



Wisconsin Land Information Council Minutes 2024-06-05

Meeting Date: Wednesday, June 5, 2024
Time: 1:00–3:00 p.m.
Location: [WLIA Spring Regional Meeting 2024](#) | Marshfield, Hotel Marshfield, Central Ballroom II
Remote ID: [Click here to join the meeting](#) | Meeting ID: 238 180 576 291 | Passcode: YHDJEG
Or call in (audio only) +1 608-571-2209 | Phone Conference ID: 442 444 539#

WLIC Appointees (Y = present; N = not present; some participated via teleconference)

Adam Derringer	Y	Sarah Hedtke	Y	Colter Sikora	Y
Kim Christman	Y	Chris Carrillo	Y	Jim Osborne	Y
Kelly Felton	Y	Christina Muller	N	Howard Veregin	Y
Scott Hand (proxy)	N	Cody Brommerich	Y	Cindy Wisinski	Y
Jim Giglierano	Y				

Other Attendees

Mike Friis, Peter Herreid, Ben Wildenberg (proxy for Scott Hand), Nik Anderson, Staci Hoffman
Mitch Bergeson, Adam Dorn, Davita Veselenak

- Welcome and Introduction** (Adam Derringer)
- Approval of previous meeting's minutes from 2024-02-28**
 - Motion to approve by Veregin, seconded by Christman.
 - Minutes approved.
- WLIC Business** (Mike Friis)
 - Council [membership](#) is full.
- WLIP Program Update** (Mike Friis/Jim Giglierano/Peter Herreid)
 - Lidar status, lidar transition, and hydrography updates**
 - Giglierano provided updates on the U.S. Geological Survey (USGS) 3D Elevation Program (3DEP) lidar grants.
 - Giglierano is transitioning administration of lidar grants to Peter Herreid.
 - For FY2024 lidar grants, county contracts have gone out and the contract with the Department of Transportation (DOT) for their contribution is almost done.
 - FY2023 will be delivered this summer, for the counties of Buffalo and Manitowoc.
 - For FY2025, an application will include counties in the area of the Southeastern Wisconsin Regional Planning Commission (SEWRPC). The application will be coordinated by Rob Merry from SEWRPC.
 - The past couple of cycles of lidar acquisition have seen a movement toward higher standards and greater accuracy, from Quality Level 2 (QL2) to QL1 and QL0. QL1 will be the minimum moving forward.
 - In the SEWRPC region, they are moving up to 30 points per meter, which is approaching the QL0 specification.
 - For FY2025, it is likely that there will be two separate applications to USGS.
 - The second project would be for the QL1 spec, with an area of counties following most of the Wolf River. Those planning meetings are starting to occur.

- Friis reported that the Wisconsin Coastal Management Program may be looking for opportunities to contribute some BIL (Bipartisan Infrastructure Law) dollars to projects, as well as to generally partner on projects that resonate with appropriators, such as resiliency-focused projects.
- Derringer stated that bathymetry projects are a different consideration, as they use a different lidar system with different processing and software. Many counties are doing these types of projects but they are complex.

b. WLIP grants and program status

- Reference Appendix A – Map:
 - [VariationAnalysis_20240520](#)
- Herreid provided updates on WLIP grants and revenues.
- Register of Deed document recording levels have not improved. FY2023 saw the lowest levels in the last 30 years recorded. They have further fallen from 770,705 last year, to an estimated approximate figure of 730,000 recorded statewide for this year.
- Herreid presented a map with an analysis of the data demonstrating the decline in documents recorded from FY21—which was the highest year since 2007—with FY23 the lowest in last 30 years.
- All counties experienced a drop in activity, but, because of the distribution of WLIP Base Budget funding, counties that retain less than \$100,000 in recording fee revenue receive a Base Budget grant to make up the difference to the \$100,000 funding level.
- Therefore, only about a dozen non-Base Budget counties have had their land info funding affected. They are also the counties that had the largest run up in documents recorded to 2021. The reduction in the annual amount of retained fee revenue ranges by hundreds of thousands of dollars per county.
- There has also been a decline in WLIP Strategic Initiative grants, which were funded at \$10,000 per county for this year. This figure is not projected to change much in the coming year.
- For 2025, it is estimated that Strategic Initiative grants may be around \$10-15,000 per county.
- Another item in progress is work on [county land information plans](#), which counties are updating this year on the 3-year update cycle.
- There was discussion of the degree of the revenue decline and what it means for various counties, and how to possibly support them given challenges like the implementation of the new judicial privacy law and staff turnover.

5. Project Updates

a. 2025 Wisconsin Regional Orthoimagery Consortium status and Lidar Projects (Adam Derringer)

- Derringer gave updates on the Wisconsin Regional Orthoimagery Consortium (WROC), the consortium led by regional planning commissions since the 1990s.
- Planning for the 2025 cycle to acquire imagery is underway.
- WROC has expanded. Multiple counties want to capture imagery on a more regular basis.
- There is an option to fly in years 2023-2024-2025 for 2025.
- Flights were completed this spring for 6-inch or 3-inch imagery.
- Projects for 2025 are being finalized. The vast majority of counties are using the program to complete their imagery. The consortium has had very strong partnerships. Partners, from state and federal government agencies to businesses, help provide money back after all is completed.
- They are on a path for statewide imagery for 2025 from the WROC program.

b. Act 235 Judicial Privacy Law WLIA Task Force (Nik Anderson)

- Anderson gave an update on [Act 235](#), signed by the Governor in April to allow judges to submit documentation to the Director of State Courts to have their personal information shielded from public records.
- One group, PRIA Local (Property Records Industry Association), is led by Staci Hoffman of Jefferson County and Scott Moore of Fidler. That group is meeting monthly.
- The legislation affects associations and organizations in their own way. Details of implementation are a matter of concern.
- Another group working on this issue is the Judicial Privacy Task Force, under the Technical Committee of the Wisconsin Land Information Association. The WLIA task force is chaired by Adam Dorn and Fred lausly.
- To understand the interpretation of the legislation, PRIA Local and the task force have compiled a list of questions for attorneys. They are working with Andy Phillips, an attorney from Attolles Law, and others.

- The WLIA Legislative Committee is working on how to approach potential changes to the legislation to make implementation easier but still follow the intent of the law. The task force is working on how to approach the bill's authors and stakeholders.
- Considerations include planning for the potential expansion from one protected class likely to other protected classes of individual, issues relating to open data, real estate records, and how third-parties land records holders might be affected.
- Feedback is welcome from users of the data who will be impacted, such as realtors and others.

c. Tribal Consultation and Hydrography Projects (Mitch Bergeson)

- Reference Appendix B – Slides:
 - [USGS_Lidar_Tribal_Presentation-WLIA_Spring_2024](#)
- Bergeson presented on the USGS Data Collaboration Announcement (3DHP, 3DEP) and tribal consultation in Wisconsin.
- He offered to help identify hot spots that might be federal funding priorities for 3DHP and 3DEP.
- For hydro projects that cross state borders, there are some examples, such as the Chesapeake Bay area, and projects from Pennsylvania and Ohio. But everybody is doing hydro differently and doing land cover differently.
- It is not yet known whether Wisconsin efforts like county hydrography projects will be able to count as the match for future applications. The details of the contributed data process have not been figured out yet.
- Regarding tribal consultation issues, USGS has a process to work with tribes if there is an area of concern. In one example for 3DEP lidar, the Lac du Flambeau data was redacted.
- Some tribes are interested in sharing the data and open to data sharing.
- There was discussion about the consultation process, and the timing of agreements made relative to when an award is contracted. Bergeson stated that first, projects are awarded, then a notification goes out to the tribal governments, with a 45-day response window before the project task order can be completed. However, it cannot be assumed that no response in the 45-day window means that there is not potential for an issue.
- Outreach goes to the tribal council, the president/chair, and tribal historic preservation officers. Redaction requests must be a formal action of the tribal council. USGS has [tribal liaisons](#) who are dedicated to these efforts.
- There was discussion of the potential for federal projects that have been paid for by county governments that have tribal areas in them which can prevent the data to be shared with the county.
- Friis pointed out that there is greater awareness of both the perspective of the tribes as sovereign nations, and of the county perspective. A guiding idea and expectation for the future is that of open discussion, where all parties are brought to the table.

d. Brown County OneMap Project (Jim Giglierano)

- Giglierano gave an overview of the OneMap project in Brown County and Outagamie County, funded by the DOA Wisconsin Coastal Management Program.
- One Map: "Harmonizing" Three GIS Data Layers
 - Layers - USGS 3D Hydrography, USFWS NWI Wetlands, and NOAA CCAP land cover
 - Local partner - Brown County Planning and Land Services Department
 - Map and assess potential habitat projects in 3 HUC10 watersheds
 - Coastal program objective - support habitat restoration and conservation efforts
 - Funded by NOAA BIL capacity grant through the Wisconsin Coastal Management Program
- One Map Schedule
 - Contractor: NV5 Geospatial
 - Work started in December 2023
 - Draft hydrography delivered Jan 2024
 - Draft NWI wetlands delivered April
 - Draft land cover delivered June
 - Final products to be delivered Fall 2024
 - Coastal and other locations 2025
- USGS EDH Hydrography: Duck Creek and Green Bay
 - All mapped from 2020 lidar
 - Green Bay at near record high levels
 - Mapped by NVS
- USFWS NWI Wetlands: Duck Creek and Green Bay
 - EDH hydro stream lines and culverts

- Wetlands mapped using 3 years of orthophotography
 - Green Bay at low, medium and high levels
 - Mapped by St Mary's University
- NOAA CCAP Land Cover: Duck Creek and Green Bay
 - NOAA Coastal Change Analysis Program one meter land cover
 - Mapped from 2021 imagery
 - Mapped by NVS
- One Map "Harmonization"
 - All mapped from 2020 lidar
 - Green Bay at near record high levels
- Best Available: WDNR, Wisconsin Land Cover
 - Mapped from Landsat 30 meter
 - Mapped by UW SCO
- Regarding redaction of tribal areas, after discussion with the Oneida Nation of Wisconsin, they agreed to make the data public.
- Overall, the hope is for analysis-ready data in the end that will benefit projects such as environmentally sensitive areas and coastal habitat.

e. State Cartographer's Office update (Howard Veregin)

- Veregin, co-chair of [WSRS2022](#), the Wisconsin Spatial Reference System 2022 Task Force, provided a 2022 coordinate system update.
- The National Geodetic Survey (NGS) continues work on an updated version of the modernized National Spatial Reference System (NSRS), which was originally planned to be rolled out in 2022.
- Veregin gave an overview of the phased rollout and the main highlights of the schedule.
- NGS is rolling out different components at different times. They are maintaining three websites—including the official NGS website (geodesy.noaa.gov), as well as a [NGS Beta website](#) and an [NGS Alpha website](#).
- All of the new data and models are being posted on the beta site. Some time in the year 2026, hopefully there will be a vote by the Federal Geodetic Control Subcommittee to approve the updated NSRS, after which point the information will be moved to the Geodesy site.
- Users can experiment with the data, but it should not be used at this time.
- Additional components, including a new State plane coordinate system (SPCS) will be rolled out soon.
- WISCRS (Wisconsin Coordinate Reference Systems) is tied to the existing NSRS, so there will be a new state plane coordinate system.
- A new vertical datum will also be coming online.
- Models take into account how the earth is transforming. Coordinates are tied to time, or "epoch." There will be a need to transform coordinates in order to work across epochs.
- Other components of the new system include the depreciation of the U.S. survey foot. The international foot will be used for SPCS2022 and other components of the modernized NSRS, but that will not be until at least 2025.
- Until 2026, nothing is changing.
- At the local level, these changes will affect survey grade coordinate and could mean that coordinates will need to be reshot rather than merely transformed.
- WSRS2022 is also considering legislative issues, such as the statutory language and the existing statutes relating to surveying the also have subcommittees working on funding issues and implementation issues.
- For questions, contact Veregin or [Richard Kleinmann](#).
- You can visit the SCO website (www.sco.wisc.edu/community/wsrs2022) to look at the articles and blog posts published on these topics in the last several years.

f. SAGIC and PSC Broadband update (Colter Sikora)

- Sikora gave a broadband update from the Public Service Commission of Wisconsin, including the "Wisconsin Broadband Challenge Map" (<https://maps.psc.wi.gov/apps/BEADChallengeMap>). It is a tool to help figure out where to apply broadband funding.
- There is a month-long challenge period for planners and providers to look at broadband coverage data commitments, and report to the Public Service Commission where that data is wrong.
- A goal is to create better informed project areas to disperse about a billion dollars of funding for broadband. Awards are expected late this year or early next year.
- Regarding a SAGIC (State Agency Geospatial Information Committee) updates, a save the date went out for SAGIC's first conference to take place in Madison in October 2024. It will be an opportunity

for state agencies using GIS to share the work they do with each other. There will be a focus on partnerships across agencies. Contact [Christine Koeller](#) with questions.

- Derringer noted that there is a Esri Wisconsin User Group (EWUG) conference in Green Bay on November 7-8.

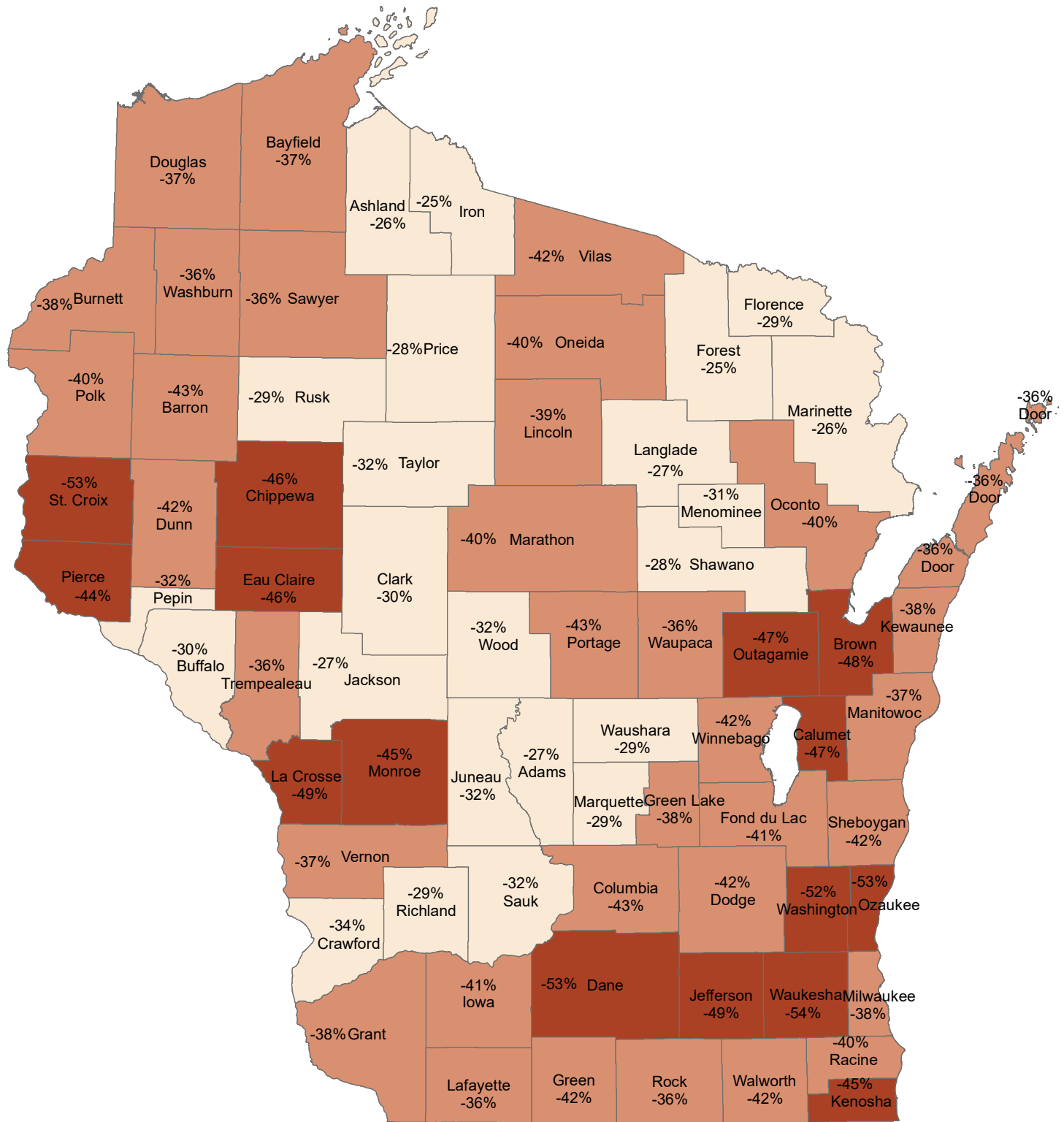
6. Next Steps/Action Items

- Next WLIA meeting – WLIA [2024 Fall Regional Meeting](#): October 16-18, LaCrosse

7. Adjourn

- Meeting adjourned at 3:37 pm

Decline in Documents Recorded (FY2021 - FY2023)



This map shows the decline in the number of documents recorded from State Fiscal Year 2021 to FY2023 by color background. FY2021 had the highest number of recordings statewide (1,355,032) since 2007. FY2023 had the lowest number of recordings (770,705) in 30 years, as documented in the [2023 WLIP Report](#).

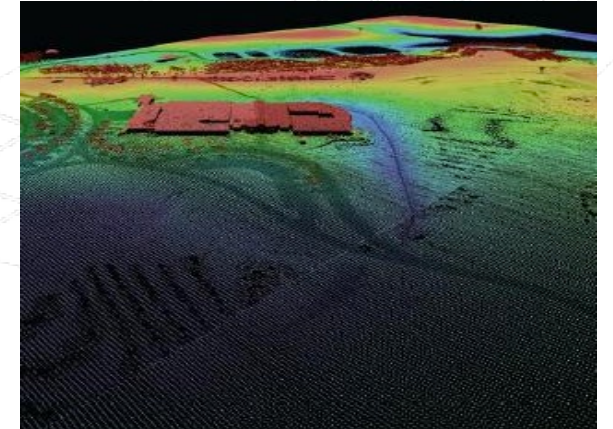
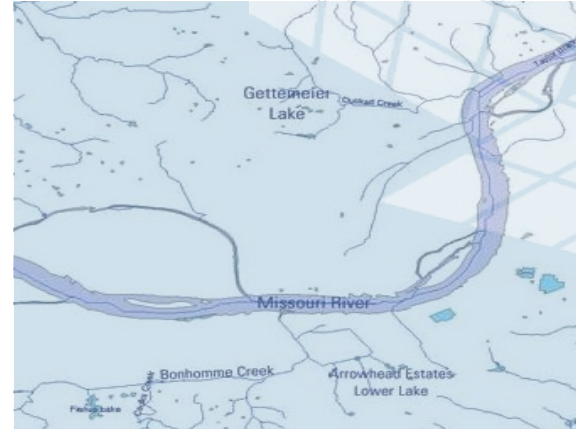
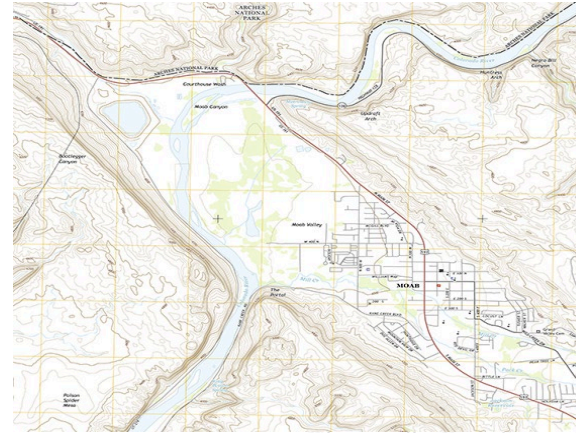




USGS Data Collaboration Announcement (3DHP, 3DEP)

and

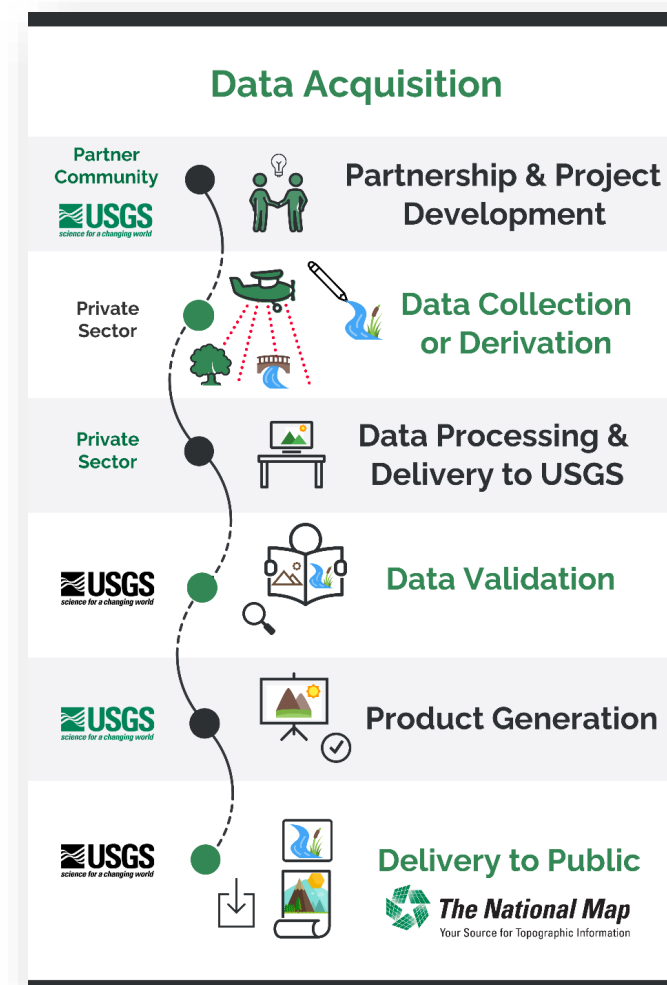
Tribal Consultation in Wisconsin



Data Collaboration Announcement (DCA)

Formerly the Broad Agency Announcement (BAA)

- The DCA is the mechanism used for non-federal entities to partner with USGS and other Federal agencies to acquire high-quality hydrography data for 3DHP or lidar data for 3DEP
- Open to Federal agencies, State and local governments, Tribes, academic institutions and the private sector
- Applicants are encouraged to build funding coalitions to pool resources to fund 50% or more of project costs
- 3DEP and 3DHP “matching” funds are added to cover remaining costs



DCA Instructional Webinar

- The FY25 3DNTM DCA Instructional webinar will be held on August 7, 2024 from 1-2:30pm ET.
- This webinar provides an overview of the Federal Fiscal Year (FY) 2025 3D National Topography Model (3DNTM) Data Collaboration Announcement (DCA). Registration Required with NSGIC (coming soon).
- Expected release early to mid August

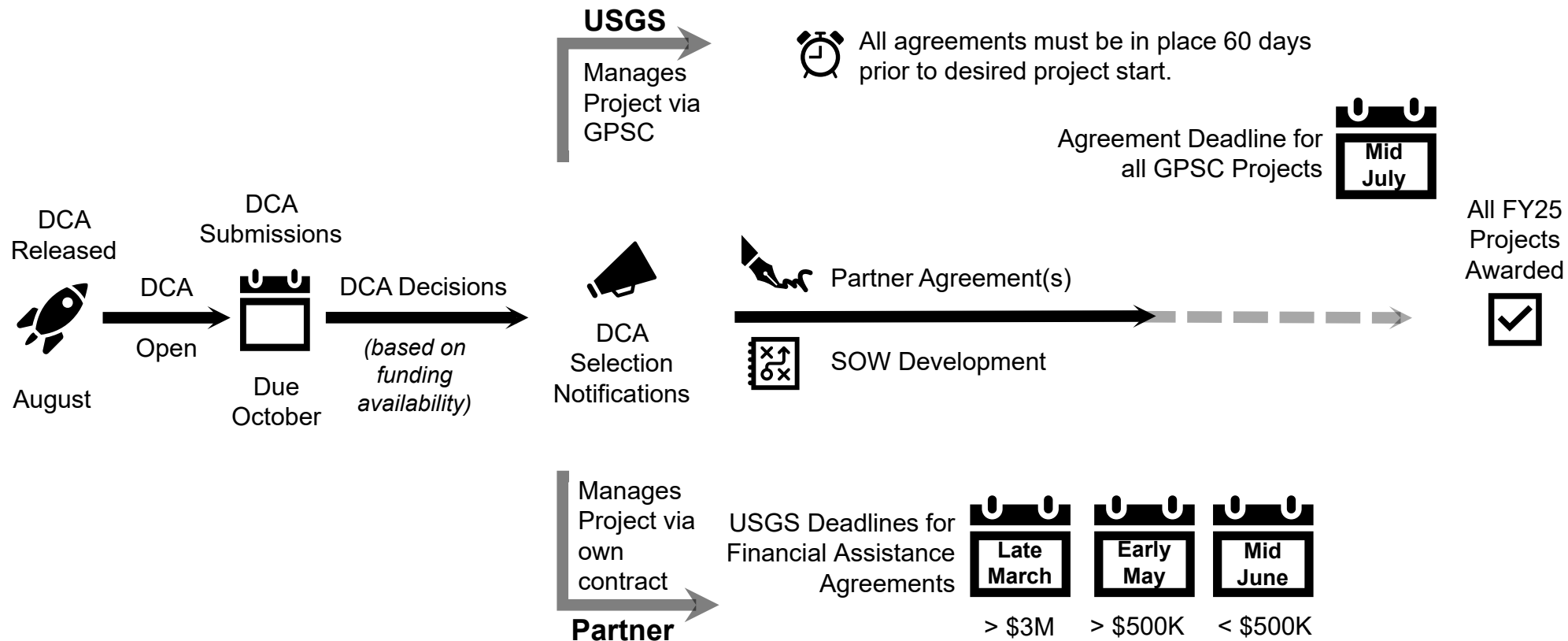
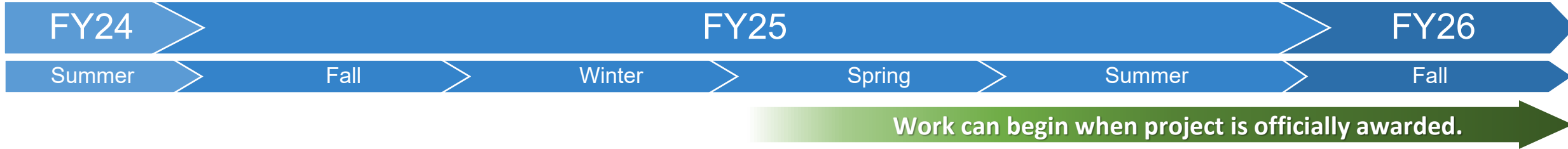


usgs.gov/3DNTM/DCA

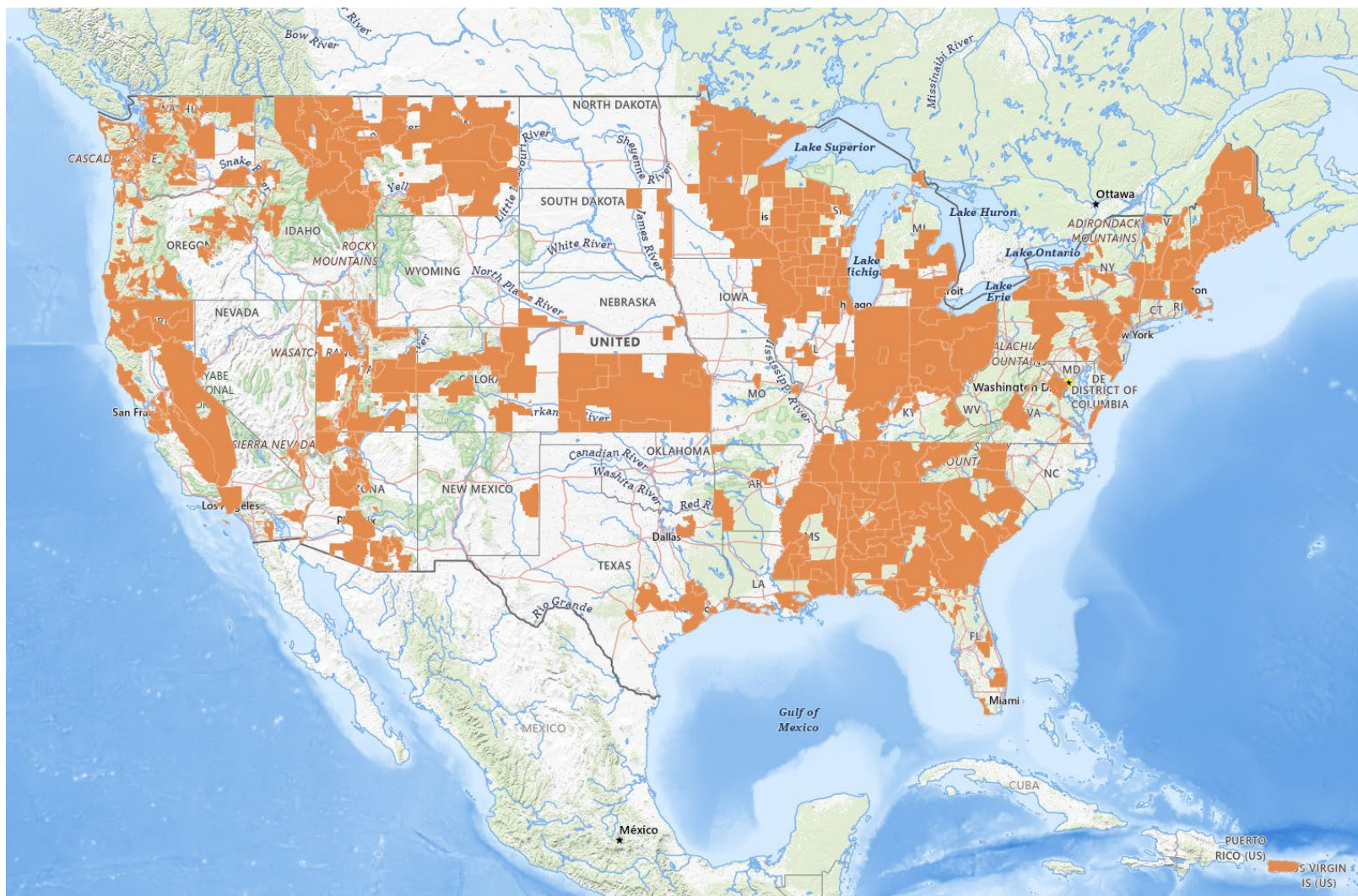
<https://www.usgs.gov/programs/national-geospatial-program/data-collaboration-announcement-portal>

+ 3DNTM DCA Timeline

4



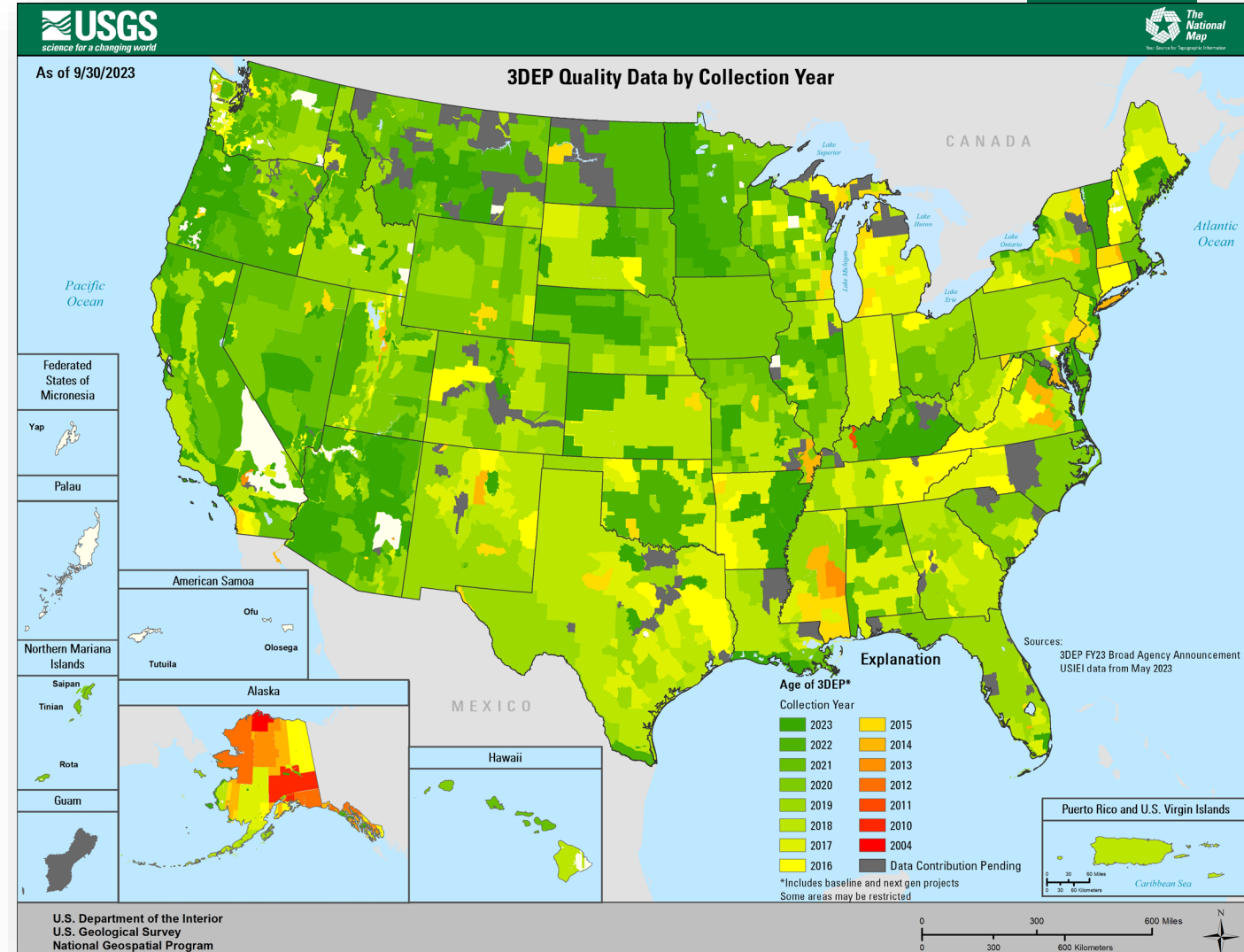
3DEP BAA and DCA Projects



Current 3DEP Partnership Priorities

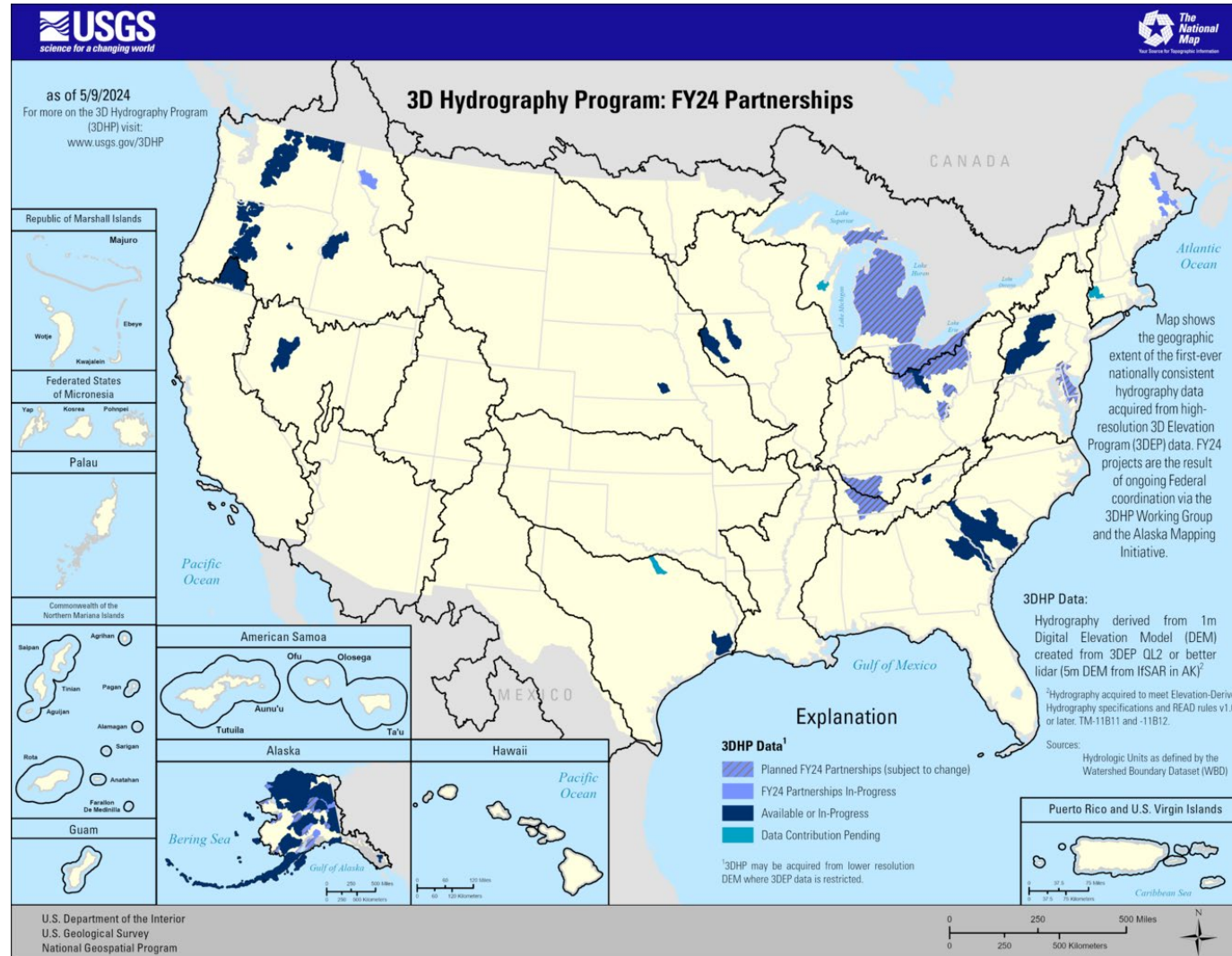
Baseline and next gen 3DEP transition

- Prioritize partnerships where there is no baseline coverage
 - USGS continues partnering on QL2 data
 - Applicants can submit projects for the acquisition of higher quality (QL1 or better) data as a buy up
- Where 3DEP baseline data exist – allow for new coverage
 - USGS partners on QL1 or QL2 data as submitted by the partner for areas where data are 5 years old or more
 - Applicants can submit projects for the acquisition of higher quality (QL0) data as a buy up





3D Hydrography Program FY24 Partnerships

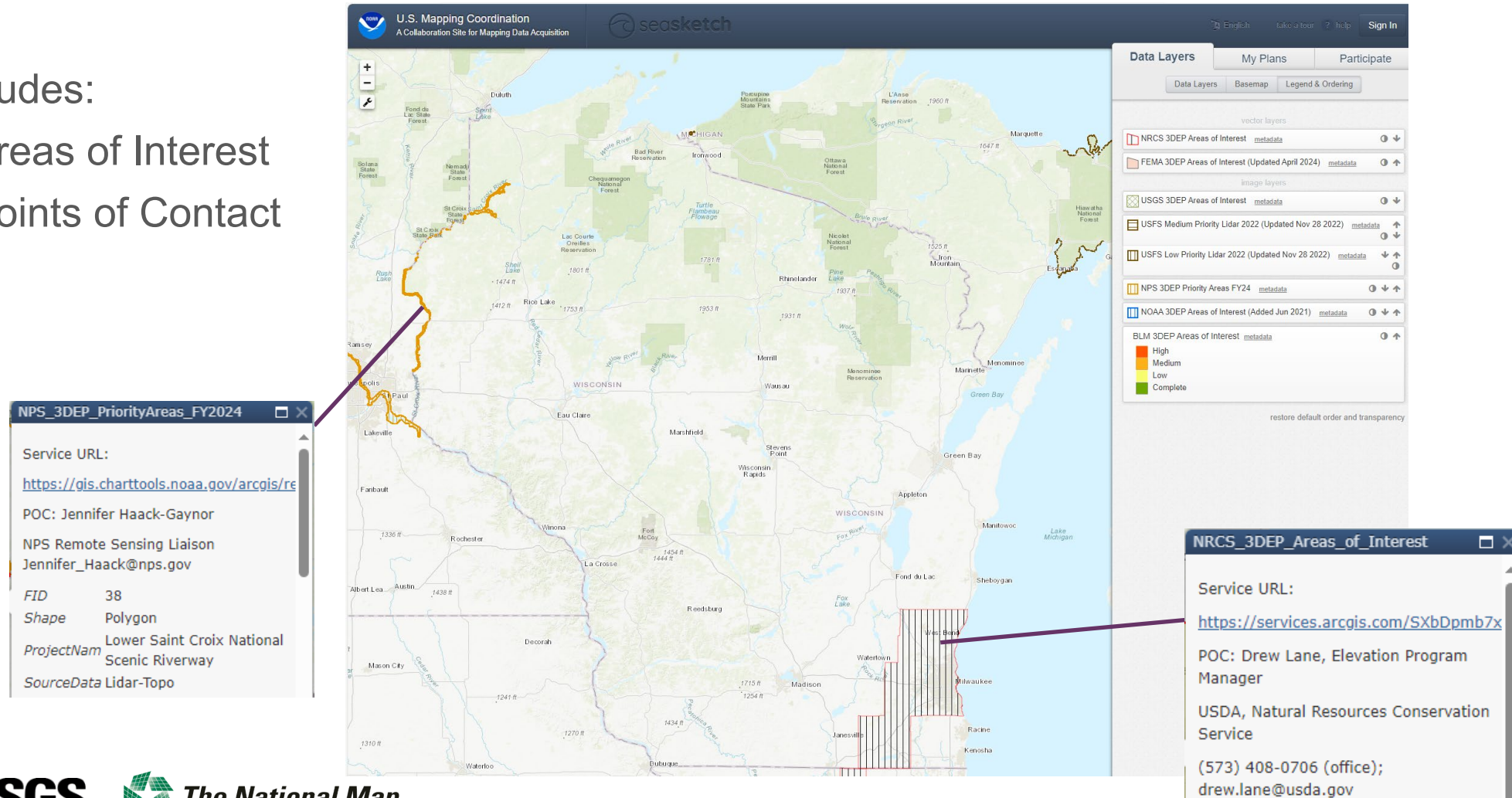


3DNTM Data Collaboration Announcement

Find Partnerships: Seasketch – U.S. Federal Mapping Coordination

Includes:

- Areas of Interest
- Points of Contact



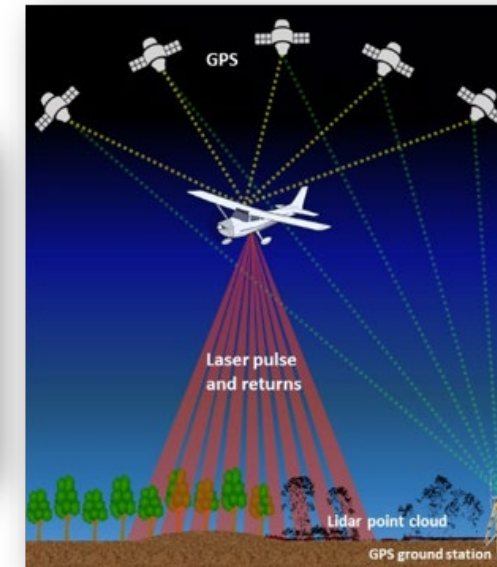
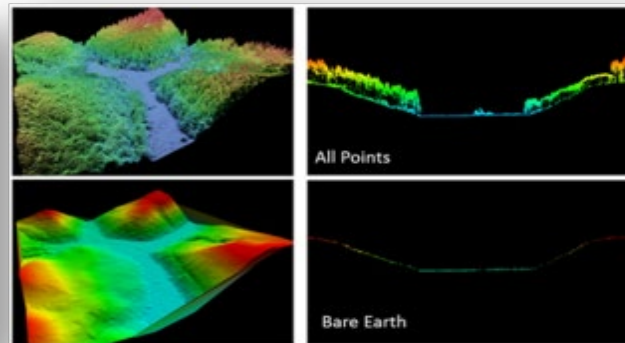
3DEP Tribal Consultation

Background

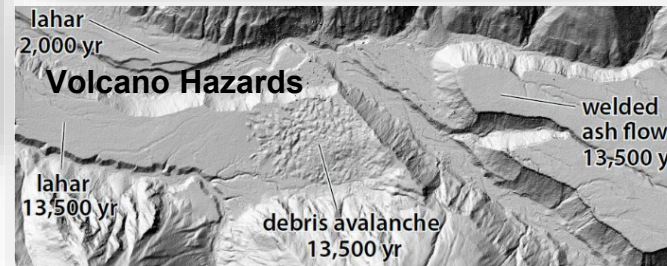
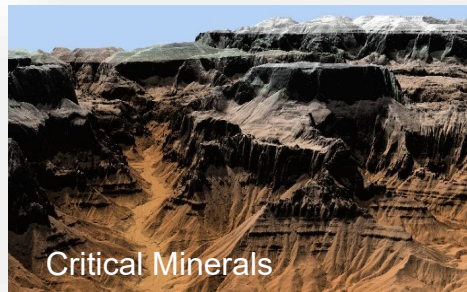
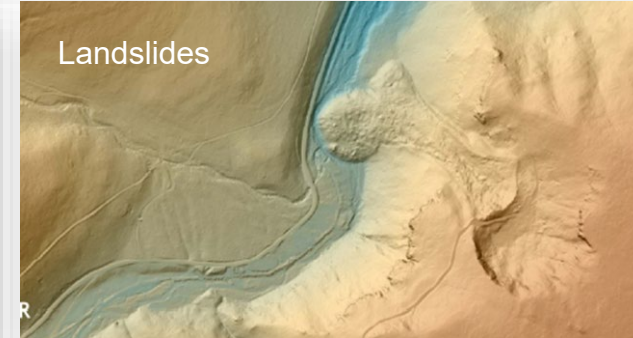
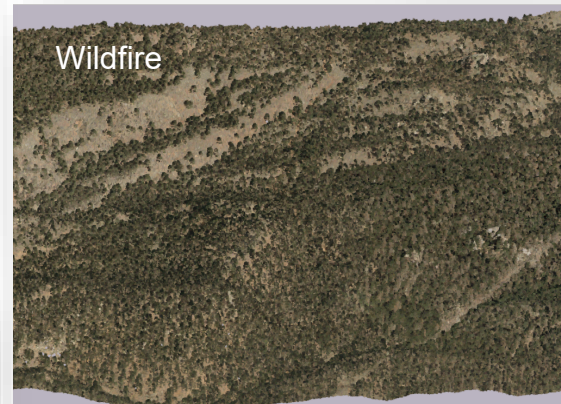
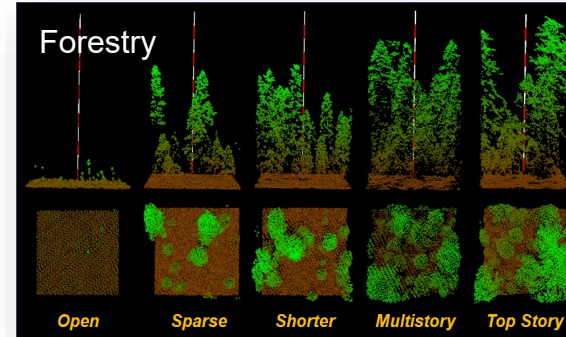
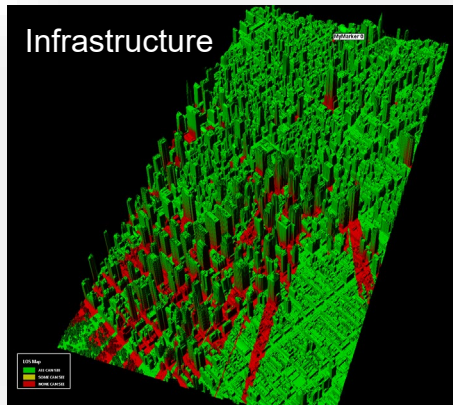
- 2011: Department of Interior Policy required all Bureaus to provide Indian Tribes and Alaska Native Claims Settlement Act Corporations the opportunity to consult before taking any action that may impact tribal interests
- 2016: USGS determined that publishing lidar may impact Tribal Nations
 - USGS took lead on notification and consultation for 3DEP
 - July 2017: started notifying for new projects
- Currently notifying tribes for all lidar projects collected or published since December 2011 (date of policy)
- Also sent National Notification Awareness letter to all tribes except in Alaska (unless we already had discussions with Tribe)
- Letters provide background on 3DEP, overview of Lidar and uses and offer tribes opportunity for a technical overview meeting.

3D Elevation Program (3DEP)

- Use lidar to map bare earth and 3D data of natural and constructed features. Completely refresh national elevation data holdings with new products and services.
- Complete nationwide lidar coverage to provide **first-ever national baseline of consistent high-resolution elevation data – as both bare earth and 3D point clouds.**
- Address critical requirements of 34 federal agencies, 50 states, tribal and local governments, and private organizations documented in the National Enhanced Elevation Assessment
- ROI 5:1, conservative benefits of \$690 million/year with potential to generate \$13 billion/year
- Leverage the capability and capacity of private industry mapping firms
- Achieve a 25% cost efficiency gain by collecting data in larger projects



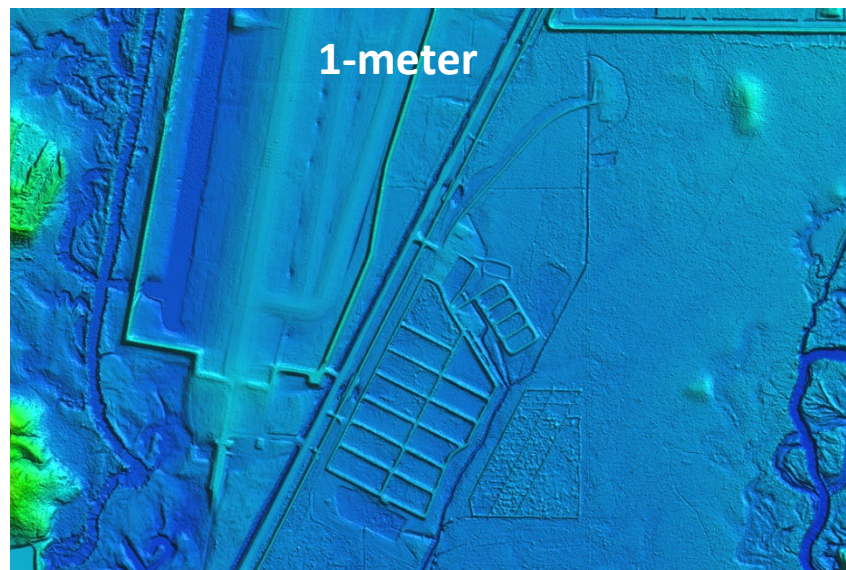
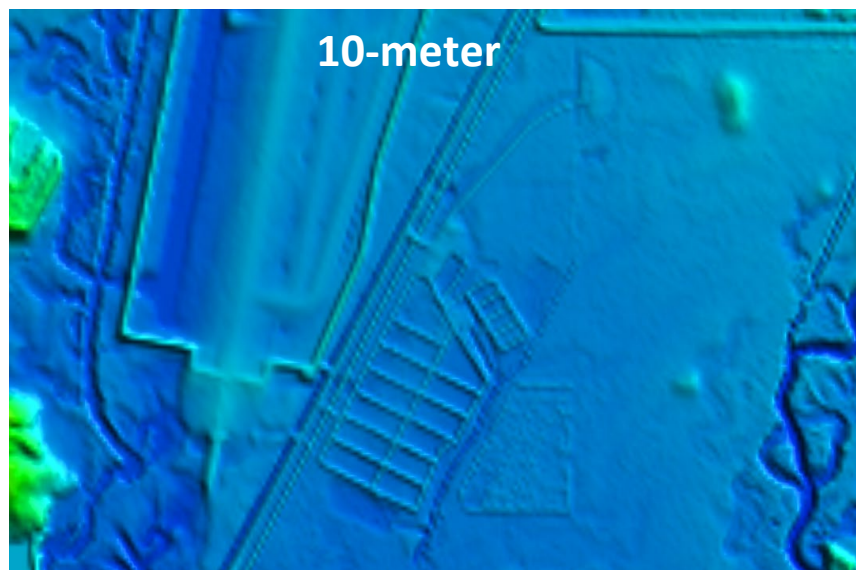
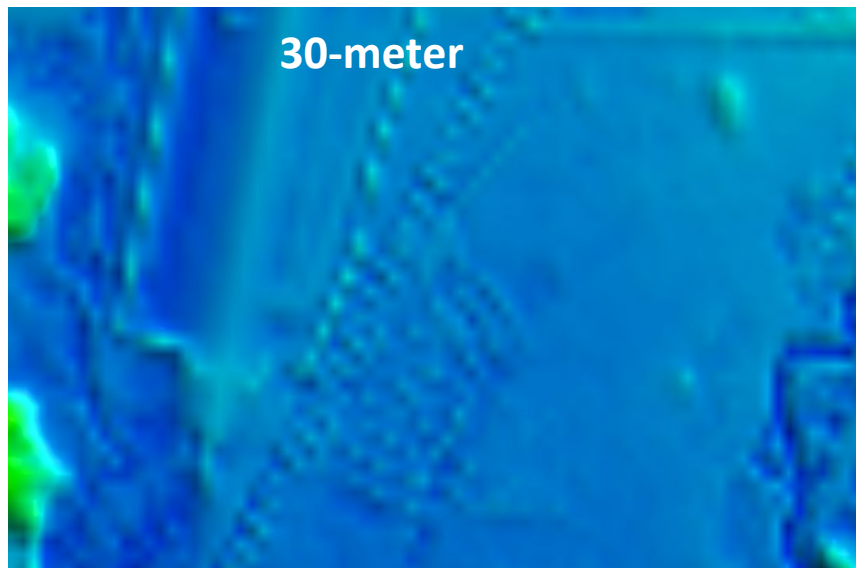
Lidar Applications





3DEP Standard DEM Products (Lidar source)

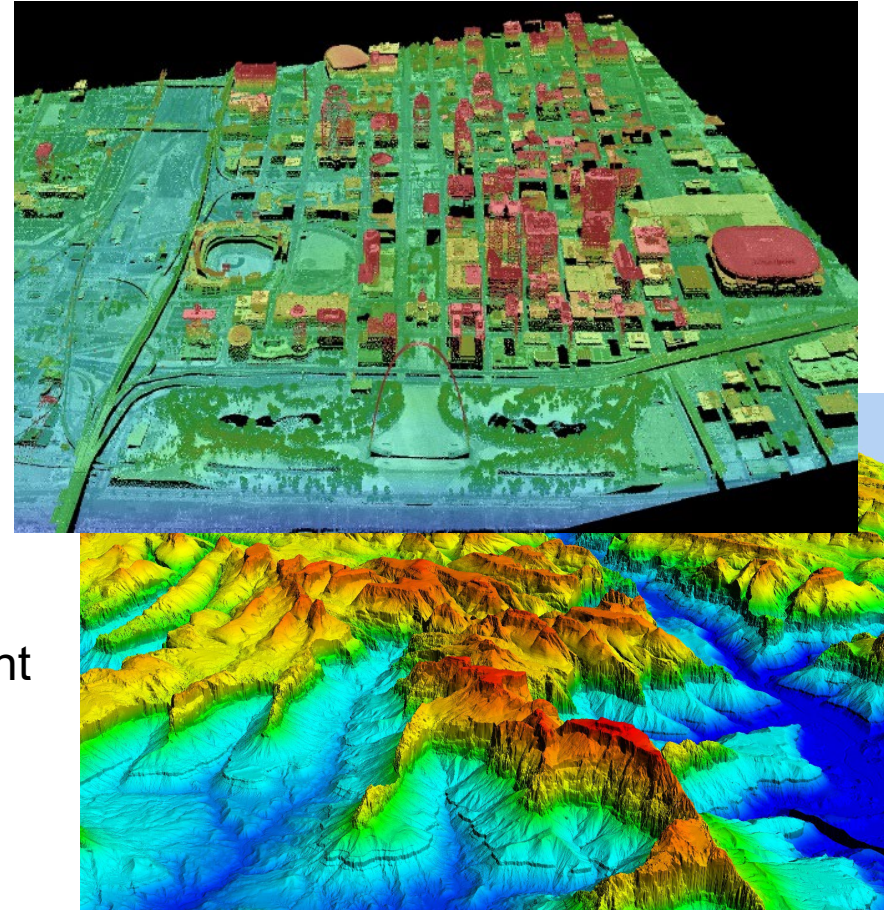
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Lidar Benefits

Supports a broad range of applications and decisions that depend on elevation data

- Flood risk management
- Infrastructure and construction management
- Natural resources conservation
- Agriculture and precision farming
- Water supply and quality
- Wildfire management, planning and response
- Geologic mapping
- Forest, river and stream management
- Aviation safety
- Archaeological studies



Bare earth DEM shaded by elevation values, Zion National Park, UT

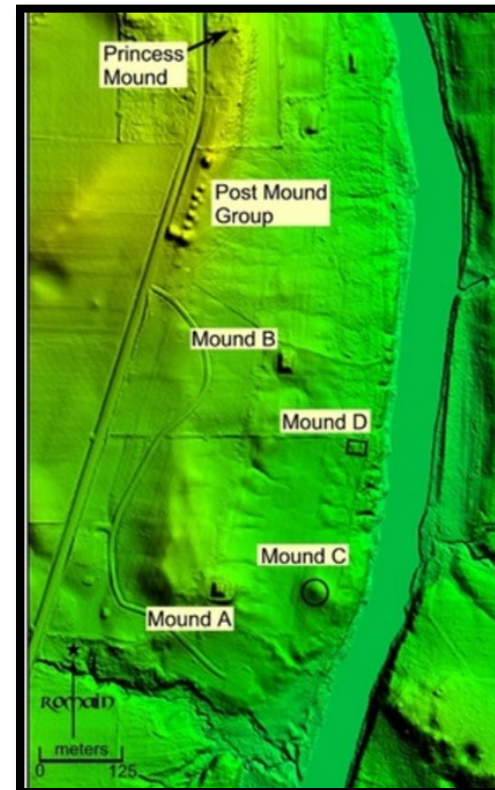
3DEP for Archaeology

Investigations of past landscapes and civilizations

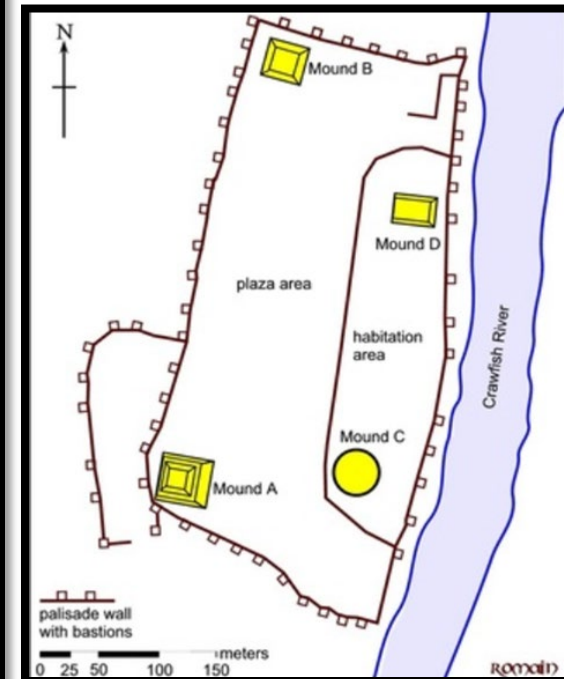
Lidar laser pulses can penetrate vegetation (in some areas) to map the ground underneath

Lidar can reveal details of the ground hidden by vegetation, including layout of archaeological sites

Lidar allows archaeologists to see the total scale of a site and understand the spatial relationship between archaeological features



Ancient mound site in Jefferson County, WI

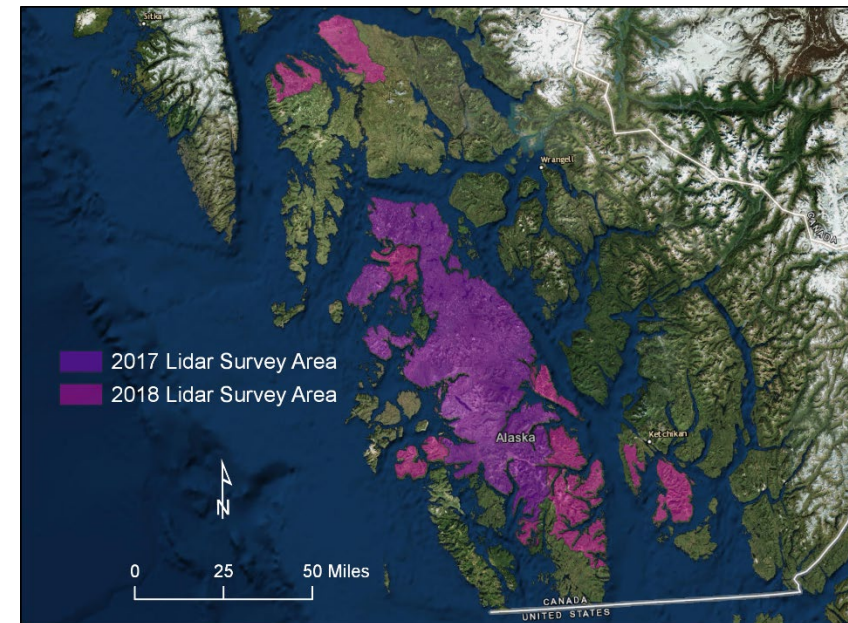


Images: William Romain, Ancient Earthworks Project

3DEP Partnerships with Tribes

Metlakatla Indian Community and Organized Village of Kake in Alaska, 2017-2018

- Partners: USGS, The Nature Conservancy, USFS, Alaska Native Corporation Sealaska (with support from Alaska DNR and local tribes)
- *“We immediately saw the benefit of the 3DEP project to all of our natural resources programs – fisheries, forestry, aggregate and invasive species – as well as a means to leverage the data for a planned Integrated Resources Management Plan”- Genelle Winter, Metlakatla tribal staff*



Lidar survey areas on Prince of Wales Island, Alaska

3DEP Lidar Projects Over Tribal Lands

What will the data be used for?

US Geological Survey

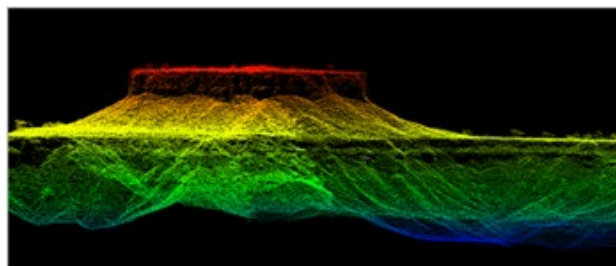
- Updating topographic maps and elevation models
- Mapping vegetation biomass
- Deriving updated hydrography data

State and Regional uses

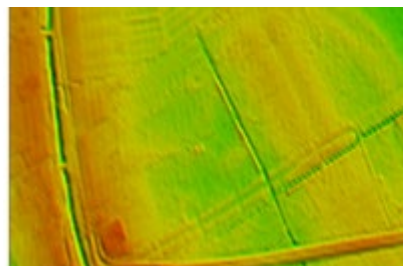
- Hydrography and Wetlands data creation
- Forest inventories and Fire mitigation
- Road safety, culvert analysis and construction
- Flood abatement, Hazard Mitigation Planning, Climate Resiliency
- Habitat analysis

Concerns with Data: Options

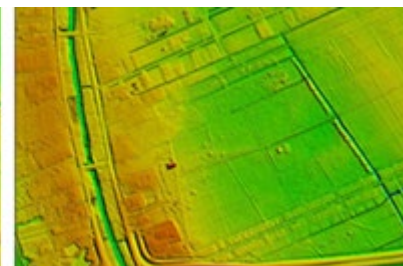
- USGS will work with tribe until any concerns are resolved. If desired tribe can review data before making a decision
- Options to protect data from public access:
 - Modify area of concern to match surrounding area
 - Remove area of concern from 1m DEM, Source DEMs, and/or Lidar Point Cloud
 - Remove entire reservation/trust land from 1m DEM, Source DEMs, and/or Lidar Point Cloud
- USGS requests a letter or email from tribal leader stating concerns and desired action
- Federal partners are required to honor resolution
- Nonfederal Partners required to get written permission from Tribe to access restricted data



Lidar Point Cloud



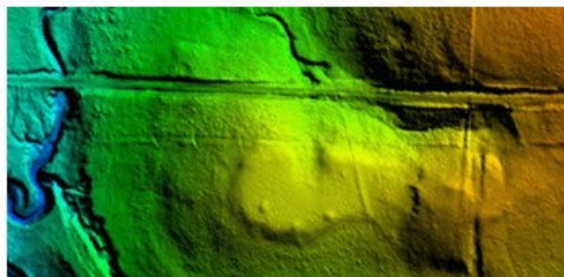
10-meter DEM



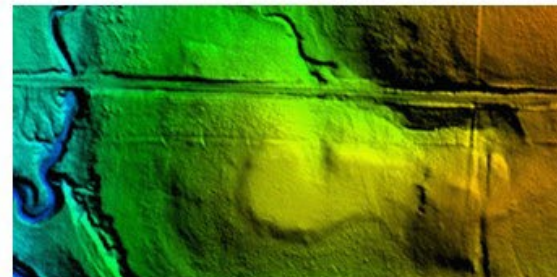
1-meter DEM

Concerns with Data: Options

- USGS will work with tribe to resolve privacy concerns
- Options to protect data from public access:
 - Modify area of concern to match surrounding area



Original DEM



DEM modified to obscure certain features

- Remove area of concern from 1m DEM and lidar point cloud products
- Remove entire reservation lands from 1m DEM and lidar point cloud



Data redacted for
L'Anse Reservation
at the request of the
Keweenaw Bay
Indian Community

Lidar data publicly
available



3DEP Lidar and Lac du Flambeau

The screenshot displays the USGS 3DEP LidarExplorer web application. The interface includes a top navigation bar with the USGS logo, a search bar, and a 'BASE MAP' button. The main content area is divided into a left sidebar and a central map view.

Left Sidebar:

- Which product are you interested in?**
 - LIDAR** (selected)
 - DEM
 - OTHER
- ☒ Show where Lidar is available.
- ☐ Show Topobathy Lidar.
- Click on the map to retrieve information about a lidar project.*
- Show options for filtering the lidar map display? [Hide Legend](#)
- Legend:**
 - ☒ Lidar Point Cloud QL0 (Approx. <= 0.35m NPS)
 - ☐ Lidar Point Cloud QL1 (Approx. 0.35m NPS)
 - ☐ Lidar Point Cloud QL2 (Approx. 0.7m NPS)
 - ☐ Lidar Point Cloud QL3 (Approx. 1.4m NPS)
 - ☐ Lidar Point Cloud Other
 - ☒ Topobathy AOI
 - ☐ Topobathymetric Lidar Point Clouds
- [More Info](#)
- ☐ Define Area of Interest

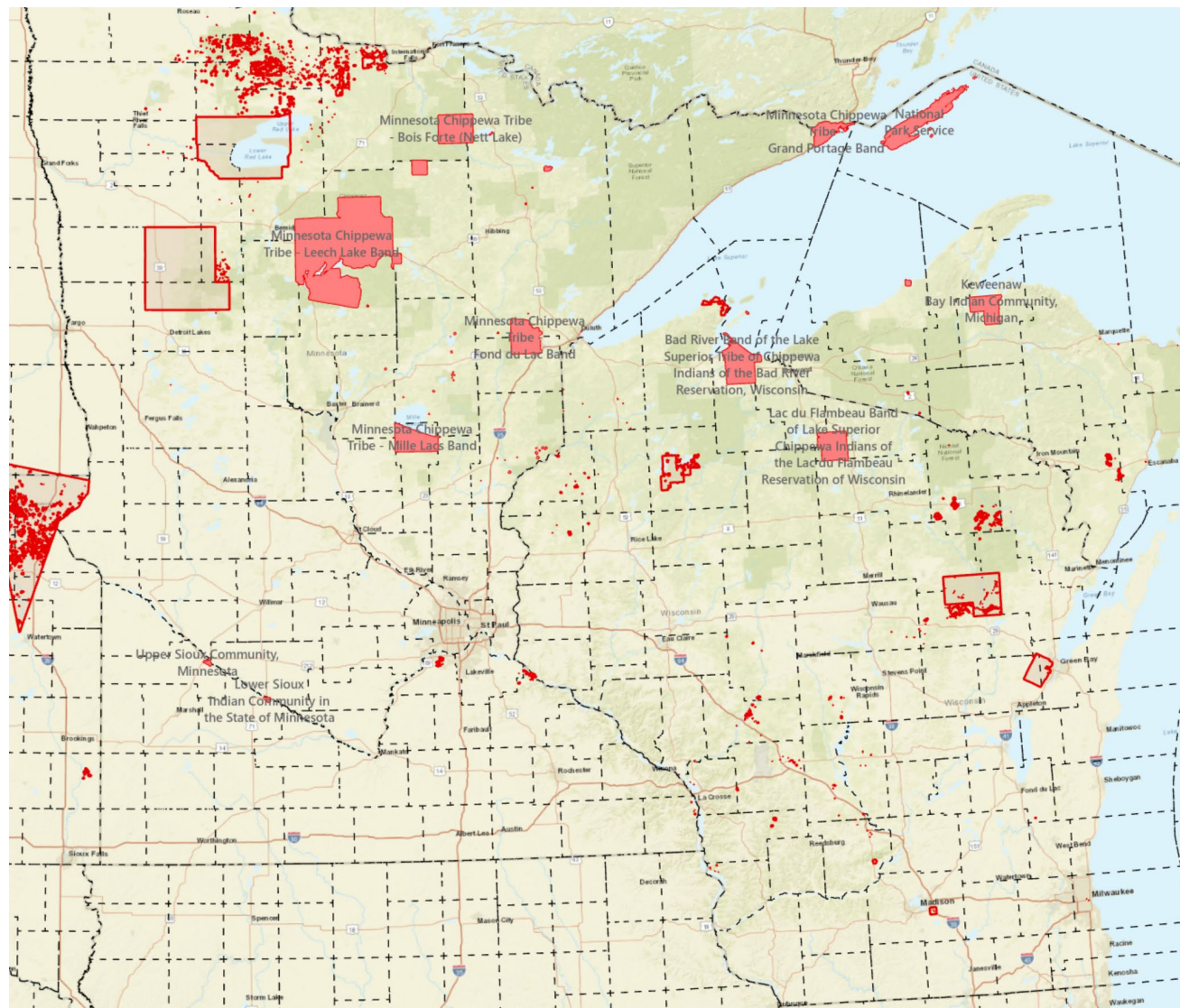
Central Map View:

- Shows a topographic map of the Lac du Flambeau area, including Iron County, Vilas County, and Quamegon National Forest.
- Overlaid on the map is a yellow-green rectangular area representing the Topobathy AOI (Area of Interest).
- Various lakes are labeled, including Little Trout Lake, Lac du Flambeau, Wild Rice Lake, Upper Gresham Lake, Lower Sugarbush Lake, Middle Sugarbush Lake, Upper Sugarbush Lake, Big Crooked Lake, White Sand Lake, Pokegama Lake, Stearns Lake, Plummer Lake, Mitten Lake, Fence Lake, Crawling Stone Lake, Tippecanoe Lake, Broken Bow Lake, Buckslen Lake, Shishebogama Lake, and Gunlock Lake.
- A scale bar at the bottom indicates 5 km.
- A coordinate string is visible in the top right corner: -89.8360718225547,45.99761255002065.



3DEP Lidar Tribal Reservations and Redacted Areas

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THANK YOU!

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Bismarck, ND
3D Elevation Program (3DEP)