

PAIGH U.S. National Section (USNS) Monthly Meeting – June Meeting Notes

Tuesday, June 11, 2024

Meeting attendees: Jorge Bajo Sanchez, Josh Coutts, Emily Day, Erick Langer, Roger Payne, Ivan Ramirez, Paul Riley, Sergio Rodriguez, Diana Sinton, Charlotte Smith, Tim Trainor, Eric van Praag, Mike Shellenberger, Evan Ward

1) Welcome

- Paul welcomed everyone to the meeting and apologized that Deirdre was unable to attend.

2) USNS Leadership Vacancies

- Paul announced they have filled the vacancies for the USNS Vice President and Geophysics Committee Lead positions. On behalf of Deirdre, Paul congratulated Evan Ward, who will serve as the new Vice President.
 - Evan mentioned that nothing is more important than citizen diplomacy and the contacts that USNS members have established through PAIGH, that service comes down to what can be done for the organization, and that he is very excited to support and promote the work that the USNS is doing at the international level. He looks forward to working with everyone and thanks everyone for their support.
- Paul also congratulated Lidia Lopez for her role as the new Geophysics Commission Lead.
 - Lidia thanked everyone for their support and thanked the USNS for the opportunity to serve as a Commission Lead. As someone who studied both environmental science and geography in college, she looks forward to bridging the gap between physical geography, and human geography, and exploring emerging geospatial technologies.

3) National Geospatial-Intelligence Agency (NGA) work in Ecuador

- Paul invited Lidia and Mike Shellenberger to present a story map on the aerial imagery that helped Ecuador mitigate a massive erosion catastrophe. They had originally planned to present this during the USNS Annual Meeting on April 9-10, 2024, but were unable to.
- Lidia spoke on the opportunity that NGA had to work with Mike's team and the Oak Ridge National Laboratory to support an activity that was going to help the government of Ecuador and turned it over to Mike to give an overview of the project.
- Before getting into the presentation, Paul shared a video that NGA created detailing the project: https://www.youtube.com/watch?v=6U3beiF_uJ0.
- Mike shared a presentation, 'Project Condor: Mapping the Rio Coca in the Amazon Basin, Ecuador with small UAS.'
 - In February 2020, Ecuador's largest waterfall, San Rafael collapsed due to erosion. The erosion from the waterfall was approaching the Coca Codo Sinclair Dam which supplies 25-30% of the country's power.
 - Due to the location in the Amazon Rainforest, there was little to no satellite imagery.
 - The Ecuadorian government requested assistance from the U.S. government and received support from the NGA Warfighter Support Office as well as the Oak Ridge National Laboratory in mid-2023. The team used small, unmanned aircraft systems (UAS) to map the Rio Coca from the Coca Codo Sinclair Dam to 100km downstream within 12 days (see presentation for specifications on the UASs).
 - Through the project, the team collected 2TB of data, processed the data, and delivered accurate data to the Ecuadorian government.

- Overall, it was a successful mission with a lot of work accomplished in a short amount of time. Mike mentioned the outgoing ambassador has requested NGA to support a follow-up mission, which would allow his team to put together a change detection analysis. They are currently waiting on approval for the follow-up mission.
- Lidia added that the U.S. Army Corps of Engineers is working with a lot of U.S. governmental organizations, such as the U.S. Geological Survey (USGS) and the Bureau of Land Management (BLM) to provide support to the Ecuadorian government. She also asked Mike to speak on the human impacts of the erosion event.
 - Mike mentioned that the town of El Chaco, shown in the video, has a giant sinkhole right on the edge of the town and mentioned that if he gets to go down again, he does not expect that town will still be there in its entirety. While the effects of the erosion event cannot be stopped, they can be slowed down. Unfortunately, the erosion event has had catastrophic impacts on nearby villages and infrastructure, such as bridges, gas pipelines and hydroelectric dams.
- Paul mentioned that Ecuador is currently experiencing drought conditions and asked if a return to normal rainfall amounts would exacerbate the situation.
 - Mike answered that it would absolutely make the situation worse. There was a significant rain event at the dam approximately two months ago that caused an entire meter of terrain to erode in a single day. He mentioned if the weather is like what it was last year, then the worst is happening right now, but any significant rain event could change that.
- Eric van Praag complimented Mike and Lidia for a job well done and asked if there was an associated story map for the project.
 - Mike answered that while they have all the raw and processed data available, they have not yet ingested that data into grid or different NGA repositories. He did mention that the data is unclassified and that there is no reason they couldn't share it.
 - Lidia also mentioned that they did create a story map meant for internal distribution and would check with all the associated organizations to see if it is permissible to share the data with the public. Eric suggested it could be a great project to showcase on the PAIGH ArcGIS Online account.

4) Updates from the American Association of Geographers (AAG) Annual Meeting

- Paul invited Ivan Ramirez to brief the group on the AAG Annual Meeting held April 16-20, 2024, in Honolulu, HI.
- Ivan mentioned that the AAG was productive. He met Josh Coutts and Betty Smith from the Midwest Association of Latin American Studies (MALAS) in person and organized two undergraduate sessions focused on climate justice. There was also a Latin American session that he found interesting.
- Ivan suggested that USNS members attend next year, either virtually or in person, to present a session or two on the work that PAIGH and the USNS is doing. He suggested discussing and starting to plan for this in September/October and said he would be happy to co-lead it.
- Josh mentioned that he also valued meeting USNS members and discussing problems with them in person and agreed it would be a great opportunity to present on the work USNS is doing.

5) Updates to the USNS Website

- Paul invited Emily Day to show recent updates to the USNS website.
- Emily mentioned that the website updates are still a work in progress but was happy to showcase the changes that had been made.

- Instead of recent blog posts, the home page now has a description on what the USNS and PAIGH are and includes a sidebar with 'Latest News'/blogposts. All of the extraneous widgets (calendar, social media links, etc.) are now gone. There are plans to add in more graphics/images.
- There is now a dedicated Meetings landing page that includes links to annual meeting and monthly meeting notes from 2023-2024. The annual meeting pages also have presentations, photos, and meeting agendas. Emily was unable to locate materials from before 2023 and requested that if anyone has that information to let her know.
- There is also now a dedicated USNS Leadership page that will include a biography and head shot for each USNS leadership position. Emily requested that those in leadership positions provide a headshot and a brief (one paragraph) biography.
- There are plans to make edits to the Commission pages to include more current membership information as well as projects that USNS commission members are working on.
- Paul mentioned that he and previous Executive Secretary Lynda Liptrap have materials from before 2023 on a Google Drive. Diana Sinton confirmed that she has all meeting notes and agendas going back to 2014 on the Google Drive and is happy to send the information over. She also suggested getting approval to post the meeting notes from each monthly meeting on the website, saying in the past the USNS did not want sensitive information discussed in the meetings to be publicly available. Paul said that he and Emily would get Deirdre and Evan's approval before making the website updates public.
- Lidia mentioned there was a discussion at the annual meeting to set up an email distribution list and asked if that was going to be incorporated on the website. Emily answered that the email distribution list is something that will be addressed in the future and also mentioned a 'Contact Us' widget available in WordPress and suggested that the USNS could use instead. Emily and Paul will speak further about this topic offline.
- Paul asked that anyone with questions or suggestions send them to himself, Emily and Sergio Rodriguez.
- Erick Langer said he really liked the idea of posting publications to the commission websites and suggested we limit the number of them. Paul suggested it would be best to work one-on-one with the Commission Leads to get their thoughts and ideas on how to flesh out their pages.

6) Walk on Topics

- Paul announced the next monthly meeting will be July 9, 2024. Emily asked if that was during the Esri User Conference. Paul confirmed the conference is the week after the USNS monthly meeting.
- Lidia asked when the annual report is due this year. Paul said he plans to meet with Deirdre, Evan, and Emily to start setting up a schedule for the report.