NiSource Biodiversity Commitment

Vision Statement

Our vision is to establish a legacy of sustained economic growth, social responsibility and environmental stewardship representative of a premier energy company. Environmental stewardship is one of four pillars that supports NiSource's Sustainability Strategy[1]. As stewards of the environment, NiSource is committed to conserving and enhancing biodiversity on lands under its responsibility. NiSource practices environmental stewardship by reducing its impact on the environment through pollution prevention and reduction programs, and through innovative conservation approaches. NiSource is making significant investments to ensure that the company can continue to deliver energy to its customers where and when they need it, and in a way that is environmentally responsible.

NiSource Utility Vegetation Management

NiSource manages six electric and natural gas companies in states stretching from the Mid-Atlantic to the Midwest. Its operating companies include the Northern Indiana Public Service Company (NIPSCO) and the Columbia Gas companies of Kentucky, Ohio, Pennsylvania, Virginia and Maryland.

NiSource manages energy generation facilities and transmission and distribution infrastructure across a large, diverse landscape. Its geographic footprint of owned lands and easements covers approximately 142,000 acres.

Utility Vegetation Management Research Trends

In the 1980s and 1990s, academic research emerged concerning habitat fragmentation for caribou herds in Alaska[2] and other potentially negative effects that utility infrastructure may have on undisturbed habitats and native wildlife in Australia[3]. This research left a legacy perception that utility rights-of-way only fragment habitat, providing little value to their surrounding landscapes and ecosystems. While it can be true that long, linear corridors that transect core, contiguous habitat areas can contribute to habitat fragmentation for large charismatic wildlife, like caribou, linear rights-of-way can also act as wildlife corridors providing food, cover and breeding habitat for numerous birds, insects and mammals, if managed properly through integrated vegetation management.

In response to public concern about the excessive use of herbicides in the 1950s, the longest running research and demonstration study on the effects of utility vegetation management began in 1953 in Pennsylvania on State Game Lands 33[4]. Research on this site, and others like the Green Lane Research and Demonstration Area, have continued to study the effects of various non-selective and selective integrated vegetation management methods on vegetation and wildlife habitat quality. Following more than six decades of ecological research, academic researchers and utility vegetation management practitioners continue to conclude that integrated vegetation management is the most cost-effective and environmentally sound system to safely secure utility infrastructure while providing ecological benefits to the surrounding landscape.

Integrated Vegetation Management

What is IVM?

Integrated vegetation management (IVM) is "a system of managing plant communities in which compatible and incompatible vegetation are identified; action thresholds are determined; tolerance levels are established; and control methods are evaluated, selected, and applied to achieve management goals and maintenance objectives."[5]

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[1] NiSource Sustainability and Environmental, Social and Governance (ESG) Strategy

[2] Migratory Movements of the Nelchina Caribou Herd in Relation to the Trans-Alaska Pipeline | Semantic Scholar

[3] Fragmentation of Habitat by Roads and Utility Corridors: A Review | Australian Zoologist (allenpress.com)

[4] Rights-of-Way Ecological Research at Penn State. Transmission Line Ecology (psu.edu)

[5] Miller et.al, 2021. Integrated Vegetation Management, Best Management Practices, 3rd Edition.

Why Does NiSource Use IVM?

NiSource performs vegetation maintenance in accordance with federal and state regulations, and through its focus on IVM, the company seeks to establish, maintain and enhance early successional habitats, like grasslands and shrub-scrub habitats, on NiSource-owned lands and rights-of-way. These early successional habitats help to provide its customers with safe and reliable energy and contribute to the company's core value of environmental stewardship.

Why are Grassland and Shrub-Scrub Habitats Important?

Grasslands and shrub-scrub habitats are desirable vegetation communities because they provide biological control on NiSource-owned and -leased lands that protect infrastructure from coming into contact with incompatible tall-growing woody species that can cause damage or outages. While grasslands and shrubscrub habitats are desirable from a safety and reliability perspective, they are also two of the most threatened and rapidly disappearing ecosystems in North America[6][7], providing wildlife habitat for numerous birds, mammals, and pollinating insect species.

Understanding & Managing Biodiversity Through IVM

Understanding Biodiversity-Related Risk

In 2022, NiSource formed a Biodiversity Team, comprising internal and external subject matter experts, to evaluate the risks, impacts and opportunities that biodiversity-related issues have across its business operations. NiSource's 2022 Biodiversity Risk Assessment was performed using the Task Force for Nature-Related Disclosures LEAP approach (locate, evaluate, assess, prepare), supplemented by biodiversity management and material topics defined by the Global Reporting Initiative and the Dow Jones Sustainability Index. The scope of NiSource's Biodiversity Risk Assessment includes owned and leased operations, lands adjacent to owned and leased operations, and upstream activities like forest products utilized to protect natural resources during construction (mats) and to distribute energy to customers (poles).

Leveraging the results of the 2022 Biodiversity Risk Assessment, NiSource's Biodiversity Team developed a long-term strategy and tactical plan to address biodiversity-related risks and to enhance management of biodiversity across an extensive network of owned and leased lands. NiSource's Corporate Biodiversity Strategy is built on two goals:

1) Creating net positive impact on biodiversity, and,
2) Strengthening communities through our connections with nature.

Activities that comprise NiSource's long-term Corporate Biodiversity Strategy align with 2030 targets outlined within the Kunming-Montreal Global Biodiversity Framework of the Convention on Biological Diversity[8], specifically targets:

#1: Plan and Manage all Areas To Reduce Biodiversity Loss,
#6: Reduce the Introduction of Invasive Alien Species by 50% and Minimize Their Impact,
#10: Enhance Biodiversity and Sustainability in Agriculture, Aquaculture, Fisheries, and Forestry,
#11: Restore, Maintain and Enhance Nature's Contributions to People,
#12: Enhance Green Spaces and Urban Planning for Human Well-Being and Biodiversity,
#14: Integrate Biodiversity in Decision-Making at Every Level,
#15: Businesses Assess, Disclose and Reduce Biodiversity-Related Risks and Negative Impacts,
#21: Ensure That Knowledge Is Available and Accessible To Guide Biodiversity Action.

Biodiversity Exposure, Assessment & Management Plans

NiSource's Biodiversity Team continually evaluates the company's understanding of the opportunities that business operations provide to maintain and enhance biodiversity. In 2019, NiSource undertook its first

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[6] Seidl, Andrew, Larry VanTassell, and Neal Wilkins. "United States Grasslands and Related Resources: An Economic and Biological Trends Assessment."

[7] Lark, T.J., Spawn, S.A., Bougie, M. et al. Cropland expansion in the United States produces marginal yields at high costs to wildlife. Nat Commun 11, 4295 (2020).

[8] Kunming-Montreal Global Biodiversity Framework (cbd.int)

company-wide evaluation of energy generation, transmission and distribution lands for protected areas classified by the International Union for the Conservation of Nature (IUCN), Key Biodiversity Areas (KBAs), and critically endangered and vulnerable IUCN Red List Species. Results of this evaluation helped NiSource to better understand direct and indirect impacts of its actions, to develop biodiversity management plans for high biodiversity areas and to enhance conservation activities for sensitive species.

In 2024, NiSource revised its biodiversity exposure evaluation using updated data describing its owned and leased properties, as well as updated external data delineating protected areas[9][10], biologically important areas outside of protected areas[11], and potential habitat for sensitive wildlife species[12].

NiSource does not operate in World Heritage areas. However, where the company shares management responsibilities with its partners at global and nationally important protected areas (IUCN II-IV), NiSource employs a mitigation hierarchy to protect sensitive habitats and species. Results of its 2019 biodiversity exposure evaluation were used to develop twenty-six (26) biodiversity management plans for areas of high biodiversity value (IUCN II-IV & Key Biodiversity Areas). In 2019, NiSource developed the target to complete all 26 biodiversity management plans by 2023 and achieved this target. Biodiversity management plans are maintained and updated periodically according to NiSource's vegetation maintenance and monitoring schedules.

Mitigation Hierarchy

NiSource's commitment to biodiversity is achieved through the application of a mitigation hierarchy that applies to each aspect of asset development, operation and maintenance. Its planning framework is designed to avoid new development in global and nationally important biodiversity areas, to minimize and restore unavoidable negative impacts from operations, and to offset any remaining impacts within biologically sensitive areas. NiSource uses this framework to manage biodiversity related risks and to balance sustainable management of natural resources with development priorities. Additionally, NiSource is working toward transformative actions that seek to prioritize enhancement of ecosystem services and positive environmental justice outcomes in underserved communities.

Avoidance

Avoidance typically applies to project siting, design and scheduling. NiSource avoids siting new infrastructure in globally and nationally important biodiversity areas, as well as key local and regional areas like native prairies, savannas and wetlands. Careful siting of infrastructure, selection of best management practices (BMPs) and seasonal scheduling can greatly reduce, and in some cases avoid, negative impacts to biodiversity and natural resources.

Reduce

NiSource practices a variety of reduction activities across its business operations. NiSource's hydroelectric generation facilities in Northern Indiana follow protocols developed in coordination with the U.S. Fish & Wildlife Service to reduce negative downstream effects on federally endangered mussels during abnormally low flows on the Tippecanoe River. This example is described in greater detail within the No Net Loss & Net Positive Impact, Compliance with the Endangered Species Act section below.

Regenerate

NiSource's IVM program focuses on selective removal of incompatible, tall growing woody species that threaten electric and natural gas infrastructure. Selective treatments limit off-target effects to the surrounding, compatible vegetation, like milkweeds and nectar bearing forbs, which provide ecological value to birds, mammals and pollinating insects. As opposed to traditional utility vegetation management, which may focus on non-selective vegetation maintenance methods, NiSource employs IVM, which is a

[9] World Database of Protected Areas
[10] Protected Areas Database of the US (PAD-US 4)
[11] World Database of Key Biodiversity Areas
[12] IUCN Red List of Threatened Species

regenerative system of management that seeks to establish, maintain and enhance biological control by low-growing, compatible, wildlife-friendly plants on the lands that the company manages.

Restore

Differing from the NiSource IVM program, restoration activities are most often projects.

The state-dedicated Calumet Prairie Nature Preserve and adjacent NIPSCO rights-of-way contain the largest natural sedge meadow and wet prairie community complex in Indiana. The wetland complex contains one of the largest populations of spotted turtles (Clemmys guttata) in the state of Indiana as well as numerous other state-listed species. In 2011, NIPSCO partnered with the DNR and U.S. Army Corps of Engineers to restore 144 acres of the wetland complex including 25 acres on NIPSCO rights-of-way. The project restored structural function and ecological integrity of the sedge meadow through the removal of invasive species and undesirable woody vegetation. In 2019, NIPSCO supported an additional 30 acres of wetland restoration within the preserve in partnership with the DNR. These additional restoration activities included invasive species control and native plant introductions. NIPSCO is also seeking further restoration efforts on the 63-acres of adjacent rights-of-way and implementation of a Spotted Turtle Habitat Management Plan to protect and enhance the extent and population within the Calumet Prairie Complex. In 2022, NIPSCO provided financial support to Loyola University to study the spotted turtle population at the complex. The findings indicated that the NIPSCO rights-of-way is providing critical habitat for this imperiled species.

Transform

NiSource's Corporate Biodiversity Strategy, commitment to biodiversity and commitment to IVM are transformative initiatives that secure its business operations from biodiversity-related risk, contribute to operational flexibility through innovative conservation activities and provide positive examples that contribute to better management of utility lands. NiSource continues to work with and form new conservation partnerships to share the cost and responsibility of environmental stewardship.

No Net Loss & Net Positive Impact

Compliance with the Endangered Species Act (ESA)

NiSource avoids sourcing raw materials from and operating within areas of critical biodiversity, but it's important to note that many areas classified for conservation of critical biodiversity were designated after the establishment of NiSource infrastructure. An example of how NiSource reduces sourcing of upstream materials, contributing to no net loss[13] of federally listed species, occurs within renewable energy generation operations.

NiSource recognizes that hydroelectric facilities, while providing renewable energy, can pose threats to biodiversity, particularly aquatic fauna. During normal run-of-river operations for the Oakdale and Norway hydroelectric dams in northern Indiana, both established before federal energy policy and designation of critical habitat, NiSource, pursuant to regulations of the North American Electric Reliability Corporation and the U.S. Fish & Wildlife Service, minimizes water withdrawals during abnormally low flows and lake levels to protect federally listed mussels on the Tippecanoe River.

Proactive Habitat Management through the ESA / Monarch CCAA

Recognizing that global biodiversity loss poses threats to ecosystem services and for operational flexibility, NiSource was a founding member and maintains a certificate of inclusion within the Nationwide Candidate Conservation Agreement for Monarch Butterfly on Energy and Transportation Lands[14]. NiSource's certificate of inclusion ensures that NiSource will continue normal IVM practices on

[13] *No Net Loss* is defined as "Status achieved when biodiversity gains from the combination of avoidance, mitigation, rehabilitation, and targeted conservation actions match biodiversity losses from the impacts of a specific development project such that there is no overall reduction in the type, amount, or condition of biodiversity over space and time." Fauna & Flora International, The Mitigation Hierarchy: No Net Loss and Net Positive Impact. (fauna-flora.org)

[14] FAQ: Candidate Conservation Agreement with Assurances for the Monarch Butterfly | U.S. Fish & Wildlife Service (fws.gov)

generation, transmission, and distribution lands should the U.S. Fish & Wildlife Service list the monarch butterfly as threatened or endangered.

In exchange for long-term operational flexibility, NiSource commits to implementing conservation measures on lands that it manages to protect and conserve the flora that support monarch butterfly habitat (milkweed and other nectar-bearing floral resources) and to assess monarch habitat quality through biological effectiveness monitoring activities. Through this agreement, NiSource commits to no net loss, and where feasible, works to enhance habitat resources for net positive impact[15] on the monarch butterfly on the owned and leased lands that it manages for energy generation, transmission and distribution.

No Net Deforestation Commitment

Deforestation Definition

NiSource considers the term *deforestation* to mean the purposeful clearing of mature or old-growth forests.

NiSource accepts the Bureau of Land Management's definition of mature forests as, "the stage of forest development immediately before old growth. The mature stage generally begins when a forest stand moves beyond self-thinning, and is often marked by abundance of large trees, vertical canopy layers, aboveground biomass accumulation and stand height, as well as other attributes," whereas old-growth forests are defined as, "dynamic systems distinguished by old trees and related structural attributes. Old growth encompasses the later stages of stand development that typically differ from earlier stages in a variety of characteristics, which may include tree size, accumulations of large dead woody material, number of canopy layers, species composition and ecosystem function."[16]

NiSource does not consider the following IVM activities to be deforestation:

- Reclamation activities that involve the clearing of immature shrubs and trees to maintain right-of-way widths.
- Tree trimming of forest edges to maintain right-of-way widths and clearance distances between woody vegetation and electric conductors.
- Maintaining low-growing grassland and shrub-scrub habitats through the selective control of immature tree saplings and woody vines that threaten utility infrastructure.

No Net Deforestation Mitigation Hierarchy

The majority of NiSource's owned and leased rights-of-way are maintained in low-growing grassland and shrub-scrub cover types that provide for the safe and reliable transmission and distribution of energy.

When siting new infrastructure, NiSource avoids siting rights-of-way through mature and old-growth forest due to the increased operational challenge and costs associated with clearing forested lands. Where avoidance is not possible, NiSource mitigates and minimizes the effect of fragmentation on core forested habitat by siting along paths that reduce core habitat fragmentation. Where mitigation and minimization are not possible, NiSource invests in reforestation and afforestation projects (restoration), as well as urban tree planting projects that help to compensate for the loss of mature and old-growth forests.

NiSource is currently developing a formal no net deforestation policy, expected to achieve no net deforestation of mature and old-growth forests by 2030. The company's no net deforestation plan will be monitored by NiSource's Environmental Permitting Department for evaluation and net compensation planning.

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[15] *Net Positive Impact* is defined as "Target for project outcomes in which the impacts on biodiversity (i.e., the variety of ecosystems and living things) caused by the project are outweighed by the actions taken to avoid and reduce such impacts, rehabilitate affected species/landscapes, and offset any residual impacts." Net Positive Impact on Biodiversity : the Conservation Case | IUCN

[16] Mature and Old-Growth Forests. 2023. US Bureau of Land Management. https://www.blm.gov/old-growth-forests. Accessed April 24th, 2024.

Sustainable Forest Resource Tier-1 Suppliers

Sustainable Electric Pole & Wooden Mat Supply Chains

In addition to NiSource's planned no net deforestation policy, 100% of NIPSCO overhead electric wooden distribution poles and wooden construction mats are sourced from suppliers that utilize sustainable forestry practices.

Engagement with Partners

NiSource and its local operating companies regularly engage with stakeholders and community partners on a wide range of environmental and conservation initiatives throughout its service territory. Through these efforts, NiSource is seeking to magnify biodiversity protection and conservation by leveraging resources while also increasing environmental education and awareness. External stakeholders include local and national environmental nonprofits, state and federal agencies, environmental consultants, customers and local communities. By leveraging its resources and personnel, NiSource often extends conservation and biodiversity protection well beyond its managed rights-of-way.

In Indiana, for example, NiSource has helped secure private, state and federal grant dollars for integrated vegetation management, pollinator habitat restoration and landscape level habitat restoration projects within co-managed and adjacent protected areas. NIPSCO is also restoring over 1,000 acres of electric and natural gas pipeline transmission rights-of-way for key biodiversity areas. Conservation goals for these projects include the protection of plant species of greatest conservation need (SGCN); enhancement of sedge meadow, wet prairie and upland sand prairie habitats; enhancement of wildlife SGCN species such as the spotted turtle and eastern massasauga rattlesnake; and protection of diverse wetlands and remnant native plant communities. NiSource is also controlling large invasive species populations adjacent to protected areas and enhancing pollinator conversion areas, such as mowed turf grass, old fields and agricultural lands via collaborative efforts.

As a contributing partner of the Indiana Dunes Ecosystem Alliance Framework, Conservation Action Plans in the Calumet Region, gROWing Chicago Habitat, and Calumet Land Acquisition and Habitat Restoration Plan, NIPSCO is providing technical assistance for various planning initiatives, as well as improving habitat quality and connectivity on its rights-of-way located within these important conservation areas. Notable partners in its conservation efforts include the Urban Waters Federal Partnership, Save the Dunes, The Nature Conservancy, the National Park Service, Rights-of-way as Habitat Working Group, the National Parks Conservation Association, the Indiana Department of Natural Resources, the Audubon Society, The Wetlands Initiative, Audubon Great Lakes and various local parks.

Columbia Gas has established pollinator habitat sites in Virginia, Ohio and Pennsylvania and maintained certifications through the Wildlife Habitat Council, and it is developing additional partnerships with the Audubon Society of Southwestern Pennsylvania, the Pennsylvania Department of Transportation, the University of Kentucky, Lexington Parks and Recreation, and private businesses.

NiSource is providing utility vegetation management crews with integrated vegetation management training in plant identification, and in pollinator habitat establishment and enhancement practices, such as implementation of pipe zone-border zones on natural gas distribution rights-of-way.

This commitment is also a part of NiSource's workplace culture, where every day its employees are engaged in volunteer opportunities focused on protecting and enhancing the environment, from tree planting events, community clean-up efforts, and land restoration projects. Many of these team-building projects are led by the NiSource Environmental Action Team (NEAT), an employee-based organization. In 2023, NiSource employees performed more than 400 hours of volunteer work throughout the community, with many focused on environmental projects. And the NiSource Charitable Foundation gave more than $400,000 to nearly 50 nonprofit organizations focused on environmental stewardship issues and projects. The company also provided 17 Environmental Action Grants totaling approximately $70,000 to support environmental restoration and education projects in 2023, including seven projects totaling approximately $30,000 to provide support for pollinator habitat restoration and education.

NiSource's continuing efforts are improving engagement between staff and its community partners, and a culture of environmental stewardship, and contributing to enhanced wildlife quality across NiSource's large service territory.