<p style="text-align: center;">**NY State Geospatial Advisory Council**
**Minutes for December 14, 2021 Meeting**
WebEx</p>

*Mission: Advise the State on effective use of geospatial technology resulting in tangible benefits to NYS.*

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|---|---|
| Attending: | Christopher Badurek, Svetla Borovska, Sylvie Browne, Cattyann Campbell, Christina Croll, Mickey Dietrich, Keith Ducett, Emily Fogarty, Eric Herman, Ana Hiraldo-Gomez, Todd Nelson, Julia O'Brien, Christopher O'Connor, Lindi Quackenbush, Chris Rado, Randy Rath, Richard Reichert, David Richardson, Heather Weller, Carrie Wiley, Frank Winters |
| Guests: | Nick Conrad and Emily Cheadle |
| Absent: | Jonathan Garner, Larry Spraker |
| Minutes: | Christopher O'Connor |

**9:00    Welcome / Agenda Review / Approval of Minutes** (Weller)
- Solicited corrections to minutes
    - No corrections
- Solicited approval of minutes from September 14, 2021 meeting
    - Weller motioned to approve the minutes, Richardson seconded, all remaining unanimously approved
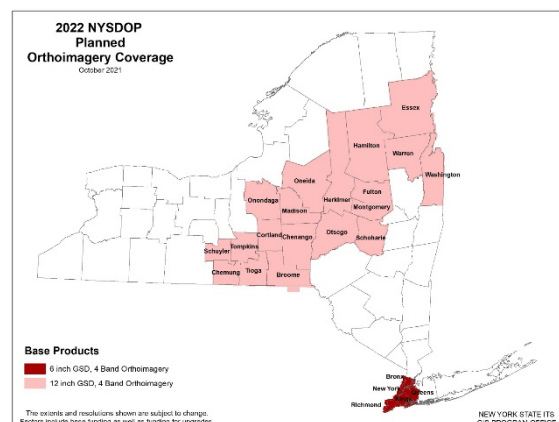    - Vote to approve, all

**9:15    GAC Ice Breaker**
- Quick share, go around the web ex and share your favorite holiday, memory or tradition; love to hear some holiday cheer from the group before we get down to business
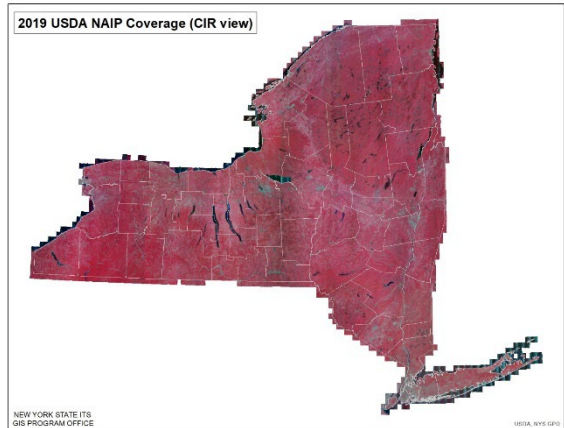
**9:25    Reports**
- NYSGISA report (Badurek)
    - Organizational summary (https://www.nysgis.net/)
        - Karyn Tareen, new president
        - Christopher Badurek, past president
        - Mary Susan Knauss, president-elect
    - Expressed urgency for maintaining association activity; several efforts are underway to address participation and involvement
    - Association invites new GIS participants, looking for greater diversity and community building
    - 2021 Fall Virtual Event and Annual Meeting
        - Keynote from Esri - discussed idea of promoting value of every organization more widely and harnessing web service technologies, particularly for smaller organizations (presentation available on YouTube)
        - Provided updates on GISP
        - Provided updates on U.S. Census
        - Conducted Pandemic & GIS Community Roundtable
        - Attended 9/11 GISMO Remembrance Event
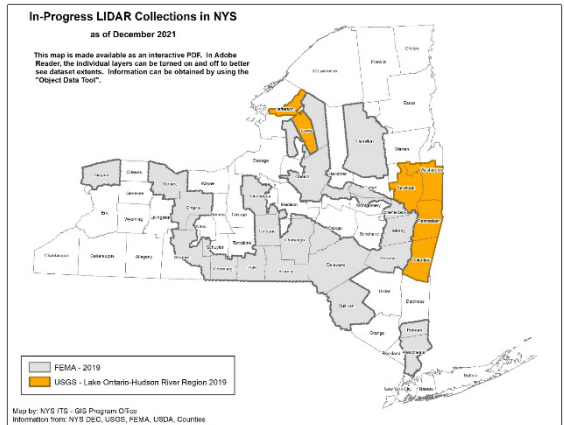    - Discussing GeoSpatial Summit for 2022; uncertainties due to COVID

- o Building relationships with other organizations (ex. NYSAPLS); there's increased interest in looking at GIS Open Source communities (ex. QGIS)
  - o Focusing on bringing new professionals into the workforce - outreach to colleges and universities, conduct professional development workshops for students

- **GIO/GPO report (Winters)**
  - o **Streets and Address Maintenance**
    - With four weeks until 2022, remaining almost 500,000 edits have been made in 2021, averaging over 9,000/week.
    - Renewable funding has been found for the purchase of 1Integrate from 1Spatial.
    - Have had several meetings with companies having national data about sharing and collaborating.
    - Went over six million geocodes in a month for the first time in November. New record is 6.3 million.
  - o **Civil Boundaries**
    - September 2021 Update
      - 2020 US Census Population added to all files
      - Village boundaries corrections and improvements
      - State Shoreline improvements
  - o **Statewide Parcel Map Program**
    - 2020 Parcels now available
    - 2021 Parcels
      - Outreach to NYS Counties for GIS tax parcel polygons almost complete (54 of 62 counties received to date)
      - NYS DTF ORPTS 2021 tabular Assessment Data to be delivered to GPO by mid-December
      - Spring/Summer 2022 full set of standardized 2021 GIS tax parcels will be available→ all counties for State Agency use, 26 counties' polygons and all counties as centroids available to the public
  - o **Statewide Orthoimagery** (as of 12/10/21)
    - All 18 counties received
    - 10 counties delivered and available in web service, app, and download
    - 1 county delivered and ready for addition to web access
    - 2 counties nearly done
    - 5 counties in various stages of review
    - Expect all to be available by early February
  - o Planned 2022 Orthoimagery Project
    - Update 19 counties last flown in 2017 and 2018
    - Continues 2-year update partnership with NYC
    - Scheduled for 2022 flights

- Will leave 5 counties flown in 2018 to be updated in 2023: Cayuga, Ontario, Seneca, Wayne, and Yates
- 2019 USDA NAIP Web Service
  - Statewide services released by GPO in October 2021
  - RGB and CIR versions
  - GPO service displays at near full resolution of 0.6 m
  - USDA limits their public service to 1.2 m due to size constraints with a national image set
  - Leaf-on imagery
  - Will make tiles available for download soon


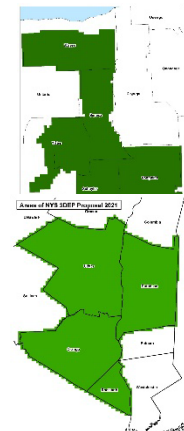2019 USDA NAIP Coverage (CIR view)

- Active LIDAR projects as of 12/10/21
  - FEMA/USGS Project
  - Niagara, Putnam, and Westchester are available
  - Other areas expected to be available Summer 2022
  - USGS Project
  - - Deadline extended as reprocessing is underway
- Completed Central Finger Lakes LIDAR Project
  - GPO project with ~30% 3DEP funding
  - Flown Spring 2020
  - Available for download October 2021


In-Progress LIDAR Collections in NYS

- Planned 2022 LIDAR Project
  - USGS issued initial award
  - 3DEP Funding for $216,000
  - (~30% of cost)
  - ~3200 square miles of 0.7-m LIDAR
  - Replaces less precise data from 2011 in Rockland County
  - Replaces 2014 data in other 3 counties
  - Will be scheduled for 2022 flights



- **National Hydrography Dataset (NHD) Stewardship**
  - GPO is engaged with USGS and NSGIC to work through impacts of planned 3D Hydrography Program (3DHP) (Formerly Elevation Derived Hydrography (EDH))
    - Concerns that NHD updates from current workflows will not be incorporated once 3DHP specs are implemented
    - Discussions continue
  - NHD work is on hold as this topic is addressed and GPO staff assigned to other data programs
- **Emergency Management Support**
  - Continued low level support of OEM for COVID-19
  - Provided GIS support for response to Tropical Storms Henri and Ida

- ESRI Collector based building damage assessment app was used extensively by DHSES and DOS
- Created ESRI Survey 123 web page for DHSES to allow self-reporting of damage
  - Attempt to help areas qualify for disaster assistance
  - Areas affected by TS Fred and TS Ida
- GIS Platforms
  - There have been 242,160,597 service requests since September 7, 2021.
- **Work Zone Data Exchange**
- Looking to extend Work Zone Data Exchange infrastructure for other data sets like Bridge Clearances

- **GCO Report (O'Connor)**
  - The NYS Office of Information Technology Services GIS Client Office (GCO) provides NYS executive agency GIS support as part of a larger Data Management Services team.
  - Actively assessing impact and remediation requirements related to Log4j.
  - Implementing GIS Virtual Desktop Infrastructure (VDI) for select clients.
  - Using Esri publishing services for elasticity and improved data sharing across agencies.
  - Using ArcCollector and an Oracle versioned environment for maintaining data directly in Oracle.
  - Informally reviewing data Extract, Transfer & Load (ETL) tools.
  - Discussing agency governance around publishing publicly through ArcGIS Online.
  - Completing custom development project that integrated Tableau and Esri software capabilities.

- **Federal report (O'Brien)**
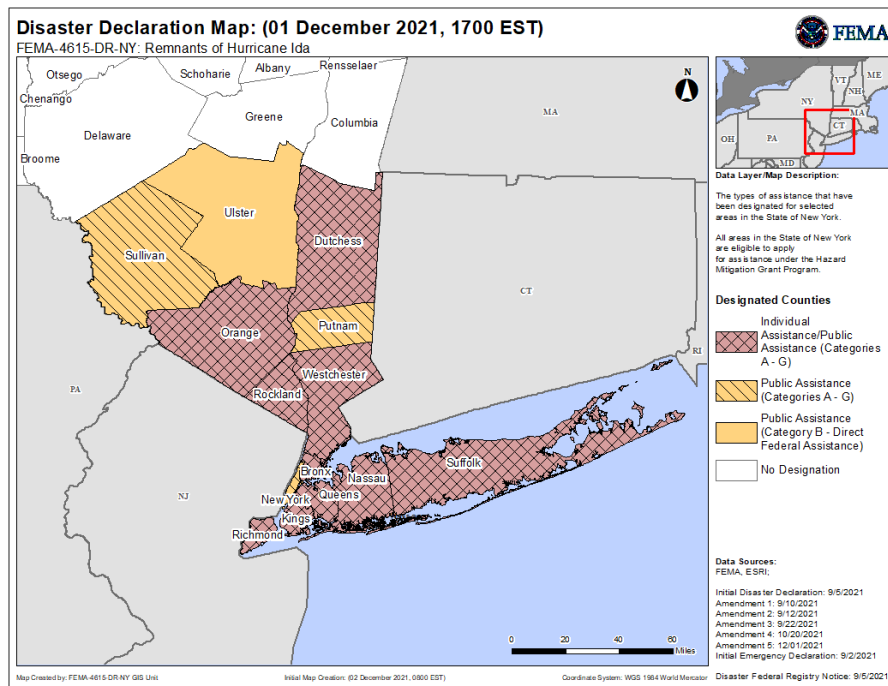  STATUS OF NATIONAL FLOOD INSURANCE PLAN STUDIES
  The FEMA Region II Risk Mapping site is here:
  https://fema.maps.arcgis.com/apps/MapSeries/index.html?appid=39e87438546249d988a85fc3085cab0e
  The Federal Emergency Management Agency (FEMA) Region II office has created this site to support your community through the Risk Mapping, Analysis, and Planning (Risk MAP) program. Risk MAP is a national FEMA program that works with states, tribes, and local communities to evaluate and better understand their current flood risks, as well as the actions that can be taken to mitigate those risks and become more resilient.

  This site now also contains the reports that come out of the Discovery projects as they are completed.
  RESPONSE TO THE REMNANTS OF HURRICANE IDA:

**Disaster Declaration Map: (01 December 2021, 1700 EST)**
FEMA-4615-DR-NY: Remnants of Hurricane Ida

## US DEPARTMENT OF AGRICULTURE
No updates for December.

## NOAA/NATIONAL GEODETIC SURVEY
Information on the delayed datum release: https://geodesy.noaa.gov/datums/newdatums/delayed-release.shtml
Blueprint Part 3 (Working in the modernized National Spatial Reference System (NSRS) has been released: https://geodesy.noaa.gov/library/pdfs/NOAA_TR_NOS_NGS_0067.pdf
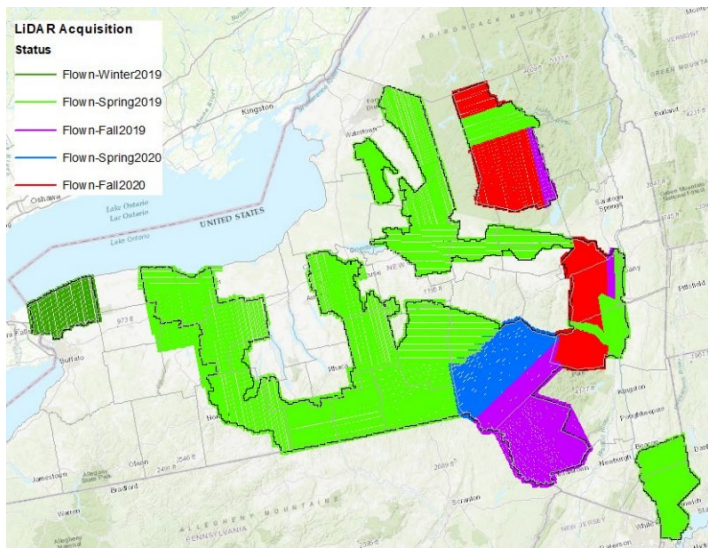
## USGS WATER RESOURCES CENTER
Under Mission Assignment from FEMA, the USGS has finalized collection of high-water marks (HWM) in New York City post-Ida.  Typically, the HWM program is activated for coastal surge to help define the areas of flooding from surge post-storm.  In this case, recognizing that this was an urban flooding event caused by freshwater/rain flooding created an unusual opportunity to capture HWM to be used to understand these types of events.  The HWMs will be used to create/update flood extents data from models. In turn, the data will be instrumental in devising better urban mitigation strategies.

## USGS 3DEP UPDATES FOR NYS
- FY22 USGS Broad Agency Announcement (BAA) award recipients have been notified, and applicant summaries will be posted online.
- As of 12/9/2021, USGS 3DEP lidar is available or in progress for all of NYS. The most recently accepted project is the 2020 Finger Lakes NY Lidar, now available for download via the Discover GIS Data NY Application and from the USGS at https://rockyweb.usgs.gov/vdelivery/Datasets/Staged/Elevation/1m/Projects/NY_FingerLakes_2020_A20/.
- Currently, the two projects that are in progress are:
    1. 2020 Harris Romano NY Lidar

a. This acquisition consists of Geiger Mode lidar being collected for a utility company with a focus on sensing electrical wires, electrical components, etc. during leaf-on season.

b. Data for this project do not meet the USGS specification and need a full second review; therefore, data validation is ongoing, and the period of performance for this project is being extended for a second time

2. 2018 FEMA R2 Central NY Lidar

a. Flown between Winter 2019 through Fall 2020. This project saw setbacks due to weather and the pandemic, and it is now seeing setbacks during data review and validation due to withheld processing issues. The data are currently being corrected and reviewed.



b. Some of the data are available on our rockyweb server at:

Lidar point cloud (LPC) data:
https://rockyweb.usgs.gov/vdelivery/Datasets/Staged/Elevation/LPC/Projects/NY_FEMAR2_Central_2018_D19/
Original product resolution (OPR) data:
https://rockyweb.usgs.gov/vdelivery/Datasets/Staged/Elevation/OPR/Projects/NY_FEMAR2_Central_2018_D19/
**Note USGS has switched from ftp to https. Please update your bookmarks.**

c. The full dataset will not be ready for shipment until March 2022 at the earliest, but considering that more corrections will likely be needed, it is more probable that the full final dataset may not be shipping out until summer of 2022.

- **State Agency Advisory Group report (Herman)**
  - NYS GIS State Agency Advisory Group Virtual Meeting on September 21, 2021
  - Great showing at last meeting, 32 attendees
  - Discussed support of climate change
  - See Online Minutes: https://gis.ny.gov/coordinationprogram/workgroups/wg_7/meetings/2021-09-meeting-minutes.pdf
  - Next meeting January 11, 2022

**10:15  Break**

**10:30  Nomination Committee, and Chair and Vice Chair** (David Richardson, Heather Weller)

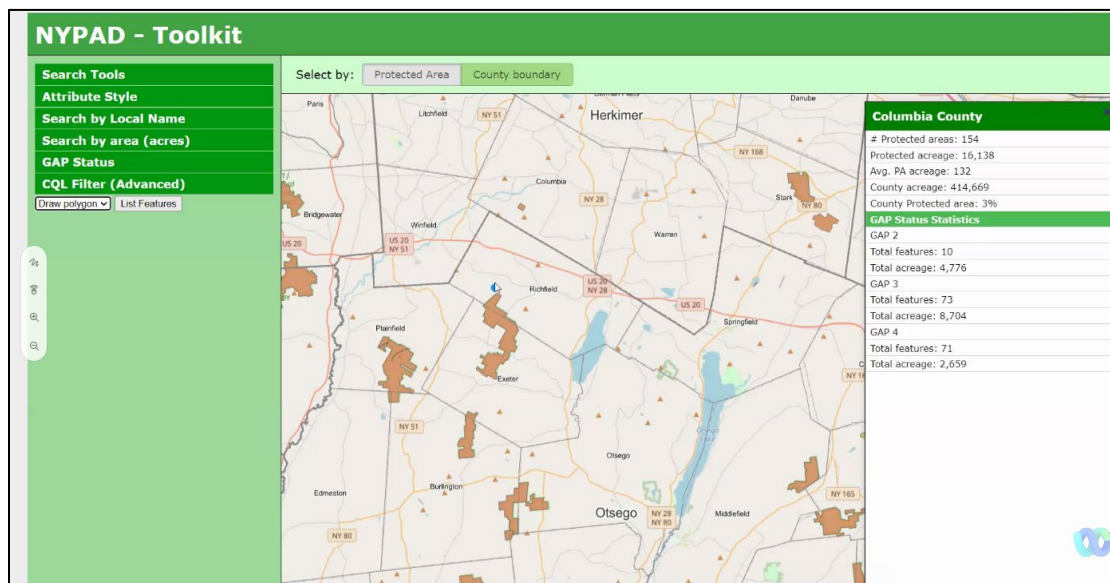Team acknowledged the contributions of David Richardson.



- 5 Open Seats
  - 4 members eligible to serve second term
- Herman motioned to accept slate of nominations, Christina Croll seconded; all in favor, none opposed
  - Slate:
    - academia: Emily Fogarty - renominated
    - local government: Ana Hiraldo-Gomez - renominated
    - local government: Mickey Detrich - renominated
    - federal government: Julia O'Brien - renominated
    - nonprofit: Sadra Shahab – new member

- Richardson motioned to have governance documentation updated to reflect the cored number of members, Herman seconded, all in favor, none opposed
- Nomination for Chair – Christina Croll; and Vice Chair – Sylvie Browne; Keith Ducett motioned to approved, Julia O'Brien seconded, all in favor, none opposed


**11:00  NY PAD (New York Protected Areas Database) Presentation** (Nick Conrad and Emily Cheadle from the Natural Heritage Program)

- Developed by Natural Heritage Program, which is part of SUNY ESF and works under an MOU with NYSDEC; key service is to maintain a database on the location and status of rare plants and animals
- Comprehensive Protected Areas data – uses, benefits and value
  - See specific locations and overall extent of currently protected lands
  - Identify gaps and potential links
  - Guide land conservation priorities and planning for future projects
  - See what's protected now and what still needs to be protected
  - Guide land conservation priorities
- Applications of Protected Areas data
  - Sustainable land use and smart growth planning' open space protection programs
  - Drinking water protection strategies
  - Siting for renewable energy and climate resiliency projects
  - Assess and communicate the cumulative impact of land conservation and funding
  - Reduce redundancy of effort – collaborate better
  - Vital metrics for tracking and evaluation programs
- Data Sources
  - State agencies, land trusts, federal agencies, counties municipal, individual landowners, private companies
- NYPAD
  - NYPAD centralizes the data sources
  - Created in 2012; updated in 2015, 2017 updates (limited)
  - Maintaining an up-to-date comprehensive protected areas database is challenging
  - Land parcel class code are often out of date or inaccurate, nor do they reflect multiple uses of a parcel; don't indicate whether the property is long-term protected
  - To do this right, the NHP team started from scratch
- NYPAD 2.0
  - Authoritative, comprehensive, and current aggerated spatial database of NY protected and conserved land
  - Conservation lands owned and managed by all agencies
  - Collect data from owners
  - Updated annually in collaboration with users and data providers
  - Make easily available to all for viewing online, web service
  - Schema easily exported and imported
  - PAD-US NCED national programs
- Started in 2020 with TNC and Scenic  Hudson partners
- 2021 got dedicated line item in EPF budget
- 2021-2022 establish long term collaboration for sustaining NYPAD

- Current Online
    - Existing version www.nypad.org is online now
- NYSPAD 2.0
    - Define database schema – based on PAD-US
        - Five feature classes (categories) including fee and easement
        - Standardized fields (attributes)
        - Set domains
    - Additional fields  (level of access)
    - Request, obtain, and load data
        - Quality control (e.g., overlapping polygons)
- Beta Release
    - NYS DEC and OPRHP lands
    - Federal Lands
    - County and municipal lands
    - Land trusts – first set
    - Online Map Viewer (AGOL) and Download from NYPAD.org
    - Caveats on Public Access
    - 21,590 records; 4,941,069 acres
- Next Tasks
    - Increase inventory of lands, esp. land trusts
    - Increase review of attributes
    - Provide web service(s)
- Demo NYPAAD Toolkit



- Establish NYPAD Advisory Committee
    - Guidance on broad topics and priorities
    - Input from users and user communities
    - Topics (criteria for lands to be included, gaps in data, attributes, access to NYPAD data, concerns with providing data, data products, queries/reports/statistics, data updates, support/outreach/funding)
- Establish Coordinating Committee
    - Smaller group
    - Guidance on more technical level'

- Reviewed what defines a protected area, and would like to collaborate with others to decide if "unprotected" undeveloped lands should be included (playing fields, playgrounds, bike trails, rail trails, military installations)

For more information about NYPAD, contact:

Nick Conrad                     nick.conrad@dec.ny.gov
Information Resources Coordinator, NYNHP

Emily Cheadle                   emily.cheadle@dec.ny.gov
GIS Specialist, NYNHP

- (Christopher Badurek) Suggested having the data set be referenced more explicitly so that people can see where it is being used (credit / acknowledgement / etc.)
- (Frank Winters) Parcel data is limited by the assessment data quality
- (Frank Winters) Map companies (Google, and others) are always interested in authoritative data and we have the connections with the companies to have those discussions; Creative Commons 0 is the right licensing term for New York address data, maybe look at publicly owned lands to start

**11:30    AGOL/ArcGIS Enterprise –** (Winters) roundtable discussion on member use of these platforms

Skipped due to time constraints.

**11:45    USDA NAIP upgrades** (Ruhren)

- Looking for interest for partnerships
- Imagery collection would be for leaf on (ex. peak growing season)
- Question posed to the group – USDA will pay for 60cm resolution; is there value in the state paying for and capturing 30 or 15cm
- The GIS Program Office can get 60 cm from NAIP and host it (NAIP won't host nationwide 60 cm yet due to file size)

**12:00    Break for lunch**

**1:00    911 chat** (Keith Ducett/Chris Rado)
Keith Provided examples showing the importance (and sometime the lack) of quality data.

- Boundary line concerns (PSAP, Emergency Service Zone, etc.)
- Commonplace/Landmark naming conventions between agencies
- Recreational trail challenges
- Waterway/lake challenges
- Highway challenges
- Alarm interfaces (ASAP)

**2:00    Meeting adjourned**