

Alaska Department of Natural Resources  
Division of Mining Land and Water  
Water Resources Section  
550 W. 7<sup>th</sup> Avenue, Suite 1020  
Anchorage, Alaska 99501

CRITICAL WATER MANAGEMENT AREA  
MOOSE CREEK, ALASKA

CWMA Petition,  
Boundary Map (11/27/2019), and  
Revision Boundary Map (2/19/2020)  
Attachment A



**DEPARTMENT OF THE AIR FORCE**  
**AIR FORCE CIVIL ENGINEER CENTER**  
**JOINT BASE SAN ANTONIO LACKLAND TEXAS**

NOV 26 2019

Mr. Jeffery P. Domm  
Director, Environmental Management  
Air Force Civil Engineer Center  
2261 Hughes Ave, Ste 155  
Lackland AFB TX 78236-9853

Commissioner Corri A. Feige  
Department of Natural Resources  
550 W. 7<sup>th</sup> Avenue, Suite 1400  
Anchorage AK 99501

SUBJECT: Petition to Initiate Proceedings to Designate a Critical Water Management Area (CWMA), at Moose Creek, Alaska

Dear Commissioner Feige,

The United States Air Force (USAF) hereby requests the Department of Natural Resources to initiate proceedings to designate and enforce a critical water management area (CWMA) under 11 AAC 93.500(2) for the geographic or hydrologic area underlying the community of Moose Creek, AK.

The Moose Creek area is situated adjacent to the northern boundary of Eielson Air Force Base (EAFB), which is included in the Superfund Enterprise Management System (SEMS) under U.S. Environmental Protection Agency (EPA) Identification Number AK1570028646. Per- and polyfluoroalkyl substances (PFAS), perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA) attributed to releases from sources within EAFB have migrated off base to the community of Moose Creek and have impacted private groundwater wells within the community. The PFOS and PFOA are chemicals of concern that pose a human health concern such that there exists an imminent water shortage in the area affecting approximately 600 residents and 24 permittees or certificate holders of record so that their ability to reasonably acquire potable drinking water has been affected.

The USAF, in conjunction with the United States Environmental Protection Agency (EPA) and the Alaska Department of Environmental Conservation (ADEC), have selected a long-term solution that provides safe, potable drinking water to the community of Moose Creek. The selected remedy is documented in the Final Interim Record of Decision (June 2019) and is included as Attachment 1 to this request.

The following are the major components of the selected remedy:

- A new water main will be installed to connect the City of North Pole Water Treatment Plant to the community of Moose Creek. A local distribution system, holding tank, and circulation pumping station will be constructed to serve the community, and local connections will be made to affected properties in the community of Moose Creek.
- The new system will be maintained and operated by the North Pole Municipality, which will collect water use charges from property owners, and operate and maintain the system for the residents of Moose Creek.
- Land use controls (LUCs) are required to prohibit the use of contaminated groundwater. The USAF shall petition the AK DNR to designate a CWMA to prevent the use of contaminated groundwater. Also, environmental covenants will be established and recorded with all impacted real properties in accordance with the Alaska Uniform Environmental Covenants Act (UECA) to prohibit current and future use of the contaminated groundwater.

The preliminary proposed boundary for the CWMA is included as Attachment 2. The USAF is conducting an Expanded Site Inspection to determine the full extent of PFOS/PFOA contaminated groundwater. And based upon the data obtained, the USAF may need to revise the preliminary boundary prior to publication of the public notice and public hearing as additional information becomes available. To prevent the use of groundwater, the USAF requests that DNR designate all uses of groundwater as significant, effectively setting a significant use of groundwater quantities at 0 gallons/day within the proposed CWMA boundary.

The USAF requests the AK DNR to immediately deny the acceptance of any new groundwater appropriations, or applications for additional quantities for existing appropriations of record.

The procedural basis for establishing the CWMA as established in 11 AAC 93.500 – 11 AAC 93.520 and the rationale contained therein is included in Attachment 3.

My POC for this petition is Mr. Kevin Thomas at (907) 552-4112 or kevin.thomas.1@us.af.mil



JEFFERY P. DOMM, GS-15, DAF

Attachments:

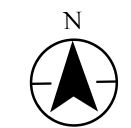
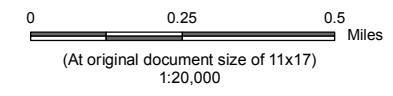
1. Interim Record of Decision for a Long-Term Drinking Water Supply for the Community of Moose Creek
2. Preliminary Boundary for the Critical Water Management Area
3. Basis of Establishment of Critical Water Management Area



Revised: 2019-10-22 By: lycoper  
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- Legend**
- Parcel Data
  - Critical Water Management Area Boundary



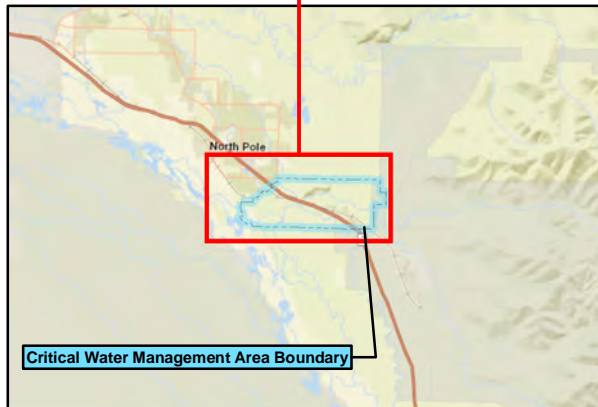
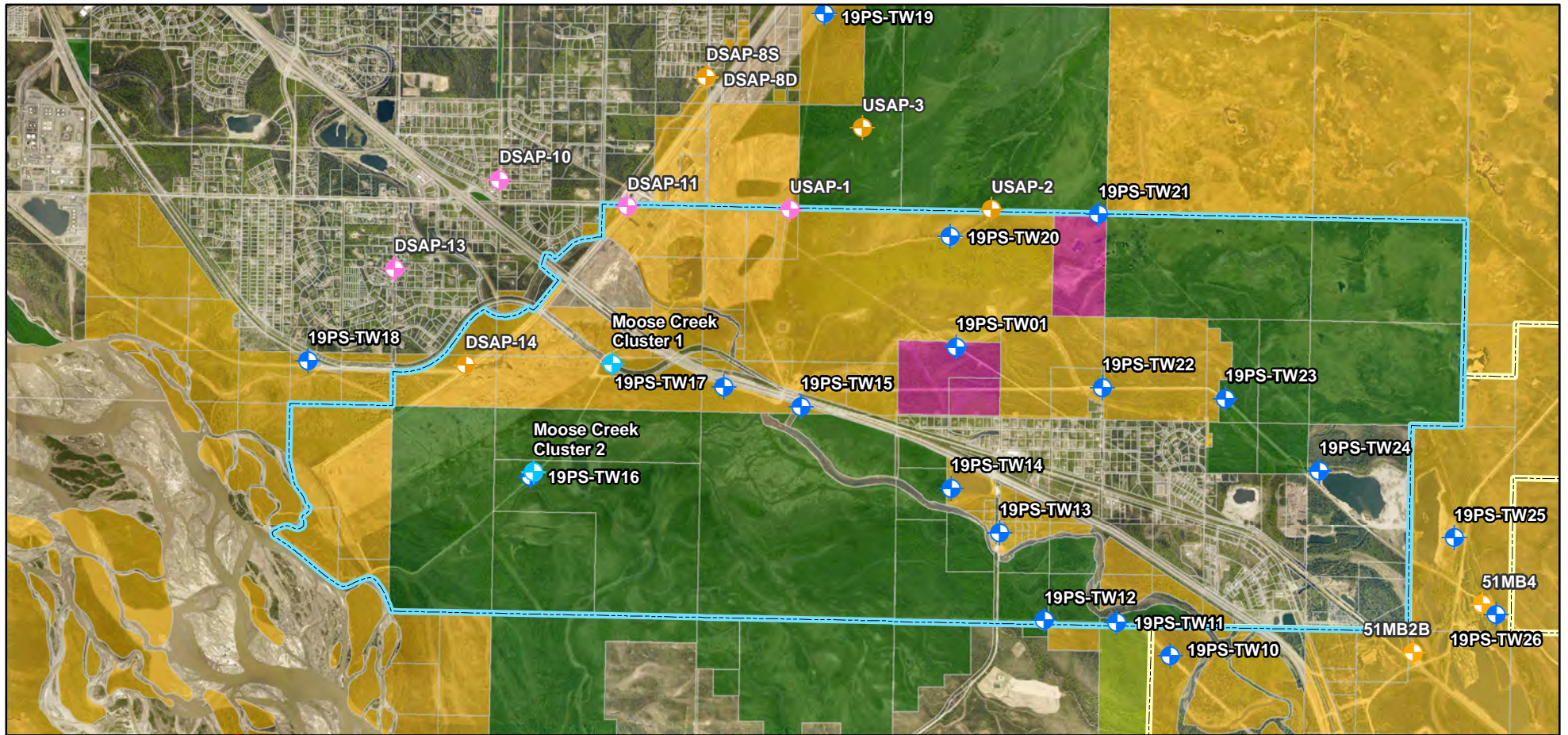
**Project Location** Prepared by RJC on 2019-09-30  
Township 1S, 2S Range 1E, 2E Technical Review by NR on 2019-09-30  
of Fairbanks, Alaska Meridian

**Client/Project** Moose Creek REVA  
Air Force Civil Engineering Center (AFCEC)  
Critical Water Management Area (CWMA) - Moose Creek

**Figure No.**  
**1**

**Title**  
**Moose Creek - Critical Water Management Area (CWMA)**

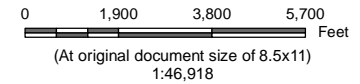
**Notes**  
1. Coordinate System: NAD 1983 StatePlane Alaska 3 FIPS 5003 Feet  
2. Data Sources:  
3. Background: Copyright © 2013 National Geographic Society, i-cubed  
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



- Proposed Well Cluster by Sundance-EA
- Proposed Temporary Well Locations
- Sampled Phase I
- Not Sampled in Phase I
- CWMA Boundary Rev. 2/18/2020
- Eielson AFB Installation Boundary
- Parcels

**Ownership**

- State (DNR)
- State (MHTA)
- Federal
- University of Alaska



Project  
 Revised Critical Water Management  
 Area (CWMA) - Moose Creek

Figure  
**Vicinity Map**

**Notes**  
 1. Coordinate System: NAD 1983 StatePlane Alaska 3 FIPS 5003 Feet  
 2. Data Sources: Fairbanks North Star Borough, AK Department of Natural Resources, USAF Wells Sampling Logs  
 3. Imagery: 2017 Fairbanks North Star Borough