

PFAS Summary

PFAS CAP Meeting

November 1, 2017



Interim CAP

Today

- Morning: Perspectives from advisory committee members
- Afternoon: Facilitated discussion of Interim CAP options
 - Interim and those for 2018 ongoing discussions

November

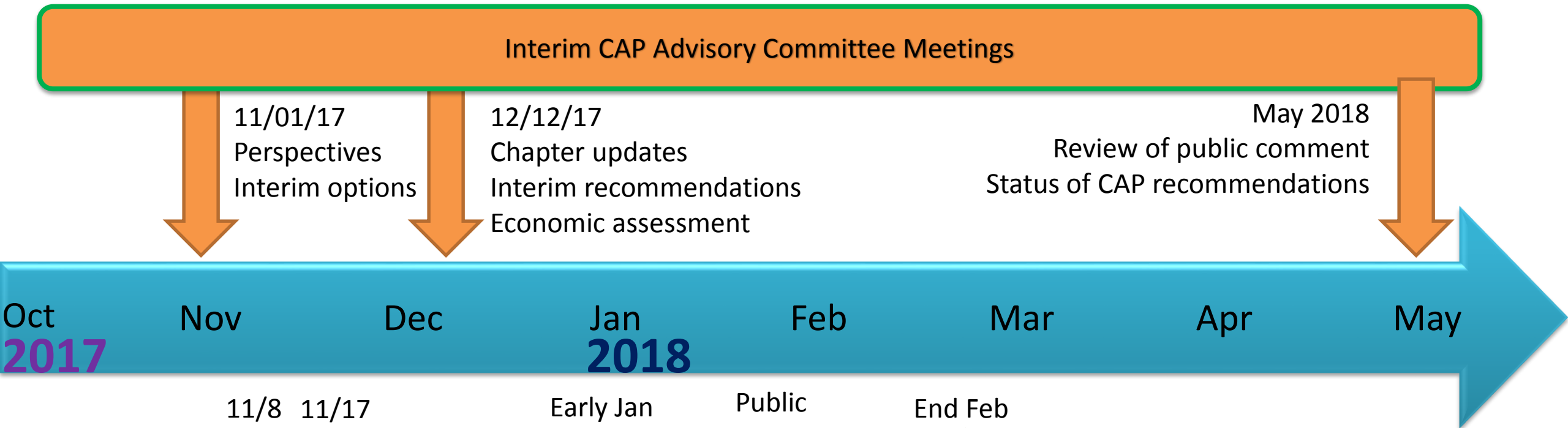
- ECY/DOH – prioritize options, draft recommendations chapter, economic assessment, update chapters
- Dec 12 – present Chapter updates, discuss economic assessment for Interim Recommendations



Interim PFAS CAP Timeline

2017

2018



Interim CAP Advisory Committee Meetings

- 11/01/17 Perspectives Interim options
- 12/12/17 Chapter updates Interim recommendations Economic assessment
- May 2018 Review of public comment Status of CAP recommendations

11/8 11/17
Biosolids Ecotoxicity Sections
Chapter Comments Due

Early Jan Public meeting End Feb
Draft Interim PFAS CAP
60-day Public Review



PFAS CAP Timeline

2017

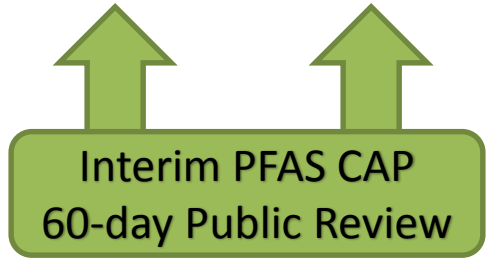
2018

2019



11/1 and 12/12

2018 CAP advisory committee meeting dates are tentative



CAP Chapter Comments

Comments received by October 20

- Alissa Cordner
- Jessica Bowman, FluoroCouncil

- November 8th drafts: Biosolids and Ecotoxicity additions
- Comments due by November 17th
- Email comments to: Kara.steward@ecy.wa.gov



PFAS CAP Options Discussion

CAP Team

November 1, 2017



Process to ID Interim CAP Options

- CAPs identify a range of policy and regulatory options from “no action” to “phase out of uses and releases.”
- Process
 - Handout:
 - Brainstorm list of categories & options for discussion
 - Today:
 - Focus on three categories identified by CAP Team
 - Discuss options proposed for Interim CAP Recommendations
 - Discuss 2018 options as time allows
 - November:
 - CAP team prioritizes Interim CAP Recommendations
 - Review at Dec. 12 meeting with economic assessment



Two Types of CAP Options

- Interim Options
 - Immediate need to protect human health and the environment
 - Efforts that need to occur or start in 2018
- 2018 Options
 - Efforts that need more evaluation, data, research
 - Additional stakeholder input and discussion needed
 - Assessment of economic impact requires more time
 - Follow-ups to Interim work



Proposed Categories

- Interim CAP Options developed from the three categories identified for Today's Discussion
- Additional options will be developed in 2018 for all categories

Today's Discussion

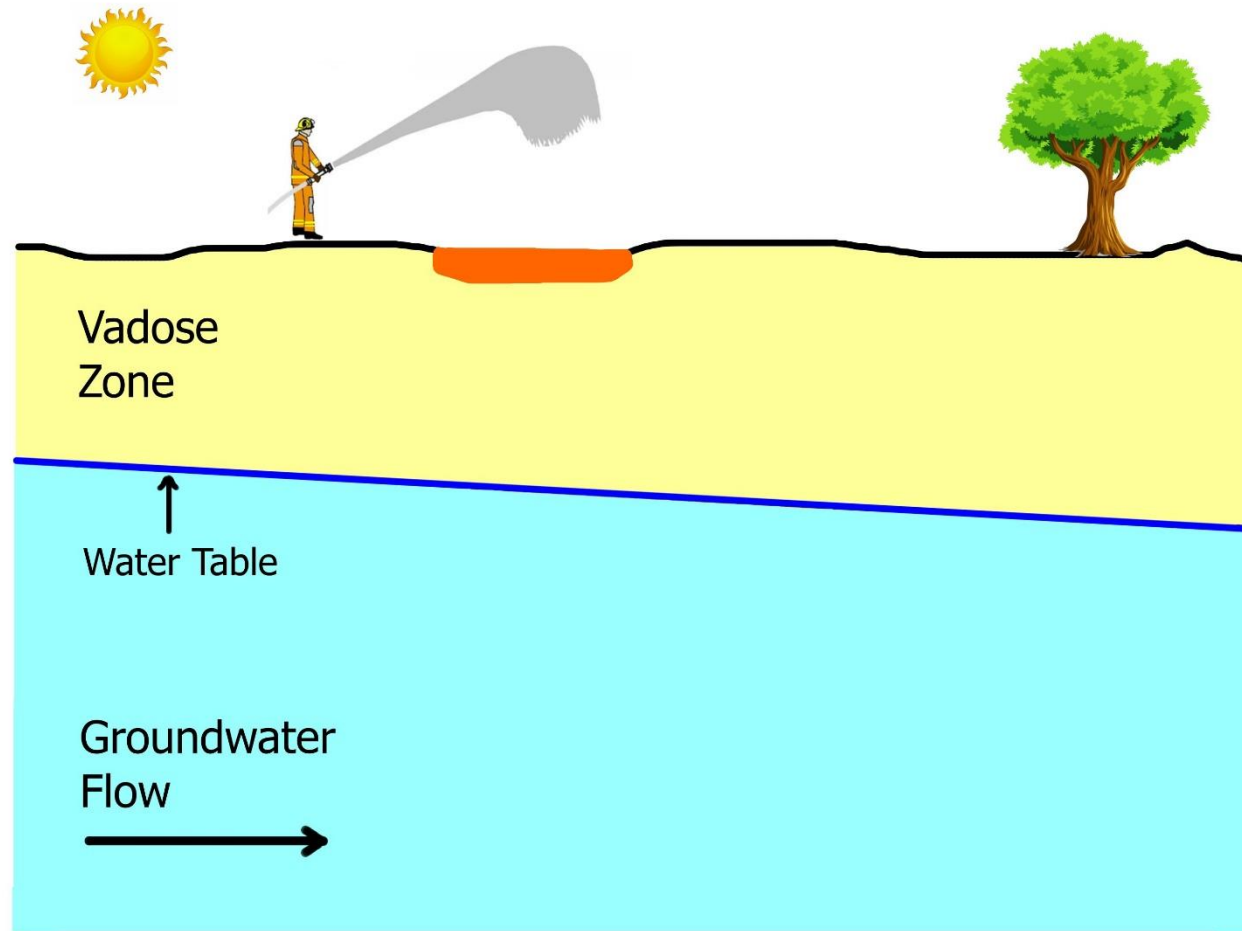
- AFFF (Aqueous Film-Forming Foam)
- Drinking Water
- PFAS Source Identification

Additional 2018 Categories

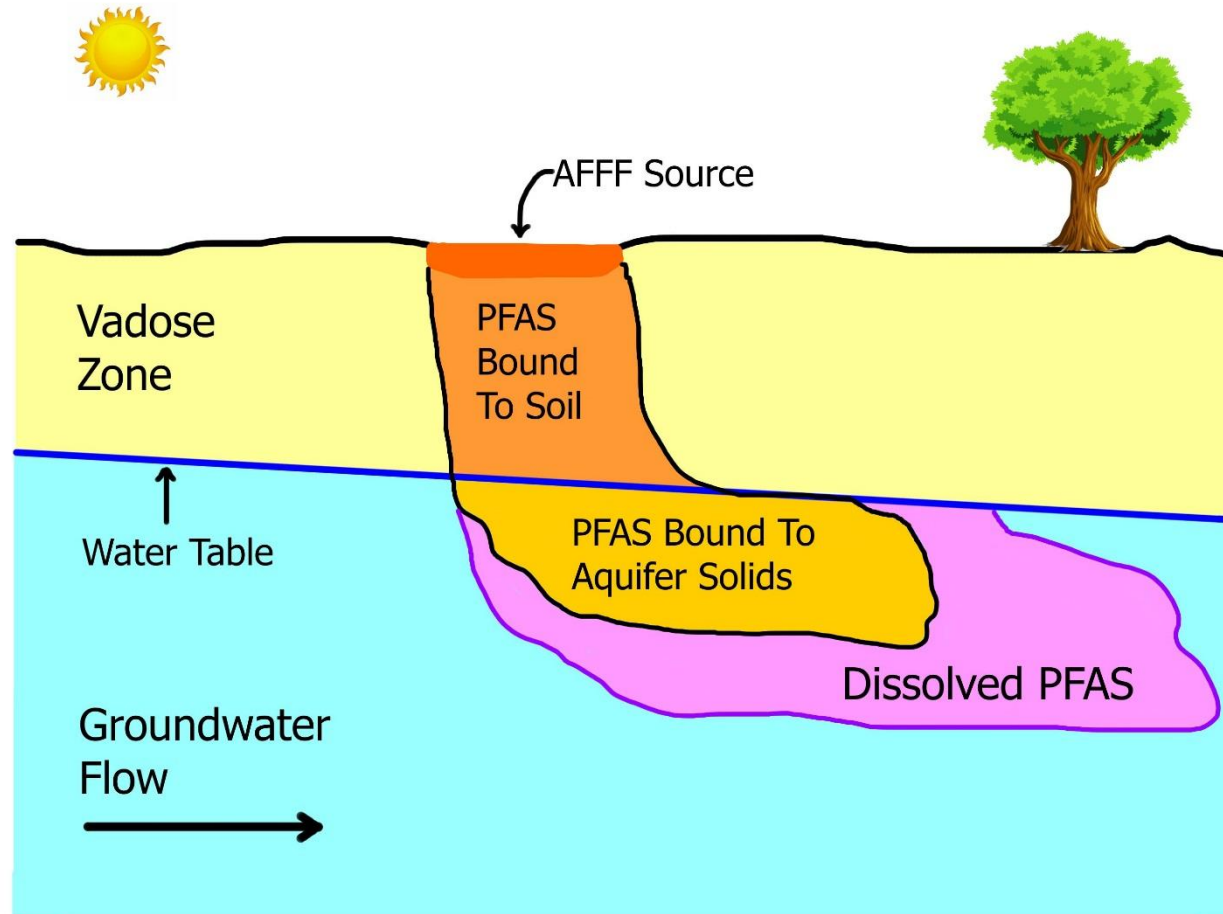
- Address Key Data Gaps
- Ecological Health (Risks to Wildlife)
- Human Health
- Outreach/Education



AFFF Use



AFFF moves through the environment



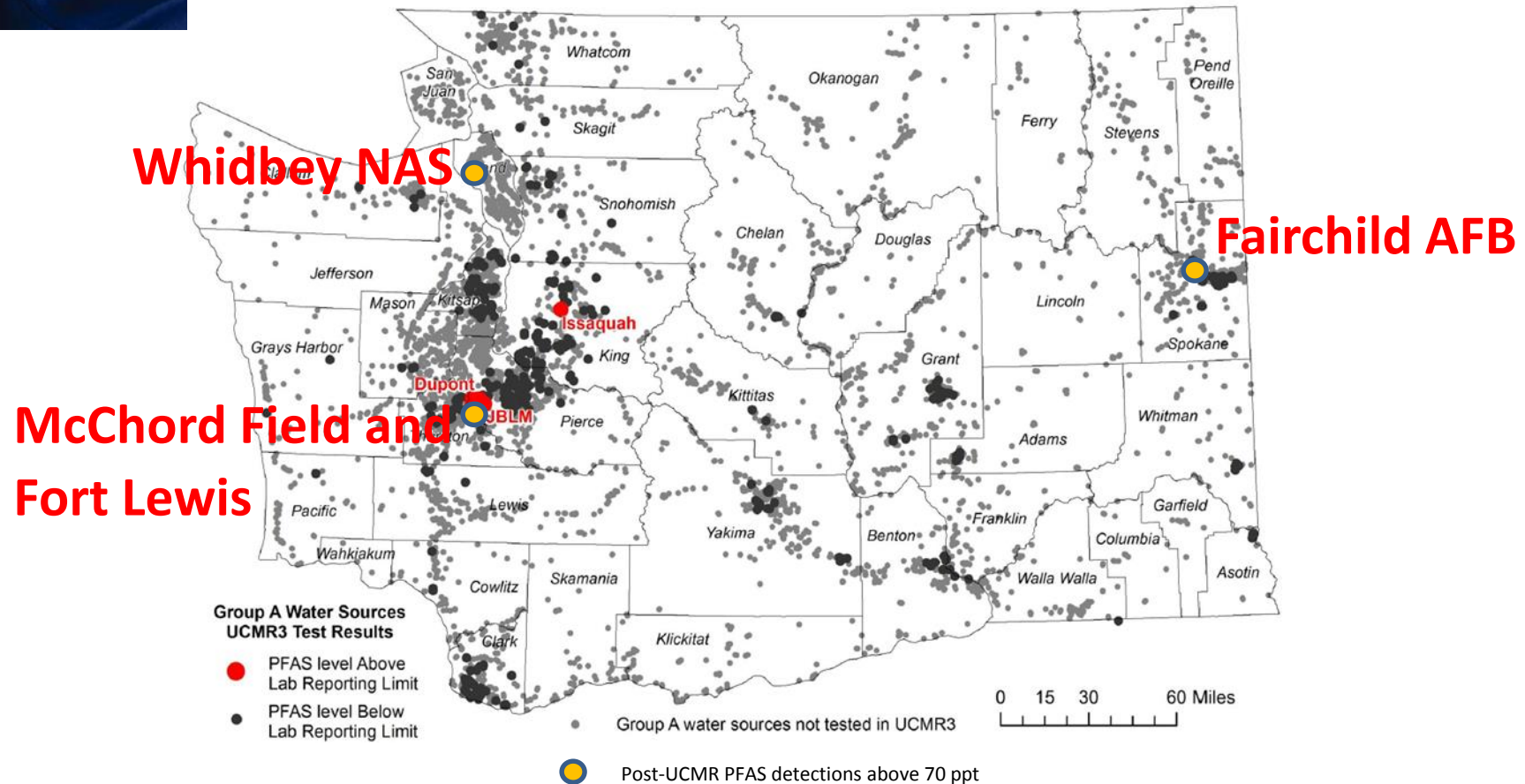
AFFF CAP Options

Problem: Exposure & Potential Harm from Drinking Water.

- **Options/Potential Recommendations:**
 - **Cleanup known AFFF-contaminated groundwater and soil.**
 - Cleanup levels and how to apply them (what chemicals?).
 - **Identify other potentially-contaminated areas (high-risk).**
 - Survey likely AFFF users to narrow the search.
 - **Ensure proper disposal of existing supplies.**
 - Develop options for environmentally-friendly AFFF disposal.
 - **Provide outreach for users, water purveyors, government, public.**
 - Use, disposal, health, etc.



Drinking Water



Drinking Water CAP Options

Problem: drinking water supplies are contaminated with PFAS in several areas of the state, many water systems have not been tested.

Identify drinking water exceeding health advisory levels for PFAS

- Expand water testing of untested public water systems, using a risk-based approach.
- Develop tools and outreach to facilitate testing by smaller systems and private wells.
- Develop health guidance for other PFAS and PFAS mixtures, based on occurrence.

Respond

- Customer notification, Technical assistance with mitigation (voluntary).
- Investigate treatment options for removal of range of PFAS detected in WA drinking water.

Protect WA drinking water from further PFAS contamination.

- Investigate/understand sources of drinking water contamination in WA.
 - Implement source control based on findings.



Source Identification CAP Options

Problem: The identities of PFAS chemicals, routes-of-exposure, and exposure amounts are poorly characterized. New data and analysis are needed to prioritize actions to protect the public and the environment.

- **Options/Potential Recommendations.**

- Conduct additional source research:
 - e.g., can we better quantify the legacy PFAS load from carpets/textiles?
- Conduct new analytical testing of:
 - e.g., imported products, food contact paper/packaging, compost.
- Conduct and/or support method development:
 - e.g., develop and/or employ the Total Oxidizable Precursor (TOP) assay.

Dialogue - Interim

Identify Legislative options from today's discussion

Missing topics for Interim CAP:

Legacy products – in waste streams

Identify other sources (aside from afff) of “long chain” – refineries, metal plating, semiconductors, textiles, food contact materials, cosmetics – also look at “general” PFAS releases

Food packaging source and exposure – as it's own topic

Amnesty for AFFF (labelled 'lightwater' brand – among others)

State procurement – FCM (like NY and MN)

Green chemistry/safer alternatives (Puget sound estuary funds)

Timeline & plan for alternatives assessment for fire fighting foam and textiles

Align with federal specifications – FAA and Mil-spec moves slow

Inventory include the supply chain

Wildlife impacts – endangered species

Dialogue 2018

Ecological risk – impact to wildlife

Ongoing monitoring and research needs – fill data gaps

WWTP – testing, standards, special testing, biosolids/land application

Other products – floor waxes and polishes (industrial & institutional);
leather treatment;

Environmental justice issues

Landfills, compost

Source in urban watersheds; (fluoropolymers used in autos, wouldn't
break down); lubricants (very expensive); car waxes

Mussel watch testing (2017/18) – add PFAS?

Next Steps

- Comments on Chapters due Nov 17th.
- Prioritization Step (Nov. 2 to Dec. 12).
 - CAP Team will prioritize option list considering: effectiveness, technical feasibility, cost, public support and authority.
- A preliminary economic analysis will begin for selected items.
- Recommended actions and economic analysis will be reviewed with the Advisory Committee Dec. 12.

