

1.0 Introduction

1.1 Background

1.1.1 Overview of NiSource

NiSource Inc., headquartered in Merrillville, Indiana, is engaged in natural gas transmission, storage, and distribution, as well as electric generation, transmission, and distribution. Operating companies owned by NiSource Inc. deliver energy to 3.8 million customers located within the high-demand energy corridor stretching from the Gulf Coast through the Midwest to New England.

NiSource Inc.'s wholly owned pipeline subsidiaries, Columbia Gas Transmission, LLC, Columbia Gulf Transmission Company, Crossroads Pipeline Company, Central Kentucky Transmission Company, and NiSource Gas Transmission and Storage Company (companies referred to collectively as "NiSource" throughout this MSHCP) are interstate natural gas companies whose primary operations are subject to the Natural Gas Act and fall under the jurisdiction of the Federal Energy Regulatory Commission (FERC) and the U.S. Department of Transportation (USDOT).¹ NiSource currently maintains and operates approximately 15,500 miles of onshore interstate natural gas transmission pipelines and appurtenant facilities.² NiSource delivers annually about one trillion cubic feet of gas to 72 local distribution companies and several hundred gas end-users in southern, northeastern, midwestern, and Mid-Atlantic states. The NiSource operating territory traverses 14 states ranging from New York to Louisiana.

NiSource's natural gas transmission pipeline systems consist of a number of components, including the pipeline itself, which is located almost entirely underground; compressor stations, which are located every forty to one hundred miles along the transmission pipelines; metering stations; Supervisory Control and Data Acquisition (SCADA) communication systems; access roads; and mainline valves. In addition, NiSource operates and maintains underground natural gas storage fields in conjunction with its pipeline system. Currently, NiSource operates 36 storage fields comprised of approximately 3,600 individual storage wells in West Virginia, Ohio, Pennsylvania, Maryland, and New York. **Figure 1-1** shows the general location of NiSource's pipeline facilities.

¹ NiSource, as defined above, is seeking coverage under an Incidental Take Permit for NiSource's gas transmission and storage operations. NiSource's corporate parent, NiSource Inc., also owns a number of local natural gas distribution (LDC) companies. NiSource is not seeking coverage under the Incidental Take Permit for the activities of the LDC companies.

² Only NiSource activities specific to onshore facilities will be addressed in this Habitat Conservation Plan. These activities take place over approximately 15,500 linear miles. Offshore areas are not included in this initiative. Where the covered lands footprint includes coastal areas, the boundary was typically drawn at the high-tide line. The few exceptions allow for Habitat Conservation Plan (HCP) coverage of the inland reaches of certain waters, including the James River in Virginia and some waters in Louisiana. These exceptions are described in detail in Section 2.3.1.

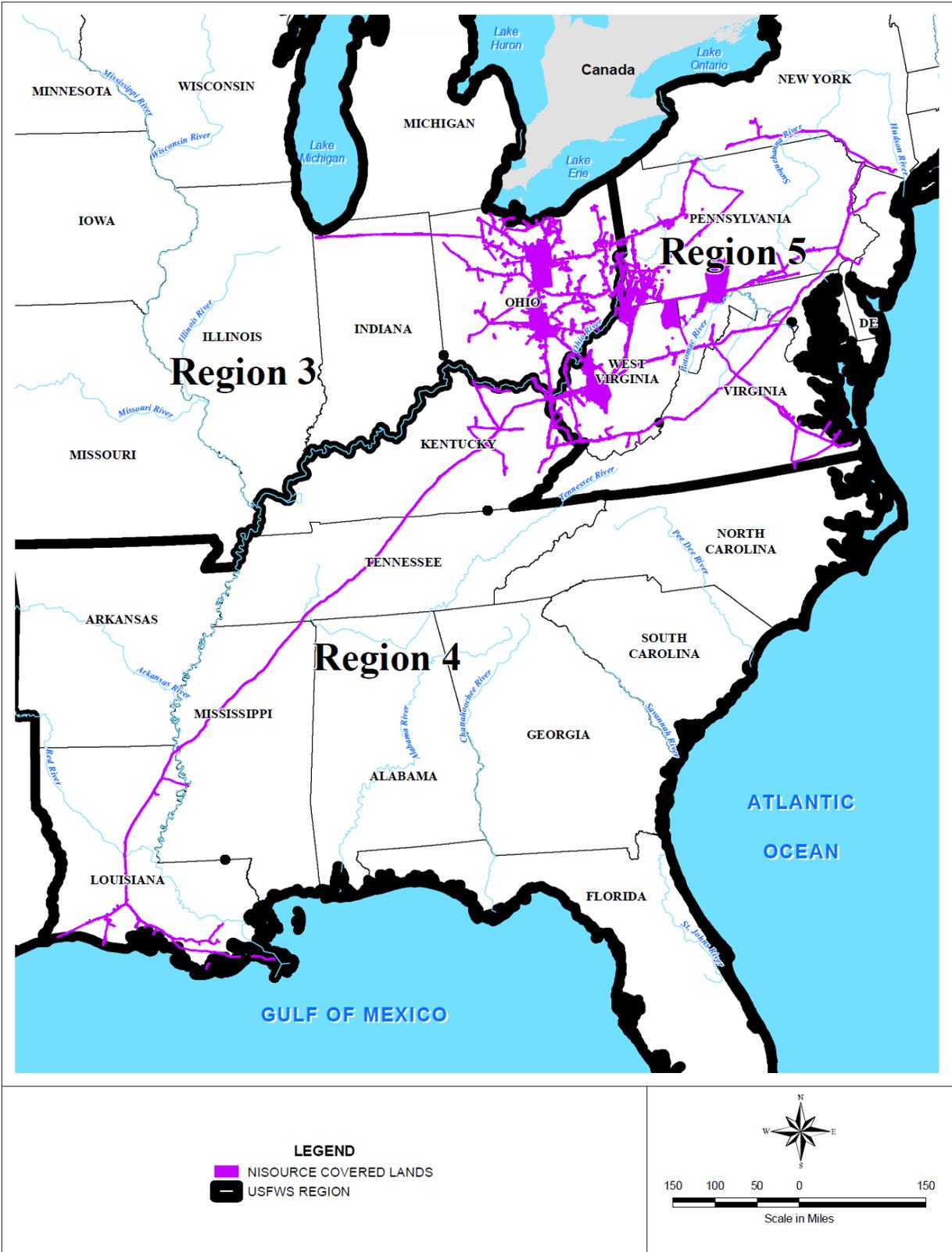


Figure 1-1 General Location of NiSource Pipeline Facilities

1.1.2 Genesis of the Habitat Conservation Plan

NiSource contacted the U.S. Fish and Wildlife Service (Service or USFWS), in late 2005, to discuss options for accomplishing Endangered Species Act (ESA) compliance and incidental take authorization with respect to natural gas transmission activities potentially affecting species listed as threatened or endangered under the ESA. Certain pipeline operations and maintenance activities are conducted without specific FERC authorization or permits, which might serve as a basis for consultation and authorization under Section 7 of the ESA. However, NiSource wanted to explore other options for ESA compliance because (1) numerous individual project-focused consultations is inefficient and time-consuming and (2) NiSource believes that the traditional ESA consultation approach to regulatory compliance may be too limited a tool to achieve the ESA's conservation goals due to its local and project-specific focus. For example, when the impacts of natural gas pipeline activities on protected species are quantified for a discrete project, the conservation benefits provided to the species are similarly discrete. Further, the project-by-project approach typically is not designed with species recovery in mind and does not provide the tools necessary to take a holistic, landscape approach to species protection.

Therefore, the Service agreed that a Multi-Species Habitat Conservation Plan (MSHCP) developed under Section 10(a)(1)(B) of the ESA could provide greater opportunities to address listed species' conservation needs. Subsequently, NiSource worked with the Service to develop a MSHCP that covers a wide array of natural gas pipeline activities over a broad geographic region, provides numerous avoidance and minimization measures for the species included in the MSHCP, identifies mitigation needs for species for which take is likely to occur, and employs a landscape-scale conservation approach. With this MSHCP, NiSource seeks to address the full range of its ongoing activities and to identify and manage species and habitat impacts on a system-wide basis.

The Section 7 and Section 10 ESA authorities, however, are not mutually exclusive. As federal actions, the Service's issuance of the Section 10(a)(1)(B) permit, plus the review and permitting activities of other agencies for future aspects of the covered activities, will also need to comply with Section 7 the ESA. The consultation requirements for these various federal actions will be addressed as a whole in the Service's Biological Opinion (BO) and associated Incidental Take Statement (ITS). In many instances, the avoidance, minimization and mitigation measures specified in the HCP will be considered part of the project description for the purposes of the Section 7 consultation, or will serve as the basis for reasonable and prudent measures in the ITS. As such, the BO with its ITS and the Section 10(a)(1)(B) Incidental Take Permit (ITP) will work in unison to provide a coordinated and complementary approach to address endangered species conservation and regulatory concerns.

1.1.3 Purpose of the Multi-Species Habitat Conservation Plan

This MSHCP represents an innovative approach to provide for both enhanced conservation of listed species and streamlined regulatory compliance requirements for NiSource's pipeline activities. It provides a means to avoid, minimize, and/or mitigate for take of species caused by covered activities. It also memorializes measures to be

undertaken to avoid and minimize adverse effects to certain species for which take is therefore not anticipated. In doing so, the MSHCP satisfies applicable provisions of the ESA pertaining to federally listed species protection, and it concurrently improves the permitting efficiency for the construction, operation, and maintenance of NiSource's natural gas pipelines and ancillary facilities by providing a predictable and accepted structure under which pipeline activities can proceed.

Operation and maintenance of NiSource's facilities requires numerous activities conducted on an annual basis. On average, NiSource has approximately 400 projects annually that require some form of review pursuant to the ESA, typically under Section 7. Most of these consultations have resulted in a determination that the project would not affect, or would not likely adversely affect, listed species or critical habitat. The majority of these projects have been addressed through informal consultations with Service Field Offices. These activities include routine right-of-way (ROW) maintenance; facility inspection, upgrade, and replacement; forced relocations; and expansion projects.

Section 9 of the ESA and its implementing regulations prohibit the unauthorized "take"³ of listed species. Like the Incidental Take Statement issued in the Section 7 consultation process, an ITP issued pursuant to Section 10 of the ESA provides such authorization. To obtain an ITP, the permit applicant must submit an application along with an HCP that specifies, among other statutory requirements, the steps the applicant will take to minimize and mitigate the impact of the taking.

This MSHCP addresses the impacts of NiSource's covered activities on 43 federally listed and candidate species. The MSHCP analyzes impacts to these species occurring during three general categories of activities related to NiSource's natural gas systems: (1) general operation and maintenance; (2) safety-related repairs, replacements, and maintenance; and (3) expansion. The geographic scope of this MSHCP will extend across Service Regions 3, 4, and 5, covering the general area stretching from Louisiana northeastward to New York where NiSource natural gas systems are in place. The lands covered by this MSHCP are described in detail in Chapter 2. After accounting for its commitments to avoidance and minimization measures, NiSource anticipates take of 10 of the 43 species analyzed. For the purposes of this MSHCP, the term "take species" refers to the ten species for which take coverage is requested. The term "MSHCP species" refers to all 43 species that are analyzed in the MSHCP.

1.1.3.1 Conservation Benefits to Species

The MSHCP provides significant conservation benefits to species by addressing the needs of such species and their habitats on a more regional, ecosystem-wide basis, where possible. Further, conservation activities can be coordinated and aggregated on a broader geographic scale more consistent with species population levels and can be focused on achieving species recovery goals. This landscape-level approach, discussed

³ The ESA defines take as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." 16 U.S.C. § 1532(19). The ESA implementing regulations further define the terms "harm" and "harass." 50 C.F.R. § 17.3.

in greater detail in Section 1.1.3.2 below, is expected to provide greater benefits to species than the traditional Section 7 approach to ESA regulatory compliance that has been used for NiSource's activities. It may also benefit other species that utilize the same habitat as species included in this MSHCP.

This MSHCP also includes avoidance and minimization measures (AMMs), and Environmental Construction Standards (ECS), which provide detailed environmental specifications for NiSource construction, operation, and maintenance activities in environmentally-sensitive areas, including habitat for federally listed and candidate species. AMMs have been specifically tailored to a species' needs. Consistent and coordinated use of these standards and practices will serve to avoid impacts to species, and where impacts will occur, will seek to minimize and mitigate the impact of the resulting take to the maximum extent practicable.⁴

1.1.3.2 The Green Infrastructure Assessment

The landscape-level mitigation approach of this MSHCP is embodied by the use of a green infrastructure assessment for strategic conservation planning developed for NiSource by The Conservation Fund (TCF) with input from all 14 cooperating states. Green infrastructure offers a conceptual approach for identifying mitigation opportunities at an ecosystem level. Specifically, it is a strategically planned and managed network of natural lands, working landscapes, and other open spaces that conserve ecosystem values and functions and provide associated, incidental benefits to human populations. The MSHCP articulates the parameters for the mitigation. The Green Infrastructure Assessment, when completed, will assist NiSource in identifying the most beneficial projects to be implemented at a landscape scale, consistent with the MSHCP's mitigation criteria.

The three primary components of a green infrastructure network design are hubs, links and sites. *Hubs* are comprised of core forest or aquatic areas that anchor the network; they are typically the origination and destination points for wildlife. *Links* are the connectors that tie the system together providing the needed connectivity to ensure that isolated populations of species are not created and that the system functions as a whole. *Sites* are areas that do not necessarily contribute to the ecological integrity of the system, but nevertheless, have value (e.g., cultural resources, parks, recreation areas, etc.). **Figure 1-2** shows how these three components of a green infrastructure work together.

The green infrastructure network design created for the NiSource MSHCP will be the largest green infrastructure assessment conducted in the country. TCF's green infrastructure assessment will extend beyond NiSource's 15,562 mile network to encompass the adjacent counties, ecoregions, and watershed units within the 14-state area. The result of TCF's assessment will be a framework that can be used to identify mitigation opportunities that are intended to provide the greatest benefit for the species. These opportunities are anticipated to extend far beyond what is required for NiSource but should be useful for States and other applicant's in the future. The green

⁴ The MSHCP also provides adaptive management mechanisms to allow the ECS and AMMs to be updated, as necessary. See Chapters 7 and 10

infrastructure assessment will not be used to determine how much mitigation should occur in response to a take, but rather will be used to guide decision-making regarding the identification and selection of appropriate mitigation opportunities at an ecosystem level.

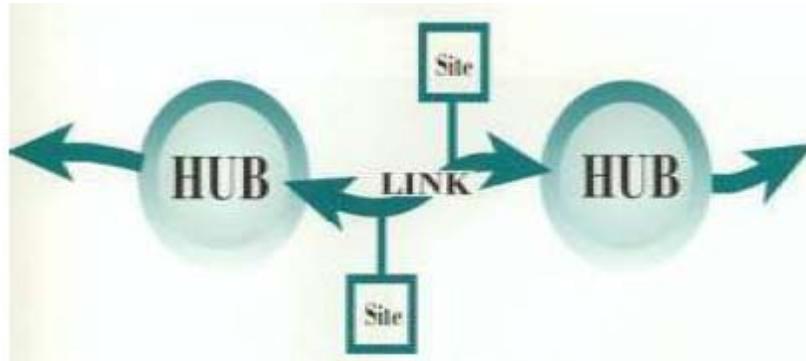


Figure 1-2 Green Infrastructure Network of Hubs, Links, and Sites

Utilizing a green infrastructure approach in this process will help NiSource integrate species habitat mitigation within the context of an interconnected network of lands and waters, providing multiple benefits across the entire range of NiSource’s natural gas pipeline transmission activities. Such an approach will also provide a consistent methodology for assessing possible mitigation projects, in accordance with the sideboards identified in the MSHCP. The methodology employed in this process has been accepted by the 14 states participating in the process.

The key product will be a green infrastructure network design that will delineate a green infrastructure core, hub, and corridor network using criteria based on habitat requirements for federally-listed species outlined in the NiSource MSHCP. TCF will prepare a green infrastructure network design methodology document that will define scales, establish criteria for key ecosystem attributes, and delineate network elements (e.g., core forests, core aquatic systems, core cave/karst systems, etc.). Once the methodology has been approved by the Service, NiSource, and the States, TCF will delineate cores, hubs, and corridors based on each ecosystem type. See **Figure 1-3**.

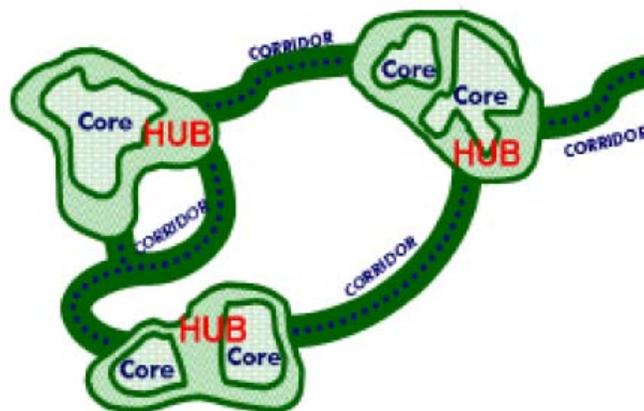


Figure 1-3 Example of Core, Hub, and Corridor Assessment

1.1.3.3 Benefits to NiSource

Pursuant to Section 10 of the ESA, the Service's issuance of the requested ITP would give NiSource comprehensive protection from take liability when performing the covered day-to-day routine activities necessary to operate, maintain, and expand its pipeline system, provided the terms and conditions of the ITP, MSHCP and implementing agreement are being met.

The MSHCP strategy would streamline and reduce the annual administrative burden of NiSource's ESA compliance efforts among a variety of agencies, while providing a common platform for improving and contributing to the conservation of protected species. The MSHCP would reduce both the frequency of inter-agency consultations between the Service and other agencies on NiSource's activities and the possibility of inconsistent obligations being imposed by different Service offices. It also would increase NiSource's ability to schedule regular or safety-related pipeline operation and maintenance work. Generally, the MSHCP would provide NiSource with a greater level of certainty than the project-by-project approach typically used.

1.1.3.4 Benefits to the Service

A comprehensive MSHCP will allow the Service to use its resources more efficiently and productively without sacrificing the protection of listed species. The upfront planning efforts undertaken to develop this comprehensive MSHCP will significantly reduce the Service's administrative burden over the life of the requested ITP by reducing the need for project-by-project consultation and avoiding multiple, redundant Section 7 consultations on individual project proposals while assuring compliance with the Section 7 consultation requirements for all covered activities. The Service will be able to redirect time and resources traditionally spent on these reviews of NiSource projects to conservation efforts, which will benefit protected species.

1.1.3.5 Benefits to Other Federal Agencies

Like the Service, other federal agencies with regulatory authority over NiSource's activities will benefit from a comprehensive MSHCP and the associated Biological Opinion and National Environmental Policy Act (NEPA) documentation. Such an approach would allow the agencies to use their staff and other resources more efficiently and productively without sacrificing the protection of listed species. The system-wide MSHCP will significantly reduce the agencies' administrative burden by eliminating the need for approximately 400 annual, project-specific, ESA consultations between the federal agencies (usually FERC or the U.S. Army Corps of Engineers [Corps]) and the Service. Given the anticipated fifty year duration of the requested ITP, this would equate to approximately 20,000 project reviews that would have occurred during the same period of time. Based on past practice, the vast majority of projects concluded that that proposed action would have no adverse impacts on listed species or their habitat. Although still responsible for approving or permitting aspects of the gas transmission system or rights-of-ways, the agencies would therefore be able to streamline their ESA compliance and redirect time and money to other agency activities, including conservation of listed species.

In addition, the agencies' participation in the preparation and planning of this HCP and the associated NEPA process furthers the goals and objectives of two interagency agreements regarding natural gas pipeline activities: (1) the 2002 Interagency Agreement on Early Coordination of Required Environmental and Historic Preservation Reviews Conducted in Conjunction with the Issuance of Authorizations to Construct and Operate Interstate Natural Gas Pipelines Certificated by the Federal Energy Regulatory Commission ("Interagency Agreement"); and (2) the 2004 Memorandum of Understanding on Coordination of Environmental Reviews for Pipeline Repair Projects (Pipeline Repair MOU). The Service, the FERC, and the Corps, among others, are participating agencies in both the Interagency Agreement and the Pipeline Repair MOU.

The Interagency Agreement "emphasizes the importance for the lead agency to receive specific information from the other participating agencies at key stages of [natural gas pipeline] project development to foster an efficient procedure to develop documentation to meet all agencies' requirements." In particular, the intent of the Interagency Agreement is to establish a process to facilitate the timely development of needed natural gas pipeline projects, whereby participating agencies will:

- Work together and with applicants and other stakeholders, as appropriate, including before complete applications for the necessary authorizations are filed;
- Identify and resolve issues as quickly as possible;
- Attempt to build a consensus among governmental agencies and their stakeholders; and
- Expedite the environmental permitting and review for natural gas pipeline projects.

The Pipeline Repair MOU similarly "enhances coordination of the processes through which agencies with environmental and historic preservation review responsibilities under various statutes meet those responsibilities in connection with the authorizations required to repair natural gas and hazardous liquid pipelines that have been identified by pipeline operators as in need of repair on a timely basis to protect life, health or physical property." The agencies' coordination on the development of the MSHCP and its associated NEPA analysis represents the type of consensus-building and streamlining described in and encouraged by the Interagency Agreement and Pipeline Repair MOU.

1.1.4 Statement of Principles

NiSource and the Service's collaboration on the preparation of this MSHCP were based on the core values of teamwork, integrity, respect, and value creation. NiSource and the Service also agreed to the following guiding principles:

Clear Purpose: NiSource and the Service would have clear goals and objectives for all aspects of the HCP and would include a diverse array of expertise and interests in its development.

Shared Approach: NiSource and the Service would collaborate with the diversity of stakeholders affected by the MSHCP. Together NiSource and the Service

serve a wide range of constituencies and would solicit and incorporate their input into the preparation of the MSHCP. NiSource and the Service will be respectful of one another, valuing all opinions and treating all concerns as legitimate.

Sound Science: NiSource and the Service would use rigorous, scientifically-sound, best available information.

Integrity: NiSource and the Service’s integrity would be demonstrated in their honesty, reliability, and trustworthiness.

Adaptive Management: NiSource and the Service would, to the extent allowable, be adaptive in their approaches recognizing that biological information regarding some listed species is sometimes incomplete.

Compliance with Laws: NiSource and the Service would fully comply with all applicable legal requirements.

1.2 Scope of the Multi-Species Habitat Conservation Plan

The scope of the MSHCP includes the duration of the incidental take permit that NiSource is requesting (permit duration); areas for which NiSource is requesting incidental take coverage for its covered activities (covered lands); the otherwise lawful activities for which NiSource is requesting incidental take coverage (covered activities); the species that were analyzed in this MSHCP (MSHCP species); the species for which NiSource is requesting incidental take authorization (take species); and the entities for whom incidental take coverage is requested (permittee). Each of these elements is described below.

MSHCP Key Components
<ul style="list-style-type: none">• Permit Duration: 50 Years• Covered Lands: One-Mile-Wide Linear Corridor Approximately 15,562 Miles in Length, Plus 12 Counties where storage fields occur equaling approximately 9,783,207 acres.• Covered Activities: ROW Vegetation Maintenance, O & M Activities, and Construction• MSHCP Species: Forty-three species that were analyzed in the MSHCP.• Take Species: Ten species for which NiSource is requesting incidental take authorization.• Permittee: NiSource Gas Transmission and Storage and Its Agents

1.2.1 Permit Duration

The duration of NiSource’s MSHCP was selected to comply with the Service’s Five-Point Policy for HCPs, 65 Fed. Reg. 35242 (June 1, 2000), which outlines the following factors to consider when determining the length of incidental take permits:

- The duration of the covered activities and the expected positive and negative effects on species covered by the ITP.
- The extent to which the operating conservation program will increase the long-term survivability of the listed species or enhance its habitat.
- The extent of information underlying the HCP.
- The time necessary to implement and achieve the benefits of the operating conservation program.

- The extent to which the program incorporates adaptive management strategies to address biological uncertainty.

Based on these factors, the NiSource MSHCP is written to cover certain activities over the next 50 years, and NiSource requests an ITP of the same duration. Assessments conducted as part of this plan are therefore based on this 50-year timeframe.

1.2.2 Covered Lands

The NiSource MSHCP planning area extends across three Service regions and 14 states to cover an area stretching from Louisiana northeastward to New York. The lands covered by the MSHCP are tied to existing NiSource facilities (e.g., pipelines, ancillary structures, and storage fields). Lands that fall within a one-mile corridor – i.e., one-half mile (2,640 feet) on either side of the centerline of a NiSource pipeline or existing ancillary company structure or building – are considered part of the covered lands as discussed in detail in Chapter 2. This corridor width was chosen for a number of reasons including it would encompass approximately 95% of NiSource Operation and Maintenance (O&M) projects (**Appendix A**). While a one-mile corridor provides various advantages, it is important to understand that over the life of the permit less than 10% of the lands within that corridor would be disturbed by NiSource activities and we anticipate that only 0.5% of the area would be impacted by new disturbance. The onshore pipeline system is 15,562 miles long. In addition to these lands, the following counties are included, in their entirety, to permit potential expansion of the existing storage fields contained therein: Hocking, Fairfield, Ashland, Knox, and Richland counties, Ohio; Bedford County, Pennsylvania; Allegany County, Maryland; Kanawha, Jackson, Preston, Marshall, and Wetzel counties, West Virginia. The total area encompassing the covered lands is 9,783,207 acres. **Figure 1-1** shows the geographic scope of the plan. For purposes of this analysis, the covered lands are divided into the 23 ecoregions that the system crosses. These regions are described in further detail in Chapter 3.

This geographic scope was chosen to be consistent with NiSource’s business philosophy of managing its natural gas facility activities as a unified system. This has the conservation planning advantage of encompassing a larger portion of a species’ population and habitat so the MSHCP can more comprehensively address conservation best management practices and mitigation measures. As noted in Chapter 2, the breadth of the corridor and counties was chosen to provide flexibility in the selection of future routes and expansion. NiSource anticipates that the covered activities will occur on only a small fraction of the 9,783,207 acres, over the 50 year permit.

1.2.3 General Description of Covered Activities

In developing this MSHCP, NiSource seeks ESA take coverage for a suite of covered activities associated with its natural gas facilities within the covered lands. These include: (1) general operation and maintenance of NiSource’s natural gas systems; (2) safety-related repairs, replacements, and maintenance of NiSource’s natural gas systems; and (3) certain expansion activities related to NiSource’s natural

gas systems. The covered lands and covered activities are described further in Chapter 2.

1.2.4 Species Analyzed in this MSHCP

Forty-three species from nine taxonomic groups have been analyzed in the MSHCP. Six mammals (including three bats), one bird, two reptiles, two amphibians (both salamanders), six fish, two crustaceans, 17 freshwater mussels, four insects, and three plants have been included in the plan. (See **Table 4-1** for a complete list of species analyzed in this MSHCP. Species for which NiSource is requesting incidental take authorization (i.e. “take species”) are: Indiana bat, bog turtle, clubshell, fanshell, Northern riffleshell, James spinymussel, Nashville crayfish, Madison cave isopod, American burying beetle and sheepnose mussel (should it become listed in the future).

1.2.5 Permittee

NiSource is requesting incidental take coverage relevant to covered activities carried out within the covered lands by NiSource, and the designated agents of NiSource. The requested ITP will not provide any ESA coverage for other individuals or entities, including landowners of the covered lands.⁵ The ITP may be transferred in accordance with the Service’s regulations, currently located at 50 C.F.R. § 13.25. NiSource may, in the future, seek to include additional subsidiaries of NiSource, or its parent, NiSource, Inc., in the scope of the ITP. In making any such modifications, NiSource will follow the procedures outlined in Chapter 9 of this MSHCP.

1.3 What the Multi-Species Habitat Conservation Plan Does Not Do

The purpose of the MSHCP planning process and requested ITP is to authorize the incidental take of threatened or endangered species in connection with NiSource’s covered activities within the covered lands, not to authorize the underlying activities that result in take. Thus, NiSource will still need to obtain any other required federal, state, and/or local permits and authorizations before undertaking the covered activities.

The MSHCP also does not authorize NiSource to clear or otherwise utilize an entire one-mile-wide corridor along its pipeline facilities. The one-mile corridor and 12 counties included in the covered lands simply provide the boundaries for the areas within which NiSource has incidental take coverage when carrying out its covered activities. As outlined above, NiSource’s covered activities are anticipated to impact less than 10% of the covered lands over the entire 50-year permit term, with new disturbance on less than 0.5% of the covered lands. NiSource does not own or control most of the lands included within the covered lands. Thus, prior to conducting any

⁵ In some instances, NiSource has entered into partnerships with third parties to develop pipeline projects (“Partnership Projects”). NiSource is not seeking coverage under this permit for work performed on the Partnership Projects by the partnerships or by partners other than NiSource. The Partnership Projects, however, are included as part of the “covered lands.” NiSource’s intent in doing this was to include within the scope of the permit only work completed by NiSource and NiSource’s designated agents on the Partnership Projects.

covered activities within the covered lands, but outside its existing easements and ROWs, NiSource would need to obtain usage rights to, or ownership of, affected lands through easement agreements or acquisition of title.

1.4 Legal Framework

The NiSource MSHCP has been developed pursuant to the ESA. Except as noted below, the MSHCP is not intended to serve as a vehicle for compliance with other regulatory programs that may affect federally-listed species and their habitats. NiSource will work with the relevant agencies to ensure that other federal and state requirements applicable to the covered activities are satisfied. However, to the extent possible, the MSHCP has been designed to be consistent with and reflect other regulatory processes and regulatory constraints.

1.4.1 Regulatory Agencies

As an interstate pipeline company, NiSource is regulated by a number of federal agencies, including but not limited to the following:

- FERC – FERC is an independent agency that regulates the interstate transmission of natural gas. FERC also reviews proposals to build and operate interstate natural gas pipelines and issues certificates for those deemed to be in the public interest and necessity.
- U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, Office of Pipeline Safety (OPS) – OPS is the primary federal regulatory agency responsible for ensuring the safe, reliable, and environmentally-sound operation of the nation’s energy pipelines. OPS develops and implements pipeline safety regulations at the federal level.
- U.S. Fish and Wildlife Service – The Service, in the Department of the Interior, and the National Oceanic and Atmospheric Administration National Marine Fisheries Service (NOAA Fisheries), in the Department of Commerce, share responsibility for administration of the ESA. Among their responsibilities are incidental take authorizations under Sections 7 and 10 of the ESA, and enforcement. The Service is responsible, however, for all the species included in the NiSource MSHCP. Portions of NiSource’s natural gas system do, or may in the future, cross Service lands owned and managed by the National Wildlife Refuge System, which is a branch of the Service. Depending on the nature of the right-of-way previously acquired or to be obtained, special use permits from a particular refuge may be required.
- U.S. Army Corps of Engineers – The Corps is responsible for issuance of permits to discharge dredged or fill material into waters of the U.S., including wetlands, under Section 404 of the Clean Water Act (CWA).
- U.S. Forest Service (Forest Service) – The Forest Service, in the Department of Agriculture, manages public lands in national forests and grasslands. Portions of NiSource’s natural gas system do, or may in the future, cross Forest Service lands.

- National Park Service (NPS) – The NPS, in the Department of Interior, manages the national park system, a network of nearly 400 natural, cultural, and recreational sites across the nation. Portions of NiSource’s natural gas system do or may in the future cross lands owned or managed by NPS.

Federal landholdings that are crossed by MSHCP covered lands are identified in **Appendix E**.

1.4.2 Federal Endangered Species Act

The NiSource MSHCP was developed to meet the requirements of the federal ESA. The ESA was enacted by Congress in 1973 to provide a means of conserving the ecosystems on which threatened or endangered species depend. Although the Service and NOAA-Fisheries share responsibilities for administering the ESA, the Service is responsible for all the species included in the NiSource MSHCP. Thus, no further discussion of NOAA Fisheries’ role in the implementation of the ESA will be included in this MSHCP.

The Service can list species as either endangered or threatened. An endangered species is at risk of extinction throughout all, or a significant portion, of its range. A threatened species is likely to become endangered within the foreseeable future. Section 9 of the ESA prohibits the take of any fish or wildlife species listed under the ESA as endangered. That prohibition has been extended by regulation at 50 C.F.R. § 17.31 to most species listed as threatened. Take, as defined by the ESA, means “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.”

Harm is further defined as “an act which actually kills or injures wildlife. Such act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.” 50 C.F.R. § 17.3. Harass, as defined “means an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering.” 50 C.F.R. § 17.3. Section 9 prohibits the removal and reduction to possession of any listed plant species “under federal jurisdiction,” as well as the removal, damage, or destruction of such plants on any other areas in knowing violation of any state law or regulation or in violation of state trespass law.

The ESA includes mechanisms that provide exceptions to the Section 9 take prohibitions. These are addressed in Section 7 for federal actions and Section 10 for nonfederal actions. There may be situations in which a project may have components with a federal nexus and others over which there is no federal control or oversight. In those circumstances, the Service has recognized that Sections 7 and 10 are not mutually exclusive vehicles for authorizing take. As is the case here, the processes may be hybridized so long as the intent of the Act and the implementing regulations are satisfied.

Section 7

Section 7(a)(2) of the ESA requires all federal agencies to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of habitat critical to such species' survival. To ensure that its actions do not result in jeopardy to listed species or in the adverse modification of critical habitat, each federal agency must consult with the Service regarding federal agency actions that have the potential to impact listed species. This consultation may be formal or informal.

Before initiating an action, the federal action agency, or a nonfederal permit applicant, must ask the Service to provide a list of endangered, threatened, and proposed species and designated and proposed critical habitats that may be present in the project area. If no such species or critical habitat is present, then the federal action agency has no further ESA obligation under section 7(a)(2) and consultation is concluded. If such a species or critical habitat is present, then the federal action agency must determine whether the project may affect listed species or their critical habitat. If so, further consultation is required.

If the action agency determines (and the Service agrees) that the project is not likely to adversely affect any listed species or designated critical habitat, then the consultation (informal to this point) is concluded and the Service's concurrence is put in writing. If the action agency determines that a project may adversely affect a listed species or designated critical habitat, formal consultation is required.

During formal consultation, the Service prepares a BO which analyzes, among other things, the direct, indirect and cumulative effects to the species. It also examines whether the proposed action would be likely to jeopardize the continued existence of the species or adversely modify designated critical habitat. If the BO reaches a jeopardy or adverse modification conclusion, the opinion must suggest "reasonable and prudent alternatives" that would avoid that result. If the BO concludes that the project as proposed would involve the take of a listed species, but not to an extent that would jeopardize the species' continued existence, the BO must include an incidental take statement. The incidental take statement specifies an amount of take that may occur as a result of the action and may suggest reasonable and prudent measures to minimize the impact of the take. If the action is performed in accordance with the BO and incidental take statement, it may be implemented without violation of the ESA, even if incidental take occurs.

The issuance of an ITP for this MSHCP is a federal action that triggers a Section 7 consultation internally within the Service. At the same time, other federal action agencies processing aspects of the gas transmission system may also need to consult with the Service. Therefore, the consultation and resulting BO will cover such agencies with regard to covered activities, and provide a programmatic mechanism to guide any future consultations that are not already covered by the MSHCP and BO.

Section 10

Until 1982, state, local, and private entities had no means to acquire incidental take authorization as federal agencies could under Section 7. Therefore, private

landowners and local and state agencies risked being in direct violation of the ESA no matter how carefully their projects were implemented. This statutory dilemma led Congress to amend Section 10 of the ESA in 1982 to authorize the issuance of an ITP to nonfederal project proponents upon completion of an approved conservation plan, now referred to as a “Habitat Conservation Plan.”

Where federal land, funding, or authorization is not required for an action by a nonfederal entity, the take of listed species must be permitted by the Service through the Section 10 process. Private landowners, corporations, state agencies, local agencies, and other nonfederal entities may obtain a Section 10(a)(1)(B) ITP for take of federally listed fish and wildlife species “that is incidental to, but not the purpose of, otherwise lawful activities.”

Protection for listed plants is more limited than for listed fish and wildlife. Under section 9(a)(2)(B) of the ESA, endangered plants are protected from removal, reduction to possession, and malicious damage or destruction in areas that are under federal jurisdiction. Section 9(a)(2)(B) of the ESA also provides protection to plants from removal, cutting, digging up, damaging, or destroying them where the action takes place elsewhere in knowing violation of any state law or regulation or in violation of a state criminal trespass law. Because the ESA does not prohibit the incidental take of federally listed plants on private or other nonfederal lands, Section 10 “incidental take” permits are not available to address such take of listed plants. However, because the Section 7(a)(2) jeopardy prohibition applies to plants, the Service may not issue a Section 10(a)(1)(B) ITP if the issuance of that permit would result in jeopardy to a listed plant species.

To receive an ITP, the permit applicant must provide (1) a complete description of the activity sought to be authorized; (2) the common and scientific names of the species sought to be covered by the permit, as well as the number, age, and sex of such species, if known; and (3) an HCP. The HCP must specify: (1) the impact that will likely result from such taking; (2) what steps the applicant will take to monitor, minimize, and mitigate such impacts, the funding that will be available to implement such steps, and the procedures to be used to deal with unforeseen circumstances; (3) what alternative actions to such taking the applicant considered and the reasons why such alternatives are not proposed to be utilized; and (4) such other measures as the Service may require as being necessary or appropriate for purposes of the plan. 50 C.F.R. §§ 17.22(b)(1) and 17.32(b)(1).17.32(b)(2).⁶

⁶ Additionally, in order for the Service to issue an ITP, it must find, among other things, that: (A) The taking will be incidental; (B) The applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such takings; (C) The applicant will ensure that adequate funding for the conservation plan and procedures to deal with unforeseen circumstances will be provided; (D) The taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild; (E) The measures, if any, required under paragraph (b)(1)(iii)(D) of this section will be met; and, (F) It has received such other assurances as he or she may require that the plan will be implemented. In making his or her decision, the Service must also consider the anticipated duration and geographic scope of the applicant’s planned activities, including the amount of listed species habitat that is involved and the degree to which listed species and their habitats are affected. 50 C.F.R. §§ 17.22(b)(2) and 17.32(b)(2).

1.4.3 National Environmental Policy Act

The NEPA, 42 U.S.C. §§ 4321-4375, requires federal agencies to include in their decision-making process appropriate and careful consideration of all environmental effects of a proposed action and of possible alternatives to that proposed action. Documentation of the environmental impact analysis and efforts to avoid or minimize the adverse effects of proposed actions must be made available for public notice and review. This analysis may be documented in, among other things, an Environmental Assessment (EA) or an Environmental Impact Statement (EIS). The agency must disclose in its NEPA document whether and how the proposed action may adversely affect the human environment. NEPA requires a comparison of environmental effects among various alternatives but includes no mandate to actually require the imposition of a particular alternative. Because the issuance by the Service of an ITP under Section 10 of the ESA constitutes a federal action, the Service must comply with NEPA. The Service has prepared a draft EIS to accompany the NiSource MSHCP during the public review period.

1.4.4 Natural Gas Act

Under the Natural Gas Act of 1938 (NGA), 15 U.S.C. §§ 717-717z, FERC has the authority to set “just and reasonable rates” for the transmission or sale of natural gas in interstate commerce and to grant “certificates of public convenience and necessity” allowing construction and operation of facilities used in interstate gas transmission. Under Section 7(c) of the NGA, FERC may grant individual certificates of public convenience and necessity for specific projects, or it may grant blanket certificates. Under a blanket certificate, a natural gas company may undertake a restricted array of routine activities without the need to obtain a separate certificate for each individual project. The NGA also requires FERC approval prior to abandonment of any interstate natural gas pipeline facility or services.

1.4.5 Natural Gas Pipeline Safety Act

The Natural Gas Pipeline Safety Act of 1968, as amended, 49 U.S.C. ch. 601, authorizes the USDOT, through the OPS, to regulate pipeline transportation of natural gas and other gases. The federal pipeline safety regulations promulgated under the Natural Gas Pipeline Safety Act (1) assure safety in design, construction, inspection, testing, operation, and maintenance of pipeline facilities; and (2) set out parameters for administering the pipeline safety program. 49 C.F.R. parts 190-199. The regulations are written as minimum performance standards.

1.4.6 Clean Water Act

Section 404 of the CWA, 33 U.S.C. § 1344, requires authorization from the Secretary of the Army, acting through the Corps, for the discharge of dredged or fill material into all waters of the United States. Waters of the United States include traditionally-navigable waters, interstate waters, their tributaries, and adjacent wetlands. These categories include many wetlands, certain intermittent and ephemeral streams, and areas subject to the ebb and flow of the tide.

New Jersey has been delegated Section 404 authority under the CWA, thus permits must be obtained from the NJ Department of Environmental Protection (NJDEP). No other states within the NiSource covered lands have been delegated Section 404 authority.

The Corps issues two types of permits under Section 404: general permits (either nationwide permits or regional permits) and standard permits (either letters of permission or individual permits). General permits are issued by the Corps to streamline the Section 404 process for nationwide, statewide, or regional activities that have minimal direct or cumulative environmental impacts on the aquatic environment. Standard permits are issued for activities that do not qualify for a general permit (i.e., that may have more than a minimal adverse environmental impact). NiSource activities under the MSHCP may result in impacts to waters of the United States and NiSource will continue to coordinate with the Corps and NJDEP to ensure compliance with all CWA obligations.

1.4.7 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA), 16 U.S.C. § 703 *et seq.*, implements various treaties and conventions between the U.S. and Canada, Japan, Mexico, and the former Soviet Union for the protection of migratory birds. Under the MBTA, taking, killing, capturing, collecting, pursuing or possessing migratory birds, their parts, nests, or eggs are the prohibitions most relevant to NiSource's activities. Take under the MBTA does not include the concepts of harm and harassment as defined in the ESA's implementing regulations. The MBTA defines migratory birds broadly and includes species listed at 50 C.F.R. § 10.13.

This MSHCP analyzes the effects on one ESA-listed bird that is also protected under the MBTA, the interior least tern. The MSHCP provides measures to avoid and minimize potential effects to this species. Any effects to the Interior least tern should not rise to the level of take under either the ESA or the MBTA. Therefore NiSource is not seeking ESA take coverage for the tern and its activities are consistent with the MBTA.

1.4.8 Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (BGEPA), 16 U.S.C. 668 *et seq.*, provides for the protection of the Bald Eagle and the Golden Eagle by prohibiting, except under certain specified conditions, the taking, possession and commerce of such birds. NiSource is not requesting BGEPA take coverage as part of the ITP. NiSource rarely encounters Bald Eagles and has not thus far ever encountered any Golden Eagles during Covered Activities. Where Bald Eagles were encountered in the past, NiSource successfully avoided take using Service approved construction timing restrictions and other best management practices. NiSource will continue to implement such best management practices to avoid take when Bald and Golden Eagles are encountered in the future.

1.4.9 Conservation Reserve Program

The Conservation Reserve Program (CRP) is a voluntary program in which agricultural landowners establish long-term, resource-conserving vegetative covers on eligible farmland in exchange for annual rental payments from the Commodity Credit Corporation based on the agriculture rental value of the land and cost-share assistance for up to 50% of the participant's costs. CRP contracts, which typically have 10- to 15-year terms, are managed by the Farm Service Agency (FSA), while technical support is provided by other agencies, primarily the Natural Resource Conservation Service (NRCS). The CRP is authorized by the Food Security Act of 1985.

The State Acres for Wildlife Enhancement (SAFE) program is a new initiative under the CRP to address high-value wildlife habitat restoration and cooperative conservation goals. SAFE encourages the public, producers, wildlife experts in state and federal agencies, the nonprofit community, and others to work together to create and submit proposals to benefit high-value wildlife in need of special consideration through the use of existing and newly established CRP lands. FSA hopes this flexible, results-oriented, locally-led practice will encourage cooperative SAFE proposals that benefit multiple species that require a regional approach in portions of several states.

NiSource recognizes the parallel goals of this MSHCP and these programs, and will propose cooperative mitigation efforts to the benefit of both initiatives, where possible. Any mitigation proposed in the MSHCP will not be constrained by a CRP contract and will be designed in a manner to complement both programs where overlap or complementary efforts can work together to benefit species and their habitats.

1.4.10 State Wildlife Laws

Many of the states crossed by the NiSource facilities have laws protecting sensitive species. NiSource has consulted with all of the state wildlife agencies in the 14 states covered by this MSHCP as part of this planning process. NiSource will continue to coordinate with those state agencies to ensure that it complies with all state wildlife protection laws applicable to the covered activities.

1.4.11 State or Local Conservation Easements

NiSource's system intersects certain states or other local governing entities that use conservation easements that limit development in exchange for landowner tax incentives. This type of easement agreement is becoming more commonplace, especially in Virginia where landowners are given a tax break for entering into such agreements with the Virginia Outdoor Foundation. When NiSource must establish a new easement for its facilities, it works with the landowner and completes title searches to identify the current terms of the conservation easements. NiSource then seeks approval from the governing agency or regulating organization to avoid converting or otherwise affecting the existing conservation easement agreement.

NiSource recognizes the parallel objectives of the MSHCP and these conservation easements and will work to find mutually-agreeable solutions where conflict may exist. Any activities covered by or mitigation proposed in the MSHCP

must be consistent with any state or local conservation easement that may be affected by such activities or mitigation.

1.4.12 Landowner Easement Agreements

NiSource negotiates easement agreements with landowners whose land its system crosses. These agreements generally contain specific stipulations that must be followed during the construction and subsequent operation of the system (e.g., notify landowner 24 hours prior to access on landowner property to pipeline maintenance). The mitigation proposed in the MSHCP is not intended to and cannot displace these agreements. The proposed mitigation measures have been developed to be consistent with these pre-existing agreements. Likewise, any new landowner agreements initiated by NiSource will consider the needs of the landowners in conjunction with the conservation initiatives set forth in the MSHCP and in the requested ITP, if issued. NiSource is not seeking incidental take coverage for the activities of any third parties who are not acting as NiSource's agents. This includes the activities of the owners of land over which NiSource has easements.

1.5 Overview of the Multi-Species Habitat Conservation Plan Preparation Process

1.5.1 MSHCP Planning

NiSource has consulted with many parties during the development of its MSHCP. A Key Team was established to facilitate work on the plan and included members from NiSource and the Service as well as NiSource's environmental and legal consultants. The team worked collaboratively throughout the planning process. NiSource, with the support of the Service, has made an effort to fully inform and engage stakeholders in the planning process, as described below. **Figure 1-4** shows the collaborative input NiSource obtained from various parties during the development of the MSHCP. In addition, 13 public scoping meetings were held by the Service to solicit and receive comments on the scope of review for the environmental impact statement.

1.5.2 Coordination with Federal Agencies, States, Tribes and Non-Governmental Organizations

This project crosses three Service regions, four Corps divisions, and 14 states. These entities were contacted early in the MSHCP process to inform them of the plan development and opportunities for their participation. The MSHCP planning process has included involvement from the state agencies in each of the 14 states covered by the project area. In late 2006 and early 2007, NiSource and the Service contacted the states about the MSHCP initiative and provided them with background materials. In mid-2007, NiSource and the Service held in-person meetings with the states to brief staff on the MSHCP development process as well as to provide working documents that addressed covered lands, covered activities, permit duration, and a potential species list for comment. After these meetings, the states determined their desired level of involvement in the process, which varied from participation on committees and specialist teams to more limited involvement through the review of draft and final documents.

NiSource has also involved other federal agencies early in the process. Outreach to the Corps, the FERC, NPS, and the Forest Service has resulted in their participation as cooperators in the NEPA process. Briefings with the Pipeline Hazardous Materials Safety Administration (PHMSA) and Tennessee Valley Authority (TVA) have also kept these federal agencies involved.

Outreach efforts to scope the project included letters to 18 Tribes. None of the Tribes responded with comments on the project. In addition, there were no Tribal representatives in attendance at any of the 13 scoping meetings that were conducted throughout the geographic area from Louisiana northward to New England. A complete description of the scoping process and results from those meetings is available in the Service Scoping Report, April 2008. In addition to the written requests and scoping meetings, additional coordination was completed with the Tribal Liaison staff in the Regional Offices, Regions 3, 4, and 5, of the Service. To date, no concerns have been raised by any of the Tribes that were contacted.

As part of the MSHCP outreach efforts, NiSource contacted a number of non-governmental organizations (NGOs), including The Conservation Fund, The Nature Conservancy, the Environmental Defense Fund, and Defenders of Wildlife. These organizations provided input to the process in various ways.

The Conservation Fund pursues a non-advocacy, non-membership approach to conservation, one that blends environmental and economic goals and objectives. Since its founding in 1985, TCF has helped its partners safeguard wildlife habitat, working farms and forests, community greenspace, and historic sites totaling nearly 6 million acres nationwide.

TCF has provided technical assistance, advice, and review regarding potential conservation strategies, mitigation and minimization measures, and other environmentally related terms and conditions during the development of the MSHCP. As described in Section 1.1.3.2, TCF is preparing a green infrastructure assessment to be used at a landscape scale to implement the mitigation strategy and criteria established under the MSHCP. TCF will serve as a coordinator in the execution and implementation of the conservation strategies adopted in the MSHCP, through communication with interested parties at the local and regional level, coordination of certain aspects of implementation, and oversight of on-the-ground conservation measures. The Nature Conservancy's (TNC's) mission is to preserve the plants, animals, and natural communities that represent the diversity of life on Earth by protecting the lands and waters they need to survive. It has developed a strategic, science-based planning process, called Conservation by Design, which helps it identify the highest-priority places—landscapes and seascapes that, if conserved, promise to ensure biodiversity over the long term. TNC will be involved at the state chapter level where mitigation opportunities align with other goals that TNC has for protected species.

The Environmental Defense Fund (EDF) works directly with businesses, government, and communities to create lasting solutions to the most serious environmental problems, using rigorous science. NiSource met with EDF to discuss the NiSource MSHCP initiative.

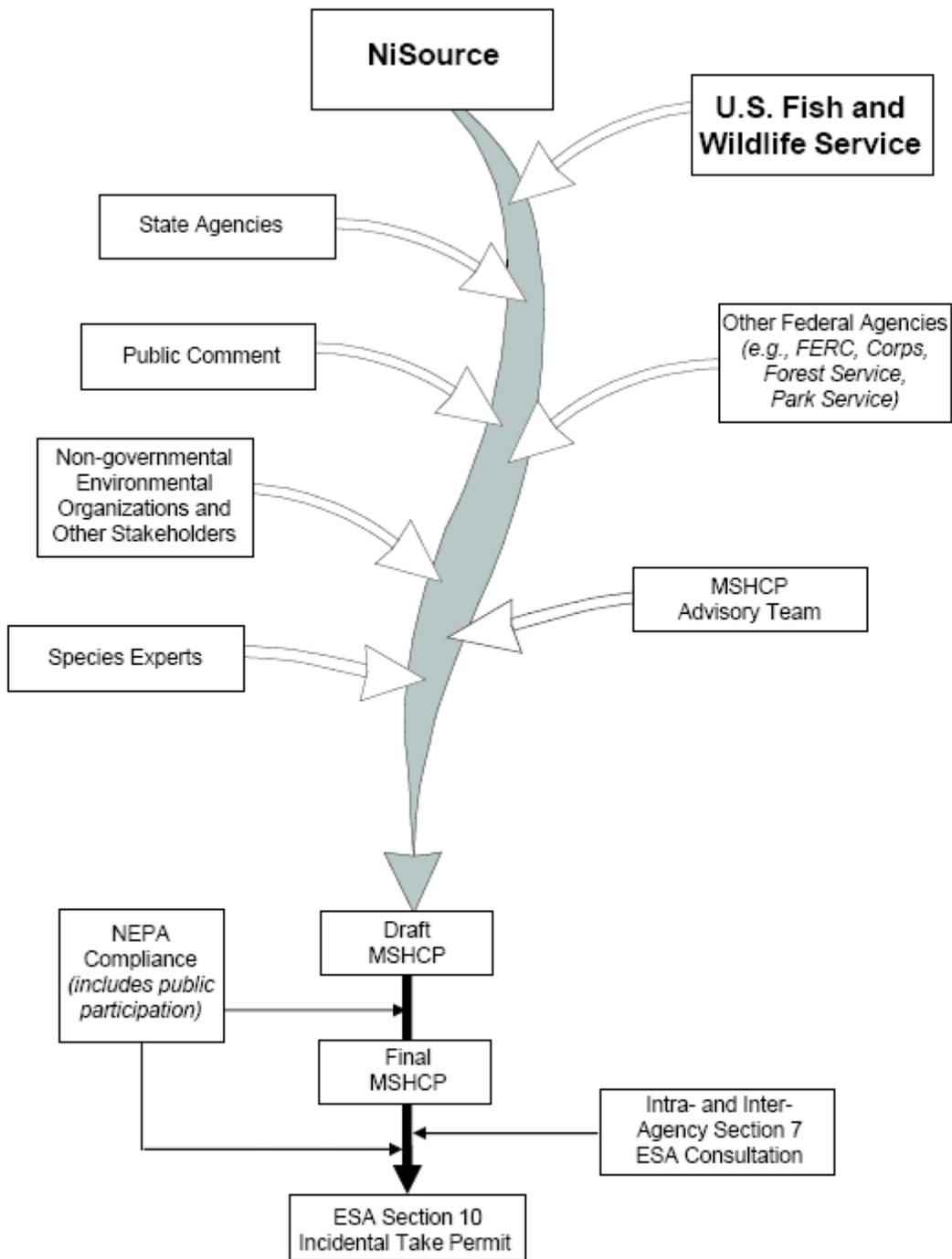


Figure 1-4 Collaborative Input from Parties During the MSHCP Development

The Defenders of Wildlife is a national, nonprofit membership organization dedicated to the protection of all native animals and plants in their natural communities. Founded in 1947, Defenders of Wildlife is one of the country's leaders in science-based, results-oriented wildlife conservation. NiSource discussed the conservation planning effort with Defenders of Wildlife early in the MSHCP development process.

1.5.3 MSHCP Advisory Team

During MSHCP development, NiSource developed an advisory team, including members from academia, the private sector, and state government, all of whom have an interest or experience in habitat conservation planning. Members of this team were consulted on various issues based on their expertise. This group also reviewed draft sections the MSHCP. *See* Chapter 12 for a list of team members.

1.5.4 Species-Specific Specialists

Another category of experts that provided important information to NiSource in the planning process was the species-specific specialists. For example, there are 17 species of freshwater mussels analyzed within the MSHCP. NiSource convened a series of conference calls with mussel specialists to gain their input regarding some of these mussel species. Similarly, NiSource and the Service consulted with other species specialists from various organizations, including state and federal government agencies, TNC, and universities, to obtain information on the MSHCP species, including potential impacts, threats, conservation measures, best management practices, and monitoring.

1.6 Overview of MSHCP Implementation

Implementation of the MSHCP will involve various actions, some of which will occur once and others of which will occur throughout the permit term. **Figure 1-5** shows generally how the implementation will proceed. The threshold actions are the Service's issuance and NiSource's acceptance of the ITP. NiSource will concurrently execute an Implementing Agreement (IA) with the Service. NiSource will also execute an agreement with the National Fish and Wildlife Foundation (NFWF) to establish a trust fund discussed in Chapters 5 and 8 and to identify NFWF as an administrative fiduciary with respect to this fund. The permit will become effective once NiSource makes an initial deposit into the Reserve Account and Mitigation Account of the fund, as specified in Chapter 8. These accounts will be updated and refreshed to meeting the rolling implementation and mitigation needs over the duration of the permit.

NiSource will then conduct its covered activities in accordance with the MSHCP, ITP and IA. Prior to undertaking any covered activity, NiSource's Natural Resource Permitting Group (NRP) will gather further site-specific information related to the covered activity's potential impacts on listed species, identify appropriate avoidance and minimization measures, and separately comply with other federal and state laws that apply to that activity, such as the CWA, state wildlife protection statutes, and the National Historic Preservation Act.

As it is conducting covered activities, NiSource will collect data to fulfill its monitoring and reporting obligations, as further described in Chapters 6, 7 and 10. Beginning after the first year of implementation, NiSource will submit an annual report

to the Service that will include (1) the results of its covered activity monitoring efforts; (2) a calculation of the amount of take that must be compensated for through mitigation; (3) a discussion and accounting of mitigation measures that were implemented to determine whether NiSource has fully compensated for the impact of take, still owes additional mitigation, or has a mitigation credit to apply to future take of that species under the MSHCP, and (4) any other reporting requirements of the ITP.

As described in further detail in Chapter 5, NiSource will have two mitigation options for compensating for the take calculated in the annual report. It may directly undertake mitigation opportunities as they arise, with the Service's concurrence regarding the level of compensation credit that a particular opportunity would provide. NiSource may also deposit funds into the Mitigation Account of the trust fund, in amounts commensurate with the anticipated take and mitigation debt. A mitigation panel will solicit proposals consistent with the mitigation criteria in Chapter 6, and recommend to NiSource the projects most suitable to undertake using Mitigation Account funds. Assuming the Service approves, NiSource will seek disbursement of funds from NFWF.

Through either option, mitigation efforts may be conducted in advance of impacts under the MSHCP, which will be considered a credit toward future impacts. Alternatively, mitigation may occur following impacts to listed species. The mitigation measures will be monitored to demonstrate success. The results of this monitoring will be included in the annual report. In addition, to help maintain current data for species included in the MSHCP, the Service should provide annually to NiSource any information in its possession regarding (1) the presence/absence of any listed species in or adjacent to the covered lands area, (2) new recovery plans or changes to existing recovery plans; and (3) any other information pertaining to listed species that may inform the implementation of the MSHCP.

At least annually for the first five years, and at least every five years after that, NiSource, the Service, and other stakeholders as appropriate, will meet to discuss the implementation and performance of the MSHCP. The purpose of these meetings will be to address any issues with implementation of the MSHCP, including whether implementation could be streamlined; whether the avoidance, minimization, and mitigation measures have been effective; whether adaptive management or changed circumstances thresholds have been triggered; and other MSHCP-related concerns. The purpose of these meetings is discussed in detail in Chapter 7.

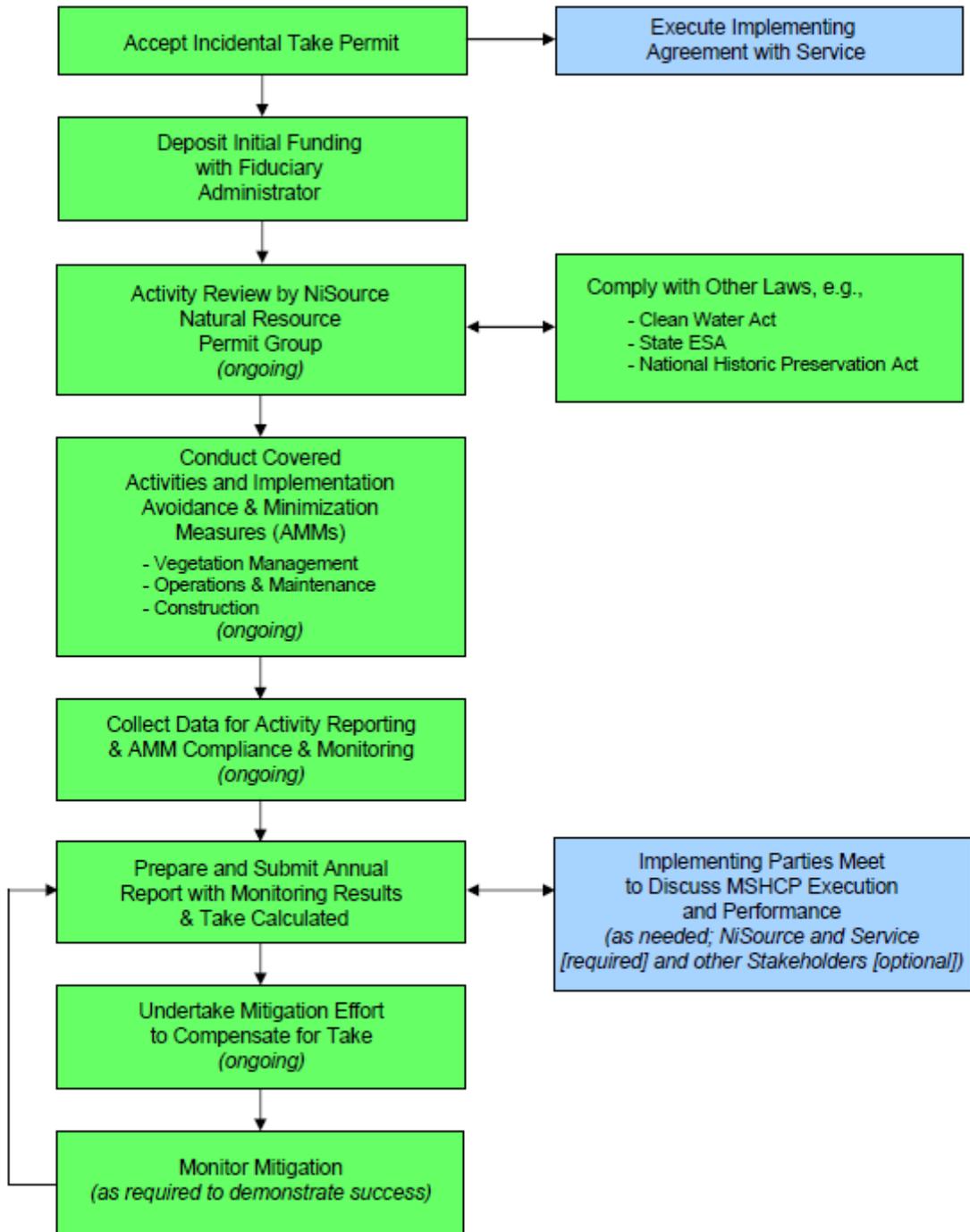


Figure 1-5 Implementation Process

1.7 Document Organization

This Plan and supporting information are presented in the chapters and appendices listed below. Volume 1 includes the draft MSHCP, and Volume 2 includes all appendices.

Chapter 1, *Introduction*, discusses the background, purpose, objectives, and scope of the MSHCP; reviews the regulatory setting; and summarizes the MSHCP process.

Chapter 2, *Covered Lands and Covered Activities*, describes NiSource's activities on its natural gas system that is covered under the MSHCP and ITP. It also identifies the lands covered by the MSHCP and ITP.

Chapter 3, *Physical and Biological Environmental Setting*, describes the existing conditions of the Covered Lands.

Chapter 4, *Species Analyzed in the MSHCP*, identifies the species analyzed in the MSHCP and those which NiSource is seeking incidental take authorization.

Chapter 5, *Conservation Strategy*, summarizes the goals, principles, objectives, and framework of the MSHCP's overall conservation strategy.

Chapter 6, *Species Assessments, Impact Analysis, and Mitigation*, describes the impacts the MSHCP will likely have on the take species and their critical habitat. This chapter also estimates the level of take for the 10 take species, and describes the avoidance, minimization, and mitigation measures required for such species.

Chapter 7, *Monitoring, Reporting, and Adaptive Management*, discusses the monitoring requirements and adaptive management procedures associated with implementation of MSHCP.

Chapter 8, *Funding Assurances*, reviews the costs associated with implementation of the MSHCP and the funding sources that NiSource will use to fund those costs.

Chapter 9, *Amendment Process*, describes the process for revising and amending the MSHCP.

Chapter 10, *Assurances*, describes the actions NiSource will take in the event of changed circumstances, unforeseen circumstances, or the necessity of modifying or amending the MSHCP.

Chapter 11, *Alternatives to Take*, presents the required analysis of alternatives to take of MSHCP species.

Chapter 12, *List of Preparers*, identifies the individuals involved in the preparation of this document.

Chapter 13, *References Cited*, lists the sources of literature and other information used in the preparation of this MSHCP.

Appendix A, *Annual Acreage Disturbance Estimates*, sets forth the methodology for determining the number of acres estimated to be disturbed annually under the MSHCP and ITP and provides estimates for such disturbance.

Appendix B, *NiSource Environmental Construction Standards*, describes the environmental specifications for NiSource construction, operation, and maintenance activities in environmentally-sensitive areas, including habitat for federally listed and candidate species.

Appendix C, *Covered Activities Photographs*, provides photographs of typical appurtenant facilities.

Appendix D, *GIS (Geographic Information System) Metadata*, describes the content, quality, condition, and other characteristics of data utilized in the MSHCP, including descriptions of what is contained in a particular GIS coverage; the spatial reference, the sources used, and the process followed to create the data; the purpose for which the data were developed; restrictions on accessing and using the data; and who to contact for further information.

Appendix E, *Conservation Lands Crossed by NiSource Facilities*, provides information on the federal, state, and NGO-owned conservation lands that are crossed by NiSource facilities covered by the MSHCP and ITP.

Appendix F, *Conservation Frameworks NLTA Species*, presents information and AMMs for species that the covered activities are not likely to adversely affect.

Appendix G, *Take Species Maps*, provides maps for the MSHCP take species.

Appendix H, *reserved*.

Appendix I, *NFWF Agreement*, is a copy of the draft agreement between NiSource and the National Fish and Wildlife Foundation relative to implementing the mitigation strategy of the MSHCP.

Appendix J, *Horizontal Directional Drilling*, provides information on the horizontal directional drilling process and how candidate crossings are evaluated.

Appendix K, *Natural Gas Pipeline & Storage Permitting Processes*, details NiSource's procedure for developing projects.

Appendix L, *Survey and Other Protocols*, provides information on current survey and other procedures to be used during implementation of the MSHCP and ITP.

Appendix M, *Threats Analysis Tables*, provides information on threats from covered activities for each of the covered species.

Appendix N, *Mitigation Panel Charter*, provides information and responsibilities for the Mitigation Panel.

Appendix O, *Information, Planning, and Consultation System*, provides information regarding the Service's IPaC system and how it will be used by NiSource.

Appendix P, *Easement/Acquisition Template*, provides template for any easements or land purchases to be undertaken for mitigation.