

State of Alaska Initiative to Create a CCUS Database

State of Alaska, ACEP, ARE



Presented by:

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OVERALL PROJECT GOAL & BENEFITS



This project will support and accelerate the safe and socially equitable deployment of CCS in Alaska by offering technical and community support services and information sharing to CCS stakeholders.

The team will meet this goal by geologic data gathering, analysis, and sharing of information in areas of Alaska where storage facilities are likely to emerge – Cook Inlet Region

MAJOR PROJECT OBJECTIVES



Establish a foundation for CCS by addressing technical challenges, environmental factors, and stakeholder engagement

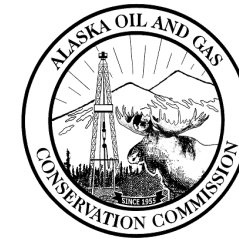
1. Collect, compile, and distribute information relevant to CCS.
2. Identify environmental and socially sensitive areas.
3. Address questions, needs, perceptions, and attitudes toward CCS in communities.
4. Develop a data distribution plan and portal for the State of Alaska to share information, research, outreach, and regulation regarding carbon storage

PROJECT OVERVIEW

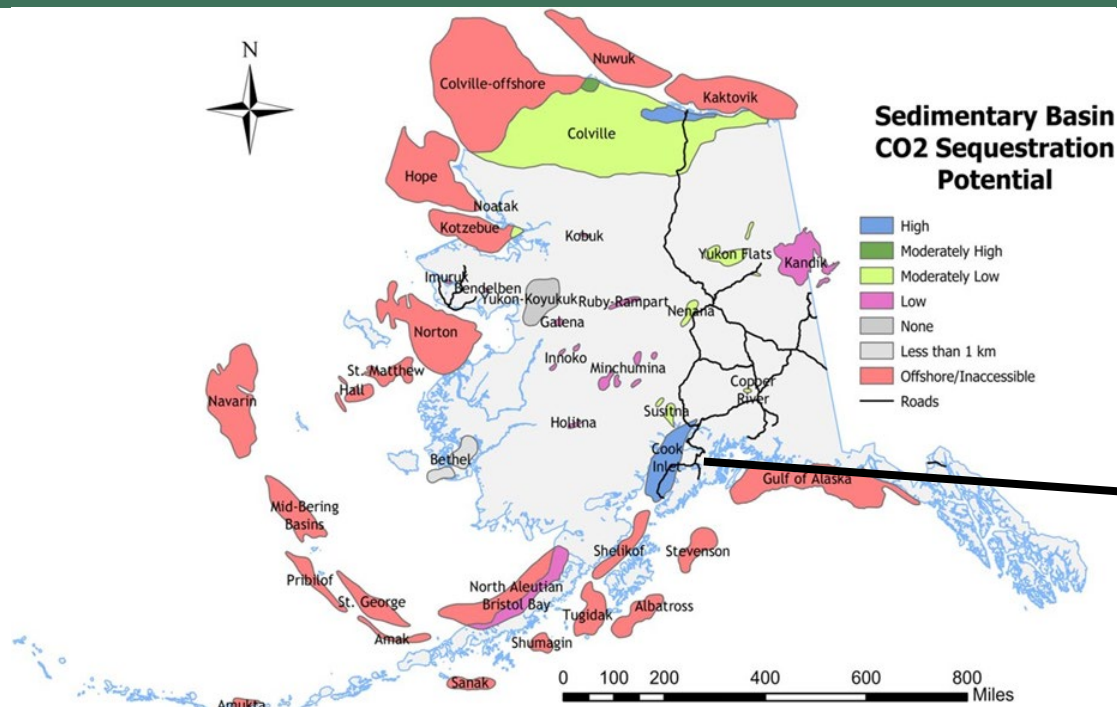
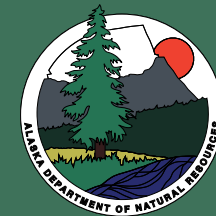


Who is involved:

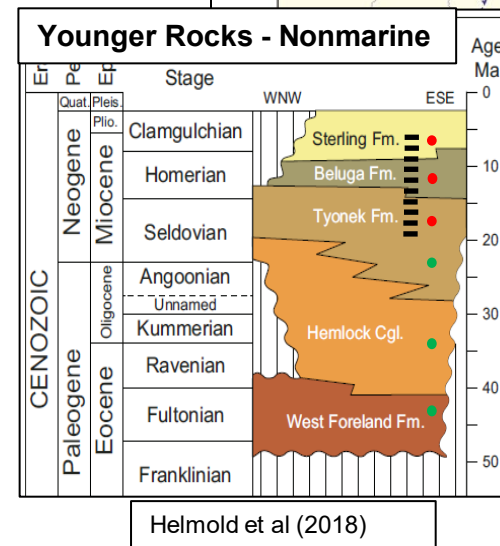
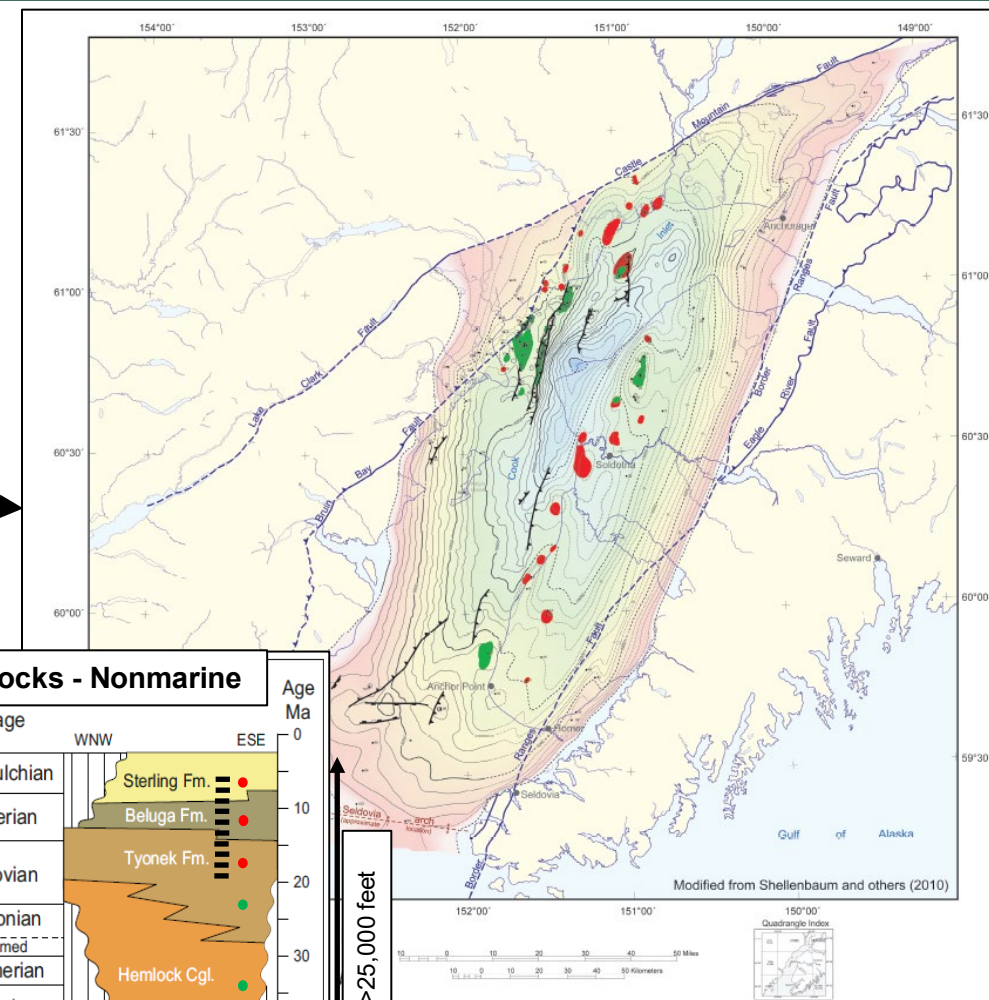
- AK DNR – Division of Oil and Gas and Division of Geological and Geophysical Survey (DOG and DGGS)
- Alaska Oil and Gas Conversation Commission (AOGCC)
 - Alaska Center for Energy and Power (ACEP)
 - Alaska Resource Education (ARE)
 - Cook Inlet Regional Incorporation (CIRI)
 - Institute of Social and Economic Research (ISER)



PROJECT LOCATION



*Shellenbaum, D.P., and Clough, J.G. 2010. Alaska Geologic Carbon Sequestration Potential Estimate: Screening Saline Basins and Refining Coal Estimates: California Energy Commission



(1) REGION	(2) IDENTIFIED & HYPOTHETICAL COAL RESOURCES (billions of short tons)	(3) AVERAGE COAL RANK	(4) ARI Estimated CBM Resources (based on daf) (Tcf)	(5) ARI Estimated CO2 Storage Potential (Tcf)	(6) USGS Estimated CBM Resources* (Tcf)	(7) CO2 Storage Potential based on USGS CBM Resources* (Tcf)	(8) REVISED ESTIMATE OF COAL SEAM CO2 STORAGE POTENTIAL (this report) (Gt)		
1) Northern Alaska Province	3,753.00		621	1,862	98	17.2	120.4	6.32	5.83
A. Arctic Foothills Subprovince	1,290.00	Bituminous							
B. Arctic Coastal Plain Subprovince	1,910.00	Subbituminous	No Data	Not Subdivided	15	105	5.53		5.08
C. Sagavanirktok Field	553.00	Subbituminous			2.2	15.4	0.79		0.75
Total North Slope	3,753.00		621	1,862	98	17.2	120.4	6.32	5.83
2) Nenana Basin	17.00	Lignite to subbituminous	1	3	0	1	10	0.52	0.41
3) Cook Inlet Basin. Includes A. Southern, B. Susitna and C. Matanuska resources	1,570.30	Subbituminous to anthracite				140	980	50.58	43.00
TOTAL ALL "BASINS"	5,340.30		758.00	2,273	120.00	158.20	1,110	57.32	49.24

*North Slope based on Roberts et al., 2008

PROJECT TASKS - BREAKDOWN



Task 1.0 – Project Management and Planning

			Budget Period																				
			Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Finish												
TASK	START	END																					
Project Award		-																					
Task 1.0 Project Management & Planning																							
Task 1.0 Project Management & Planning	Q1	End																					
Project Reporting	Q2	End		★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★	★
Task 2.0 Societal Considerations & Impacts (SCI)																							
Task 2.0 SCI Assessment and Plans	Q1	End		★										★									
Task 2.1 Diversity, Equity, Inclusion, and Accessibility	Q1	End							★														
Task 2.2 Justice40 Initiative	Q1	End								★													
Task 2.3 Community and Labor Engagement	Q1	End												★									
Task 2.4 Investing in Job Quality and Skilled Workforce	Q1	End																					
Task 2.5 Identify Environmentally Sensitive Areas	Q1	Q3																					
Task 2.6 Identify and Create Spatial Data to Reflect the Community and Stakeholder Portfolio	Q4	End																					
Task 3.0 Assess Available Subsurface Data in Cook Inlet																							
Task 3.0 Assess Available Subsurface Data in Cook Inlet	Q1	Q4							●														
Task 3.1 Identify potential storage reservoirs, their storage capacity, rock characteristics, and seals	Q2	Q5												●									
Task 3.2 Review seismic hazard analysis and risk assessment	Q1	Q4							●														
Task 3.3 Articulate data gaps and needs	Q3	Q6																				●	
Task 4.0 Data Design & Distribution																							
Task 4.0 Data Design & Distribution	Q4	End																				●	●

Key Milestone ●
Key Report Due ★

PROJECT TASKS - BREAKDOWN



Task 2.0 – Societal Considerations and Impacts (SCI) Assessment and Plans

Subtask 2.1 DEI&A

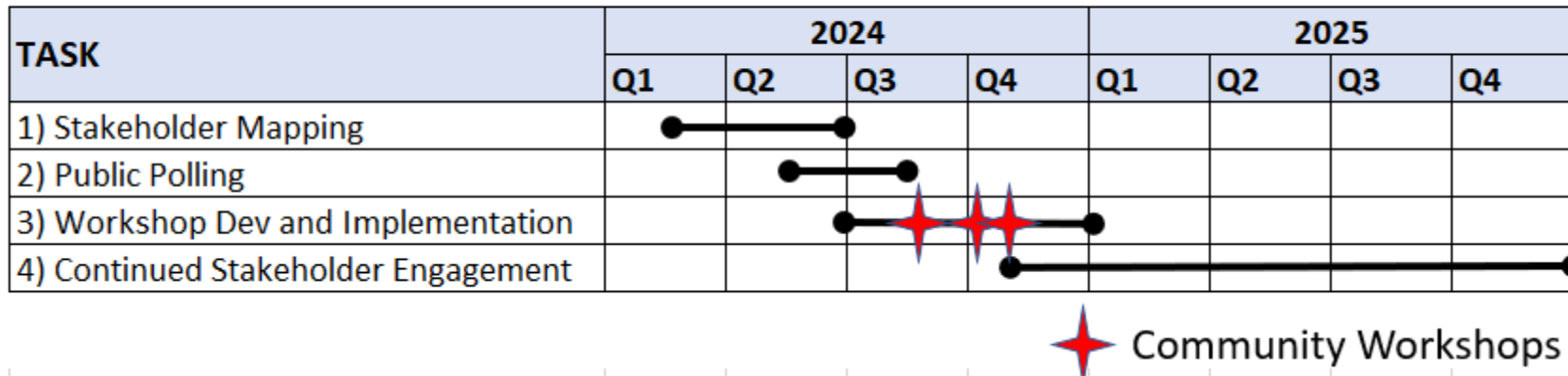
Subtask 2.2 Justice40 Initiative

Subtask 2.3 Community and Labor Engagement

Subtask 2.4 Investing in job quality and a skilled workforce

Subtask 2.5 Identify Environmentally sensitive areas

Subtask 2.6 Identify and create spatial data to reflect the CBP



PROJECT TASKS - BREAKDOWN

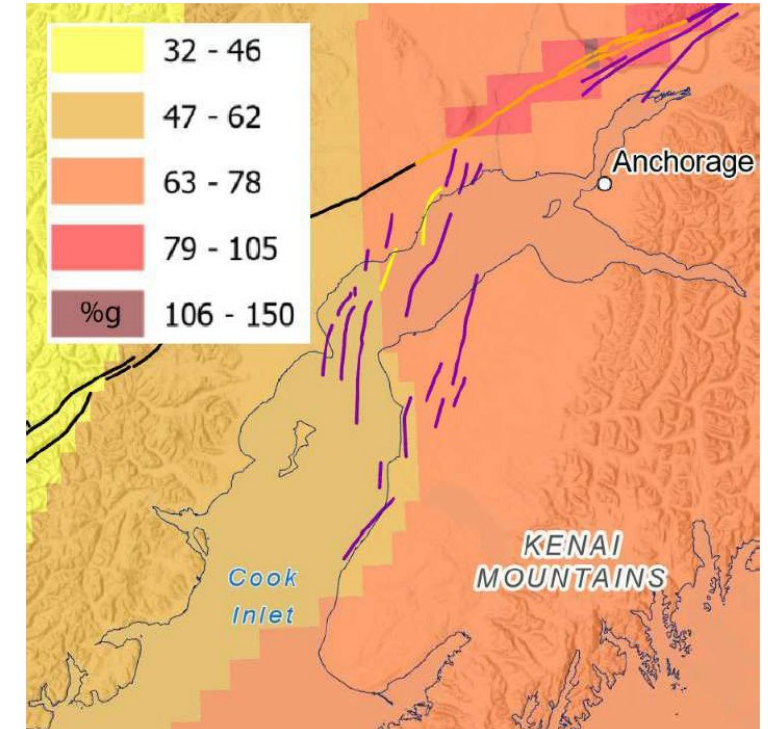
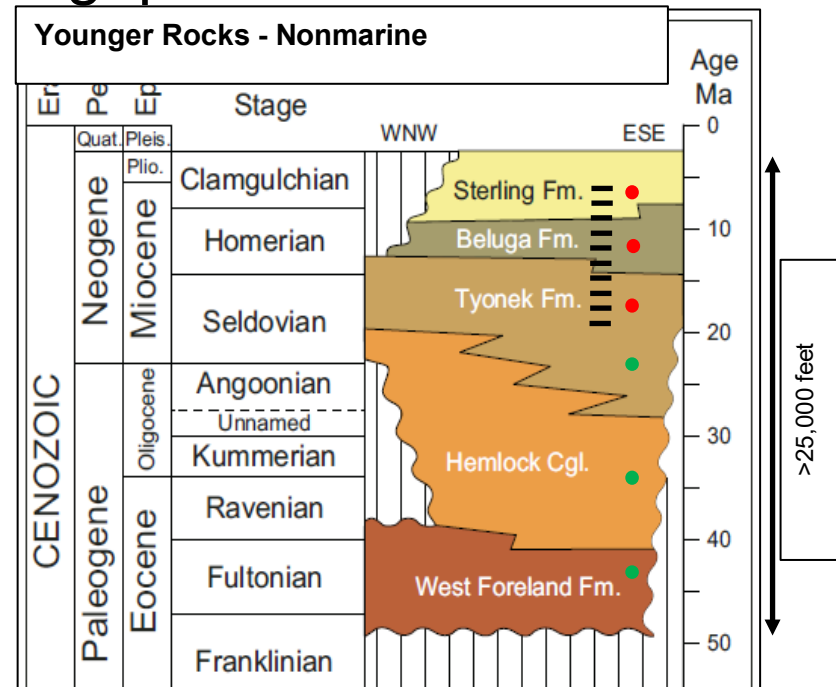
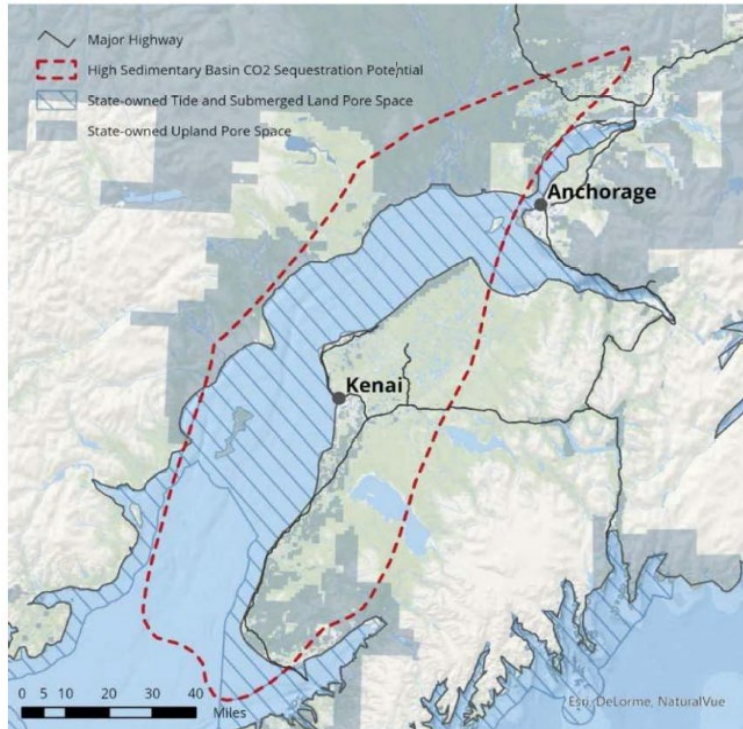


Task – 3.0 Assessment of Available Subsurface Data

Subtask 3.1 Identify potential storage reservoirs, capacity, rock characteristics, and seals

Subtask 3.2 Review seismic hazard analysis and risk assessment

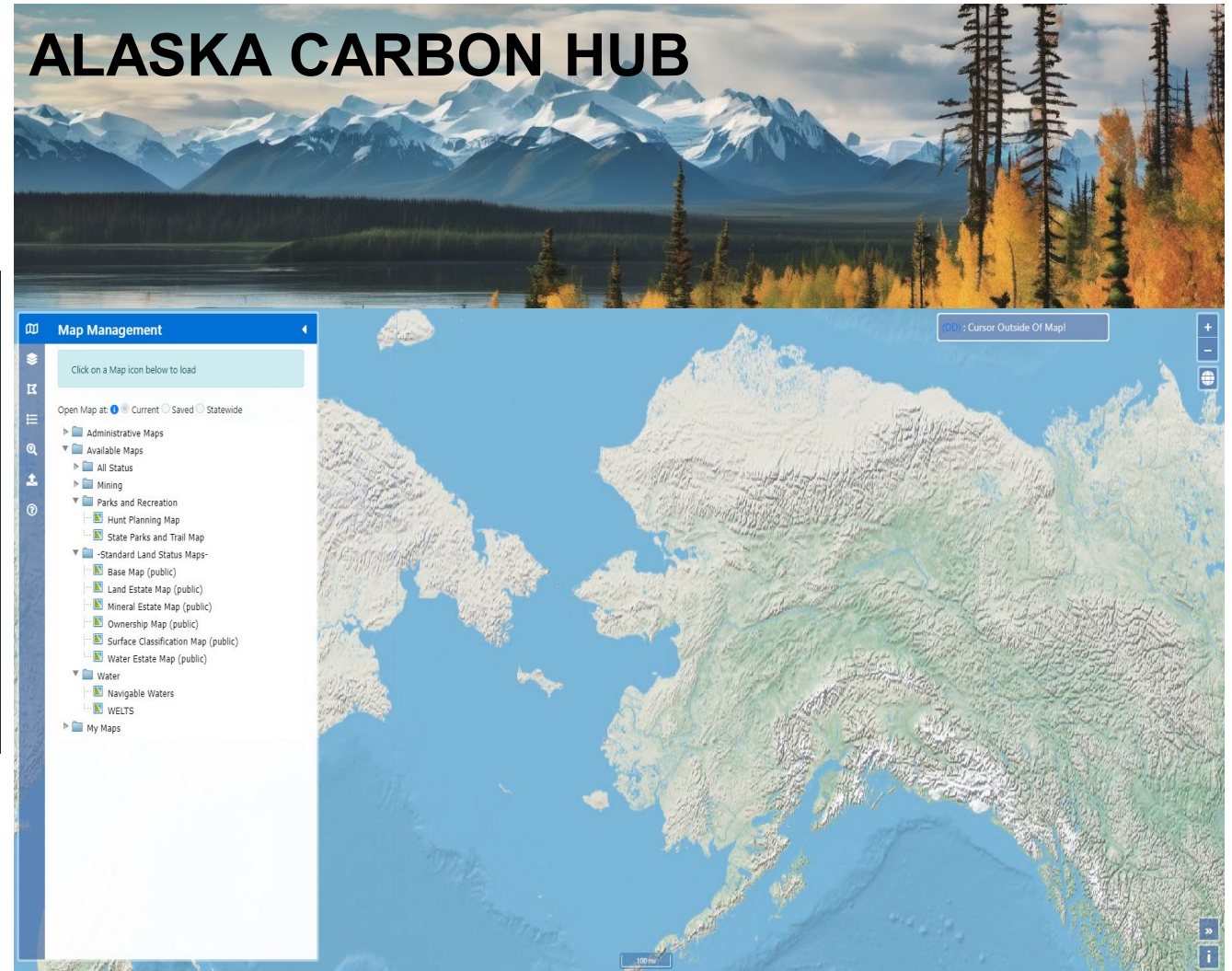
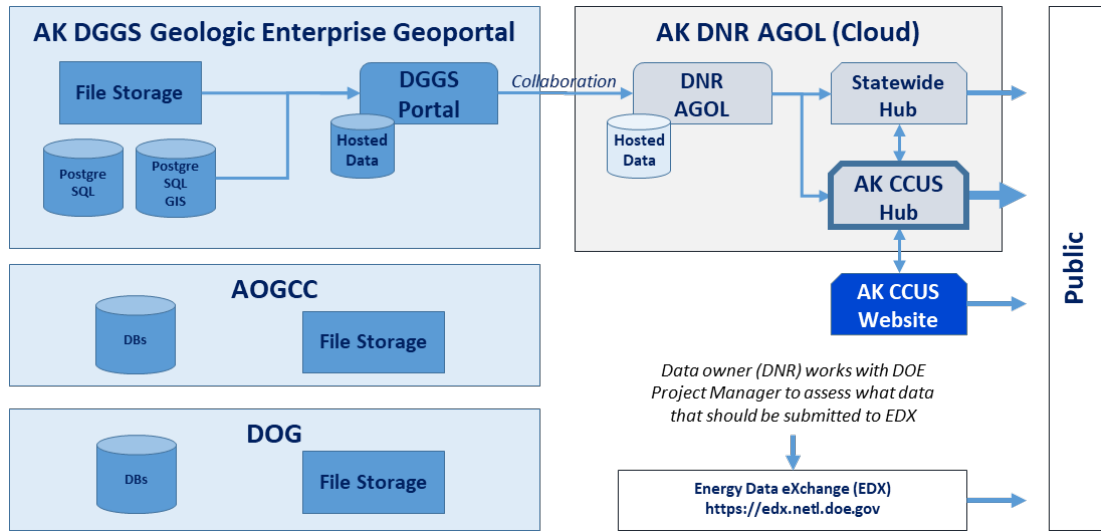
Subtask 3.3 Articulate data gaps and needs



PROJECT TASKS - BREAKDOWN



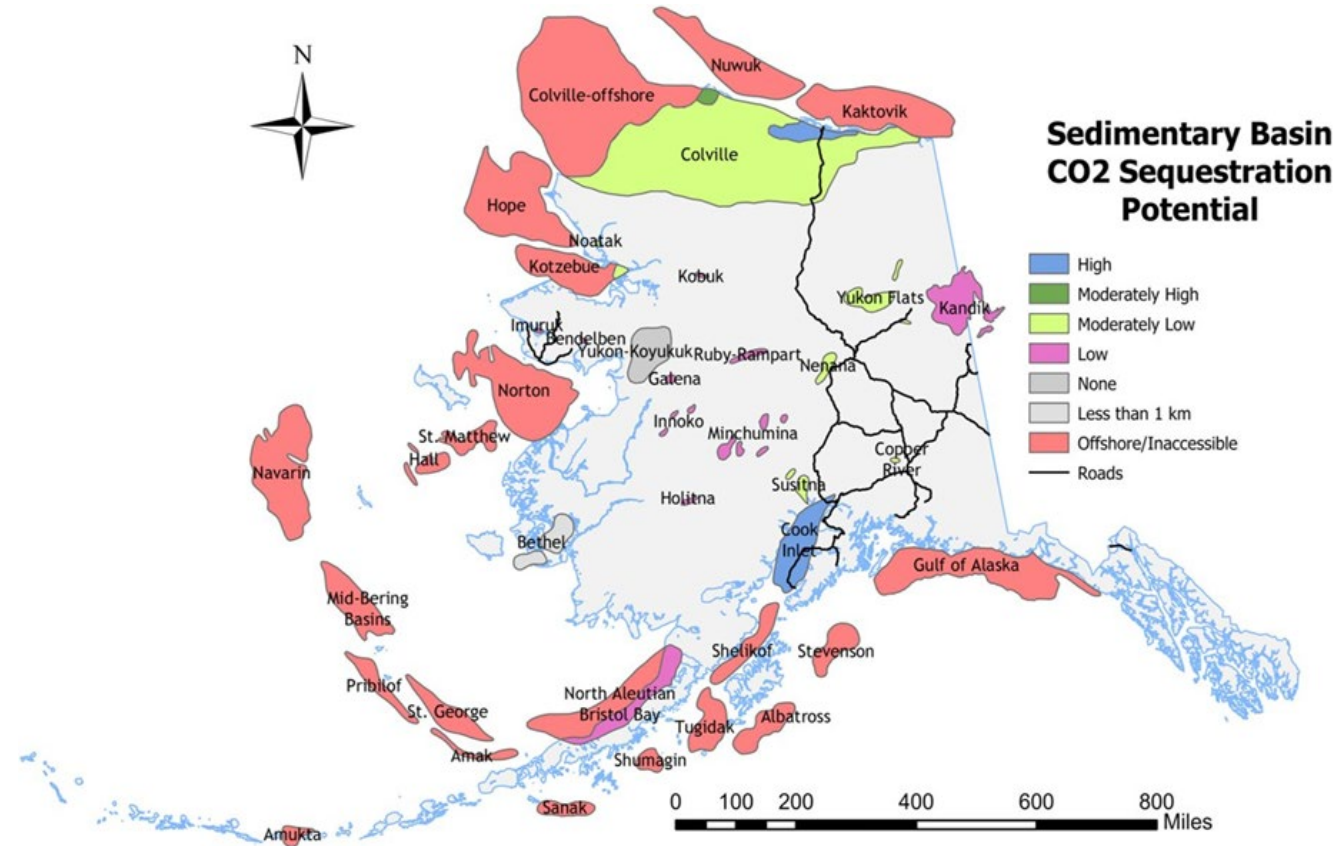
Task – 4.0 Data Storage and Distribution



NEXT STEPS



1. Ongoing stakeholder engagement.
2. Generate content based on data gaps that were articulated.
3. Expand HUB to include other high potential basins for CCS.
 - North Slope
 - Interior Alaska



QUESTIONS?



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