Attendee List

Maine Library of Geographic Information Board Meeting Wednesday, February 19, 2020 10:00 AM to 12:00 Noon

Maine Public Utilities Commission, Second Street, Emerson Room, Hallowell, Maine

Attending	Present	On the Phone
Jon Giles, CHAIR	x	
Katie Bernhardt		х
Patrick Cunningham	X*	
Betsy Fitzgerald		х
Brian Guerrette	х	
Maria Jacques	х	
Nate Kane	х	
Brian Lippold		
Vern Maxfield		х
Jake Metzler		X*
Vinton Valentine		х
Aaron Weston		
Joseph Young	х	
Statewide Association of Regional Councils	(vacant)	
DAFS Commissioner Appointee	(vacant)	
Staff:		
Claire Kiedrowski, Executive Director	X	
Jennifer Hanson, Note Taker		
Guests:		
Mal Carey	х	
Dan Walters		
Todd Metzler		
Bob Bistrais		х
Emily Pettit	x	
Leticia vanVuuren, pending		х
Jamie Carter	x	
Nate Herold		х

Kasey Legaard	X*	
Tony Guay	X*	

*After 10:00 AM

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Place: Emerson Room

Maine Public Utilities Commission

101 Second Street Hallowell, Maine

Call In: (877) 455-0244, Participant #: 367-352-2033 Also SKYPE for visuals

Join Skype Meeting

AGENDA

- 1. Roll Call of Members Jon Giles
 - a. Motion to approve the minutes of January 15, 2019 made by Joe Young, Seconded by Betsy. Voted: ___9_Yea ___0_Nay ____Abstained
- 2. Land Cover Presentation NOAA/University of Maine
 - 15 min presentation from Jamie Carter on Mapping Maine's Land Cover: A New Approach by NOAA, the University of Maine and Wheatland Geospatial lab. This proposal is about how to address Maines Land Cover needs.
 - Jamie Carter presented on behalf of the team.
 - Nate Harold- a colleague at NOAA and he's based out of Charleston, South Carolina.
 - Kasey Legaard research assistant professor at the University of Maine, taking a lead on the Intelligent GeoSolutions Initiative.
 - Tony Guay is with the Wheatland Geospatial Lab at the University of Maine and is a Remote Sensing Specialist where he supports teaching and research at the university. He also provides training and outreach to Maine's forest industry and other stakeholders across the state.

Mapping Maine's Land Cover: A New Approach – Jamie Carter NOAA, University of Maine and Wheatland Geospatial Lab

- Met in August 2019 to discuss and set out plan for gathering information about the use of a land cover dataset update for the state of Maine. A survey was sent out and over 120 responses returned. Many respondents emphasized the need for land cover, and the specific types of land cover that respondents indicated interest in included forest, agriculture, wetland, and developed. 58% of respondents indicated their organization would be willing to provide "in-kind support" for a land cover project. There was also interest in gathering mixed species forest classes; early successional/regenerating forest classes were important; a classification scheme should be developed with a long-term strategy in mind; land use categories should be avoided because of variance in definitions; interest in a continuous percent impervious surface layer in addition to a thematic class. Overall: a new statewide land cover map is an important and growing need.
- Proposing a 1-meter resolution product the product would be based on NOAA's high-resolution land cover data layer, which includes 15-20 land cover categories. The NOAA layer is based on high resolution aerial imagery and ancillary data (including LiDAR).
- Tier 1: 6 upland and 9 wetland classes; Tier 2: cultivated, pasture/hay, open space developed (managed grasses in close proximity to developed areas, such as a golf course) such distinctions are not available in the Tier 1 product.
- The production process requires machine learning, deep learning AI methods, modeling, and editing, with assistance from the private sector for cost-effective rates.

- The anticipated update cycle is every 4-6 years, based on the availability of aerial imagery (NAIP acquisition schedule is roughly the same).
- 30-meter land cover dataset best application scale is 1:100,000, a regional view; the 1-meter land cover dataset scale is appropriate at 1:15,000.
- Additional proposal to create a 10-meter C-CAP land cover with focus on forest characteristics.
- The 10-meter C-CAP land cover would include one forest class; UMaine Intelligent GeoSolutions will take the 10-meter layer and break it out at 1-meter resolution via machine learning.
- The result would be 12 forest types: 4 each of hardwood, softwood, and mixed wood, and could
 potentially include recent forest changes that have occurred since the 2016 release of C-CAP. It
 would rely on multispectral, multitemporal Sentinel-2 satellite imagery plus additional data;
 reference data provided by the USFS Forest Inventory and Analysis Program; using machine
 learning.
- Cost breakdown

o 1-meter C-CAP land cover: \$550,000

o 10-meter UMaine forest type mapping: \$110,000

Total proposal: \$660,000Total request: \$410,000

 Joe motions to confirm adding or reaffirming the land cover data layer to the GeoLibrary list of data layers supported by the GeoLibrary's Reserve Fund. Betsy Seconds the motion for purposes of discussion.

Voted: <u>11 Yea</u> 0__Nay __Abstained

3. Committee Reports

- a. Ad hoc Geospatial Data Catalog Committee Bob Bistrais
 - Bob has implemented changes requested by the Ad hoc committee.
 - Claire has sent out an email. She will be putting it on the GeoLibrary Listserv and the website and feedback will remain open until April 17th. This is an opportunity to get input about how we are going to move forward with the presentation of the data catalogue.
- b. Finance Committee Jon Giles/Brain Guerrette
 - Joe Young, Nate Kane, Brain Guerette, Claire Kiedrowski, and Jon Giles will attend the discussions for the finance committee. The current reserve does not include the "in-progress" allocations for orthoimagery and LiDAR collections for 2020.
- c. Technical Committee Brain Guerrette
 Focus has been on the Ad hoc Geospatial Data Catalog Committee above. Nothing else to report.
- d. Policy Committee Vinton Valentine No report.
- 4. Strategic Plan Workgroup Reports
 - a. Coordination & Communication Jon Giles No report.
 - b. Education & Training Vinton Valentine
 - Patrick shares that MEGUG will be doing lightning talks in March at the Frontier Café in Brunswick. Blue Marble is doing a training at their new Brunswick office at the end of March as well.
 - Claire shares that she recently exhibited at the annual Maine Society of Land Surveyors
 meeting. Attendees were very interested in what the State has to offer for data layers. Blue
 Marble exhibited as well as the Maine GIS Users Group (MEGUG). Claire did share the new
 beta data catalog with selected attendees. Blue Marble had a presentation on Unmanned
 Aerial Systems.

- MEGUG is partnering with Maine Municipal Association (MMA) for their spring conference in early May. They will be doing a GIS track sometime in early May in Augusta. Technology and energy are their theme this year and broadband is the morning keynote.
- c. Geospatial Workgroup -- Claire Kiedrowski
 - Last week there was a meeting that covered a variation of this land cover presentation with feedback on presentation, recommendation from the Workgroup for the GeoLibary to support this initiative. The data layer template outlines what was discussed and what the funds needed to accomplish developing the data. This could be a nice template for some of the other data layers and could be shared with Climate Council, the Governor's Office or for the LD1719.
- d. Geospatial Workshop Jon Giles
 Jon had been talking with Troy Ripley about the interest in seeing more recent parcel mapping.
 Troy is out-of-state in February so discussion will resume in March.
- 5. Maine Geospatial Institute/Maine GIS Users Group/GeoLibrary Symposium update Jon Giles The Maine Geospatial Institute represents a coordinated group of University representatives, Maine GIS Users Group (MEGUG), and the GeoLibary. This group met to discuss how the organizations could coordinate more going forward. It was a good meeting, though there were not any formal efforts developing out of it. Joe will represent the GeoLibrary going forward. Joe Y mentioned that he is part of a subcommittee that met with Judy Colby-George (MEGUG), and Cindy Luftin (University). He was supposed to prepare a draft letter of support to present to the GeoLibrary Board but did not manage to get it done.

Joe Young will represent the GeoLibrary's point of view and explore more of what we could do together. The group as a whole agreed that LD1719's purpose would be beneficial in the discussion about where to place the administrative support for the GeoLibrary, including data management, cataloging, analysis, support and marketing. Are there opportunities for engagement going forward?

The whole committee is focused on creating a letter of support for the study of the LD1719.

- Update on LD1719 Jon Giles & Joe Young
 LD1719 is getting attention among the committees and things seem to be moving along.
- 7. Executive Director Report Claire Kiedrowski

Board Seat Update

- Leticia van Vuuren has been appointed to the Statewide Association of Regional Councils (appointed by the House Speaker). Leticia introduction; paperwork has not yet been received (sent February 14, 2020).
- Patrick Cunningham is working on being reappointed for his seat (representing Municipal Government).
- Jake Metzler does not intend to renew his term; Sarah Haggerty (Maine Audubon) is interested in this seat.
- Ken Murchison (City of Caribou) and Rosemary Mosher (Town of Auburn) are interested.
- Vern Maxfield is interested in renewing his seat and Maine Municipal Associated has submitted paperwork.

Finance Report

 Current reserve does not include the in-progress allocations for orthoimagery and LiDAR collections for 2020.

Crown of Maine LiDAR

 Quality control issues have resulted in back-and-forth among Newberry, USGS, and the GeoLibrary. Data delivery has been delayed due to the discussions. The contract expires April 2020 but has been extended to September 2020 at the request of USGS.

BAA USGS LiDAR Grant

- Updated February 14, 2020: NRCS expanded the area of interest to include portions of Kennebec, Lincoln, and Sagadahoc counties, with a new total area closer to 2700 square miles.
- The Maine/New Hampshire boundary overlap area will be collected by New Hampshire as part of their previously awarded 2019 BAA grant, which indicates QL1 that is also tidally coordinated.

2' Contour work order

Quantum Spatial provide the contours in late January but the data does not have hydrographic
enforcement, which results in contour lines crossing inland water bodies and the ocean. Hydro
breaklines should have been included.

Maine Orthoimagery 2019

- MEGIS is serving imagery for the 2019 ortho program; the 18" imagery did not pass quality control
 but will be reviewed again at the request of Woolpert. MEGIS will assist in reviewing, along with Jon
 Giles and John Rice (ESCB). Invoices with Woolpert are current.
- The 18" was delayed in processing and review, and Claire was the only one to review. Due to the blur/jumpiness of the imagery, Claire paused review and discussed the product with Eric Cole; the area captured seems to include sections of counties that were not originally planned for collection. Sam Moffitt has taken over Eric Cole's role and has requested that Claire reviews the imagery again.

Woolpert Contract for Maine Orthoimagery

• Woolpert's contract expired at the end of 2019, and the State decided to extend the contract until the end of 2022. There will be a \$200,000 minimum enforced by Woolpert to ensure projects are feasible. 2020 collection requests are still being accepted; Spring 2021 could roll over to 2022.

Maine Orthoimagery 2020

- Communities include: Hancock County, Hancock County UT, Bar Harbor, Mt. Desert, Bridgton, Naples, China, Cushing, and Portland. Bridgeton to Cushing are leftovers from previous years, and Portland is requesting a more frequent re-flight schedule.
- Jon Giles mentioned that he and Troy Ripley (who presented at a Fall board meeting concerning the need for updated parcel data), discussed orthoimagery with Oxford County and the result of that discussion may be that Oxford County will participate in a future 2021 or 2022 orthoimagery collection.
- Executive Director Position Update Brian
 Interviews completed, Patrick and Vinton assisted; Claire was offered the position, but Claire is not able to accept the full-time position due to extenuating circumstances. The plan is to re-post the position in April or May; Claire will continue in a contract position for the time being.

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- 8. Guest & Board Comments
- 9. Recommendations for next meeting agenda
- 10. Adjourn 12:03 motion to adjourn by Joe Young, seconded by Maria Jacques.

Action Items:

- Finance committee should discuss going into 2021 and 22 in terms of the Orthoimagery and LIDAR.
- Forward allocated potential funding for 2020 2022.
- Finance committee to meet before the next board meeting.
- Joe Young will draft a letter of support for the committee to review.
- Jon Giles may reach out to Pete Rogers- the new director of Maine Municipal Association (MMA), for funding.
- Update the 2-foot contour status at the next meeting.