

Biodiversity and Energy Online Mapping

About the layers

Layer: Floodplain Complexes

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Layer developed by: The New York Natural Heritage Program

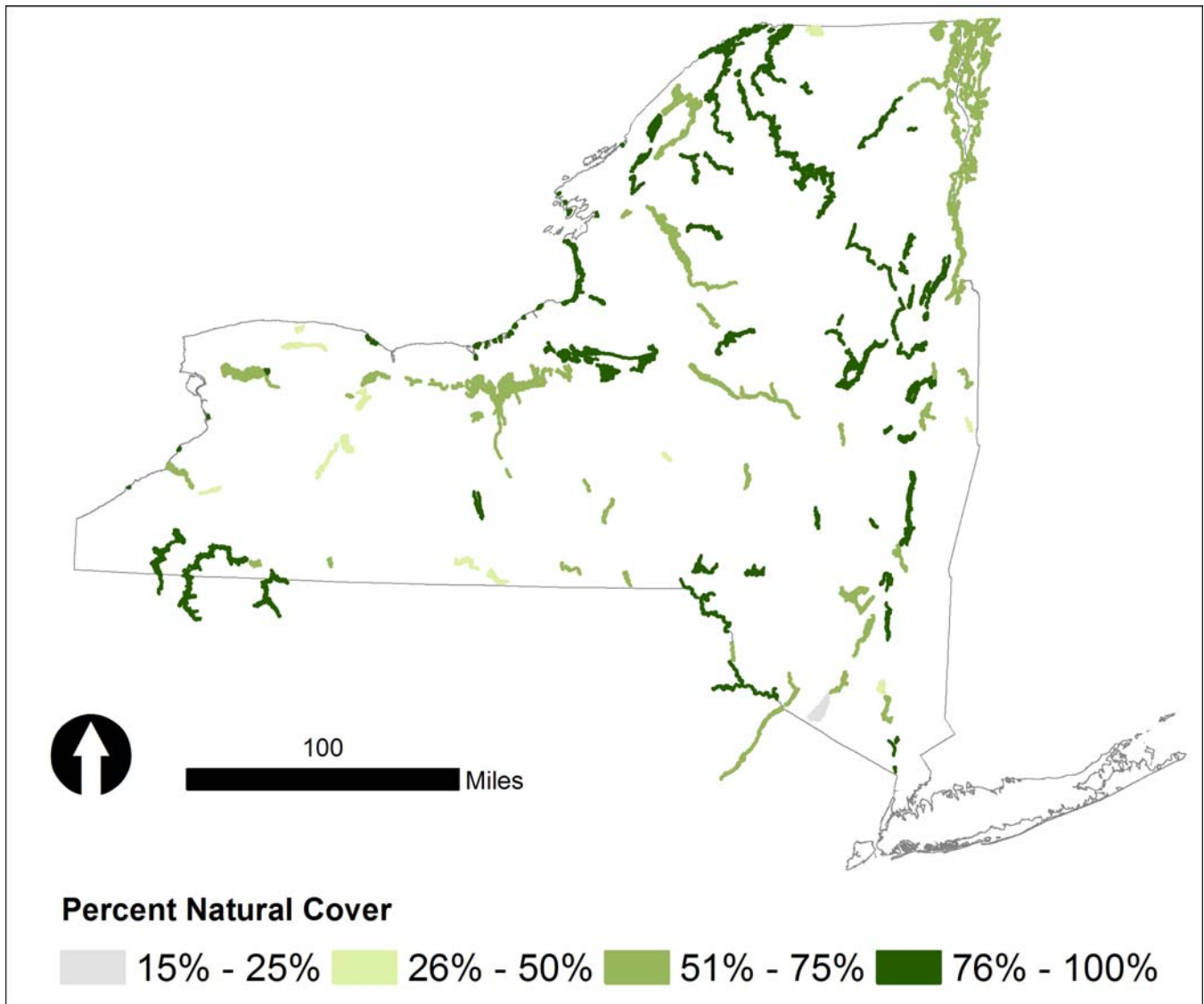
Short Description: This layer depicts floodplain cores and corridors along the larger streams in the state. Floodplain cores are contiguous areas of natural cover greater than 150 acres within the Active River Area. Floodplain corridors are undeveloped and natural lands within the same stream reach or adjacent to these cores.

Why this layer matters: Intact floodplains help absorb floodwaters to minimize the effects of flooding downstream, help filter excess contaminants and sediment from streams, and, with trees lining the stream, help maintain cooler stream temperatures for the benefit of stream organisms.

Source: The New York Natural Heritage Program developed this layer in collaboration with The Nature Conservancy as part of their Freshwater Blueprint project for New York (White *et al.* 2011). This concept was developed by The Nature Conservancy for the Delaware Assessment (Fanok *et al.* 2010). The Delaware River Basin Integrated Landscape Team (Delaware Team) worked with The Nature Conservancy's Southern Resource Office to link the Active River Areas (ARAs) to the Northeast Aquatic Habitat Classification (NEAHC) dataset, each developed by The Nature Conservancy's Eastern Conservation Science Office. We followed the Delaware Team's methodology for floodplain analysis.

Processing Overview:

1. Identify contiguous patches of natural land greater than 150 acres within the Active River Area (ARA; http://www.floods.org/PDF/ASFPM_TNC_Active_River_%20Area.pdf) of medium and large rivers. These are the floodplain cores. Natural cover was determined from the following classification types from EPA's National Land Cover Data (NLCD) from 2001: Deciduous Forest, Emergent Herbaceous Wetlands, Evergreen Forest, Mixed Forest, Shrub/Scrub, and Woody Wetlands.
2. Floodplain corridors were created by identifying all natural and undeveloped land along a stream reach that contains a core and natural and undeveloped patches greater than 100 acres adjacent to a core. Undeveloped cover was determined from the following classification types from EPA's National Land Cover Data (NLCD) from 2001: Open Water in tributaries or the ARA riparian zone, Cultivated Crops, and Hay/Pasture.
3. Floodplain corridors and cores were then merged to create floodplain complexes. Each was attributed with the percent natural cover to better quantify differences in quality among the complexes.
4. For additional details, see (White *et al.* 2011).



Literature Cited:

- Fanok, S., M. DePhilip, E. Creveling, M.-B. DeLucia, and T. Moberg. 2010. A freshwater conservation assessment for the Upper Delaware River Basin: Floodplains, headwaters, wetlands, and freshwater conservation areas. The Nature Conservancy's Delaware River Basin Integrated Landscape Team. 27 pages.
- White, E. L., J. J. Schmid, T. G. Howard, M. D. Schlesinger, and A. L. Feldmann. 2011. New York State Freshwater Conservation Blueprint Project, Phases I and II: Freshwater Systems, Species, and Viability Metrics. The New York Natural Heritage Program, Albany, NY. 85 pages. Available at: <http://nynhp.org/FBP>.