

Consolidated Edison Company of New York, Inc.'s Strategic Action Plan on Biodiversity

Goals & Initiatives
February 2023

What is Biodiversity and Why Does it Matter?

Biological diversity, or biodiversity, refers to all life on Earth, and recognizes the value of maintaining a variety of living species. A biologically diverse environment is important for the integrity of Earth's ecosystems because this variation improves the resiliency of all species. As we find ourselves amid rapid climate change, biodiverse ecosystems are needed for the health of our planet. Integrated functions from Earth's flora and fauna provide "ecosystem services" such as buffering from climate extremes, protecting soils, regulating temperatures in urban environments, reducing food insecurity, and regulating hydrological cycles. These ecosystem services from biodiversity are considered some of the natural benefits of a healthy environment that benefit human survival and quality of life – for example, through supporting the pollination of food crops, filtration of waterways, carbon capture, and shoreline resiliency.

In general, biodiversity loss is attributed by the scientific community to these factors¹:

- Land Use Changes
- Exploitation & Over Development
- Climate Change
- Pollution
- Invasive Species

Certain investor groups now consider biodiversity loss to be a serious threat and they are increasingly seeking to play a role in protecting biodiversity, sometimes referred to as natural capital. In 2021, the World Bank outlined the consequences of inaction from an "unprecedented" decline in biodiversity with roughly one million animal and plant species at risk of extinction². In response, Con Edison is exploring ways to make a meaningful impact by helping preserve biodiversity and enhancing this natural capital both on company property and through our operations.

Con Edison and Biodiversity

Con Edison maintains more than 4,000 acres of transmission line Right-of-Ways and is the second-largest owner of waterfront property in New York City. In New York State, we are surrounded by both a heavily urban environment in the core areas of our operations but also forests, wetlands, wildlife, and numerous waterways in the surrounding service territory, which can all be impacted by the drivers of biodiversity loss. Our mission is to help educate, enable change, and foster a positive impact that is supportive of our local ecosystems and communities.

¹ Greenfield, Patrick, Weston, Phoebe. **The five biggest threats to our natural world and how we can stop them.** October 14, 2021. The Guardian.

² Quinson, Tim. **Moody's Has a \$1.9 trillion Warning Over Biodiversity.** September 28, 2022. Bloomberg

Strategic Goals for Biodiversity Protection

Con Edison recognizes the vision of the [United Nation's Convention on Biological Diversity](#) and the importance of upholding the integrity of the surrounding environment. We are setting forth an ambitious strategic plan to help align our business operations with this goal. This plan is also meant to complement existing corporate goals, including our [Clean Energy Commitment](#).

Our approach will be guided by the following principles:

- Strengthen our corporate governance and awareness around biodiversity
- Understand potential drivers of biodiversity loss across our company's value chain
- Promote biodiversity by implementing the initiatives listed below
- Be transparent in monitoring and reporting efforts by using industry-approved metrics
- Prioritize initiatives that have a focus on economically disadvantaged communities
- Educate and partner with local stakeholders to help preserve biodiversity and address local environmental threats

Initiatives to Combat Biodiversity Loss

Rewilding Program

Rewilding is a conservation approach that allows the land and its ecosystems to return to a more natural state supported by natural systems. There are two primary ways to rewild land. The first is to leave an area of land to its own devices and conduct as minimal maintenance as necessary over an extended period. The second is to actively replant the area with native species, which allows for an expedited repopulation of native animals and insects. In both situations, the success of the rewilding effort is dependent on eventually leaving the area to maintain itself with minimal human involvement. Overmanaging this effort could inhibit natural processes.

Company operations provide two potential opportunities for rewilding. We could protect areas that are already in a more natural state and remote, such as our Transmission Line Right-of-Ways, or identify biologically unproductive areas of company property that could be transformed into a wilder revegetated state, specifically where there are manicured lawns. Rewilding with diverse native vegetation would increase the amount of carbon captured within our property, while reducing air emissions and mowing costs over time.

The biodiversity benefit of rewilding our lawns also allows for the creation of "eco-corridors," or wild areas between developed areas that create a network of habitats. The more areas of land we can rewild, the more we can provide these corridors for local species, specifically for various pollinators. For example, the monarch butterfly travels through our territory every year during its great migration cycle. As we pilot revegetating company lawns and undeveloped properties, we can support the monarch population's ability to survive in greater numbers by creating waystations abundant with milkweed and other pollinator-specific plant species.

We have set a goal of planting native habitat on at least ten acres of company property by 2030, which can include a mix of substations, service centers, and office buildings. We are laying the foundation for this program by identifying suitable areas for planting, establishing working relationships with partners to assist in this effort, and obtaining funding. In spring 2023, we will begin planting at our pilot locations, followed by required monitoring. We plan to re-meadow at least three acres by 2024 and three more acres by 2026. This initiative will aim to increase the biological diversity and productivity of the land. These efforts can serve as opportunities to educate local stakeholders about the benefits of rewilding and ways in which they can make similar efforts at home and in their communities.

Biodiversity Assessment of Transmission Line Right-of-Ways

Con Edison maintains a few thousand acres of transmission corridors that contain large towers, high voltage power lines, and various types of habitats. These are called Transmission Line Right-of Ways and the diverse landholdings provide us with a potential opportunity to help increase biodiversity in our region. These lands are either owned or leased by Con Edison, but they are all managed according to our regular vegetation management procedures.

A biodiversity assessment aims to understand two things: How many types of species exist in an area, and how many individual organisms of a given species are present. Currently, Con Edison maintains an Integrated Vegetation Management Program for managing these areas. This program incorporates industry-leading best practices such as ultra-low volume pesticide spraying, cyclical mechanical mowing, and protecting against the spread of invasive species near sensitive wetland regulated areas.

In 2023, Con Edison, in conjunction with Orange & Rockland Utilities, Inc., plans to partner with a collegiate research partner to begin a biodiversity assessment, which will evaluate a representative sample of 60 acres of Con Edison's lands and 60 acres of O&R's lands. The goal of the study is to establish a "biodiversity baseline" that will guide and help measure potential future enhancement initiatives.

Invasive Species Program

Invasive species are organisms that are introduced, whether intentionally or accidentally, to an area to which they are not native³. To be considered invasive, a non-native species must cause, or have the potential to cause, harm to its new location⁷. This implies that the species easily thrives in its new environment, whether because it has no natural predators, outcompetes native species for food and nutrients, or destroys the natural habitat of native species. Invasive species can cause harm on many different levels. The worst invasive species have costly economic impacts, contribute to environmental decline, and can transmit disease. An invasive grass species, for example, can inhibit the growth of other plant species, which alters the food supplies available to small animals, destabilizing the entire food web.

Con Edison's invasive species program focuses on invasive plants and insects in the greater New York City area. We are currently working to coordinate internally to identify groups within our operations that would be impacted by invasive species management. We plan to work with those groups to create an invasive species awareness protocol to provide to internal and external stakeholders.

Pollinator Habitat Creation

Pollinators are species, including bees, butterflies, and hummingbirds, that collect pollen from flowers within the same plant species⁴. As a pollinator travels from one flower to another, pollen is transferred between flowers, enabling the reproduction of the majority of the flowering plants that produce food. Pollinators require habitat, or food, water, and shelter, to survive. They pollinate 35% of the world's food supply, yet many are under severe threat, with half of bee species in decline and one-quarter at risk of extinction due to habitat loss and fragmentation, pesticides, and climate change⁵.

According to the U.S. Department of Agriculture, pollinators provide approximately \$439 million worth of pollination services to New York State and add significant value to crop production nationally each year⁶. Researchers at the University of New Hampshire have found a dramatic decline in 14 wild bee species that are important for pollinating

³ National Wildlife Federation. Invasive Species. Retrieved October 19, 2022.

apples, blueberries, and cranberries across the Northeast⁷. Con Edison's managed lands provide a potential opportunity for protecting or enhancing pollinator habitat. We plan to update procedures to incorporate better restoration practices, partner with local stakeholders for education opportunities, and continually work to develop and restore pollinator habitat within our area where possible. These newly developed initiatives also align with [New York State's Pollinator Protection Plan](#).

We actively educate local communities about the benefits of pollinators in our urban and suburban environments through our partnership with the Electric Power Research Institute's Power-in-Pollinators Initiative.

Our goals for creating pollinator habitat include a mix of funding community gardens, participating in broad education campaigns, and inviting employee participation in building new habitat. We are leveraging our Corporate Affairs' [Strategic Partnerships Program](#) to promote organizations that support local pollinators such as [The Bee Conservancy](#).

Starting in 2023, we plan to partner with local organizations to establish pollinator habitat on various types of company property in conjunction with our other rewilding goals. We will begin our commitment to support at least ten community gardens a year in our local area.

Threatened and Endangered Species Protection

Threatened species are expected to become endangered in the near future. When a species is endangered, it is at high risk of becoming extinct⁸. Habitat loss due to development or climate change is the primary driver of extinction today⁹. When a population becomes smaller, it generally lacks genetic variation. This lack of genetic diversity means that a species may become less adaptable to change, which can threaten its future.

Focusing conservation and biodiversity efforts around threatened and endangered species can help prevent their extinction. Awareness and education are also important ways to support these species. The federal Endangered Species Act lists at-risk species with the aim of preventing their extinction. The bald eagle, bog turtle, and the northern long-eared bat are all listed species in our area that require additional education and protection from our operations.

One of Con Edison's goals is to further evaluate and protect the variety of these species present in our managed lands. We are also organizing training and awareness campaigns for our employees. The monarch butterfly, a charismatic pollinator whose population size and annual migration have been harmed by various forms of overdevelopment, was recently added to the [International Union for Conservation of Nature's \(IUCN's\) Red List](#) as an endangered species and the United States Fish and Wildlife Service is considering whether to list the monarch butterfly as threatened under the ESA. In 2023, Con Edison plans to join a voluntary [Conservation Agreement](#) to promote the protection and planting of milkweed, which is considered critical habitat for the monarch butterfly.

⁴ Pollinator Partnership. **Pollinators need you. You need pollinators.** Retrieved October 19, 2022.

⁵ Xerces Society. **Pollinator Conservation Program – What's at Stake?** 2022.

<https://xerces.org/pollinator-conservation/whats-at-stake>

⁶ New York State Dept of Agriculture and Markets. **NY State Issues Guidelines to Promote Creation of Pollinator Habitats on Commercial Properties.** June 22, 2020.

⁷ UNH. April 19, 2019., **UNH Researchers Reveal More Than Dozen Wild Bee Species Declining in Northeast | UNH Today**

⁸ National Geographic. **Encyclopedic Library: Endangered Species.** Retrieved October 19, 2022.

Living Shoreline Restoration

According to the National Oceanic and Atmospheric Administration, living shorelines like marshes or reefs help absorb waves, protecting nearby land from storms, and capture sediment, growing taller as sea level rises¹⁰.

Con Edison plans to research and develop innovative ways to make our waterfront properties more resilient such as incorporating living shorelines and piloting the use of newer technologies like ecologically friendly concrete in shoreline structures.

Our current goals are to establish a protocol and specifications for sustainable waterfront revitalization. We are identifying current and future construction projects that could obtain a [Waterfront Edge Design Guidelines Verification](#), provided by the Waterfront Alliance.

Green Infrastructure Development

Green infrastructure systems like rain gardens, green roofs, and permeable pavements absorb rainwater as it falls¹¹. In certain circumstances, green infrastructure can replace traditional forms of stormwater management such as gutters and pipes (e.g., gray infrastructure), which are built with the intent of rerouting stormwater to treatment facilities or into waterways. In general, stormwater runoff can carry various forms of pollution that can damage the natural ecosystem and harm local species. Green infrastructure systems absorb rainwater, reduce runoff, and protect waterways from pollution while helping to prevent or reduce flooding.

Exploring ways to use green infrastructure to naturally capture and treat surface water runoff where possible at our facilities is an opportunity for Con Edison to support the biodiversity of our waterways while mitigating the negative impacts of flooding.

One of Con Edison's partners is the [Billion Oyster Project](#). We support them by providing co-funding and volunteering efforts for the replanting of a billion oysters in the New York Harbor. We plan to take this partnership further and study ways to incorporate oyster restoration on some of our company waterfront properties. A research and development pilot project to place oysters on several pier pilings in the Hudson River is currently being scoped between Con Edison's Natural Resource Scientists and the Billion Oyster Project.

For each of these initiatives, we will conduct an awareness campaign to engage communities throughout our service area and work with our Strategic Partnership Program to identify charitable giving opportunities through local environmental and conservation groups.

⁹ National Wildlife Federation. **Habitat Loss**. Retrieved October 19, 2022.

¹⁰ NOAA. **Understanding Living Shorelines**. Retrieved October 19, 2022.

¹¹ NYC Dept of Environmental Protection. **Green Infrastructure**. Retrieved October 19, 2022.