

East Selah Community PFAS Listening Session

September 14, 2023



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This document was created by DOH to support the East Selah community. The Sept. 14 East Selah Community PFAS Listening Session was a community-run event that DOH was invited to.

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Listening Session Overview

The East Selah Community Per- and Polyfluoroalkyl Substance (PFAS) Listening Session was hosted by East Selah community member Brandi Hyatt and her organization, Pursue PFAS Free. Brandi invited Yakima Health District (YHD), Washington State Department of Health (DOH), and Washington State Department of Ecology (ECY) to be on a guest panel. Agencies were asked to provide updates on actions taken since the Feb. 2, 2023 Listening Session*, and answer community questions.

Paul Noel, Public Affairs Officer for Yakima Training Center (YTC), was also invited. Paul attended the meeting in a listening capacity only, though did answer some questions.

25 community members attended the meeting. 6 of the community members reported they attended the listening session in February 2023.

**To see the report on the Feb. 2, 2023 Listening Session, please visit*

<https://doh.wa.gov/sites/default/files/2023-03/334-491EastSelahCommunityPFASSessionSummary.pdf>

The goals of the listening session were to:

- Get to know local and state agency employees working on PFAS issues in East Selah and other locations in Washington.
- Get updates from agencies on actions taken based on community feedback at the Feb. 2 Listening Session, including work on a PFAS detection map for East Selah.
- Provide feedback to the agencies on what is working and not working in the PFAS response, and ideas for next steps.

The listening session questions were:

- 1) What questions do you have that are still unanswered?
- 2) What would you like to work on together going forward?
- 3) What else do you need us to know?

Session Moderator

- Claire Nitsche (Claire.nitsche@doh.wa.gov) – Health Educator, Center for Health Promotion and Education, Washington State Department of Health

Guest Panel Representatives

Yakima Health District (YHD):

- Shawn Magee (shawn.magee@co.yakima.wa.us) – Director of Environmental Health, Yakima Health District

Washington State Department of Health (DOH):

Site Assessment and Toxicology Division (DOH-SAT)

- Barbara Morrissey (Barbara.morrissey@doh.wa.gov) – Toxicologist, Office of Environmental Public Health Sciences – Site Assessment and Toxicology Division, Washington State Department of Health

Office of Drinking Water (DOH-ODW)

- Dorothy Tibbetts – Eastern Regional Manager for the Office of Drinking Water, Washington State Department of Health

Dorothy Tibbetts has retired since the Sept. 14 meeting. For drinking water questions, please contact Marcus Goodman, Eastern Regional Operations Manager for ODW, at marcus.goodman@doh.wa.gov.

Washington State Department of Ecology (ECY):

- Greg Caron (greg.caron@ecy.wa.gov) – Hazardous Waste & Toxics Reduction Program Manager, Central Regional Office, Washington State Department of Ecology
- Kurt Walker (kurt.walker@ecy.wa.gov) – Hazardous Waste & Toxics Reduction Program Cleanup Site Manager, Central Regional Office, Washington State Department of Ecology

Question 1: What questions do you have that are still unanswered?

Meeting attendees shared 42 questions with the panel. Not all questions could be answered at the meeting. Questions that the panelists didn't have enough information or data to answer were written down so the panelists could elevate those questions to the right people or agency.

Specific questions the invited agencies can improve their guidance on are:

- Livestock and gardening safety guidelines. Specifically, whether the animal products (meat, eggs, milk) community members have raised or harvested on their properties is safe to sell/eat.
- Testing the effectiveness of the Army's Point of Entry Treatment (POET) systems at the tap instead of the filter shed.
- How long PFAS stay in pipes after the pipes are flushed.
- How to safely dispose of used filter cartridges.

Meeting attendees also shared questions about whether the Army was still using PFAS, and which companies are making PFAS alternatives.

See pg. 10 for a complete transcript of the question and answer session from the meeting.

Question 2: What would you like to work on together going forward?

Meeting attendees shared that they want more support and resources going forward. Specifically, attendees asked for the following.

1. Answers in the immediate future about livestock and gardening concerns. In particular, the safety of home-raised meat and eggs.

Several meeting attendees stressed the need to have their home-raised livestock products and produce tested. They shared that many are not comfortable butchering, selling, or eating their livestock, eggs, and produce until they have answers on whether it is safe to do so. One meeting attendee shared, “a lot of us can’t wait a lot longer to find out what to do with the animals, and if in good conscience we can sell them.”

Meeting attendees also asked why Washington State Department of Agriculture (WSDA) was not reaching out to community members if they know there is a PFAS issue in East Selah.

After the meeting, DOH-SAT secured one-time funding from USDA Food Safety Inspection Service laboratory for limited PFAS testing of livestock blood, meat, and eggs. See the “Actions Agencies are Taking” section on pg. 8 for more information.

2. Getting water tests for the point-of-entry treatment (POET) systems from the Army done at the tap, not at the filter shed.

Many meeting attendees shared frustration that the Army was testing the effectiveness of the POET filter systems at the filter shed. They want tests done at the tap. Several attendees shared that they are concerned PFAS will still be in their pipes.

ECY elevated this sampling issue in the past to high-level Department of Defense (DOD) officials, who shared that DOD’s nationwide policy is to conduct water testing as the water enters the house, not at the tap. In December 2023, ECY executives again informed DOD that tap testing is an issue and are awaiting further DOD response.

3. Getting more information about the Army’s long-term support plan for maintaining their POET filters.

Many meeting attendees shared that many of their questions about the Army’s POET systems have not been answered. These questions included:

- Will the Army only maintain the POET system for 5 years, or until the PFAS situation is resolved?
- Will the Army provide filters to the new owners of lots being sold?
- Who owns the filters, the property owner or the Army?
- Will the cartridges be regularly changed? How readily apparent will it be when the cartridges fill up?

4. Better coordination and collaboration between state agencies, local health, and the Army.

Several meeting attendees expressed frustration that they hear different things from the Army and the local/state agencies. This includes the Army and the agencies having separate meetings. They want a more collaborative approach to sharing information, receiving feedback, and answering questions.

Several attendees asked why the Army is not working with the agencies.

5. More information on grant opportunities that the community can apply for to help with their PFAS needs.

Several meeting attendees voiced frustration over waiting for government support to fix the PFAS problem. They asked if panelists could provide information about grants the community can apply for. These attendees emphasized that they “want action, not studies.” One attendee expressed that Brandi Hyatt, a community advocate and session host, should “not have to do all the work herself” to get results.

6. Answers on whether the land can be contaminated by poop/urine from livestock drinking contaminated water.

One family shared that they haven’t made money all year because they can’t rent their land out, due to concern it is contaminated. This is challenging. They were also told by a real-estate agent that, due to the contamination, their farm is not worth much money. They are concerned as they want to retire.

7. Holding the Army accountable for the contamination.

One meeting attendee shared that, when they hear the Army use the word “monitoring,” the community thinks that means “paid for and maintained.” They are frustrated to learn that this may not be what the Army means. This meeting attendee also shared that, in printed materials, the Army uses words that imply they could be responsible for the contamination. This attendee was frustrated that they are not “owning up to it” and wanted to know why ECY’s enforcement order was not being implemented.

Meeting attendees also shared that they want the Army to hold meetings more like the listening session, and that they do not like the poster session format.

Question 3: What else do you need us to know?

Meeting attendees shared the following thoughts and concerns with YHD, DOH, ECY, and the Army.

1. The PFAS situation is having a profound, negative effect on many meeting attendees’ lives. They want the Army to hear that, and be accountable.

One meeting attendee shared the difficult medical experiences of their loved one since the PFAS situation started. They worked with DOH-SAT to find access to blood testing for their partner, consulted with doctors at University of Washington (UW), and had a spinal tap done to find answers to PFAS medical questions. This community member shared that they “would like the military to know it’s not just affecting our habits, it’s affecting our lives – our children, our spouses, ourselves...if [the military] could grasp that concept and not be so cautious about accountability.”

2. “PFAS fatigue” is impacting many meeting attendees’ hope about the situation, and willingness to continue engaging in meetings.

Several meeting attendees shared that they are “tired” of coming to meetings, repeating their concerns, and not seeing anything done to address them. They emphasized that it is hard to continue showing up to meetings without action.

3. Several meeting attendees want to know how the Army is notifying servicemembers and civilian staff on base about the contamination.

One meeting attendee shared that they talked to a military servicemember on base, who had not been told the water was contaminated. The meeting attendee asked how and when service members and civilian staff on base will be notified about the contamination.

4. Several meeting attendees signed up to be part of YTC's Restoration Advisory Board (RAB) in September 2022. They never heard back, and are not aware of any progress.

One meeting attendee shared that they “wrote to [their] congressmen, and that they said to join, but there’s been no activity.”

After the meeting, DOH-SAT found the following in YTC's Nov. 2023 Newsletter:*

Since initial community meetings over a year ago, only 11 people showed initial interest in being part of a Restoration Advisory Board (RAB). There was no response to the article asking for volunteers in the July YTC PFAS Response Newsletter and no one filled out an interest form to volunteer during the Aug. 30 Open House/Community Meeting. In order to represent the diverse community, a variability of perspectives, people, and backgrounds is needed. East Selah community members interested in starting a RAB should contact Paul Noel at paul.e.noel6.civ@army.mil.

*YTC Newsletter:

[https://home.army.mil/yakima/application/files/6316/9887/1503/YTC PFAS Newsletter NOV 2023 FINAL.pdf](https://home.army.mil/yakima/application/files/6316/9887/1503/YTC_PFAS_Newsletter_NOV_2023_FINAL.pdf).

5. The Army has told community members they cannot use the POET filters for gardening or livestock use.

Meeting attendees shared that this is not acceptable. One meeting attendee shared, “How come the Army isn’t working with [local and state agencies] to get a filter system we trust for all our needs, like cattle? Our area is rural and agricultural – we’ve got to get that taken care of. Not being able to garden and take care of livestock means this system is not acceptable. It needs to address all needs. Livestock is our livelihood, our income, and the way we live.”

Actions Local and State Agencies Are Taking From Community Comments

Based on community feedback, agency guests are working on the following actions:

- 1. The state and local agencies will strive to strengthen our coordination with the Army on our response to PFAS in East Selah.**
 - ECY and the Army are having more frequent communication than prior to the Enforcement Order. ECY uses this as an opportunity to share residents' concerns and requests. Please feel free to reach out to Kurt Walker (509-934-0386) at ECY with your questions, thoughts, and concerns.
- 2. DOH-SAT partnered with USDA to offer one-time, limited testing of eggs and meat for interested community members.**
 - Samples were picked up Dec. 12, 2023. Results will be communicated to study participants as soon as they are available.
 - ECY & DOH-SAT will work together to find more resources for investigating this issue and will continue to press the Army to investigate and address community exposure to PFAS through home-raised produce and livestock.
- 3. To support additional water testing and PFAS water filters in the area, YHD applied for and received a grant from DOH-ODW (Alternative Drinking Water Supply Fund).**
 - Over the next several months, YHD will be launching a new testing project for residents of the broader East Selah area who have not received water testing from the Army.
 - Any residences with PFAS levels over the Washington State Action Levels (SALs) would be eligible to receive a point-of-use filtration system at no cost. For more information, contact Jocelyn Castillo at the Yakima Health District (509-249-6506, Jocelyn.Castillo@co.yakima.wa.us).
- 4. YHD is applying for a grant from DOH to explore the feasibility of a large public water system to serve the East Selah area.**
 - YHD, DOH, and ECY recognize the need to explore long-term solutions for the PFAS issue.
 - With this grant, YHD plans to do additional outreach to residents in order to gauge interest in a public water system. If interest is sufficient, YHD would then hire a contractor to prepare a proposal for a public water system.
 - For more information, contact Kait Wolterstorff at the Yakima Health District (509-249-6525, Kait.Wolterstorff@co.yakima.wa.us).

5. DOH-ODW looked into community questions related to PFAS testing at the tap after POET systems are installed.

- After review, DOH-ODW recommends the Army offer homeowners confirmation samples taken from the tap after installing the POET systems and flushing the pipes.
- If the confirmation sample at the tap shows PFAS levels higher than Washington's SALs, DOH-ODW recommends more flushing or installing a point-of-use (POU) filter system at the tap.
- ECY and DOH-ODW are jointly requesting that the Army implement this recommendation.

6. Panelists are determining better ways to reach the community with news about meetings and PFAS program offerings from partners.

- After the meeting, panelists found out some community members had not received the mailer advertising the meeting. DOH-SAT is collaborating with YHD, ECY, and Pursue PFAS Free on better ways to get information to the community beyond mailers and word of mouth.

7. YHD is looking into local disposal options for used filter cartridges.

- YHD recognizes that the inability to dispose of used PFAS filter cartridges via Yakima County Solid Waste's Terrace Heights or Cheyne Landfills places a significant burden on East Selah residents.
- YHD is working with Yakima County to identify alternative disposal methods. Such as, collection at household hazardous waste drop-offs at Terrace Heights or Cheyne Landfills.
- When an alternative option is identified, YHD will work with DOH and Pursue PFAS Free to notify residents.
- This does not apply to filters installed by the Army, which will be maintained by the Army. This includes disposal of spent filter media.

Questions and Answers

Q: We have decided to retire. We have 40 acres that has been broken up into 14 two-acre lots with roads and easements. We talked to a realtor, and he said it isn't worth much because of PFAS. Is the Army going to put in filters for new owners to build on those lots?

Per Paul Noel (YTC), the Army is installing Point of Entry Treatment (POET) systems on existing wells where the drinking water is above 70 parts per trillion (ppt) for PFOS/PFOA as a result of past activities on Yakima Training Center.

Residents can reach out to Lupe Lara, the YTC Restoration Project Manager at 509-577-3544 or guadalupe.a.lara3.civ@army.mil to follow-up. The YHD may also be able to assist people in the area with PFAS water testing. Contact Jocelyn Castillo (509-249-6506; Jocelyn.castillo@co.yakima.wa.us) about assistance.

Q: Should we put in a community well(s) or individual wells?

There are likely multiple factors to consider in this decision. For this specific project, a community well would be required under the Yakima County Unified Land Development Code (Title 19 - 19.25.020). We recommend you contact Yakima County Planning (509-574-2300, Planning_Info@co.yakima.wa.us) or Kait Wolterstorff (509)-249-6525; kait.wolterstorff@co.yakima.wa.us) at YHD to learn about the county requirements for different types of drinking water wells.

Q: We haven't been able to make money all year because we can't rent our land out. We've had a cattle operation for a long time, and the cattle have been drinking the contaminated water. We were taking 600 gallons, 4 times a day from our contaminated well to water the cattle. Are those lands also now contaminated by their poop and urine?

I (Barb Morrissey, DOH-SAT) don't know. We would need to test the soil to know for sure.

We (DOH-SAT) know that cattle that drink PFAS in their water will have some of it in their bodies. The PFAS in their bodies will come out in their poop and urine and end up in the soil. PFAS don't break down easily, so they may stay in the soil for a while. Over time, PFAS tend to move down out of topsoil and into groundwater. If it happened a long time ago, the PFAS may no longer be in the topsoil.

Q: We don't know how long the PFAS has been in the water, but when did the Army quit using the foam? What year did they discover the contamination?

Based on verbal evidence from my (Greg Caron, ECY) investigations, we (ECY) know PFAS were used in the training pit that was on base in the early 1990s, but it sounds like the pit wasn't used after that. However, other areas on the base continued to use firefighting foams containing PFAS for training. We (ECY) know that's the primary source of the contamination we're now seeing.

Follow up question: but when did they start?

ECY was recently told that firefighting foam was used at YTC as far back as 1976.

Q: When we had a meeting in September, the gentleman (Army) said they still HAVE to use it for training purposes sometime, every once in a while, for training purposes. Is that true?

I (Barb Morrissey, DOH) am happy to answer this. In 2018 our state Legislature passed a law that banned any use of PFAS firefighting foams, like aqueous film forming foam (AFFF), in training. That was a blanket ban that included military sites. Until they have an approved PFAS-free replacement foam that meets military performance specifications, the Army can use the PFAS foam when there's an actual fire emergency.

I (Paul Noel, YTC) can add that there's also a requirement from the Secretary of the Army. We (YTC) don't have a date on that requirement, but it does ban use of PFAS-containing foams Army-wide. There is some foam that still exists from historic use that can only be used in an absolute emergency.

I (Greg Caron, ECY) also want to add that, in order for certification to take place, fire fighters have to test equipment to know it works, and is effective, and they know how to use it. So periodically, they do use foams. The past year or two, the Army changed their foam specification: the foams they buy must now be PFAS free. My (Greg Caron, ECY) understanding based on that is, from this point forward, the Army will use reformulated foams without PFAS.

Q: If [the military] quit using PFAS firefighting foams, is what they are using instead safe? Could it be as harmful as PFAS?

This is a question for the military. We'll (DOH-SAT) ask them what process they have in place to ensure that the next foam they use won't harm the environment or human health.

In the civilian market, fire departments and oil refineries can solve this problem by buying firefighting foam that passes the new "Green Screen" certification. These foams are PFAS-free and also can't contain other known chemical hazards. You can check to see if a specific product has this certification at: <https://www.greenscreenchemicals.org/certified/fff-standard>.

After the meeting, Paul Noel (YTC) provided DOH with the following information:

The Army prohibits the use of AFFF for maintenance, testing and training on its installations, and only uses AFFF for emergency responses. Since 2017, the Army has treated any release of PFAS-containing AFFF as a spill and has required immediate response to limit environmental effects.

In Jan. 2023, the military approved a new PFAS-free version of fire-fighting foam appropriate for combating aviation fuel fires and in September 2023 approved the first replacement foam. The Army is now beginning the complex task of replacing all AFFF in its vehicles, facilities, and equipment with fluorine-free firefighting formulations. Congress prohibited the use of fluorinated aqueous film-forming foam on military installations after Oct. 1, 2024. This prohibition does not apply to firefighting foam that is used solely onboard oceangoing vessels.

More information can be found at the DOD PFAS website:

<https://www.acq.osd.mil/eie/ee/ecc/pfas/index.html>.

Q: This seems to be a problem that has been around for a long time. Chemical companies have sold PFAS internationally and nationally. PFAS just became a known problem in the last 6–7 years. What are the medical ramifications of intaking PFAS into your body? What effects have become evident? Asking as someone who is just now finding out and has been consuming for years.

I (Barb Morrissey, DOH-SAT) can take this one. PFAS were invented in the 1940s and have been used in consumer products since the 1950s. There was a big bump in their use in the 1970s. Around 2000, it was discovered widely that some PFAS weren't breaking down, and were building up in wildlife, people, and the environment. At that time, we didn't know if they were toxic. Some people in the industry already knew that they were, but they didn't share that information.

Over the last 20 years, there has been tremendous effort by public health, health researchers, and communities to fill in the knowledge gaps about how these chemicals affect us, animals, and the environment. This resulted in lots of new health studies reporting results in just the last 10 years. Because of that research our understanding of how PFAS affect our bodies has improved, but we're still learning.

The kinds of health problems that are more common in people with higher PFAS exposure include:

- Increased cholesterol.
 - Cholesterol is a waxy fat-like substance made by your body that is important to your health. Too much, however, can increase your risk of cardiovascular disease. It is measured by a simple blood test.
- Toxicity to the liver.
 - Mostly, we see elevated liver enzymes levels. These are an indicator for liver injury.

- Slightly lower birth weights.
- Slightly higher risk of kidney cancer.
- Increased risk of high blood pressure during pregnancy (pre-eclampsia).
- Changes in immune system response. PFAS chemicals appear to affect how the body responds to some vaccines, like childhood vaccines. We see fewer protective antibodies produced when there are higher levels of some PFAS chemicals in the body.
 - We were discovering this during the COVID-19 pandemic, so studies were done to see if communities with elevated PFAS exposure had less vaccine response or suffered higher rates of COVID-19. We didn't see much evidence of an effect there. PFAS might affect response to some vaccines but not others.

You also asked about the history of PFAS on the base. I (Greg Caron, ECY) can speak to that. The short answer locally is that, in 2019, one well on YTC showed PFAS. The sample found low levels of PFAS, but there were issues with quality control at the lab. It was unclear if the result could be trusted.

The Army came back in 2020 to test 6–7 drinking water wells across YTC. The results did not show elevated PFAS levels. This was a relief. The military was aware it could've been an issue, so for a brief time we (ECY and DOH) didn't think it was a problem at YTC. However, because PFAS has been a huge issue nationwide at military bases, the Army did a more thorough investigation that tested not only drinking water wells, but all the monitoring wells they could find on base.

On-base drinking water wells are quite deep – 400 to 500 feet deep. There hasn't been enough time for the PFAS to infiltrate those deep wells. Your wells might be 200, 100 feet or less deep so that when we (ECY) started testing those, we did find elevated PFAS levels. It wasn't known that PFAS in private wells was a concern until the last two years. The map with blue dots shows wells that have been tested off base.

Q: Is there just one company producing PFAS chemicals?

No. There are a bunch of companies that make PFAS chemicals. 3M is one of the ones that made PFAS and firefighting foams first. Others that make PFAS include Dupont, Chemours, Honeywell, Solvay, Daikin, BASF, Bayer...it's a long list.

Q: Are Dupont or 3M, or the other companies, also making the new replacement foams?

I (Barb Morrissey, DOH-SAT) don't know who makes the newer foams used by the Army.

In general, many companies that serve the fire-fighting foam market are now offering PFAS-free alternative foams. They still want to serve the foam market and are responding to the high demand for PFAS-free foams. These companies have names like: National Foam, Tyco Fire Protection Products, Perimeter Solutions, and Angus Fire. I (Barb Morrissey, DOH-SAT) did not see Dupont or 3M listed as manufacturers of a PFAS-free foam.

Q: There was a gentleman at an earlier meeting who owns a 300-foot deep artesian well. YTC gets water from him. The pipes go across properties here in East Selah. Could he potentially supply water to everyone on Grange and Simmons?

A community member at the meeting shared: This is Pomona Artesian Irrigation Company Water System. It is two artesian wells, and they are leased to a community with 62 properties and YTC. The system was put in over 100 years ago. It's deep with layers of basalt to protect from contaminants. The system tested ok. This is a deep well that could help provide water, but this doesn't help those with their own shallow wells.

Q: When are we going to get more information on animals, like harvesting them? I can't butcher, sell, or eat those animals until we know if it's safe.

Washington State Department of Agriculture (WSDA) is the agency that you need to work with if you're going to sell that meat. They have relationships with federal food safety labs, like USDA, and might be able to test your animals to let you know about safety. I would reach out to them. We (DOH-SAT) have a factsheet* here with their information. Working with them, they have some things in place that we don't for home raised beef and garden.

For people who are raising livestock for their own consumption, there's hardly any resources and testing costs more than \$500 a sample. We'll (DOH-SAT) see what we can do to help.

In terms of animal health, there's almost no studies about PFAS and livestock health. Vets don't have a lot of info to go off at this point in time. Across the country, everyone is scrambling to answer animal health questions.

After the meeting, DOH-SAT partnered with USDA to offer one-time, limited testing of eggs and meat for interested community members. See the "Actions Agencies are Taking" section on pg. 8 for more information.

*<https://doh.wa.gov/sites/default/files/2024-01/WSDA-DOHpetslivestockgardens.pdf>

Q: On our property, the cattle drink irrigation water out of the Selah/Naches river from this time of year until next April. Then, they drink out of our well. So, irrigation water part of year, [contaminated] well water for the rest. A lot of us can't wait a lot longer to find out what to do with the animals, and whether we can sell them in good conscience. In the rest of the U.S., are there any other experiences of this happening?

I (Barb Morrissey, DOH-SAT) have been looking at what's going on in other states. There is some state-led action in Maine and in Michigan. Both states have started addressing PFAS in farmlands.

In Maine, their state legislature provided \$100 million in 2022 to address PFAS on farmlands. Some of this money was given to The Maine Dept. of Agriculture, Conservation, and Forestry to use and distribute. You can find out more here

<https://www.maine.gov/dacf/ag/pfas/index.shtml>.

In Michigan and Maine, they are testing farm soils, crops, and cattle where biosolids that were highly contaminated with PFAS were applied.

Q: Why isn't Washington State Department of Agriculture (WSDA) reaching out to us if they know it's a problem? Can you put pressure on Ag?

From the conversations we (DOH-SAT) have had with WSDA, they are not hearing from commercial operators. Having people get involved gets things moving. If you're a commercial operator and are willing to leave me (Barb Morrissey, DOH-SAT) your email address, maybe we can make progress.

Q: Was the money in Maine dispersed directly to owners with livestock?

Yes, some of the money has been given to commercial livestock owners to reimburse them for the impacts of PFAS. As far as we know, Maine's assistance programs only target commercial dairies and livestock operations right now, not home-raised livestock. See description here:

<https://www.maine.gov/dacf/ag/pfas/pfas-assistance.shtml>

The state is testing soil, milk, meat. In some cases, cattle that are too contaminated are bought by the state and disposed of. A similar case of dairy cattle contaminated with PFAS happened in New Mexico.

Q: The Culligan POET system the Army came out with, they said that they (the Army) will give 5 years of maintenance for it. But we were also told this is a “forever chemical.” At the initial meeting the Army gave us a timeline up to 30 years for cleanup. It’s a bit short sighted on the Army to say they’ll take care of us for only 5 years when this is a “forever chemical.” What’s the plan?

Per Paul Noel (YTC), The Right of Entry (ROE) document signed by the homeowner states the agreement is for 5 years or until the project is complete – whichever is longer. System maintenance and monitoring will be extended unless a more permanent solution becomes available.

Q: The millions of dollars spent in Maine...are we going to spend millions of dollars studying how this affects residential agriculture when we could put the same money into just fixing the problem – like buying extra filters for water? Maybe it could be turned into a grant?

We (DOH) agree that money spent on solutions should make sense and that the community should be at the table during those discussions about what makes sense.

If we want regulatory standards or advisory levels about how much PFAS in well water is safe for livestock to consume, then we (DOH-SAT) do need more studies. There may be a more direct way, however, to get you answers to your immediate questions: testing the meat. We (DOH-SAT) would like to work with you to design something that addresses your concerns and needs and gets you to a solution as fast as possible.

After the meeting, DOH-SAT partnered with USDA to offer one-time, limited testing of eggs and meat for interested community members. See the “Actions Agencies are Taking” section on pg. 8 for more information.

Q: What sort of protections or regulations are in place about disposal of PFAS? Has anything changed? There are local news stories about dirt from YTC that then goes to a local landfill that is not prepared for it. Has anything been done to treat it better?

Kurt Walker (ECY) and I (Greg Caron, ECY) attended a meeting this morning with a researcher talking about disposal options. We know it’s an issue.

For example, ECY is thinking a lot about how to dispose of AFFF firefighting foams that haven’t been used ECY has already set up a system for collecting PFAS foam from fire departments. We’re (ECY) trying to pull that foam back in. ECY has commissioned an environmental impact statement to look at all methods of disposal to see what’s most effective and safe. That document will guide how our state disposes of it. The environmental impact statement (an assessment of the environmental impacts of all the cleanup options) started over a year ago. This is not a small issue. Our agency is going to spend over \$1 million on this impact statement, not including storing/collecting/replacing the foams once the impact statement is complete.

On YTC's contaminated dirt, we knew there was old petroleum products used to start the training fires. We knew it was contaminated with petroleum. We did our investigation, and the Army had it excavated and tested. The soil was sent to a landfill in west Yakima that is not lined. At the time, that was allowed because we thought we were only dealing with petroleum contamination. Now, 15 years later, we discovered PFAS was also likely present. We have pulled the disposal records to help determine how much was dumped, and in what part of the landfill. We know where to look and test. ECY has been coordinating with YHD and owners of the landfill to look into it. The good news: we have good records. The bad news: we have to go back and test to know if it's there.

Shawn Magee (YHD) added: YHD permits the landfill facility where the contaminated soil is under remediation. We required them to add PFAS to groundwater monitoring for the landfill, and we would know in advance of residents if it is getting there.

Q: Who owns the POET filtration system the Army is installing? Owners or the Army? Our insurance agent asked about that.

Per Paul Noel (YTC), The POET system remains property of the federal government, and the Army remains responsible for the upkeep and maintenance of the system, which may include but is not limited to filter change-outs, replenishment of water softener salt supply, and UV filter cleaning and maintenance.

Q: What do we do with the filters at the end of their life? Send it to the landfill? Where does the Army come in and do something more proper with them?

Per Paul Noel (YTC), all components of the POET system remain property of the federal government. If the Army installed and maintained the filter, its contractor will remove the filter and dispose of it according to applicable state and federal laws.

Q: Neither the company nor the military will dispose of the used PFAS filter cartridges from a home water filter that the homeowner installed themselves. It doesn't seem right to put them in a landfill if they're contaminated. This question was brought up months ago, and we haven't gotten an answer. We're still storing our cartridges in our house. It's been over a year. What should we do?

We (YHD) reached out to the municipal landfill to double check that the moderate hazardous waste facility can take them. They said no, that is not what they deal with. We're doing research and ideally would like to get the used cartridges to a lined landfill facility, but we don't have one here. Yakima County will have one in a bit, but it's a limited purpose landfill, not municipal, so we're not sure it'll work.

We are looking into resources for this and where to locate them for the long term. We don't want to move the contamination. We're doing research on that and as soon as we have firm confirmation of answers, they'll be in the YHD PFAS newsletter

(<https://www.yakimacounty.us/2667/PFAS>) and we'll come directly to you with options.

After the meeting, YHD looked into the issue of disposing used filter cartridges. Please see the "Actions Agencies are Taking" section on pg. 8 for more information.

Q: Why won't the Army test for PFAS at the tap? I brought it up when [the Army] came out to our house, what they are going to do to check concentration levels? They said they'd check concentration levels after the POET system outside the filter shack, but I want it done at the kitchen sink since that's where I drink from. They said, "they'll look into that." We're afraid it's still going through pipes.

This is an issue that Kurt Walker (ECY) and I (Greg Caron, ECY) thought of, and we elevated it to our bosses in Olympia, who then elevated it to the Director of the Army's environmental restoration program in Washington D.C. It went high. The Army protocol is to sample at the treatment system. Your question is the same one we (ECY) had. I don't blame you. I would want to know. The Army's director wrote back that "we (the Army) cannot do that (test at the kitchen tap)." That is where it has ended at this point. It's not something we have stopped discussing. But that is the stance of the Army. It was not a local decision. It came from very high Army level.

DOH-ODW followed up on this question after the meeting. They provided the following update:

DOW-ODW recommends that the Army offer homeowners a confirmation sample taken from the tap after the POET system has been installed and the pipes flushed. Please see the "Actions Agencies are Taking" section on pg. 9 for more information.

Q: Did they (the Army) acknowledge contamination came from their base?

I (Greg Caron, ECY) don't think there has been any question. The Army has been involved in bottled water and installing filters. They have never said otherwise.

Q: But they (the Army) are expecting us to be responsible for cleanup of PFAS left in our home plumbing? I have 6 kids, elderly parents, 10 people in the main house, 2 people in small. It's my family. Would they want this for their family?

We (DOH-ODW) will look into the home plumbing issue.

DOH-ODW looked into the home plumbing question. This is what they came up with:

There is not a lot of science out there about PFAS building up in and releasing from home piping. However, there are some examples in the existing research that show that it can happen.

We (DOH-ODW) understand that for each affected house, there is already a plan to collect a PFAS sample directly after the POET system to confirm it's working. We (DOH-ODW) also recommend that the Army offer homeowners a confirmation sample taken from the tap after the POET system has been installed and pipes flushed. If the confirmation sample at the tap shows PFAS levels higher than Washington's State Action Levels (SALs) we recommend additional flushing, or installation of a point of use filter system at the tap.

To see a factsheet on the SALs, visit <https://doh.wa.gov/sites/default/files/2023-02/334-473-PFAS-StateActionLevelFactsheet.pdf>.

Q: They're (the Army) already coming out anyway, just test the tap. My husband still doesn't feel safe with the POET system, and wants to continue buying bottled water. They (the Army) don't know what percentage [of the PFAS] is getting flushed out in the internal pipes. I am eating and drinking from the tap, not the well. Is there treatment for clearing out the water lines in the house?

I (Dorothy Tibbetts, DOH-ODW) can take this. It's fairly straightforward to flush contaminated water out of household piping after installing the filter. But you are asking a good question: does the PFAS "stick" to the internal piping? And if it does, does it continue to get released into the water that's flowing through the pipes?

The concern is that PFAS may deposit in layers along the insides of home pipes and then be slowly released back into the filtered water as it flows through the pipes overtime. If we really don't know if this is a problem or not, we should probably test at the tap. They could always put a POU filter on for a while

We (DOH-ODW) are going to look into this question.

DOH-ODW followed up on this question after the meeting. They provided the following update:

DOW-ODW recommends that the Army offer homeowners a confirmation sample taken from the tap after the POET system has been installed and the pipes flushed. Please see the "Actions Agencies are Taking" section on pg. 9 for more information.

Q: I would like transparency; they change a word or two and it leaves us "holding the bag" by changing enforcement order. It's unclear why wording changes, sounds like they're not taking accountability?

I (Greg Caron, ECY) can answer this. As part of the state cleanup process from ECY, any party that we believe has credible evidence for being the polluter is known as a "potentially liable person" (PLP). The Army is included as a "person" per our attorneys. We have sent the Army their PLP letter, and the Army has accepted that. So even though they signed the letter and accepted it, it is still called "a potentially liable party" because the only way it is established is in a court of law. Our agreements have been made outside the courtroom. Only a judge gets to determine if the Army is truly a "liable party."

Q: Back to tap testing – is it a specific test? Can they do it?

It would be the same test at the tap as they will do at the treatment unit, where the water leaves the unit and enters the home.

Just for perspective, I (Dorothy Tibbetts, DOH-ODW) can share that DOH-ODW doesn't allow Group A public water systems to use in-home water treatment units because it's hard to go into people's homes to test and maintain an under-sink unit. Even if all the community members initially say, "Yes! The water system operator can come into my home and test regularly."

Over time, it might become hard to schedule, it's a hardship on the person doing the testing to arrange times with all of the residents, it's inconvenient for the residents, new people move in and don't want the inconvenience of someone coming in every month to test, and even people who initially agreed to it become fatigued by it. This might be one reason why the Army considers it challenging to conduct the testing in-home instead of at the unit outside the home. However, this is a consideration independent of the question about whether PFAS might accumulate in the pipes. That's what we need to find out first.

Q: Could a homeowner take their own tap sample to get tested?

Yes, you could contact labs in the area. We (DOH-ODW) have a list of labs* here tonight on a handout for labs certified to test for PFAS. Ask the lab if they can come and collect the sample, or if they will accept a sample collected by the homeowner or resident. If they do accept that, ask them about the proper collection techniques, and of course ask them about cost.

After the meeting, DOH-ODW and YHD followed up with the following:

DOH-ODW is providing funding to YHD to test individual wells and provide treatment if necessary to residents of the East Selah area from our Alternative Drinking Water Supply Fund. See the "Actions Agencies are Taking" section on pg. 8 for more information.

*To see the list of labs, please visit <https://doh.wa.gov/sites/default/files/2022-09/331-700.pdf>

Q: I understand not every person will open their doors for testing, but what about half? That gives some test results, it will help.

The first step is to see what we (DOH-ODW) find out about PFAS accumulation in household piping and other internal water fixtures, and risk to health.

Q: The test itself is \$500–\$700. Would any of the state reps here be willing to pay for those tests? That would help a lot with our concern.

I (Dorothy Tibbetts, DOH-ODW) am not sure if the money that we mentioned earlier – the Alternative Drinking Water Fund for Group B systems and private wells for testing/treatment – would include in-home sampling associated with these POET systems that the Army is installing. I will find out. We’re still developing the funding criteria for distributing funds to local health that have applied for them. This ties into the other question we’re working on: whether it is understood that PFAS sticks to piping, and therefore sampling at the tap inside the home is warranted and necessary.

After the meeting, DOH-ODW and YHD followed up with the following:

DOH-ODW is providing funding to YHD to test individual wells and provide treatment if necessary to residents of the East Selah area from our Alternative Drinking Water Supply Fund. See the “Actions Agencies are Taking” section on pg. 8 for more information.

Q: It would be better peace of mind to consume the water if you did that. Back when this started, I got onto my computer and researched, and it said way back in the papers that calcium and PFAS are buddies. I think most wells have a lot of calcium with hard water build up. My pipes are contaminated with calcium, my hot water tank is still working 20 years later. Can you imagine how much sediment is in that? What could PFAS stick to in the pipe build up?

DOH-ODW looked into this after the meeting. Here is what they found:

There is not a lot of science out there about PFAS building up in and releasing from home piping and plumbing components. However, there are some examples in the existing research that show that it can happen. We understand that for each affected house, there is already a plan to collect a PFAS sample directly after the POET system to confirm it’s working. DOH-ODW also recommends that the Army offer homeowners a confirmation sample taken from the tap after the POET system has been installed and pipes flushed. If the confirmation sample at the tap shows PFAS levels higher than Washington’s SALs*, we recommend additional flushing, or installation of a point of use filter system at the tap.

*For more information on the SALs, please visit <https://doh.wa.gov/sites/default/files/2023-02/334-473-PFAS-StateActionLevelFactsheet.pdf>.

Q: The map that's being passed around, is it old (the original from the Army 2021–2022) or is it new?

The maps that were provided today were created for the public's benefit. Please let me (Kurt Walker, ECY) know how I can improve them. There's a map with a satellite photo overlay with red/yellow/green colors showing the Army data from 2021–2022. Then there is a map with fewer dots—light red to black from the May 2023 sampling event. Many locations were repeat tests with some first-time samples taken from new areas and new wells. We can talk on the side about the individual results.

Q: Are we seeing [the PFAS plume] move quite a bit? Seeing differences on this map compared to the original.

Yes, we (ECY) saw 37 wells that were repeat tests: 11 were basically unchanged, 10 went down an average of 30%. Most change was seen in an upward direction: 16 wells increased, with an average increase of 310%. We took notice of some significant increases. Some areas that previously tested low are now testing high or "hot." We (ECY) will be keeping an eye on those areas. We (ECY) tested areas on the margin of the contaminated area because we wanted to understand how contamination is moving over time. It has moved further to the north and northwest, more than what was previously assumed. It is expanding.

We (ECY) need to get more regular testing done, so that locations that we think the groundwater is safe, is in fact safe. We don't want to assume water is safe. We want testing to confirm it is safe. DOH and YHD are also providing assistance to those residents who the Army is not helping. We need continued testing, so we know who needs information and resource assistance.

Q: What is the Army's filtration system based on? The original 70 parts per trillion (ppt) from EPA, or the new number? What should we do if PFAS levels increase in our water?

Per Paul Noel (YTC), the design Point of Entry (POET) systems are based on the general chemistry of the water of each well. Some may include granulated activated carbon (GAC) filters, others may include anion resin tanks. Other components may include but are not limited to pre- and post-resin tank sediment filters, and an ultra-violet light for post-treatment disinfection. Water samples from POET systems already installed in the East Selah area have returned as non-detect or near non-detect for PFAS after the water has passed through treatment.

Q: You said you were finding more PFAS to the north and northwest, how is that?

I (Dorothy Tibbetts, DOH-ODW) can answer that. Pomona mobile home trailer park has a shallow (backup) well and a deep well. The deep well is the primary drinking water source and tested clean. The shallow well tested above the SALs, which are the state's recommended health limits for daily water consumption.

For more information on the SALs, visit <https://doh.wa.gov/sites/default/files/2023-02/334-473-PFAS-StateActionLevelFactsheet.pdf>.

Q: Can you tell if the PFAS have gotten across the river?

We (ECY) have not tested west of the Yakima River yet. There aren't any drinking water wells in the area just west of the river to test.

The floodplain west of the river is used for agriculture and doesn't have drinking wells to sample.

Q: What about the Zirkle Fruit Company wells? They have two visible wells along Harrison Road.

We (ECY and the Army) haven't tested as far west as Zirkle on Harrison Road. I (Kurt Walker, ECY) don't suspect with the way the groundwater moves that PFAS contamination has reached that far. But we (ECY) do see contamination all the way to the Yakima River.

Follow up statement: Zirkle has two visible wells along Harrison Road.

Your point is well noted. They have not been directly asked to test. Yes, we (ECY) intend to see testing in areas west of the Yakima River and will be requesting that of the Army. In July we requested the Army provide very specific testing plans on PFAS. That is part of the 1,700 pages of documents the Army submitted. Kurt will provide feedback to the Army on that by the end of this month. You're right, there are more areas that need to be tested and this is part of the next steps.

Q: Please take this back to the Army: we went to the POET system meeting. The design looks great. For our family, we have a medically compromised child. We had to put in a house filtration system to take care of him. We've paid for 5 tests from valley labs. \$3,500 we have spent to make sure our child is okay to bathe in the water. It took us that amount of tries to figure out when filters detect PFAS again, which is about every 2 months. There wasn't any way for us to know when they fill up unless we did that testing. Is it going to be readily apparent when they fill up with the POET systems? Will the cartridges be regularly changed?

Yes, my (Paul Noel, YTC) understanding is that the first 3 years will have 16 total tests, several during first year then quarterly. That will give us (YTC) an idea of how often they need to be changed. Systems will be tested from 3 areas: pre filtering, mid filtering, and after the filtering. The plan right now is to not test from the tap.

I (Paul Noel, YTC) will bring the request to test at the tap back to the team. YTC does not have an answer for that tonight.

After the meeting, Paul Noel (YTC) provided DOH with the following information:

To ensure effective treatment of PFAS, the Army has established a robust monitoring schedule, during which ECC and/or its subcontractors will come to the residence to collect a 3-part sample from the POET system: one sample of untreated groundwater; one sample collected midstream between the resin tanks to verify any occurrences of PFAS breakthrough and monitor the life of the resin (or granulated activated carbon, depending on the system); and one sample post-treatment to ensure all system components are functioning properly. The first year of testing is aggressive following a weekly, biweekly, and eventually, monthly schedule. Testing will follow a quarterly schedule following the first year.

Q: Please give us a reason for why the Army is not testing out of the tap. So far, we have only had vague answers.

I (Paul Noel, YTC) will take this back to the team at YTC.

After the meeting, DOH followed up with YTC about why they are not testing from the tap. YTC provided the following answer:

The Army's priority is providing filtered water for the purposes of consumption to homes with wells that have PFAS (PFOA+PFOS) levels above 70 parts per trillion. To ensure effective treatment, the Army takes three samples. The first sample is collected as close to the well head as possible, addressing contamination of the well head. The second sample, collected between filtration vessels, provides insight on when the filtration vessels or filtration media need to be replaced. The final sample, finished water, is collected directly after the final treatment element (UV disinfection) which ensures the treatment system is performing according to design specifications. Samples must be collected immediately downstream of the treatment system to ensure effective treatment is occurring.

Q: The military likely has many barrels of [AFFF] left. If it's not allowed to be used except emergency, I would like the state agencies to ask the military where they will be disposed of to ensure not recycled.

After the meeting, Paul Noel (YTC) provided DOH with the following answer:

Working closely with EPA, on July 11, 2023, the Department of Defense (DOD) issued interim guidance on PFAS destruction and disposal options that identified commercially available options consistent with EPA guidance. Those options include:

- Carbon reactivation units
- Hazardous waste landfills
- Solid waste landfills that have composite liners and leachate collection and treatment systems
- Hazardous waste incineration
- Several other storage or site-specific options.

Incineration of PFAS-containing materials remains on hold since April 26, 2022, when DOD issued a temporary moratorium on the use of incineration for its PFAS materials while it continues to evaluate existing and developing PFAS destruction and disposal technologies, monitor studies on their potential environmental effects, and collaborate on best practices.

Q: I talked to a military person on base, and they didn't know the water was contaminated. I would like to know how the military members themselves are going to be notified of this.

Per Paul Noel (YTC), YTC's drinking water comes from a 400-foot-deep well that is leased from Pomona Artesian Irrigation Company. PAIC also has a second well located on the Garrison that serves several members of the East Selah community. Sample results of both wells are registered with the state, and according to the Washington State Department of Ecology, "Previous investigations have demonstrated that the deeper aquifer used for drinking water on-post (i.e., Pomona and Jordan wells) is not connected to the shallow aquifer beneath YTC (i.e., where contamination is found from IRP [Irrigation Restoration Program] sites)." We found this at <https://apps.ecology.wa.gov/cleanupsearch/document/93713>. Samples of these wells continue to return at non-detect levels for PFOS/PFOA.

Q: How can we work as a community? Some of us have irrigation rights, but no access to water. We'd have to trench. The contractor never did because the ground is too rocky, and it was \$7k-10k to do. It would be great if you (the panelists) could help us find funding to help put those systems in to get irrigation water.

This is a take-home question.

The panelists looked into this question and, unfortunately, are unaware of any funding for this type of project. We suggest that you contact your irrigation district to ask about funding opportunities for connection to canals (Selah-Moxee: 509-469-0446; Roza: 509-837-5141).

Q: Washington banned PFAS-containing consumer products, but it's being found in food products. I'm not hearing that those products are being banned. Are PFAS products actually really being banned?

Yes, the state adopted a number of bans on use of any PFAS as an ingredient in a number of consumer and commercial products.

After the meeting, DOH staff made a list of adopted state restrictions with their effective date. The state is considering additional products for action.

Year that law/rule was adopted	What it does	Effective dates	Links to details
2018 Toxics in Firefighting law RCW 70A.400	Bans intentionally added PFAS in AFFF firefighting foam. AFFF use in training.	Effective dates vary from 2018-2024. Facilities (like military bases) with federal laws that required PFAS in AFFF have until 2 years after the change in the federal law to comply.	Dept. of Ecology
2018 Food Packaging RCW 70A.222.070	Bans intentionally added PFAS in food contact paper	Feb. 2023 - Paper wraps and liners, food boats, and pizza boxes May 2024- paper bags and sleeves, bowls, flat service ware like plates and trays, open-top containers like French fry cartons and food cups, closed containers like clam shells.	Dept. of Ecology
2023 Toxic-Free Cosmetic Act RCW 70A.560	Ban intentionally added PFAS in cosmetics	Jan. 1, 2025	Dept. of Ecology Report

2023 <u>WAC 173-337-110</u>	Bans intentionally added PFAS in carpets, rugs, indoor leather and fabric covered furniture and other furnishings, and aftermarket stain- and water-proofing sprays	Jan. 1, 2025	<u>Dept. of Ecology Safer Products for Washington rule</u>
2024 – under consideration for bans and ingredient reporting	Clothing, outdoor gear, protective clothing for firefighters, cleaning products, car/boat washes, car wax, floor waxes and polishes, ski wax, surface sealants, cookware and kitchen supplies.	This work is preliminary. No rulemaking has begun yet.	<u>Dept. of Ecology Safer Products for WA Program</u>

Q: Do you have any concerns with the plume expanding to the south or east?

There are elevated PFAS areas to the south, but not the kind of elevation we (ECY) saw to the north. We still want to get more tests done. In May, we got 50 samples, but there are other areas we (ECY) want to continue to test near the south and southeast boundary.

Q: Why won't the Army reimburse homeowners who, on their own dime, had installed a whole house system that had been independently tested to remove PFAS and other related toxins to a non-detect level? We're showing more than 560 ppt in, non-detect on the test after the filter, with a 260 ft deep well.

Per Paul Noel (YTC), at this time, there is no funding method to provide direct compensation for resident expenditures; however, there is a system through which someone can file a claim against the government for losses associated with military activities. For more information about this process for YTC, please contact the Claims Division, Office of the Staff Judge Advocate, Joint Base Lewis-McChord, WA at 253-477-1878.

Q: Is it so that EPA will/has determined that the PFAS level of 70 ppt is inadequate, and the agency will be issuing a much lower PFAS limit, like 4 ppt?

Basically, yes. EPA lowered their health advisories for PFOA and PFOS in drinking water in 2022. A health advisory is a recommended limit for long-term consumption (over years) in drinking water. Then in 2023, EPA proposed 4 ppt as the national safety standards for PFOA and for PFOS in drinking water. This proposed standard could change during the rule-making process which we expect to finish by April 2024. EPA also proposed standards for 4 other PFAS in drinking water. See the EPA's factsheet on the proposed rule to learn more:

https://www.epa.gov/system/files/documents/2023-04/Fact%20Sheet_PFAS_NPWDR_Final_4.4.23.pdf

Q: Do you know what foods PFAS are in?

Earlier testing of foods (2005–2015) found widespread low levels of PFAS in the food supply. However, levels of PFAS in our grocery market foods have declined over time to the point that they are not detected frequently anymore. The exception is seafood. PFAS are still frequently detected in seafood samples. FDA and USDA are the federal agencies that monitor the U.S. food supply for contaminants. You can learn more at <https://www.fda.gov/food/chemical-contaminants-food/questions-and-answers-pfas-food>.

The state has also investigated PFAS in seafood sold here or caught in state rivers and lakes.

- DOH surveyed PFAS in the top 10 fish varieties sold in our seafood markets and did not find any with enough PFAS to recommend that consumers eat less of them.
- The Department of Ecology also monitors contaminants, including PFAS, in freshwater fish in urban and rural locations across the state. Based on the PFAS results, DOH advises that people curb their consumption of certain fish types in 3 urban lakes (Lakes Meridian, Sammamish, and Washington—all in King County). More testing is underway. In general, PFAS (especially PFOS) are higher in fish that live in urban water or in waters that receive PFAS pollution (like a wastewater treatment plant outfall).
- Please note, some fish in the Yakima River have state recommendations to curb or avoid consumption—common carp, largemouth bass and small mouth bass. This is because they contain other contaminants (mercury and PCBs.)

Some limitations of all the above food surveys:

- The surveys included all the PFAS with health advice, but we can't rule out that other unmeasured PFAS could be in our food.
- The laboratory detection limits in foods are much higher than detection limits in drinking water. Surveys of PFAS levels in meats typically only report concentrations over 500 ppt. Surveys of other foods have reporting levels of 10–100 ppt. Because people consume a lot less volume of meat and seafood daily compared to drinking water, the health advisory levels for meats and seafood are also much higher than for drinking water.

Q: What are we doing about PFAS now?

You can stay up-to date on state and local action to address issues at the YTC site by reading the Yakima Health District's regular community newsletter on the PFAS response:

<https://www.yakimacounty.us/2667/PFAS>

The Army also publishes a quarterly newsletter for East Selah community on their PFAS investigation at YTC <https://home.army.mil/yakima/my-fort-1/all-services/directorate-public-works/pfas>

More generally, the state and federal government have too many actions to list that are underway to address PFAS in consumer products, waste streams, drinking water, etc. Visit the below websites to learn more.

- WA DOH PFAS website: <https://doh.wa.gov/PFAS>, see "What our state is doing to address PFAS" section.
- WA Dept of Ecology PFAS website: <https://ecology.wa.gov/waste-toxics/reducing-toxic-chemicals/addressing-priority-toxic-chemicals/pfas>
- EPA actions to address PFAS: <https://www.epa.gov/pfas/key-epa-actions-address-pfas>

Q: How long has the Army been using PFAS?

ECY was recently told that firefighting foam was used at YTC as far back as 1976. According to information on the YTC website, the training center has not used AFFF for fire training or fire emergencies since 2014.

Q: When did PFAS show up in the environment? In our products?

PFAS have been used in many commercial and consumer products since the 1950s. We didn't start testing widely for PFAS in the environment or in people until the early 2000s at which point we found them to be widespread in both. We can assume that they showed up in the environment and our bodies much earlier, closer to when their use began.

Q: How long have we been living with PFAS in East Selah? As a country?

It is currently unknown how long PFAS has been in the drinking water wells in East Selah. We may learn more about this timeline in the Army's remedial investigation. The same uncertainty about timeline exists at 100's of contaminated sites across the nation. This is because PFAS use goes back many decades while PFAS testing of drinking water only started recently.

Q: What is the Army doing about PFAS in East Selah?

For information on what YTC is doing about PFAS, please visit

<https://home.army.mil/yakima/my-fort-1/all-services/directorate-public-works/pfas>.

In July 2023, YTC started a quarterly newsletter to inform the community of its activities. These are accessed at the website above. Their latest November 2023 YTC newsletter can be found at

[https://home.army.mil/yakima/application/files/6316/9887/1503/YTC PFAS Newsletter NOV 2023 FINAL.pdf](https://home.army.mil/yakima/application/files/6316/9887/1503/YTC_PFAS_Newsletter_NOV_2023_FINAL.pdf)

