**NTS GIS Network- Meeting Minutes**

**Tuesday, April 20, 2021, 1:00 pm Mountain Time (12pm PT, 2pm CT, 3pm ET)**

**MEETING AGENDA**

1. **Welcome & Introductions** (Ryan Cooper/Peter Bosnall/Kerry Shakarjian/Brian Deaton)

Meeting Attendees:

1. Peter Tomczik (presenter)
2. Katie Lyon (presenter)
3. Tiffany Stram - GIS/IT Specialist, Ice Age Trail Alliance, Cross Plains, WI
4. Elizabeth Becker - student
5. Tatyana DiMascio - USGS, National Digital Trails project
6. Galen Keily, Pacific Crest Trail Association
7. Matt Schulte, Santa Fe Trail Association
8. Anthony Tridente, USFS
9. David Fothergill – USFS Enterprise Program
10. Philip M
11. Charlynne Smith – NCSU, OVVI
12. Gita Urban-Mathieux – USGS National Geospatial Program
13. Elizabeth McCartney – USGS National Digital Trails Project
14. **Announcements & Information from Audience**
    1. [Esri User Conference](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fgo.esri.com%2Fe%2F82202%2F00aejLAAQ-aducp-event-body-cta%2Fn9szlt%2F829529512%3Fh%3DYSwna7xDkSN9N4L4UnTeWx_WMHUosQURNIjBv1Q1XDo&data=04%7C01%7Ckerry_shakarjian%40nps.gov%7Cb4129a9e44e049ac9ec908d8ddad1613%7C0693b5ba4b184d7b9341f32f400a5494%7C0%7C0%7C637503082772237144%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C1000&sdata=nKfNpLgi5qNHGIqyKyiN3hLW39qSK8GLrZO6LQqTehg%3D&reserved=0) (Virtual), July 12-15, 2021
    2. [PNTS Events page](https://pnts.org/new/events/)
15. **Discussion Topic**

Presenter: Peter Tomczik, U.S. Fish & Wildlife Service, Transportation Asset Management Coordinator

Katie Lyon, American Conservation Experience, USFWS National Trail Inventory Project Manager

Behind the Scenes of the FWS/ACE National Trail Inventory

In partnership with the American Conservation Experience (ACE), the U.S. Fish and Wildlife Service (FWS) Infrastructure Management Division is identifying, assessing, and updating every trail on 700+ National Wildlife Refuges, National Fish Hatcheries, and National Wetland Management Districts. The third cycle of the FWS National Trails Inventory began in 2019 and, although still in progress, the teams at FWS and ACE have learned many lessons along the way. Between Covid-19, historic blizzards, and more snakes than you’d think, there is much to discuss! The presentation will cover the need for the trail inventory, progress, and how the team is using GIS tools to plan and conduct the inventory.

**Notes:** *Presentation Notes based upon Powerpoint Notes and NTS GIS Network notes taken during the presentation*

* Peter Tomzik, We have a video recorded but wanted to do a brief introduction.
* Presentation Outline – Intro to USFWS and Wild life Service Trail Network, Exploring the Cycle 3 Trail Inventory, Detailing the American Conservation Experience Role, Discussing how USFWS and NTS Interact
* United States National Wildlife Refuge System - The Service is responsible for maintaining 568 National Wildlife Refuges, 38 Wetland Management Districts, and more than 70 National Fish Hatcheries.
* Hunting, Fishing, Wildlife Observation, Photography, Environmental Education, and Interpretation - Lots of different activities across FWS.
* Need to know where the trails are since there are so many activities. National Trails Inventory is essential. Purpose of the National Trail Inventory is too aggregate and document the status of almost 700 station’s individual Trail Networks. The Infrastructure Management Division of National Wildlife Refuge system is committed to public accountability of our trail network in two important ways.
  + First, by having a consolidated database of verified trails and trail conditions for public access and station management promotion.
  + And Second, by employing limited Federal Land Transportation Program funds as effectively as possible to ensure a safe and resilient Trail Network for years to come.
* American Conservation Experience (ACE) – non-profit providing environmental service opportunities to America’s youth.
* ACE EPIC Program - Emerging Professionals in Conservation – Individual and team based placement at agency locations.
* Trail Inventory Process
* How Trails are Identified – Various sources of data and documentation are compiled in order to give a listing of trails to check out.
* Trail Identification Meeting– Use staff knowledge, and ensure we have the correct trail identification
* Trails Inventory Field Visit – Location of trails and trail associated assets
* Trail ID Example Screenshot – Our web app allows for our field teams to verify information with the station staff.
* Challenges – field inventory started in August 2019 and the crews were pulled in March 2020 due to COVID19. Crews were sent out again in September 2020. Had to deal with other issues like blizzards and ice storms.
* GIS Tools for Planning – Using GIS tools to make field inventory the most efficient and anticipate the number of days.
* 13 NHT/NSC - across 35 National Wildlife Refuges and National Fish Hatcheries. There are 76 National Recreation Trails on Refuges and Hatcheries.
* Thanks, we can dive in and answer any questions.
* Katie – Next steps – We are a 1/3 of the way through all of the stations. 200 stations left to visit for the inventory. In the past there was just a first come first serve. Took all of the stations left and estimated field time associated with those stations and placing restrictions on the number of days. We used the route planner within ArcGIS Pro for more efficient routes to take for field inventory.
* How is the collection process done? We use Arrow 100 with Survey123/ ArcGIS Field Maps - Teams are collecting more accurate line data and is QA/QC and uploaded to FWS data for the trails. We have line data for trails/points for assets/and photos are also collected.
* Is the data differently corrected? Is the data corrected in real time or once back from the field. Need to look at the specifics for this info.
* ACE partners with federal partners, but also partners with Non-Profit Organizations – specifically trail construction. Contact Mark Loseth, ACE National Trails Specialist - mloseth@usaconservation.org
* Peter Tomzik – How do different trails/agencies deal with differing boundaries and how they are managed? Peter Bonsall – since we only administer, we are not responsible for the management. Peter Tomzik - that is usually how it is done. Kerry Shakarjian – When I managed the CDT GIS data, very small segments zig zagged across ID/MT state boundaries where the BLM managed the ID side and the FS managed the MT side. There was an agreement where BLM managed FS segments and vice versa to better manage sections as a group instead of in small chunks. Management is usually tied to funding which can also come from different sources.
* What was the reason for starting this project? Congressionally mandated to do condition assessments of trails. Do a 5 year cycle for the inventory of trails. Does the legacy data get used? Yes, the legacy data is the starting point and other datasets in order to determine if the it is a road or a trail.
* Kerry asked: Track Allowed Uses/Prohibited Use? – UFWS tracks allowed uses – hiking, biking, etc. Trying to figure out how to track water trails. Water trails and snow trails are kind of tricky since there isn’t an actual trail on the ground. Use unconstructed trails for these types of trails. Cannot track costs with these. Trying to track accessibility is also difficult along trails.
* Kerry asked: NPS has not added accessibility for trails and don’t have trail accessibility criteria easily available. Accessibility is a judgement call in the field and worried that we would get that wrong. How does FWS handle this? FWS only make a note about information concerning accessibility, such as signs, and is not making a call in the field on whether it is accessible. Just getting information concerning trail surface and slopes etc.
* Peter Tomzik – Trying to streamline our processes and working with newer GIS technologies to integrate into FBMS.

1. **Future Meeting Dates & Topics**
   1. **May 18, 2021** - Looking for presenters!
   2. **June 15, 2021** - Looking for presenters!
   3. **July 20, 2021** - Looking for presenters!

**We always welcome suggestions for additional topics for discussion or presentations. Please contact us with your suggestions using the email below.**

**NTS GIS Email Address:** [ntsgis@nps.gov](mailto:ntsgis@nps.gov)

**NTS GIS Network Email List:** [ntsgis@webmail.itc.nps.gov](mailto:ntsgis@webmail.itc.nps.gov)

**NTS GIS Network Website:** http://pnts.org/new/national-trails-system-gis-network/

**NTS GIS Network Mission:**

*We established the NTS GIS Network as a way to connect the diverse array of National Trails System staff and partners who use GIS systems and products in their work. One of our goals is to facilitate the sharing of information and tools that help us do our jobs more efficiently and innovatively. Because the national trails system is managed as a collaboration of agencies and partner organizations, the NTS GIS Network is open to anyone.*