

## **Meeting Federal Requirements Now and in the Future**

As with the 2017 Plan, the 2025 State Wildlife Action Plan must meet a set of federal requirements overseen by the U.S. Fish and Wildlife Service. Specifically, every plan across the country must address eight key elements.

The 2025 comprehensive review uses the [2022 Northeast Lexicon](#) in all Elements. While not all data fields were used, New Jersey considered all recommendations. It also continues to follow the [NAAT 2004](#) guidance.

### **Information on the distribution and abundance of wildlife species (Element 1)**

The State Wildlife Action Plan identifies 614 animal and 128 plant species that are New Jersey's Species of Greatest Conservation Need (SGCN). SGCN are defined as having small or declining populations, are at-risk, and/or are of management concern. In 2025, New Jersey's list of SGCN includes amphibians, reptiles, birds, mammals, marine and freshwater fish, invertebrates (including pollinators), plants, and fungi. Plants and fungi are new for the 2025 New Jersey plan.

Following the 2022 Northeast Lexicon SGCN data fields, the SGCN list was developed by evaluating all of New Jersey's native wildlife species using standardized conservation criteria at the state, regional, national, and global scales. Each taxonomic group includes the best available data, such as reports and plans that listed or ranked at-risk species on a variety of vulnerability factors. New Jersey used the Integrated Taxonomic Information System (ITIS) Taxonomic Serial Number (TSN) for all SGCN.

**2025 UPDATE:** New Jersey used the same process to select SGCN as was approved in the 2017 plan, incorporating data fields from the 2022 Northeast Lexicon. Data sources and criteria were updated and a species meeting one or more of the assessment criteria was added to the SGCN list. That list was reviewed by taxa experts in a fatal flaw analysis, and any change of the screened classification required justification. New Jersey Fish and Wildlife (NJFW) employed transparent, standardized justifications for moving a species from one SGCN category to another including removing a species from the SGCN list. See [Appendix A](#) for sources, criteria, and justifications.

The New Jersey DEP Natural Heritage Program worked with a Rare Plant Technical Advisory Group to select a subset of 128 species from NJ's 365 state endangered plants, federally listed plants, and globally imperiled plants and fungi to include as SGCN in the SWAP. Plant sources are found in [Appendix A1](#).

**Change in 2025:** In 2017, New Jersey identified 107 focal species to elevate as priorities to focus our collective conservation work. In our 2025 Plan, New Jersey moved from a species-specific approach to a habitat-focused approach.

To prioritize species based on need, SGCN are assigned to one of three categories. Collectively, all the categories are called SGCN.

Species of Greatest Conservation Need (SGCN): Native species with declining populations or vulnerabilities expected to benefit from strategic conservation attention. They total 262 animals and 105 plants.

Regulated Species of Greatest Conservation Need: SGCN species that are on the [New Jersey regulatory list](#) with a status of endangered, threatened, or special concern, or are listed or proposed for listing by the USFWS. These species are considered priority SGCN. They number 221 animals and 0 plants.

Data Deficient Species of Greatest Conservation Need: Species for which more information is needed to fully understand status and trends to determine the level of conservation concern or SGCN status. They total 131 animals and 23 plants.

All 221 regulated animal SGCN, and all 128 plant SGCN, will have species profiles on the NJDEP Fish and Wildlife SWAP website to increase engagement and accessibility for users.

New Jersey Fish and Wildlife's Connecting Habitat Across New Jersey (CHANJ) project identified 72 species of wildlife SGCN facing the greatest risk from road effects, including higher mortality and increased risk of genetic isolation. For these species, it is crucial to focus on actions that improve landscape permeability and preserve intact connections between habitats, to allow animals to safely travel between habitats to meet breeding, foraging, and sheltering needs.

For a complete table of all SGCN sources and screening CLICK [HERE](#). To see a simplified list of SGCN and their category, visit our webpage [HERE](#).

## **Descriptions of locations and relative condition of key habitats and community types (Element 2)**

New Jersey's Wildlife Action Plan uses a relatively coarse habitat classification to determine 19 key habitat types. These 19 habitats are slightly different from the habitats used in the 2022 Northeast Lexicon, so NJFW cross-walked the two versions of habitat types (including recommended habitat modifiers) to ensure New Jersey's habitat types can be integrated into the Northeast SWAP database ([Habitat definitions and modifiers](#)).

**Change from 2017:** New Jersey is no longer using Conservation Focal Areas (CFAs). Instead, we focus on nine regions to describe habitat locations and three new mapping tools to describe relative condition within each region. We made this change because the CFAs are challenging to update, the revised regions allow users to determine the places of interest using the maps with regional boundaries, and the mapping tools use existing, publicly available data layers. The Ecological Priority Model map, managed by Rowan University, uses existing map layers to prioritize habitat across the state.

**Update from 2017:** The 2017 SWAP divided the state into six regions. In the 2025 SWAP, New Jersey is divided into nine landscape regions: Kittatinny Ridge, Kittatinny Valley, Highlands, Piedmont, Inner Coastal Plain, Pinelands, Atlantic Coast, Delaware Bay, and Marine (which is exclusively aquatic). The first eight regions are each characterized by landforms, soils, vegetation, and hydrological regimes that collectively support distinctive

habitats and plant and animal communities. This change was made based on input from users and to better reflect the differences in landforms and habitats as recommended by the **Northeast Lexicon Framework**. See **REGION MAP** and check out our **REGION** page for detailed descriptions of each region including associated maps depicting condition.

#### **New in 2025 - Ecological Priority Model map, Spring 2020 – Version 3**

Ecological Priority Model mapping (EcoMap) is the product of a partnership spearheaded and managed by Rowan University. This map represents lands that are the most ecologically important in New Jersey and includes detailed, publicly available data across four broad ecological indicator categories: water, rare species and natural communities, climate change resilience, and habitat connectivity. The priority layer illustrates lands that are critical to protect to maintain the ecosystems of New Jersey.

Each region has the Ecological Priority map clipped to region boundaries, highlighting ecologically important areas within.

Citation: Conservation Blueprint Science Advisory Committee. *Ecological Priority Model - Version 3.0 (Raster version) also known as Ecosystems to Protect*. Published online at <https://www.nj-map.com/blueprint/ecological/>, February 2020.

#### **Updated in 2025 - New Jersey's Landscape Project Map**

New Jersey's Landscape Project mapping continues to be the principal tool that NJDEP's Fish and Wildlife uses to document habitats that support endangered, threatened, and special concern wildlife species. The Landscape Project mapping tool uses New Jersey's land use/ land cover GIS data and Biotics Database of rare species occurrence data to model species habitat locations in the state. **Landscape Project version 3.4** (released January 2025) provides this presumptive habitat mapping based on 2020 land use/ land cover habitat patches and species occurrence data.

Within each SWAP Region, Landscape Project mapping depicts the habitats that are ranked based on the combination of habitat type and documented species locations, resulting in habitat patches that are rank 1 (suitable only), 2 (supporting species of Special Concern), 3 (supporting state-threatened species), 4 (supporting state-endangered species), and 5 (supporting federal-listed species).

#### **New in 2025 - Connecting Habitat Across New Jersey (CHANJ)**

**Connecting Habitat Across New Jersey** (CHANJ) is a multi-partner, multi-disciplinary strategic plan led by NJ Fish and Wildlife. CHANJ identifies key areas to preserve and restore habitat connectivity for terrestrial wildlife at the local, region, and statewide levels. The CHANJ mapping is designed to help prioritize areas for land protection, habitat restoration and management, and mitigation of road impacts on wildlife and their habitats.

Each region has the CHANJ map clipped to region boundaries, highlighting habitat cores, corridors, and road segments.

## [New in 2025 - New Jersey Heritage Priority Sites](#)

Depicted at the state level, a total of 343 Natural Heritage Priority Sites represent some of the best remaining habitats for rare species and rare ecological communities in the state. These areas are priorities for the preservation of biological diversity in New Jersey. Click [HERE](#) to explore the sites.

## **Descriptions of problems and priority research and survey efforts**

### **(Element 3)**

The 2025 SWAP continues to follow the five components described in the [NAAT 2004](#) guidance. The NJ SWAP aligns with the Northeast Lexicon and uses CMP Direct Threats Classification v 2.0, amended by Quebec in 2021 (see Ministère des Forêts, de la Faune et des Parcs, June 2022, Standardized Classification of Threats to Biodiversity). Using this Threat Classification Lexicon, we identified Level 3 priority threats at two different spatial scales – statewide and region.

**Change from 2017:** In 2017, New Jersey drafted Level 4 threats facing focal species and habitats. The 2025 plan shifted to focus on threats facing *habitats* and prioritized the CMP Direct Threats Classification v 2.0 Level 3 threats at the region and state levels. Species are linked to the regional habitats they use within NJ's SWAP Database which is recommended in the 2022 Northeast Lexicon. By focusing on addressing the threats facing habitats, species within those habitats will benefit.

- Statewide threats are those that affect most regions, like roads or pathogens, or that can only be addressed at the state level, such as drafting regulations or need for research. Statewide threats are more likely to be addressed by state, local, or federal government agencies, Fish and Wildlife staff, statewide non-profit organizations, and academics. However, some threats go beyond state boundaries, and are best addressed by working regionally (e.g., Northeast RCN projects) or by collaborative national and international work.
- Identifying Level 3 priority threats within each *region* allows people and organizations to focus on the direct impacts to habitat or species at a smaller spatial scale. Many regional threats are more likely to be addressed by private and public landowners and managers, local governments, non-profit organizations, and academics.

### Threat Prioritization Methodology

To prioritize threats facing habitats in our nine regions and at the statewide level, NJFW selected a diverse group of technical stakeholders with expertise in wildlife conservation, ecology, or habitat conservation in specific regions or those with experience with specific threat classes. Over 120 individuals from more than 75 agencies (state, federal, local), non-profit organizations, universities and colleges, and researchers participated in at least one survey. Stakeholders prioritized the threats using the CMP Direct Threats Classification

version 2.0. Threat Characteristics from the 2022 Northeast Lexicon were provided to survey takers to evaluate the threats.

Using *SurveyMonkey*, we administered an iterative process to identify the Level 3 threats our survey respondents identified as priority.

Step 1: Prioritize Level 2 Threats. Staff administered two survey rounds and a fatal flaw review. SWAP Technical Advisory Group and NJFW staff established thresholds for highest priority, priority, and important categories.

Step 2: Prioritization of the Level 3 Threats associated with the priority Level 2 Threats. Staff administered two rounds of surveys and a fatal flaw review by Technical Advisory Group and NJFW staff.

Survey participants were instructed to consider the following threat characteristics when prioritizing:

- **Actionability/Certainty:** The ability or feasibility of a person or organization to take steps to address the threat. Range is low to high.
- **Spatial Extent:** Consider impact of the threat within 10 years for taxa and 20 years for ecosystems. Range is small to pervasive.
- **Urgency or Immediacy:** This characteristic assesses the time scale over which impacts of the threat will be observable. Range is long-term (10-100 years) to immediate (current or existing).
- **Severity:** The degree or probability of impact on a species or habitat within the region. Consider impact of the threat within the spatial extent (above) over the next 10 years for taxa and 20 years for ecosystems. Range is slight to extreme.

See Priority Level 3 threats that were identified as statewide in scope [HERE](#).

See Level 3 Priority Threats by regions below

- [Kittatinny Ridge](#)
- [Kittatinny Valley](#)
- [Highlands](#)
- [Piedmont](#)
- [Inner Coastal Plain](#)
- [Pinelands](#)
- [Atlantic Coast](#)
- [Delaware Bay](#)
- [Marine](#)

## **Descriptions of Conservation Actions (Element 4)**

As in 2017, the 2025 SWAP includes actions to support SGCN, mitigate threats to habitats, address data gaps, highlight legal/legislative actions, and provide information to the public, staff, and stakeholders. Conservation actions were prioritized in 2025 for the first time.

While we plan on using the Quebec revision of the CMP action classification system adopted by the 2022 Northeast Lexicon, actions are currently not classified.

**2025 UPDATE:** In 2017, New Jersey wrote Level 4 actions based on the Level 3 TRACS Action Lexicon. Since the actions were written to fit into the Lexicon classification, it was difficult for users to identify the actual threat the action was addressing. For the 2025 Plan, NJFW, partners, and nearly 50 conservation stakeholders developed conservation actions to address the Level 3 priority threats facing SGCN in each of our nine regions and at the state level. This will help direct users to take the most important action to address the priority threats facing our wildlife, plants, or the habitats they rely on.

### Action Development

New Jersey's experts, including NJFW staff, partners, technical stakeholders, academics, and our Technical Advisory Group members, were invited to draft priority conservation actions to address the statewide and regional priority Level 3 threats using a results chain template. This helped make actions consistent, and using the template required actions to include the *how* and *why* of the action. All actions were to be feasible, measurable, identify potential implementors, and inform success.

### Prioritization of Actions

NJFW considers the prioritization of actions the most consequential step to our SWAP revision. Using multiple steps, participants were asked to prioritize the actions into three categories: important, priority and highest priority. Staff administered multiple reviews by the people who developed the original action list as well as additional experts to classify the actions as important, priority, and highest priority within regions and at the state level.

NOTE: *Highest* priority actions were finalized by a voting round, followed by a second round that asked reviewers to simply agree or disagree with the classification. The final classification of an action was determined by a simple majority of those who agreed on the classification. Lastly, NJFW led two regional in-person meetings of experts for a fatal flaw review to finalize the classification of the *highest* priority actions.

Currently, *highest* priority actions remain classified as *priority* because we have not added metrics including feasibility, potential effectiveness, and other criteria to complete their result chain metrics. *Highest* priority actions will be refined by staff, technical stakeholders, and conservation partners to improve their actionability.

Review the action template, guidance, definitions, and example of Action Prioritization instructions (see [Drafting Action Instructions\\_Prioritization\\_Example.pdf](#)). To see an example of a prioritization spreadsheet from round two, see ([Example\\_Action\\_Prioritization\\_spreadsheet](#)).

### Connecting Actions to Wildlife and Plants

The focus of the 2025 SWAP is addressing threats to the *habitats* that SGCN plants and animals require to survive and thrive. There are some species-specific threats, but the



majority of threats are not directly linked to species. To connect actions to species, we created species guilds that are associated with certain habitats or will respond similarly to actions. There are some guilds containing species that will not benefit equally to a specific action. Assigning species into guilds is not a perfect solution but provides a picture of the species benefiting from the actions.

[View all the Conservation Actions including the species and/or guild\(s\) associated with them using the searchable table at the bottom of the \*\*ACTION\*\* webpage.](#)

Check out the list of [GUILDS](#).

### [Collaboration beyond New Jersey's borders](#)

Tackling threats at a larger spatial scale results in more unified, consistent, and effective actions and projects. The Northeastern states have worked together for years and have a culture of cooperation. New Jersey is an active member of the Northeast Fish and Wildlife Diversity Technical Committee (NEFWDTC) and will continue to participate in this and other regional-, watershed-, and landscape- scale cooperative approaches to addressing at-risk species and habitat conservation needs. Using the 2022 CMP Action Classification system will allow for greater collaboration with the Northeast states.

### [Addressing the Impacts of Climate Change on New Jersey's Wildlife and Their Habitats](#)

Read the section [HERE](#).

### **Proposed plans for monitoring (Element 5)**

The 2025 SWAP focuses on prioritizing both the threats facing NJ's habitat and species and the most important conservation actions we, as a community, need to take to address those threats. All conservation actions were written using a results chain template that provides the opportunity to assess outcomes as they are implemented. During the prioritization process, certain priority conservation actions were further classified as "highest" priority. In essence, the highest priority actions are those that will reduce the impact of a threat resulting in improved outcomes ([Salafsky et al. 2021](#)). The 2022 Northeast Lexicon provides this as an option for meeting the Monitoring Element ([Crisfield et al. 2022](#)).

Many of New Jersey's SGCN and habitats have active monitoring programs, some dating back more than 60 years. Some of these monitoring programs provide data to evaluate the effectiveness of conservation projects and actions. Check out our summary list of [Species and Guild-Level Monitoring Programs by the NJDEP and Conservation Partners](#).

In addition to gaining insights into wildlife management from conservation and monitoring efforts in New Jersey, NJFW will continue to cooperate with work on at-risk species in other states by participating with the NEFWDTC and continuing to serve on the committee. Over the course of completing our anticipated C-SWG SWAP Enhancement Grant (2026-2028), NJFW will engage with key implementor groups, which will allow NJFW to review and analyze outcomes of actions taken and adjust as necessary.

## Coordinating State & Regional Monitoring

While it is simple to create monitoring goals, it is much more challenging to implement them because effective monitoring can be time and resource intensive. It can also be difficult to connect conservation actions to observed population conditions because so many factors and influences are continually at play in nature. To help overcome these challenges, the NEFWDC secured funding (the Regional Conservation Need fund from State Wildlife Grants) to create a Northeast region SWAP database to which NJ is committed to providing data. The database integrates SGCN data from the 13 states (plus the District of Columbia) and allows users across the country to access regional data. This met the Association of Fish and Wildlife Agencies' proposed best management practices (2012) that state agencies establish monitoring programs that met their specific goals and integrated smoothly into monitoring programs regionally.

Please note, the integration of New Jersey state data into the Northeast region database and the system to share monitoring efforts and outcomes are currently still in development.

## **Descriptions of procedures for reviewing the plan (Element 6)**

Our [About](#) page contains our SWAP Summary document where we commit to a comprehensive review in 2035.

## **Provisions for coordinating the development and implementation of the plan with federal, state, and local agencies and representatives of organized New Jersey Native American groups (Element 7)**

A sixteen-member Technical Advisory Group (TAG) was created that included academics, non-profit organizations, and federal and state agency representatives. There were 8-10 consistently active members. The ENSP also created a Steering Committee made up of a core engaged group of 5-6 individuals to provide timely input and feedback on targeted decisions. This group provided critical guidance in major decisions throughout the update process.

In our threat prioritization, over 120 individuals representing 67 technical stakeholder organizations participated in at least one survey. The organizations that participated outside of NJFW were comprised of non-profit organizations, academia, private companies, federal agencies, counties, and state programs/agencies.

While all participating technical stakeholders were invited to participate in our action development and prioritization exercise, a majority of participants were NJFW staff, TAG members, DEP staff, and local and federal agency staff.

[Engaging NJ's Native American Groups](#). One of our TAG members, Tyrese Gould Jacinto "Bright Flower", is a Nanticoke Lenni-Lenape tribal member and President of the Cohanzick Nature Reserve. While she was active in the beginning of the plan revision process, her



involvement tapered due to too many demands. Our SWAP Coordinator gave an update on the 2025 comprehensive review of the SWAP to the [NJ Commission on American Indian Affairs](#), part of the State Department. No member asked to be further involved.

### **Provisions for broad public participation (Element 8)**

New Jersey opened public comment for the 2025 comprehensive review on June 30, 2025. A news article on NJFW's website was posted announcing the opportunity. A direct email to our listserv of over 50,000 addresses will be sent at least twice during the comment period, and a minimum of two social media posts will be published on the NJFW Facebook page and Instagram.

New Jersey Fish and Wildlife requested public comment on our SGCN list in April, 2024, and the Natural Heritage Program requested comment on the plant list in June, 2024. The metrics for our outreach announcing the request for public comments are below (and as an attachment):

- Animal SGCN announced via targeted email (51,170 emails delivered) with 11,446 opens and 1,413 clicks to the public comment page.
- Plant SGCN announced via targeted email (52,260 emails delivered) with 10,347 opens and 559 clicks to the public comment page.
- Facebook post for Animal SGCN reached 15,000, 91 likes, 17 shares, and 5 comments
- Facebook post for Plant SGCN reached 4,061, 11 likes, 0 shares, and 4 comments
- Instagram post for Plant SGCN reached 959, 65 likes and 1 share.

### **2025 Comprehensive Public Comment**