



Alaska Update - WSWC Fall 2023

Proposed changes to Water Use Law
AS 46.15

Proposed Water Regulation Changes

Water Right Backlog Reduction
Project Update

Record Precipitation for Southcentral
Alaska in 2022- Above average
Snowpack in 2023



Water Use Law Changes

In Fall of each year DNR provides the legislature a report that includes any recommended changes to water law. DNR recommended an update to statute 46.15 to eliminate the requirement for newspaper publication of certain water right applications. Advertising costs are paid by the applicant and can exceed the cost of the water use permit, tie up staff time, and reach a limited number of persons.

Senate bill 68 was proposed near the beginning of the legislative session in mid-January and first heard in Senate Resources Committee in Mid-March.

Other agencies noted the bill and by early May the bill gained 10 additions considering changes to public notices and public hearings. The bill did not make it to the Senate floor before the end of the legislative session and will wait until the second session of the 33rd State Legislature next year.

Water Regulation Changes

- Changes to 11 AAC 93 on Water Use were proposed in 2021.
- Changes were last made in 2004.
- Comments were received from 376 entities.
- A smaller set of regulation changes are currently being circulated for regulatory agency review.
- Lesson learned- make more frequent proposed updates.

Water Right Backlog Reduction Project

In late 2021 a multi-year project was proposed to significantly reduce the backlog of 556 water right applications that span multiple decades- since the Water Use Act of 1966. Alaska follows the prior appropriation doctrine.

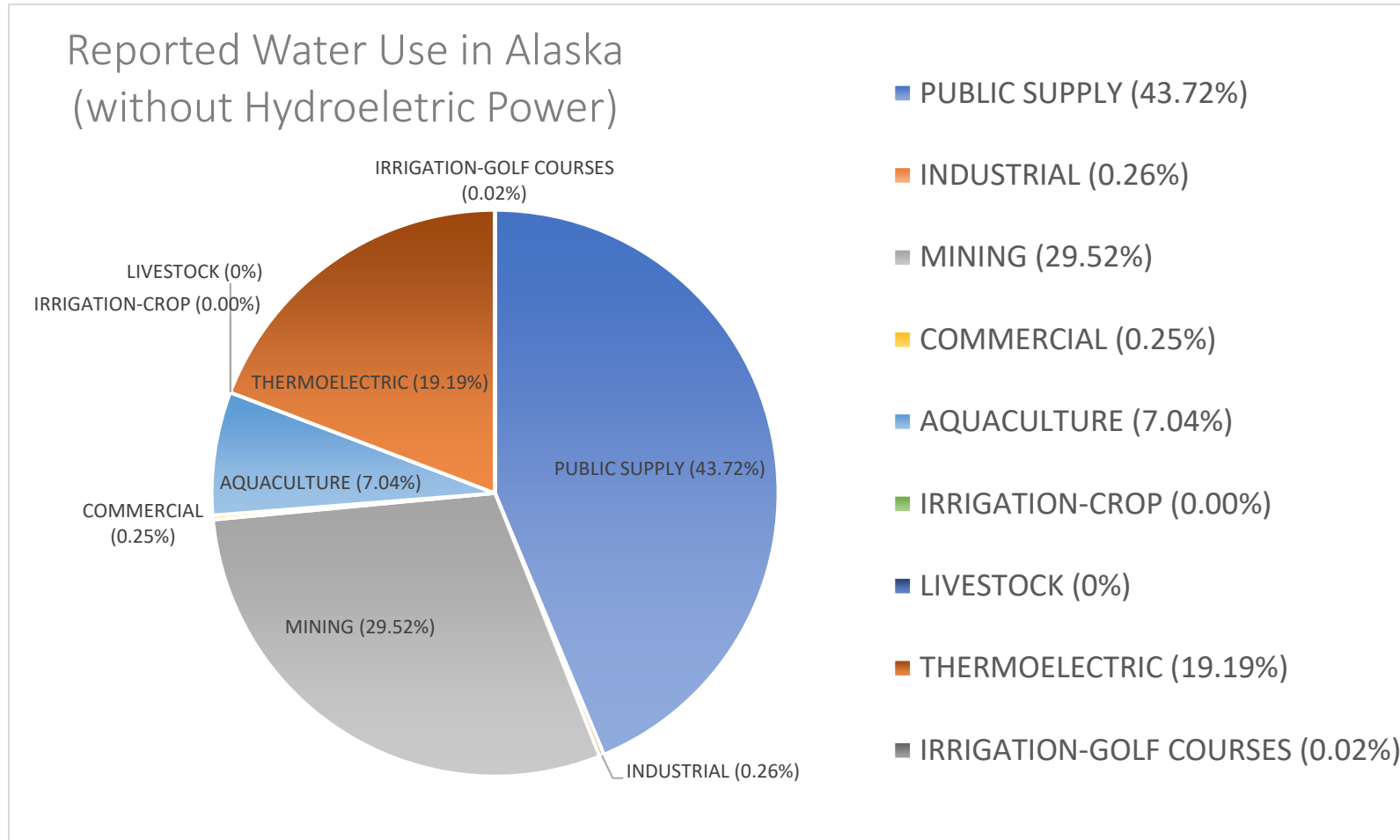
In January 2022 DNR hired two Long Term Non-Permanent positions dedicated to adjudicating the backlogged applications. A third LTNP position was added to scan older casefiles so adjudicators have electronic access to files, speeding up the adjudication process.

The backlog now stands at 251 casefiles in backlog.
We are past the halfway point!

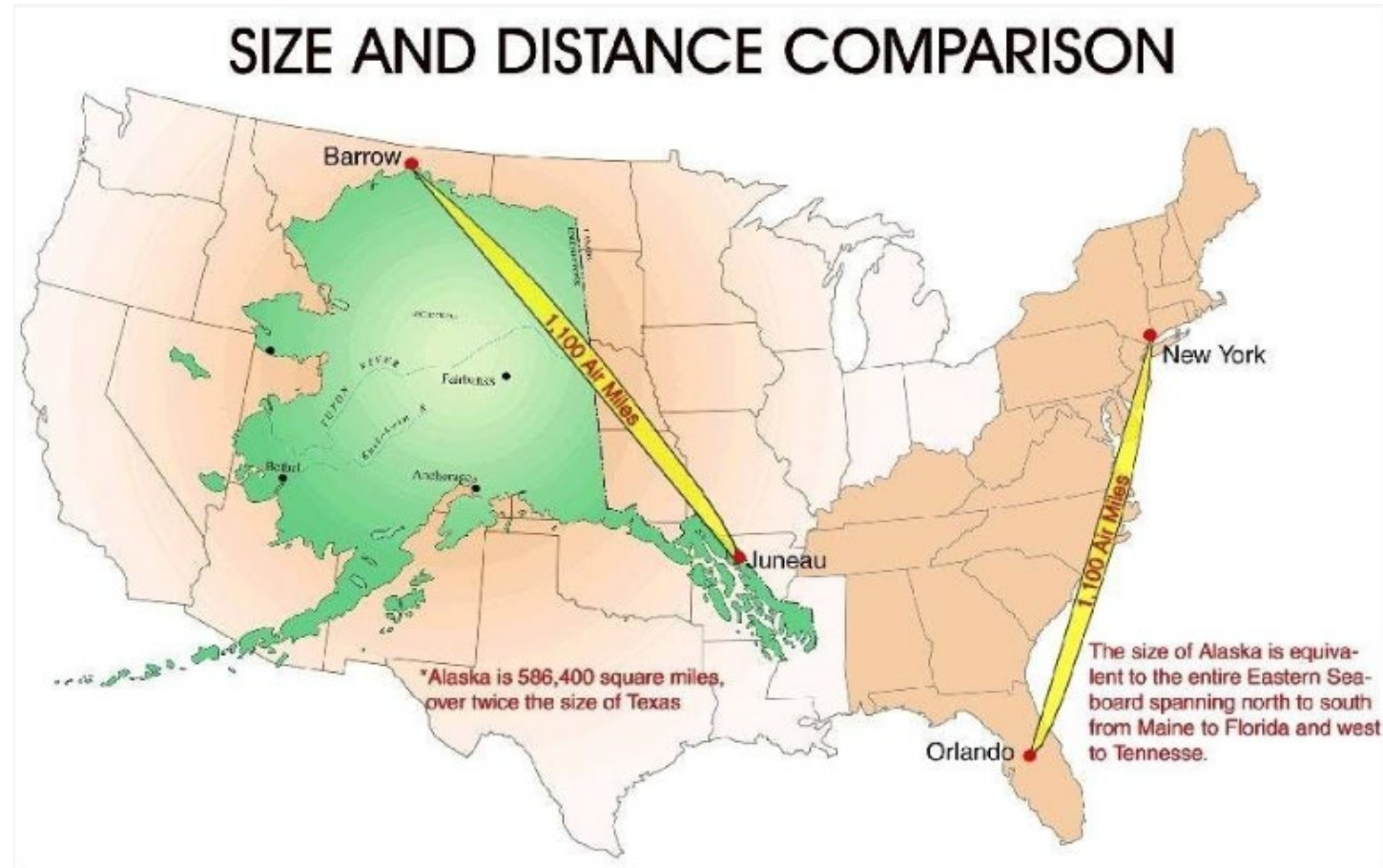


Water Use Data

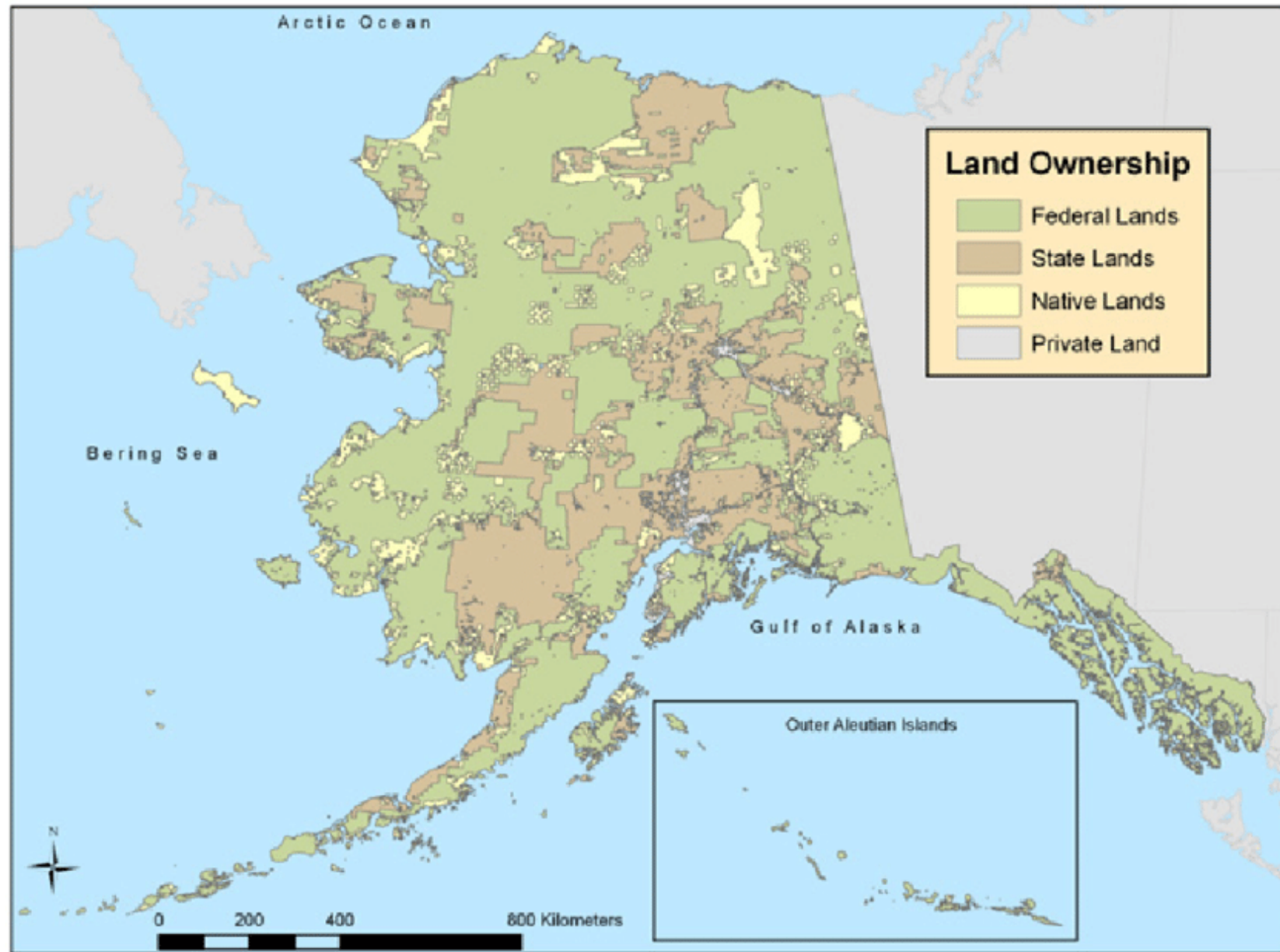
Water Use Data for Alaska is typically reported from users who use more than 30,000 gpd. Hydrologists and water users input their water use into the Alaska Water Use Data system (AKWUDS). There are about 200 users reporting water use data.



Relative Size of Alaska



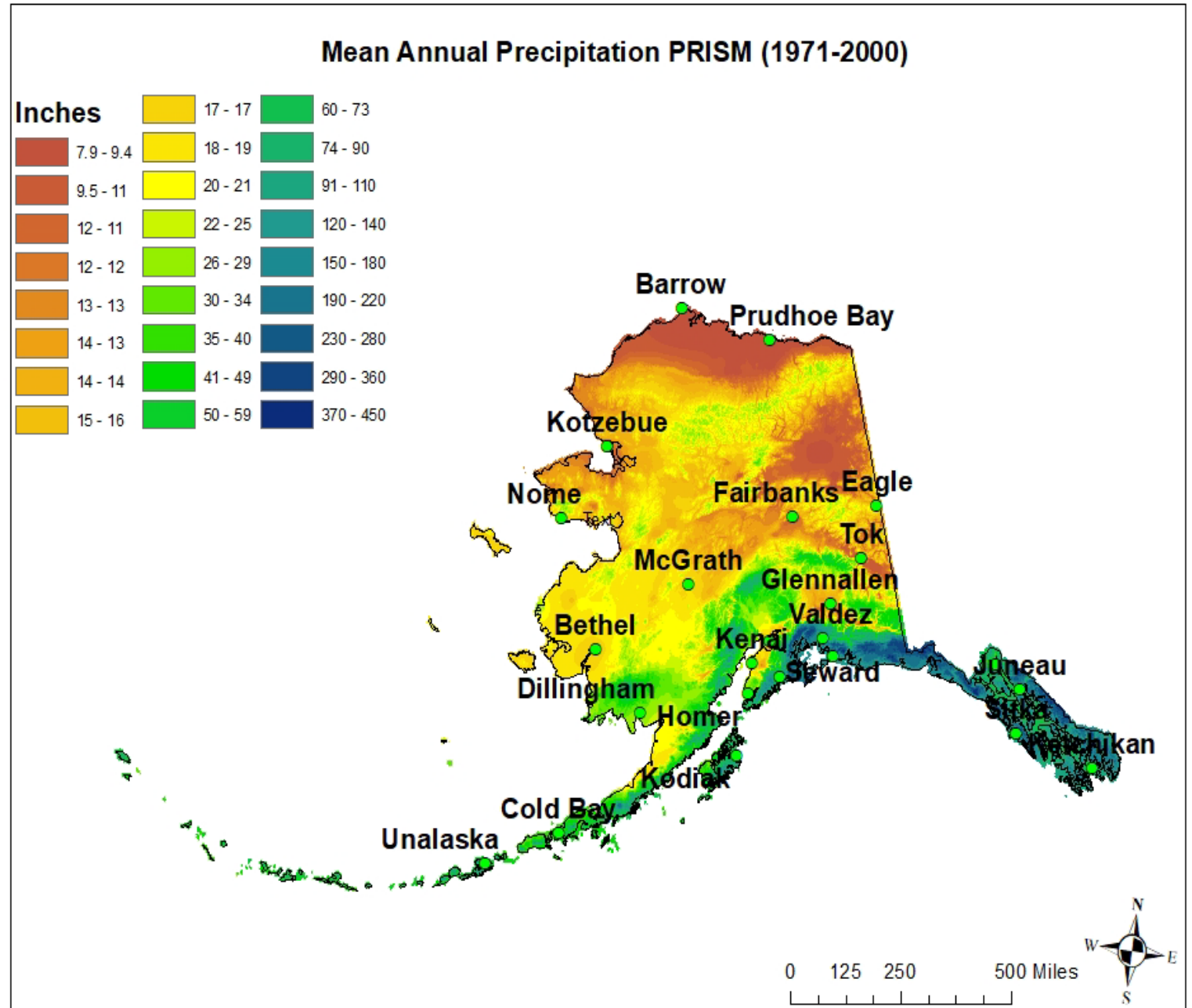
Land Ownership of Alaska



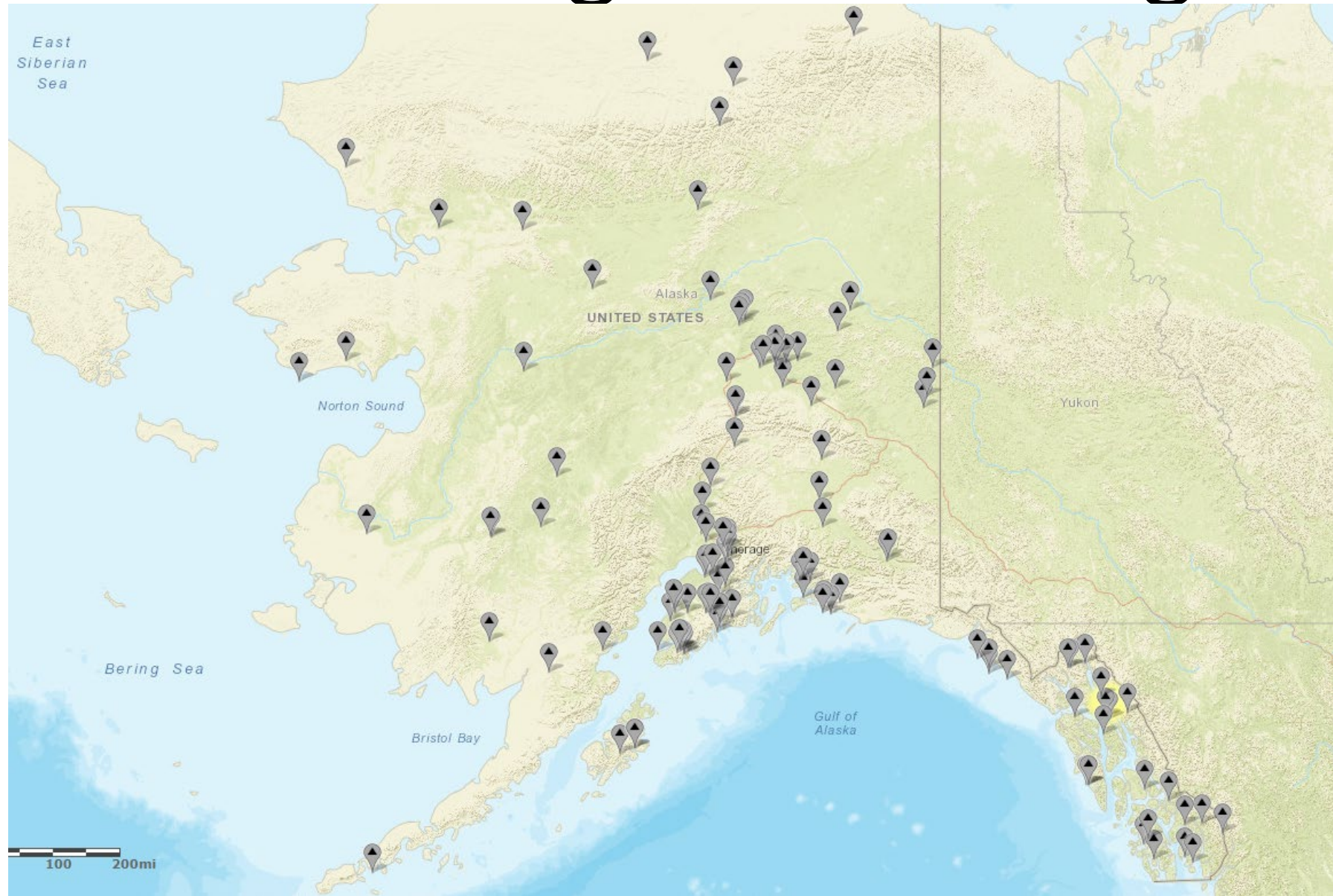
Alaska Climate

Broad Range in Precipitation

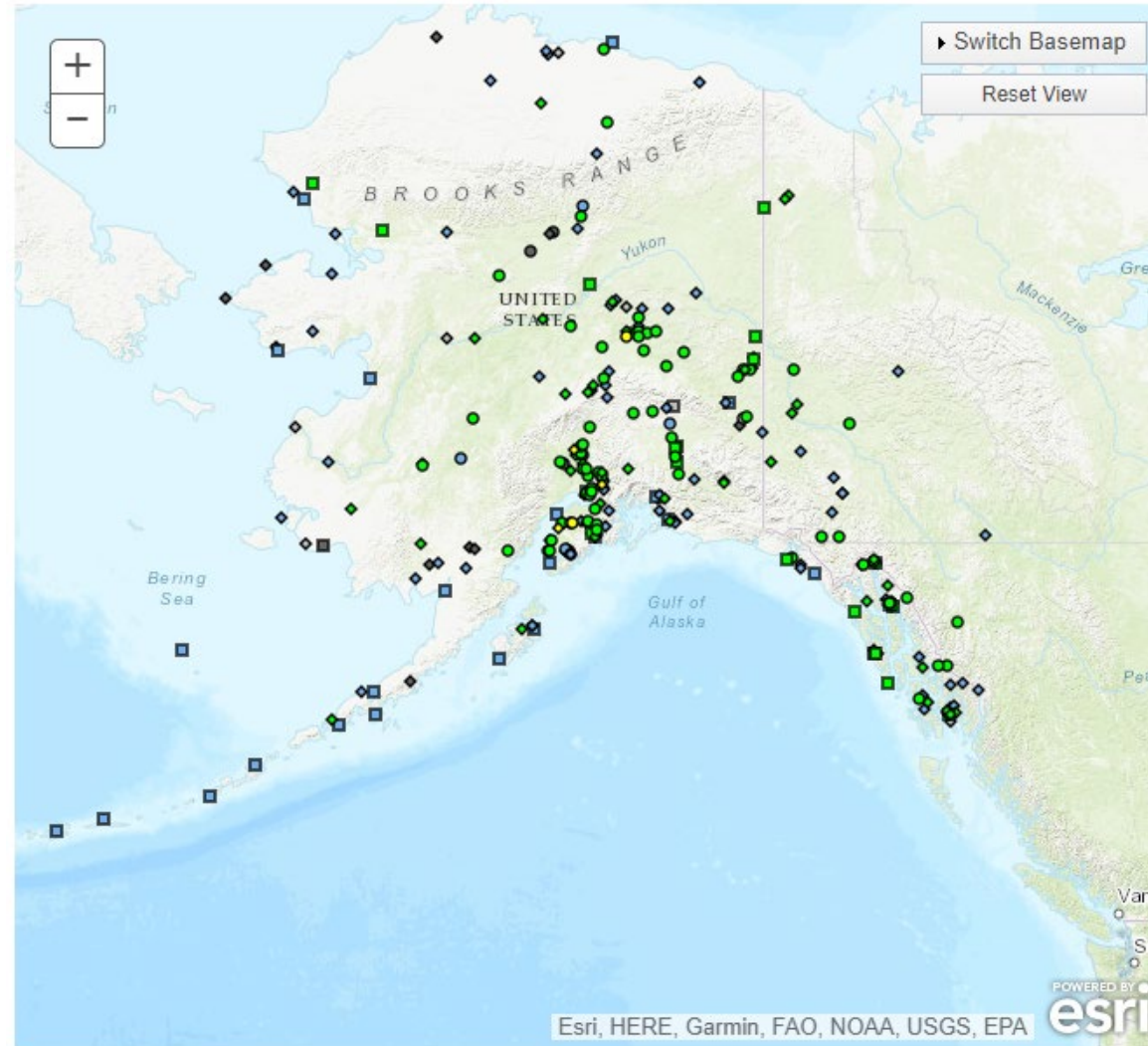
- Greatest precipitation in Southeast and Southcentral Coast
- Lower precipitation in interior Alaska
- Lowest precipitation in Arctic Alaska



USGS Gages- Discharge



Alaska Pacific River Forecast Center- NOAA



- Probability and forecasts available
- ◇ Observations only available
- Forecasts available

Precipitation Update

Precipitation for Anchorage and nearly all of southcentral Alaska was record setting in 2022.

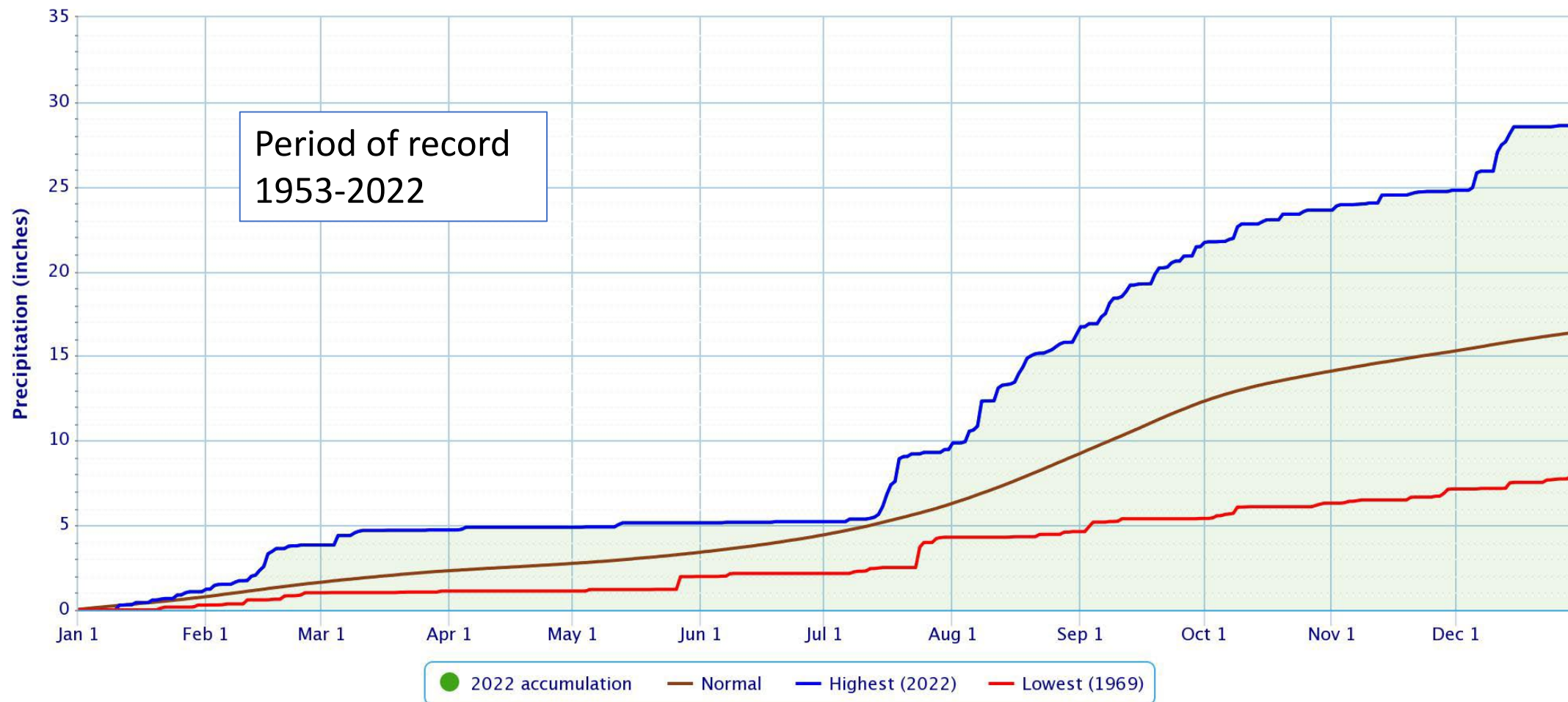
Snowfall for the Anchorage area during the winter 2022/23 was among the 10 highest recorded.

Southcentral Alaska is tracking for another above average precipitation year in 2023.

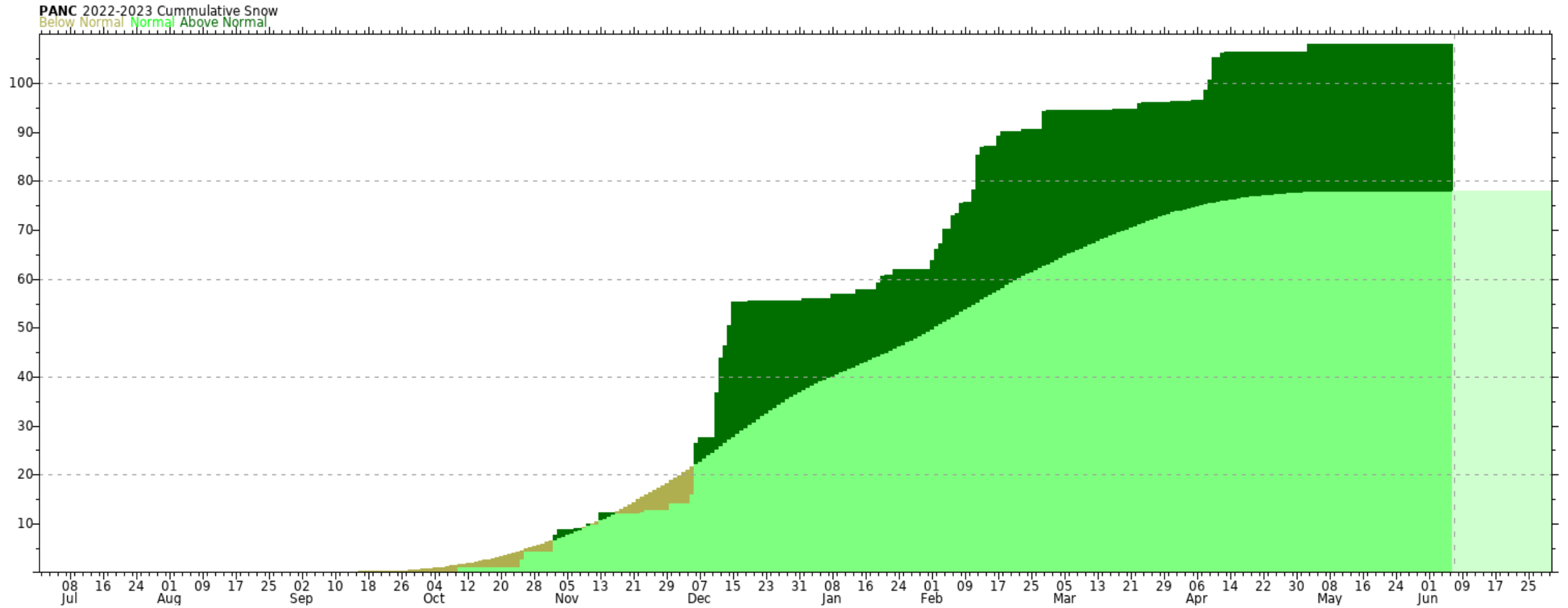
Anchorage Precip 2022

Accumulated Precipitation – ANCHORAGE TED STEVENS INTERNATIONAL AIRPORT, AK

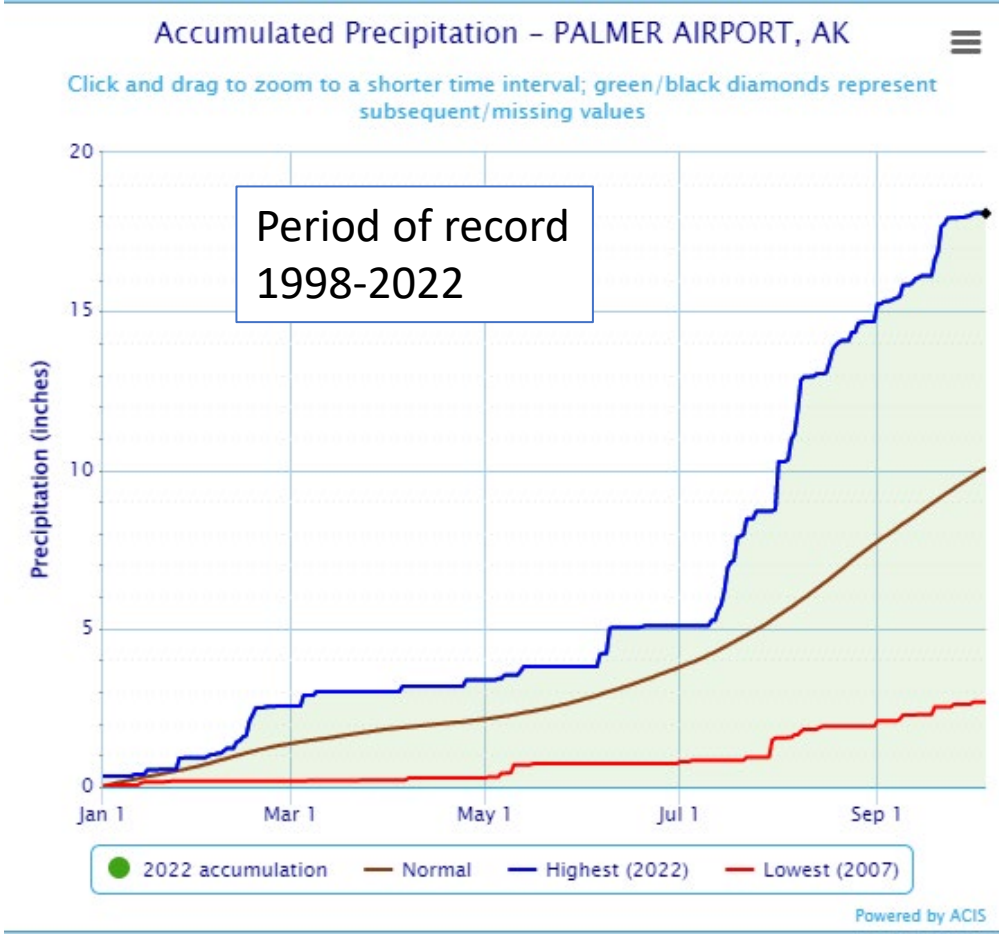
Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



Anchorage Snowfall 2022-2023



2022 Wettest Year On Record- Palmer, Ak



Almanac for PALMER AIRPORT, AK Oct 5 2022				
Year-to-Date Summary	Observed	Normal	Record Highest	Record Lowest
Total Precipitation	18.1	10.04	18.10 in 2022	2.67 in 2007

2023 Water Problems



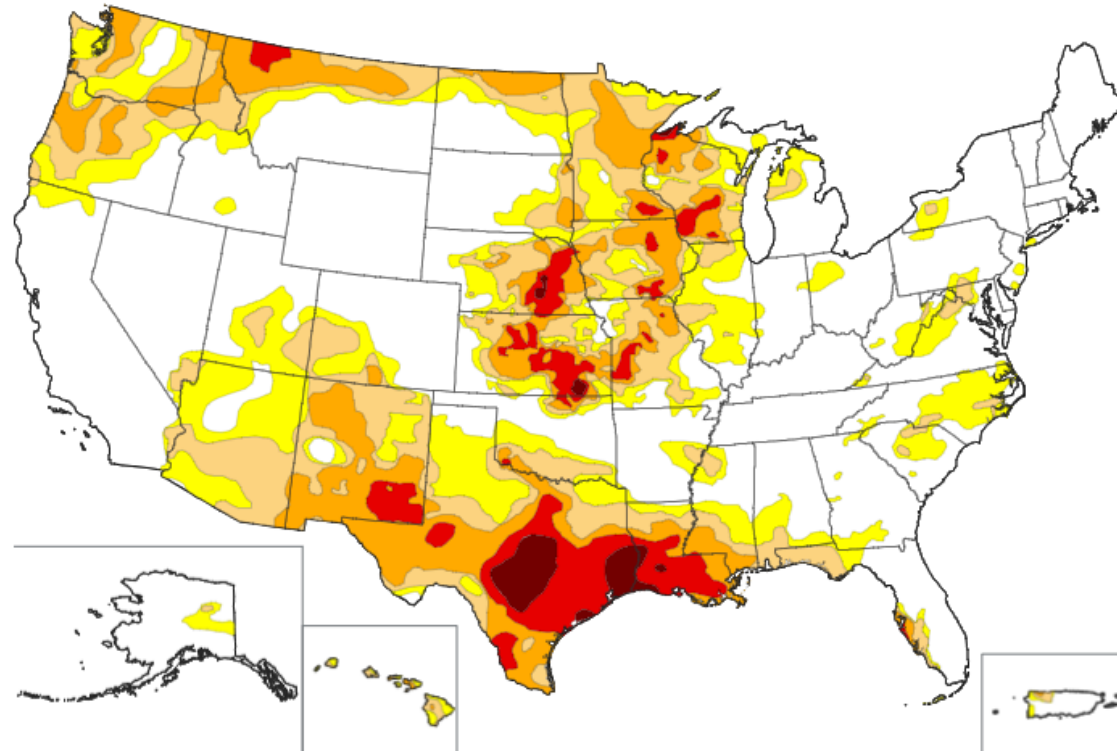
Regulatory Issues During Extreme Events

While the Water Use Act is effective at managing the beneficial use of water, it does not address how to handle an excess very well. Problem areas:

- Lower lying lots subject to inundation
- Illegal diversions- passing the problem elsewhere
- Pumping from your yard to your neighbor's yard
- Municipal vs state jurisdiction of drainage systems
- Confusion and gray issue between drainage ditches and waters of the state

Drought Monitor

U.S. Drought Monitor



U.S. Drought Monitor



Source(s): NDMC, NOAA, USDA
Data Valid: 08/22/23

Drought.gov

Data Sharing

Hopefully the previous slides showed that Alaska is both large and has a wide variety of climate conditions.

Data collection off Alaska's limited road system is expensive and therefore sparse.

Several state and federal agencies collect climate and hydrologic data for different purposes.

The Interagency Hydrology Committee of Alaska meets twice yearly to share climate and hydrology initiatives among the various agencies. Member agencies include BLM, Park Service, Corps of Engineers, NOAA, Department of Commerce, DEC, DF&G, DNR, University of Alaska.

<https://sites.google.com/site/ihtcalaska/homeUSGS>,

Drought, infrastructure, precipitation, snowpack, monitoring and infrastructure issues are discussed.