

PFCs in the FNSB

*This story was made with [Esri's Story Map Journal](#).
Read the interactive version on the web at <https://arcg.is/W99f8>.*



Mayor Bryce Ward

Alaska State Legislature
House Resources Committee

May 10, 2019

What are PFCs?



Manmade compounds used in the manufacture of stain-, oil-, and water-resistant products.

In Alaska, PFCs in the environment are primarily from the use of aqueous film-forming foams (AFFF) during firefighting or fire training activities.

Environmental Actions



2016:

- ADEC publishes cleanup levels for PFOS & PFOA
- EPA issues Lifetime Health Advisory (LHA) levels for PFCs in drinking water

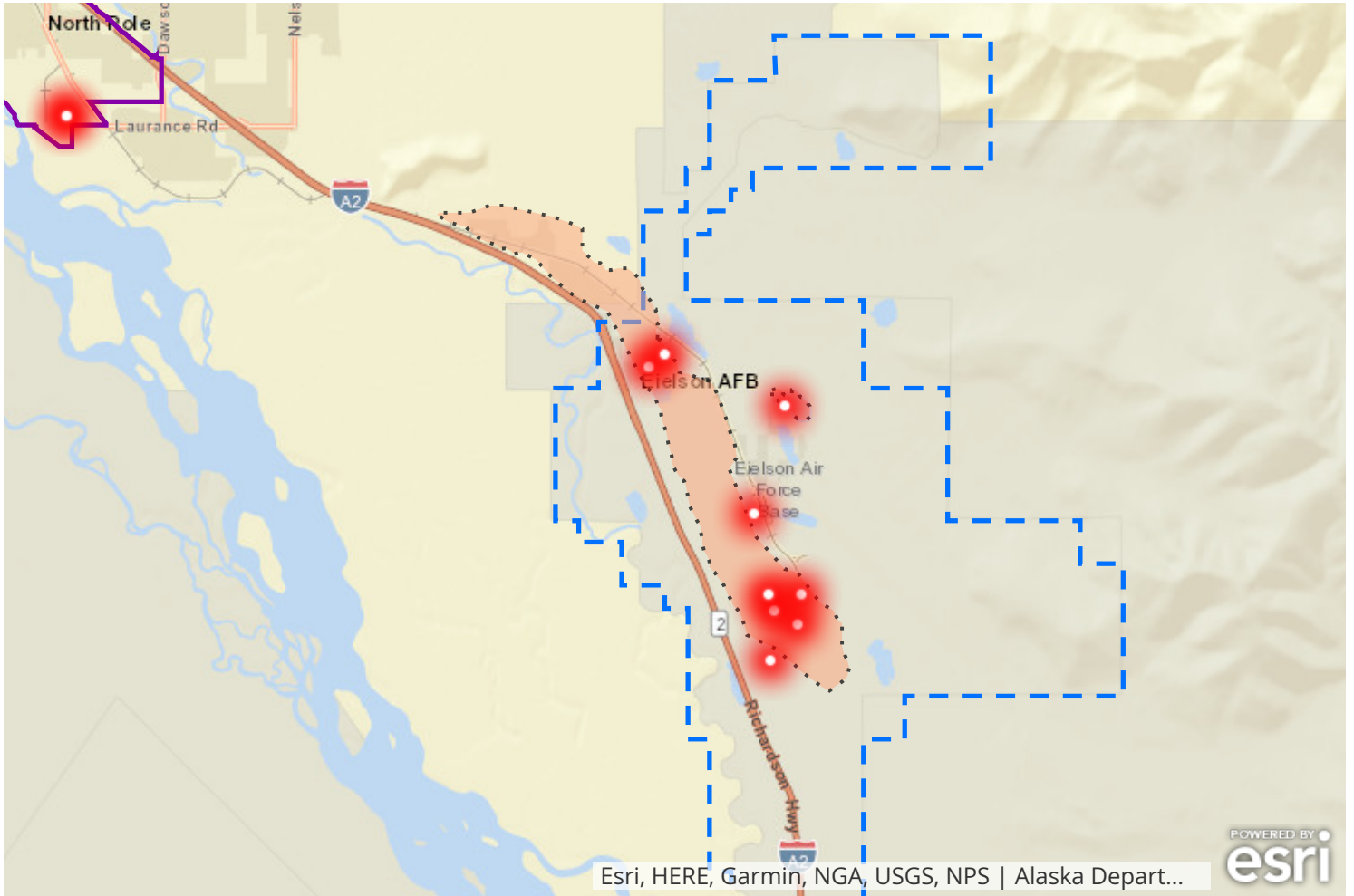
2018:

- ADEC set action levels for 6 PFAS compounds

2019:

- ADEC revises action levels to align with EPA LHA

EAFB & Moose Creek





ADEC PFAS Sites





Contaminant Plumes



City_Boundaries

-  City of Fairbanks
-  City of North Pole

Military_Boundaries

-  Eielson Air Force Base
-  Fort Wainwright Army Post



Spring 2015: PFCs discovered in drinking water supply wells

Mitigation efforts to date:

- Granular activated carbon (GAC) filtration
- Bottled water or water delivery to holding tank

Moose Creek: Long Term Mitigation



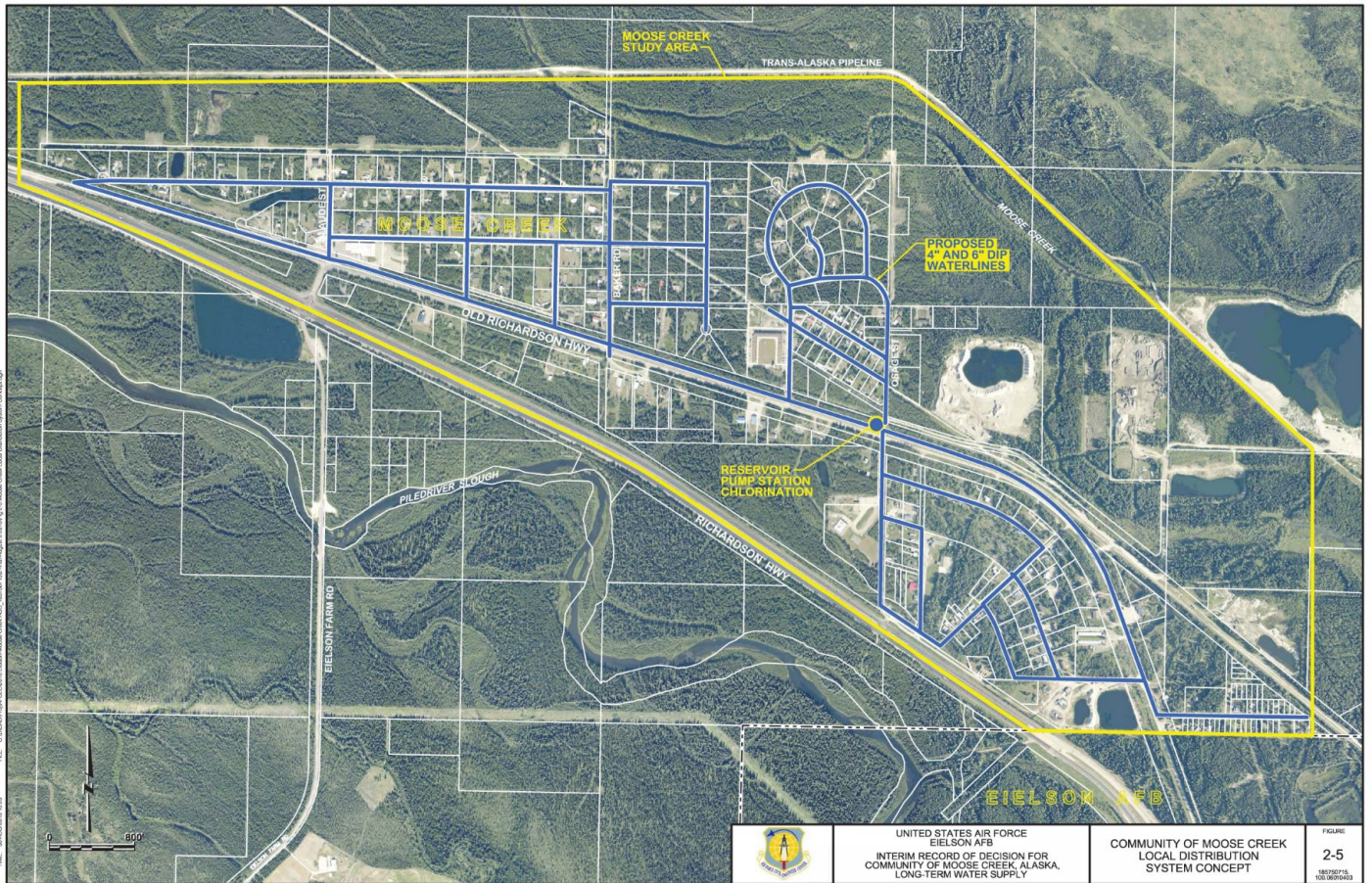
UNITED STATES AIR FORCE

Eielson AFB

**Interim Feasibility Study for
Community of Moose Creek, Alaska,
Long-Term Drinking Water Supply**

FINAL

NOVEMBER 2017



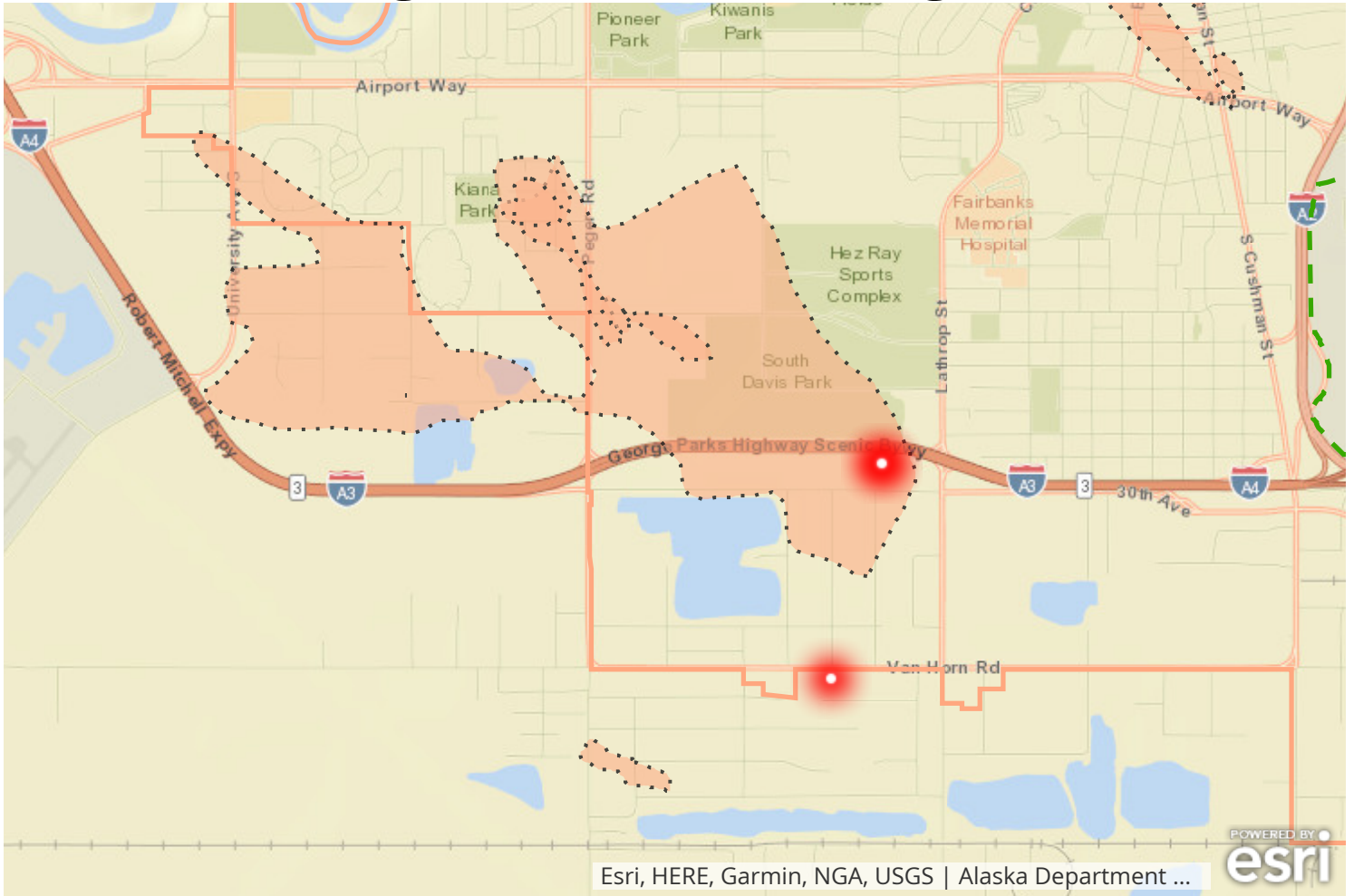
Moose Creek: Water Utility Connection

Getting from North Pole to Moose Creek



The North Pole water utility system will be extended to connect the Moose Creek community.

Fairbanks Regional Fire Training Center





ADEC PFAS Sites





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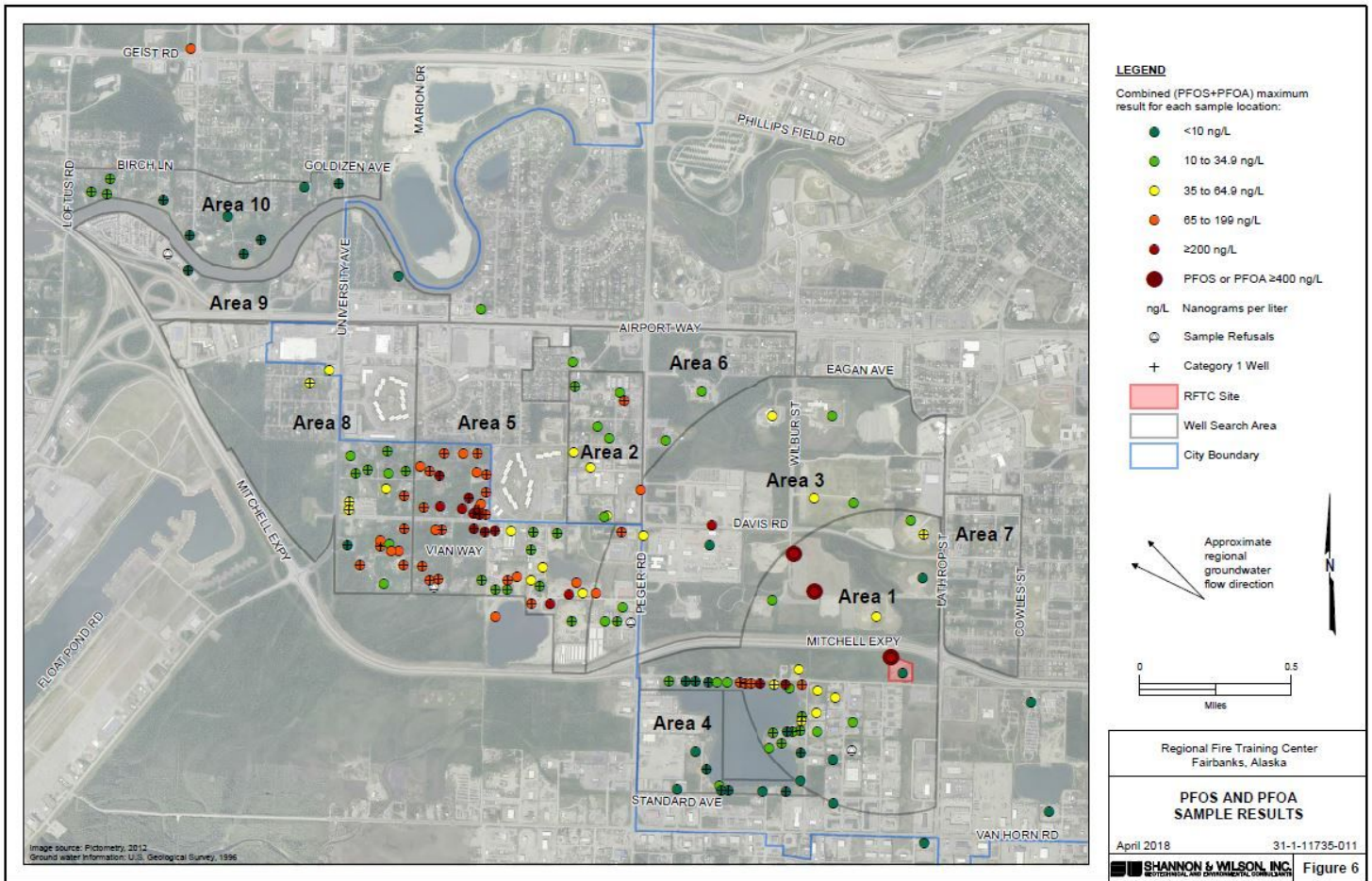
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Credit: City of Fairbanks website

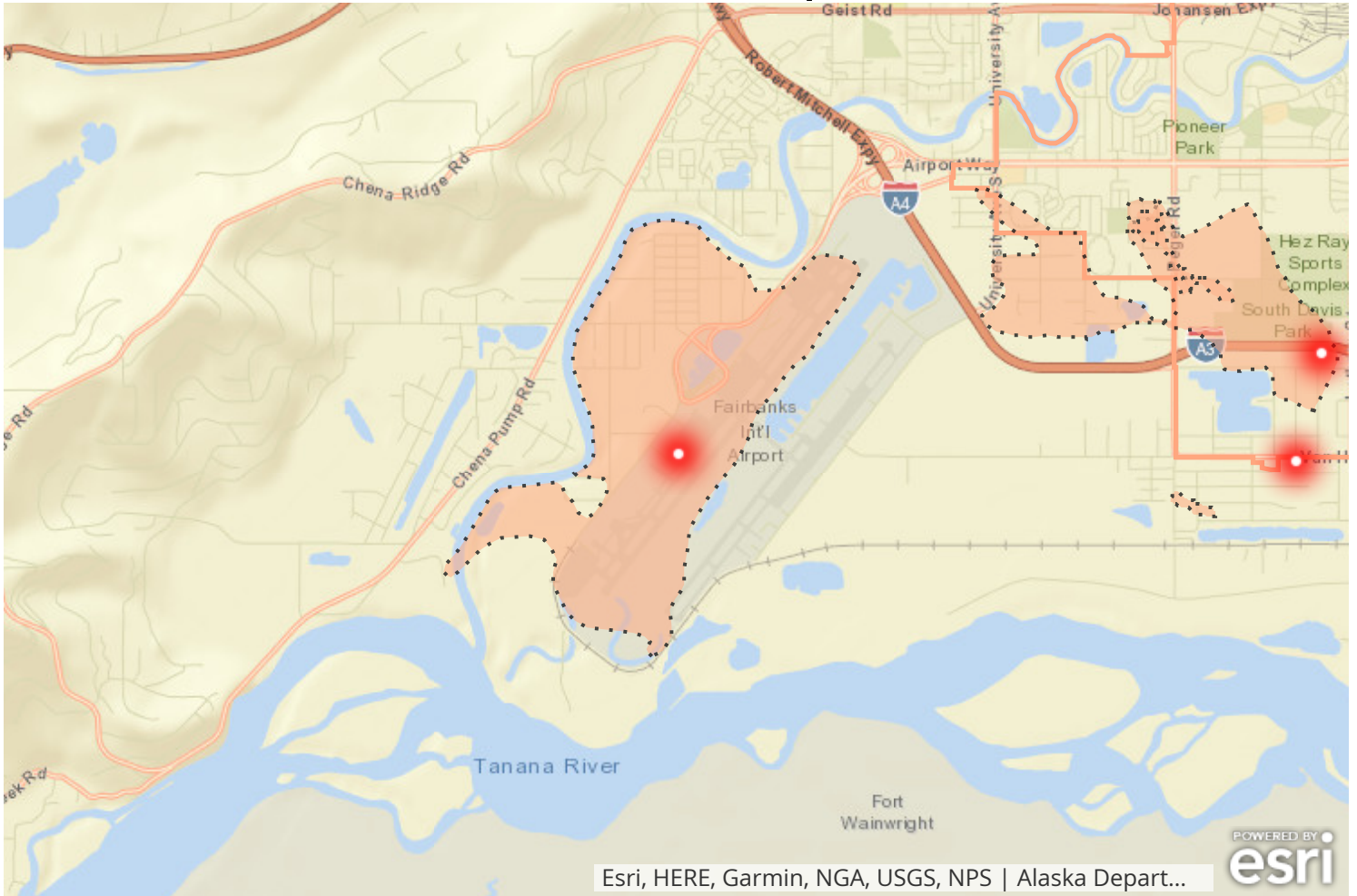
2015: PFAS compounds discovered in the burn pit.

Fairbanks RFTC: Sample Locations



PFOS & PFOA Sample Results

Fairbanks International Airport





ADEC PFAS Sites





Contaminant Plumes



City_Boundaries

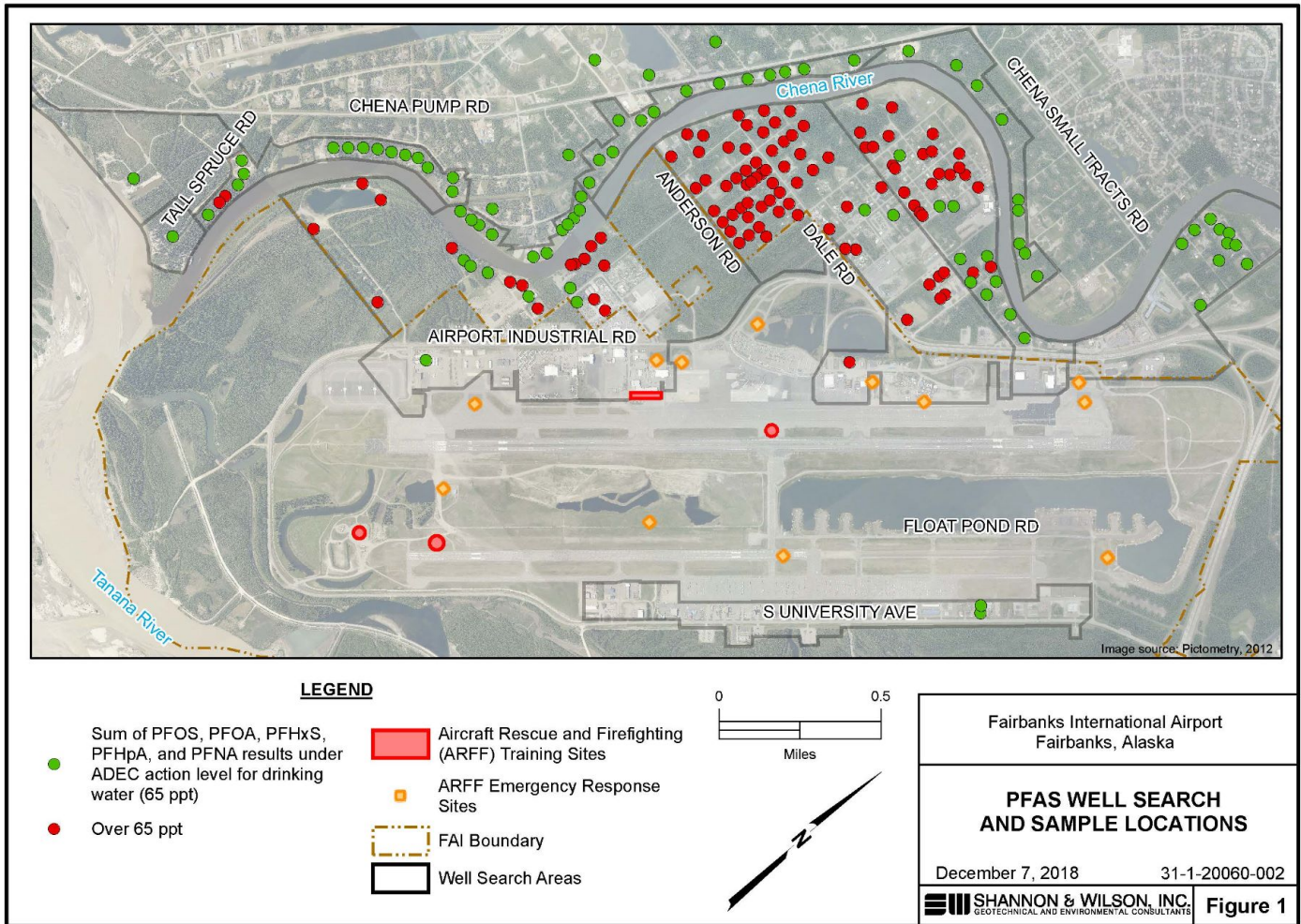
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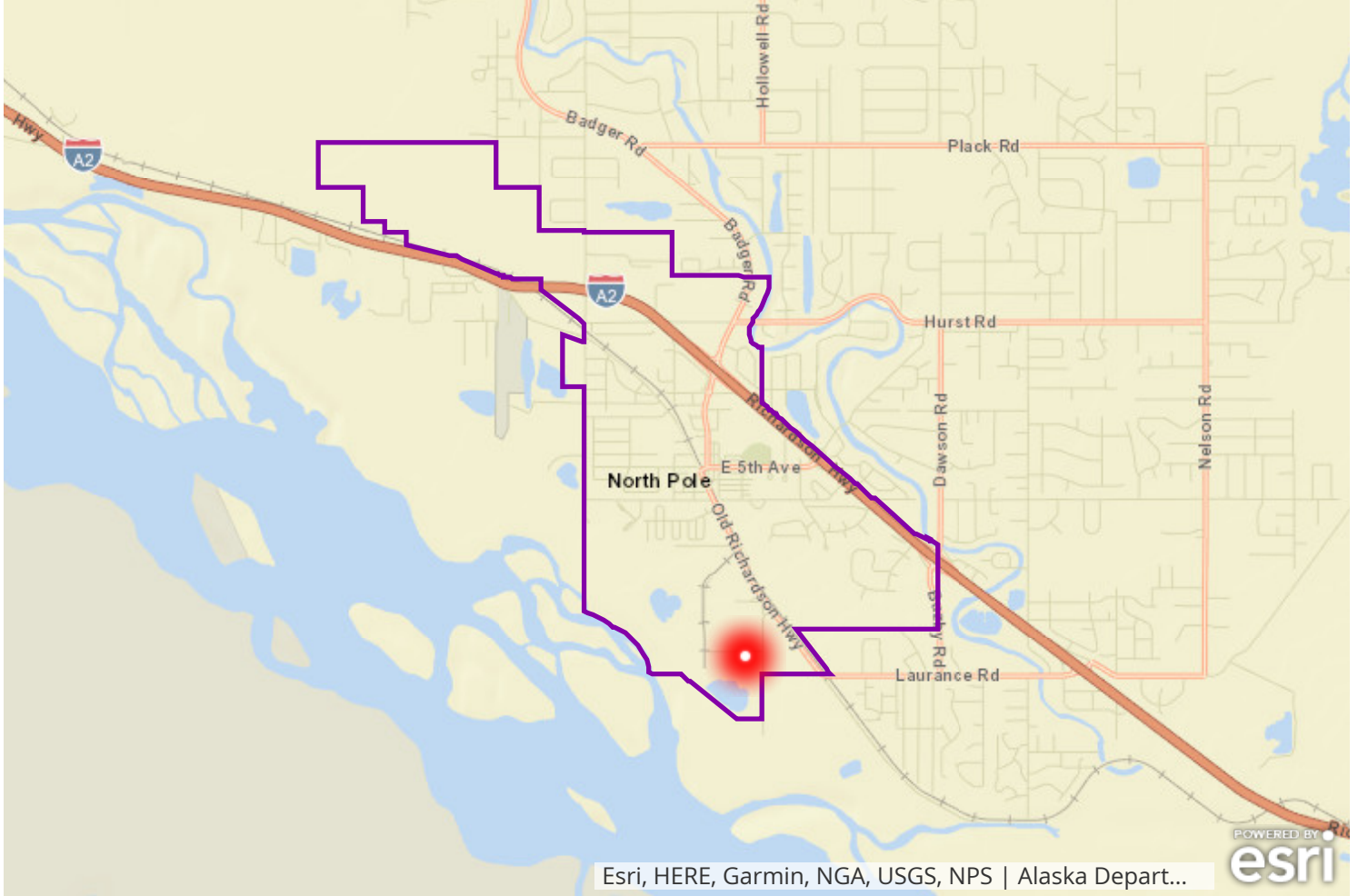
2017: PFCs found on airport property

FAI: Sample Locations



Detections of PFOA and PFOS above cleanup levels prompted immediate searches and water sampling around the airport.

North Pole & Kimberly Lake





ADEC PFAS Sites





Contaminant Plumes



City_Boundaries

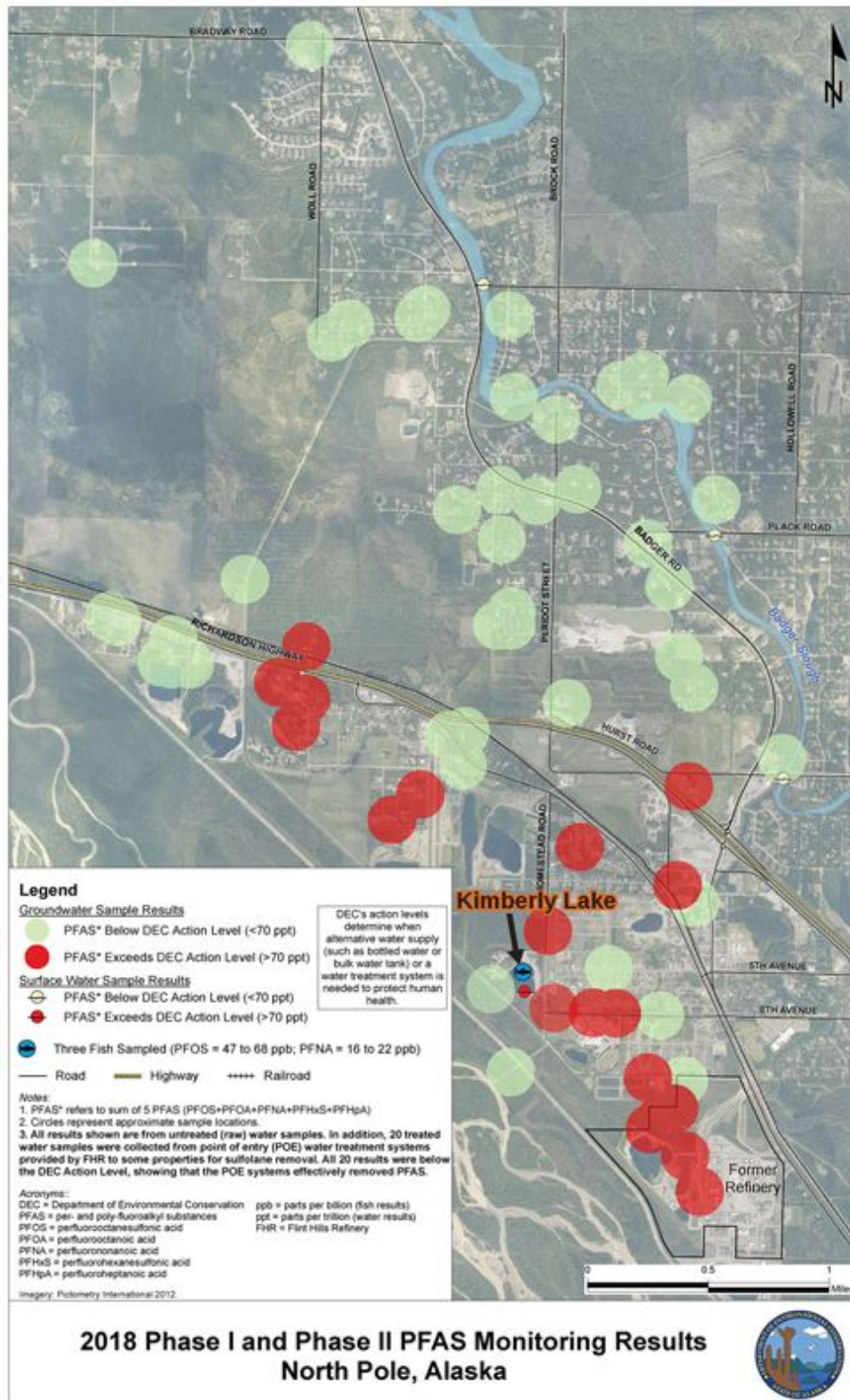
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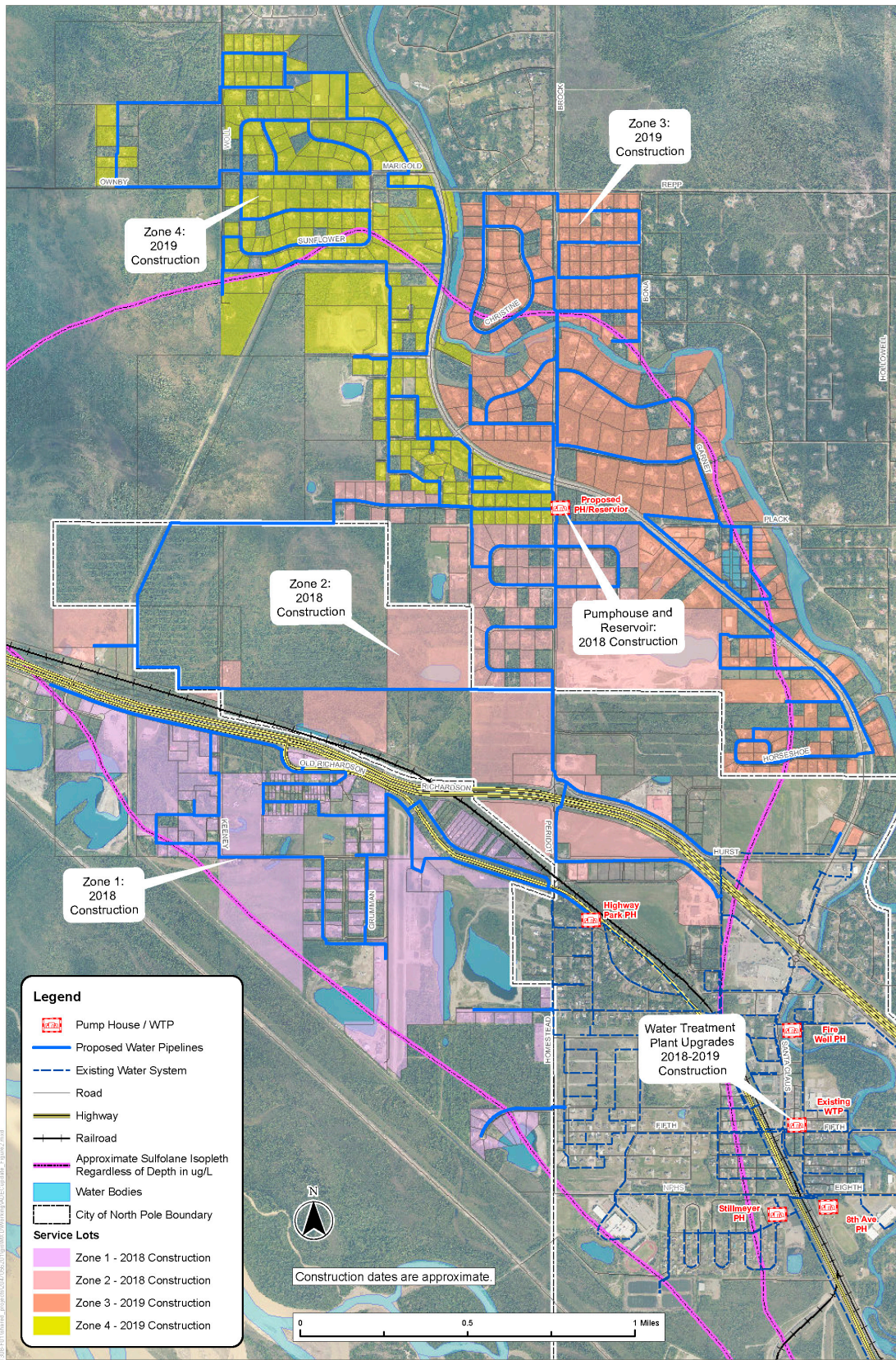
2018: Contamination discovered in Kimberly Lake.

North Pole & Kimberly Lake: Monitoring Results



State advised to not consume fish from Kimberly Lake due to PFOS & PFNA concentrations.

North Pole: Long Term Mitigation



2018 Water System Expansion Project
North Pole, AK

North Pole Water Expansion Project

Groundwater Contamination Concerns



- Impacts to garden produce
- Irrigation of grass/sport fields
- Bioaccumulation

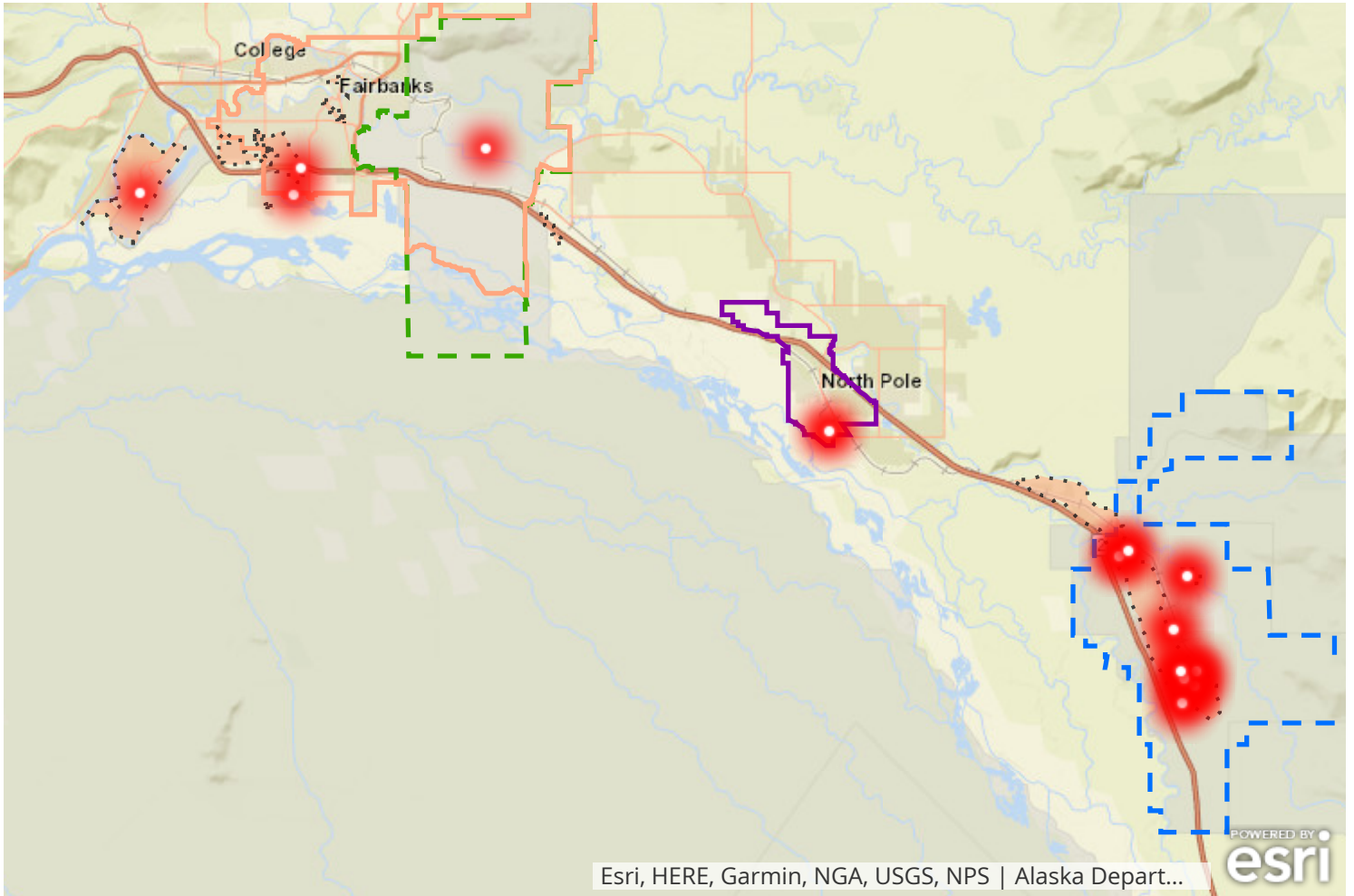


South Davis Park

Fire Training Center

Fire Training Center and South Davis Park sport fields

FNSB PFC Contaminated Areas



Four major contamination areas over the urbanized area of the borough, covering approximately 30 miles between plumes.

Recommended State Actions



DEC:

- Set standards & provide guidance for clean up measures
- Set standards for human health advisory and cleanup levels

Legislature & Administration

- Help provide financial resources for remedies