

Science to Conservation Outcomes: Data Transfer

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Amber Crawford, ADEC

Colton Percy, ADF&G

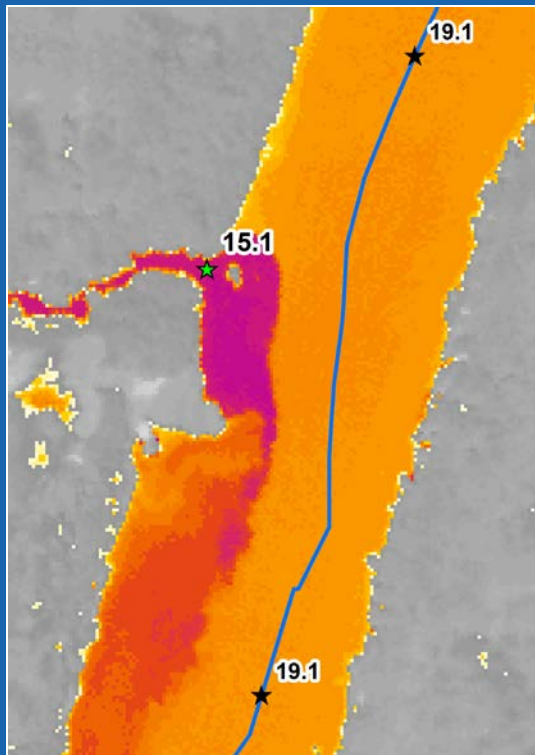
Mike Daignault, USFWS

Jessica Speed, Mat-Su Basin Salmon Habitat Partnership



November 2021

Do we have management pathways to protect habitat diversity, like thermal refugia, to build salmon resilience?



Small Group/Individual Meetings

Active

(current - next 120 days)

Soonish

(next 3 - 6 months; Aug-Nov 2022)

Later - We'll Talk More...

(6+ months - after November Partnership Symposium)

KEY

land
planning
tools

science
transfer

outreach

other

1

Meet with MSB Fish&Wildlife Commission in May about classification of 13 parcels in lower 12 miles as "watershed lands"

best time to suggest designation changes is during plan updates

taking comments over the phone and at the public meetings

continued classifying MSB lands as "watershed lands"

focus on cold water inflows

Is there a public process to reclassification? No public comment requirement because not prohibiting or limiting uses.

<https://aws.state.ak.us/OnlinePublicNotices/Notices/View.aspx?id=203396>

You all rock...this continues to be such a useful and fruitful conversation!

2

Deshka Recreational Rivers update - open comment period now

Rec Rivers stakeholder survey coming - Partnership share out opportunity and comment?

MSB Assembly decision

3

When are Rec Rivers meetings? How do we make comment?

4

water quality standards review - clarifies how temperature is calculated

public notice for change coming out in the next week

90-day comment period

new information added to Alaska Mapper with real-time water data

5

Ensure relevant science is available/easily usable to Agencies to truly inform reviews (e.g., ADF&G decisions)

consider how water data can be used for fish management

6

Share + apply! ACWA (Alaska Clean Water Actions) grants cycle - opportunities for implementation coming out soon

EPA funds - project applications in the fall (Sept., with 45-day RFP period, announce in Jan for projects to start in March)

<https://dec.alaska.gov/water/water-actions/> - ACWA grant info link (may change with website update)

10

Consider options for land trusts to hold conservation easements on public lands

<https://mapper.dnr.alaska.gov/>
<https://mapper.dnr.alaska.gov/docs/UserGuide.pdf>
<https://www.matsusalmom.org/resources/project-mapper/>

13

DEC 2024 Integrated Report - reviews water quality data and makes determinations

14

Partners participate in 2023 watershed tour

Consider Little Su as a next place to look

15

11

Colton gives Alaska Mapper presentation at Symposium!

Opportunities for Andy or other journalists to tell the Deshka story - connect cold-water habitats to fish population productivity

12

Partnership's Science & Data Committee help develop a Science Summary of GIS information available, how to find it, how it could be a powerful decision-making tool.

16

Consider how temperature data can be used in fish management on Deshka River

17

"Influencers" go on summer field trips - ask Partnership to "nominate" decision-makers.

9

Send out landowner packages

Conversations about replicating this approach with Great Land Trust on Deshka and Big Lake watershed

Kenai outreach to private land owners has been ongoing

Kachemak Bay Heritage Land Trust has purchased some lands with ecosystem services/high conservation values.

NOTE: numbering identifies actionable items (not priorities)

Field Trips



November 2022

② Engagement in Area-Wide Plans

- How can thermal refugia data inform planning processes?

③ Outreach

- What is the role of Committees, + partners in area-wide plans?

- What are the most effective ways to communicate with landowners about their properties' conservation value?

- What is the role of the outreach committee for topic-specific outreach?

Landowner Outreach

Most effective communication methods

1. Engage with their interests in property
2. Establish connection to a bigger purpose than personal use for the water resource
3. Repeat attempts of engagement positively
4. Messenger should ~~be~~ come from place of education rather than regulation
5. Engage with youth - landowner parent will listen to their kids
6. Celebrate good Landowner Stewards

What conservation Topics Specific to Landowners

1. Riparian area alteration
2. Wetland Filling
3. Aquatic invasive species
4. Create welcoming spaces for engagement and demonstrations to show landowners of habitat. e.g. BBQ party displaying salmon!

① Land Classification

- Discuss land classification as a tool to explore conserving cold-water refugia?

Data Availability + Accessibility

- Is there a role for the Partnership in transferring datasets to agencies?

classification be

③ Data Quality

- Do we need standards for thermal imagery data like we have for water temperature monitoring?

- Can we establish data quality standards for Partnership-funded projects based on agency needs

①

- Expensive vs. "inexpensive" methods how do we make that consistent

- Share data through AK mapper

- Standardizing time of year or timing
- Summer/Winter differences
- Ground truth habitat

- Standard Place to report Lco network org
- Making specific data standards

① Invasive sp management efforts.

- Land classifications, ~~tools~~
- Fish passage prioritization
- Instream flow reservation
- Involvement in the planning
- Modification of goals/objectives or statutes + regulation
- availability/access to data
- What is the plan.
- plans help direct
- guide conservation, designation
- educate

② Public outreach/education

- "Keepers of quality"
- Focus on efforts/priorities
- Organizers to present data parties
- Communication among
- be aware of current factors
- Networking tool box

ic-specific Partnership permitting

ds to transfer factors (permitting)

re sensitive ed broadly to the public

d conven s that include permitting

uld host

g Framework Partners list Asset Map their specialty

Tools for Conservation

Incorporate thermal refugia information into the current revision of the Susitna Basin Recreational Rivers Management Plan

Maintain and/or improve water quality standard revised language for water temperature

Communicate to private landowners about stewardship opportunities

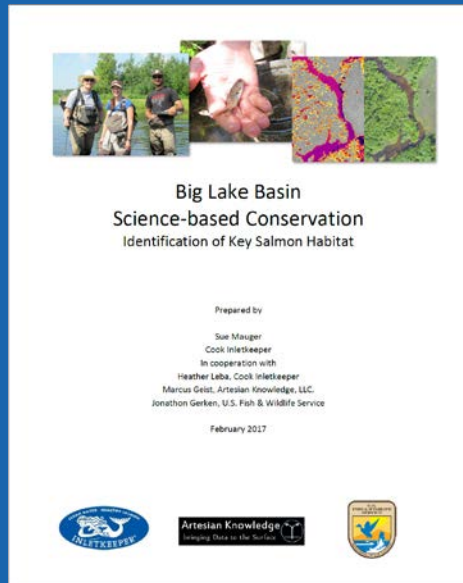
Classify MSB parcels with thermal refugia as "watershed lands": a land classification that recognizes the importance of the land for water quality

Ensure relevant science is available, discoverable, interpretable for agencies for permit reviews

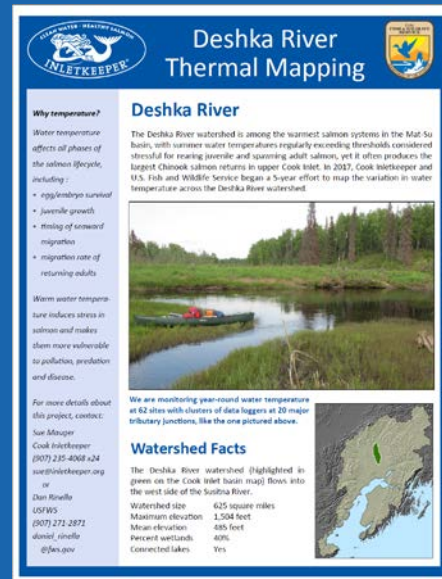
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Thermal Imagery – Data Transfer

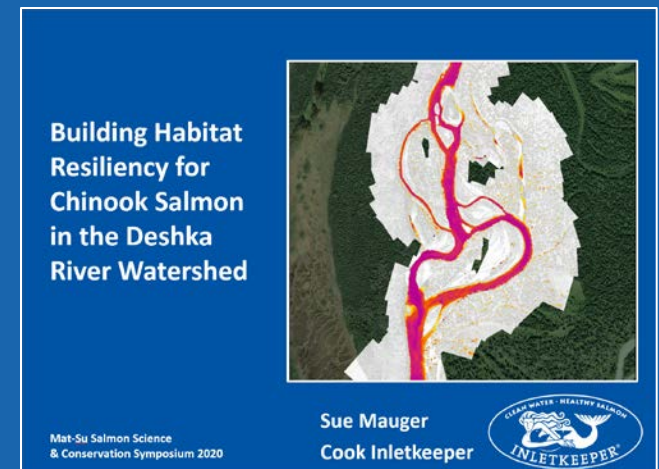
Reports



Fact Sheets



Presentations

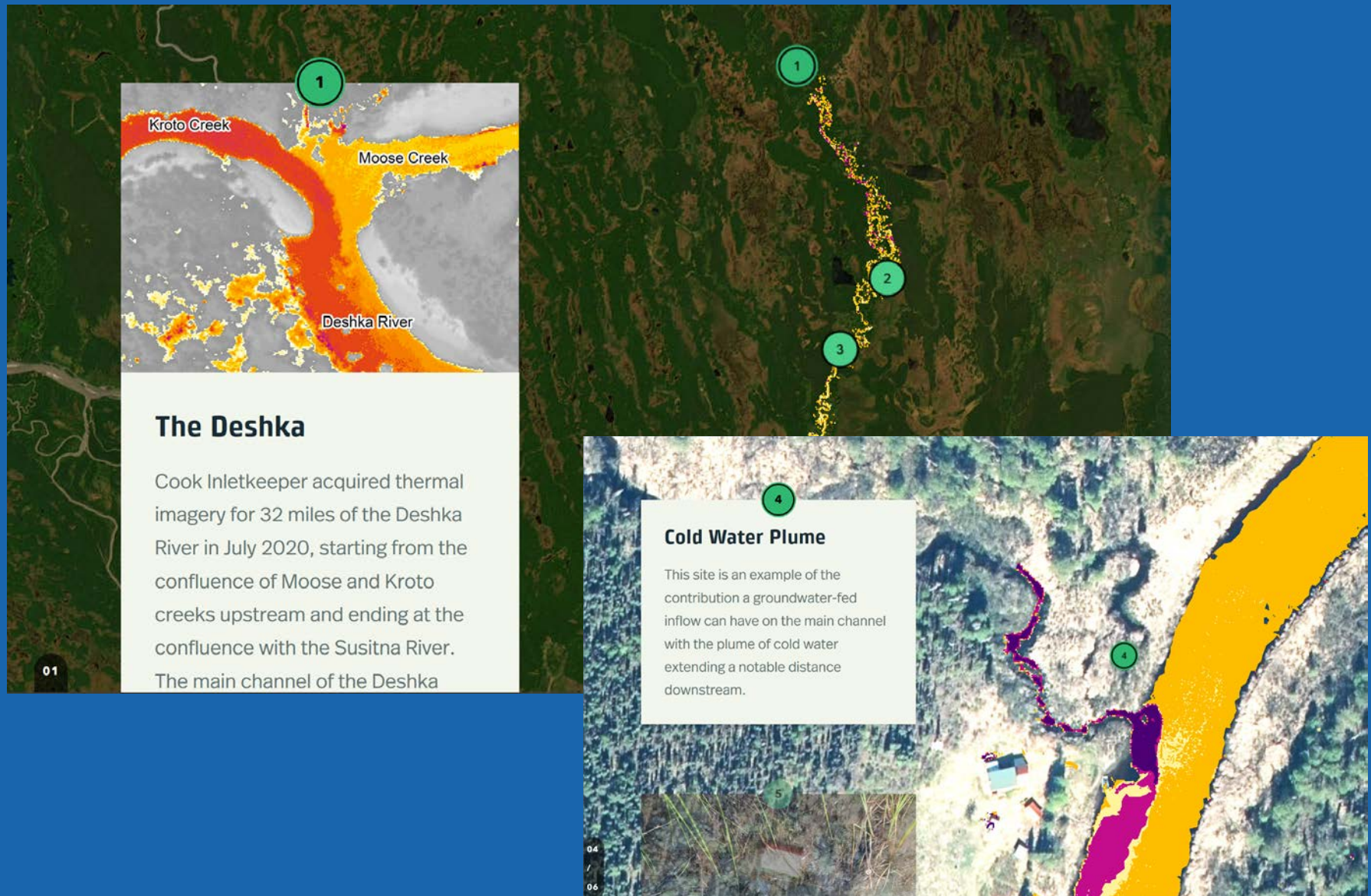


Archiving datasets

Mauger, Sue, & Diabat, Mousa. (2023). Building Habitat Resiliency for Chinook Deshka River Watershed - thermal imagery shape files [Data set]. Zenodo. <https://doi.org/10.5281/zenodo.8412376>

Story Map

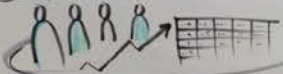
<https://inletkeeper.org/our-work/habitat/salmon-science/>



November 2023

★ SCIENCE to CONSERVATION OUTCOMES: DATA TRANSFER

★ DATA PRODUCERS



Who are you/org/agency?

ADFG
INSTREAM FLOW
PROGRAM
MAPS
DATA
LINKS
AND
ANALYSIS

DATA
QUALITY
Pilot

DNR
Land
Planner

ADFG
INSTREAM
FLOW
PROGRAM
MAPS
DATA
LINKS
AND
ANALYSIS

Private
data

Web Map
(Single
theme)



WHITE
PAPER

INTERNAL
DOC

Alaska
Mapper



Q: Where does
your data
live?



How do we BRIDGE the gap?

NEWS
ARTICLE

JOURNAL

EMAIL

BOOK
CHAPTER

ArcGIS
Online
Layers

ADFG
INSTREAM FLOW
PROGRAM
MAPS
DATA
LINKS
AND
ANALYSIS

Working
groups

ADFG
INSTREAM FLOW
PROGRAM
MAPS
DATA
LINKS
AND
ANALYSIS



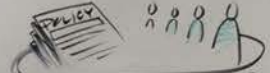
Salmon
Net

Portal
clearing
house

2nd
PORTAL
OPEN SOURCE
SHAPE

Q: How do
you find
your data?

★ DATA USERS



Who are you/org/agency?

Decision /
updates
Water Quality
Standards

Fishermen

DNR
Land
Planner

Priority
Actions

Improved
Water Quality

ADFG
INSTREAM FLOW
PROGRAM
MAPS
DATA
LINKS
AND
ANALYSIS

ADFG
INSTREAM FLOW
PROGRAM
MAPS
DATA
LINKS
AND
ANALYSIS

THE
PUBLIC



Alaska
Mapper

ADFG
INSTREAM FLOW
PROGRAM
MAPS
DATA
LINKS
AND
ANALYSIS

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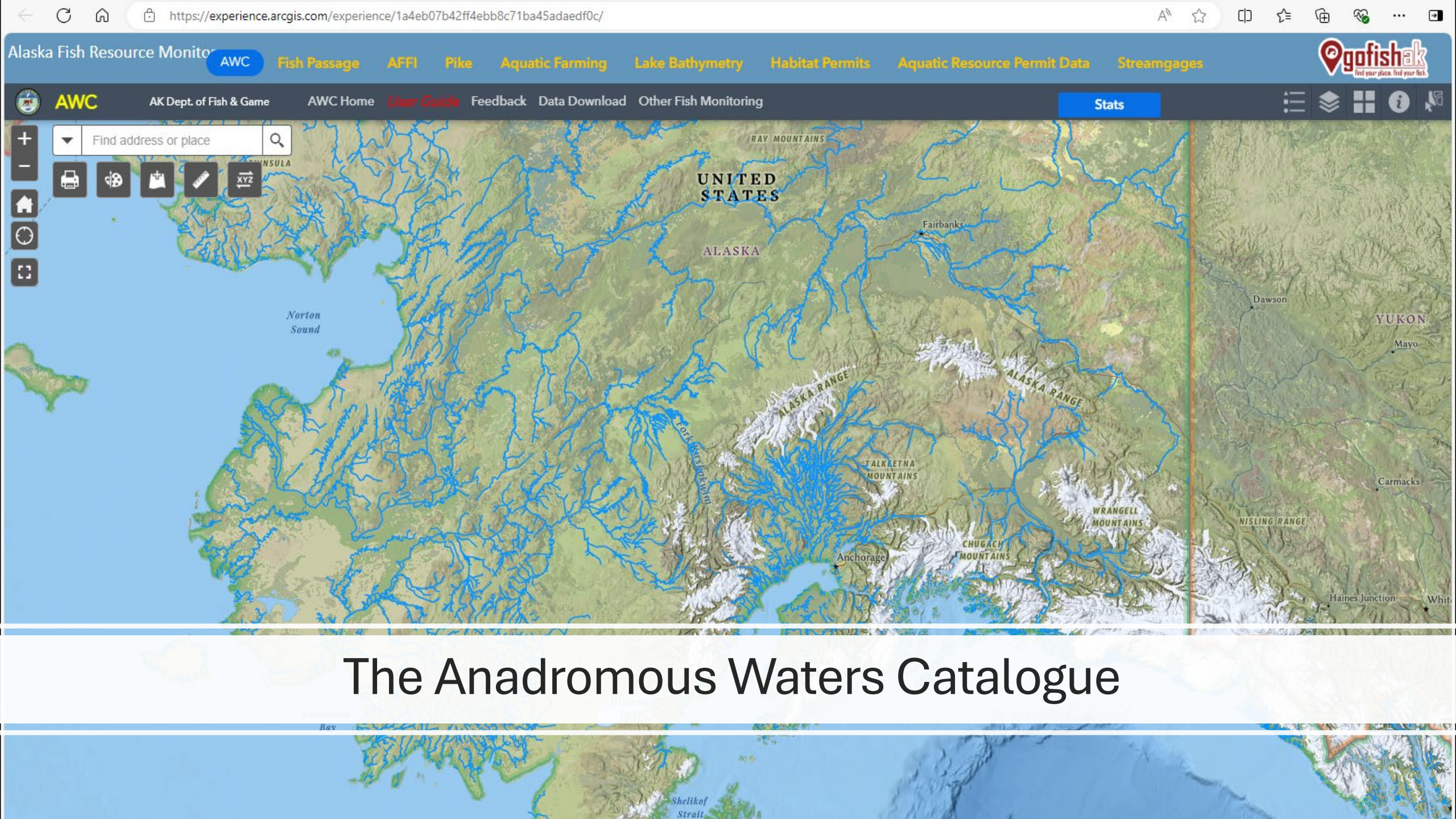
ADFG
INSTREAM FLOW
PROGRAM
MAPS
DATA
LINKS
AND
ANALYSIS



Please take out your phones

Go to menti.com

Use code: 2256 7789



The Anadromous Waters Catalogue



AWC

AK Dept. of Fish & Game

AWC Home

User Guide

Feedback

Data Download

Other Fish Monitoring

Stats

Find address or place



AWC 2023 - AWC stream: Wolverine Creek

AWC Code: 247-50-10220-2080

Species at Mouth: COs,Kp,Sp

Nomination Info: [Click Here](#)Go to map, [Click here](#).[Zoom to](#)

How to add data to the AWC:

www.adfg.alaska.gov

Anadromous Waters Catalog

[Overview](#)

[Introduction](#)

[Interactive Mapping](#)

[Atlas Maps & Data](#)

[Nominations](#)

- [– Guidelines](#)
- [– Instructions](#)
- [– Search Existing](#)
- [– Submit New \(login\)](#)

[Reference](#)

[ADF&G Home](#) » [Habitat](#) » [Conservation](#)

Nomination Form

The Alaska Department of Fish and Game is currently accepting a formal call for nominations from

1. adding new streams,
2. adding [species](#) to catalog
3. extending species distribu
4. deleting streams or parts
5. updating survey data on c
6. revising stream channels,

Comments are also welcome on

Anyone can request a change to the catalog. Any change that needs to be verified by ADF&G personnel. If you have information about anadromous fish species, please

ADF&G Sport Fish Division
ATTN: Joe Giefer
333 Raspberry Road
Anchorage, Alaska 99508

Be sure to review the Guidelines

How to get data out of the AWC:

www.adfg.alaska.gov



Alaska Department of
Fish and Game

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[Access & Planning](#) [Conservation Areas](#) [Ecosystems](#) [Habitat Permits](#) [Maps & GIS](#) [Restoration](#)

Anadromous Waters Catalog

- [Overview](#)
- [Introduction](#)
- [Interactive Mapping](#)
- [Atlas Maps & Data](#)
 - [Regulatory Map Viewer](#)
 - [Mapping Data Files](#)
 - [Regulatory Catalog](#)
 - [Regulatory Atlas Maps](#)
- [Nominations](#)
- [Reference](#)

[ADF&G Home](#) » [Habitat](#) » [Conservation Areas](#) » [Anadromous Waters Catalog](#) »

2024 Regulatory Mapping Data Files

The 2024 Regulatory AWC GIS data is available for download below.

Water body numbers, locations, extent of cataloged habitat and year to year. Additionally, new water bodies are being added on to maintain an up to date version of the electronic data files. This data is used upon for making decisions regarding permitting needs. The user can determine if a permit is required under AS 16.05.871 - 881 and .

These are large zip files (average ~ 5 Mb). If you are having problems decompressing.

	Dataset	Description
	Statewide AWC	This statewide data layer contains polyline data used for regulatory mapping.
	AWC for the Arctic Region	This data layer contains data used to create the Arctic Region.
	AWC for the Interior Region	This data layer contains data used to create the Interior Region.

Questions?

Kevin Keith

Kevin.Keith@alaska.gov

Joe Giefer

Joe.Giefer@alaska.gov



Alaska Department of
Fish and Game



Fish Passage Database: What it is?

Types of crossings





- Public and private roads, driveways, trails, and RXR
- No Bridges or fords, except for culvert to bridge upgrades

Data collection

- ADFG Level 1 Assessment or USFS AOP Assessment (to rate)
- Inventory Data (minimum GPS coordinates and 1 photo)



Classify sites in relation to fish passage

-  Green: conditions at the crossing are likely to be adequate for fish passage,
-  Gray: conditions at the crossing may be inadequate for fish passage,
-  Red: conditions at the crossing are assumed to be inadequate for fish passage, and
-  Black: not enough information to rate culvert.



Google "Alaska Stream Crossing Workshop - March 2022, Alaska"

Explore

Design, Review and
Construction of Stream
Crossings for Ecological
Function Workshop
March 2022
USFWS-Alaska

Stream Crossing Workshop
- March 2022, Alaska
U.S. Fish & Wildlife Service
24 videos • 1,353 views • Last updated on Apr 25, 2022



Play all

Shuffle

This playlist contains the presentations from Design, Review and Construction of Stream Crossings for Ecological Function Workshop, March 2022. Workshop content will help practitioners work together to create stream crossings that provide for fish and aquatic organism passage; fish and wildlife habitat; woody debris, sediment, and nutrient transport;

1

Design, Review and
Construction of Stream
Crossings for Ecological
Function Workshop

20:21

Functions and Functional Processes of Streams and Riparian Areas - Erika Amman

U.S. Fish & Wildlife Service • 288 views • 1 year ago

2

Design, Review and
Construction of Stream
Crossings for Ecological
Function Workshop

17:43

Aquatic Organism Passage and Wildlife Corridors - Erika Amman

U.S. Fish & Wildlife Service • 125 views • 1 year ago

3

Design, Review and
Construction of Stream
Crossings for Ecological
Function Workshop

23:12

Wetland Connectivity and Beavers - Kirsti Jurica

U.S. Fish & Wildlife Service • 101 views • 1 year ago

4

Design, Review and
Construction of Stream
Crossings for Ecological
Function Workshop

23:11

Stream Temperature and Erosion- Sean Eagan

U.S. Fish & Wildlife Service • 77 views • 1 year ago

5

Design, Review and
Construction of Stream
Crossings for Ecological
Function Workshop

17:55

The Fish Passage Inventory Database Mapper: Anadromous Water Passage - Kim Clark

U.S. Fish & Wildlife Service • 83 views • 1 year ago

6

Design, Review and
Construction of Stream
Crossings for Ecological
Function Workshop

28:26

The Stream Function Pyramid and the Alaska Stream Quantification Harman

U.S. Fish & Wildlife Service • 102 views • 1 year ago



HOW TO SUBMIT DATA?

New Data or data requests can be submitted at:

dfg.dsf.fpid@alaska.gov

Questions:

Michael Mazzacavallo

michael.mazzacavallo@alaska.gov

907-267-2891



The Red, Gray, Green Classification is based on:

1. A 55mm Coho

2. Culvert Type

3. Measured Critical Values

- Slope
- Perch Height
- Constriction Ratio

4. Other

- Backwatering
- Tidal influence
- Fish ladders
- Damage



AKEPIC 2.0



Alaska Center for
Conservation Science
UNIVERSITY of ALASKA ANCHORAGE

Legend

Minimize all Hide all

✓ Alaska Native Lands

✓ Bureau of Indian Affairs

✓ Bureau of Land Management

✓ Department of Transportation

✓ Federal Aviation Administration

✓ Fish and Wildlife Service

✓ Forest Service

✓ General Services Administration

✓ Local Government

Survey Types

✓ All

✓ Non-native plant population survey

✓ No non-native plant population survey

Total points: 105550 On screen

Download filtered data

BLM AK Land Management
Administered Lands

Data

Time



Jan 1, 1816

1900

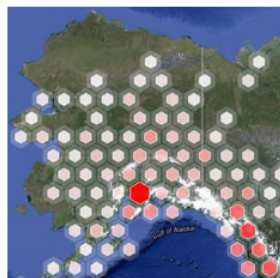
1950

Jul 10, 2024

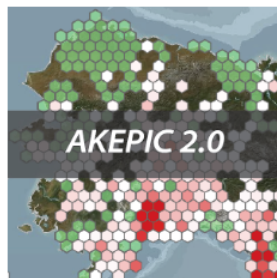
Alaska Exotic Plants Information Clearinghouse (AKEPIC)

The Alaska Exotic Plants Information Clearinghouse (AKEPIC) is a database and [mapping application](#) that provide geospatial information for non-native plant species in Alaska and neighboring Canadian Territories. These products are the result of an ongoing cooperation among the U.S. Forest Service, National Park Service, Bureau of Land Management, U.S. Fish and Wildlife Service, Department of Natural Resources Plant Material Center, and Alaska Center for Conservation Science (ACCS) in support of the [Alaska Invasive Species Partnership \(AKISP\)](#) and the Strategic Plan for Noxious and Invasive Plants Management in Alaska. ACCS administers the mapping application, database, and website associated with the project; project funding is granted by collaborators and [contributed by users](#). These data are primarily intended to support the identification of problem species and infestations, thus promoting early detection and rapid response across Alaska. Additionally, the data are used in a variety of research and modeling activities.

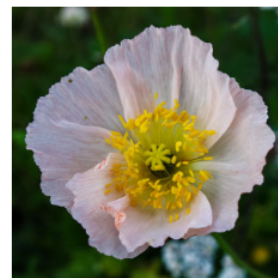
ACCS [tracks all non-native plants](#) known to occur in Alaska. In addition, ACCS has compiled biographies for over half of the 400 non-native plant species that are known or likely to occur in Alaska. In collaboration with biologists, land managers, and weed scientists across the state, ACCS has developed an [invasive plant ranking system](#) that helps evaluate the potential invasiveness and impacts of non-native plants to natural areas in Alaska (Carlson *et al.* 2008). With funding support from the U.S. Forest Service, the Alaska Association of Conservation Districts, and the University of Alaska, we have ranked approximately 170 non-native plant species to date.



Non-native Plant Data



Non-native Plant Data 2.0



Non-native Plant List



Elodea Survey Web App

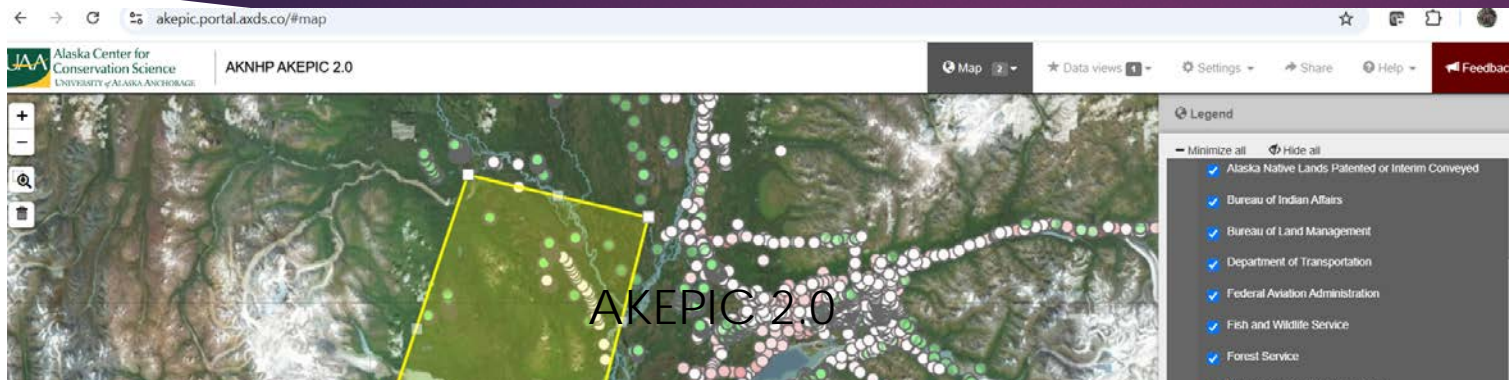
Most Recent AKEPIC Data Upload: 10 September 2024 with 3 record

ArcGIS Web Service for AKEPIC

An ArcGIS REST API feature to access AKEPIC is available. Using the REST service allows users to pull data from the AKEPIC dataportal directly into their ArcGIS Pro application using a secure http service. This eliminates the need for data managers to download and refresh AKEPIC data for every use. Click the button below:




[AKEPIC REST API](#)

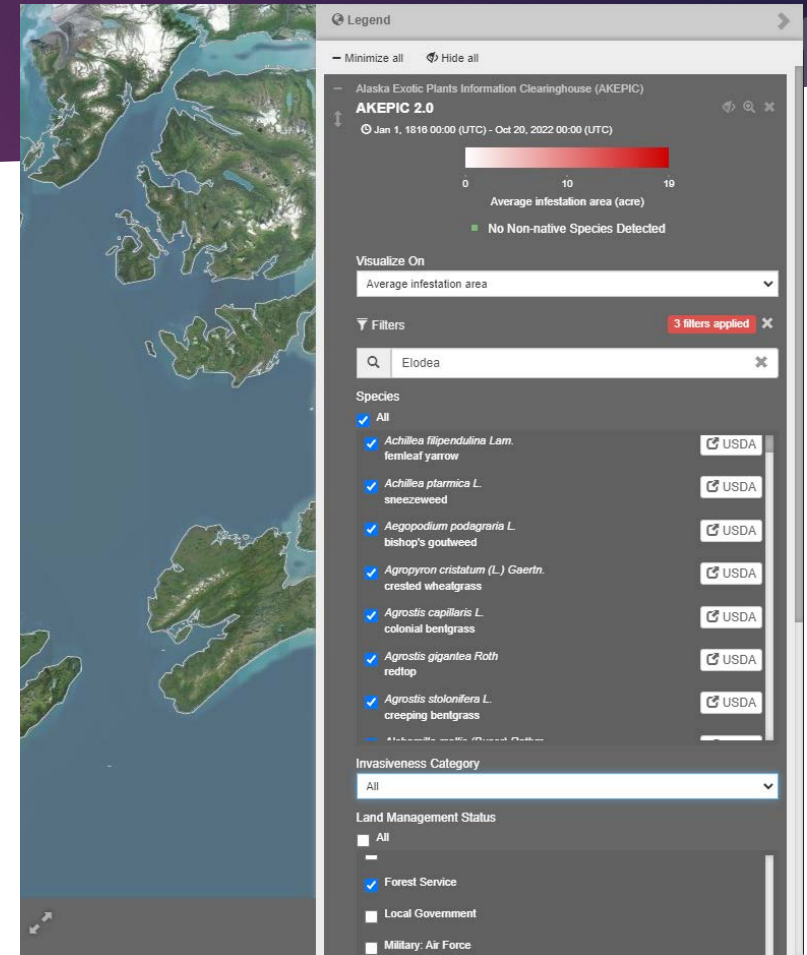
Using the AKEPIC Tool box



Download filtered data
AKEPIC 2.0

Species: *Alchemilla mollis* (Buser) Rothm.

GeoJSON	https://accs.axds.co/geosei	 Download
CSV	https://accs.axds.co/geosei	 Download
Shape file	https://accs.axds.co/geosei	 Download



Legend

Alaska Exotic Plants Information Clearinghouse (AKEPIC)

AKEPIC 2.0

Jan 1, 1816 00:00 (UTC) - Oct 20, 2022 00:00 (UTC)

Average infestation area (acre)

0 10 10

No Non-native Species Detected

Visualize On

Average infestation area

Filters

3 filters applied

Elodea

Species

- ☒ All
- ☒ *Achillea filipendulina* Lam. fennel yarrow [USDA](#)
- ☒ *Achillea ptarmica* L. sneezeweed [USDA](#)
- ☒ *Aegopodium podagraria* L. bishop's goutweed [USDA](#)
- ☒ *Agropyron cristatum* (L.) Gaertn. crested wheatgrass [USDA](#)
- ☒ *Agrostis capillaris* L. colonial bentgrass [USDA](#)
- ☒ *Agrostis gigantea* Roth redtop [USDA](#)
- ☒ *Agrostis stolonifera* L. creeping bentgrass [USDA](#)

Invasiveness Category

All

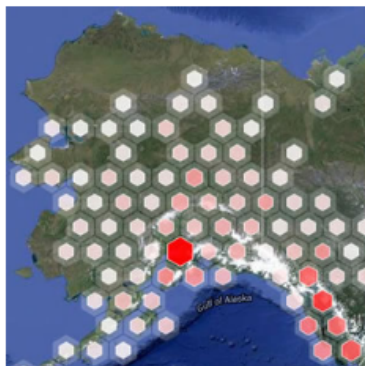
Land Management Status

- ☐ All
- ☒ Forest Service
- ☐ Local Government
- ☐ Military: Air Force

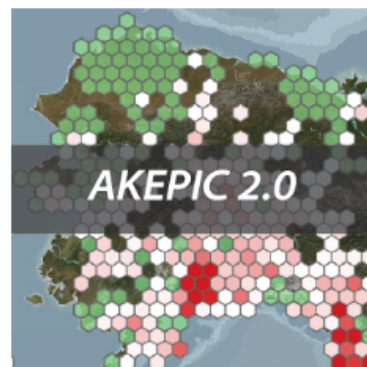
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Non-native Plant Data



Non-native Plant Data 2.0



Non-native Plant List



Elodea Survey Web App

Most Recent AKEPIC Data Upload: 11 November 2024 with 162 record

ArcGIS Web Service for AKEPIC

An ArcGIS REST API feature to access AKEPIC is available. Using the REST service allows users to pull data from the AKEPIC dataportal directly into their ArcGIS

www.accs.uaa.alaska.edu











Invasiveness ranking

Non-Native Plant Species List

ACCS has been tracking all non-native plants known to occur in Alaska since 2002. To qualify for listing, the species must be found escaped outside of a designated planting/gardening area and not on private lands. The designation of nativity status for plants involves a careful review of the known distribution of the species and documentation of earliest establishment in our region. We consider the context of early botanical explorers documenting the flora of Alaska by using historic floras, herbaria records, and current scientific literature to inform our listing decisions and document the first presence in our region. Here we list the non-native plant species known to or likely to occur in our region. In collaboration with biologists, land managers, and weed scientists across the state, ACCS has developed an [invasive plant ranking system](#) that helps evaluate the potential invasiveness and impacts of non-native plants to natural areas in Alaska (Carlson et al. 2008). Most species have biographies and an invasiveness rank.

The AKEPIC list is maintained by ACCS Botanists, please report new species to [Justin Fulkerson](#)



Scientific Name	 	Symbol	Common Name	Rank	Family	Est.	Occurrence
<i>Achillea filipendulina</i> Lam.		ACFI	fernleaf yarrow		Asteraceae	2005	Alaska
<i>Acer negundo</i> L.		ACNE2	boxelder		Aceraceae		Adjacent Canada only
<i>Achillea ptarmica</i> L.	 	ACPT	sneezeweed	46	Asteraceae	1913	Alaska
<i>Acroptilon repens</i> (L.) DC.	 	ACRE3	hardheads	66	Asteraceae		Adjacent Canada only
<i>Aegopodium podagraria</i> L.	 	AEPO	bishop's goutweed	57	Apiaceae	2006	Alaska
<i>Agrostis capillaris</i> L.		AGCA5	colonial bentgrass		Poaceae	1941	Alaska
<i>Agropyron cristatum</i> (L.) Gaertn.		AGCR	crested wheatgrass		Poaceae	1939	Alaska
<i>Agropyron fragile</i> (Roth) P. Candargy		AGFR	Siberian wheatgrass		Poaceae		Adjacent Canada only
<i>Agrostemma githago</i> L.		AGGI	common corncockle		Caryophyllaceae	2006	Alaska
<i>Agrostis gigantea</i> Roth		AGGI2	redtop		Poaceae	1902	Alaska
<i>Agrostis stolonifera</i> L.		AGST2	creeping bentgrass		Poaceae	1918	Alaska
<i>Aira caryophyllea</i> L.		AICA	silver hairgrass		Poaceae		Adjacent Canada only
<i>Alyssum alyssoides</i> (L.) L.		ALAL3	alyssum		Brassicaceae	1954	Alaska
<i>Alopecurus arundinaceus</i> Poir.		ALAR	creeping meadow foxtail		Poaceae	2011	Alaska
<i>Alopecurus geniculatus</i> L.	 	ALGE2	water foxtail	49	Poaceae	1940	Alaska

Alaska Exotic Plants Information Clearinghouse (AKEPIC)

The Alaska Exotic Plants Information Clearinghouse (AKEPIC) is a database and [mapping application](#) that provide geospatial information for non-native plant species in Alaska and neighboring Canadian Territories. These products are the result of an ongoing cooperation among the U.S. Forest Service, National Park Service, Bureau of Land Management, U.S. Fish and Wildlife Service, Department of Natural Resources Plant Material Center, and Alaska Center for Conservation Science (ACCS) in support of the [Alaska Invasive Species Partnership \(AKISP\)](#) and the Strategic Plan for Noxious and Invasive Plants Management in Alaska. ACCS administers the mapping application, database, and website associated with the project; project funding is granted by collaborators and [contributed by users](#). These data are primarily intended to support the identification of problem species and infestations, thus promoting early detection and rapid response across Alaska. Additionally, the data are used in a variety of research and modeling activities.

ACCS [tracks all non-native plants](#) known to occur in Alaska. In addition, ACCS has compiled biographies for over half of the 400 non-native plant species that are known or likely to occur in Alaska. In collaboration with biologists, land managers, and weed scientists across the state, ACCS has developed an [invasive plant ranking system](#) that helps evaluate the potential invasiveness and impacts of non-native plants to natural areas in Alaska (Carlson *et al.* 2008). With funding support from the U.S. Forest Service, the Alaska Association of Conservation Districts, and the University of Alaska, we have ranked approximately 170 non-native plant species to date.



Non-native Plant Data



Non-native Plant Data 2.0



Non-native Plant List



Elodea Survey Web App

Most Recent AKEPIC Data Upload: 11 November 2024 with 162 record

ArcGIS Web Service for AKEPIC

An ArcGIS REST API feature to access AKEPIC is available. Using the REST service allows users to pull data from the AKEPIC dataportal directly into their ArcGIS

UAA Alaska Elodea Survey Map Viewer

Legend

Basemap Gallery

Details

Layers

Info

Elodea Survey Summary

Elodea Survey Lakes - points

- Survey, Elodea still present
- Survey, Elodea treatment
- Survey, no Elodea detected

AKEPIC Data (web services)

- Present
- Absent

Elodea River Surveys

- Elodea present
- Elodea survey, not present

Elodea Survey Lakes - polygons

- Survey, Elodea still present
- Survey, Elodea treatment
- Survey, no Elodea detected





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AKEPIC contact:
jrfulkerson@alaska.edu

Legend

Minimize all Hide all

- ☒ Alaska Native Land
- ☒ Bureau of Indian Affairs
- ☒ Bureau of Land Management
- ☒ Department of Transportation
- ☒ Federal Aviation Administration
- ☒ Fish and Wildlife Service
- ☒ Forest Service
- ☒ General Services Administration
- ☒ Local Government

Survey Types

- ☒ All
- ☒ Non-native plant population survey
- ☒ No non-native plant survey

Total points: 105550 On screen

Download filtered data

BLM AK Land Management
Administered Land

Data

Time



Jan 1, 1816

1900

1950

Jul 10, 2024

AKTEMP: A Stream and Lake Temperature Database for Alaska



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**Walker Environmental
Research**

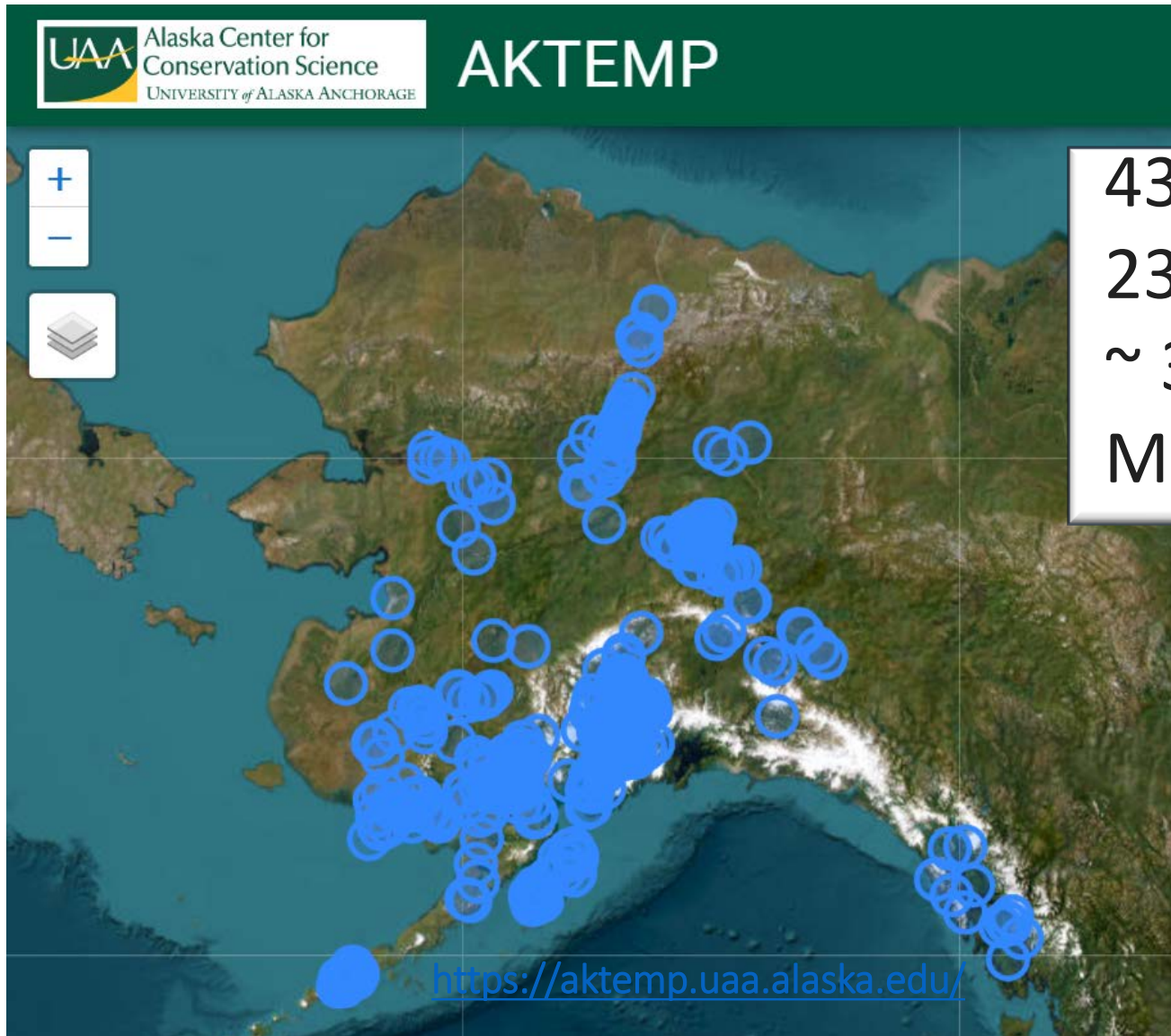
November 2024

Marcus Geist, UAA

Dustin Merrigan, UAA

Jeff Walker, WER

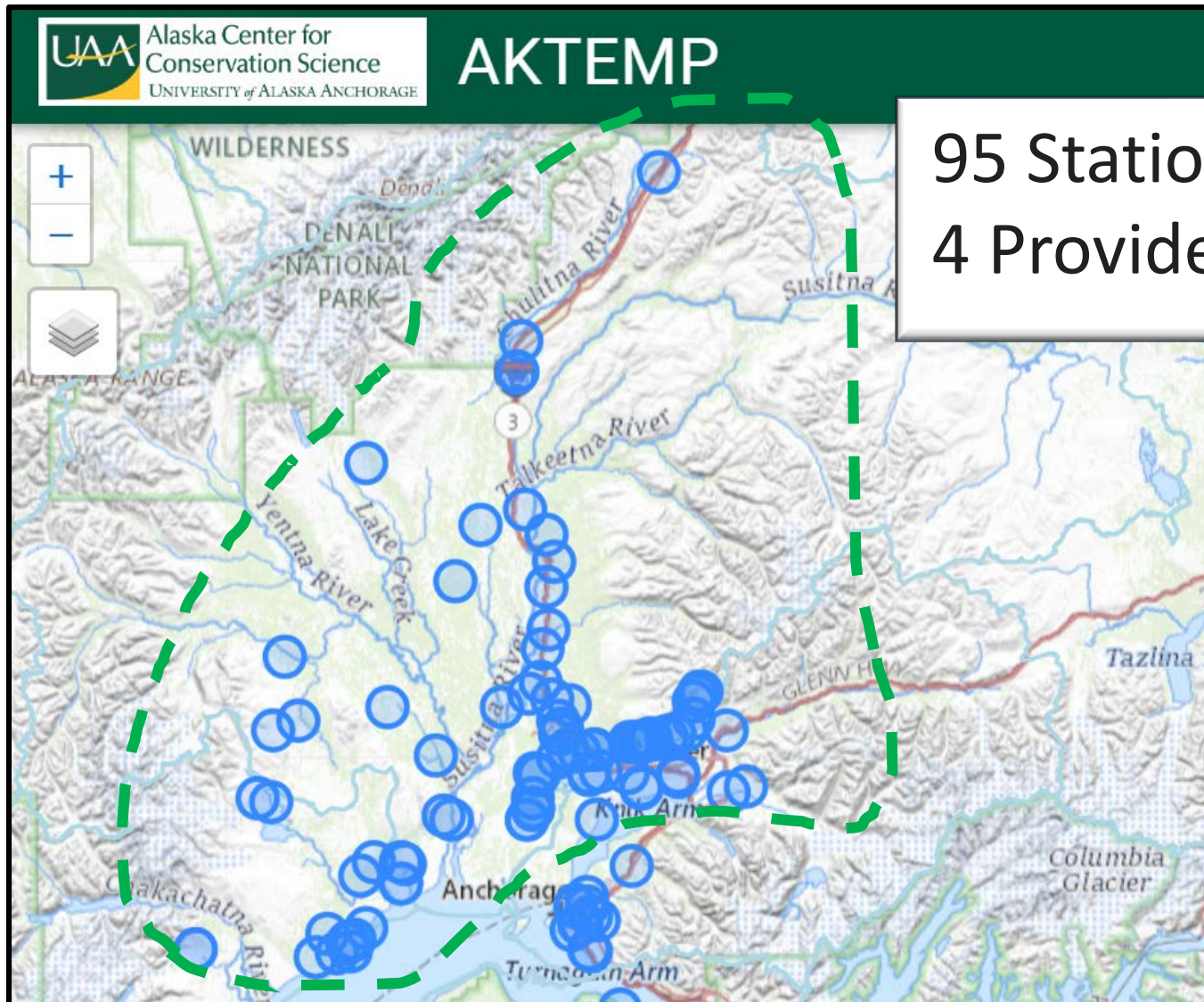
Today - AKTEMP Data



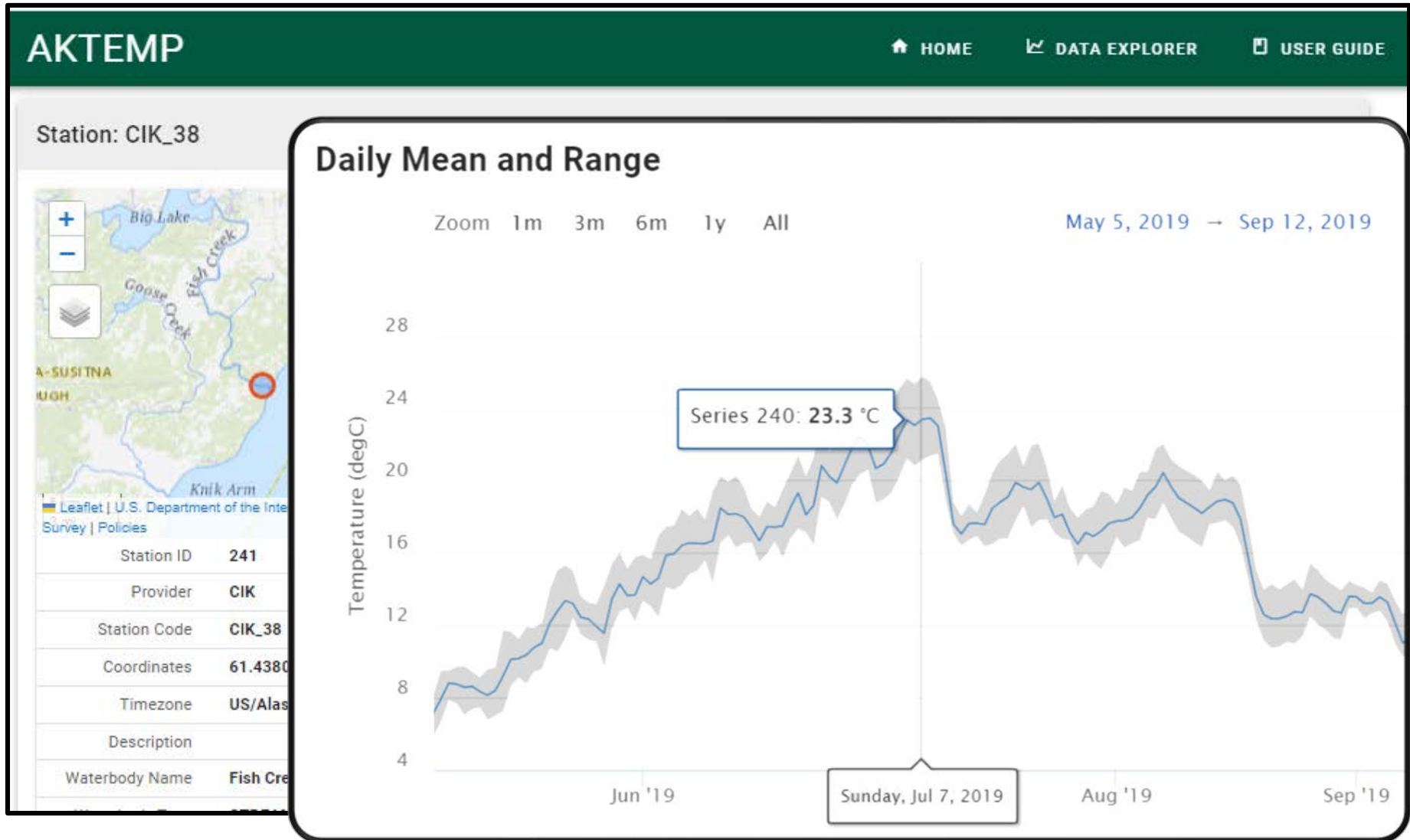
438 Stations
23 Providers
~ 32,000,000
Measurements



Today - AKTEMP – Mat-Su



Today - AKTEMP – Data Viewer



EPA Water Quality Database (WQX)

Raw data

- Collected under Quality Assurance Project Plan (QAPP)
- QA/QC results meet data quality objectives
- Approved methods used for field and lab measurements
- Complete metadata

Water Quality Exchange (WQX)

- Processes data file
- Review uploaded data
- Stores data for use by public

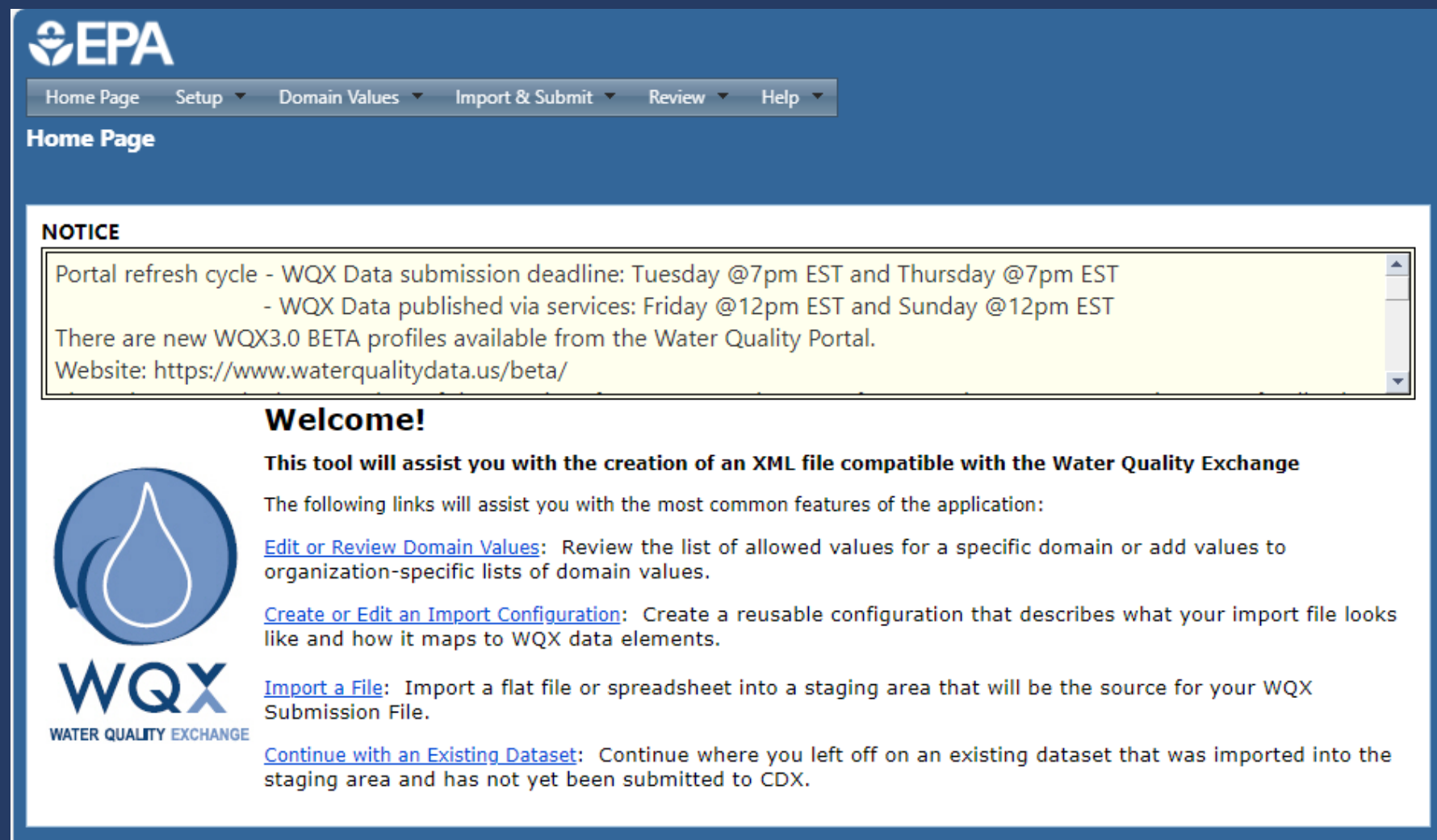
Water Quality Portal (WQP)

- Nationwide water quality database
- Download data



EPA Water Quality Exchange

- Register for WQX account
- Format data (can use WQX web templates)
- Upload and review data



The screenshot shows the EPA Water Quality Exchange (WQX) website. At the top is the EPA logo and a navigation menu with links: Home Page, Setup, Domain Values, Import & Submit, Review, and Help. Below the menu is the 'Home Page' heading. A yellow 'NOTICE' box contains information about data submission deadlines and new WQX3.0 BETA profiles. The main content area features a 'Welcome!' message, a description of the tool's purpose, and a list of links for common features: 'Edit or Review Domain Values', 'Create or Edit an Import Configuration', 'Import a File', and 'Continue with an Existing Dataset'. On the left side of the main content area is the WQX logo, which includes a water drop icon and the text 'WQX WATER QUALITY EXCHANGE'.

EPA

Home Page Setup Domain Values Import & Submit Review Help

Home Page

NOTICE

Portal refresh cycle - WQX Data submission deadline: Tuesday @7pm EST and Thursday @7pm EST
- WQX Data published via services: Friday @12pm EST and Sunday @12pm EST
There are new WQX3.0 BETA profiles available from the Water Quality Portal.
Website: <https://www.waterqualitydata.us/beta/>

Welcome!

This tool will assist you with the creation of an XML file compatible with the Water Quality Exchange


The following links will assist you with the most common features of the application:

[Edit or Review Domain Values](#): Review the list of allowed values for a specific domain or add values to organization-specific lists of domain values.

[Create or Edit an Import Configuration](#): Create a reusable configuration that describes what your import file looks like and how it maps to WQX data elements.

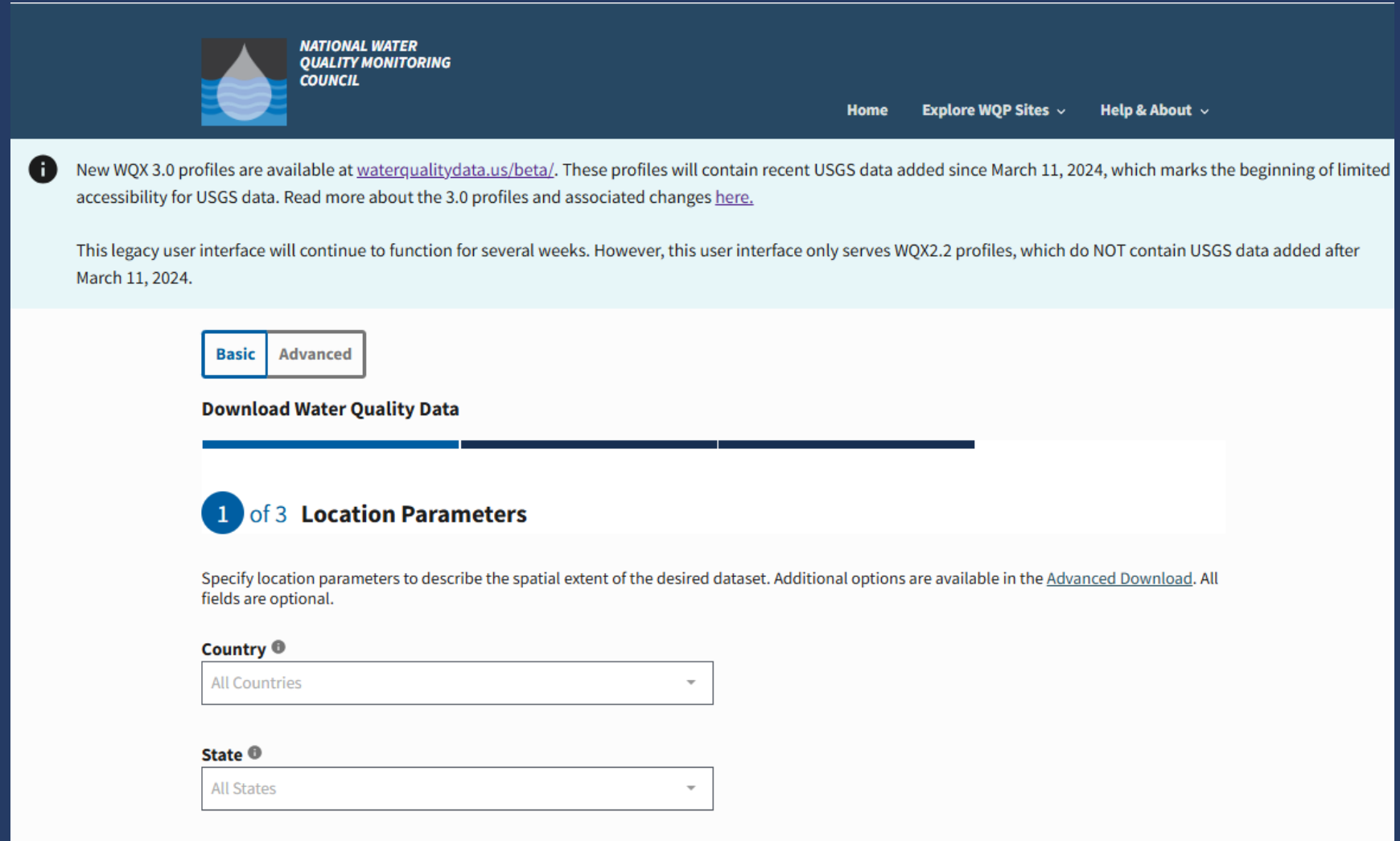
[Import a File](#): Import a flat file or spreadsheet into a staging area that will be the source for your WQX Submission File.

[Continue with an Existing Dataset](#): Continue where you left off on an existing dataset that was imported into the staging area and has not yet been submitted to CDX.



Water Quality Portal

- Data from
 - EPA
 - USGS
 - USDA
 - States
 - Tribes
 - NGOs
- Premiere source of discrete water-quality data in the United States and beyond



The screenshot shows the National Water Quality Monitoring Council's Water Quality Portal. The header features the council's logo and navigation links: Home, Explore WQP Sites, and Help & About. A light blue banner contains an information icon and text about new WQX 3.0 profiles available at waterqualitydata.us/beta/, noting that these profiles contain recent USGS data added since March 11, 2024. Below the banner, there are tabs for 'Basic' and 'Advanced' download options. The 'Basic' tab is selected, and the section is titled 'Download Water Quality Data'. A progress bar indicates the current step is '1 of 3 Location Parameters'. The instructions state: 'Specify location parameters to describe the spatial extent of the desired dataset. Additional options are available in the [Advanced Download](#). All fields are optional.' There are two dropdown menus: 'Country' with 'All Countries' selected, and 'State' with 'All States' selected.

NATIONAL WATER
QUALITY MONITORING
COUNCIL

Home Explore WQP Sites Help & About

i New WQX 3.0 profiles are available at waterqualitydata.us/beta/. These profiles will contain recent USGS data added since March 11, 2024, which marks the beginning of limited accessibility for USGS data. Read more about the 3.0 profiles and associated changes [here](#).

This legacy user interface will continue to function for several weeks. However, this user interface only serves WQX2.2 profiles, which do NOT contain USGS data added after March 11, 2024.

Basic Advanced

Download Water Quality Data

1 of 3 **Location Parameters**

Specify location parameters to describe the spatial extent of the desired dataset. Additional options are available in the [Advanced Download](#). All fields are optional.

Country ⓘ

All Countries

State ⓘ

All States

Want to know more?

- DEC Water Quality Program (Integrated Report, Water Quality Standards, Listing Methodologies, Water Quality Map)
 - <https://dec.alaska.gov/water/water-quality/>
- Water Quality Exchange (Upload Data)
 - General Info: <https://www.epa.gov/waterdata/water-quality-data-upload-wqx#wqxoverview>
 - Templates: <https://www.epa.gov/waterdata/water-quality-exchange-web-template-files>
- Water Quality Portal (Download Data)
 - www.waterqualitydata.us

Amber Crawford

Water Quality Monitoring and Assessment Section Manager
Amber.Crawford@Alaska.gov

Jenny Petitt

Integrated Report Coordinator and Data Manager
Jenny.Petitt@Alaska.gov





DNR's Alaska Mapper

Created by Colton Percy, ADF&G
colton.percy@alaska.gov

Landing Page

Links to two user guides

You do not need an account to use Mapper.
Click the blue button to get started.

Additional help on how to use Alaska Mapper is available in the [User Guide](#), the Alaska Mapper [Story Map](#), and at the DNR [Public Information Centers](#) located in Anchorage, Fairbanks and Juneau.

Updates and New Features

- 8/15/2024 - Switched default base map to "National Map Imagery Topo"
- 8/15/2024 - Updated "Mining" Map Category
 - Added
 - Mining Claim Research Map
 - Mining Claim Sketch Map
 - Removed
 - Mining Claims Map
- 8/15/2024 - Added new base maps
 - ArcGIS World Imagery Labeled
 - Mining Claim Sketch Base Map
- 4/20/2023 - Added link to [Alaska Mapper Web User Guide \(Story Map\)](#) to Help and Resources panel
- 5/11/2022 - Changed default Base Map to "ArcGIS USA Topo Map"
- 9/14/2021 - Base Layer Updates
 - Removed Alaska High Res Imagery and SDMI BDL
 - Added AK RGB High Resolution and AK CIR High Resolution
- 8/13/2021 - Added new "Hunt Planning Map" in the "Parks and Recreation" Map Category

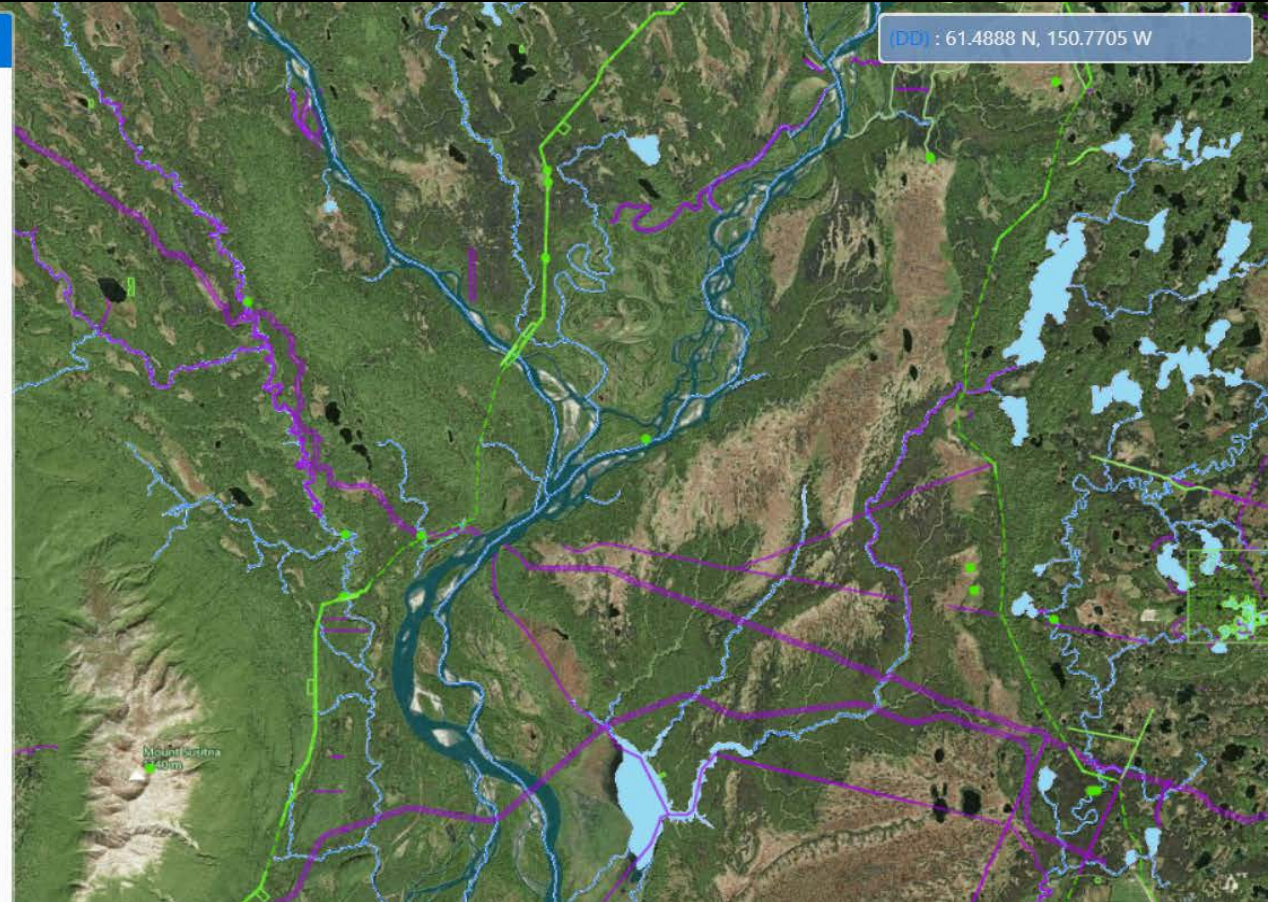
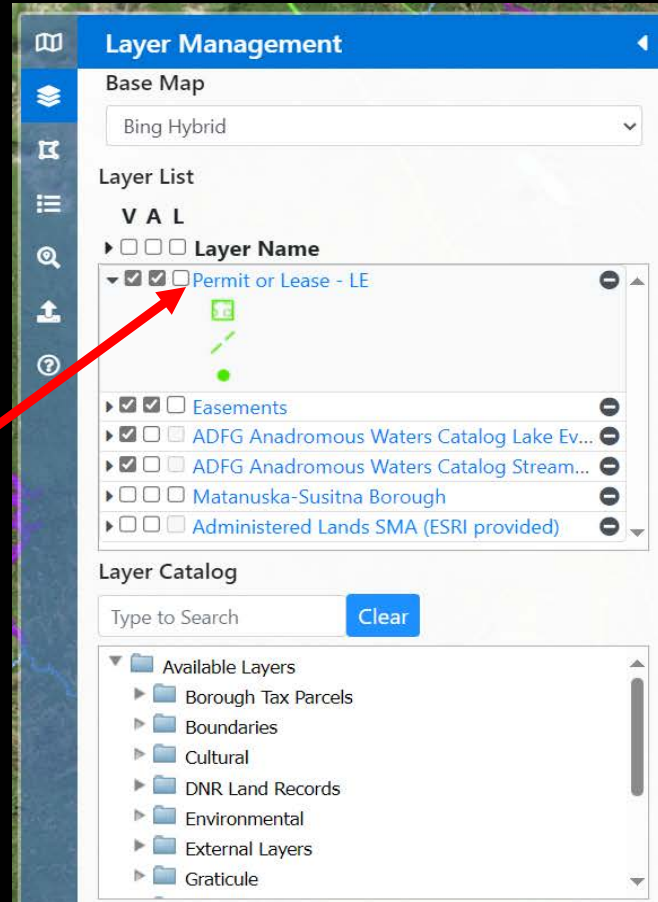
[Log in with MyAlaska](#)

[Log in with SOA](#)

[Launch Alaska Mapper](#)

Layers

Visible - V
Active (able to be queried) - A
Label - L



Layer names can be clicked on for more information

Useful Layers to include

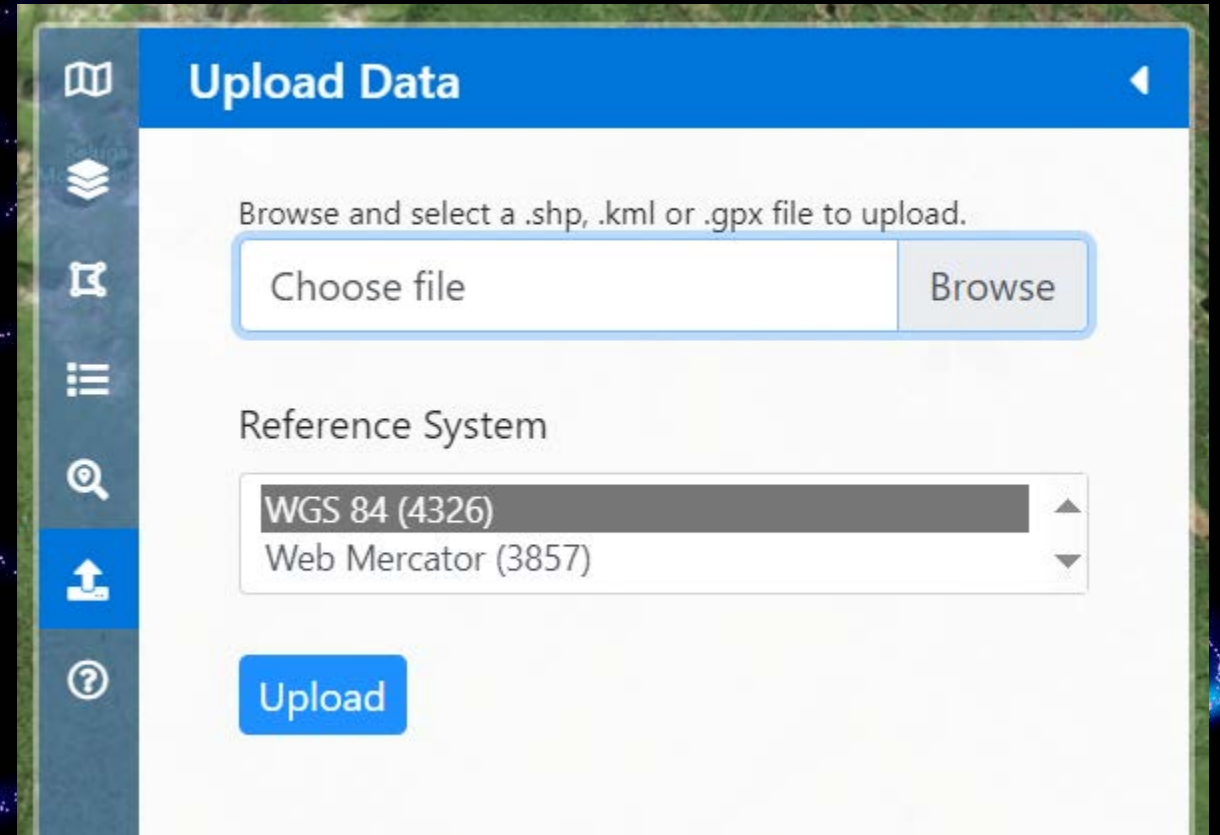
- Anadromous Waters Catalog
- BLM Surface Management Agency (broad overview of land ownership)
- Borough parcels
- DNR Permits and Leases
- DNR Easements

Data Upload

You can upload shapefiles (.shp), kml's used by Google Earth, or gpx files associated with gps devices.

The spatial data being uploaded must have one of two coordinate reference systems:

- WGS 1984 (EPSG 4326)
- Web Mercator (EPSG 3857)



The screenshot shows the 'Upload Data' dialog box in Google My Maps. On the left is a vertical sidebar with icons for map, layers, settings, search, and upload. The main panel has a blue header 'Upload Data' with a back arrow. Below the header, it says 'Browse and select a .shp, .kml or .gpx file to upload.' There is a text input field containing 'Choose file' and a 'Browse' button to its right. Below this is a 'Reference System' section with a dropdown menu. The dropdown is open, showing 'WGS 84 (4326)' as the selected option and 'Web Mercator (3857)' as an alternative. At the bottom of the main panel is a blue 'Upload' button.

Upload Data

Browse and select a .shp, .kml or .gpx file to upload.

Choose file

Reference System

WGS 84 (4326)
Web Mercator (3857)

The background of the slide is a close-up photograph of six salmon patties. The patties are round, golden-brown, and appear to be made of ground salmon. They are garnished with finely chopped green onions and small pieces of red onion. They are arranged on a dark, textured surface, possibly a baking sheet or a piece of parchment paper.

Mat-Su Mashup

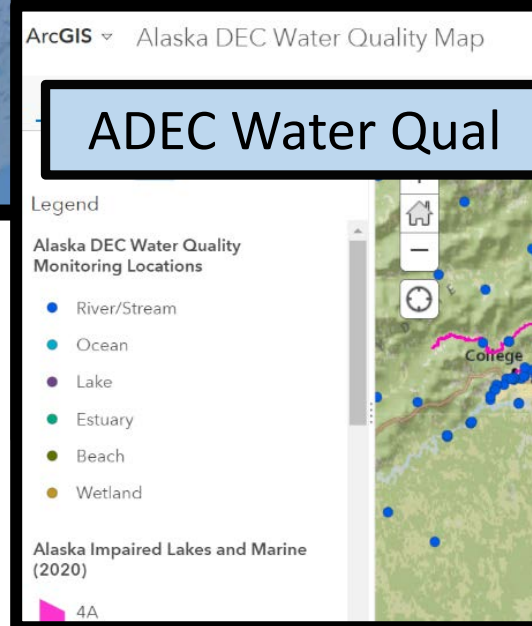
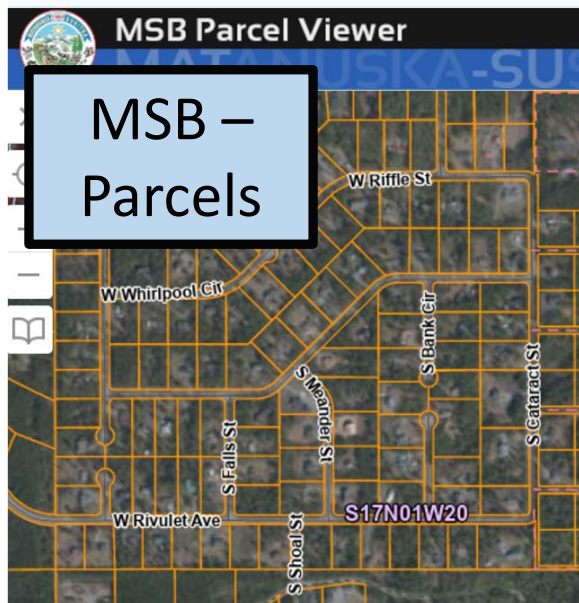
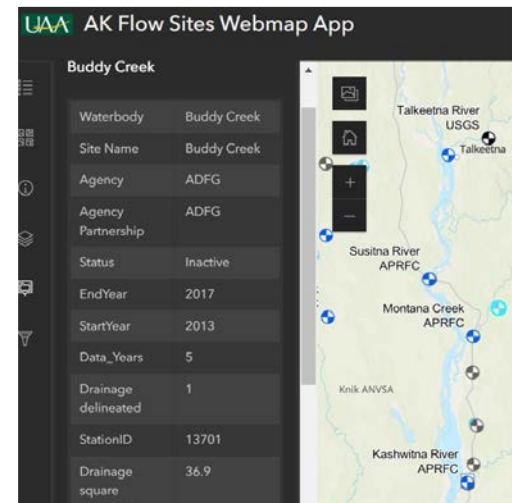
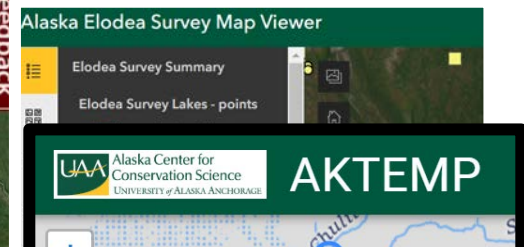
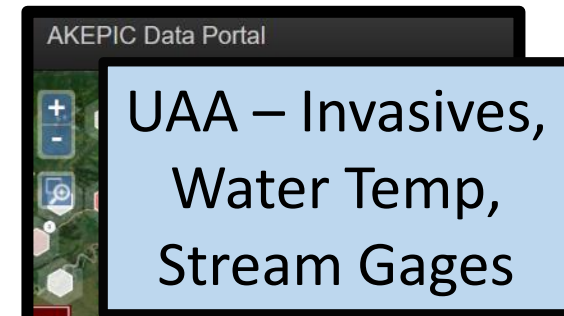
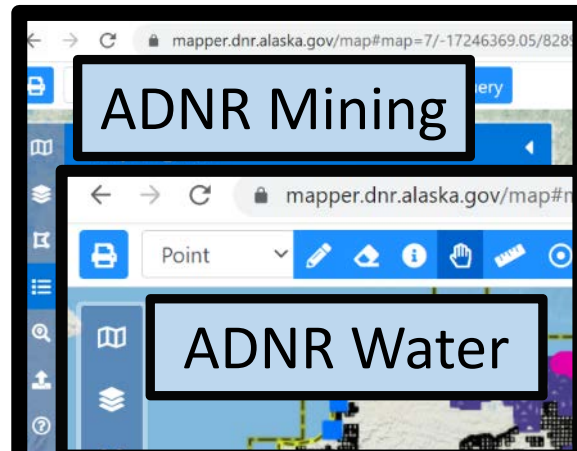
November 2024

Marcus Geist, Geographer

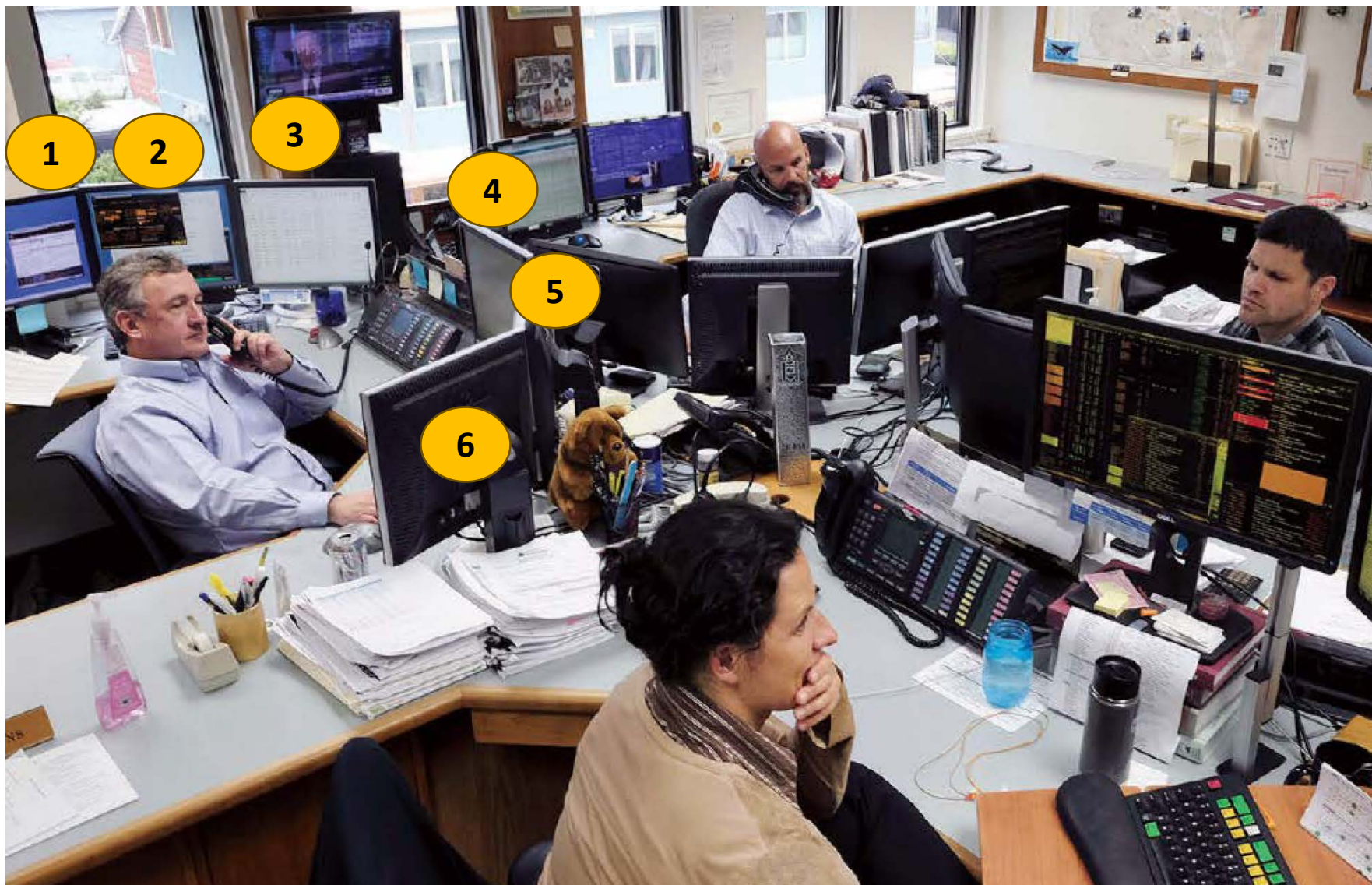


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Currently Many, Many Portals



Solution?

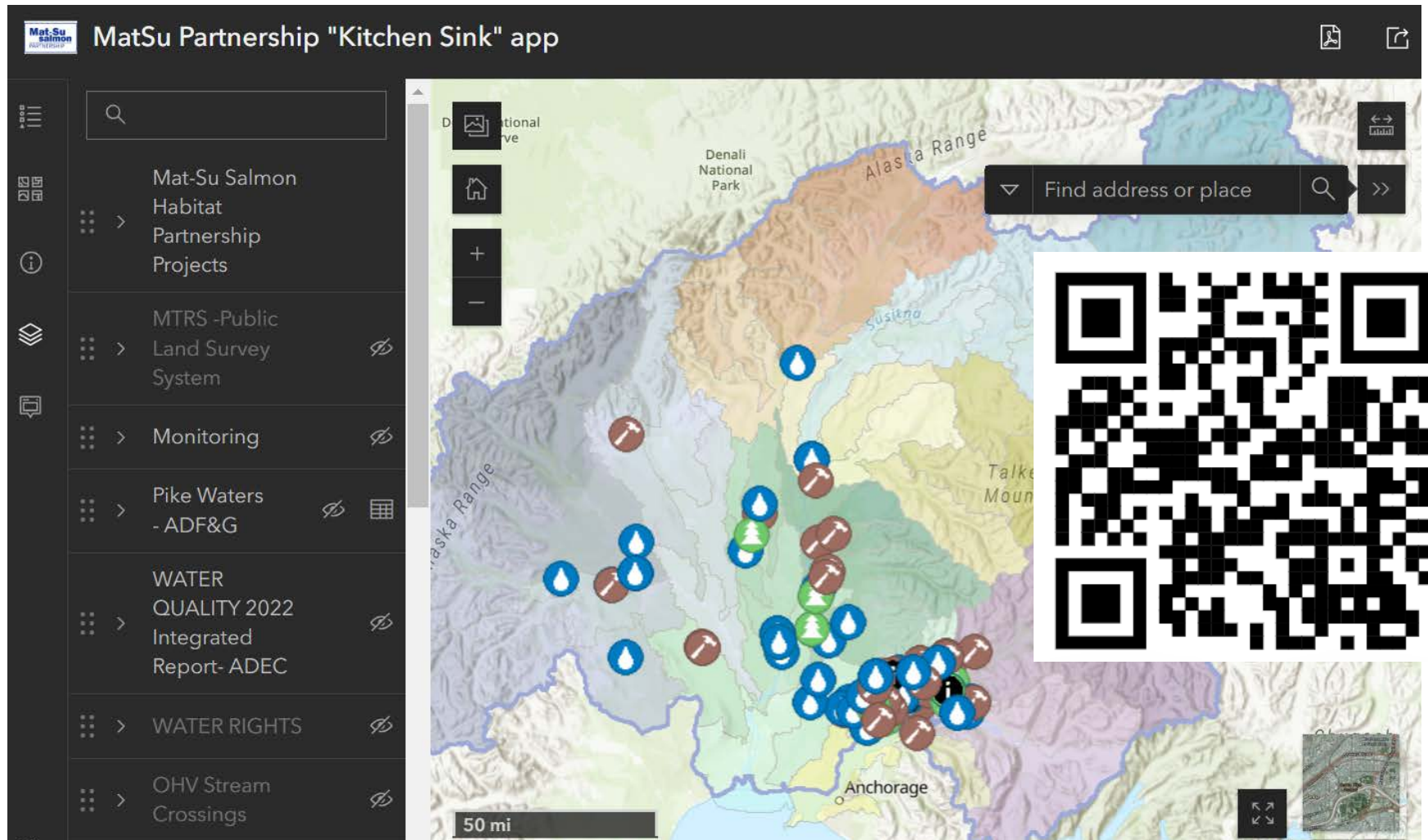




Or?

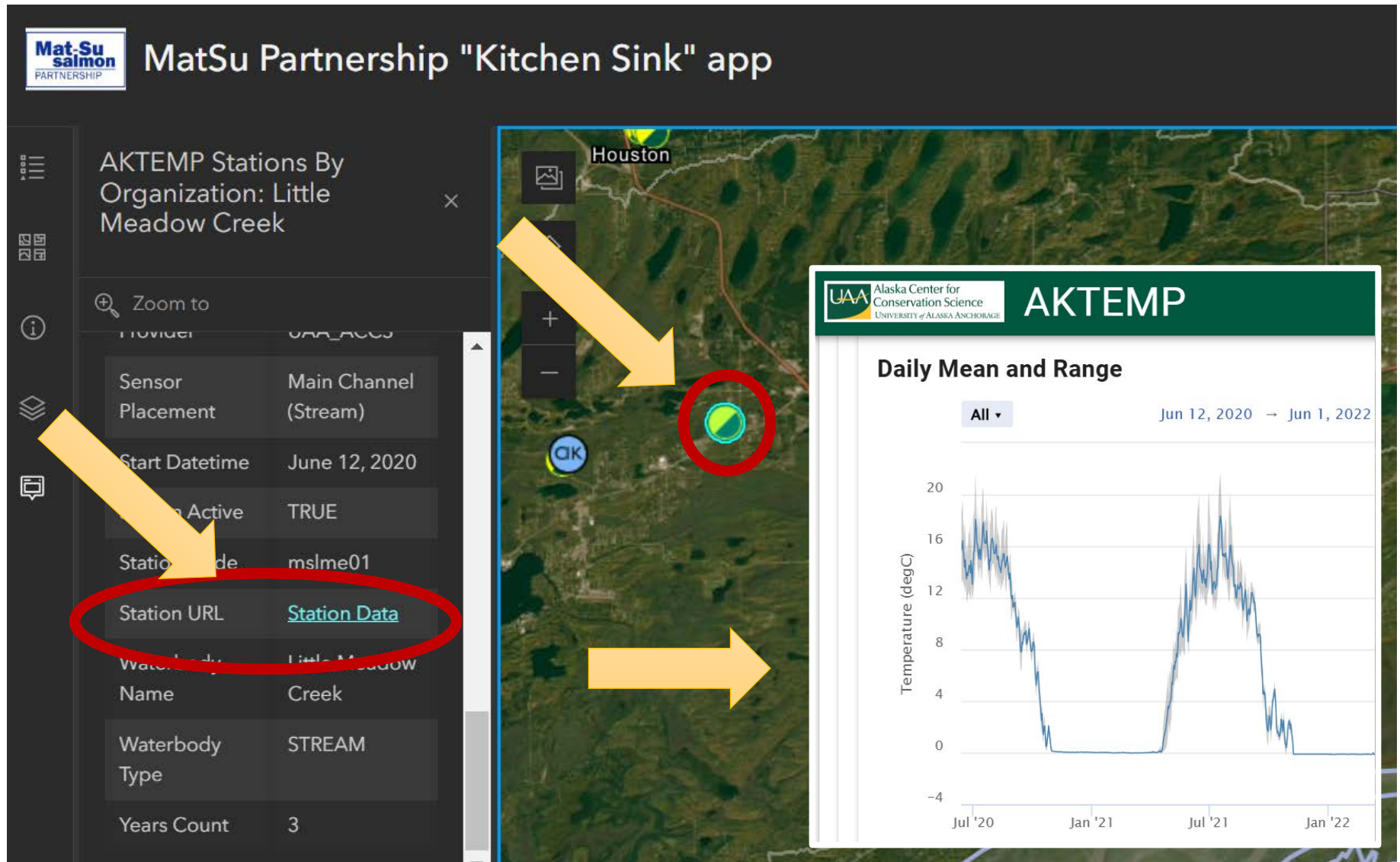
Data
Discovery
Tool

Partnership Web App – web browser

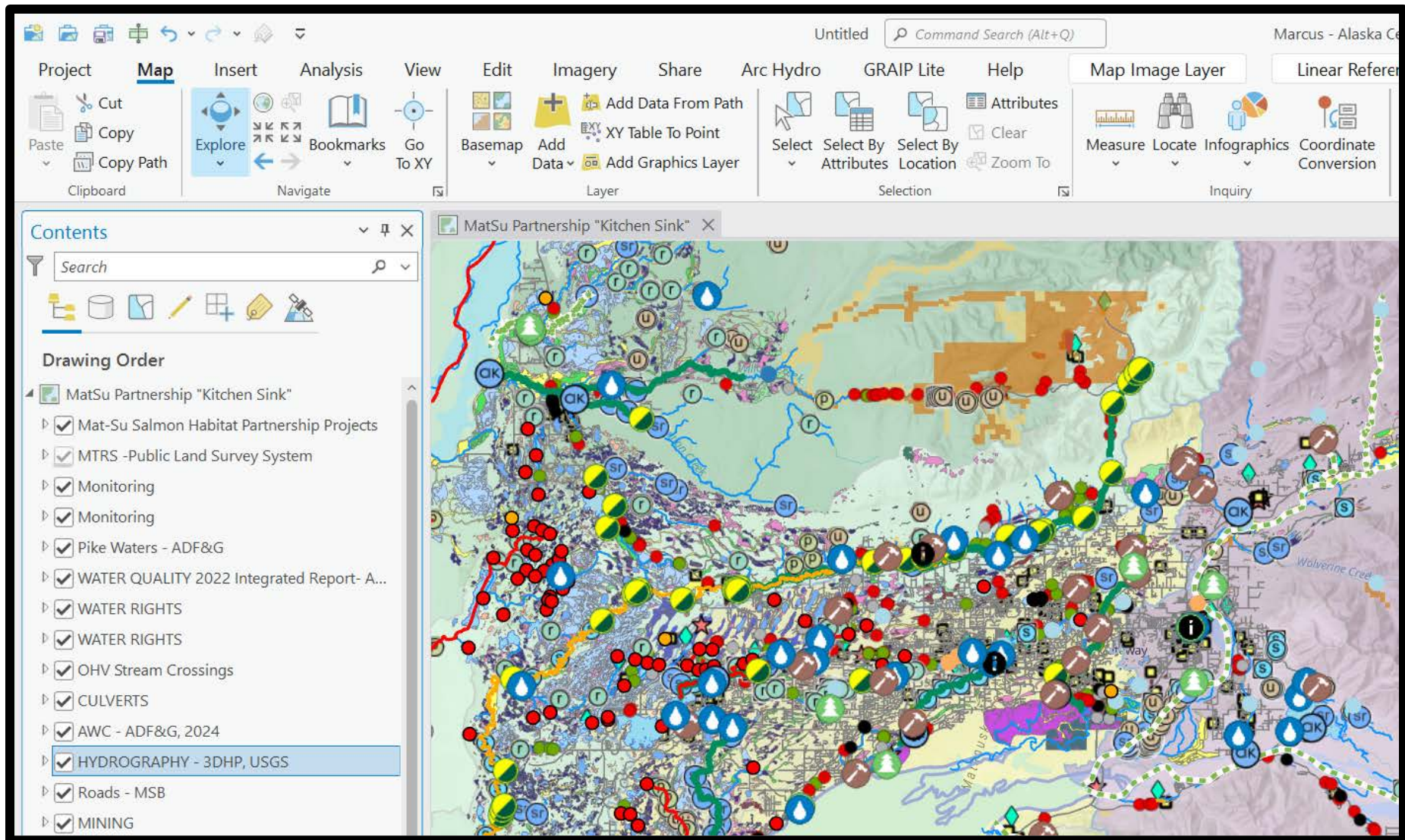


<https://arcg.is/00iGnr>

Data sourced from/linked to Agencies



Partnership Data – Open in ArcGIS (desktop)

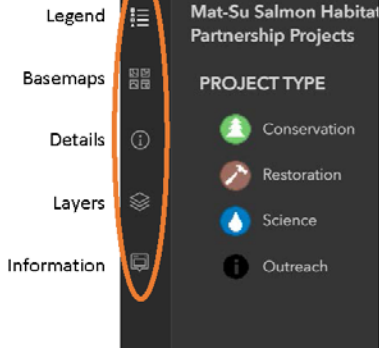


Mat-Su Fish Habitat Web Map User Guide

OVERVIEW: This web mapping site is intended for data discovery to provide the user with an ability to view dozens of layers related to fish habitat in the Mat-Su Salmon Partnership Region. It allows for initial site reconnaissance and comparisons using the tool. Data provided might be incomplete or incorrect in some circumstances. Users are encouraged to use the tool and explore the data yet use the site as a starting point for further, more detailed information.

START UP: You will see a map of the Mat-Su with overlays of former and current Fish Habitat Partnership sponsored datasets. Detailed datasets will become visible on the web map as you zoom in.

Icons along the map's left edge.



Legend: Displays the symbology for the layers that are turned on. It also indicates if layers are scale dependent (e.g. they are only visible when you are zoomed in to a minimum scale)

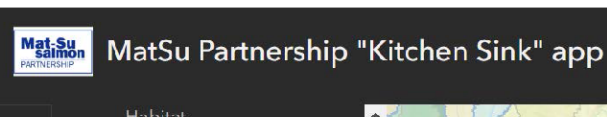
Basemaps: The default basemap is a topographic style, however, user can choose among basemaps such as: imagery, terrain with labels, or a national map from the US Geological Survey which includes many labeled features, both natural (rivers, lakes, mountains) and anthropogenic (airports, roads, communities).

Details: Provides a short description of the map and emphasizes that the map is meant as a data discovery tool rather than a definitive decision support tool.

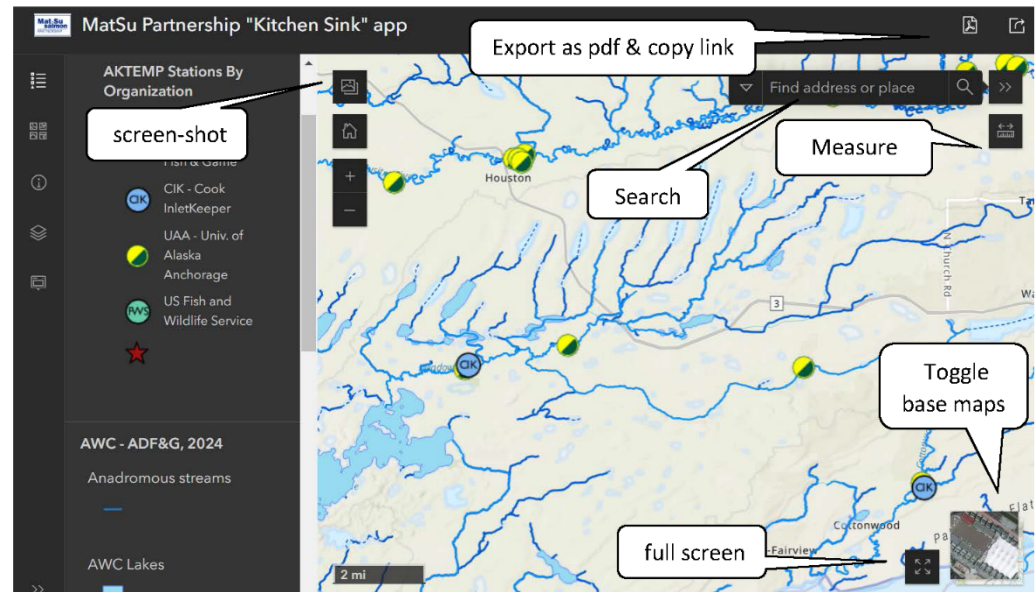
Layers: The layers tool allows users to turn datasets on or off by selecting each layer's eye icon.

Some layers are scale dependent. Layers will be "grayed out" until the user zooms to a particular scale. Layers have been done to optimize map speeds and legibility. Layers are organized into "nested groups" that share a common theme and are accessed by the arrow icon.

"nested groups of layers"



Other Map Functions: Users can: search by mine name, expand the map to full screen, toggle between the topographic basemap and imagery, measure distances or areas, export the map on the screen to a pdf, capture a screenshot as an image, or share the web map link.



Questions?

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