

NTS GIS Network- Meeting Minutes

Wednesday, February 19, 2020, 1:00 pm Mountain Time (12pm PT, 2pm CT, 3pm ET)

MEETING AGENDA

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

Meeting Attendees:

1. Haden Macbeth, Florida National Scenic Trail, FSU Graduate Intern (Presenter)
2. Peter Bosnall - National Trails System Program Specialist, NPS (moderator)
3. Kerry Shakarjian - NPS Alaska Region GIS Specialist (moderator)
4. Brian Deaton – National Trails GIS Specialist (moderator)
5. Becky Blanchard -
6. Brenda Yankoviak – USFS Continental Divide NST Administrator
7. Brigitta Urban_Mathieux
8. Charlyne Smith - NC State University, Overmountain Victory NHT
9. David Fothergill - USFS Enterprise Program
10. Denise Wesley - GIS Manager for the Trinity County Resource Conservation District (TCRCD)
11. Elizabeth McCartney – National Digital Trails Project Manager, USGS
12. Gita Urban-Mathieux - USGS/NGP Federal Liaison
13. Greg Matthews
14. Kevin Keeler
15. Matthew Rowbotham - GIS Coordinator, North Country Trail Association
16. Megan Wargo - Director of Land Protection for the Pacific Crest Trail Association
17. Shawn Thomas - Florida NST USFS
18. Valerie Bader
19. Brye Lefler
20. Rick Gmirkin -

2. Announcements & Information from Audience

- a. [ESRI Users Conference, San Diego, CA, July 13-17, 2020](#)
- b. [Oregon-California Trails Association Symposium, Yuma, AZ, February 21-23, 2020](#)
- c. [Professional Trail Builders Association Sustainable Trails Conference, Bentonville, AR, March 15-21, 2020](#)
- d. Other Announcements?

3. Discussion Topic

Presenter: Haden Macbeth, Florida National Scenic Trail, US Forest Service Southern Region, Florida State University Graduate Intern

Trail Gap Analysis - Using Priority Parcel Modeling

During this call, Haden, will present work on a GIS model that can be used to evaluate parcels within trail gaps based on reroute criteria established in the Florida National Scenic Trail Comprehensive Plan.

Notes:

- GIS model for land acquisition decision making for trail rerouting
- Florida NST administered by USFS
- Model analyzes parcels based upon planning criteria
- Land cover, future conservation acquisition
- 400 miles not located on suitable land, close gaps by rerouting trail to suitable lands part of strategic plan
- Florida NST created various planning documents and data to guide land acquisition planning, documents are out of date and may not cover all possibilities – built trail atlas to be up to date
- Built a descriptive model for aspects of land acquisition process – used ArcGIS Pro model builder
- Model used for simplified representation of complex reality – very cautious for selecting criteria for model
- Determine quantitative data meet the needs of the atlas and criteria formed the foundation of the model
- Looked to existing planning docs for criteria

- Corridor Location review process – 15 different criteria, tech limitations, data availability 4 criteria used – biodiversity, public conservation land, altered landscape, impact to land owners
- Use non-private land
- Model needed to make sure it could incorporate updated data and reliable data
- Data sources: cooperative land cover, conservation lands, Florida forever – state proposed lands for conservation, parcel data – state of Florida
- Meaning to land cover data – 246 different land cover types – ranked land cover types 0-4
- Answer key questions
- Percent of each parcel comprised of each of the land cover rankings – Rankings of percentage
- Proximity analysis used to create ranking of proximity to Florida Forever Parcels
- Create ranking based upon proximity to conservation lands
- Model creates suitability data for reroute – parcels that are the most suitable for trail reroute
- Also developed another model using land ranking – displays percentage of each land cover rank, compare trail segments to each other
- Trying to look at big picture while using the intricate model – allows for the team to think more clearly with the decision making process for trail reroutes
- Took a long time to develop the model
- Questions:
 - Land cover data is specific to Florida
 - Could expand the model to utilize data for other locations
 - This same methodology could be used across other NSTs and NHTs.
 - Least cost path analysis was not used, but it could be incorporated. Parcel data was leading the analysis. Other criteria could be built into the model.

4. Future Meeting Dates & Topic

- a. **March 17, 2020** - Looking for presentations!
- b. **April 21, 2020** - Looking for presentations!
- c. **May 19, 2020** - Looking for presentations!

We always welcome suggestions for additional topics for discussion or presentations. Please contact Ryan Cooper, Peter Bonsall, Kerry Shakarjian and Brian Deaton with your suggestions using the email below.

NTS GIS Email Address: ntsgis@nps.gov

NTS GIS Network Email List: 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.