

Protecting New Jersey's Ecosystems



The New Jersey Conservation Blueprint empowers local communities, land trusts, open space committees, planning boards and others to strategically protect our natural and cultural resources. The Blueprint's four maps prioritize sites in N.J. for Ecosystems, Farmland, Community Green-space and Water Resources; the maps are free for all users on

www.njblueprint.org. The maps contain the most complete list of natural resource data for making decisions about where to protect land in New Jersey.

 **Flip over**
the page for more details.



New Jersey is rich in iconic landscapes. From our globally renowned Pine Barrens to barrier islands and coastal marshes, from sandy Atlantic and Delaware Bayshore beaches to the forested hills where the Appalachian and Highland mountain ranges converge. These habitats support a wide variety of plants and wildlife, like state-endangered bobcats and the iconic horseshoe crab and shorebird migrations.

These forests, rivers and coastal habitats are also critical for us, its residents, by filtering our air, providing clean drinking water and flood protection and an ever-expanding recreational canvas.

There is a long history of land conservation in New Jersey, we are a national leader in protecting our natural and cultural resources. As we approach the final few decades of conservation before New Jersey reaches buildout, we must complete the work of ensuring a natural legacy for future generations.

New Jersey's leading environmental scientists developed the Conservation Blueprint to prepare for the next phase of land conservation. The resulting product is the Ecosystems to Protect Map. We used the most timely data on water, rare species, habitat connectivity and climate resilience to identify places for protection. We want you to join us in shaping New Jersey's future!

THE ECOSYSTEMS TO PROTECT MAP IS MADE UP OF FOUR MAIN PARTS:

WATER RESOURCES

Our state's future depends on healthy and plentiful freshwater resources—like wetlands, rivers, lakes, streams and aquifers—for drinking water, recreation and wildlife habitat. When prioritizing water resources to protect, we considered:

- Places that contain the headwaters (sources) of our rivers and streams
- Presence of floodplains, the natural areas along our rivers that absorb and filter water
- Regions with low percentage of development (impervious surface)
- Areas with high potential to filter surface water into aquifers (ground-water recharge)
- Presence of wetlands

Snapshot of the Water Resources data

HABITATS FOR RARE SPECIES

New Jersey is home to more than 100 endangered, threatened and special concern species including mammals, reptiles, amphibians, resident and migratory birds, fish, freshwater mussels and rare plants. Their existence—and their role within the greater ecosystem—depends on the protection of their homes and habitats. To rank rare species importance in the Ecosystems map, we considered:

- Presence of habitat for high numbers of unique species
- Natural areas that contain small temporary pools (vernal ponds) for amphibians
- Sites that support rare plant and animal species (identified by the NJ Natural Heritage Program and NJ Landscape project)
- Natural areas ranked by habitat condition

Snapshot of the Habitats for Rare Species data

CLIMATE CHANGE RESILIENCE

Climate change-related sea level rise, worsening storms and increased flooding is already a challenge to New Jersey's natural and human environment. To bolster our resilience, we need to protect natural flood-absorbing areas near our cities and towns, and safeguard places where natural communities, wildlife and plants can adapt and move in the face of climate stresses. To incorporate resilience into the Ecosystems ranking, we considered:

- Natural areas that allow the most flexibility for animals and plants to move
- Areas that provide space for tidal marshes to migrate inland in response to sea level rise
- Landscape regions of potentially concentrated wildlife and plant movement

Snapshot of the Climate Change Resilience data

HABITAT CONNECTIVITY

Mammals and other wildlife need to roam to find food, water, shelter and mates. Their survival depends on large areas of suitable "core" habitat connected by natural movement "corridors," and so protecting and maintaining those areas is paramount. To emphasize wildlife connectivity needs in the Ecosystems ranking, we considered:

- Large areas of natural habitat (cores)
- Areas that link cores (corridors)
- Natural habitat of regional importance for connectivity

Snapshot of Habitat Connectivity data