

New Jersey Open Space and Farmland Preservation Coordinators'

Roundtable Discussion

Friday, April 19, 2013

9:30 AM to 2:00 PM

Presentation: NJ Statewide Habitat Connectivity Plan

Gretchen Fowles, NJDEP, Division of Fish and Wildlife

Gretchen provided an overview and update of the state's Habitat Connectivity Plan currently under development. The plan focuses on two major concerns: 1) what kind of habitat areas do animals need to move feed, forage and reproduce? And 2) what are the barriers to animal movements between and among habitats?

New Jersey suffers from severe habitat loss and fragmentation and also has a dense network of roads. Road volumes greater than 10,000 vehicles per day are generally impermeable to wildlife. Gretchen showed how animals like bobcats that traditionally require large ranges to feed and find mates, are hindered in their ability to move around the state by these types of roads.

Thirty-one states have developed or are currently working on habitat connectivity planning. NJ's plan will recommend opportunities to conserve, restore and connect habitat.

Major conservation actions include:

1. Preserve corridors
2. Restore and maintain habitat
3. Mitigate road barriers

The full working group for the plan consists of 100 members divided into 3 teams.

The plan will identify where corridors intersect roadways and identify ways to make those roadways more permeable. Examples include sizing and designing culverts to meet the needs of aquatic and terrestrial species. Other examples include amphibian tunnels (i.e., smaller passages designed expressly for amphibian species), barriers and fencing to direct animals to a structure, and installing gabion baskets in wet culverts to provide passage above the water line for terrestrial species.

Benefits of the plan include:

- Wildlife population recovery and sustainability
- Maximize return on open space and conservation investment
- Increase permit efficiency and cost savings
- Increase driver safety

The team is working with TNC and UMass to create a single, comprehensive crossing structure database (including evaluations of effectiveness for existing culverts) for the state and they are working with NJIT to create engineering plans to improve existing crossing structures and build new ones. The wildlife guardian project will identify hot spots for wildlife mortality and crossing activity.

The state is launching an app to collect roadkill validation data.

Pre and post construction monitoring is an often overlooked (or under-funded) element in building and maintaining crossing structures. Even the Route 78 overpasses, which are some of the state's highest profile crossing structures, weren't monitored. All projects going forward will have post-project monitoring.

Presentation: Open Space Institute's Preservation Programs in New Jersey and Pennsylvania

Bill Rawlyk, Open Space Institute

OSI's works in conservation finance and facilitates land deals through lending and grants in PA and NJ. Bill presented on three programs: the Bayshore-Highlands Fund, the William Penn Foundation's new watershed priority areas, and the Doris Duke climate resiliency program.

Bayshore Highlands Fund

The Bayshore-Highlands (B-H) Fund began with \$5 million from the William Penn Foundation and an additional \$1 million from OSI. The fund required 5 to 1 leverage for the Foundation's original \$5 million investment, for a total investment of \$30 million in land preservation.

The B-H Fund was set up to help the Foundation focus their money on specific landscapes (focus areas) instead of simply distributing money on the basis of where land trusts happened to be working. Working together, the Foundation and OSI developed and prioritized focus areas. The original focus areas, which encompassed 800,000 acres in two states, were reduced in size to 400,000 acres based on additional land use analysis.

To date, the B-H Fund has approved 38 projects, totaling over 3,600 acres valued at \$24 million. Three million dollars have been committed and \$2 million remain in the fund.

How did they develop priorities?

The original focus areas drawn by the Foundation were refined based on factors like species habitat density and other ecological values. Overall, most focus areas encompass lands of high natural value, though some encompass areas of concentrated farmland, like the area around Mannington Meadows.

Projects were prioritized based on proximity to Landscape Project habitat and existing preserved land. Other important criteria included leverage, timing (property availability), clusters of activity, and the capacity of land trusts.

For the Bayshore, the Cohansey and Maurice focus areas were the big winners in terms of the number of deals. Other areas, like Mannington, have a lot of potential, but the timing was off.

Accomplishments of the fund include: Coordination between land trusts and state and county funders. Aligning priorities among multiple parties. Leveraging Salem and Cumberland County money. Getting Salem and Cumberland to prioritize projects and apply for Green Acres money for the first time. Encouraging munis in the Cohansey River focus area to apply for Green Acres funding.

William Penn Foundation Watershed Strategy

The foundation is putting all their conservation resources toward watershed protection in the Delaware River Basin. Originally, Penn was going include the Chesapeake Bay, but in the end chose not to.

Penn is investing in *both* watershed protection and restoration, and they are trying to generate a good baseline of water quality data to inform their efforts.

The National Fish & Wildlife Foundation is going to be a partner in their restoration work.

The foundation has identified a number of specific sub-watersheds in which to do restoration and protection, and they are using a 3-pronged approach – agricultural improvements, policy, and preservation.

Penn is looking for a strategy to get high-quality results and they've engaged NJCF to help them establish priorities. The land trust community is being asked to provide Penn with an agreed upon set of priorities.

Doris Duke Climate Resiliency Program

The Climate Resiliency Program assesses what areas are most important for ecological resiliency in the face of climate change. The program looks at these questions: What areas can protect biodiversity through climate change? What are climate resilient places?

A resilient landscape is diverse and complex. It has a diversity of geology, topography and micro-climates. It is large and interconnected. These factors create a greater capacity to adapt.

Bill presented many maps that showed the results of the analysis. Areas with the highest resiliency scores were the large, unfragmented, wooded landscapes with lots of elevation change, such as the Adirondacks, the Maine North Woods, and the PA Wilds. The NJ Highlands and the Pinelands also had high scores.

Land trusts can use resiliency science and mapping to inform their priorities and will play a big role in protecting those areas that are most critical for insuring resilient ecosystems/landscapes.

Presentation: Rowan University's NJ MAP Agricultural Preservation Toolkit

Prof. John Hasse, Rowan University, Director of Environmental Studies

Professor Hasse reviewed NJ MAP and talked about how the Ag Preservation Toolkit built on that platform to create user-friendly, web-based maps using a set of pre-determined themes.

The tool currently includes four themes:

1. Land use change
2. Landscape project habitat
3. Agricultural preservation
4. Impervious surface

Each theme calculates the rate of change for different factors (i.e., developed land, agricultural land, wooded land, etc.) over a set of pre-determined timeframes that correspond with NJ's land use/land cover mapping.

Professor Hasse demonstrated the tool, which confirmed, with the use of underlying aerials, that low density development has been the story of recent land use change.

The tool also illustrates trends in farmland loss and preservation. The tool is freely available to the public and displays maps, charts and data by municipality.

Presentation: DVRPC's Long Range Plan Update – Connections 2040

Mike Boyer, DVRPC, Manager of the Office of Long Range Planning

The long-range plan is everyone's plan, not just DVRPC's plan. DVRPC looked at a whole suite of indicators to track progress since previous iterations of the plan. Most indicators did not move much, positively or negatively, because of the economic downturn

The region did well in open space preservation with a 16% increase overall; Gloucester County saw a 51% increase.

The land use vision includes a Greenspace Network that has over a 100 named corridors as well as rural areas targeted for land preservation. Where these areas have a unique identity, they have been branded as Conservation Focus Areas.

A key theme of the plan is that development should be concentrated in existing and new centers, that feature a mixed-use, walkable development pattern and densities that are greater than the low-density development that has become the norm. Centers are identified on the Center's map

In addition to Protecting the Environment and Creating Livable Communities, other plan principles include Building the Economy and Modernizing the Transportation System.

A big problem in transportation is that we don't have enough funds to maintain the system. According to the plan, our needs are much greater than our resources. One reason is that gas tax revenues are going down, because fuel efficiency has increased, but the gas tax has remained flat. Alternative sources of revenue need to be found, and the plan describes a number of these, such as a Vehicle Miles Traveled user fee. Compared to peer cities, we don't spend much local \$\$ on transit. Over the life of the plan, we have a \$75 billion funding gap.

Mike directed the audience to Choices & Voices <http://www.dvrpc.org/choicesandvoices/> a DVRPC web portal designed to allow the public to provide input on land use and funding for the long-range plan. Choices and Voices allows users to see the how different land use scenarios and funding strategies would affect the future of the region.