Comment #	Summary of Comment	Reference to Letter	Entity(ies) Submitting Comment	Draft HCP or DEIS reference	Response
1	Cumulative Impacts to Mussels must be considered in EIS	p. 25	EarthJustice*	DEIS Ch. 5	The FEIS addresses cumulative impacts in Chapter 5. With regard to cumulative impacts to fish and wildlife resources, a variety of development pressures may negatively impact the resources. Due to the conservation measures and mitigation that will be part of the implementation of the MSHCP, it is anticipated that activities authorized by the ITP will have a negligible effect on the cumulative impacts to fish and wildlife resources, including mussels.
2	Mussel monitoring protocols were not completed at the time the HCP was released. Public unable to comment.	p. 25	EarthJustice*	HCP App. L (survey); HCP 7.4 p. 4-5, 7.6.4.4.3 p. 27-28	Mussel survey protocols will comply with protocols in approved recovery plans and the best available science; protocols that are included in the Final MSHCP were developed specificially for MSHCP activities and will be followed in accordance with the MSHCP, IA and permit.
3	Mussel protection and planning should include events such as spills and streambank failure	p. 26	EarthJustice*	General comment that is addressed in multiple places in the HCP (i.e. Ch. 8 Funding, 6.2.7.4 - 5)	The FWS worked with NiSource to improve response to such events. With respect to catastrophic stream bank failure, the MSHCP incorporates specific measures in Mussel AMM # 2, which require NiSource to do additional planning for slopes > 30% (a key factor relating to catastrophic stream bank failure). NiSource Environmental Construction Standards (ECS) require specific measures like trench barriers and not leaving trenches open to the stream bank as measures that are always employed to avoid sedimentation and catastrophic failure. The Service and NiSource agree that the incorporation of the following measures into the MSHCP, implemented under the procedures outlined in AMM # 2, would provide an added layer of protection for extant mussel resources where there are steep slopes and the potential for prolonged rains or heavy rain during intense storms: a) implementation of hard/soft trench plugs; b)implementation of in-line and off-ROW sediment traps; c) increased use of temporary slope drains (flexible pipe leading off-ROW); and d) breaking-up and installing interceptors as a part of spoil piles.
4	Request that Take for mussels be described in stream miles rather than acres.	p. 28	EarthJustice*	HCP 6.2.7.4 p. 190-194	Acres provide a better way to evaluate mitigation. The information to convert acres into linear distance using stream widths is provided in the HCP or its appendices (i.e., take calculation spreadsheet).

5	Response for mussels under changed circumstances is inadequate.	p. 27	EarthJustice*	HCP 10.3 p. 3-4, 16, 33, 41	This comment relates to changed circumstances affecting mitigation for take of mussels; specifically, cases in which drought, flooding, or invasive species affect a restored or augmented population of mussels. As currently written, Chapter 10 of the MSHCP requires a five-year monitoring period prior to NiSource implementing corrective action. With respect to invasive species, the Service believes that the five-year monitoring period is necessary to understand the severity and extent of the invasion prior to taking corrective action. We agree with the concern, however, that in the case of severe drought or flooding, a large component of the restored or augmented population could be destroyed in a single stochastic event (e.g., severe summer-long draught or high-energy flood). In those cases, it is more appropriate to replace the lost mitigation as quickly as possible so that it can continue to provide mitigation benefits. For the changed circumstances of drought and flooding related to mussel mitigation, NiSource agrees that if greater than 50% of the augmented or restored population (based on the numbers initially restored or most recent survey) are lost in a single or series of drought or flood events, NiSource will replace at least that number of the HCP mussels within one calendar year of the loss unless there are extenuating circumstances (e.g., mussels of the species are not available for translocation) in which case, NiSource will replace the lost mussels as soon as practicable, which may include funding additional mussel propagation. In addition, if a) it is determined by the Service, the mussel assemblage (into which the HCP mussels were introduced) has been depopulated to an extent that replacing the lost HCP mussels would not result in viable mitigation; or b) it is determined by the Service that the original location of the mitigation is no longer suitable because of drought or flooding, NiSource in cooperation with the Service will reestablish the original level of mitigation at a new site for the target species.
6	Additional measures to avoid impacts recommended including monitoring equipment to avoid introduction of invasives and assessment of risk of surfactants added to hydrostatic test water	p. 12	TNC	HCP 6.2.4.3 p. 107 - 112	already addressed.
7	Concerns expressed regarding assessment work to determine presence and density of mussel populations prior to instream work	p. 12-13	TNC	HCP page numbers referenced in TNC comments.	This comment concerns the methodology employed by NiSource to estimate mussel populations. It is based on an average density estimate over 50% of the available habitat. We agree that average density estimates could be in error for any particular stream crossing, but they are almost certainly high for all but a few streams. Based on additional work done by the Service for the biological opinion, most populations of HCP mussels are very small and often widely scattered. The Service will require under terms and conditions that NiSource implement pre-construction surveys for those streams that are known to harbor large or critical populations of HCP mussels and non-HCP mussels analyzed in the biological opinion. This should effectively address concerns in those few cases where estimates of mussel populations might be lower than the actual population. Survey protocols (provided in Appendix L) address the issue of buried mussels by using a methodology designed to detect cryptic species. Given that mussel populations at most crossings will be well below the estimate, it is assumed that the impact to mussel resources will not exceed the calculation for either a dry-ditch or wet-ditch crossing (note no impacts are anticipated from a HDD crossing).

8	crayfish relocation to a pond is unacceptable	p. 14	TNC	HCP 7.6.4.1.1. p. 12	This is a last resort option prior to losing the crayfish. The comment concerns adaptive management actions if it is determined that relocating Nashville crayfish away from a construction site results in greater than 50% mortality. Relocating Nashville crayfish to a "Service approved", "artificial" pond, with "suitable habitat" is the third in a hierarchy of three options in an adaptive management strategy, which would be employed as a temporary measure only. It is inaccurate for a number of reasons to suggest that this unlikely option employed on a small part of the Nashville crayfish population would jeopardize the Nashville crayfish. It is worth noting that Nashville crayfish have been found to sustain themselves in ponds naturally (there is at least one extant population in a pond).
9	crayfish: monitoring schedule is too long; recommend 6 mos. To allow for additional population reestablishment if needed.	p. 14	TNC	HCP 7.6.4.1.2 p. 15	The comment addresses adaptive management related to Nashville crayfish mitigation. This is in part a misreading of the adaptive management section. The 75% mentioned in the comment refers to riparian tree restoration (not crayfish numbers). The one year time period mentioned is to determine if slab rock (placed in the stream bottom) remains in place, which seems a reasonable minimum amount of time to determine whether or not the habitat restoration has weathered seasonal changes in stream flow. We disagree that one year is too long to wait for the first post restoration monitoring to determine if Nashville crayfish have recolonized. Although they may do so more quickly, we want to determine that the restored habitat is stabilized and the recolonized population itself is therefore likely to be stable.
10	Encourage mitigation through tributary restoration in addition to mainstem work	p. 13	TNC	HCP page numbers referenced in TNC comments.	Agree. This is already included in the MSHCP.
11	Mussel AMMs and Crayfish AMMs - multiple suggestions for AMMs to be improved to address sediment issues, contaminants, and addressing invasives	p. 12	TNC	HCP 6.2.4.3 p. 107 - 112	AMMs were discussed with applicant following public comment period. Some adjustments have been made and the FWS has evaluated the adequacy of the AMMs to protect the species during routine activities, particularly as they relate to sedimentation, release of contaminants, and invasive species. The FWS has determined that the measures meet issuance criteria and will be permitted. In the discussion regarding the sediment transport model, NiSource states that "Adaptive management will be employed to determine the accuracy of the model under various stream conditions (width, flow rate, geographical location)." NiSource then describes the testing and monitoring that would be performed to confirm the model, e.g. …" This monitoring will occur for the first three open-cut crossings carried out on different streams for all mussels in the MSHCP…". The requirement for the "first three open-cut crossings" is intended to apply to each of the different stream conditions. Thus, NiSource would monitor the first three open-cut streams that are medium width and have a high flow rate, the first three streams that are large and have a high flow rate, etc. The intent is to gather enough data more accurately predict downstream sedimentation effects from our activities in various types of streams. The language in Ch 7.6.4.4.1 "Mussel Take Calculation" will be supplemented to reflect language this clarification.
12	Mussel Mitigation and Monitoring should extend 10 yrs	p. 11	TNC	HCP 6.2.4.6 p. 120 - 124	Adequacy of the applicant's monitoring plan has been evaluated and determined to be sufficient to measure both the effect of activities and the effectiveness of the conservation and mitigation.

13	Mussels: avoid high density assemblages - require pre-project surveys	p. 11	TNC	HCP App F p. 59-61 (example)	Where high-density assemblages are identified, such as in the Duck River, specific avoidance measures are described in the MSHCP. Surveying all rivers is not necessary in light of the numerous AMMs required for mussel species. The FWS has determined that the assumption of presence of the species and subsequent application of avoidance and minimization measures adequately protects the mussel populations and meets issuance criteria. Under terms and conditions in the biological opinion, NiSource will be required to survey other high-density mussel assemblages.
14	Mussels: mitigation measures inadequate	p. 11	TNC	HCP 6.2.4.5 and 6.2.4.6 p. 116-125 (especially p. 123)	answered above
15	Mussels: risk analysis needs to include events such as failure of sediment control measures, contaminant spills, drilling frac-outs, and causing rock fractures that alter stream hydrology	p. 11	TNC	HCP 6.2.4.4 p. 112-116	answered above
16	James spinymussel has declined 90% (baseline) and is highly sensitive to sediment/contaminants. Adequacy of analysis and mitigation should be validated	p. 3	Sierra Club - VA Chapter	HCP 6.2.7 p. 178 - 204	Almost all mussels are highly sensitive to sediment. The mussel AMMs focus heavily on minimizing sediment impacts to mussels and mussel habitat. In part because JSM is confined to small streams, there are two additional requirements: 1) all JSM crossings must be by dry-ditch, which we expect to function particularly well in JSM streams, and 2) there is a time-of-year restriction to minimize impacts to reproducing populations.
17	Adaptive Management - monitoring of 3 projects to support hypothesis is too low; 6-10 recommended	p 13	TNC	HCP 7.6.3	Three conforming positive results are adequate to conclude that the impacts and benefits of AMMs and mitigations measures are consistent with what was anticipated in the context of determining whether adaptive management is required. Note that implemented AMMs will continue to be monitored for compliance throughout the duration of the permit.
18	NiSource does not clearly indicate how it will first avoid impacts, then minimize, then mitigate	p. 2	Freshwater Mollusk Conservation Society	App. M, HCP 6.2.4.3 - Species AMMs; HCP 5.1.1.1 p. 2; HCP 5.2 p. 4-10	NiSource explicitly states that "To eliminate or reduce the likelihood of take, NiSource will first employ avoidance and minimization measures before undertaking mitigation measures." HCP 5.1.1.1 p. 2. This process is described in detail in the MSHCP, Chapter 5. Specifically with respect to mussels, NiSource has agreed in the HCP to avoid certain important mussel streams (e.g., Tennessee River and Duck River). In addition, as discussed in the response to comment 7, the Service will require measures in its biological opinion that NiSource avoid impacts to specified streams that are of particular significance to the population of MSHCP and non-MSHCP mussels. NiSource may memorialize these requirements in revisions to the MSHCP.
19	Supports landscape-scale approach; supports Green Infrastructure approach to mitigation		TNC; Audubon	HCP 5.2.1	Comment noted

20	"no surprises" limits ability to adapt to new management challenges and increases risk of inferior species management for long permit periods	p 4	Audubon	HCP 10.3 p3-42	The No Surprises rule states that, if additional conservation and mitigation measures are deemed necessary to respond to changed circumstances, and such measures were provided for in the HCP, the permittee will be required to implement them. Chapter 10 of the HCP includes robust discussion of changed circumstances resulting from climate change and the additional measures NiSource will implement if such changed circumstances occur. These provisions, along with the HCP's adaptive management provisions, demonstrate that the 50-year permit duration is appropriate. In addition, NiSource has agreed to forgo No Surprises at year 25 to allow for an additional review of the operating conservation program. At that time, NiSource will be required to make any changes to their operating conservation program without "assurances". In this manner, the FWS believes that concern regarding No Surprises and planning uncertainty has been thoroughly addressed while retaining the 50 year permit term.
21	Important Bird Areas - commentor provides considerable information about where NiSource pipelines intersect with IBAs in different states and what birds are found within those IBAs; concludes with statement that these IBAs should be flagged for subsequent, tiered analyses		Audubon		BMPs have been incorporated for migratory birds. The FWS and FERC entered into an MOU for the protection of Migratory Birds in March 2011.
22	GIS data - phase 1 survey results should be shared with state (6.2.2.3)		Delaware		NiSource will be sharing information with states and will coordinate on state permitting.
23	Monitoring/compliance - concern that FWS remain involved in effectiveness and compliance monitoring		Delaware		NiSource will be responsible for monitoring the implementation of their MSHCP. This includes monitoring of the impact, the effects of their activities, the effectiveness of their mitigation, and the effectiveness of adaptive management that is undertaken to respond to changes. In addition, NiSource is responsible for monitoring the environmental response to measures implemented to respond to changed circumstances. The FWS and Cooperating Agencies will retain the responsibility to monitor compliance via annual reporting and monitoring.
24	Failure to disclose storage field locations violates Sect 10 permit issuance criteria		EarthJustice*		does not violate issuance criteria; FWS is satisfied with the scale at which NiSource has disclosed information
25	ITP issuance violates ESA due to failure to meet HCP issuance criteria		EarthJustice*		The evaluation and rationale to determine whether an applicant meets issuance criteria is documented in the Set of Findings. We concur that the USFWS must make that finding prior to issuing a permit.
26	Lacks analysis of mandatory and non-mandatory AMMs, mitigation, and adaptive management		EarthJustice*		Analysis of the effects of implementing the AMMs and mitigation measures in the MSHCP is completed in the B.O.

27	Oversight is Lacking. Request open coordination/review meetings into the future.		EarthJustice*		We believe NiSource has outlined adequate feedback mechanisms/coordination strategy to ensure the MSHCP functions as desired. NiSource and the Service plan to hold meetings to review annual report(s) and address any isues with MSHCP implementation. Meetings would include both NiSource and Service staff (and other stakeholders as needed) and are proposed to occur on an as needed basis during year one, annually until the fifth year of implementation, and then at least every five years thereafter, unless the parties agree to meet on a more frequent basis. These meetings will provide a structured process to review AMMs, discuss adaptive management strategies, and, as needed, modify conservation strategies for individual species in order to reach desired goals and outcomes for that species. In order to capture all relevant discussion regarding MSHCP implementation, NiSource will produce a summary report, which requires concurrence by the Service, of all issues addressed and specific conclusions or agreements made at the meeting. This summary report will provide another feedback mechanism for use and reference at the next scheduled meeting. NiSource also plans to submit a Prior Notification Report to the Service annually to provide information on planned projects, both O&M and new construction, for the upcoming year. NiSource will identify Covered Activities that are anticipated to be conducted within an occupied site, with details regarding the planned Covered Activity and location, as well as anticipated take and the amount to be deposited in the mitigation fund.
28	Purpose and Need should not prioritize "facilitation of NiSource's activities...over rigorous consultation…"		EarthJustice*		Agree that prioritization of NiSource's needs is not an appropriate statement of purpose and need for the EIS. The purpose and need is to respond to the application for a permit, evaluate the effects of issuing such a permit, and disclosing environmental consequences. A full description of purpose and need can be found in the first chapter of the EIS.
29	Reduced scope is reasonable alternative and should be more fully explored. Suggest covered lands footprint of [R-O-W + compressor stations + known 9 actual storage fields].		EarthJustice*; Buckeye Forest Council		In the draft and final EIS, we acknowledge that the Service has the authority to both limit or expand the scope of Covered Species and Covered Lands. However, evaluating these permutations in the context of NEPA would not produce a meaningful comparison of environmental consequences. The list of species incorporated into NiSource's MSHCP is at the discretion of NiSource. However, the Service can only issue an ITP for those species under its jurisdiction. Receipt of an ITP would not release NiSource from any obligations related to state-specific species regulations or requirements. Also, NiSource's activities that have the potential to impact federally listed species not covered by or included in the MSHCP and ITP are still subject to the requirements of the ESA, and conservation of these species must be accomplished in some manner to remain in compliance with ESA.

30	Geographic Scope of Covered Lands is Too Large		EarthJustice*; Friends of Blackwater**; members of Earth Justice, End Species Coalition, and Sierra Club		We believe the methodology NiSource utilized for establishing their Covered Land footprint is reasonable and sound. The applicant's work is concentrated along its existing pipeline network, and thus the proposed area to be covered by the ITP and associated MSHCP includes a one-mile wide corridor centered upon a majority of NiSource's existing system. According to NiSource, a one-mile-wide corridor will accommodate approximately 95% of the projects included in routine O&M and capital expansion activities NiSource carries out annually. Thus, the one-mile corridor and county boundaries for select storage fields were chosen to provide needed flexibility for both the realignment of existing facilities to accommodate future forced elocations (typically resulting from public road construction/maintenance projects) and the minimization of environmental impacts while aligning future replacement and expansion projects. Actual surface disturbance associated with the covered activities will be far less than the covered lands in their entirety (see Table 2.1 in MSHCP). Further, NiSource has agreed to restrict or completely avoid implementing Covered Activities in certain portions of the one-mile wide corridor where such activities could potentially impact sensitive species.
31	50 Years is Too Long	p 2 Audubon; p 2 Freshwater Mollusk Conservation Society	EarthJustice*; Friends of Blackwater**; TNC; Audubon; Buckeye Forest Council; Freshwater Mollusk Conservation Society; members of Earth Justice, End Species Coalition, and Sierra Club	HCP 1.2.1; DEIS -	We believe the 50-year duration for the permit that NiSource applied for is reasonable in light of the adaptive management framework and assurances in the MSHCP. Regulations issued by the Service provide that the duration of an incidental take permit must be sufficient to provide adequate assurances to the permittee to commit funding necessary for the activities authorized by the permit, including conservation activities and land use restrictions (50 C.F.R. § 17.22). However, in response to public concern over the permit duration, NiSource agreed to waive its No Surprises Assurances at year 25 to "ensure that the implementation of the MSHCP is consistent with conservation needs of listed species". If needed, the MSHCP will be amended at that time to incorporate any additional commitments and/or needed restrictions.
32	DEIS and MSHCP fail to include flying squirrel		Friends of Blackwater**	DEIS Appendix F	DEIS did include Flying Squirrel as part of the Biological Assessment, Appendix F. Flying squirrel will be analyzed in the B.O. along with other non-HCP species; NiSource may choose which species to include in its MSHCP per FWS policy. At the time that the FEIS is published, the Flying Squirrel is no longer protected under the ESA (delisted). However, NiSource has agreed to conservation measures to protect the species regardless of status under ESA.
33	Scientific information would become stale; uncertainty		Friends of Blackwater**		The MSHCP includes a strong monitoring and adaptive management component to enable NiSource and the FWS to recognize when information becomes obsolete and/or respond to new information relative to species.
34	Commentor requests assurance that the approach with NiSource will not affect other available approaches to compliance (i.e., informal consultation, categorical exclusion)		Spectra Energy		Developing a habitat conservation plan and applying for an incidental take permit under Section 10 of the ESA are strictly voluntary. NiSource's decision to seek an incidental take permit in no way affects whether other compliance mechanisms may apply to other parties' proposed actions.
35	Commentor voices concern that AMMs and conservation measures adopted as a result of the MSHCP not be presumed to automatically apply to other situations		Spectra Energy		USFWS does not intend to automatically apply any AMMs or conservation measures identified in NiSource's MSHCP to the ESA compliance process for any other proposed action.

36	Concern expressed regarding how agencies may rely on the NEPA to streamline ESA compliance		Spectra Energy		The MSHCP and associated biological opinion are intended to serve as the mechanism for ESA compliance with respect to the MSHCP species and the covered activities through the life of the permit, subject to the incidental take permit's take limits and the standard regulatory reinitiation of consultation requirements. Cooperating agencies will be able to rely on the Biological Opinion for future permitting such as Section 404 (Clean Water Act) or Special Use Permitting. A discussion of future NEPA is included in the FEIS, Chapter 1, Section 1.6.
37	Is IPaC available to the public?		Spectra Energy		Yes. IPaC is a web-based project planning tool that is publicly available on the FWS web site. Any portion or phase of IPAC that is made available for use by any private sector or public entity will also be made available to anyone else within those sectors as long as the use is similar to what has been granted. The exception will be any modules developed specific to business operations which are proprietary in nature.
38	Concerned about adequacy of survey protocols; want opportunity to comment when Appendix L is complete		TNC		See response to comment #2
39	Data sharing between NiSource and FWS needs to be agreed prior to issuing any ITP		TNC		Agreed. NiSource will be required to share all necessary data that the FWS may use or need to evaluate implementation.
40	Disagree with assertion that habitat restoration mitigates for loss in reproductive success		TNC		Habitat restoration is one way to mitigate for species loss. We also considered captive propagation, augmentation, and reintroduction to be mitigative measures. For Indiana bats, several authors have suggested that restoration and maintenance of habitat can be beneficial to Indiana bat maternal colonies (Callahan 1993). While not an exact science, we believe NiSource has outlined mitigation adequate to compensate for potential impacts of take, and contribute toward MSHCP biological goals and objectives for the species.
41	It is unclear how take ratios were calculated and why certain (mitigation) ratios were deemed adequate to compensate for the impact of the take		TNC		In response to this comment, the Service requested from NiSource that they provide clarity and additional detail to Section 6.2 of their MSHCP. Take calculations however are based on habitat impacts. Mitigation is based on best available information, past practices, and negotiations with NiSource.
42	Mitigation ratios (referred to as take ratios in TNC comments) need to reflect probability of success based on known likelihood of proposed restoration action to achieve conservation goals		TNC		see comment 41
43	Monitoring should continue through life of permit		TNC		Agreed. Pursuant to the Service's Five-Point Policy, monitoring will be required to determine effects and effectiveness of the conservation program.
44	Requests more information about advantages and disadvantages of 50-year timeframe due to uncertainty of changes to human environment over time	p.1	EPA		In response to this and other comments on permit duration, the Service provided additional details and rationale in Section 2.3.2.1 of the EIS.
45	responsibilities for determining AMM effectiveness need to be clear - lies with NiSource	p. 14	TNC	HCP 7.6.3 p. 10	The responsibilities for determining AMM effectiveness rests with NiSource, not the USFWS. The example of a local Service Field Office as was given as a credible source of information that NiSource would use in its evaluation of AMMs.
46	Action violates Section 7; FWS lacks information needed to adequately address responsibility under Section 7.	p. 18	EarthJustice*		The FWS is engaged in Section 7 consultation on these actions. That process will ensure that all federal agency responsibilities under Section of the ESA are met.
47	Public has not been able to participate in a meaningful way; commentor wants to understand S7 conditions		Friends of Blackwater**		Please see sections 1.5.2.3 and 2.3.2 in the EIS for a description of the ESA Section 7 process. The Section 7 consultation documents will be available to the public once the consultation process is completed; we anticipate any additional requirements reached during consultation to be incorporated into the ITP and other relevant permits as necessary and appropriate.

48	NiSource (and subsidiaries) fail to meet general permit issuance criteria	p. 3	EarthJustice*	none - FWS makes this determination in Set of Findings	It is the responsibility of the FWS to assure that an applicant for an ITP meets permit issuance criteria in 50 CFR 13. Rationale will be documented in the Statement of Findings, which will be completed between issuance of the FEIS and issuance of the ROD. It is the preliminary position of the FWS that the violations cited in the commenter's letter are not violations of wildlife law or Federal Fish and Wildlife permits. 50 CFR 13.21 (b)(1) clarifies that the violation or penalty must "relate to the activity for which the application is filed." Therefore, an application for take of endangered species should relate to wildlife law germane to endangered species or fish and wildlife permitting.
49	NEPA Interagency MOU or Implementing Agreement is not available		EarthJustice*; Spectra Energy		The Service and Cooperating Agencies decided not to develop a NEPA MOU. Details on future NEPA implementation can be found in Chapter 1 of the EIS in Section 1.6.2.
50	Approval of NiSource action would "lock-in" Forest Service management planning	p. 3	Friends of Blackwater**		Regardless of the length of an ITP, the Forest Service would continue to process NiSource special use applications according to Forest Service Manual and Handbook direction. In other words, special use applications submitted to the Forest Service by NiSource (i.e., renewals of existing permits or new applications) would undergo project-level NEPA analysis. Consultation with the USFWS could be streamlined if any HCP-covered species were present and if the proposed NiSource project incorporated all AMMs and mitigation measures required by the MSHCP/ITP. If a Forest Plan required more restrictive Forest-wide direction related to pipelines and any HCP-covered species, a streamlined consultation would not occur. Instead, formal consultation on the proposed project would occur between the two agencies.
51	With respect to NiSource and designated agents - explain why - commentor asks whether an HCP (ITP) may cover joint ventures and third parties		Spectra Energy		The application for the issuance of an ITP for the MSHCP included a list of NiSource affiliated pipelines for which the application was submitted. Any issuance of a permit resulting from the processing of the application would be on behalf of those entities named. The FWS does not issue incidental take permits to include parties other than the applicant unless that is specifically included (and analyzed) as part of the conservation program.
52	Recommends additional information on what types of new construction impacts and where they may occur, plus additional evaluation of impacts	p.1	EPA	FEIS Chapter 4	The Service looked at all new construction impacts carefully in matrices and exposure-response tables. Activities were deconstructed and analyzed for each HCP species.
53	Cumulative Impacts and effect on various Virginia locations should be analyzed.	p.4	Sierra Club - VA Chapter		Site-specific analysis and planning will continue to occur over the life of the MSHCP. The FWS discussed additional cumulative impacts in Chapter 5 of the FEIS; however, the implementation will continue to rely on site-specific details to be evaluated as activities are implemented.
54	HCP fails to adequately address threats to Ibat (cumulative) with respect to WNS; comment cites declining numbers, inadequacy of AMMs to protect and use of old information such as 2007 draft Rec Plan and 2009 status report as the basis for the threats analysis.	p. 21-25	EarthJustice*	HCP 6.2.1 p. 7-59	Commenter is correct that 2009 population status report used 2009 numbers; however, the Service only estimated range-wide population every 2 years and the 2011 numbers where only finalized in early 2012. The discussion of the status of WNS was updated in Chapter 10 of the MSHCP. On the surface, the 2011 numbers have not indicated expanded mortality of Indiana bats from WNS beyond what was represented in the 2009 numbers used in the HCP. The disease however has spread and is now confirmed in IN, KY, OH, MO, and most of the rest of the species range. The FWS is currently in the process of implementing new range-wide Indiana bat summer survey guidelines to address the concerns regarding the locations of bats while in summer habitat. It is anticipated that the new guidance will be fully implemented by the 2014 survey season. NiSource will be required to follow approved FWS protocols for bat surveys when they conduct such studies.

55	Ibat - concerns over options for BMPs, location (presence) information presented, lack of survey data, lack of protocols for survey, underestimation of the take that will occur	p. 8-9	TNC	MSHCP Table 6.4-1, p 271,	In relation to the commenter's BMP comments, the suggestion to include habitat improvement BMPs are better suited for inclusion in the mitigation section as opposed to AMMs. The use of habitat improvements as suggested are a site specific decision dependent upon the needs of the colony within the known home range where the mitigation is planned. All of the options for habitat improvement mentioned by the commenter (and many more) are available to NiSource to implement during mitigation. The commenter also suggested that additional AMMs be included to avoid and minimize effects. They suggested that the noise AMM as defined (AMM #20) is not protective enough. The affects analysis considered all potential adverse affects and it was determined overall that noise created by all NiSource equipment and facilities is below the decibel level that will cause adverse impacts to Indiana bats. This AMM was left in as a good thing to do when they can but not critical to avoid or minimize take. Commenter also recommended including an AMM related to light pollution and suggested that an AMM be included to limit when it could be used as well as requiring that light only be directed downward onto worksite. Similarly to the noise issue, light pollution was considered during the analysis of adverse affects and it was determined, largely because NiSource rarely would work at night, that light pollution would not likely adversely affect Indiana bats if they were present.
56	Ibat - take calculation underestimates probable number of bats and maternity colonies affected by the pipeline	p. 8-9	TNC	MSHCP pp 21, 36, 37	The FWS provided extensive technical assistance relative to the take calculation for Indiana bat and the modeling that went into this determination. The take calculation took into account the probable number of maternity colonies based on habitat mapping and habitat suitability. Viable home ranges in or near the covered lands were predicted based on this modeling effort and the take number that was calculated was the number that would be expected if all suitable habitat was occupied and was a maternity colony. Biologically, that is the maximum potential and not an underestimate.
57	Ibat AMMs - commentor suggests changes to AMMs for spoil disposal, blasting, tree cutting; also mitigation success monitoring	p. 15-16	TNC	HCP page numbers referenced in TNC comments.	Adaptive management will allow for changes to assure success and minimization of effects.
58	provide citation for definition of unoccupied habitat and swarming habitat	p. 9	TNC	HCP page numbers referenced in TNC comments.	The MSHCP defines how NiSource will be considering this. NiSource has described habitat types and definitions of habitat use in its MSHCP, Chapter 6, beginning on page 9 where the biology of the species is described.
59	Support the approach as a creative, collaborative, and cost-effective approach to conservation	p. 1	American Gas Association	None.	Thank you for your comment.
60	Covered activities include an estimated 3250 mi of new construction which must receive full environmental review under the law. Recommend separating O&M and new construction due to the nature of the disturbance associated with each.	p. 4-6	Audubon	HCP 2.3, 2.4	The ITP authorizes the take of listed species. It does not authorize any of the underlying covered activities. Thus, the NEPA analysis for the ITP focuses on the impacts of the authorized take and the implementation of the MSHCP. As pipeline expansion and new construction projects are proposed, they will be subject to project-specific NEPA analyses. Nevertheless, the MSHCP considers the potential impacts to listed species for every aspect of the potential new construction or expansion. Separately permitting the construction covered activities from the operation and maintenance covered activities would not make a material difference in either the MSHCP or the NEPA analysis.
61	Delaware Natural Heritage program was consulted - not listed in MSHCP (6.1.2)	p. 2	Delaware	HCP 6.1.2	Thank you for your comment. Delaware will be added to the list in the MSHCP.

62	Seasonal Restrictions in mussel habitat are non-mandatory, but should be mandatory; time-of-year restrictions should be species-specific (work with states) and mandatory	FMCS p 3	EarthJustice*; Freshwater Mollusk Conservation Society	HCP 6.2.4.1 among others, App. M	Time-of-year restrictions were considered for all mussel species analyzed in the MSHCP. However, with the exception of the James spinymussel, there was disagreement among experts concerning the approprite period and whether or not time-of-year restrictions that weren't year round would be effective. It was determined to address impacts for most species using other mechanisms.
63	Decision not ripe under NEPA: NiSource fails to disclose details on its future plans; should be able to do so at least for next 5-10 years. Should be able to disclose information on pipeline replacement planned.	p. 4-5	Friends of Blackwater**	HCP 2.3.3, App. A	USFWS is not being asked to approve, and has no approval authority over, any of NiSource's future covered activities, including capital improvements or expansions. Rather, NiSource has requested an incidental take permit for a suite of specifically identified covered activities over the life of the permit. That is the proposed agency decision that is the subject of this NEPA analysis.
64	Mitigation is inadequate; fails to account for loss if mitigation measures are not implemented by the time of impact or take years to achieve goals. Concern whether this leads to full mitigation.	p. 2, 5-6	TNC	HCP page numbers referenced in TNC comments.	The take ratios in the MSHCP are already designed to take into account the concerns raised by TNC. In some instances, these ratios are based upon the best professional judgment from USFWS biologists and other species experts. The mitigation monitoring required in the MSHCP will confirm that the measures have achieved their objective of compensating for the take or adaptive management will be required to assure such compensation has been assured.
65	Define the covered activities referred to as "safety-related repairs, replacements, and maintenance" within the MSHCP		Spectra Energy		Safety-related repairs, replacements, and maintenance include any covered activities that originate or are required by the NiSource Pipeline Integrity Management Plan (e.g., replacements, upgrades, etc.).
66	Explain relationship between incidental take calculated and implementation of non-mandatory AMMs		Spectra Energy	HCP 5.2.1	The USFWS can issue an ITP only if it determines that the applicant will minimize and mitigate the impact of the taking to the maximum extent practicable. When the non-mandatory AMMs are practicable as defined in the MSHCP, they need to be implemented to meet this standard. Because the USFWS cannot determine at this time whether implementation of the non-mandatory AMMs will be practicable for any given covered activity, the amount of incidental take anticipated must assume that none will be implemented.
67	Has NiSource provided estimate of cost for monitoring and compliance over the permit term?		Spectra Energy	Table 8.2.1-1	Yes, see Table 8.2.1-1 of the MSHCP.
68	MSHCP does not provide sufficient detail on the role of economic basis for choosing between AMMs		Spectra Energy	HCP 5.1 and 5.2	See Section 5.2.1 of the MSHCP which provides a detailed decision-making process for the implementation of the non-mandatory AMMs, including the role of economic considerations.
69	AMMs should be prioritized in order of intended use - can make a difference as to species impact	p 5	TNC	HCP 6.2.X (multiple).3	Because all mandatory AMMs will be implemented, a priority order is not needed. AMMs have typically been ordered to facilitate compliance.
70	avoidance measures are lacking for species OTHER THAN CMS and LBB	p 4	TNC	HCP 5.2 p. 4 -10	When data describing core areas were available, they were used to help delineate avoidance areas (i.e., Lousiana Black Bear, several mussel and plant species, and Cheat Mountain salamander). The MSHCP also includes measures to avoid impacts to designated critical habitat. AMM restrictions do account for other high-value areas, such as P1 and P2 hibernacula for the Indiana bat.
71	bank erosion should be measured quantitatively to determine sediment load	p. 14-15	TNC	HCP 7.6.4.1.2 p. 14	This comment addresses adaptive management related to Mussel AMM # 8, which requires the applicant to visually inspect pipeline crossings annually for signs of erosion or destabilization. Quantitative assessments of bank erosion are likely not practicable for all stream crossings. The MSHCP approach addresses all crossings and has a low threshold for action associated with visual inspection.

72	baseline surveys and studies to document indirect effects should begin at the time permit is issued (not 5 years out)	p. 14	TNC	HCP 7.4.1 p. 6	The timing of NiSource's commitment to contribute funds to a study of the response of maternity colonies to habitat removal activities is designed to take advantage of potentially larger studies and to enhance what is learned about indirect effects from linear projects. This is not the only measure in the MSHCP designed to evaluate indirect impacts on Indiana bats.
73	commentor finds problem with "effectiveness monitoring for AMMs that appear to be effective (for some time) should no longer be required"; monitoring success or effectiveness of an AMM for only 3 times is inadequate	FMCS p 2	TNC; Freshwater Mollusk Conservation Society	HCP 7.6.3 p. 10	Three conforming positive results are adequate to conclude that the impacts and benefits of AMMs and mitigations measures are consistent with what was anticipated in the context of determining whether adaptive management is required. Note that implemented AMMs will continue to be monitored for compliance throughout the permit duration.
74	Conservation Goals for species should provide net positive impact and those goals should be the basis for take ratios, mitigation, and monitoring	p. 4	TNC	HCP 5.1.1 p. 2, 6.2.X (multiple).2	USFWS believes that implementation of the MSHCP will have net positive impacts on the species. However, as the TNC points out, USFWS cannot require that NiSource be responsible for species recovery and the ESA does not require an HCP result in a net benefit.
75	inconsistent - coffer dam distances and measurement of sediment loads	p. 14	TNC	HCP 7.6.4.1.1 p. 13-14	TNC has misinterpreted the upstream and downstream distances identified for sediment impacts in the hypothesis versus for sampling to confirm the hypothesis. The cofferdam itself is 75 feet. Therefore, the area identified as potentially causing take of the Nashville crayfish is the sum of the 10 feet upstream from the dam, the 75 feet of the dam itself, and 100 feet downstream of the dam, or 185 feet. In the paragraph following the hypothesis, this distance was inadvertently identified as 175 feet instead of 185 feet. This error will be corrected in the final MSHCP. The 200-foot sampling area is to determine the baseline. The timeframe for measuring sediment load is more than adequate to ensure that no unexpected impacts have occured to the species.
76	Monitoring and Adaptive Management provisions should be reviewed (annually) by oversight committee; committee to operate as a FAC	p. 6	TNC	HCP 7.3 p. 2-4	An additional layer of oversight is not necessary to ensure proper implementation of the HCP. NiSource will provide annual reports detailing compliance and progress with its HCP. These reports, other than locational information regarding listed species, can be made available to the public if desired.
77	Need to address temporal losses in take ratios and mitigation; apply discounting to address temporal loss when mitigation not complete at time of impact.	p. 5	TNC	multiple locations within the HCP	The take ratios in the MSHCP are already designed to take into account the concerns raised by TNC. In some instances, these ratios are based upon the best professional judgment from USFWS biologists and other species experts. The mitigation monitoring required in the MSHCP will confirm that the measures have achieved their objective of compensating for the take to the maximum extent practicable.
78	Recommend inclusion of proposed and candidate species; all listed, proposed, and candidate species should be covered	FMCS p 2	TNC; Freshwater Mollusk Conservation Society	HCP 4.2 p. 1-3, Biological Opinion and Biological Assessment	The choice of which species to cover in an HCP is left to the applicant. NiSource's species-inclusion process is described in in Section 4.2 of the MSHCP. The other listed, proposed, and candidate species were assessed in USFWS biological assessment and biological opinion. A process for including other species in the MSHCP at a later date is provided in Section 9.3 of the MSHCP.
79	Recommend inclusion of small-footed bat, northern long-eared bat, and virginia northern flying squirrel	p. 7	TNC	HCP 4.2 p. 1-3, Biological Opinion and Biological Assessment	The choice of which species to cover in an HCP is left to the applicant. NiSource's species-inclusion process is described in in Section 4.2 of the MSHCP. The other listed, proposed, and candidate species were assessed in USFWS biological assessment and biological opinion. A process for including other species in the MSHCP at a later date is provided in Section 9.3 of the MSHCP.
80	recommend NiSource support propagation/augmentation efforts	FMCS p. 2-3	TNC; Freshwater Mollusk Conservation Society	HCP 6.2.X (multiple).6	The MSHCP currently does not propose to use propogation and augmentation as a mitigation strategy for any mussel species, other than the Northern riffleshell, due to the uncertainty surrounding their success. The science available for Northern riffleshell propogation is advanced enough to permit its use as mitigation.

81	Request removal of references to TNC involvement in development of mitigation opportunities (HCP)	p. 3	TNC	HCP 1.5.2 p. 20	Thank you for your comment. NiSource will remove the TNC reference from this part of the HCP.
82	seasonal restrictions in mussel habitat are non-mandatory, but should be mandatory	p.25	EarthJustice*	HCP 6.2.4.1 among others, App. M	Time-of-year restrictions were considered for all mussel species analyzed in the MSHCP. However, with the exception of the James spinymussel, there was little scientific evidence to support such restrictions.
83	Stream bank stabilization - should be monitored annually where new disturbances occur	p. 14	TNC	HCP 7.6.4.1.1 p. 14	The intent of this adaptive management requirement is to determine whether the one-year monitoring standard is effective in discovering potential future stream bank erosion concerns. Monitoring newly disturbed streambanks for adequate revegetation and restoration is already completed and will continue to be completed, on an annual basis per NiSource's ECS.
84	Species list is inadequate - request additional consideration of various listed and state species in Virginia	p. 1-2	Sierra Club - VA Chapter	HCP 4.2 p. 1-3, Biological Opinion and Biological Assessment	The choice of which species to cover in an HCP is left to the applicant. NiSource's species-inclusion process is described in in Section 4.2 of the MSHCP. The other listed, proposed, and candidate species were assessed in USFWS biological assessment and biological opinion. A process for including other species in the MSHCP at a later date is provided in Section 9.3 of the MSHCP.
85	Concerned about avoidance measures; need to be true avoidance, not just minimization	p. 4	TNC		The applicant for this type of permit is responsible to provide for measures to avoid and minimize effects, and to mitigate for effects that cannot be avoided. Response to this comment is similar to comment #70 above. See 50 CFR 17.22 (b)(1) for more detailed information on the requirements of a conservation plan.
86	Advise that data sharing agreements between NiSource and the Service be updated before HCP implementation	p. 15	TNC	HCP 7.8.2 p 33	NiSource and the Service will update the data sharing agreements as necessary to ensure efficient data flow between the parties.
87	BT AMM - time of year restriction. Recommend change to October 31	p. 2	Delaware	HCP 6.2.2.3 p. 69 multiple AMMs	NiSource has agreed to adjust the AMMs to accommodate the October 31 restriction and to coordinate with FWS Field Offices each year to ensure that anticipated active season does not exceed that date. In cases where active season may exceed Oct. 31, NiSource will adjust AMM accordingly.
88	Bog Turtle Surveys and Habitat Assessments - concern that these will be conducted by trained NiSource personnel not on the approved bog turtle surveyor list for the state. Commentor suggests that surveyors must be on list of qualified surveyors for the state.	p. 2	Delaware	HCP 6.2.2.3 p. 66 - 69	We agree that anyone at NiSource would need to have the same level of experience as someone else qualified to conduct Phase 1 surveys but we disagree that they need to be on the Phase 1 bog turtle survey list for that state. State and Service agency personnel or university researchers that conduct bog turtle work are similarly qualified but not on a list of consultants that may be hired by project sponsors to conduct surveys. In other words, NiSource staff are not consultants available to conduct surveys for other project sponsors.
89	Bog Turtle GIS information - desire to receive survey information.	p. 2	Delaware	HCP 6.2.2.3 p. 67	NiSource agrees that open communication between itself and the states regarding survey information is important. NiSource will forward any relevant endangered species survey information it develops to Delaware as part of its annual report.
90	BT AMM #2 - comments on "scenarios 1, 2 & 3"	p. 3	Delaware	HCP 6.2.2.3 p. 69	The specifications in scenarios 1 and 2 represent the latest avoidance standards from the USFWS. NiSource agrees with Delaware's comments on scenario 3 and has modified its AMMs accordingly.
91	BT AMMs - concern with procedures to handle frac-outs when conducting HDD under BT wetlands	p. 3	Delaware	HCP 6.2.2.3 p. 72	NiSource agrees with Delaware's comments and notes that a frack out continguency plan is always prepared as part of the planning for an HDD. NiSource will add this requirement into AMM #25.
92	Rather than attempting to restore or make bog turtle habitat, NiSource should acquire known bog turtle habitat.	p. 2	Rosenbaum	HCP 6.2.2.6 p. 80	Commentor has misunderstood the intent of NiSource's bog turtle mitigation proposal. In fact, NiSource will protect existing bog turtle sites for mitigation. The standard has been further clarified to require documentation of bog turtle presence for potential mitigation sites.
93	Commentor does not agree with NiSource's assessment of impact of take.	p. 2	Rosenbaum	HCP 6.2.2.5	The Service will independently review the impact of take, and fully analyze the effects in its Biological Opinion.

94	Commentor does not agree with NiSource's assessment of genetic impacts and implications.	p. 2-3	Rosenbaum	HCP 6.2.2.5	It is not anticipated that 23 populations will be lost as a result of NiSource activities.
95	Commentor believes that a site by site, case by case review of NiSource's activities is required.	p. 4	Rosenbaum	HCP Chapter 1	NiSource disagrees that a site by site review is necessary and, in fact, believes that a holistic, landscape level review of its activities will result in better species conservation. One of the primary goals of the HCP is to proactively identify avoidance and minimization that will benefit the species in the long run.
96	Bog Turtle concerns: need BMPs to conserve BT	p. 10	TNC	HCP 6.2.2.1 p 61	Thank you for your comment. BMPs for bog turtle have already been incorporated into the HCP.
97	Bog Turtle concerns: disagree with assertion that BT are not likely to hibernate over pipeline	p. 10	TNC	HCP 6.2.2.1 p 61	The HCP acknowledges that bog turtles may hibernate on existing ROWs and the BMPs have been designed to avoid and minimize effects to them.
98	Bog Turtle concerns: HCP does not provide information on how bog turtle sites will be avoided.	p. 10	TNC	HCP 6.2.2.1 p 61	We disagree with the comment. AMM # 25 and 26 detail this avoidance process.
99	Bog Turtle concerns: ATV use statement not supported	p. 10	TNC	HCP 6.2.2.1 p 61	Thank you for your comment. However, NiSource does not have any information that suggests ATV use on its ROWs is affecting bog turtle habitat.
100	Bog Turtle concerns: urge extreme caution when discussing hydrology alteration and impacts to or near wetlands.	p. 10	TNC	HCP 6.2.2.1 p 61	Thank you for your comment.
101	Bog Turtle concerns: in some wetlands utility ROWs provide the only suitable bog turtle nesting habitat.	p. 10	TNC	HCP 6.2.2.1 p 62	Thank you for your comment. The HCP acknowledges that bog turtles may use existing ROWs and the BMPs have been designed to avoid and minimize effects to them.
102	Bog Turtle concerns: hydrology alteration can impact bog turtles.	p. 10	TNC	HCP 6.2.2.1 p 62	Thank you for your comment.
103	Bog Turtle concerns: driving vehicles adjacent to wetlands may still effect bog turtles.	p. 10	TNC	HCP 6.2.2.1 p 63	We agree with your comment. This is why the AMMs apply when wetlands (even if off ROW) are within 300' of the activity.
104	Bog Turtle concerns: question whether moving bog turtles out of wetland is appropriate strategy.	p. 10	TNC	HCP 6.2.2.1 p 63-64	TNC has misunderstood the AMM. The bog turtles will only be moved out of the work area, not the wetland. The work area will then be fenced off to prevent re-entry into the area by bog turtles.
105	Bog Turtle concerns: refers NiSource to FWS BO on chemical use near bog turtles.	p. 11	TNC	HCP 6.2.2.1 p 64	NiSource has already referenced the BO in AMM #8.
106	BT AMMs - suggestions for rewording BT AMMs.	p. 15	TNC	HCP 7.6.4.2.1 and .2 p 16-18	Thank you for your comment. The wording NiSource has for these AMMs is sufficient.
107	Bog Turtle concerns: encourages NiSource to add an objective to preserve potential bog turtle habitats.	p. 11	TNC	HCP 6.2.2.2 p 65	Preserving potential habitat (as opposed to documented habitat) is not a priority for our HCP.
108	Bog Turtle concerns: step 2a, first bullet should include potential habitat.	p. 11	TNC	HCP 6.2.2.3 p 65	NiSource does not understand the comment. Step 2a requires NiSource to document that no bog turtles were found during the survey.
109	Concerned with potential impact of projected loss of BT	p. 11	TNC	HCP page numbers referenced in TNC comments.	NiSource respectfully disagrees with TNC. Regardless, the Service will independently review the impact of take, fully analyze the effects and publish the results in its Biological Opinion.
110	Trigger to implement Adaptive Management in karst ecosystem is inadequate	p. 18	TNC	HCP 7.6.4.6.1 p 29-30	Monitoring construction activities over a five year period is adequate to determine whether karst features are destabilized by these activities.
111	Use proper protocols for chemical use within or near BT habitat (see recovery plan)	p. 11	TNC	HCP page numbers referenced in TNC comments.	We believe the protocols developed for NiSource are fully protective of bog turtles and their habitats.

112	Bog Turtle sites (identifying info) should be removed from record	p. 1	New Jersey	Green Infrastructure	Actual bog turtle sites are not identified in the MSHCP. We believe the NJDEP is referencing The Conservation Fund's Green Infrastructure mitigation plan prepared for the states. NiSource will request that TCF remove the bog turtle site description from that document.
113	Bog Turtle mitigation is not comprehensive	p.1	New Jersey	Mitigation sites are not listed in the HCP.	NiSource will welcome any information the NJDEP has regarding potential bog turtle mitigation sites. The information contained in TCF's mitigation plan was not meant to be final, rather merely the intial thoughts on potential mitgiation sites for species.
114	Dispersal barrier criteria for bog turtles may unfairly result in low suitability scores in NJ.	p.1	New Jersey	This reference is to the decision tree criteria in TCF's GI model.	NiSource will welcome any additional comments the NJDEP has regarding the decision tree criteria.
115	Green Infrastructure should be updated with regularity to accommodate changes in land use, species ranges, and scientific information over time		Audubon		Agree. Thank you for your comment.
116	Proposal constrains decisionmaking flexibility		Audubon		NiSource submitted to the USFWS an application for an Incidental Take Permit, including the required MSHCP. The USFWS decision is to decide whether to deny a permit to NiSource, issue an ITP with a 50-year duration or issue an ITP with a 10-year duration. The 50-year permit will include a hard stop at 25 years, which was agreed to by NiSource in late 2012. At that time, NiSource has committed to a voluntary removal of No Surprises assurances in order to conduct a comprehensive evaluation of the conservation program and apply any new conditions that the Service deems necessary for the continued protection of covered species. That commitment to comprehensive evaluation, in concert with adaptive management strategies and response to changed circumstances, gives the Service sufficient confidence that NiSource activities will not constrain or compromise the recovery of covered species.
117	Mitigation (front-loaded) questioned as to sufficiency and whether the NEPA analysis has fulfilled "hard look" std		Buckeye Forest Council		We believe having mitigation on the ground and working before the impacts associated with take occur is usually the best course of action (i.e., front-loading). However, white-nose syndrome may present challenges when it comes to selecting locations and timing of mitigation.
118	Adequate Funding not ensured by NiSource; lack of discussion of this in the EIS violates NEPA	p. 18	EarthJustice*		We disagree. Funding assurances is a required component of an HCP and one of the permit issuance criteria in the ESA. However, we will adress funding in a bit more detail as it pertains to mitigation.
119	Alternatives Section of DEIS fails to comply with ESA Sect.10: with respect to alternatives, max extent practicable, and minimizing take through reduced scope or duration		EarthJustice*		If the applicant provides biologically based minimization measures and mitigation measures that are fully commensurate with the level of impacts, it has minimized and mitigated to the maximum extent practicable. It is only where certain constraints may preclude full minimization or full mitigation that the "practicability" issue needs to be addressed more thoroughly.
120	Analysis of Alternative is insufficient. Does not consider the value of a flexible response and public participation in assessing permit duration.		EarthJustice*		Alternative 3 does recognize input received from the public during scoping on the issue of permit duration.
121	Analysis of Direct Impacts is inadequate		EarthJustice*		We believe the analysis in the EIS of direct impacts is sufficient. The scope of the analysis in the EIS covers the direct, indirect, and cumulative effects (i.e., impacts) of the proposed incidental take and the mitigation and minimization measures proposed from implementation of the HCP.
122	EIS and HCP fail to address cumulative impacts to Ibat due to wind energy		EarthJustice*		Wind energy is a foreseeable activity in the Covered Land and is analyzed in the cummulative impacts chapter. Thank you for your comment

123	EIS fails to address how NiSource (and subsidiaries) meet permit issuance criteria		EarthJustice*		The USFWS will make a determination on how NiSource either meets or fails to meet ESA permit issuance criteria in our Findings Document.
124	EIS fails to show that the taking "will not appreciably reduce the likelihood of survival and recovery of the species in the wild". Comments point to worst case scenario, changed circumstances, and species analysis.		EarthJustice*		That analysis will be contained in our Findings Document and in our Biological Opinion
125	FWS fails to assess HCP impacts- assumes only beneficial or no impacts		EarthJustice*		The scope of the analysis in the EIS covers the direct, indirect, and cumulative effects (i.e., impacts) of the proposed incidental take and implementation of the NiSource MSHCP, including the species avoidance, minimization, and mitigation measures.
126	Impacts of the Proposed Action are unclear		EarthJustice*		See comment above
127	Reduced duration is feasible and will reduce take. FWS consideration of alternative is inadequate.		EarthJustice*		The reduced permit duration alternative would reduce the amount of take that is authorized under the Section 10(a)(1)(B) ITP. However, after 10 years NiSource will continue to operate and maintain its pipeline infrastructure. As far as ESA compliance, NiSource could elect to seek an exception to the ESA's take prohibition either through Section 7 of the ESA (status quo) or through Section 10 of the ESA, most likely through a renewal and/or ammendment of their permit and MSHCP.
128	Cumulative Impacts analysis is inadequate. Cannot be deferred; concluding statements with respect to activities not having cum impacts are false; FWS cannot conclude that ITP will have no cum impacts and defer review (this is contradictory); avoids meaningful review by deferring analysis		EarthJustice*; Friends of Blackwater**		The Service recognizes that NiSource covered activities do contribute to cummulative impacts, and avoidance, minimization, and mitigation measures developed for the take, MSHCP, and non-MSHCP species will help off-set those impacts.
129	Impacts uncertain due to climate change		EarthJustice*; Friends of Blackwater**		As stated in the MSHCP, most climate change-related impacts to species covered in the NiSource MSHCP are likely to manifest through species life history changes. Scientists are working hard to produce reliable models to predict the potential effects of climate change to species and ecosystems at global, regional, and local levels. Although the evidence for global average temperature increases is strong, its effect on a local or regional climate or ecological conditions is much less certain, and has not provided a clear response to date. Potential impacts due to climate change are addressed in Chapter 10 of the MSHCP. We believe having these safegaurds in place is appropriate and justified.
130	EIS should be site-specific, not programmatic		Friends of Blackwater**		Due to the nature of the Proposed Action, including the proposed Covered Land that comprise the affected environment, the variety of Covered Activities, the uncertainty about future locations, timing or intensity of Covered Activities, and the nature of the adaptive management approach being considered, the EIS analysis does not allow for site-specific analyses. Further, the scope of the NEPA analysis covers the direct, indirect, and cumulative effects (i.e., impacts) of the proposed incidental take, and the avoidance, minimization, and mitigation measures proposed from implementation of the HCP. As discussed in Chapter 1 of the EIS, the basic tenet that the Proposed Action of issuing NiSource an ITP, and the subsequent implementation of the HCP, does not itself permit the activities that may cause the take of a Covered Species. NiSource activities are authorized and regulated by a number of federal and state agencies, including the Federal Regulatory Commission, U.S. Department of Transportation, and the U.S. Army Corps of Engineers, to name a few.
131	Fails to understand how an ITP can be issued for some species, but not all species in the action area		Friends of Blackwater**		The ITP NiSource has requested from the Service will only authorize the take of those species covered by the permit. For the other listed species that may occur within the NCL, NiSource will either need to avoid take of these species, or seek take authorization through Section 7 of the ESA.

132	Programmatic EIS vs. site-specific is insufficient		Friends of Blackwater**		See comment above
133	EIS does not take into account cum impacts of all impacts to a species; Plan fails to account for cumulative impacts to species		Friends of Blackwater**; TNC		The Final EIS considers potential impacts due to a variety of factors, including wind energy, transportation, and infrastructure. The proposed Covered Land includes an existing 14,000+ mile natural gas distribution and storage system operating within existing ROWs and other NiSource controlled lands across 14 east-central states. The proposed permit duration is 50 years. Because of this broad spatial extent and multi-decadal duration, identification of all specific past, present, and reasonably foreseeable activities within the Covered Land beyond those proposed as covered activities is not feasible. However, identification of generalized activities and their impacts is possible, and can be used with the environmental consequences (see Chapter 4) to analyze their potential cumulative impacts on the environment. The cumulative impacts analysis is not project specific or quantifiable, but rather an overview of past, present and reasonably foreseeable activities within the proposed Covered Land.
134	Cumulative Impacts fail to assess broad land-use changes and energy development on species habitat		TNC		As stated in the draft EIS, a quantifiable, project-specific evaluation of past, present, and reasonably foreseeable activities within the proposed Covered Land was not feasible or practical. However, land use changes and energy development were two activities identified as reasonably certain to occur, and were included in the impact analysis.
135	Further explain why "All AMMs Alternative" is dismissed		TNC		The "All AMMs Alternative" was dismissed from consideration based on rationale cited by NiSource.
136	G.I. should be used to develop areas where no take should occur, reducing covered lands		TNC		Agree. The GI project did include development of habitat suitability data layers that will facilitate implementation of species-specific avoidance, minimization and mitigation measures. That data will be utilized by NiSource personnel when both planning and implementing projects.
137	Green Infrastructure is a good starting point to know what conservation success looks like		TNC		Agree.
138	Mitigation actions and their ability to protect/conserve need to factor in a background rate of loss (cumulative impact analysis)		TNC		While we agree in principle, conducting that analysis in a meaningful way across the 9.8 million acre Covered Land area would be difficult, if not impossible. We do know that portions of the proposed covered land have undergone extensive urban and industrial development, while other portions are primarily agricultural, which have experienced little development. These past and present actions have had profound impacts to the covered land landscape, the most notable being the loss and/or conversion of native landscapes to intensive agricultural production lands, urban and rural development, mining and timber operations, energy development, and transportation infrastructure.
139	no information provided on how Ibat habitat will be assessed		TNC		That information is contained in the “Mitigation Sites Reports” for each of the take species. They are located on our website at http://www.fws.gov/midwest/Endangered/permits/hcp/nisource/index.html
140	Regarding surrogates - if they are to be used, need to adequately document why they are a suitable representative		TNC		Agree. Some of that information is in the report “Network Design Methods” which can be found at http://www.fws.gov/midwest/Endangered/permits/hcp/nisource/index.html
141	Remedies for failed AMMs are too narrow		TNC		The failure of AMMs would be addressed through Adaptive Management and responses. There are no circumstances in the MSHCP where NiSource would be able to simply ignore such a failure. In all cases, where Adaptive Management response is required, the MSHCP has been changed between draft and final to clearly require a permit amendment if the circumstance cannot be fully addressed within the adaptive management context.
142	Mitigation should be assessed over time	p.1	EPA		Agree. Compliance and effectiveness monitoring requirements are key components of the NiSource MSHCP.

	*EarthJustice comment letter on behalf of multiple entities				
	**Friends of Blackwater letter on behalf of multiple entities				