scope from EWU before formally issuing the grant to Medical Lake. The timing of that review is not known. I will continue to keep you informed as this progresses.

Please advise if additional information is needed or a briefing is requested.

Thank you,

Rob Lindsay – Environmental Services Administrator
Spokane County Public Works
509.477.7576 rlindsay@spokanecounty.org

From: Sonny Weathers <SWeathers@medical-lake.org>
Sent: Thursday, March 23, 2023 11:18 AM
To: Furmall, Ali (ECY) <afur461@ECY.WA.GOV>; Pritchard, Chad <cpritchard@ewu.edu>
Cc: Lindsay, Robert <RLindsay@spokanecounty.org>; Mike LaScuola <mlascuola@srhd.org>
Subject: West Plains PFAS Fate

Ali,

I have attached a letter of intent from the City of Medical Lake related to TCPRA-2123-SRHDEP-00048 Grant Project. We look forward to administering the grant and working with Eastern Washington University, Spokane Regional Health District, and Spokane County Water Resources to accomplish the defined scope of work. Please let me know if you need anything further from us and advise on next steps to begin this important work.

Kindest regards,



City of Medical Lake
124 S. Lefevre St.
P.O. Box 369
Medical Lake, WA 99022-0369

City Hall: (509) 565-5000 Fax: (509) 565-5008

Parks & Recreation: (509) 565-5007

Police: (Crime Check) (509) 456-2233

March 21, 2023

Ali Furmall, LG, LHG
Small & Rural Communities Brownfields Specialist
Washington State Department of Ecology
4601 N. Monroe St.
Spokane, WA 99205

*RE: TCPRA-2123-SRHDEP-00048 Grant Project
Spokane County West Plains PFAS Transport and Fate Groundwater Study*

To Whom It May Concern:

The City of Medical Lake wishes to accept the TCPRA-2123-SRHDEP-00048 Area-wide Groundwater Investigation grant project for Spokane County West Plains PFAS Transport and Fate Groundwater Study to administer funding while working with Eastern Washington University, Spokane Regional Health District, and Spokane County Water Resources to accomplish the defined scope of work.

Sincerely,

A handwritten signature in blue ink, appearing to read "Terri Cooper".

Terri Cooper, Mayor
City of Medical Lake

CC: Don Kennedy, Mayor Pro-Tem
Chad Pritchard, Eastern Washington University
Mike LaScoula, Spokane Regional Health District
Robert Lindsay, Spokane County Water Resources

Mayor
Terri Cooper

Administrator
Sonny Weathers

Finance Director
Koss Ronholz

Public Works Director
Scott Duncan

Police
County Sheriff

Fire & EMS
SCFD3

ATTACHMENT E

City: Resolution 2019-0086
Resolution No. 19-1338

BEFORE THE BOARD OF COUNTY COMMISSIONERS
OF SPOKANE COUNTY, WASHINGTON
AND
THE SPOKANE CITY COUNCIL OF SPOKANE, WASHINGTON

IN THE MATTER OF AMENDING THE)
AIRPORT JOINT OPERATION)
AGREEMENT BETWEEN SPOKANE)
COUNTY AND THE CITY OF)
SPOKANE)

RESOLUTION

WHEREAS, the County of Spokane and the City of Spokane, Washington (“Parties”), entered into an Airport Joint Operation Agreement (“Agreement”) for the purpose of financing, construction, improving, and operation, through the agency of the Spokane Airport Board (herein referred to as “Board”), Spokane International Airport and Felts Field, as provided by Chapter 182, Laws of Washington, 1945, codified as RCW 14.08; and

WHEREAS, said airport facilities have been operated under that certain Airport Joint Operation Agreement dated July 30, 1962, as amended and supplemented by various joint resolutions, ordinances, agreements, and other actions from time to time; and

WHEREAS, the County of Spokane and the City of Spokane now desire to amend the Agreement and adopt a new Agreement.

NOW, THEREFORE, BE IT HEREBY RESOLVED, by the Board of County Commissioners of Spokane County, Washington, that the Spokane County Board of County Commissioners approves the amendments to the Agreement, as set forth in Attachment “A”, attached hereto and incorporated by reference. Attachment “A” will identify by striking and underlying changes in the Agreement.

BE IT FURTHER RESOLVED by the Spokane County Board of County Commissioners, that but for the changes proved for and identified in Attachment “A”, all other terms and provisions within the Agreement shall remain in full force and effect without any changes or modifications.

ADOPTED by the Spokane City Council this 7 day of October, 2019.

Terri L. Pfister
Terri L. Pfister, City Clerk

Approved as to form:
Pat Dahl
City Attorney

PASSED AND ADOPTED this 17th day of Sept., 2019.



ATTEST:

GINNA VASQUEZ
GINNA VASQUEZ, Clerk of the Board

BOARD OF COUNTY COMMISSIONERS
OF SPOKANE COUNTY, WASHINGTON

MARY L. KUNEY
MARY L. KUNEY, Chair

AL FRENCH
AL FRENCH, Vice-Chair

JOSH KERNS
JOSH KERNS, Commissioner

AMENDED SPOKANE COUNTY/CITY AIRPORT AGREEMENT

WHEREAS, the County of Spokane and the City of Spokane, Washington, on July 30, 1962, entered into an Airport Joint Operation Agreement for the purposes of financing, constructing, improving, and operating, through the agency of the Spokane Airport Board (herein referred to as "Board"), Spokane International Airport and Felts Field, as provided by Chapter 182, Laws of Washington, 1945, codified as RCW 14.08; and

WHEREAS, said airport facilities have been operated under that 1962 Agreement, as amended and supplemented by various joint resolutions, ordinances, agreements, and other actions from time to time; and

WHEREAS, the County of Spokane and the City of Spokane now desire to amend the Agreement and adopt a new Agreement;

NOW, THEREFORE, the County of Spokane, Washington (referred to herein as "County"), and the City of Spokane, in Spokane County, Washington (referred to herein as "City"), and hereafter collectively referred to as "Parties," agree as follows:

1. PURPOSE. It is the purpose of the Parties to continue their association under Chapter 14.08 RCW to provide for joint operation of Spokane International Airport, Felts Field Airport, and Spokane International Airport Business Park facilities (herein collectively referred to as "Airport"), by replacing that 1962 Agreement with a new Agreement.

1.1 The Parties intend to vest the Board, to the fullest extent permissible by State and Federal law, with complete authority for the management and operation of the Airport for aeronautical and industrial development purposes subject to the specific limitations herein contained.

1.2 All existing rules, regulations, contracts, offices, and other actions and circumstances previously adopted or approved by the Board or the Parties acting jointly and not in conflict with this Agreement are unaffected and shall remain in full force and effect until terminated or amended in accordance with this Agreement.

2. AIRPORT PROPERTY. The "Airport" consists of Spokane International Airport, Felts Field, and Spokane International Airport Business Park, and such other property as may hereafter be acquired.

2.1 It is recognized that the property of the Airport has been acquired at various times in various ways, including surplus property grant deeds from the United States of America, purchased through Federal Aviation Administration (FAA) or its predecessor, funds, and donations. Rather than maintain abstracts of title for each segment of the Airport, it is agreed that all real property and fixtures, except as provided hereinbelow, shall be held by the County and City in equal undivided shares as tenants in common, subject to any valid future interest reserved or excepted by deed.

2.2 Personal property (except City utility properties) shall be acquired, held, and disposed of in the name of the Board. Upon termination of this Agreement and dissolution of the Board, personal property shall be deemed owned by the City and County as tenants in common.

2.3 Notwithstanding Paragraph 2.1, City shall own and have the control, operation, and maintenance of all public utility sewer and water systems within the Airport, including, but not limited to, all present and future utility systems, tangible property, pipes and pumps, storage tanks, and fire hydrants, whether located underground or above ground, and intangible property such as franchises and easements.

3. FEDERAL RULES, REGULATIONS AND REQUIREMENTS. It is recognized that part of the land of the Spokane International Airport and Spokane International Airport Business Park was acquired from the United States of America by grant deed which contains reversion, restrictions, and obligations on the use of such properties for aeronautical and nonaeronautical purposes.

3.1 It is further recognized that the Airport has received grants from the federal government by or through its Federal Aviation Administration or its predecessors or other federal departments or agencies which have also imposed restrictions, conditions, and obligations on the use of Airport properties and further require that the revenues received be devoted to aeronautical purposes. The Parties hereby expressly ratify and confirm all previous grant agreements in existence at the time of execution of this Agreement and agree to be bound by any conditions or obligations imposed therein. Any future grant or other form of federal financial assistance for the Airport shall be subject to approval and acceptance by the Board, which is delegated authority to act on behalf of the City and County to enter into grant agreements on behalf of each the City and County.

3.2 In the event the Parties desire to terminate this Agreement, notice shall first be given to the Federal Aviation Administration of the intent to terminate this Agreement and of any change affecting ownership, control, operation, or performance of any conditions or obligations required by the grants or other federal financial assistance programs. It is also recognized that any termination or disposition of the properties of the Airport shall require prior FAA approval unless otherwise provided for by federal law or regulation.

4. AIRPORT FINANCES. It is intended that the expenses of operating Spokane International Airport, Felts Field, and Spokane International Airport Business Park shall be paid, to the maximum extent possible, from the operating revenues of each entity.

4.1 The Airport fiscal year shall be the calendar year.

4.2 The Board shall submit a proposed comprehensive balanced operating budget for the Spokane International Airport, Felts Field, and Spokane International Airport Business Park by the first Monday in the month of December for the ensuing fiscal year. Separate operating budgets and accounting records will be presented for each of the three cost centers described above and the comprehensive budget must be jointly approved by the Parties prior to the end of the current calendar year in which the proposed budget is submitted.

4.3 The Board shall have no independent authority to issue bonds or to incur other debts with a date of maturity of more than one year from the date of the obligation.

In the event there is a deficit in a principal or interest payment necessary to pay a bonded indebtedness, then the Parties shall each fund one-half of said deficit.

The Parties may, by joint resolution, authorize the issuance and sale of revenue bonds or other obligations payable from Airport revenues, the proceeds of which are to be used exclusively for Airport purposes. After the proper adoption of a joint resolution by both the City and the County, the revenue bonds or other revenue obligations shall be authorized by and issued in the name of Spokane County.

General obligation debt may also be issued for Airport purposes for projects authorized by law. If a general obligation debt is proposed to be issued, the Parties shall adopt a joint resolution evidencing the intent to incur said debt. The Parties then each shall

separately authorize its portion of the total debt in the manner required by law for each Party, respectively.

5. AIRPORT FUNDS. All Airport funds arising from the sale of bonds, proportionate contributions of the Parties, federal funds, all revenues from the operations of the Airport, and all other funds of whatever nature or source allocable to the Airport or its operations shall be deposited and maintained in appropriate accounts in the office of the Treasurer of Spokane County. All disbursements from said Airport funds shall be made by order of the Board, in accordance with the annual Airport budgets, this Agreement and such rules and regulations and for such purposes as the Parties acting jointly shall, from time to time, prescribe.

5.1 Airport funds shall be administered and accounted for in accordance with the rules, regulations, and principles established and approved by the Auditor of the State of Washington, subject only to contrary federal audit requirements.

5.2 Idle funds may be invested by the County Treasurer under direction of the Board in accordance with the laws governing investment of County funds. Earnings from investment of Airport funds, less statutory administrative costs, shall be credited to the Airport funds.

6. ALLOCATION OF FUNDS. The primary purpose of this Agreement is to provide for the continued joint operation, maintenance, and control of airport facilities for air navigation purposes. The management of associated facilities for industrial development, foreign trade zones, and other commercial purposes are secondary to the primary purpose described above.

6.1 As specified in the annual budget, revenues shall be applied to the following purposes, in the order listed:

- (a) Maintenance and operation expenses, including salaries and other personnel costs;
- (b) Principal and interest and any required reserve deposits on outstanding bonds and any other bonds having a parity of lien;
- (c) Principal and interest on the revenue bonds having a junior lien to any outstanding bonds;
- (d) Any outstanding revenue or interest bearing warrants;
- (e) Accumulation of reserve funds;
- (f) Early redemption of revenue bonds or other Airport indebtedness;
- (g) Other proper purposes consistent with operating budget approvals.

7. AIRPORT BOARD. The Board shall consist of seven members, serving at the pleasure of their appointive party, and shall be appointed to a three-year term except as provided below. The City shall appoint three members; the County shall appoint three members; and the City and County, acting jointly, shall appoint one member. One of the three members appointed by the City to the Airport Board shall be a member of the City Council, and one of the three members appointed by the County to the Airport Board shall be a member of the Board of County Commissioners; these appointments shall immediately terminate if the appointee is no longer a member of the Council or Board of County Commissioners.

7.1 City and County each shall endeavor to ensure that its appointees are qualified by reason of education or experience in matters pertaining to aviation and industrial development.

7.2 In case of vacancy, a person shall be appointed by the appropriate appointing authority to the unexpired term in the same manner as the member whose position is vacant.

7.3 Members of the Board shall serve without compensation. Board members may receive from Airport funds reimbursement for expenses incurred in the course of official business, or when travel is necessary, a travel advance or per diem allowance consistent with procedures approved by the State Auditor.

7.4 The Board may purchase liability insurance with such limits as it deems reasonable for the purpose of protecting the Board and Airport employees against liability for personal or bodily injuries and property damages arising from its acts or omissions while performing or in good faith purporting to perform its official duties.

In the event that the Board may not purchase insurance at reasonable rates, the Board may adopt resolutions providing for the indemnification, including reasonable costs and attorney's fees, against liability for personal or bodily injuries and property damages arising from its acts or omissions while performing or in good faith purporting to perform its official duties.

8. POWERS OF THE AIRPORT BOARD. The Board shall have the authority to exercise all of the powers granted to municipalities pursuant to the provisions of RCW 14.08 et seq. in the management, operation, and control of the Airport for aviation and business park purposes, subject to final approval of the annual comprehensive budget except that:

- (a) Eminent domain power must be exercised jointly by the Parties;
- (b) The acquisition, sale, transfer, or disposal of real property, except the grant of a lease, must be by joint action of the Parties;

(c) Policy regulations governing conduct and use of the Airport to be enforced through a judicial proceeding, if not adopted by the joint action of the Parties, must be adopted pursuant to the requirements of City or County ordinances and resolutions. The Airport Board may adopt reasonable rules and regulations for the control and management of the Airport not requiring judicial enforcement, including, but not limited to, minimum standards for aeronautical and nonaeronautical activities;

(d) Contracts for public works and procurements of goods and services must satisfy the legal and procedural requirements of the City;

(e) The employment and termination of the Airport Chief Executive Officer must be jointly approved by the City and County;

(f) Capital improvements of Airport property, for aeronautical, commercial, and industrial purposes, shall be in general accordance with an Airport Layout Plan jointly adopted by the Board, City, and County, and approved by the FAA; and

(g) All aviation capital improvements and land uses conforming with said Airport Layout Plan shall not be subject to City of County zoning regulations.

9. UTILITIES.

9.1 City has assumed responsibility for the maintenance and operation of the Spokane International Airport water and sanitary sewage disposal system, excluding any septic tanks, cesspools, or similar onsite sewage disposal systems in existence on Airport property.

9.2 Ownership of lines, wells, pumping stations, and other component parts of the water and sanitary sewage disposal systems within the boundaries of the property owned jointly by the City and the County for Airport operations, excluding on-site sewage

disposal systems, as noted above, have vested in the City in the same manner and subject to the same regulations and procedures as if those facilities were located within the City limits.

9.3 The City shall be responsible for maintenance and operation of all utility lines and component parts. The cost of new water meters, installation costs, the upgrading of existing meters, and any other costs usually related to meter installation will be borne by the user.

9.4 All decisions relating to operation of existing or future lines including the active nature of substandard or high maintenance lines will be made by the City.

9.5 All future expansion and upgrading of such systems will be done in accordance with City policy in effect at the time and will become the property of the City; provided that, the City may authorize, upon the recommendation of the Airport Board, the construction and installation of sewer lines, water lines, pumping stations, wells and other component parts of the water and sanitary sewage disposal systems within the Airport boundaries by private contract.

9.6 Utility service shall be provided to users located on SIA property at in-City rates. All rules and regulations which apply to in-City users will apply to said SIA users. Any user who had a service agreement with the Airport shall enter into a new agreement with the City.

9.7 A Utilities Plan shall be maintained by the City which will depict all utility lines and facilities and the appropriate City departments shall be given the necessary easement for access to those existing lines and facilities for service and maintenance. The City will coordinate its utility planning and development with the Airport Board and in

compliance with United States Federal Aviation Administration (hereinafter "FAA") rules and regulations in order to minimize any interference with Airport operations and all construction and expansion of the water and sewer systems shall then be added to the Utility Plan with the necessary access extended as with the existing system. Easements for the Airport utilities system, as well as real property site requirements, shall be provided at no cost to the City.

9.8 If it becomes necessary, in the expansion of the Airport utilities system, to form a local improvement district to provide for said expansion, then the City and the County agree, as co-owners of the Airport property, to jointly sign petitions as authorized and required by law for the formation of said local improvement district. If utility service is expanded by the formation of a local improvement district, or other similar method, then the City and County agree that assessments may be placed against any Airport property not being used for Airport purposes in the proportion that said property specially benefits from the construction, improvement, and/or expansion of the utility service.

10. PERSONNEL. The Board shall employ, subject to City and County approval A Chief Executive Officer who shall direct the administration of all matters pertaining to Spokane International Airport, Felts Field, and Airport Business Park, all as in accordance with the FAA approved Airport Layout Plan.

10.1 The Chief Executive Officer may employ or contract for personnel to operate the Airport. Any employees shall be employees of the Airport and shall not be considered employees of either Party. The Board, however, may contract with either Party or other recognized service providers for payroll, withholding, unemployment, worker's

compensation, and fringe benefits, and accounting and administrative services as the Board, from time to time, shall prescribe.

10.2 The Board may employ, or contract with a private body or political subdivision of the state to furnish, law enforcement and firefighting services and personnel in accordance with RCW 14.08.120(2) and FAA rules and regulations.

10.3 The Board shall retain legal counsel other than from the offices of the Prosecuting Attorney and City Attorney.

11. AMENDMENT. This Agreement may be amended at any time by mutual agreement of the Parties.

This Agreement is intended to set forth the basic agreement between the Parties. Nothing herein prevents City, County, and Board from agreeing to any specific matter consistent with this Agreement.

12. TERMINATION. Either Party may terminate this Agreement effective at the end of any calendar year, by serving written notice on the other before the 1st day of October of the previous year. The terminating Party shall also give notice to the Board, the FAA and to other agencies with jurisdiction over or a financial interest in the Airport.

12.1 After notice of termination has been given, if the Parties do not, by the 31st day of December of what will be the last year of joint operation under this Agreement, reach an agreement regarding the takeover by either Party, or other operation of the Airport, or the abandonment and liquidation of the Airport, then the terminating Party will acquire the assets and assume the liabilities of the Airport, except that the City Utilities facilities remain the property of the City. Should it become necessary to engage independent appraisal or arbitration services to determine the amount and nature of payments between

the Parties to compensate for any difference in the value of assets and liabilities, the Parties agree to share the costs equally.

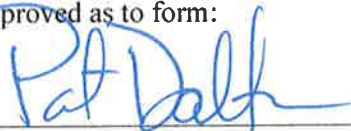
IN WITNESS WHEREOF, this Agreement has been signed and sealed in duplicate in Spokane, Washington, by:

CITY OF SPOKANE



Terri L. Pfister, City Clerk

Approved as to form:



City Attorney

SPOKANE COUNTY



Commissioner Mary L. Kuney, Chair



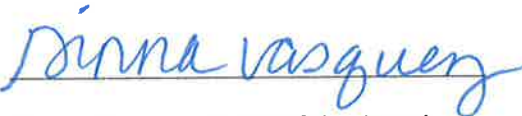
Commissioner Al French, Vice-Chair



Commissioner Josh Kerns, Vice-Chair



ATTEST:



Ginna Vasquez, Clerk of the Board

ATTACHMENT F



Spokane County

OFFICE OF COUNTY
COMMISSIONERS

AL FRENCH, DISTRICT 5

December 12, 2023

U.S. Rep. Cathy McMorris Rodgers
2188 Rayburn House Office Building
45 Independence Ave SW
Washington, D.C. 20515

U.S. Sen. Patty Murray
154 Russell Senate Office Building
Washington, D.C. 20510

U.S. Sen. Maria Cantwell
511 Hart Senate Office Building
Washington, D.C. 20510

Dear Rep. Rodgers, Sen. Murray and Sen. Cantwell:

I am writing to strongly advocate for increased federal research funding and resources to address the pressing concerns related to PFAS/PFOA contamination and its impact on the health and environments in the vicinity of Fairchild Air Force Base on the West Plains.

From my past conversations with you and your staff on this topic, I know we share a deep concern for the well-being of our community and believe that immediate action is essential to mitigate any adverse effects of PFAS/PFOA exposure.

Through my routine contact with constituents and stakeholders, I am hearing increasing concern about the presence of PFAS/PFOA compounds in our water supply. These concerns are heightened by the evolving science behind the potential threat to the environment, health, and safety of our residents.

In particular, the recent CDC study shows some of the highest levels of nationwide samples in some West Plains individuals' bloodstreams is of concern.

As a national issue, I believe it is imperative that Congress prioritize comprehensive research to better understand the extent of contamination, its effects on human health, and effective cleanup strategies.

If I can be of any assistance to share our local experience as Congress and federal regulatory agencies develop regulations and standards for PFAS/PFOS in our water supply, please don't

hesitate to contact me. Ensuring that our community has access to clean and safe drinking water must be a top propriety for all of us.

The residents of our community, especially those in proximity to Fairchild Air Force Base, deserve reassurance that their health and well-being are being safeguarded. We rely on your leadership and advocacy to address this critical issue and allocate the necessary resources to protect our community.

I appreciate your attention to this matter and look forward to your support in our efforts to respond to PFAS/PFOS contamination around Fairchild Air Force Base and the West Plains.

Sincerely,

A handwritten signature in blue ink that reads "Al French". The signature is written in a cursive style with a large initial "A" and a long, sweeping underline.

Al French
Commissioner, District 5



ATSDR collected samples of tap water and dust from some homes.

ATSDR sent each participant their individual results in May 2020 and published community summary results at www.atsdr.cdc.gov/pfas/communities/factsheet/Spokane-County-Community-Level-Results-Factsheet.html.

Key Takeaways

- Levels of some PFAS in the blood of Airway Heights residents were up to fifty-six times higher than national levels.
- Elevated blood levels may be linked with past drinking water contamination.
- Some demographic and lifestyle characteristics were linked with higher PFAS blood levels.
- All tap water samples collected during the EA in 2019 met or were below EPA's health advisory and Washington state public health guidelines for PFAS in drinking water.