Nature's Network: Your Local Treasure – Our Landscape Posterity from Maine to Virginia

Session 2B – Hunt Room
2017 RCP Network Gathering

Speakers: Brian Hall, Michale Glennon
Moderator: Scott Schwenk

Introduction to Nature's Network – Scott Schwenk, Science Coordinator, North Atlantic Landscape Conservation Cooperative (NALCC), USFWS

- The places you care about in your community are part of a larger, interconnected landscape. This project highlights how local work adds up to something bigger
- Nature's Network is a network of places and a network of people. It is a voluntary strategy for protecting the future.
- NALCC is a partnership working across the region including agencies, NGOs, and scientists
- We're taking this big landscape and identifying the most important areas for conservation.
- This can complement local data and priorities--we're adding an additional perspective on how your local places and information fits into a bigger picture.
- We can accomplish more by working together! Let's align objectives to leverage resources.
- The evolution of Nature's Network:
    - 2006: Regional Conservation Needs program was initiated by northeastern state organizations
    - 2011 Northeast Conservation Framework was agreed upon in Albany
    - 2014: Nature's Network (formerly known as RCOA) begins
    - 2016: Pilot project was tested in the Connect the Connecticut Conservation Design Pilot
    - 2017: Announcement of Nature's Network rolled out and working with partners to start implementing
- The team has 30 scientist members, plus contributions from many organizations
- Nature's Network website is: naturesnetwork.org
- There are four major components of Nature's Network
    - Terrestrial habitats
    - Imperiled species
    - Aquatic habitat
    - Connectivity
- These components are summarized in a layer called conservation design, which is a top-level, entry point - like an atlas
- Terrestrial Habitats:
    - Identifies intact, resilient examples of every major ecosystem type.
- Imperiled Species:

    - The most important places for imperiled species of fish and wildlife as designated by state fish and wildlife agencies
- Aquatic Habitat:
    - Complement to the terrestrial habitat areas. Includes intact, resilient examples of each stream class and type of lake and pond
- Connectivity:
    - Areas that ensure wildlife, fish, and plants access the ecosystems on which they depend
    - Includes connectors between core areas, regional flow patterns from TNC, and analyses of where coastal ecosystems will move
- This is all integrated into the "Natures' Network Conservation Design" map
- From the maps and data, there are several tools:
    - Prioritization tool to identify opportunities
    - Map viewer and download-able data
    - Supplemental landscape data including the data that went into the models that can be used on their own or as part of the bigger package
- Think of it as a network of information
- There is documentation for each project, including a quick-start guide and detailed technical reports
- On the Data & Tools page on the website, "See the big picture" link brings you to the map viewer
- Nature's Network is not only a network of places, but a network of partners, scientists, implementers, and habitats

Questions and Discussion about where RCPs are in the Planning Process – Brian Hall, GIS Researcher and Ecologist, Harvard Forest and Highstead

- The analyses were done in raster format, but the top level "cores and connectors" product is a vector dataset
- This is closely related to the Designing Sustainable Landscapes dataset from UMass Amherst but with additional data sources
- This does not include social data, but it may be used in conjunction with other social datasets
- Has potential to bring together key datasets
- How did you connect with state/local data – how can it evolve over time? How tied is it to state heritage datasets, etc?
    - We brought in rare natural communities and species locations as mapped by the natural heritage programs
    - We're hoping that different states and communities can combine and bring in their own data
    - This won't necessarily be continually updated with state datasets, but there is hope over time to put out additional editions
- Is there interpretive data that goes along with the maps?

    - There is good documentation to help people interpret the information. The web viewer is easy to use and is very helpful once you know what the data is saying. The quick-start guides provide a good introduction.
- Nature's Network has held half-day or full-day training workshops and is available to lead more
    - Can come into regions and put on trainings for local land trusts, etc.
- You've included imperiled species, how about exemplary viable populations of species that are not yet endangered? Can we protect them before it's a crisis?
    - They are already included because we are identifying the most intact, best cores of each habitat type – this should protect areas from each habitat in order to "keep common species common"
- What about urban wildlife and urban corridors?
    - We don't want to completely cut out urban regions from this discussion, but these datasets don't capture this information. That might be the next stage – adding on important areas in urban riparian corridors, etc.

Applications of Nature's Network in the Adirondacks – Michale Glennon, Director of Science, Adirondack Program of the Wildlife Conservation Society

- Michale is from the Wildlife Conservation Society and has been part of the team participating in this process with the NALCC
- These are examples that use this data, but that pre-date this packaging of this data and this name of "Nature's Network." They use the components, and could potentially be improved by using the packaging of Nature's Network
- There are examples on the scale spectrum from 30,000-foot vision to single project sites, and on the spectrum from planning & prioritizing to policy reform
- Examples:
- Wildlands Network – recently released a report and map called Mapping a Habitat Network for Eastern North America: Pathways to Half Earth
    - Set goals at 50%, covers all of eastern North America
- Scenic Hudson – comprehensive mapping and prioritization through Marxan for the Hudson Valley. Leverages partnerships in the whole region.
- Lake George Conservancy and other local land trusts – determined focus areas in the region. Doing both land protection and private land partnership program to enlist landowners to do ecological monitoring.
- Municipal Scale:
    - Land Use Planning Tools for Municipalities in New York State – received a grant to enhance conservation planning at the municipal level. They picked 10 datasets and packaged them up as a 'gallery' on Data Basin for just NY. Also uploaded tools (explanations of maps) and Conservation Profiles
    - Conservation Profiles were case studies for 10 municipalities in New York that explained how to go about using the data through examples. Elevated the special and unique features of each town.
- Individual Parcel level:

    - The Boreas Tract – the last of a series of tracts in the Adirondacks owned by a paper company which has been purchased by TNC and is becoming part of the state forest. There are many classifications that state forest tracts can be – the biggest distinction is between wilderness (no mechanized recreation) vs. several other classifications, and there was a big debate over this.
    - Did a deep dive into this particular parcel, by comparing this parcel to other parcels in the state forest. Was able to show how this parcel compared to other parcels, and could show that it was similar to other parcels that were classified as wilderness
- Policy Reform
    - Conservation Design Bill: Amend the Adirondack Park Agency Act to require Conservation Subdivision
        - This bill was introduced in the house, and has a large coalition of people trying to draft the bill in a way that has support from all sides.
    - Adirondack Park Agency is using Nature's Network to reform the Application for Large Subdivisions so that developers for big subdivisions come in with a conceptual design that already identifies important features and has considered these things before they've completed their lot lines and designs

Further Examples of RCPs in the context of Nature's Network – Brian Hall

- Webmap link: http://arcg.is/1mGP4C – can look at the data for yourself!
- Looking at example maps – can separate out "core" areas and "connectors" that allow plants and animals to move around the landscape in a network
    - Can use the data to look at core areas for imperiled species, even in urban areas
- Example: MetroCOG in southern CT. It's a very urbanized area.
    - The Fairfield County RCP did their own conservation map, which prioritizes a lot of areas within the region. Those towns don't have a lot to offer at the "mega-region" scale of Nature's Network, but do have a lot of locally important areas.
    - However, there are certain small areas that show up as Nature's Network core areas that were not identified in the FCRCP map. We can take a closer look at those and decide whether to prioritize them. This can help identify connectors that local maps didn't identify.
- When you're comparing this data to your own data:
    - Are we already including this data?
    - Do we care about what we're missing?
    - How do our local priorities match up with regional priorities?