


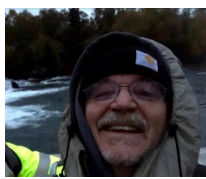




















November 14th, 8:00am – 4pm Alaska Time


8:00 – 9:00	REGISTRATION and NETWORKING – MORNING FIKA
9:00 – 9:30	Welcome
	<p>Welcome from the Alaska Geospatial Office</p> <p>Dr. Leslie Jones is the Geospatial Information Officer for the State of Alaska and Executive Director of the Alaska Geospatial Council.</p> <p>What is the Alaska Geospatial Council? What does the future look like? How is it different from the Alaska Geospatial Office? Tune in to find out.</p>
AGC Geodetic Working Group	
9:30 - 9:50	<p><u>New Frontiers in Geodetic Control: Positioning Alaska for our future</u></p> <p>Dr. Nic Kinsman is Alaska’s Regional Advisor at NOAA’s National Geodetic Survey (NGS).</p> <p>Geodetic control is the often-underappreciated foundational framework that enables the alignment of geospatial data sets with one another and with our built environment. AGC’s Geodetic Technical Working group works to unify the geodetic priorities of diverse stakeholders; to preserve, densify, and enhance Alaska’s geodetic control networks; and to support geodetic consistency and educational outreach.</p>
	
9:50 - 10:10	<p><u>Alaska's Continuously Operating Reference Network (ACORN)</u></p> <p>Peter Flint is a land surveyor at the Alaska Department of Natural Resources. He leads the implementation of ACORN.</p> <p>The State of Alaska is approaching the one-year mark in creating Alaska's Continuously Operating Reference Network (ACORN). ACORN is a collaborative effort between the DNR, DOT, NPS and others. Learn where DNR stands in the process, what to expect in the future, and how you and your organization could help the project progress.</p>
	
10:10 – 10:30	<p><u>Centimeter Precision via NTRIP stations in Alaska</u></p> <p>Joel Cusick is a GIS specialist and GNSS program manager for the Alaska Regional office of the National Park Service.</p> <p>The National Park Service has installed 15 Trimble NETR9 GNSS base stations on federal properties throughout the state, including 3 stations along coastal parks and USFWS refuges, providing high-precision mapping services in real-time via cellular connections and post processing capacity with RINEX files hosted by UAF Geophysical Institute. This presentation will update the current status of the coastal stations in Seward, Homer and Glacier Bay and provide examples of how these stations can provide not only subscription-free centimeter level access to streaming services when available, but base data for PPK shoreline-based surveys including aerial SfM surveys.</p>
	
10:30 – 11:00	<i>30-minute networking break</i>
Statewide and National Mapping Initiatives	
11:00 – 11:20	<p><u>Land Cover mapping for the Nation: what’s coming for Alaska</u></p> <p>Nate Herold is a Physical Scientist with NOAA's Office for Coastal Management (OCM) where he leads NOAA’s national land cover mapping and monitoring activities through its Coastal Change Analysis Program (C-CAP).</p> <p>For almost two decades, NOAA’s Office for Coastal Management (OCM) has been an authoritative source for coastal land cover and change information in the U.S. but past efforts have not included the state of Alaska. This presentation will highlight the upcoming efforts to map impervious cover, tree and shrub canopy, water, and snow/ice features statewide and how this data will be part of a next generation of higher spatial resolution land cover products nationally.</p>
	
11:20 – 11:40	<p><u>Statewide Building Footprints and Addressing</u></p> <p>Sean Lowery leads Product and Business Development for Ecopia AI, a young tech company focused on digitizing the world. Prior to Ecopia, he spent 15 years working for satellite imagery provider Maxar Technologies.</p> <p>Hillary Palmer (Dewberry) is a Geospatial Project Manager for Dewberry and has lived in Alaska for over 32 years. She is the secretary/treasurer of the Alaska Chapter of APCO/NENA and chair of URISA’s Next Generation 9-1-1 Task Force.</p> <p>As the FCC looks for equitable ways to distribute \$44 Billion in broadband expansion funding, building footprints and addressing GIS data take center stage. Learn how the dynamic duo of Ecopia and Dewberry created several of Alaska’s first statewide GIS datasets to help Alaska bridge the digital divide.</p>
 	
11:40 – 12:00	<p><u>The Trail to National Data Harmony</u></p> <p>Angie Southwold is the Alaska Regional GIS Coordinator at the National Park Service.</p> <p>The National Park Service has celebrated success in establishing a national Trails dataset. This ongoing journey includes bringing together disparate data from park units spread across regions around the nation into a single consolidated data stack. This accomplishment stems from committed efforts in the areas of data standardization, data stewardship, data aggregation, and data dissemination and considers best practices that reflect the multitude of data management scenarios that exist across NPS. Join Angie and learn about this enterprise effort, the lessons learned along the way, and how others might scale these strategies to benefit their own organizations.</p>
	
12:00 – 1:00	<i>1-hour break for lunch</i>
AGC Vegetation Working Group	
1:00 – 1:20	<p><u>A Flexible Strategy for Developing Statewide Vegetation Map Products</u></p> <p>Timm Nawrocki is a vegetation and wildlife ecologist at the University of Alaska Anchorage.</p> <p>Elizabeth Powers is a Biologist for the U.S. Geological Survey Alaska Region.</p> <p>In March 2022, Alaska Geospatial Council’s Vegetation Technical Working Group (VTWG) released a set of field data collection and mapping standards designed to facilitate the development of the AKVEG Map, which includes continuous maps of individual vegetation characteristics, such as the foliar cover of a species, and a categorical map of USNVC types derived from the continuous maps. Map products will support a variety of user needs, such as land-use planning, natural resource development, wildfire management, species and habitat management, and climate adaptation planning.</p>
	
1:20 – 1:40	<p><u>Cordova Ranger District Existing Vegetation Mapping Project</u></p> <p>Kim Homan is the Regional Geospatial Program Manager for the Alaska Region of the USDA Forest Service.</p> <p>Dustin Witter is the Regional Remote Sensing Specialist for the Alaska Region of the USDA Forest Service.</p> <p>USDA Forest Service has extended their Existing Vegetation Classification Mapping program to include the greater Cordova area with existing vegetation and updated forest structure metrics. This project includes a forest structure update to the Copper River existing vegetation map and statuses of our orthoimagery and LiDAR projects.</p>
 	

1:40 – 2:00	AGC Wetland Working Group
	<p><u>Statewide National Wetlands Inventory</u></p> <p>Sydney Thielke is the Regional Wetlands Coordinator for U.S. Fish and Wildlife Service based in the Alaska Regional Office.</p> <p>The National Wetlands Inventory (NWI) is a geospatial dataset stewarded by U.S. Fish and Wildlife Service representing the location and type of wetlands across the country. In 2014, CONUS had complete coverage of the NWI, yet Alaska's coverage was only 42%. Over the past four years, the U.S. FWS, along with partners, has funded NWI projects across an additional 44% of the state. This presentation will cover an overview of the dataset, detailed status updates and the path going forward for reaching a goal of statewide coverage.</p>
2:00 – 2:20	AGC Hydrography Working Group
	<p><u>Overview of the Alaska Mapping Initiative</u></p> <p>Brian Wright serves as the National Map Liaison for Alaska within the National Geospatial Program of the US Geological Survey. Liaison supports the acquisition of new topographic map data for the Alaska Mapping Initiative.</p> <p>The National Geospatial Program (NGP) within the US Geological Survey acquires and provides geospatial foundation data for several statewide baseline mapping themes. NGP has partnered with federal and state partners with a strategy to update statewide elevation, imagery, and hydrography mapping themes. This session will highlight the recent progress and status to update statewide mapping themes and the production of new statewide topographic maps under the Alaska Mapping Initiative.</p>
2:20 – 3:10	30-minute networking break
3:10 – 3:50	AGC Enterprise Working Group
	<p><u>State of Alaska Geoportal: Behind the Scenes</u></p> <p>Erin Novakovich is a GIS Analyst, working with the Department of Natural Resources for the past 10 years. Her goal is to promote simplicity, authoritative data sources, and communication in DNR's and Alaska's GIS community.</p> <p>A quick update from the Enterprise Working Group and a peek behind the curtains of our Hub site. We are going to revisit the original goals of our charter and then get a glimpse of the geoportal and how it currently functions. We will be talking about tagging, categories and working together to benefit everyone.</p>
3:30 – 3:50	State Highlights
	<p><u>The Alaska DGGs Geologic Mapping System</u></p> <p>Mike Hendricks is a geospatial analyst and chief of the Geologic Information Center with the Alaska Division of Geological and Geophysical Surveys (DGGs).</p> <p>DGGs produces and publishes numerous geologic maps each year. These maps and their associated databases are made available to the public as downloads and delivered to the USGS in their recently published database standard, GeMS (Geologic Mapping Schema). To produce standards-based, GeMS-compliant geologic maps, we developed the AK DGGs Geologic Mapping System. The system controls the process of collecting, producing, converting, packaging, publishing, and sharing geologic map data. This presentation will discuss the components, processes, and lessons learned while developing this standards-based production and delivery system.</p>

November 15th, 8:00am – 4pm Alaska Time

8:00 – 9:00	REGISTRATION and NETWORKING – MORNING FIKA
	AGC Coastal & Ocean Working Group
9:00 – 9:20	<p><u>Alaska Coastal Mapping Strategy</u></p> <p>Hillary Palmer is a Geospatial Project Manager for Dewberry. She chairs the Alaska Geospatial Council's Coastal & Ocean technical working group and is the coordinator for the Alaska Coastal Mapping Strategy.</p> <p>The Alaska Coastal Mapping Strategy is an initiative aimed at acquiring imagery and elevation data for all of Alaska's vast coastal areas by 2030, as well as improving the geodetic framework required to support data acquisition. See how we're using ArcGIS Hub and Dashboards for public outreach, to track existing data and to coordinate planned data collection efforts. Then, hear how FME scripting saved the day when it was used to conflate complex mapping prioritization survey results into a fun interactive experience, and to help individuals find potential mapping partners.</p>
9:20 – 9:40	<p><u>All Hands-on Deck Data Collection Response to 2022 Bering Sea Storm from Typhoon Merbok</u></p> <p>Jacquelyn Overbeck is the Alaska Regional Geospatial Coordinator with the NOAA Office for Coastal Management. Overbeck provides technical assistance and coordination support for Alaska coastal geospatial projects and initiatives including the NOAA Digital Coast.</p> <p>September 17-18, the remnants of Typhoon Merbok impacted over 1,000 miles of coastline and at least 35 communities with storm surge inundation and waves. In advance of and during the immediate aftermath of the storm, partners from all sectors reached out to contribute what they could to support Alaska's communities. A coordination team was established to measure impacts using existing monitoring infrastructure and local partners, post-storm high water marks, unmanned aerial system, and satellite data collection surveys, as well as to process data to distribute to emergency responders and the public. Because of the all hands-on deck approach, this will be the most well documented coastal storm event in Alaska history which will help facilitate damage assessment and community assistance well into the future.</p>
	AGC Imagery and Elevation Working Group
9:40 – 10:00	<p><u>Re-envisioning the State Imagery & Elevation portal</u></p> <p>Andrew Herbst is a GIS Analyst for the Alaska Geospatial Office. He leads development and management of the Alaska Imagery and Elevation Portal.</p> <p>The Alaska Geospatial Office aims to expand access to imagery and elevation data with the debut of a new and re-envisioned Imagery and Elevation Portal. Taking lessons learned from the Best-Data-Layer and the DGGs Elevation Portal, we have developed a comprehensive approach to integrating massive volumes of data from a diverse community of contributors. We are excited to share the new ways in which these data will be available to the public.</p>
10:00 – 10:20	<p><u>Statewide Alaska High Altitude Aerial Photography (AHAP) Project</u></p> <p>Denise Miller has been the Alaska Natural Resources Conservation Service State GIS Coordinator since 2018. She has been part of the NRCS for over 22 years, working in both Alaska and South Dakota.</p> <p>Alaska High Altitude Aerial Photography (AHAP) imagery offers a view of our state between 1978 and 1986. Presentation will highlight existing and upcoming work on statewide AHAP mosaic, process used and how to access to dataset by USDA FPAC Business Center GEO Branch.</p>
10:20 – 10:50	30-minute networking break

10:50 – 11:10	 <p>Use of Planet satellite imagery to support wildfire response and forest practices</p> <p>Dan LaBarre is a GIS Analyst for the Alaska Division of Forestry & Fire Protections. For the past 11 years he has supported wildland fire as a qualified GISS.</p> <p>Overview of the Division’s implementation of Planet imagery to support operations of Forestry Resources and Fire Protection and coordinated use with the BLM.</p>
AGC UAS Drone Working Group	
11:10 – 11:30	 <p>State of Alaska UAS Programs and the need for a new AGC Technical Working Group</p> <p>Russ Kirkham manages the Coal Regulatory Program for the Department of Natural Resources and is part of the State of Alaska UAS Working Group. Since 2016, he has been using UAS to conduct site inspections throughout Alaska.</p> <p>This presentation will provide a brief overview of how UAS technology is being used by Departments within the State of Alaska and how the State is coordinating between Departments to identify best practices and efficiencies that can be gained with the use of UAS. In addition, the presentation will introduce the new Unmanned Aerial System (UAS)/Drone Policy Technical Working Group with the AGC.</p>
11:30 – 11:50	 <p>Infrastructure Inspection with Drones</p> <p>Ryan Marlow is the Unmanned Aircraft Systems (UAS) Coordinator for Alaska Department of Transportation & Public Facilities, and works closely with federal, state, tribal and municipal agencies on the safe integration and advancement of UAS and remote sensing technologies throughout Alaska.</p> <p>With recent advances in remote sensing technologies, state agencies are beginning to explore the cost savings and safety benefits with the use of uncrewed systems commonly referred to as drones. DOT&PF’s UAS program highlights existing use cases for inspection and what the future of data storage and management will look like augmented with GIS.</p>
12:00 – 1:00	1-hour lunch break
Technology Talks	
1:00 – 1:20	 <p>Efficiency in Realtime GIS Project Management Tools</p> <p>Dave Neff is a NSPS/THOA Certified Hydrographer for Woolpert.</p> <p>To compliment this fast-paced tempo of acquisition, Woolpert has developed real-time GIS tools for project management, data delivery, and client interaction. These new age tools allow the personnel associated with the project a real-time visibility of field as well as processing efforts. This visibility promotes real-time situational awareness to the entire team.</p>
1:20 – 1:40	 <p>Innovations in Alaska Remote Sensing Applications</p> <p>Adam McCullough manages geospatial programs for NV5 Geospatial in Alaska. His work involves connecting users in government and commercial groups to remote sensing solutions.</p> <p>Overview of recent innovations in airborne lidar and imaging sensors, platform considerations, and project applications in Alaska. Use cases include landslide risk detection, infrastructure monitoring and river habitat studies.</p>
1:40 – 2:00	 <p>Creating Multi-temporal Satellite Derived Bathymetric Surfaces in Teller and Yakutat</p> <p>Natalie Treadwell is an artist and cartographer from Anchorage, Alaska and she recently joined TCarta Marine after completing her masters in Geographic Information Science and Technology at the University of Southern California.</p> <p>Satellite derived bathymetry in Alaska has been characterized as difficult and slow developing, as the challenges come in many forms; turbidity, datum issues, lack of in situ data, and the small archive of clear imagery. In attempts to address the challenges of procuring clear imagery along Alaskan coastlines, TCarta has developed a methodology for creating multi-temporal image composites that can be used to inform the creation of Satellite-Derived bathymetry surfaces. Using Sentinel-2, Planet, and Worldview imagery, multi-temporal SDB surfaces were created with a range of spatial resolutions to create bathymetric surfaces in Teller and Yakutat, Alaska.</p>
State Highlights	
2:00 – 2:20	<p>GIS for Alaska’s Food Systems</p> <p>Amber Chambers is a Senior Geospatial Analyst for Dewberry Alaska. Logan Bolan is a GIS Analyst for the Alaska Department of Transportation and Public Facilities. Hillary Palmer is a geospatial technologies Project Manager for Dewberry Alaska.</p> <p>In support of the Governor’s Task Force on Food Systems, an unlikely team of GIS superheroes was enlisted to help identify ways GIS could come to the rescue of this complex issue. Check out the website that we developed using ArcGIS Hub, hear about our GIS analysis attempts and data-poor struggles, and see what’s in store for Alaska’s food security and independence future.</p> 
2:20 – 2:50	30-minute networking break
State Highlights	
2:50 – 3:10	 <p>Developing the GIS supply of recreational assets for analysis with mobility data for the Statewide Comprehensive Outdoor Recreation Plan</p> <p>Gary Greenberg is GIS professional and contractor that has been serving Alaskan communities since 2003.</p> <p>To make informed decisions about outdoor recreation investments, land managers require data that show where the recreation is happening on their lands and trends in the use amount and type of specific resources, amenities, and activities. To attain the goals of the 2023-2027 SCORP, a consolidated Geographic Information System (GIS) was produced to represent outdoor recreation resources statewide. These data were analyzed using mobility data to show demand for recreational lands. Final resources have been centralized on the DNR hub site to focus these efforts moving forward and provide a portal for recreational data.</p>
2:20 – 2:50	30-minute networking break
AGC Cadastral Working Group	
3:10 – 3:30	<p>Mat-Su Borough AutoCAD to Parcel Fabric Migration</p> <p>Ben Cohen has been a part of the Mat-Su Borough since 2017. He is part of the Cadastral team and responsible for managing all parcel and right-of-way data, and recorded easements.</p> <p>In the fall of 2021, the Mat-Su borough GIS team deployed a comprehensive GIS Parcel Fabric allowing for real-time parcel editing and a more wholesome and efficient workflow for managing their parcel data. By creating a GIS Parcel Fabric and using it to maintain parcel data, the Mat-Su Borough is now</p>

	able to produce parcel data that the public can see in as little as 24 hours instead of up to 6 months in years past.
State Highlights	
<p>3:30 – 3:50</p> 	<p><u>ADF&G Fish Stream Inspections Along the Trans Alaska Pipeline System (TAPS) Using ArcGIS Survey123</u></p> <p>Lee McKinley (ADFG) has worked for ADF&G for the past 20 years and is the Liaison to the Federal/State Joint Pipeline Office (JPO) and State Pipeline Coordinators Section (SPCS) within the Department of Natural Resources.</p> <p>The Trans Alaska Pipeline System (TAPS) has over 600 crossings on fish streams that need to be regularly maintained to ensure fish passage both under State Law and the terms of their Right-of Way Lease. Traditionally a MS Access database has been used to document inspections of these stream crossings while in the field. This past summer, Survey123 was also used, and it has shown to have several advantages and efficiencies over previous inspection tools used by ADF&G.</p>