



DEPARTMENT OF THE INTERIOR
U.S. FISH AND WILDLIFE SERVICE

FEDERAL FISH AND WILDLIFE PERMIT

2. AUTHORITY-STATUTES
16 USC 1539(a)
16 USC 1533(d)

REGULATIONS
50 CFR 17.22
50 CFR 17.32

50 CFR 13

1. PERMITTEE

NISOURCE, INC.
1700 MACCORKLE AVE SE
CHARLESTON, WV 25314
U.S.A.

3. NUMBER
TE02636A-0

4. RENEWABLE
 YES
 NO

5. MAY COPY
 YES
 NO

6. EFFECTIVE
01/01/2014

7. EXPIRES
12/31/2064

8. NAME AND TITLE OF PRINCIPAL OFFICER *(If #1 is a business)*
VICTOR M. GAGLIO
SENIOR VICE PRESIDENT - OPERATIONS

9. TYPE OF PERMIT
NATIVE ENDANGERED & THREATENED SP. HABITAT
CONSERVATION PLAN - E & T WILDLIFE

10. LOCATION WHERE AUTHORIZED ACTIVITY MAY BE CONDUCTED

The Covered Lands include NiSource's onshore pipeline system in the States of Delaware, Indiana, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, New Jersey, New York, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia and is more fully described in Chapter 2 of the MSHCP and §2.8 of the Implementing Agreement.

11. CONDITIONS AND AUTHORIZATIONS:

- A. GENERAL CONDITIONS SET OUT IN SUBPART D OF 50 CFR 13, AND SPECIFIC CONDITIONS CONTAINED IN FEDERAL REGULATIONS CITED IN BLOCK #2 ABOVE, ARE HEREBY MADE A PART OF THIS PERMIT. ALL ACTIVITIES AUTHORIZED HEREIN MUST BE CARRIED OUT IN ACCORD WITH AND FOR THE PURPOSES DESCRIBED IN THE APPLICATION SUBMITTED. CONTINUED VALIDITY, OR RENEWAL, OF THIS PERMIT IS SUBJECT TO COMPLETE AND TIMELY COMPLIANCE WITH ALL APPLICABLE CONDITIONS, INCLUDING THE FILING OF ALL REQUIRED INFORMATION AND REPORTS.
- B. THE VALIDITY OF THIS PERMIT IS ALSO CONDITIONED UPON STRICT OBSERVANCE OF ALL APPLICABLE FOREIGN, STATE, LOCAL, TRIBAL, OR OTHER FEDERAL LAW.
- C. VALID FOR USE BY PERMITTEE NAMED ABOVE.

C.1. VALID FOR PERMITTEE NAMED ABOVE AND THE FOLLOWING AFFILIATES/SUBSIDIARIES:

NiSource Gas Transmission and Storage Company
Columbia Gas Transmission, LLC
Columbia Gulf Transmission, LLC
Crossroads Pipeline Company
Central Kentucky Transmission Company

C.2. THIS PERMIT MAY BE TRANSFERRED TO SUCCESSORS AND ASSIGNS IN ACCORDANCE WITH 50 CFR 13.24 AND 13.25. SHOULD THE PERMIT REQUIRE AMENDMENT DUE TO CHANGE IN OWNERSHIP, THE USFWS WILL PROCESS THAT AMENDMENT WITHOUT REQUIRING NISOURCE TO PREPARE ADDITIONAL MSHCP DOCUMENTS OR PROVIDING ANY MITIGATION OVER AND ABOVE THAT REQUIRED IN THE ORIGINAL PERMIT.

D. ACCEPTANCE OF THIS PERMIT SERVES AS EVIDENCE THAT THE PERMITTEE AND ITS AUTHORIZED AGENTS UNDERSTAND AND AGREE TO ABIDE BY THE TERMS OF THIS PERMIT AND ALL SECTIONS OF 50 CFR, PARTS 13 AND 17, PERTINENT TO ISSUED PERMITS. SECTION 11 OF THE ENDANGERED SPECIES ACT (ESA) OF 1973, AS AMENDED, PROVIDES FOR CIVIL AND CRIMINAL PENALTIES FOR FAILURE TO COMPLY WITH PERMIT CONDITIONS.

BLOCK 11 OF THIS PERMIT CONSISTS OF CONDITIONS E-U (15 PAGES TOTAL).

THERE ARE FIVE (5) ATTACHMENTS TO THIS PERMIT.

ADDITIONAL CONDITIONS AND AUTHORIZATIONS ALSO APPLY

12. REPORTING REQUIREMENTS

ANNUAL REPORT DUE: 03/31

ISSUED BY
Thomas O. Melius

TITLE
REGIONAL DIRECTOR

DATE
09/13/2013

E. The authorization granted by this permit is subject to compliance with, and implementation of, the Multi-Species Habitat Conservation Plan (MSHCP), dated May 2013, and the accompanying Implementing Agreement (IA) executed by the Permittee and the U.S. Fish and Wildlife Service (USFWS). This Permit, the MSHCP, and the IA are binding upon the Permittee, its officers, employees, authorized contractors and agents conducting covered activities.

Incidental take of the covered species identified below, on covered lands, is authorized under the terms and conditions of the MSHCP, IA, and as conditioned herein. This permit does not authorize take of any covered species resulting from unlawful activities nor does it authorize take of any species not listed as a covered species on this Permit.

The following species are covered by this Permit:

Common Name	Scientific Name	Federal Status
Mammals		
Indiana bat	<i>Myotis sodalis</i>	Endangered
Reptiles		
Bog turtle	<i>Glyptemys muhlenbergii</i>	Threatened
Crustaceans		
Madison Cave isopod	<i>Antrolana lira</i>	Threatened
Nashville crayfish	<i>Orconectes shoupi</i>	Endangered
Mollusks		
Clubshell	<i>Pleurobema clava</i>	Endangered
Fanshell	<i>Cyprogenia stegaria</i>	Endangered
James spinymussel	<i>Pleurobema collina</i>	Endangered
Northern riffleshell	<i>Epioblasma torulosa rangiana</i>	Endangered
Sheepnose	<i>Plethobasus cyphyus</i>	Endangered
Insects		
American burying beetle	<i>Nicrophorus americanus</i>	Endangered

F. The Permittee must allow/facilitate access to MSHCP covered lands in accordance with 50 CFR §13.21(e)(2). Nothing within this condition precludes or limits USFWS law enforcement related actions pertaining to this permit in accordance with applicable Federal and/or State law.

G. Modifications and amendments to the Permittee’s MSHCP and this Permit may occur through its effective term, consistent with the provisions of the MSHCP, IA, and regulations governing amendment of Federal Fish and Wildlife Permits (50 CFR 13.23).

H. Terms used in this Permit have the same meaning as defined in the ESA or in its implementing regulations, unless expressly set forth below. Terms used in the IA shall have the meanings defined in the IA.

1. "AMM" or "AMMs" means the avoidance and minimization measure(s) in Attachment 1 of this Permit.
2. "Biological Opinion" or "BO" means the ESA Section 7 biological opinion issued by the USFWS for the NiSource MSHCP.
3. "Incidental Take Statement" - As part of the BO, the USFWS issued an Incidental Take Statement (ITS), which authorizes Take by Federal Parties pursuant to the MSHCP. The ITS includes mandatory Reasonable and Prudent Measures and their associated Terms and Conditions, which are necessary and appropriate to minimize the impact of incidental take when activities are undertaken by NiSource.
4. "Covered Activities" means the activities that will be undertaken by NiSource and covered for incidental take through this Permit, as defined in the IA and described in Chapter 2 of the MSHCP.
5. "Covered Lands" means the geographic area in which covered activities will occur, as described in block #10 of this Permit and further described in Chapter 2 of the MSHCP and §2.8 of the Implementing Agreement.
6. "Effective Date" means the date on which this Permit takes effect, identified in block #6 of this Permit.
7. "Federal Parties" means the Federal Energy Regulatory Commission, National Park Service, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, and U.S. Forest Service. These Federal Parties cooperated on the preparation of the Environmental Impact Statement (EIS).
8. "Implementing Agreement" or "IA" means the agreement between NiSource and the USFWS that describes how the USFWS and NiSource will implement the MSHCP.
9. "Incidental Take Permit," "ITP" or "Permit" means this section 10(a)(1)(B) incidental take permit, and any future amendments thereto, issued by the USFWS to NiSource pursuant to the MSHCP.
10. "MSHCP Species" means the forty-two (42) species that are defined and analyzed in the MSHCP, including Take Species and Non-Take Species. The names of MSHCP Species are provided in Table 4-1 of the MSHCP.
11. "NFWF Agreement" means the agreement between the National Fish and Wildlife Foundation and NiSource.
12. "NiSource" means NiSource Gas Transmission and Storage Company, Columbia Gas Transmission, LLC, Columbia Gulf Transmission, LLC, Crossroads Pipeline Company, and the Central Kentucky Transmission Company, subsidiaries of NiSource,

Inc. These entities collectively are authorized to operate under this Permit and are listed in Condition C.

13. “Non-MSHCP Species” means species that are not addressed in the MSHCP that may occur in the Covered Lands, as listed in Attachment 3 of this Permit. These species are addressed in the BO or its appendices, but no take authorization is provided under this Permit. Non-MSHCP Species consist of three groups: 1) species for which implementing the MSHCP will have “no effect”; 2) species for which implementing the MSHCP and its AMMs will avoid take; 3) and species that may be affected by the Covered Activities in the MSHCP.

14. “Non-Take Species” means species that are addressed in the MSHCP but for which no take authorization is provided under this Permit, as listed in Attachment 4 of this Permit. Non-Take Species consists of two groups: 1) species which may be affected by the Covered Activities, but are not likely to adversely affect (NLAA) because NiSource will implement appropriate conservation measures to avoid Take and 2) species upon which the Covered Activities will have “no effect.”

15. “Take Species” means the ten (10) species that are defined and analyzed in the MSHCP as covered species for which incidental take is authorized by this Permit. Take species are listed in Condition E of this Permit.

- I. Upon locating a dead, injured, or sick ESA listed species, including Take Species, Non-Take, or Non-MSHCP Species, NiSource is required to contact the Service's HCP Implementation Coordinator in the Regional Office in Bloomington, Minnesota, (612) 713-5350, who will coordinate care and disposition instructions. Extreme care should be taken in handling sick or injured individuals to ensure effective and proper treatment. Care should also be taken in handling dead specimens to preserve biological materials in the best possible state for determination of cause of death. In conjunction with the care of sick or injured endangered/threatened species, or preservation of biological materials from a dead specimen, NiSource has the responsibility to ensure that evidence intrinsic to the specimen is not unnecessarily disturbed.
- J. NiSource shall use the Service’s Information, Planning, and Consultation System (IPaC) (or county species lists if IPaC is not available) to identify species that may be present in a project area prior to implementing covered activities.
- J.1. All applicable avoidance and minimization measures (AMMs) for take species (Attachment 1) and measures to avoid adverse effects to non-take species (Attachment 2) must be applied, in accordance with the MSHCP. Measures in Attachment 2 that are required to avoid take include some measures that are non-mandatory; however take of species identified as Non-Take MSHCP species (Attachment 4) that results from NiSource’s decision not to implement a non-mandatory measure is not exempted by this ITP.

J.2. Measures to avoid effects to non-MSHCP must be implemented. In addition, NiSource must contact the USFWS and coordinate with appropriate Federal Parties for any additional Federal permitting or required authorizations to ensure ESA compliance when working in any area where non-covered, ESA listed species may be present.

K. The MSHCP provides for implementation of AMMs for Take Species, including measures that are mandatory and measures that are non-mandatory. NiSource shall implement all mandatory measures identified in Attachment 1.

L. Where an express condition of this Permit plainly conflicts with a provision in the MSHCP or the IA, and the Permit cannot reasonably be construed in a manner to resolve the conflict, the Permit condition shall control.

M. Take Authorization

M.1. NiSource is authorized to incidentally take Covered Species to the extent described below. This is further described in Chapter 6 of the MSHCP.

Species	Summary of Take Authorized
Indiana bat	Up to 69,900 acres of summer and/or spring staging/fall swarming habitat that could support up to 2,584 Indiana bat individuals
Bog turtle	impacts to turtles and habitat at 25 sites
Madison Cave isopod	two populations within 2,764.5 acres of Madison Cave isopod habitat
Clubshell mussel	Up to 166 acres of clubshell mussel habitat
Northern riffleshell mussel	Up to 165.3 acres of northern riffleshell mussel habitat
Fanshell mussel	Up to 283.2 acres of fanshell mussel habitat
James spiny mussel	Up to 12.8 acres of James spiny mussel habitat
Sheepnose mussel	Up to 229.6 acres of sheepnose mussel habitat
Nashville crayfish	Up to 4.0 acres of Nashville crayfish habitat
American burying beetle	Up to 4 American burying beetle individuals

M.2. Mitigation is required for impacts to Take Species, as described below and as described in Chapter 5, 6, and 8 of the MSHCP. The following methods will be used:

M.2.a. Mitigation shall occur within states crossed by the covered lands.

M.2.b. NiSource shall initiate on-the-ground efforts for mitigation no later than 2 years after take occurs unless the Service agrees that a longer initiation period is advantageous in garnering the conservation benefit for the species.

- M.2.c. Compensatory mitigation for stream crossings involving mussels will only be required for the first time that a covered activity involving take is conducted in a specific geographic location.
- M.2.d. If a NiSource-initiated mitigation effort more than compensates for previous impacts to a given covered species, NiSource will receive a mitigation “credit” toward future impacts to that species
- M.2.e. NiSource will maintain a database and annually report to the Service the amount of mitigation performed, by species, along with any “credits” remaining. The report will include details regarding mitigation projects that compensate for take for more than one species at the same site.
- M.2.f. To the extent that NiSource undertakes conservation efforts to offset the impacts of a given activity on one or more migratory bird species protected under the Migratory Bird Treaty Act and such conservation efforts also offset that activity’s impacts on one or more Take Species, NiSource may use those conservation efforts to satisfy, in whole or in part, its mitigation obligations for take of species covered by this Permit.
- M.2.g. For mitigation measures implemented on third-party real estate, NiSource will ensure that those rights left to the third party landowners are compatible with achieving the success criteria of the mitigation. If a third-party landowner damages a mitigation measure despite NiSource’s best efforts, NiSource will assess and handle this damage using the procedures described in Chapter 10 of the MSHCP.
- M.2.h. NiSource may use mitigation or conservation banks to compensate for all or part of the take from its activities.
- M.2.i. Mitigation implementation in response to individual projects may be guided by The Green Infrastructure Assessment for Strategic Planning conducted by The Conservation Fund, as well as by recovery plans, state requirements and/or other ecoregional information, so long as the requirements for the type and amount of mitigation for each Take Species are satisfied.
- M.2.j. If the mitigation effort does not fully compensate for impacts to a given species, NiSource will either pursue additional mitigation efforts or will use the mitigation fund described below.
- M.2.k. The MSHCP includes two approaches for undertaking mitigation efforts to compensate for impact of Take of MSHCP species: (1) mitigation undertaken directly by NiSource, and (2) mitigation undertaken by third parties under the MSHCP Fund. NiSource has the right to choose between the two approaches, at NiSource’s discretion, unless specific mitigation

measures and the parties to conduct them have been identified in Chapter 6 of the MSHCP.

M.2.1. NiSource will convene a mitigation panel, which it will chair, to assist it in evaluating third-party mitigation proposals. After evaluating proposals, NiSource will submit final written recommendations, including its reasoning and all supporting information to the USFWS. The USFWS will make a final determination on whether the proposed mitigation package is acceptable.

M.2.m. Mitigation is divided into two components: 1) O&M/Aggregate (O&M), which is designed to compensate for impacts from ongoing operations of existing facilities; and 2) Project-Specific, which is designed to compensate for impacts from certain construction or non-recurring maintenance activities.

M.2.n. Species-specific mitigation is required for all ten (10) Take Species. NiSource shall follow the mitigation measures for each species that are described in detail in Chapter 6 of the MSHCP.

N. With the exception of the cost share provisions set forth in Condition O.2., below, if any statute is enacted, or any rule or regulation is issued after the Effective Date of this Permit, that conflicts with any provision of this Permit, such statute, rule or regulation shall govern the rights and obligations of NiSource and the Service, provided, the Service shall give due consideration to the measures required under the MSHCP in applying the new statute, rule or regulation.

O. "No Surprises" and Funding Assurances

O.1. This Permit, and the MSHCP, shall be implemented consistent with "No Surprises," as defined in 50 CFR 17.22(b)(5) and 17.32(b)(5) and as further described in Section 11 of the IA between NiSource and the Service.

O.2. "No Surprises" assurances must be waived at the end of year 25 of permit implementation, pursuant to NiSource's commitment via letter to the USFWS dated November 19, 2012 (Attachment 5). Following a comprehensive review of the MSHCP implementation and any new information available to the USFWS concerning the status of any listed species present within the covered lands, NiSource will be afforded assurances for the remaining 25 years. Prior to the application of No Surprises for the second 25 years of the permit, the USFWS must concur that the operating conservation program is properly functioning.

O.3. NiSource is required to provide funding for MSHCP implementation in accordance with the IA and Chapter 8 of the MSHCP. NiSource shall comply with the following:

- O.3.a. Prior to implementing the MSHCP, NiSource shall establish the MSHCP Fund that will be administered by the National Fish and Wildlife Foundation (NFWF). Two associated sub-accounts will be maintained, a Mitigation Trust Fund and a Reserve Fund. Deposits shall be made and balances retained as described in detail in Section 8.4 of the MSHCP.
- O.3.b. NiSource shall pay the costs for O&M mitigation in the first seven years of the Permit term and MSHCP implementation. The actual amount deposited in each of the first seven years will vary based on the then-current costs of the identified mitigation projects. Payment is due on or before January 15 of each year.
- O.3.c. NiSource shall pay into the Mitigation Account annually for Project-Specific mitigation prior to the impact occurring. Estimated mitigation costs described in the MSHCP are in 2010 dollars, however, NiSource shall deposit its annual estimated mitigation obligation based on actual mitigation costs to NiSource at the time of impact. NiSource will follow the process for annual deposits outlined in Section 8.4.1 of the MSHCP. NiSource shall make deposits into the MSHCP Fund before work begins on any project, on or before March 31 of each year.
- O.3.d. NiSource shall make necessary and regular adjustments to ensure the Mitigation Account is fully funded following the procedure outlined in Section 8.4.1 of the MSHCP. Failure of the Service and NiSource to agree about new or additional obligations could result in, among other things, the suspension of all or a portion of the permit by the Service. If NiSource's mitigation obligations have been fully satisfied for a given year at a lower cost than was anticipated at the beginning of the year, NiSource shall have the right to withdraw the remaining balance of that annual mitigation deposit from the Account on or after January 1 of the subsequent year, or NiSource may elect to leave the balance in the Account as contribution toward the next year's annual mitigation estimate.
- O.3.e. All other MSHCP costs, including administrative costs, project costs, as well as some of the adaptive management and changed circumstances costs, shall be funded through NiSource's operational budget and assured through NiSource's corporate credit facility. Should the available balance in NiSource, Inc.'s credit facility fall below \$25 million, or should the credit facility be allowed to lapse, NiSource will notify the Service in writing within 7 days and will obtain a \$250,000 letter of credit, in a form acceptable to the Service, within 30 days of such fall or lapse.

- P. This Permit may be amended in accordance with the provisions of 50 CFR 13.23 and the procedures outlined in Chapter 9 of the MSHCP. In addition, the following conditions apply to amendments to this permit:

- P.1. The proponent of the amendment (either NiSource or the Service) shall provide a written statement of the reasons for the proposed amendment. If NiSource proposes an amendment to its Permit, the proposal shall include an analysis of its environmental effects, including its effects on operations under the MSHCP and on Take Species. In considering a proposed amendment to this Permit, the USFWS will give due consideration to, and full credit for, conservation measures previously implemented as part of the MSHCP.
- P.2. The activities proposed or in progress under this Permit may not be interrupted provided the required conditions of this Permit are being followed.
- P.3. If during the term of this Permit, the Covered Activities and/or the extent of the habitat impact described in the MSHCP are altered, such that there may be an increase in the anticipated Take of Take Species, NiSource is required to contact the Service and obtain authorization and/or amendment of this Permit before commencing any activities that might result in Take beyond that described in Chapter 6 of the MSHCP and authorized under Condition M.
- Q. This permit may be suspended, revoked or voluntarily surrendered if NiSource is not in compliance with the conditions of this Permit, the IA, the MSHCP, or any applicable Federal laws and regulations.
- Q.1. For the purposes of the MSHCP, the procedures applicable to any suspension shall be in accordance with the Federal regulations in effect at the time of the suspension; provided however, that, at a minimum, NiSource shall be afforded the procedural rights set forth in 50 CFR 13 in existence at the time of suspension or revocation. The suspension shall remain in effect until the Service determines that NiSource has corrected the deficiencies. This Permit may be partially suspended with respect to specified Take Species, or to a portion of the Covered Lands or Covered Activities. In the event of a partial suspension, the portion of this Permit not subject to suspension shall remain in full force and effect. Permit suspension as a result of Changed Circumstances shall be in accordance with the applicable terms of this section and the IA.
- Q.2. The Service shall not revoke this Permit for any reason except those listed in 50 CFR 13, or unless the Covered Activities would be inconsistent with the criteria set forth in 16 USC § 1539(a)(2)(B)(iv) and this inconsistency has not been remedied. Notwithstanding the foregoing, this Permit will only be revoked if the Service, NiSource, and other interested parties have not been successful in remedying any such inconsistency through other means. This Permit may be partially revoked with respect to specified Take Species, or to a portion of the Covered Lands or Covered Activities. In the event of a partial revocation, the portion of this Permit not subject to the revocation shall remain in full force and effect. All avoidance and minimization measures in the MSHCP that are in effect after Permit revocation shall be taken into account by the Service and credited toward any future efforts by NiSource and other parties to ensure that any

Covered Activities are in compliance with requirements of the ESA. This provision shall survive any revocation of the Permit and shall remain in full force and effect. Procedures applicable to any revocation shall be in accordance with the Federal regulations in effect at the time of the revocation; provided however, that, at a minimum, NiSource shall be afforded the procedural rights set forth in 50 CFR 13.

- Q.3. In the event that NiSource shall permanently discontinue its Covered Activities, NiSource shall return this Permit to the Service with a written statement surrendering this Permit for cancellation. This Permit will be deemed cancelled only upon a determination by the Service, in collaboration with NiSource, that sufficient measures have been implemented by NiSource to mitigate for the impact of the take of Take Species that occurred pursuant to the terms of this Permit prior to surrender. Upon surrender of this Permit, no further Take of the Take Species by NiSource shall be authorized via this Permit.
- Q.4. No provision of this Permit shall limit the authority of the Service to seek civil or criminal penalties or otherwise fulfill its enforcement responsibilities under the ESA and other applicable laws.
- Q.5. If NiSource is wholly or partially prevented from performing obligations under this Permit because of causes beyond the reasonable control of and without the fault or negligence of NiSource (Force Majeure), NiSource shall be excused from whatever performance is affected by Force Majeure to the extent so affected and such failure to perform shall not be considered a material violation or breach. However, the occurrence of any Force Majeure shall not be deemed to authorize NiSource to violate the ESA and provided further that: (i) the suspension of performance is of no greater scope and no longer duration than is required by the Force Majeure; (ii) within fifteen (15) days after the occurrence of the Force Majeure, NiSource shall give the Service written notice describing the particulars of the occurrence; and (iii) NiSource demonstrates due diligence to remedy their inability to perform.
- R. NiSource shall monitor the effects and effectiveness of MSHCP implementation, including adaptive management and responses to changed circumstances. In addition to the provisions of the MSHCP, the following conditions apply to monitoring:
- R.1. NiSource will form an internal MSHCP implementation team to establish the overall management processes and systems within the parameters of the MSHCP, IA and Permit. NiSource shall establish an MSHCP Coordinator (Section 7.3, MSHCP), who will be responsible for monitoring NiSource's compliance with the MSHCP, IA, and this Permit.

- R.2. IPaC, or a similar data processing tool, shall be used to support MSHCP implementation, monitoring, reporting, and tracking (in addition to use described in Condition J, above). If IPaC is not ready at the time of MSHCP implementation, other means of project tracking, such as NiSource's ProjStat, shall be used.
- R.3. NiSource will undertake additional effectiveness monitoring for AMMs that have a moderate to high risk and/or likelihood of failure. This includes AMMs for the Nashville crayfish, bog turtle, Indiana bat, Madison Cave isopod, and Clubshell, fanshell, Northern riffleshell, and sheepnose mussels. These are noted in Attachment 1, and specific details on monitoring requirements are found in Chapter 7 of the MSHCP.
- R.4. NiSource will undertake monitoring and adaptive management on specific uncertainties associated with take calculation and/or mitigation options as described in general below and in detail in Chapter 7 of the MSHCP:
- R.4.a. There is uncertainty associated with the effectiveness of habitat creation/restoration in attracting and meeting the life history requirements of Nashville crayfish. The trigger for evaluating and implementing alternative adaptive management measures is if Nashville crayfish have not occupied the created or restored site at a density of approximately 1.0 to 2.0 animals per square meter.
- R.4.b. The key area of uncertainty identified in the proposed mitigation for bog turtle is the success of restoring suitable bog turtle habitat at a given site. The trigger for evaluating and implementing alternative adaptive management measures is if there is more than a 10% reduction in acreage or unsuccessful restoration of core fen and/or nesting habitat as specified in the site-specific mitigation/restoration plan.
- R.4.c. The key area of uncertainty identified in the proposed mitigation for the Indiana bat is the effectiveness of winter habitat restoration projects in attracting Indiana bats and meeting the species' life history requirements. The trigger for evaluating and implementing alternative adaptive management measures is that Indiana bats have not occupied or increased in numbers within restored hibernacula within the first four years after restoration.
- R.4.d. The key area of uncertainty identified in the estimate of take for the mussels is the use of the sediment transport model when the open-cut stream crossing methodology is used. Adaptive management will be employed to determine the accuracy of the model under various stream conditions (width, flow rate, geographic location).

- R.4.e. There is uncertainty in the proposed mitigation for the mussels associated with enhancement of the substrate within the construction zone of any pipeline repair, replacement, or relocation that disturbs the stream bottom. Adaptive management will be employed on the first three enhancement sites on different streams to determine whether at five years (assuming that no 100-year floods occur during that period) after enhancement the substrate remains suitable habitat for the relevant mussel (clubshell, fanshell, northern riffleshell, sheepsnose, or James spiny mussel). The trigger to further evaluate the effectiveness of mitigation is a finding that the substrate is unstable five years after the mitigation occurred.
- R.4.f. There are several areas of uncertainty with respect to the current take calculation for Madison Cave isopods. Adaptive management will be employed to evaluate how frequently NiSource earth-disturbing activities either encounter previously undocumented surface or subsurface karst features that are reasonably likely to connect to the groundwater, or impact the karst such that a vector to the groundwater is opened (or made more direct) where one did not previously exist. The results will be used to appropriately adjust the mitigation requirements identified elsewhere in the MSHCP. There also is uncertainty associated with the impacts of NiSource earth-disturbing activities (e.g., trenching and blasting) destabilizing visible surface karst features (e.g., closed sinkholes, depressions, etc.) within or immediately adjacent to the ROW. The trigger to implement adaptive management relevant to destabilization is if monitoring determines that any of the karst features exhibit a level of destabilization that results in a higher risk of Madison Cave isopod habitat contamination.
- R.5. The regulations governing section 10 incidental take permits provide for inclusion of remedial measures to address Changed Circumstances in an MSHCP, as provided in Chapter 10 of the MSHCP. If a changed circumstance occurs, the Service and NiSource will coordinate and determine if additional remedial measures are necessary. Changed Circumstances that are reasonably anticipated and planned for in the MSHCP include: 1) climate change; 2) droughts; 3) floods; 4) fires; 5) tornados; 6) disease; 7) invasive species; 8) species range expansion/contraction; and 9) species listing/delisting. Changed circumstances are provided for in the MSHCP, and hence do not constitute unforeseen circumstances or require amendment of this Permit or the MSHCP. For those circumstances that were planned for, NiSource will implement the measures set forth in Chapter 10 of the MSHCP as soon as possible, but no longer than one year from the time a changed circumstance has occurred.
- S. NiSource shall provide notification and shall report on activities in accordance with the MSHCP and IA. Specifically, NiSource shall:

- S.1. Provide an annual “prior notification” of planned projects described in detail in Chapter 7 of the MSHCP. Notification will be provided electronically to the appropriate Service Field Office(s) and the Service MSHCP contact and will include: (1) the daily routine projects that will be carried out for operation and maintenance, safety, or new construction purposes, and (2) whether the projects are in the vicinity of MSHCP species or their habitat.
- S.2. Submit an annual report of activities conducted by March 31st following each year this permit is in effect. The following information shall be described in detail:
1. Results of any pre-activity surveys (e.g., habitat assessments, preconstruction surveys to relocate individuals) and the person(s) conducting the activities consistent with MSHCP surveys;
 2. The number, type, location, and size of activities that occurred and the temporary and permanent habitat loss;
 3. Overall number and percentage of covered activities for which AMMs (mandatory and non-mandatory) were implemented;
 4. The number and percentage of covered activities for which AMMs (mandatory and non-mandatory) were implemented for each activity type;
 5. The specific reason applicable non-mandatory AMMs were not implemented;
 6. The number and locations of covered activities where take species (each to be named individually) were identified on or near a worksite and the AMMs implemented at those worksites;
 7. Implementation success of AMMs, including compliance and effectiveness monitoring;
 8. The anticipated and actual Take of Take Species (whether through individuals or surrogates) and comparisons to requested Take;
 9. An itemized accounting of mitigation efforts and expenditures for all species, the status of the mitigation fund(s), including an accounting of any credits from previous mitigation efforts that may be applied toward future impacts;
 10. Details on the success of mitigation projects (including copies of deeds or contracts, upon request);
 11. A calculation of the mitigation requirements for anticipated take in the coming year, the resulting mitigation debt, and deposits into the NiSource mitigation fund;
 12. An evaluation of the effectiveness of the conservation program;
 13. Assessment of the need for responses to changed circumstances or adaptive management;
 14. Documentation of the implementation and effectiveness of any measures undertaken to respond to changed circumstances or adaptive management measures;
 15. A statement assuring that adequate implementation funding is in place; and
 16. Details regarding any emergency events and NiSource’s response to such events that have or may have affected take species.

- T.1. In addition to its annual report, NiSource shall complete a review of MSHCP implementation and effectiveness following years 5, 10, 15, 20, 30, 35, 40, 45, and 50 of MSHCP implementation. This evaluation shall include a summary of items required by annual reporting requirements and shall include the following:
1. NiSource shall convene a meeting with the Service and Federal agencies involved in MSHCP implementation and permitting. This meeting will be open to all interested parties;
 2. NiSource shall present its findings on effects and effectiveness of its operating conservation program, including an overview of AMM implementation, adaptive management that has been undertaken, responses to changed and unforeseen circumstances, and projects that have been implemented to mitigate for impacts;
 3. NiSource shall make its findings available to interested parties via the internet (on its corporate website) or other suitable medium;
- T.2. Following Year 25 of MSHCP implementation, NiSource shall forgo “No Surprises,” pursuant to its commitment letter dated November 19, 2012 (Attachment 5). NiSource shall conduct a review of MSHCP implementation for years 1-25, including items in condition T.3. In addition, the Year 25 review will be subject to review and approval by the Service as follows:
1. NiSource shall convene a meeting with the Service to review the 25-Year Report.
 2. NiSource shall provide its report findings in writing.
 3. The Service and Federal agencies involved in MSHCP implementation shall assure that the operating conservation program that NiSource has implemented in the first 25 years, including amendments, adaptive management, responses to changed and unforeseen circumstances, and mitigation requirements have been adequately implemented.
 4. NiSource shall implement any revised MSHCP requirements and/or permit amendments that the Service deems necessary following its review of the 25-Year Report. In the event that NiSource is unable or unwilling to accept such changes to its MSHCP and permit, it shall surrender the permit.

- T.3. Reports required under Conditions S and T shall be submitted to the following:

Regional Director
(Attn: HCP Coordinator)
U.S. Fish and Wildlife Service
5600 American Blvd. West, Suite 990
Bloomington, MN 55437-1458

Regional Director
(Attn: HCP Coordinator)
U.S. Fish and Wildlife Service
1875 Century Blvd., Suite 400
Atlanta, GA 30345

Regional Director
(Attn: HCP Coordinator)
U.S. Fish and Wildlife Service
300 Westgate Center Drive
Hadley, MA 01035-9587

- U. This Permit may be renewed upon application of NiSource prior to its expiration date in accordance with provisions of 50 CFR13.22.

-- End of Permit Terms and Conditions for Permit # TE02636A-0 --

TE02636A, NiSource, Inc., Incidental Take Permit
List of Attachments

Attachment 1 – Avoidance and Minimization Measures, MSHCP Take Species (10 species)

Attachment 2 – Avoidance Measures, MSHCP Non-Take Species (32 species)

Attachment 3 – Non-MSHCP Species

Attachment 4 – MSHCP Non-Take Species

Attachment 5 – NiSource No Surprises Commitment Letter