

Appendix T-2
Responses to Comments

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Responses to Comments - Federal

Response#	Commenter	Response
2421-1 2421-2	National Park Service	<p>Thank you for your comments on the Draft EIS. The use of the North Country National Scenic Trail (NST) would be temporarily restricted during active construction. Depending on the weather and other environmental conditions, construction may last several days to several weeks. The most common types of impacts to the North Country NST would likely be limited access, noise, and visual disturbances. Because the pipeline will be co-located with existing pipelines in the area, operational impacts will be negligible due to the existing right-of-way.</p> <p>It was assumed in development of the FEIS that crossing through public lands would prompt authorizing agencies to ensure that the Applicant’s preferred route or a CN Alternative complies with the designated uses of the land; therefore, the various agencies would require mitigation, and the Applicant would need to coordinate with the authorizing agency, which in this case would be the National Park Service.</p>
2421-3 2421-4	National Park Service	<p>It was assumed in development of the FEIS that crossing through public lands would prompt authorizing agencies to ensure that the Applicant’s preferred route complies with the designated uses of the land; therefore, the various agencies would require mitigation, and the Applicant would need to coordinate with the authorizing agency.</p>
2421-5	National Park Service	Mitigation measures were added to Section 6.3.6.4.2, where appropriate.
2280-1, 2280-2, 2280-3	U.S. Army Corps of Engineers	Thank you for your comments on the Draft EIS. The text has been modified as requested in the Executive Summary, Chapter 3, and elsewhere in the FEIS. Additional clarification regarding jurisdiction for such permits has been provided in Chapter 3.
2280-4	U.S. Army Corps of Engineers	The revisions suggested as part of this comment have been incorporated into the text.
2280-5	U.S. Army Corps of Engineers	The text regarding this sentence has been revised.
2280-6	U.S. Army Corps of Engineers	Your comment was considered in development of the FEIS. The FEIS assumes that the Applicant will obtain and comply with all necessary permits and approvals that would be required for the construction and operation of the pipeline if a Certificate of Need and route permit are approved by the Commission.
2280-7	U.S. Army Corps of Engineers	This comment has been addressed by noting the United States Environmental Protection Agency’s (USEPA’s) role in 401 Certification on tribal lands.

Responses to Comments - Federal

Response#	Commenter	Response
2280-8	U.S. Army Corps of Engineers	The text has been modified per the comment.
2280-9	U.S. Army Corps of Engineers	Your comment was considered in development of the FEIS. Compensatory mitigation information is provided in Sections 5.2.1 and 6.3.1. The text was revised in Section 5.2.1 to show that the types of wetlands listed are examples of those that may require mitigation. No changes were made to the mitigation section, as compensatory mitigation was noted generally.
2280-10	U.S. Army Corps of Engineers	Your comment was considered in development of the FEIS; information regarding acreages/classification was checked to the extent possible.
2280-11	U.S. Army Corps of Engineers	Thank you for the information provided as part of this comment. No changes were made to the text within this section of the FEIS.
2280-12	U.S. Army Corps of Engineers	The text has been modified per the comment.
2280-13	U.S. Army Corps of Engineers	At this time, we are unable to reconduct the analysis for NWI wetland crossings. A wetland delineation of the Project would have to be completed; this survey would provide actual wetland impact acreages.
2280-14	U.S. Army Corps of Engineers	The text has been modified per the comment.
2280-15	U.S. Army Corps of Engineers	Comment noted. At this time we are unable to reconduct the analysis for NWI wetland crossings. A wetland delineation of the Project would have to be completed; this survey would provide actual wetland impact acreages.
2280-16	U.S. Army Corps of Engineers	Comment noted. At this time we are unable to reconduct the analysis for NWI wetland crossings. A wetland delineation of the Project would have to be completed; this survey would provide actual wetland impact acreages.
2280-17	U.S. Army Corps of Engineers	The EIS was formatted as best possible to be easily readable. Subject matter reflects information on existing conditions and impacts for all of the alternatives, so the reader can compare routes in a systematic manner.
2280-18	U.S. Army Corps of Engineers	The text has been modified per the comment.

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2280-19	U.S. Army Corps of Engineers	As noted in the comment, the USACE will be directly involved in EIS review and permitting of the Project, should it go forward.
2280-20	U.S. Army Corps of Engineers	A reference to birds protected under the Bald and Golden Eagle Protection Act (BGEPA) has been added to Section 6.3.5.1. Bird species protected under the BGEPA and the Migratory Bird Treaty Act are generally discussed in Sections 5.2.4 and 6.3.4.
2280-21	U.S. Army Corps of Engineers	Thank you for the information noting the review of the Army Corps of Engineers.
2280-22	U.S. Army Corps of Engineers	Text has been added to note that the status is not initiated.
2280-23	U.S. Army Corps of Engineers	Recommended language has been added to Table 6.8-1.
2280-24	U.S. Army Corps of Engineers	Recommended language has been added to Table 6.8-1.
2279-1	U.S. Environmental Protection Agency	Thank you for your comments on the Draft EIS. Periodic checks for updates have been made to ensure that information, if applicable, is included.
2279-2	U.S. Environmental Protection Agency	Table 3.6-1 has been updated to include the Clean Water Act (CWA) 402 National Pollutant Discharge Elimination System (NPDES) permit.
2279-3	U.S. Environmental Protection Agency	Tribal specific resource policies have been acknowledged throughout the EIS and noted in Chapter 9. A reference to this chapter was added to Section 6.3.1.
2279-4	U.S. Environmental Protection Agency	A detailed analysis of all impacts to all of the various and site-specific natural resources was not possible under the FEIS process.
2279-5	U.S. Environmental Protection Agency	Information on tribal oversight for water quality issues has been added to the FEIS per the comment.
2279-6	U.S. Environmental Protection Agency	The text has been modified per the regulatory comment.
2279-7	U.S. Environmental Protection Agency	A detailed analysis of all impacts to all of the various and site-specific natural resources was not possible under the FEIS process.

Responses to Comments - Federal

Response#	Commenter	Response
2279-8	U.S. Environmental Protection Agency	<p>Wetland mitigation banks are discussed in Sections 5.2.1 and 6.3.1.</p> <p>A discussion of public lands is provided in 6.3.6; this provides information on the federal, state, and local lands crossed by the Applicant’s preferred route and route alternatives.</p>

Responses to Comments – State and Local

Response#	Commenter	Response
2600-1	Alberta, Government of - Minister of Energy	<p>Thank you for your comments on the Draft EIS.</p> <p>The statement noted as part of the comment refers to the proposed project, not the existing Line 3. The environmental document does include mention of the integrity digs and maintenance program of the existing Line 3; however, the evaluations of impacts are on the proposed project (and the Applicant's preferred route).</p>
2600-2	Alberta, Government of - Minister of Energy	The methodology used to evaluate greenhouse gas (GHG) emissions is provided in Section 5.2.7.1.2. GHG emissions were evaluated using pump station electricity consumption data supplied from the Applicant and GHG emissions factors from the United States Environmental Protection Agency's (EPA's) eGRID (Emissions and Generation Resource Integrated Database). While the methodology does not replicate that conducted by the Department of State for the Line 67 environmental document, it does consider typical industry practices.
2600-3	Alberta, Government of - Minister of Energy	While it is accurate that GHG intensities of heavy Western Canadian Sedimentary Basin (WCSB) crude oil fall on a continuum, the EIS presents a conservative estimate of lifecycle gas emissions based on a higher value of CO ₂ e/bbl of crude oil. The conservatism of the estimate is indicated in Section 5.2.7 of the EIS.
2600-4	Alberta, Government of - Minister of Energy	The displacement scenarios in this table are not meant to be exhaustive, but rather to bookend possible outcomes considering only the changes associated with WCSB, in part due to the location of the pipeline. The introduction of additional scenarios is not necessary to convey the relevant range of GHG emissions and does not materially contribute to a reasoned choice between alternatives. No changes were made to Table 5.2.7-11.
2600-5	Alberta, Government of - Minister of Energy	As noted above, the EIS presents a conservative estimate of lifecycle gas emissions based on a higher value of CO ₂ e/bbl of crude oil. The conservatism of the estimate is indicated in Section 5.2.7 of the EIS.
2367-1	Becker-Finn, Jamie - Minnesota House of Representatives	<p>Thank you for your comments on the Draft EIS.</p> <p>Chapter 9 provides a discussion of the various types of land holdings for individual tribal members and tribes. Figures 9-1, 9-2, 9-4, and 9-5 show the presence of ceded land. Treaty rights for hunting, fishing, and gathering were considered when evaluating the potential for impacts to occur as a result of the Applicant's proposed project/preferred route, along with the alternatives.</p>

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Response#	Commenter	Response
2367-2	Becker-Finn, Jamie - Minnesota House of Representatives	The discussion of the spill analysis is provided in Chapter 10. Within this chapter, a discussion of the acreage of reservation land that is crossed by the alternatives is provided. Spills are also referenced in Chapter 9. In this chapter, text was added to show that if a spill were to occur to reservation land, the impact could be major, as the tribes are tied to this land and are not able to replace resources permanently damaged or to move away from the reservation.
2367-3	Becker-Finn, Jamie - Minnesota House of Representatives	Please refer to Chapter 6, Section 6.5.1 of the FEIS for details on potential impacts to wild rice due to the proposed project. Details include acreage of wild rice impacted per project component, as well as approximate annual commodity economic loss during construction and operation.
2367-4	Becker-Finn, Jamie - Minnesota House of Representatives	The EIS has been revised to refer to the Applicant's proposed project as the Line 3 Project. Where applicable, the word "replacement" has been deleted.
2367-5	Becker-Finn, Jamie - Minnesota House of Representatives	<p>Federal treaty experts were not consulted with regard to the EIS. Potential impacts to affected natural resources are discussed in Chapters 5 and 6, and how American Indian tribes experience and interact with these resources is summarized in Chapters 9 and 11. This constitutes the analysis of treaty rights within this EIS.</p> <p>Discussions regarding the potential for oil spills is provided in Chapter 10. Information on the potential for spills within reservation boundaries is supplied.</p> <p>Chapter 9 provides information regarding the American Indian perspective on the proposed project. It includes direct quotations from elders and tribal leaders consulted as part of the development of the EIS. In this manner, the EIS provides a discussion of how Ojibwe peoples and their culture would be impacted.</p> <p>A discussion of economic impacts is provided in Section 5.3 and 6.5. Please note, the discussion on wild rice is based on limited publicly available information and thereby may only capture some of the actual economic impacts.</p>
2278-1	Eden Prairie, City of	Thank you for your comments on the Draft EIS. Pipeline corrosion is generally discussed within Chapter 8.

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Response#	Commenter	Response
2278-2	Eden Prairie, City of	<p>Appendix E provides the Environmental Protection Plan from the Applicant. This provides information on their procedures in case of a spill. The EIS does not provide information on the financial responsibilities associated with a spill if the Applicant is no longer able to provide this service (e.g., due to closure of business).</p> <p>The scoping decision document (available here: https://mn.gov/commerce/energyfacilities/documents/34079/FSDD_L3R_FN_160112.pdf) provides the topics that were planned for inclusion within the EIS.</p>
2278-3	Eden Prairie, City of	Water quality information on lakes potentially affected by the proposed Project has been accounted for in the FEIS. Impacts to water quality and natural resources will be the same as all other impact sources that could potentially lessen lake attributes.
1235-1	Grand Rapids, City of	Thank you for your comments on the Draft EIS. As discussed in Chapter 8 and detailed in Appendix B, the proposed purging and cleaning regimen has been tested and must comply with PHMSA requirements. Design, testing and review of the methods addresses the ability of the line to “handle” the cleaning and purging regimen. If contaminated soils or groundwater are encountered, they would be handled and disposed of in accordance with applicable regulations; the Environmental Protection Plan; and a Contaminated Soils Management Plan, which the Applicant will develop prior to construction in coordination with the MPCA.
1235-2	Grand Rapids, City of	Additional information regarding wellhead protection areas has been provided in Section 5.2.1 and 6.3.1 of the FEIS.
2372-1	Hansen, Rick - Minnesota House of Representatives	Thank you for your comments on the Draft EIS. Section 4.1 of Appendix B in the FEIS provides information on the Applicant's plans to minimize the risk of soil and water contamination. The section includes a discussion of mitigation and cleaning protocols. As shown, information can be extrapolated to calculate the potential for remaining hydrocarbons.
2372-2	Hansen, Rick - Minnesota House of Representatives	Information on the abandonment and removal of the existing Line 3 is provided in Chapter 8. The use of fill and concerns regarding subsidence are discussed within this chapter.
2372-3	Hansen, Rick - Minnesota House of Representatives	Thank you for the information provided as part of this comment. Enbridge will be required to provide monitoring for public safety to the degree that local, state, and federal laws dictate. Additional monitoring can be raised as a potential permit condition for consideration during the contested case hearing process.

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Response#	Commenter	Response
2372-4	Hansen, Rick - Minnesota House of Representatives	Section 8.3.1.4 of the FEIS discusses the potential issues concerning the loss of buoyancy. Buoyancy also is discussed in Appendix B of the FEIS.
2372-5	Hansen, Rick - Minnesota House of Representatives	As noted in this comment, no previous pipeline removals are cited within Appendix B to show that roads, bridges, and crossings may be damaged. However, as shown in Chapter 8, impacts to human settlement would be similar to that discussed for RA-07.
2372-6	Hansen, Rick - Minnesota House of Representatives	Additional information has been included in Chapter 8 to add detail where data is available. The introduction also was revised to show that the discussion of abandonment and removal would be applicable to the new pipeline (if approved) at the end of its service life.
2372-7	Hansen, Rick - Minnesota House of Representatives	Section 8.3.1.1 of the FEIS discusses Enbridge's current and ongoing liability and responsibility under the Minnesota Statutes 115E.
2867-1	Hornstein, Frank - Minnesota House of Representatives	Thank you for your comments on the Draft EIS. The physiochemical characteristics of crude oil, including benzene, are discussed in Section 10.2.1.1 . Benzene also is discussed as part of the discussions of historic spills.
2867-2	Hornstein, Frank - Minnesota House of Representatives	Potential impacts to Drinking Water Supply Management Areas (DWSMAs) and vulnerability, wellhead protection areas, hydrogeologic sensitivity, domestic wells and sensitivity, and public wells are evaluated in the EIS. When the volume of releases is compared to the volume of crude oil transported, rail and truck transport release a significantly higher percentage of the volume transported, 0.309% and 0.154%, respectively. Comparatively, pipeline transport release an average of 0.006% of the volume of crude oil transported.
2867-3	Hornstein, Frank - Minnesota House of Representatives	As part of the evaluation of accidental releases, seven sites were modeled; they represent a broad range of stream/waterbody characteristics, such that the results of the modeling help illustrate potential impacts in different types of waters.
2867-4	Hornstein, Frank - Minnesota House of Representatives	Additional information related to abandonment and associated impacts have been added to Section 8.3 of the FEIS.
2867-5	Hornstein, Frank - Minnesota House of Representatives	Chapter 9 of the FEIS has been revised to include additional information regarding impacts on tribal resources. This includes incorporating additional information received from individual tribal members.

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Response#	Commenter	Response
2867-6	Hornstein, Frank - Minnesota House of Representatives	Revisions to the FEIS text have been made to note the State's commitment to upholding the Paris Accord and to reducing fossil fuel consumption. If the pipeline is permitted, consideration would need to be made to offset the emissions associated with the pipeline.
2867-7	Hornstein, Frank - Minnesota House of Representatives	The range of alternatives evaluated as part of the EIS is consistent with the scope. The No Action alternative assumes the continued use of Line 3, if the Commission denies the CN. Section 1.4 explains the Department's rationale for the treatment of overarching policy issues. The Minnesota Environmental Policy Act (MEPA) requires that decision makers be informed of the environmental impacts for permitting decisions before they issue a permit. As indicated in MN Rules 4410.0300, environmental documents are to be used as guides in issuing, amending, and denying permits and carrying out other responsibilities of governmental units to avoid or minimize adverse environmental effects and to restore and enhance environmental quality. Consistent with this purpose, the evaluation of impacts in the EIS attempts to inform the Commission about the impacts of the decisions before them. The EIS does not provide a global assessment of these overarching policy issues; however, where the policy issues specifically relate to the CN or routes, the EIS provides a project-level assessment.
1405-1	Lueck, Dale - Minnesota House of Representatives	Thank you for your comments on the Draft EIS. Chapter 5.3.3 includes a discussion of potential concerns with regard to safety associated with rail transport. For instance, annual crossing incidents are provided in Table 5.3.3-8. Section 10.1.2.2 provides additional information on the potential for rail incidents, including derailment, collisions, and other miscellaneous incidents.
1405-2	Lueck, Dale - Minnesota House of Representatives	SA-04 is a system alternative evaluated to aid the Commission's evaluation of whether or not to grant a CN for the proposed project. A system alternative is not a routing alternative, as no entity has proposed to build such a pipeline, detailed routing and design have not been conducted, and a route permit could not be issued for SA-04. Instead, a system alternative serves as a broader level point of comparison to the Applicant's Proposed project and the other CN alternatives. The level of analysis of SA-04 is in line with this concept.
1405-3	Lueck, Dale - Minnesota House of Representatives	Please refer to Table 5.3.4-2 for information regarding government revenue.
1405-4	Lueck, Dale - Minnesota House of Representatives	Section 8.4 of the FEIS provides a discussion of the removal of the pipeline. Consideration for the distances between existing pipelines was considered.

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Response#	Commenter	Response
1405-5	Lueck, Dale - Minnesota House of Representatives	Information is provided in Chapter 10 of the FEIS regarding spills. Section 10.1.2 discusses the potential causes of unanticipated releases. Section 10.3.1.2 then provides a discussion of the spill history within MN. Table 10.3.1-5 notes the potential causes of these spills.
1405-6	Lueck, Dale - Minnesota House of Representatives	The FEIS acknowledges that the creation of forest edge habitat as part of construction will benefit some species that favor such habitat.
1404-1	Marty, John - State of Minnesota Senate	Thank you for your comments on the Draft EIS. A discussion of pipeline removal is discussed in Section 8.4 of the FEIS.
1404-2	Marty, John - State of Minnesota Senate	Section 8.1 of the FEIS discusses the eventual need to replace the proposed pipeline.
1404-3	Marty, John - State of Minnesota Senate	Additions have been made to Chapter 11 to provide more information on how adverse impacts to environmental justice communities are addressed. As shown, this finding does not preclude approval of the project or selection of a route alternative; however, it does require detailed efforts to avoid, mitigate, minimize, rectify, reduce, and/or eliminate the impacts.
1404-4	Marty, John - State of Minnesota Senate	For purposes of comparison across alternatives, a consistent time window of 30 years was chosen to match the economic life of the project indicated by the Applicant and to understand typical annual operating impacts/tradeoffs of the alternatives. A brief discussion regarding GHG related statutes in Minnesota has been added to Section 5.2.7.2.
1404-5	Marty, John - State of Minnesota Senate	The Project's contribution to direct and indirect GHG emissions and for CN alternatives and route alternatives are provided in Section 5.2.7 and Section 6.3.7, respectively. The cumulative potential effects of climate change and trends in Minnesota and the Midwest are discussed in Section 12.
1404-6	Marty, John - State of Minnesota Senate	The denial of a CN for a new oil pipeline will not necessarily result in operational changes to existing infrastructure, such as shutdown and/or removal of existing Line 3. Therefore, the No Action alternative assumes the continued use of Line 3, if the Commission denies the CN. If the proposed Line 3 project is not approved by the Commission, the continued operation of the existing Line 3 will be regulated by the Federal government, not the State of Minnesota. Accordingly, shutting down and removing existing pipelines in the mainline corridor is not included in the No Action Alternative.
1404-7	Marty, John - State of Minnesota Senate	As noted in the comment, the "No Action" alternative assumes the continued use of Line 3. The continued operation of the pipeline will be the responsibility of the Applicant (Enbridge). Enbridge will be required to adhere to standards and conditions of its operations, including those noted in the consent decree (i.e., if a new pipeline is not constructed).

Responses to Comments – State and Local

Response#	Commenter	Response
1055-1	Minnesota Department of Health	Thank you for your comments on the Draft EIS. The FEIS considered DWSMAs potentially affected by all of the alternatives in Chapter 5 and Chapter 6. Wellhead protection areas are also evaluated in Chapter 5 as this allowed an assessment of potential impacts across other states where the DWSMA designation is not used. Wellhead protection areas are evaluated in Chapter 6 in order to provide an additional layer of information consistent with recommendations from Department of Health and MPCA.
1055-2; 1055-3	Minnesota Department of Health	The recommended monitoring and communication can be raised as a potential permit condition for consideration during the contested case hearing process.
1055-4	Minnesota Department of Health	Figures ES-1 and ES-3 have been updated.
1055-5	Minnesota Department of Health	Figure 2.3-1 has been updated.
1055-6	Minnesota Department of Health	The recommended siting considerations can be raised as a potential permit condition for consideration during the contested case hearing process.
1055-7	Minnesota Department of Health	Figures 2.4-3 through 2.4-6 have been updated.
1055-8	Minnesota Department of Health	Pipeline construction schedules will be public knowledge. Potential effects to public or private wells would be coordinated during final design and construction planning. Currently, there is no definitive plan on where the Applicant will obtain water for hydrostatic testing. Thank you for the constructive comment on water conservation during testing procedures.
1055-9	Minnesota Department of Health	The text has been revised as suggested.
1055-10	Minnesota Department of Health	Chapter 4 provides information on the alternatives evaluated as part of the EIS. Details on each of the alternatives are included in this section. The system alternative (SA-04) is a conceptual route, whereas the route alternatives (RA-03AM, RA-06, RA-07, and RA-08) present potential routes for consideration for a specific project.

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Response#	Commenter	Response
1055-11	Minnesota Department of Health	Karst is discussed in Section 5.2.1.1.2 under the SA-04 heading.
1055-12	Minnesota Department of Health	Information was added to Section 5.2.1 to indicate that well data is not comprehensive and that some wells may be missed.
1055-13	Minnesota Department of Health	No change was made to the EIS. The information was retained to demonstrate that sole source aquifers were evaluated.
1055-14	Minnesota Department of Health	The information provided has been reviewed; however, no changes were made to the EIS to note the setback distance as noted in the comment.
1055-15	Minnesota Department of Health	The analysis of DWSMA data relied on database information available at the time the Draft EIS was prepared.
1055-16	Minnesota Department of Health	The text has been modified to reflect Minnesota Department of Health's (MDH's) drinking water responsibilities.
1055-17	Minnesota Department of Health	Big Lake has been removed from the table.
1055-18	Minnesota Department of Health	Thank you for the information provided on the potential for underestimating domestic wells. A discussion of this was added to Section 5.2.1.
1055-19	Minnesota Department of Health	Thank you for the information provided on mineral rights. Impacts to mineral resources in the Iron Range region are discussed in Chapter 6.5.1.
1055-20	Minnesota Department of Health	The paragraph referenced in this comment has been moved.

Responses to Comments – State and Local

Response#	Commenter	Response
1055-21	Minnesota Department of Health	The FEIS assumes that the Applicant would abide by all federal, tribal, state, and local regulations associated with permits. The use of trench breakers is discussed in Appendix E – the Applicant’s Environmental Protection Plan.
1055-22	Minnesota Department of Health	The information provided as part of this comment was reviewed in evaluating potential impacts associated with blasting. No changes to the EIS have been made.
1055-23	Minnesota Department of Health	The information provided as part of this comment was reviewed. No changes to Table 6.8-1 regarding drinking water have been made.
1055-24	Minnesota Department of Health	An assessment of public water supply wells located within 1250 feet of the centerline of each RSA is included in Chapter 7 of the FEIS.
1055-25	Minnesota Department of Health	Chapter 5 of the FEIS discusses the applicant's intention to store materials and hazardous substances outside of drinking water source areas and water resource locations.
1055-26	Minnesota Department of Health	Section 8.3 of the FEIS discusses potential further evaluation of segmentation locations.
1055-27	Minnesota Department of Health	There are no notable changes anticipated on the existing (recently upgraded) infrastructure in Wisconsin or elsewhere in conjunction with the Applicant's proposal. Therefore, new impacts associated with the Applicant's proposal are limited to the length of the proposed Line 3 route and do not extend through Wisconsin to an end destination in Illinois. The EIS compares the new impacts associated with the Applicant's proposal (extending from Neche to Superior) to the new impacts associated with the significantly longer SA-04 (extending from Neche to Joliet).
1055-28	Minnesota Department of Health	The high consequence area drinking water sources figure (10.4-3) was updated.
1055-29	Minnesota Department of Health	Where applicable, changes have been made to Chapter 10.

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Response#	Commenter	Response
1055-30	Minnesota Department of Health	The FEIS has been updated to reflect the source of the DWSMA definition.
1055-31	Minnesota Department of Health	Thank you for your comments regarding the sensitivity of well locations. The maps are shown at a scale that keeps exact locations from being determined.
1055-32	Minnesota Department of Health	This comment notes that the residences identified in the map 26A of this map series for RA-06 are greater than ½ mile from the route of RA-06. This should be noted when evaluating this map, as the legend incorrectly identifies these as being within ½ mile.
1055-33	Minnesota Department of Health	Both DWSMAs and WHPAs are relevant data sets to consider when evaluating potential sensitive resources located in proximity to the proposed project or alternatives. The preference of MDH to focus on DWSMAs is noted.
2368-1	Minnesota State Historic Preservation Office	Thank you for your comments on the Draft EIS. Table 3.6-1 has been updated in the FEIS to show that the State Historic Preservation Office (SHPO) does not provide clearance. Information also was added to show the SHPO role in reviewing and consulting with State Agencies.
2368-2	Minnesota State Historic Preservation Office	Text within Section 3.6.3.4 of the FEIS has been revised to more clearly show the role of the SHPO in consulting with state agencies.
2368-3	Minnesota State Historic Preservation Office	The definition of cultural resources has been revised in Sections 5.4 and 6.4 of the FEIS to include historic districts, objects, and landscapes.
2368-4	Minnesota State Historic Preservation Office	The text in Section 5.4.1.1.2 of the FEIS has been revised to clarify the jurisdiction to lands or waters. The statement at the end of the Minnesota Private Cemeteries Act was removed.
2368-5	Minnesota State Historic Preservation Office	The text in Section 5.4.2.6 of the FEIS was revised to account for additional studies completed by the Applicant. These reports are now listed in Table 5.4.2-1. The text also was revised to more accurately show what is included within the Minnesota Historical Society (MHS) information from the database. Additions were made to the text to show that the analysis of the CN alternatives focuses on information obtained from these databases. Corresponding changes were made in Section 6.4, as well.

Responses to Comments – State and Local

Response#	Commenter	Response
2368-6	Minnesota State Historic Preservation Office	Additional information regarding the Applicant's surveys has been added to Sections 5.4.2.6 and 6.4.2.1. NRHP-listed properties also have been noted for each of the alternatives (CN and Route) that are within the respective regions of interest (ROIs). Text also was added within Sections 5.4.2.2 and 6.4.2.2 to show that additional survey may be needed depending on the outcome of the Commission decisions regarding the Certificate of Need and a subsequent route permit.
2368-7	Minnesota State Historic Preservation Office	Text was added within Sections 5.4.2.2 and 6.4.2.2 to show that additional survey may be needed depending on the outcome of the PUC decisions regarding the Certificate of Need and a subsequent route permit. Additional efforts regarding cultural resources also would be needed by the Applicant (and federal/state agencies) in order to obtain permits associated with the construction of the project.

Responses to Comments - Tribal

Response#	Commenter	Response
2477-1	1854 Treaty Authority - Kaspar, Tyler	Thank you for your comment on the Draft EIS. Impacts to aquatic communities and resources are addressed in Chapters 5, 6, and 10.
2477-2	1854 Treaty Authority - Kaspar, Tyler	Wild rice lakes have been identified within 0.5 mile of alternative routes and impacts have been assessed based on right-of-way intersection with GIS-based wild rice locations. Impacts to wild rice are addressed in Chapters 5, 6, and 10.
2477-3	1854 Treaty Authority - Kaspar, Tyler	Information on tribal consultation is included in Chapter 9 of the Final EIS. Wild rice was among the many topics discussed; impacts to wild rice are addressed in Chapters 5, 6, and 10.
2477-4	1854 Treaty Authority - Kaspar, Tyler	Accidental crude oil releases are addressed in Chapter 10.
2477-5	1854 Treaty Authority - Kaspar, Tyler	Impacts from construction are evaluated in Chapters 5 and 6. Blasting and subsequent contamination have been noted for portions of the alternatives where there is a high likelihood for this occurrence.
2477-6	1854 Treaty Authority - Kaspar, Tyler	Under Minnesota statutes and rules, blasting and demolition requires permitting and analysis of potential impacts. Construction procedures are discussed in Chapter 2, and impacts of construction are addressed in Chapters 5 and 6. If a permit is issued, Enbridge will be required to meet the permit conditions of the Minnesota Pollution Control Agency (MPCA) Stormwater Pollution Prevention Plan (SWPPP), the United States Army Corps of Engineers, and Minnesota Department of Natural Resources (DNR) permits. These permits are identified in Chapter 3.
2477-7	1854 Treaty Authority - Kaspar, Tyler	The Final EIS assumes that the Applicant will obtain and comply with all necessary permits and approvals that would be required for the construction and operation, including any required mitigation for anticipated wetland impacts, of the pipeline if a Certificate of Need and route permit are approved by the Commission. A list of required permits and approvals for the Applicant's proposed Project is presented in Table 3.6-1.
2477-8	1854 Treaty Authority - Kaspar, Tyler	Section 5.2.3.3.1 of the EIS has been revised with updated summaries of potential impacts to vegetation resources, including forested communities and woody wetlands, from activities associated with construction and operations associated with the proposed Project.

Responses to Comments - Tribal

Response#	Commenter	Response
2477-9	1854 Treaty Authority - Kaspar, Tyler	Minnesota Department of Commerce is consulting with American Indian tribes. Information regarding tribal consultation is provided in Chapter 9 and Appendix P. A discussion of treaty rights and potential impacts to them are also discussed in Chapter 9.
2477-10	1854 Treaty Authority - Kaspar, Tyler	Chapter 9 has been revised to include information on the 1854 Treaty Authority and the management of off-reservation resources.
2477-11	1854 Treaty Authority - Kaspar, Tyler	Chapter 9 has been revised to include more information on potential impacts to tribal resources. Chapter 11 also contains information on tribal resources.
2477-12	1854 Treaty Authority - Kaspar, Tyler	Chapter 9 and Appendix P provide information regarding tribal consultation. Cultural resources were among the topics discussed. Revisions to Sections 5.4 and 6.4 were made to account for additional information on the potential to impact cultural resources. If the Project were to move forward, additional consultation with American Indian tribes would be needed to account for other federal and state agency involvement.
2477-13	1854 Treaty Authority - Kaspar, Tyler	The comment correctly notes that according to the analysis completed in Chapter 11 of the Final EIS, potential environmental justice communities would be likely to experience disproportionately high and adverse impacts of the project, largely based on tribal use of the lands within the region of interest. Mitigation measures are proposed to minimize and mitigate potential impacts.
2477-14	1854 Treaty Authority - Kaspar, Tyler	Additional consideration for removal as an alternative has been included in Section 8.3 of the Final EIS.
2477-15	1854 Treaty Authority - Kaspar, Tyler	Additional information regarding removal as an option has been included in Section 8.4 of the Final EIS. Additional information regarding potential loss of buoyancy has been included in Section 8.3.
2477-16	1854 Treaty Authority - Kaspar, Tyler	The Applicant will need to abide by all state and federal regulations regarding waterbody crossing construction techniques. See Chapter 3 for a discussion of additional permits required.

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Response#	Commenter	Response
2477-17	1854 Treaty Authority - Kaspar, Tyler	As explained in Sections 12.1 and 12.2 of the Final EIS, past and present actions are now considered part of the "existing environment" for the purpose of the EIS and thus analyzed in detail in Final EIS Chapters 5 and 6. Where possible, the analyses included within Chapter 12 of the Final EIS include cumulative quantitative impacts, such as acres of wetland anticipated to be impacted within the environmentally relevant area of an alternative and reasonably foreseeable action. However, reporting quantitative impacts was not possible for all resource impacts, and in those cases, a qualitative analysis is included.
2477-18	1854 Treaty Authority - Kaspar, Tyler	Where possible, the analyses included within Chapter 12 of the Final EIS include quantitative impacts, such as acres of wetland anticipated to be impacted. However, reporting quantitative impacts was not possible for all resource impacts, and in those cases, a qualitative analysis is included.
2477-19	1854 Treaty Authority - Kaspar, Tyler	A discussion of cumulative impacts is provided in Chapter 9 for tribal resources. Additional text has been included to discuss abandonment and also the potential for opening a new corridor.
2478-1	1855 Treaty Authority - Bibeau, Frank	Appendix P of the Final EIS has been reviewed and re-compiled to include additional information received from American Indian tribes. A revised table of contents is included to assist readers in finding information. As the file noted in the comment was received as an attachment, only the main letter is identified in the table of contents.
2478-2	1855 Treaty Authority - Bibeau, Frank	Chapter 9 has been revised to re-organize the section on the types of lands that may be held by individual tribal members or tribes as a whole. Additional information also is included on the various treaties for the Dakota. Where appropriate, text also was added to further describe hunting, fishing, and gathering rights.
2478-3	1855 Treaty Authority - Bibeau, Frank	This comment has been noted. The analysis in Chapter 11 is completed within the context of the existing regulatory framework and does acknowledge that the regulatory framework is not recognized by the American Indian community.
2478-4	1855 Treaty Authority - Bibeau, Frank	This comment raises a number of issues that may or may not fall within the confines of the EIS and, specifically, Chapter 12 of the Final EIS "Cumulative Potential Effects." It is unclear which specific issues the commenter wishes to address. Regarding the methodology utilized in Chapter 12, Sections 12.1 and 12.2 explain the reasoning for why past and present actions are not included within Chapter 12: these actions are now considered part of the "existing environment" for the purpose of the EIS and thus analyzed in detail in Final EIS Chapters 5 and 6.

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2617-1	Fond du Lac Band	<p>Thank you for your comments on the Draft EIS.</p> <p>Section 1.4 of the Final EIS explains the Department's rationale for the treatment of overarching policy issues. The Minnesota Environmental Policy Act (MEPA) requires that decision makers be informed of the environmental impacts of permitting decisions before they issue a permit. As indicated in MN Rules 4410.0300, environmental documents are to be used as guides in issuing, amending, and denying permits and carrying out other responsibilities of governmental units to avoid or minimize adverse environmental effects and to restore and enhance environmental quality. Consistent with this purpose, the evaluation of impacts in the EIS attempts to inform the Commission about the impacts of the decisions before them. The EIS does not provide a global assessment of these overarching policy issues; however, where the policy issues specifically relate to the CN or route alternatives, the EIS provides a project-level assessment.</p>
2617-2	Fond du Lac Band	General discussion of swamp weights is provided in Chapter 8 of the Final EIS.
2617-3	Fond du Lac Band	If a route permit is issued, Enbridge will be required to submit cathodic protection locations prior to construction.
2617-4	Fond du Lac Band	A discussion of cathodic protection is provided in Chapter 8.
2617-5	Fond du Lac Band	Consideration for the information provided within the comment has been considered when revising the EIS. Burning of woody material is presented as an option only after an appropriate permit is obtained from Minnesota DNR; it is not included with the calculations. Greenhouse gas (GHG) and other emissions from open burning of wood debris are estimated in Section 5.2.7 of the FEIS. Climate change is discussed as part of the air quality sections, as well as in Chapter 9 and Chapter 12.
2617-6	Fond du Lac Band	The stated erosion control measures are appropriate for such activities.
2617-7	Fond du Lac Band	Upland topsoil salvage is also discussed in the Project Environmental Protection Plan (Appendix E in the DEIS), Section 1.10. The cited statements reflect the difficulty of salvaging topsoil in cleared forested and shrub vegetation communities, due to woody roots within the topsoil column. Sections 5.2.33 and 6.3.3 in the EIS discuss the long-term impacts of this action, and others, to forested and shrub-dominated vegetation communities from construction and operation activities associated with the Proposed Project and alternative routes.

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Response#	Commenter	Response
2617-8	Fond du Lac Band	All federal and state regulations relevant to construction and operation of the facility will be required. Additional requirements may be included as permit conditions.
2617-9	Fond du Lac Band	The use of trench breakers is discussed in Appendix E – Section 1.13. According to Enbridge’s Environmental Protection Plan, trench breakers will be constructed with bags filled with rock-free subsoil or sand, and the use of foam trench breakers will be approved by Enbridge in advance and installed in accordance with applicable project permits, local/state/federal regulations, and manufacturer’s recommendations.
2617-10	Fond du Lac Band	The cited text has been revised to clarify the sequence and specifics of soil compaction within the trenches; decompacting soil in other disturbed areas; and application of salvaged topsoil. These changes are consistent with details in the Project Environmental Protection Plan (EPP) (Appendix E to the Draft EIS), Section 1.16 - Cleanup and Rough/Final Grading and Section 1.18 - Soil Compaction Treatment.
2617-11	Fond du Lac Band	Appendix E – Section 8.0 describes the use of frozen backfill according to Enbridge’s Environmental Protection Plan. All federal and state regulations relevant to construction and operation of the facility will be required. Additional requirements may be included as permit conditions.
2617-12	Fond du Lac Band	Appendix E provides information on the Applicant’s Environmental Protection Plan. As part of this, construction methods for stream and water crossings and wetlands are provided. The Final EIS assumes that the Applicant will obtain and comply with all necessary permits and approvals that would be required for the construction and operation of the pipeline, including the use of particular construction methods, if a Certificate of Need and route permit are approved by the Commission.
2617-13	Fond du Lac Band	The use of temporary bridges is noted in Section 2.7.2 in the FEIS. Temporary bridges are noted in the Applicant’s Environmental Protection Plan (Appendix E of this Final EIS). The FEIS assumes that the Applicant will obtain and comply with all necessary permits and approvals that would be required for the construction and operation of the pipeline, including the use of temporary bridges, if a Certificate of Need and route permit are approved by the Commission.
2617-14	Fond du Lac Band	Beaver dam removal is discussed in the Applicant’s Environmental Protection Plan (Appendix E of this Final EIS - 2.2.1 Beaver Dam Removal and Prevention of Dam Rebuilding).
2617-15	Fond du Lac Band	The bullet point regarding horizontal directional drilling (HDD) has been revised. A reference also has been included for Sections 5.2.1 and 6.3.1, for which a discussion of “frac-outs.”

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Response#	Commenter	Response
2617-16	Fond du Lac Band	The FEIS assumes that the Applicant will obtain and comply with all necessary permits and approvals that would be required for the construction and operation of the pipeline, if a Certificate of Need and route permit are approved by the Commission. Additional requirements may be included as permit conditions.
2617-17	Fond du Lac Band	Appendix E of this Final EIS provides the Applicant's Environmental Protection Plan. As part of this plan, the Applicant has outlined how Enbridge would restore and revegetate water crossings and would stabilize streambanks. Text was revised as part of Section 2.7.2.3.4 to show that is not referring to entry/exit points.
2617-18	Fond du Lac Band	The cited text describes temporary streambank stabilization to be installed immediately (within 24 hours of crossing completions). Plans for temporary revegetation is more completely described in Section 7.2 of the Project Environmental Protection Plan (EPP), Appendix E in the Final EIS. Appendix C in the EPP provides detailed seed mixes for temporary cover crops as well as for site-specific permanent revegetation seed mixes, which comprise native plant species appropriate to each particular habitat. The cited text has been modified to include slender wheatgrass, a native perennial grass, also specified in Appendix C to the EPP, for temporary revegetation. The text has been amended to include as a Best Management Practice, that annual rye be avoided as a temporary cover crop due to its potential allelopathic effects to permanent revegetation species.
2617-19	Fond du Lac Band	Text in Chapter 4 of the Final EIS has been revised to show that this RSA crosses the Fond du Lac Reservation. Table 7.3-14 shows the mileage of vulnerable water tables and MBS lakes crossed.
2617-20	Fond du Lac Band	Notes have been added in Final EIS to detail the land use ordinance and that RAs may pass through areas with those established land use and zoning regulations in Chapter 6.
2617-21	Fond du Lac Band	The mitigation measures were revised to include topsoil segregation in temporary workspace, forested areas in Chapter 6.
2617-22	Fond du Lac Band	The EIS has identified wetlands and other waterbodies using state and federal hydrography databases.
2617-23	Fond du Lac Band	The document has examined impacts to various types of wetlands, not just public water wetlands. The text has been modified to include these in the introduction of the section.
2617-24	Fond du Lac Band	The multitude of stressors for the many resources addressed is beyond the scope of the EIS.
2617-25	Fond du Lac Band	This information is valuable and appreciated. All federal and state regulations relevant to construction and operation of the facility will be required. Additional requirements may be included as permit conditions.

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Response#	Commenter	Response
2617-26	Fond du Lac Band	This information is valuable and appreciated. All federal and state regulations relevant to construction and operation of the facility will be required. Additional requirements may be included as permit conditions.
2617-27	Fond du Lac Band	This information is valuable and appreciated. All federal and state regulations relevant to construction and operation of the facility will be required. Wild rice lakes would be addressed specifically in permitting activities for sensitive resources.
2617-28	Fond du Lac Band	The Final EIS has been updated to address your comment in Chapters 5 and 6.
2617-29	Fond du Lac Band	Appendix E provides information on the Applicant’s Environmental Protection Plan where in Best Management Practices during various construction activities are discussed. Additionally, the Applicant would file a Fugitive Dust Control Plan and provide further details regarding commitments to reduce pollutants from mobile and stationary construction equipment. The plan would specify the precautions that would be taken to minimize fugitive dust emissions from construction activities, mitigation measure including use of water or a palliative needs, describe inspection, reporting procedures to identify and abate visible dust plumes, and how the Applicant would ensure that the sub-contractors would carry out the requirements. The Applicant would also provide further details regarding commitments to reduce pollutants from mobile and stationary construction equipment including during restoration and routine maintenance activity and implementation of no-idling, or reduced idling, policy.
2617-30	Fond du Lac Band	Appendix E provides information on the Applicant’s Environmental Protection Plan; this includes a discussion of best management practices during various construction activities.
2617-31	Fond du Lac Band	The range of alternatives, for which impacts are assessed and emissions for activities are estimated, is consistent with the scope of the proposed Project.
2617-32	Fond du Lac Band	Your comment has been considered in preparation of Final EIS. The particulate matter emissions are provided in Table 6.3.7-4.
2617-33	Fond du Lac Band	As noted in this comment, vehicle combustion emissions are included in Table 6.3.7-5. These typically are estimated based on fuel characteristics. Notes are provided in subsequent tables regarding these emissions for the route alternatives. Please note, a mitigation measure is included to limit construction equipment idling to the extent practical when not in use.

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2617-34	Fond du Lac Band	Your comment has been considered in preparation of the FEIS. No changes have been made to the EIS. The range of alternatives, for which impacts are assessed and emissions for activities are estimated, is consistent with the scope of the proposed Project.
2617-35	Fond du Lac Band	The EIS acknowledges a mitigation measure to follow equipment manufacturer-recommended operations and good combustion practices, including not tampering with engines to increase horsepower and using ultra-low sulfur diesel. This measure accounts for the appropriate use of equipment, exclusive of the age of the equipment.
2617-36	Fond du Lac Band	Additional information has been provided in Chapter 7 regarding the individual route segment alternatives.
2617-37	Fond du Lac Band	Text has been added to Chapter 4 to show that this RSA crosses the Fond du Lac Reservation.
2617-38	Fond du Lac Band	Text in Chapter 4 has been revised to show that this RSA crosses the Fond du Lac Reservation. Additional information also has been included in Chapter 7 regarding the individual RSAs.
2617-39	Fond du Lac Band	RSA-53 as described in Chapter 7 connects RA-07 to RSA-22. This revision has been made in the chapter.
2617-40	Fond du Lac Band	Additional information regarding manual valves has been included in Section 8.3.1.2 of the Final EIS.
2617-41	Fond du Lac Band	Additional information related to preemptive measures has been included in Section 8.3 of the Final EIS.
2617-42	Fond du Lac Band	Additional information has been included in Section 8.3 of the Final EIS pointing to further identification of specific areas, which may help to better estimate associated costs.
2617-43	Fond du Lac Band	This information has been included in Section 8.4.1 of the Final EIS.
2617-44	Fond du Lac Band	The text in Chapter 9 has been updated to show the revised number of crossings.
2617-45	Fond du Lac Band	The text in Chapter 9 has been revised to show that these are only a few examples of the many plants used by American Indian tribes.
2617-46	Fond du Lac Band	Text has been added to Chapter 9 to show that American Indian tribes are connected to the reservation, thereby making it more difficult to replace resources that are impacted in these particular locations.
2617-47	Fond du Lac Band	Case studies of several spills, including the 2010 spill, and their impacts to various resources is now provided in the EIS in Chapter 10.
2617-48	Fond du Lac Band	As discussed in the EIS, the Applicant is committed to limiting equipment idling during construction when not in use. The Applicant will use similar practices during restoration and maintenance activities.
2617-49	Fond du Lac Band	A discussion of impacts related to climate change and American Indian tribes is provided in Chapter 9.

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Response#	Commenter	Response
2617-50	Fond du Lac Band	<p>Appendix E provides information on the Applicant’s Environmental Protection Plan; this includes a discussion of best management practices during various construction activities.</p> <p>Additionally, the Applicant would file a Fugitive Dust Control Plan and provide further details regarding commitments to reduce pollutants from mobile and stationary construction equipment. The plan would specify the precautions that would be taken to minimize fugitive dust emissions from construction activities, mitigation measure including use of water or a palliative needs, describe inspection, reporting procedures to identify and abate visible dust plumes, and how the Applicant would ensure that the sub-contractors would carry out the requirements. The Applicant would also provide further details regarding commitments to reduce pollutants from mobile and stationary construction equipment including during restoration and routine maintenance activity and implementation of no-idling, or reduced idling, policy.</p>
2617-51	Fond du Lac Band	This comment has been noted. The lighter compounds aromatics and alkanes tend to be the more toxic parts of crude oil, most of which evaporates in the hours and days after spilling. These components also tend to be the more toxic parts of the oil (see Chapter 10).
2617-52	Fond du Lac Band	The air emissions associated with ongoing integrity digs and repair of the existing Line 3 are discussed in Chapter 5.2.7.3.2 of the EIS and are not expected to be significant at any one location.
2617-53	Fond du Lac Band	VOC emissions referenced in Section 12.3.1.3.2 provide annual estimates. The text in the EIS has been updated accordingly.
2617-54 2617-55	Fond du Lac Band	A description of the new truck loading facility at Clearbrook analyzed within Final EIS Section 12.3.5.3 can be found in Section 4.2.7 of the FEIS. Section 4.2.7 notes that a new access road and other highway upgrades would be required in conjunction with the loading facility; it is not clear whether idling would be reduced by these upgrades. It is not known whether there are plans to require use of clean diesel/low-emission trucks.
2617-56	Fond du Lac Band	While the potential for increased mold levels in homes and resultant illness to result from the proposed project is beyond the scope of this FEIS, other impacts associated with greenhouse gas emissions are discussed in Chapter 5.2.7.2.1.
2617-57	Fond du Lac Band	As discussed in the EIS, the Applicant has committed to limiting equipment idling when not in use during construction. The Applicant would use similar practices during restoration and maintenance activities.

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Response#	Commenter	Response
2617-58	Fond du Lac Band	As discussed in the EIS, the Applicant has committed to limiting equipment idling during construction. The Applicant has also committed to following equipment manufacturer-recommended operations and good combustion practices, including not tampering engines to increase horsepower and using ultra-low sulfur diesel.
2634-1	Great Lakes Indian Fish & Wildlife Commission	Thank you for your comments on the Draft EIS. Chapter 10 provides an overview of the types of resources that may be impacted by a potential oil spill. Table 10.4 in particular has been revised to more accurately show that this references reservation land. The numbers of resources are drawn from SHPO databases. A note was added to table 10.4-28 to show this.
2634-2	Great Lakes Indian Fish & Wildlife Commission	A 10-mile downstream distance was selected, because it was considered to be not overly conservative, and crossing widths for the RAs were unavailable. The Applicant surveyed the streams and rivers for the APR ONLY, so small (<10 m wide) and large (10 m or > wide) crossings are only known for this route. It would be biased to only run the 2 downstream buffers (30 miles for large rivers, and 10 miles for small streams) along the APR. Furthermore, it was determined that it would be overly conservative to run a 30-mile downstream buffer for all water crossings, especially since many of these water bodies are ditches and terminate within a few miles.
2634-3	Great Lakes Indian Fish & Wildlife Commission	The FEIS provides data on the Applicant's spill history, as well as comparisons of the Applicant's spill and incident rate compared to other crude oil pipeline operators, both in Minnesota and nationwide.
2634-4	Great Lakes Indian Fish & Wildlife Commission	The discussion of cumulative impacts includes an analysis that provides a focused, Project-specific review of cumulative potential effects; it does not address impacts outside of the environmentally relevant area at a broad regional level.
2634-5	Great Lakes Indian Fish & Wildlife Commission	Discussion related to watershed impacts is found in Section 5.2.1.2.
2634-6	Great Lakes Indian Fish & Wildlife Commission	Discussion related to watershed impacts is found in Section 5.2.1.2 of the FEIS.

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Response#	Commenter	Response
2634-7	Great Lakes Indian Fish & Wildlife Commission	Thank you for your comment. A detailed analysis of all impacts to all of the various and site-specific natural resources was not possible under the FEIS process.
2634-8	Great Lakes Indian Fish & Wildlife Commission	Corridor management activities would adhere to both state and federal guidelines and directives, considering off-site migration and impacts to proximal waterbodies and supported flora and fauna. State and federal required management plans are required for both construction and operation.
2634-9	Great Lakes Indian Fish & Wildlife Commission	This comment has been noted. The wetland and waterway high consequence areas evaluated for spill impacts were limited to: Aquatic Management Areas, Lakes of Biological Significance, Minnesota Biological Survey Sites of Biodiversity Significance (MBS Sites), native plant communities, wetland bank easements, wild rice lakes, Muskie lakes, and sensitive lakeshore areas (see Chapter 10).
2634-10	Great Lakes Indian Fish & Wildlife Commission	Further information regarding financial assurance has not been provided by the Applicant. The pertinent regulations for responsibility and liability have been identified throughout the EIS. Financial assurance will be addressed if permits are issued.
2634-11	Great Lakes Indian Fish & Wildlife Commission	The cumulative potential effects analysis described with FEIS Chapter 12 does not restrict the analysis to pipeline and transmission lines that cross the route alternatives, as is stated in the comment. The description of the cumulative potential effects analysis (Final EIS Section 12.1) clarifies that cumulative potential effects analyses are performed for environmentally relevant areas, which vary in size depending on the type of resources and potential impacts considered. For example, one of the reasonably foreseeable actions considered (Table 12.2-1) is "addition of pipeline in same corridor." This would parallel an alternative. Section 12.1 provides an explanation of what the cumulative effects analysis does, and that it does not address impacts outside of the environmentally relevant area at a broad regional level. Finally, habitat fragmentation and water quality/resources are addressed as potential cumulative effects for alternatives where these resources are potentially affected.
2634-12	Great Lakes Indian Fish & Wildlife Commission	Chapter 12 clarifies that cumulative potential effects relevant to tribal resources are discussed in Chapter 9. The discussion in Chapter 9 provides a brief discussion of the types of impacts that may occur. The experiences of tribal members and contributions to current and historical trauma are noted as part of this evaluation in Chapter 9.

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Response#	Commenter	Response
2634-13	Great Lakes Indian Fish & Wildlife Commission	Chapter 9 of the FEIS discusses cumulative potential effects relevant to tribal uses. The information provided as part of this comment was reviewed in revising Chapter 9.
2634-14	Great Lakes Indian Fish & Wildlife Commission	Pipeline and Hazardous Materials Safety Administration (PHMSA) does not have specific requirements regarding weighting of the pipe, commonly called swamp weights. However, there are requirements to ensure movement of a pipeline does not create stress on joints or equipment that would compromise the pipe. Chapter 8 and Appendix B provide additional information related to weighting down pipelines.
2634-15	Great Lakes Indian Fish & Wildlife Commission	Additional information regarding cathodic protection locations has been included in Section 2.3.2.3 of the Final EIS.
2634-16	Great Lakes Indian Fish & Wildlife Commission	A discussion of cathodic protection is provided in Chapter 8. Your comment has been considered in updates to this section.
2634-17 2634-18	Great Lakes Indian Fish & Wildlife Commission	As shown in Chapter 2, the coating consists of non-hazardous fusion-bonded epoxy. Information on its removal, if it were to fail, is provided. Hazardous waste handling is addressed as part of the Applicant's Environmental Protection Plan provided as Appendix E.
2634-19	Great Lakes Indian Fish & Wildlife Commission	A detailed analysis of all impacts to all of the various and site-specific natural resources, for all potential routes, was not possible under the FEIS process. Detailed wetland surveys for all alternative routes is not a standard practice in conducting an EIS. Available desktop analysis is relied upon to identify known resources.
2634-20 2634-21 2634-22	Great Lakes Indian Fish & Wildlife Commission	Text has been added relevant to tribal water quality regulation consideration by the project.
2634-23	Great Lakes Indian Fish & Wildlife Commission	Management of various construction activities will be reviewed by the relevant state and federal agencies during the construction permitting process.

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2634-24	Great Lakes Indian Fish & Wildlife Commission	Water quality standards may vary based on the surface water body being considered. Applicant will be required to adhere to those standards and criteria as relevant to the water body in question.
2634-25	Great Lakes Indian Fish & Wildlife Commission	The Applicant will be required to develop crossing plans that will provide specific measures for limiting impacts and for restoration of affected natural resources, including wild rice waterbodies.
2634-26	Great Lakes Indian Fish & Wildlife Commission	Chapter 10 of the Final EIS includes an analysis of the potential for spill impacts to wild rice lakes and wild rice harvest areas within Areas of Interest (AOIs).
2634-27	Great Lakes Indian Fish & Wildlife Commission	The analysis of air quality impacts (and specifically the use of diesel) is based on the type of equipment that is proposed for construction. The assumption can be made that if alternative types of fuel would be used, the air emissions would generally be less.
2634-28	Great Lakes Indian Fish & Wildlife Commission	Dust suppression water sources have not yet been identified based on need. All chemical additives to dust suppression water would be considered during construction plans and operational permitting processes.
2634-29	Great Lakes Indian Fish & Wildlife Commission	Enbridge has not provided information regarding additives in dust control water.
2634-30	Great Lakes Indian Fish & Wildlife Commission	Additional information related to abandonment and ongoing maintenance and monitoring has been included in Section 8.3 of the Final EIS.
2634-31	Great Lakes Indian Fish & Wildlife Commission	This is discussed in Section 8.3.1.2 of the Final EIS.
2634-32	Great Lakes Indian Fish & Wildlife Commission	Additional discussion has been included in Section 8.3.1.2 of the Final EIS.

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Response#	Commenter	Response
2634-33	Great Lakes Indian Fish & Wildlife Commission	Additional information related to subsidence and other issues associated with abandonment has been included in Section 8.3 of the Final EIS.
2634-34	Great Lakes Indian Fish & Wildlife Commission	Further discussion related to preemptive measures has been included in Section 8.3 of the Final EIS.
2634-35	Great Lakes Indian Fish & Wildlife Commission	Additional information related to understanding the specific locations of necessary measures has been included, which may help to better estimate associated costs.
2634-36	Great Lakes Indian Fish & Wildlife Commission	The text in Chapter 9 has been revised to show that these are only a few examples of the many plants used by American Indian tribes.
2634-37	Great Lakes Indian Fish & Wildlife Commission	Text has been added to Chapter 9 to show that American Indian tribes are connected to the reservation, thereby making it more difficult to replace resources that are impacted in these particular locations.
2634-38	Great Lakes Indian Fish & Wildlife Commission	Information has been added to the EIS to more clearly show how volume of transported oil is considered. For instance, Figure ES-4 has been revised to demonstrate amount spilled per volume transported.
2369-1	Leech Lake Band of Ojibwe	Thank you for your comments on the Draft EIS. The sentence has been revised to show that the importance for these resources is on both reservations and ceded lands.
2369-2	Leech Lake Band of Ojibwe	This figure (Figure ES-2) is intended to provide an overview of the CN alternatives. Figures have been reviewed throughout the EIS for clarity.
2369-3	Leech Lake Band of Ojibwe	This information has been included within the Executive Summary within the section noted as advantages and disadvantages of removing the old pipeline.
2369-4	Leech Lake Band of Ojibwe	Your comment has been noted, and language was revised within the section to account for the Leech Lake Band of Ojibwe objection to the routes.
2369-5	Leech Lake Band of Ojibwe	Your comment has been noted, and language was revised within the section to account for the Leech Lake Band of Ojibwe objection to the routes.

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2369-6	Leech Lake Band of Ojibwe	A sentence has been added to the Executive Summary to note that relationship (distance) to other pipelines within the Mainline corridor is provided in Chapter 8.
2369-7	Leech Lake Band of Ojibwe	This sentence has been revised to show that RA-07 would be compatible with existing land use to the extent that it is to be placed within an existing corridor.
2369-8	Leech Lake Band of Ojibwe	This sentence has been revised to show that some benefit may occur due to the use of an existing corridor. It is not intended to negate potential impacts to the reservations through which the route alternative crosses.
2369-9	Leech Lake Band of Ojibwe	The information provided as part of the comment has been considered, as the statement refers to what the Applicant has identified as their challenges for RA-07; no change has been made. As shown in Chapter 3, other types of permits and approvals would be needed, if the proposed project were to move forward.
2369-10	Leech Lake Band of Ojibwe	Changes have been made throughout the EIS to address consistency with terminology. This comment has been considered in this effort.
2369-11	Leech Lake Band of Ojibwe	This comment has been considered. Changes have been made in Chapter 9 and Chapter 11 to show how impacts to the political integrity, economic security, and health or welfare of American Indian tribes may occur.
2369-12	Leech Lake Band of Ojibwe	While this information is not provided as part of the Executive Summary, Chapter 11 of the EIS has been revised to include additional detail on potential EJ communities. The section describes potential impacts to American Indian populations, including those residing on or using the Leech Lake Reservation.
2369-13	Leech Lake Band of Ojibwe	Information provided as part of your comment was considered in revising portions of the EIS. Where information was available, additional data has been included regarding wild rice lakes.
2369-14	Leech Lake Band of Ojibwe	Sections 5.3.1 and 6.3.1 provide information on potential impacts to wild rice lakes. Where additional information was available, data were included in the EIS.
2369-15	Leech Lake Band of Ojibwe	Thank you for the information provided as part of this comment. Revisions within the EIS have included additions showing where tribal regulations are applicable, as well as to emphasize that the federally recognized American Indian tribes noted in this EIS are sovereign nations (see Chapter 9).
2369-16	Leech Lake Band of Ojibwe	As part of the mapping analyses within the EIS, available datasets were used to the extent possible. Wild rice data included, but was not limited to, that from the DNR.

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2369-17	Leech Lake Band of Ojibwe	The word "shallow" has been removed from this sentence.
2369-18	Leech Lake Band of Ojibwe	Figure 6.3.1.2-1 utilized data from the DNR. Information from this dataset is noted on the figure.
2369-19	Leech Lake Band of Ojibwe	The information for crossings is based on data from the DNR. The text included shows the results from the use of these data.
2369-20	Leech Lake Band of Ojibwe	The evaluation of wild rice lakes within this EIS largely draws on data from the DNR.
2369-21	Leech Lake Band of Ojibwe	Information as provided in the comment was added to the Executive Summary to show that RA-07 and RA-08 would have the greatest impacts, since they cross reservations.
2369-22	Leech Lake Band of Ojibwe	The information provided in your comment has been noted. This census tract is discussed in Chapter 11. Information on changes to this section are noted in the Executive Summary, even though specific references to individual census tracts are not.
0812-1	Leech Lake Band of Ojibwe	Thank you for your comments on the Draft EIS. Information regarding the Leech Lake resolution has been added to the Executive Summary of the Final EIS.
0812-2	Leech Lake Band of Ojibwe	The maps in Chapter 9 have been revised to more clearly show the information provided as part of the legend.
0812-3	Leech Lake Band of Ojibwe	A discussion of wild rice is provided in Chapter 9. This discussion focuses on the importance of rice within the tribal community, including the economic importance.
2464-1	Mille Lacs Band of Ojibwe	Thank you for your comments on the Draft EIS. Section 6.7 of the Final EIS provides a discussion of corridor sharing. Within Chapter 6, distinctions are made between sections of the Applicant's preferred route and route alternatives due to the possibility of corridor sharing. In this manner, the existing conditions and impacts discussions account for this potential.
2464-2	Mille Lacs Band of Ojibwe	Additional information was provided in Chapter 8 to note the presence (and average distance) of existing pipelines within the Mainline corridor. The EIS as a whole accounts for the presence of existing pipelines, as well, as some analyses show the differences within the Clearbrook to Carlton section as a discrete analysis.

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Response#	Commenter	Response
2464-3	Mille Lacs Band of Ojibwe	References to Applicant provided materials are made in places throughout the EIS. A list of preparers is also included within Chapter 13.
2464-4	Mille Lacs Band of Ojibwe	Chapter 9 has been re-organized to include a description of what is evaluated in Chapters 5 and 6. The purpose in doing so is to show that Chapters 5 and 6 focus on those that are recorded in the State Historic Preservation Office (SHPO) databases. Chapter 9 provides an additional component, which is the connection between natural resources and cultural resources. A discussion of traditional cultural properties also was added to Chapters 5 and 6. The tables in Chapter 10 have been revised to show that the reference is to reservations, which include the potential of cultural resources being presented. As this chapter is meant to be more of an overview of potential impacts, specific resources are not called out.
2464-5	Mille Lacs Band of Ojibwe	Information included in Appendix P was considered when writing the Draft EIS and Final EIS, along with all public comments received. Included among these are those from the Great Lakes Indian Fish and Wildlife Commission (“GLIFWC”).
2464-6	Mille Lacs Band of Ojibwe	As shown in the revised text for Chapter 9, consultation will continue beyond the release of the FEIS.
2464-7	Mille Lacs Band of Ojibwe	Enbridge stated in their Certificate of Need application that the State required a permanent access road at each mainline valve.
2464-8	Mille Lacs Band of Ojibwe	Appendix O contains an unanticipated discovery plan for cultural resources. As shown in this plan, appropriate American Indian authorities would be contacted in the event of a discovery of human remains. Please note – this plan contains information for those areas under federal and state jurisdiction. A mitigation measure has been included in Chapter 9 to recommend the use of tribal monitors in archaeological surveys and monitoring.
2464-9	Mille Lacs Band of Ojibwe	Of the requested items, Enbridge has only supplied information regarding restoration of wetland areas after construction. This information is provided in Section 5.2.1.3.3.
2464-10	Mille Lacs Band of Ojibwe	Hazardous waste handling is discussed as part of the Applicant's Environmental Protection Plan. This is included as Appendix E.

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Response#	Commenter	Response
2464-11	Mille Lacs Band of Ojibwe	The applicant has not supplied a plan specific to avoidances of cultural artifacts/resources during directional drilling. However, they have discussed their plans for limiting the loss of circulation of drilling fluid throughout Chapter 5, which will help limit the impacts to subsurface soil and artifacts outside of the borehole. Additionally, it may be possible to further avoid impacts by drilling deeper in locations of potentially affected artifacts/resources.
2464-12	Mille Lacs Band of Ojibwe	Such requirements may be conditions of a permit.
2464-13	Mille Lacs Band of Ojibwe	The Environmental Protection Plan is provided in Appendix B. Section 1.6.1 provides information on the use of herbicides. Impacts associated with the use of herbicides are discussed in Sections 5.2.4, 6.3.4, and 6.3.5. A mitigation measure was added to Chapter 9 to indicate that tribes may be consulted prior to the use of herbicides.
2464-14	Mille Lacs Band of Ojibwe	The Environmental Protection Plan is provided in Appendix B. Section 1.6.1 provides information on the use of herbicides. Impacts associated with the use of herbicides are discussed in Sections 5.2.4, 6.3.4, and 6.3.5. A mitigation measure was added to Chapter 9 to indicate that tribes may be consulted prior to the use of herbicides.
2464-15	Mille Lacs Band of Ojibwe	A review of publicly available policies, rules, and regulations for the abandonment of pipelines was conducted. This statement is intended to be general, as more detailed information is provided in Chapter 8 and Appendix B.
2464-16	Mille Lacs Band of Ojibwe	Section 8.3.1.1 of the Final EIS discusses Enbridge's current and ongoing liability and responsibility under the Minnesota Statutes 115E.
2464-17	Mille Lacs Band of Ojibwe	Fish IBI and other waterbody quality metrics have been used to the best of DOC's ability. State agencies tasked with assessing aquatic metrics generally address the most relevant waterbodies during their assessment program. During subsequent permitting activities the quality and supporting capability of various waterbody's crossed would be taken into account.
2464-18	Mille Lacs Band of Ojibwe	Impacts have been directed at sensitive species. Protection of sensitive species and resources will ultimately be protective of species that are considered less sensitive. Impacts to lakes and waterbodies, via consideration of water quality standards and criteria, would allow for protection of warmwater fisheries.

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Response#	Commenter	Response
2464-19	Mille Lacs Band of Ojibwe	Information on tribal policies regarding wild rice are noted in Chapter 9. As part of the revisions to this chapter, an example of one of these policies was provided.
2464-20	Mille Lacs Band of Ojibwe	A detailed analysis of all impacts to all of the various and site-specific natural resources was not possible under the Final EIS process.
2464-21	Mille Lacs Band of Ojibwe	A detailed analysis of all impacts to all of the various and site-specific natural resources was not possible under the Final EIS process.
2464-22	Mille Lacs Band of Ojibwe	A detailed analysis of all impacts to all of the various and site-specific natural resources was not possible under the Final EIS process.
2464-23	Mille Lacs Band of Ojibwe	A detailed analysis of all impacts to all of the various and site-specific natural resources was not possible under the Final EIS process.
2464-24	Mille Lacs Band of Ojibwe	A detailed analysis of all impacts to all of the various and site-specific natural resources was not possible under the Final EIS process.
2464-25	Mille Lacs Band of Ojibwe	A detailed analysis of all impacts to all of the various and site-specific natural resources was not possible under the Final EIS process.
2464-26	Mille Lacs Band of Ojibwe	A detailed analysis of all impacts to all of the various and site-specific natural resources was not possible under the Final EIS process.
2464-27	Mille Lacs Band of Ojibwe	Invasive species would be addressed via plans during construction. The project will be required to meet all requirements of the National Invasive Species Act.
2464-28	Mille Lacs Band of Ojibwe	Generally, in each situation where there are impacts to private individuals, remedies reflect the unique situation and are addressed based on a detailed analysis of need. It is difficult to predict the mechanisms required for all situations.
2464-29	Mille Lacs Band of Ojibwe	Revisions to Chapter 9 include additional references to other chapters within the EIS. Likewise, additions were made in other chapters to refer back to Chapter 9. Chapter 11 also includes a summary of impacts to particular resources. It provides a discussion of impacts to American Indian tribes.
2464-30	Mille Lacs Band of Ojibwe	The concern for the use of a new pipeline corridor and corridor sharing is discussed in the Executive Summary - "What are the benefits or drawbacks of corridor sharing versus opening a new corridor?" - This section provides a short discussion of how this concern is reviewed as part of the EIS. Section 6.7 also discusses Right-of-Way Sharing or Paralleling.

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Response#	Commenter	Response
2464-31	Mille Lacs Band of Ojibwe	Information within Chapter 9 indicates that other tribes may have an ancestral tie to the lands within Minnesota. Where applicable, this information is noted within the EIS.
2464-32	Mille Lacs Band of Ojibwe	The text has been revised to show that Minnesota is the ancestral homeland of the Dakota.
2464-33	Mille Lacs Band of Ojibwe	The full names of the tribes are included in Chapter 9.
2464-34	Mille Lacs Band of Ojibwe	Additional information on the sovereignty of American Indian tribes has been added to Chapter 9.
2464-35	Mille Lacs Band of Ojibwe	The text has been revised to show that management of natural resources may extend outside of reservation boundaries.
2464-36	Mille Lacs Band of Ojibwe	The text has been revised per the comment received.
2464-37	Mille Lacs Band of Ojibwe	Text has been added to Chapter 9 to include the names of elders and tribal leaders that were interviewed as part of the consultation.
2464-38	Mille Lacs Band of Ojibwe	Text has been added to Chapter 9 to account for the information in the comment received.
2464-39	Mille Lacs Band of Ojibwe	Information has been added to Chapter 9 to show how the cultural corridors were developed.
2464-40	Mille Lacs Band of Ojibwe	Text has been added to Chapter 9 to show the importance of water to American Indian tribes and to their future.
2464-41	Mille Lacs Band of Ojibwe	Appendix P provides a copy of the resolutions received by American Indian tribes consulting with the Minnesota Department of Commerce. Revisions also were made to add Section 5.4.1.1.7, which includes a discussion of tribal cultural resources policies. A similar addition was made to Section 6.4.1.1.
2464-42	Mille Lacs Band of Ojibwe	This sentence has been revised per the comment received.

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Response#	Commenter	Response
2464-43	Mille Lacs Band of Ojibwe	The scope of the Final EIS does not allow for all studies that could provide additional information on subject areas. Many of the studies noted would be part of the state's purview on aquatic and fisheries assessment. Additionally, all cumulative aspects of global warming on specifically-assessed resources is beyond the scope of the EIS process.
2464-44	Mille Lacs Band of Ojibwe	The scope of the FEIS does not allow for all studies that could provide additional information on subject areas. Many of the studies noted would be part of the purview by state regulatory agencies associated with management of aquatic and fisheries resources. Additionally, all cumulative aspects of global warming on specifically-assessed resources is beyond the scope of the EIS process.
2464-45	Mille Lacs Band of Ojibwe	The spelling has been revised.
2464-46	Mille Lacs Band of Ojibwe	The text has been revised to show that Leech Lake is one of the wild rice lakes within MN.
2464-47	Mille Lacs Band of Ojibwe	Wild Rice harvest data have been included in the spill analysis
2464-48	Mille Lacs Band of Ojibwe	Chapter 9 has been revised to more accurately show that some of the impacts analysis provided represents a summary of resource specific impacts discussed in more detail in Chapter 6.
2464-49	Mille Lacs Band of Ojibwe	The text noting this statement has been removed.
2464-50	Mille Lacs Band of Ojibwe	The EIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release.
2464-51	Mille Lacs Band of Ojibwe	The spill model accurately deals with the fate and transport of the spills given the factors provided by the spill model. Only in cases where the spill volume was exhausted to losses from adhesion, evaporation, and other environmental factors prior to the 24-hour time limit did the model predict how far the spill could travel. All other cases was how far the spill traveled in 24 hours and remaining volume of the spill.
2464-52	Mille Lacs Band of Ojibwe	SIMAP (Integrated Oil Spill Impact Model System) was also used.

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Response#	Commenter	Response
2464-53	Mille Lacs Band of Ojibwe	Predicted volume out data is considered “public” data and is provided in Chapter 10.
2464-54	Mille Lacs Band of Ojibwe	Ten miles downstream was selected because it was considered to be not overly conservative, and crossing widths for the RAs were unavailable. The Applicant surveyed the streams and rivers for the APR ONLY, so small (<10 m wide) and large (10 m or > wide) crossings are only known for this route. It would be biased to only run the 2 downstream buffers (30 miles for large rivers, and 10 miles for small streams) along the APR. Furthermore, we determined that it would be overly conservative to run a 30-mile downstream buffer for all water crossings, especially since many of these water bodies are ditches and terminate within a few miles.
2464-55	Mille Lacs Band of Ojibwe	The ROI was identified as the distance that released oil would typically spread on flat ground (calculated to be 1,214 feet from the centerline) plus an additional distance of 1,050 feet for estimated down-gradient migration in groundwater (if groundwater were contacted); the estimated total distance of approximately 2,264 feet was rounded up to 2,500 feet.
2464-56	Mille Lacs Band of Ojibwe	The FEIS does include data on wild rice harvest areas and water and wetlands of high biological significance.
2464-57	Mille Lacs Band of Ojibwe	Table 10.4-16 was updated to show that this is referring to reservation land and not cultural resources. Text was revised in Section 10.4.2.1.2 to clarify what the acreage in Table 10.4-9 was referencing and that reservation lands may contain cultural resources.
2464-58	Mille Lacs Band of Ojibwe	The analysis is of reservation land, which contain cultural resources, but not of all cultural resource sites.
2464-59	Mille Lacs Band of Ojibwe	This has been corrected. The applicant (primary responsible party or PRP) and their contractors are the responders. Spill recovery efforts are monitored, and as needed directed, by the Federal and State on-scene coordinators. If the PRP's response efforts are deemed to be inadequate, the NCP authorizes mobilization of federal and state resources, funded by the Oil Spill Liability Trust Fund, which in turn will bill the PRP for funds expended in the response.

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2464-60	Mille Lacs Band of Ojibwe	Chapter 11 of the EIS has been updated to reflect that census tract level data does not necessarily capture micro-populations within larger tracts. The East Lake Community near Gregor, MN is used as an example of this. The EIS explains that the qualitative analysis, the discussion of potential impacts, and the proposed mitigation measures provided in this section would be applicable to these communities as well as the potential EJ communities identified through quantitative analysis of census tracts.
2464-61	Mille Lacs Band of Ojibwe	Chapter 12 of the Final EIS contains a thorough analysis of the potential cumulative effects associated with "adding another pipeline within the corridor" of the Applicant's Preferred Route and Route Alternatives outside of the Mainline Corridor, i.e. RA-03AM and RA-06, including effects on planning and zoning, aesthetics, vegetation, and other resources. The referenced section of the FEIS also includes discussion on cumulative spills. The addition of another pipeline is a "reasonably foreseeable action" discussed in detail throughout Chapter 12.
2290-1	White Earth Nation	Thank you for your comments on the Draft EIS. Results from a comprehensive review of federal and state-listed lands and species within proposed project and alternative routes, some of which are also known to occur within the 1855 Treaty Area, are presented in Sections 5.2.5 and 6.3.5 of the Final EIS.
2290-2	White Earth Nation	An analysis of Audubon Important Bird Areas (IBAs), Migratory Bird Treaty Act (MBTA)-protected birds, and Bald and Golden Eagle Protection Act (BGEPA)-protected birds near the proposed project and alternative routes, is presented in Sections 5.2.4 and 6.3.4 of the FEIS.
2290-3	White Earth Nation	Chapter 9 provides information on tribal consultation process, along with Appendix P. A tribal consultation policy was developed in March 2016.
2290-4	White Earth Nation	Tribal consultation is discussed in Chapter 9. A formal consultation policy is provided in Appendix P.
2290-5	White Earth Nation	Chapter 9 provides an assessment of tribal resources and incorporates input gathered from consultation. The chapter shows how American Indian tribes often think beyond one generation and how natural and cultural resources are one in the same.
2290-6	White Earth Nation	Based on a secondary GIS analysis of the DNR Wild Rice Lakes database, it is confirmed that 17 wild rice lakes occur within the ROI (0.5 miles from centerline) for the Applicant's proposed project.
2290-7	White Earth Nation	Appendix E of the EIS provides a discussion of the Applicant's Environmental Protection Plan. While wild rice bodies are not specifically addressed, the plan provides information on the restoration of waterbodies and associated features.

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Response#	Commenter	Response
2290-8	White Earth Nation	Appendix E of the EIS provides a discussion of the Applicant’s Environmental Protection Plan, which includes a discussion of the restoration of wetlands.
2290-9	White Earth Nation	Additional information related to abandonment and removal has been included in Sections 8.3 and 8.4, respectively.
2290-10	White Earth Nation	Text has been added to note that tribal water quality standards and criteria would be addressed within tribal lands.

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Response#	Commenter	Response
1702-1	Ackerman, Mary	Thank you for your comments on the Draft EIS. The FEIS assumes that the Applicant will obtain and comply with all necessary permits and approvals that would be required for the construction and operation of the pipeline, including any required pipeline monitoring, if a Certificate of Need and route permit are approved by the Commission. Table 3.6-1 provides a list of additional permits and approvals required for the Line 3 Project.
2479-1	Adams, Mary	Thank you for your comments on the Draft EIS. Section 5.3 and Section 6.5 provide the socioeconomic analysis.
2479-2	Adams, Mary	Additional information on spill impacts are included in Chapter 10 of the FEIS. The spill models include winter and summer runs.
1202-1	Adams, Mary	Thank you for your comments on the Draft EIS. The FEIS is designed to identify and analyze all of the various impacts potentially feasible based on the various alternatives chosen. Crossing methods for various waterbodies identified for determined alternatives has been proposed by the Applicant and are provided in Appendix G.
1202-2	Adams, Mary	Spill data were provided by the Applicant and reviewed by the Department of Commerce and the third-party EIS preparation team. The updated list of EIS preparers is included in Chapter 13, List of Preparers. The methodology for assessing spills is included in Section 10.1.5, Methodology for Assessing Failure Probabilities, Potential Exposure, and Resource Impacts.
1202-3	Adams, Mary	The various tables within Section 5.3.4.2 of the FEIS report workforce numbers for each county that would be crossed by the Applicant's proposed project and alternatives. The FEIS notes the source/date for these data: U.S. Bureau of Economic Analysis, August 2015.

Responses to Comments – Citizen

Response#	Commenter	Response
1202-4	Adams, Mary	<p>After establishing these baseline employment conditions within the counties crossed by the Applicant's proposed project/preferred route and alternatives, and discussing potential impacts on employment for the Applicant's proposed project/preferred route and alternatives, Section 6.5.4 of the FEIS clarifies that it is likely that the Applicant would hire local residents during construction of any of the alternative routes for a portion of its workforce. Based on current labor agreements in Minnesota at least 50% of workers will be expected to be employed from local union halls.</p> <p>Chapters 5 and 6 of the FEIS include analysis of the potential economic impacts of the project on recreation, property values, and taxes.</p>
0800-1	Adams, Mary	Thank you for your comments on the Draft EIS. See Appendix G in the FEIS for a more detailed explanation of horizontal directional drilling (HDD) activities.
0800-2	Adams, Mary	The FEIS addresses impacts to waterways and natural resources through evaluation of multiple alternatives. Chapter 5 provides detailed discussions on the major alternatives and the Applicant's proposed project. Chapter 6 provides information on the route alternatives in Minnesota.
0644-1	Arnosti, Don	Thank you for your comments on the Draft EIS. The Minnesota Pollution Control Agency (MPCA) and Department of Natural Resources (DNR) are assisting the Department of Commerce in preparing the FEIS. Data and suggestions from these agencies have been incorporated into the FEIS.

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Response#	Commenter	Response
0498-1	Auchterlonie, Clare	<p>Thank you for your comments on the Draft EIS. Section 6.2.4.3 of the FEIS includes a discussion on the presence of an oil or gas pipeline, or pipeline easement, and potential effects on property values. A review of relevant literature provided limited to no conclusive evidence that the presence of a pipeline and associated easement would have an effect - negative or otherwise - on surrounding property values. Table 6.2.4-5 within the aforementioned section summarizes the findings reviewed. Ultimately, landowner property values are a product of many local or regional market variables, of which the presence of a pipeline is only one. The discussion clarifies that spills, ruptures, and other incidents potentially resulting in "legacy contamination" may have a greater impact on property values. The magnitude of such impacts is highly dependent on the specific nature of the contamination.</p> <p>As stated within Table 8.3-1, in the long term, socioeconomic impacts can be lessened by monitoring, adaptive management, and site-specific mitigation measures. As stated within FEIS Section 8.3.1.1.1, the Applicant would continue to be responsible for preventing discharges and contamination, as spelled out in Minnesota Statutes.</p>
1282-1	Bad Axe Lake Association - Molin, Kay	Thank you for your comments on the Draft EIS. The FEIS provides analyses of various water and terrestrial resources that could potentially be affected by the project. All potentially affected surface water bodies are discussed in Chapters 5 and 6.
2496-1	Baker-Knuttila, Elizabeth	Thank you for your comments on the Draft EIS. Please see the updated Chapter 13, List of Preparers.
2496-2	Baker-Knuttila, Elizabeth	The methodology and datasets used to develop the resource analyses in the EIS are detailed in each section throughout the EIS. Please see also the lists of references at the end of each section throughout the EIS. Note that it is common for the applicant to provide comments on an EIS and to request various modifications to the EIS. Not all of the Applicant's suggested changes have been made to the EIS. Please see responses to comment letters 1568 and 2603.

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Response#	Commenter	Response
2496-3	Baker-Knuttila, Elizabeth	The pipeline will cross through numerous counties in Minnesota with varying zoning regulations. Zoning was analyzed at a county level for the Project, so if a county does not have approved zoning regulations, a zoning analysis could not be conducted for it. Hubbard County does not have county-wide zoning implemented. Land use impacts for Hubbard County were included in the analysis through the National Land Cover Dataset (NLCD) database detailed in Table 6.2.1-5 of the FEIS.
2498-1	Bantle, Elena	Thank you for your comments on the Draft EIS. The data utilized to evaluate the annual risk of oil releases is based on historical data for existing pipelines that range in age from old to new. Operation of the pipeline, if it is approved and constructed, would be under the jurisdiction of the Pipeline and Hazardous Materials Safety Administration, which requires additional monitoring and safety measures for operating pipelines as they age. Changes have been made to Chapter 10 based on comments.
2116-1	Barnett, David	Thank you for your comments on the Draft EIS. The figure in the Executive Summary of the FEIS has been revised to demonstrate amount spilled per volume transported. When volume of releases is compared to the volume crude oil transported, rail and truck transport release a significantly higher percentage of the volume transported, 0.309% and 0.154% respectively. Comparatively, pipeline transport release an average of 0.006% of the volume of crude oil transported.
1284-1	Barten, John	Thank you for your comments on the draft EIS. Please see Section 1.4.1.1, Need for this Project. While the FEIS does not make a determination regarding project need, the FEIS does consider the environmental impacts of alternatives that would meet the applicant's proposed need. Enbridge's proposed need for the Project is contained in their Certificate of Need application and is summarized in Section 2.2 of the FEIS.
1284-2	Barten, John	Additional discussion regarding abandonment/removal near water has been included in Sections 8.3 and 8.5 of the FEIS.
1284-3	Barten, John	A specific monitoring schedule has not been determined at this time. Structural integrity, surface subsidence, and buoyancy of the abandoned pipeline will be evaluated from routine inspections and monitoring associated with cathodic protection.

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Response#	Commenter	Response
1284-4	Barten, John	The Applicant has proposed to abandon the existing Line 3 rather than remove it. However, Section 8.4 discusses the removal option of the existing line, which would not include shutting down adjacent lines.
1284-5	Barten, John	Evaluating the cost of removing or abandoning the Applicant’s proposed project (if permitted by the Commission and constructed), is outside the scope of this FEIS. For general information on abandonment and removal of pipelines, please see Appendix B and Chapter 8 of the FEIS.
1284-6	Barten, John	The topsoil, which has the majority of the organic material within the various soil horizons, will be stripped to a depth of 12 inches and segregated from the subsoil to prevent unnecessary compaction during construction. Once the pipeline is installed, areas of subsoils that are prone to compaction will be deep tilled to further reduce compaction impact prior to replacement of the topsoil and revegetation.
1286-1	Beatty, Kathryn	Thank you for your comments on the Draft EIS. Historical pipeline incident data from publicly available sources were used in the development of the FEIS and is presented in Chapter 10.
0980-1	Beckel, Bonnie	Thank you for your comments on the Draft EIS. The FEIS analyzes impacts 10 miles downstream of all alternatives. See further discussion in Chapter 10.
0350-1	Bellefy, Austin	Thank you for your comments on the Draft EIS. Section 6.5.4 of the FEIS clarifies that it is likely that the Applicant would hire local residents during construction of any of the alternative routes for a portion of its workforce - based on current labor agreements in Minnesota, at least 50% of workers will be expected to be employed from local union halls. Section 10.1.1.1 discusses federal and state regulatory requirements for oil pipelines, as well as industry standards, which would apply to each of the pipeline alternatives.
1290-1	Bennett, Sheila	Thank you for your comments on the Draft EIS. A 30-year time window was chosen to match the economic life of the project indicated by the Applicant. For purposes of comparison across alternatives a consistent time window was targeted that is long enough to understand typical annual operating impacts/tradeoffs of the alternatives. Extending the timeframe and updating the analysis does not appear to add additional value in this comparison.

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Response#	Commenter	Response
2505-1	Berdahl, Bob & Mary	<p>The FEIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release. Case studies of several significant spills and discussion of their impacts to various resources have been included. See Chapter 10 for more details.</p> <p>As indicated in Section 10.3, on June 3, 2019 the Minnesota Court of Appeals ruled that the Revised Final Line 3 EIS of February 12, 2018 was inadequate because it failed to specifically address the potential impact of an oil spill into the Lake Superior watershed. In order to address the court’s opinion Enbridge commissioned a modeling analysis on behalf of and with input from the Minnesota Department of Commerce, Energy Environmental Review Analysis Staff for one additional hypothetical crude oil release from a pipeline crossing within the Lake Superior watershed (Stantec et al. 2019; Appendix V).</p> <p>When considered together with the seven previously modeled sites, Little Otter Creek as the eighth representative release site can be used to further characterize the range of trajectory, fate, and potential consequences of an oil spill in the project area. Using the same assumptions used for the other sites, the spill modeling was used to predict the potential trajectory of released oil, the fate of released oil, and the potential effects of accidental oil releases on the natural and human environment. The intent of these analyses was to infer a range of potential effects that may occur at this and other locations in Minnesota with similar biophysical and human use characteristics.</p>
0503-1	Berkholtz, Ric	Thank you for your comments on the Draft EIS. The importance of cultural resources and natural resources to American Indian tribes is discussed in Chapter 9. Among those discussed is wild rice. A discussion of wild rice is also included in Chapters 5, 6, and 10.
0503-2	Berkholtz, Ric	The sovereignty of American Indian tribes is discussed in Chapter 9.
2509-1	Big Sandy Lake Association - Johnson, Bruce	Thank you for your comments on the Draft EIS. The National Academies of Sciences, Engineering, and Medicine 2016 citation is included in the EIS. The EIS has been updated to include discussion on the properties of dilbit as it weathers. The EIS contains discussion of releases, the fate and transport of spills, and case histories of the effects of spills to resources. See Chapter 10 for more details.

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Response#	Commenter	Response
2509-2	Big Sandy Lake Association - Johnson, Bruce	For a new hazardous liquid pipeline, high consequence areas must be identified prior to operation, and hazardous liquid pipeline operators are required to develop and submit to Pipeline and Hazardous Materials Safety Administration (PHMSA) a written Integrity Management Plan (IMP) within 1 year of the start of operation (49 CFR 195.452). See Chapter 10 for more details.
1705-1	Birchem, Regina	Thank you for your comments on the Draft EIS. For purposes of comparison across alternatives, a consistent time window of 30 years was chosen to match the economic life of the project indicated by the Applicant and to understand typical annual operating impacts/tradeoffs of the alternatives.
2510-1	Bischoff, Toni	Thank you for your comments on the Draft EIS. The FEIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release.
2510-2	Bischoff, Toni	The Draft EIS noted that only three reports were reviewed; the additional reports now have been reviewed. Revisions to Sections 5.4.2 and 6.4.2 have been made to show this. Additional information regarding National Register of Historic Places (NRHP)-listed properties also has been included.
2517-1	Bleichner, Jessica	Thank you for your comments on the Draft EIS. Surface water quality may be associated with aquatic life use or other related use categories. The condition/measurement of the physiochemical attributes of a waterbody may not fully dictate their meeting, or not meeting, use designations. All information on water quality and designated use was considered for assessing impacts from construction and operation for all alternatives in Chapters 5 and 6.
1897-1	Borgeson, Dean	Thank you for your comments on the Draft EIS. This comment touches on the larger usage of oil production. The Executive Summary of the FEIS provides information on the purpose of the EIS and the decisions they inform, while Section 1.4 provides details about broader policy implications.
1206-1	Borgeson, Dean	Thank you for your comments on the Draft EIS. The anticipated diluent composition for the Applicant's project, if a certificate of need and route permit is approved by the Commission, is not known at this time. A general discussion of diluting agents can be found in Section 10.3.1.1.2.

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1206-2	Borgeson, Dean	Dilbit diluent is natural gas condensate. The seasonal variations are due to temperature. Natural gas condensate evaporates as the dilbit weathers once exposed. Effects after initial weathering are similar to very heavy crude oil. See Chapter 10 for more information.
1206-3	Borgeson, Dean	Potential impacts from an oil discharge are addressed in Chapter 10 of the FEIS.
1206-4	Borgeson, Dean	Impacts to potentially affected resources are identified within the region of influence (ROI) in Chapters 5, 6, and 10, along with the environmentally relevant area in Chapter 12. . The overall economic effects or impact of the project is addressed within the FEIS in Chapters 5 and 6.
1206-5	Borgeson, Dean	The cost for supplementing water resources, by providing potable water to residents or fish stocking, to offset any associated impacts is uncertain at this time, and an evaluation of such a cost is outside the scope of the FEIS.
1206-6	Borgeson, Dean	An evaluation of project costs in the event of an accidental spill is outside the scope of the FEIS. However, this topic can be further addressed in negotiated agreements during the certificate of need process.
2307-1	Bourdeaux, Dawn	Thank you for your comments on the Draft EIS. Potential transmission line connected actions are discussed in Section 2.10 of the FEIS. Reasonably foreseeable actions included as part of the cumulative potential effects analysis is presented in Table 12.2-1 of the FEIS.
2307-2	Bourdeaux, Dawn	This EIS only covers the Line 3 Project and not any approvals for other projects. Please refer to Chapter 12, "Cumulative Impacts," on how recent projects within proximity of the Line 3 are being considered. Also, please refer to Section 2.10 of Chapter 2, "Potential Connected Action - Transmission Lines," regarding information on how connected projects are described.
2307-3	Bourdeaux, Dawn	Existing conditions, impacts, and mitigation related to commodity production, including for agricultural lands - including pasture land and livestock grazing areas - for the Applicant's Proposed Project and Certificate of Need alternatives, and the Applicant's Preferred Route and Route alternatives, are discussed in FEIS Section 5.3.1 and Section 6.5.1, respectively.

Responses to Comments – Citizen

Response#	Commenter	Response
2307-4	Bourdeaux, Dawn	Please refer to Chapter 5, Section 5.3 and Chapter 6, Section 6.5 for details on existing conditions, potential impacts, and mitigation measures for various socioeconomic factors in the project area.
2307-5	Bourdeaux, Dawn	Minnesota Department of Commerce, Energy Environmental Review and Analysis (DOC-EERA) staff has prepared this FEIS in consultation with the Commission’s Executive Secretary, and with assistance from the Minnesota Department of Natural Resources (Minnesota DNR) and Minnesota Pollution Control Agency (Minnesota PCA). Route Alternative RA-03AM analyzed in the FEIS, which was initially proposed by the Minnesota PCA and modified with input from Minnesota DNR, largely reflects the alternative suggested by the commenter.
1780-1	Boyd, Natalie	Thank you for your comments on the Draft EIS. This information has been considered in the development of the FEIS. This EIS assumes that the Applicant will obtain and comply with all necessary permits and approvals that would be required for the construction and operation of the pipeline, including required mitigation, if a Certificate of Need and route permit are approved by the Commission.
2524-1	Boyd, Natalie	Thank you for your comments on the Draft EIS. The National Academies of Sciences, Engineering, and Medicine 2016 data are included in the FEIS. The FEIS has been updated to include discussion on the properties of dilbit as it weathers in Chapter 10.
2524-2	Boyd, Natalie	The PHMSA incident report for the Line 6b indicates the Enbridge control center in Edmonton, Alberta first noted the leak on July 26, 2010 at 11:45 am EDT and reported it to the NRC at 13:33 EDT.

Responses to Comments – Citizen

Response#	Commenter	Response
2524-3	Boyd, Natalie	<p>The EIS acknowledges that the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release. The EIS contains discussion of releases, the fate and transport of spills, and case histories of the effects of spills to various resources, including aquatic environments.</p> <p>As indicated in Section 10.3, on June 3, 2019 the Minnesota Court of Appeals ruled that the Revised Final Line 3 EIS of February 12, 2018 was inadequate because it failed to specifically address the potential impact of an oil spill into the Lake Superior watershed. In order to address the court’s opinion Enbridge commissioned a modeling analysis on behalf of and with input from the Minnesota Department of Commerce, Energy Environmental Review Analysis Staff for one additional hypothetical crude oil release from a pipeline crossing within the Lake Superior watershed (Stantec et al. 2019; Appendix V).</p> <p>When considered together with the seven previously modeled sites, Little Otter Creek as the eighth representative release site can be used to further characterize the range of trajectory, fate, and potential consequences of an oil spill in the project area. Using the same assumptions used for the other sites, the spill modeling was used to predict the potential trajectory of released oil, the fate of released oil, and the potential effects of accidental oil releases on the natural and human environment. The intent of these analyses was to infer a range of potential effects that may occur at this and other locations in Minnesota with similar biophysical and human use characteristics.</p>
2524-4	Boyd, Natalie	<p>Section 5.3.4.3.1 of the FEIS and other sections related to employment impacts are updated to include the expectation that Enbridge would utilize local labor for construction based on the information from direct testimony of Barry Simonson (lines 505-513) that current labor agreements in Minnesota require that at least 50% of workers would be expected to be employed from local union halls. Therefore, it is likely that direct construction-related employment would have a minor positive impact on county-level unemployment and per capita and/or median household income levels. No measureable impacts to county-level unemployment as a result of operations are still anticipated as stated in the FEIS.</p>
2524-5	Boyd, Natalie	<p>Oil that would be transported comes from sources that may reflect removal from geologic fissures.</p>

Responses to Comments – Citizen

Response#	Commenter	Response
2524-6	Boyd, Natalie	Section 195.563 of 49 CFR Subpart H – Corrosion Control states that cathodic protection must be in operation no later than 1 year after the pipeline is constructed. This does not mean Enbridge would wait a full year to install the system. It is typically installed as part of the construction process. The buried pipeline would also be protected from external corrosion by application of a coating.
2524-7	Boyd, Natalie	This EIS assumes that the Applicant will obtain and comply with all necessary permits and approvals that would be required for the construction and operation of the pipeline, including required mitigation, if a Certificate of Need and route permit are approved by the Commission.
2524-8	Boyd, Natalie	Such requirements may be included as conditions of the permit.
2524-9	Boyd, Natalie	The Draft EIS noted that only three archaeological reports were reviewed; the additional reports now have been reviewed. Revisions to Sections 5.4 and 6.4 have been made to show this. The evaluations in Sections 5.4 and 6.4 largely are based on data received from SHPO databases and known site information. Mitigation has been recommended in Chapter 9 to include tribal monitors in conducting archaeological surveys and monitoring.
2524-10	Boyd, Natalie	Chapter 11 of the FEIS has been revised to clarify that the applicant may provide funding to support the efforts of local and tribal law enforcement to address sexual abuse and sex trafficking, which would enable local entities to tailor approaches and solutions to their community, and/or to collaborate with experts in this field.

Responses to Comments – Citizen

Response#	Commenter	Response
0620-1	Brainard, Diana	Thank you for your comments on the Draft EIS. Various sections within Chapters 5 and 6 of the FEIS, including Section 5.3.4 and Section 6.5.4, address baseline employment conditions within the counties crossed by the Applicant's proposed project/preferred route and alternatives, and anticipated impacts on employment as a result of construction and operations. Section 6.5.4 of the FEIS clarifies that it is likely that the Applicant would hire local residents during construction of any of the alternative routes for a portion of its workforce - based on current labor agreements in Minnesota at least 50% of workers will be expected to be employed from local union halls. Section 5.3.4.1 of the FEIS does state that Enbridge has appealed the amount of property taxes paid between 2012 and 2016 and that to date the appeal has not been settled. Tax implications associated with retirement/abandonment of the existing Line 3 are uncertain at this time.
1299-1	Brandt, Diane	Thank you for your comments on the Draft EIS. Potential impacts to Aquatic Management Areas, Lakes of Biological Significance, Minnesota Biological Survey Sites of Biodiversity Significance (MBS Sites), native plant communities, Wetland bank easements, wild rice lakes, Muskie lakes, sensitive lakeshore areas, and Scientific and Natural Areas are evaluated in the EIS.
1299-2	Brandt, Diane	Thank you for your comments on the Draft DEIS. Your comment has been considered in development of the FEIS.
1299-3	Brandt, Diane	The downstream analysis in Chapter 10 is based on the national hydrology dataset.
1299-4	Brandt, Diane	Spill data are available from PHMSA and were used in the EIS. Enbridge has asserted that public disclosure of potential release volumes is a security risk that could be exploited.
2527-1	Brenegan, Erik	Thank you for your comments on the Draft EIS. For purposes of comparison across alternatives, a consistent time window of 30 years was chosen to match the economic life of the project indicated by the applicant and to understand typical annual operating impacts/tradeoffs of the alternatives. The life-cycle GHG estimates provided in Table 5.2.7-11 show the full range of possible outcomes for general comparison purposes. The life cycle emissions are calculated assuming worst-case throughput and provide a conservative estimates of life cycle GHG emissions.

Responses to Comments – Citizen

Response#	Commenter	Response
2534-1	Brown, Shannon	Thank you for your comments on the Draft DEIS. Your comment has been considered in development of the FEIS, and changes have been made to Chapter 10.
2534-2	Brown, Shannon	The EIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release.
2534-3	Brown, Shannon	Section 8.3 of the FEIS discusses corrosion and buoyancy concerns, as well as the need for additional analyses.
2534-4	Brown, Shannon	Enbridge does not plan to remove the pipeline. If removal is a permit condition, a removal plan would be required..
2534-5	Brown, Shannon	<p>The proposed project Environmental Protection Plan (EPP) (Appendix E in the DEIS), details wetland protection and reclamation requirements that would be implemented during construction and reclamation within wetland areas. As specified in this plan, wetland topsoil would be salvaged and stockpiled, protected from compaction, contamination, and any construction impacts. Subsoils within the construction ROW would be protected from compaction. Therefore, upon replacement, these soils would be expected to be suitable substrate to provide for natural regeneration, or reclamation seedings.</p> <p>Section 2.7.2.4 of the DEIS notes the plan also implements any further restoration and long-term monitoring guidance required by USACE in the required CWA Section 404 permit or by the local government unit in relation to the Wetland Conservation Act permit.</p> <p>Section 5.2.3 - Vegetation, Section 6.3.3 - Vegetation, and Chapter 7 of the DEIS all address specific potential direct and indirect impacts to terrestrial vegetation in terms of land vegetation cover classes, native plant communities, and rare plant communities, integrating EPP actions. These include discussions of specific impacts to wetland communities from activities associated with construction and operations associated with the Proposed Project and alternative routes.</p>

Responses to Comments – Citizen

Response#	Commenter	Response
2534-6	Brown, Shannon	Section 195.563 of 49 CFR Subpart H – Corrosion Control states that cathodic protection must be in operation no later than 1 year after the pipeline is constructed. This does not mean Enbridge would wait a full year to install the system. It is typically installed as part of the construction process. The buried pipeline would also be protected from external corrosion by application of a coating.
2534-7	Brown, Shannon	Section 5.3.4.1 of the FEIS does state that Enbridge has appealed the amount of property taxes paid between 2012 and 2016, and that to date the appeal has not been settled. Tax implications associated with retirement/abandonment of the existing Line 3 are uncertain at this time.
2534-8	Brown, Shannon	The draft EIS noted that only three reports were reviewed; the additional reports now have been reviewed. Revisions to Sections 5.4.2 and 6.4.2 have been made to show this.
2534-9	Brown, Shannon	Chapter 11 of the FEIS has been expanded to include additional information on the assessment of and impacts to potential EJ communities. As described in the section, the identification of potential EJ communities or the potential for disproportionately high and adverse impacts does not preclude approval of the project or selection of a route alternative; however, it does require detailed efforts to avoid, mitigate, minimize, rectify, reduce, and/or eliminate the impacts. Section 11.4 of the EIS describes the measures that may be undertaken by the applicant to minimize or mitigate adverse impacts. As noted in this section, the Applicant may work with companies and subcontractors hired to construct, restore and operate the pipeline to prepare and implement an education plan or awareness campaign regarding the issue of sexual abuse or sex trafficking. Section 11.4 has been revised to clarify that the applicant may also provide funding to support the efforts of local and tribal law enforcement on this and other safety-related issues, which would enable local entities to tailor approaches and solutions to their community, and/or to collaborate with experts in this field.
0813-1	Buric, Maureen	Thank you for your comments on the Draft EIS. The study has been completed with all available information.
0288-1	Capistrant, Katie	Thank you for your comments on the Draft EIS. Section 8.3.1.1 of the FEIS discusses the requirements that Enbridge must abide by according to State Statutes.

Responses to Comments – Citizen

Response#	Commenter	Response
0288-2	Capistrant, Katie	The description of Route Alternative RA-07 provided within Chapter 4 considers removal of the existing Line 3 with the new pipeline placed in the existing trench. Additional discussion on abandonment/removal is included within Chapter 8, and clean-up would be a part of the removal effort. This discussion, specifically within Section 8.4.1 also notes the approximate cost of removal as well as an estimate for the number of potential jobs created during a hypothetical removal effort (approximately half of the jobs generated by construction of a new Line 3). Chapters 5 and 6 of the FEIS, specifically Sections 6.5.4.3 et al, clarify that jobs would be created for local labor as current labor agreements in Minnesota require that at least 50% of workers would be expected to be employed from local union halls. Some of these jobs would likely be permanent jobs.
0816-1	Christenson, Jaci	Thank you for your comments on the Draft EIS. The FEIS considers the potential impacts to water resources based on the crossing methods proposed for stream/river crossings. HDD may in many cases present the lowest potential for impacts to streams. See Appendix G for a more detailed explanation of HDD activities.
1525-1	Cobb, Curtis	Thank you for your comments on the Draft EIS. Details about project operation and maintenance, including monitoring systems for detecting anomalies, can be found in Section 2.8 of the FEIS. Chapter 10 of the FEIS address the potential for unanticipated releases and the potential consequences of such releases.
0996-1	Cosgriff, Nancy	Thank you for your comments on the Draft EIS. The FEIS considers the potential impacts to water resources based on the crossing methods proposed for stream/river crossings. HDD may in many cases present the lowest potential for impacts to streams.
0996-2	Cosgriff, Nancy	Changes have been made to Chapter 10 based on comments received.
1373-1	Crocker, Kyle R.	Thank you for your comments on the Draft EIS. Current GIS technology was used for accurately indicating waterbodies and wetlands on maps. The data was obtained from both state and federal natural resources databases.

Responses to Comments – Citizen

Response#	Commenter	Response
1373-2	Crocker, Kyle R.	Section 5.2.3 - Vegetation, Section 6.3.3 - Vegetation, and Chapter 7 of the DEIS all address specific potential direct and indirect impacts to terrestrial vegetation in terms of land vegetation cover classes, native plant communities, and rare plant communities. These include discussions of specific impacts to forested and wetland communities from activities associated with construction and operations associated with the Proposed Project and alternative routes, including roads. Section 5.2.5 - Unique Natural Resources and Section 6.3.5 - Unique Natural Resources discuss specific potential direct and indirect impacts to special status plant species and plant communities.
1716-1	Dean, Laura	Thank you for your comments on the Draft EIS. Your comment was considered in development of the FEIS, and changes have been made to Chapter 10.
1716-2	Dean, Laura	The FEIS has been revised to include data on the Applicant's spill history, as well as comparisons of the Applicant's spill and incident rate compared to other crude oil pipeline operators, both in Minnesota and nationwide.
1716-3	Dean, Laura	The FEIS has been revised to include data on the Applicant's spill history, as well as comparisons of the Applicant's spill and incident rate compared to other crude oil pipeline operators, both in Minnesota and nationwide.
1716-4	Dean, Laura	Section 5.2.1.3.3 addresses topsoil management in wetlands. The following mitigation measures must be followed by the Applicant in order to avoid and minimize impacts to wetland soils: Stripping the top 1 foot of topsoil or the amount of topsoil present, whichever is less, over the trench line, segregating it, and replacing it after pipe installation and backfilling in unsaturated wetlands Restoring wetlands to preconstruction contour Using construction mats, as needed, to facilitate equipment access and pipeline installation and to minimize soil compaction and/or mixing.
0821-1	Diessner, Chuck	Thank you for your comments on the Draft EIS. Chapter 13 of the FEIS includes a List of Preparers.
0821-2	Diessner, Chuck	Chapter 13 of the FEIS includes a List of Preparers.

Responses to Comments – Citizen

Response#	Commenter	Response
1316-1	Dixon, Janet	Thank you for your comments on the Draft EIS. SA-04 is a system alternative evaluated to aid the Commission's evaluation of whether or not to grant a CN for the proposed project. A system alternative is not a routing alternative, as no entity has proposed to build such a pipeline, detailed routing and design have not been conducted, and a route permit could not be issued for SA-04. Instead, a system alternative is a serves as a broader level point of comparison to the Applicant's Proposed project and the other CN alternatives. The level of analysis of SA-04 is in line with this concept.
1316-2	Dixon, Janet	A description of the CN alternatives is provided in Chapter 4. As shown, SA-04 would terminate near Joliet, Illinois. As this is a conceptual route, the specific facilities of the alternative are not provided in detail.
1316-3	Dixon, Janet	When volume of releases is compared to the volume crude oil transported, rail and truck transport release a significantly higher percentage of the volume transported, 0.309% and 0.154% respectively. Comparatively pipeline transport release and average of 0.006% of the volume of crude oil transported. The figure in the executive summary has been revised to demonstrate amount spilled per volume transported.
2585-1	Dolph, Christine	Thank you for your comments on the Draft EIS. The figure in the executive summary has been revised to demonstrate amount spilled per volume transported. When volume of releases is compared to the volume crude oil transported, rail and truck transport release a significantly higher percentage of the volume transported, 0.309% and 0.154% respectively. Comparatively pipeline transport release and average of 0.006% of the volume of crude oil transported.
2585-2	Dolph, Christine	The figure in the executive summary has been revised to demonstrate amount spilled per volume transported. When volume of releases is compared to the volume crude oil transported, rail and truck transport release a significantly higher percentage of the volume transported, 0.309% and 0.154% respectively. Comparatively pipeline transport release and average of 0.006% of the volume of crude oil transported.

Responses to Comments – Citizen

Response#	Commenter	Response
2585-3	Dolph, Christine	The figure in the executive summary has been revised to demonstrate amount spilled per volume transported. When volume of releases is compared to the volume crude oil transported, rail and truck transport release a significantly higher percentage of the volume transported, 0.309% and 0.154% respectively. Comparatively pipeline transport release and average of 0.006% of the volume of crude oil transported.
2585-4	Dolph, Christine	Thank you for your comments on the Draft EIS. Your comment was considered in development of the FEIS. Changes have been made to Chapter 10.
2585-5	Dolph, Christine	The figure in the executive summary has been revised to demonstrate amount spilled per volume transported. When volume of releases is compared to the volume crude oil transported, rail and truck transport release a significantly higher percentage of the volume transported, 0.309% and 0.154% respectively. Comparatively pipeline transport release and average of 0.006% of the volume of crude oil transported.
2585-6	Dolph, Christine	Thank you for your comments on the Draft EIS. Your comment was considered in development of the FEIS. Changes have been made to Chapter 10.
2585-7	Dolph, Christine	Warmwater streams and biota were considered in the DEIS. Potential impacts, including excessive turbidity, will affect warmwater systems similar to coldwater or trout waterbodies. Generally, warmwater biota are hardier than those biota found in coldwater streams and consideration of coldwater streams would be protective of warmwater biota, thus the focus on coldwater and trout systems.
2585-8	Dolph, Christine	Warmwater streams and biota were considered in the DEIS. Potential impacts, including excessive turbidity, will affect warmwater systems similar to coldwater or trout waterbodies. Generally, warmwater biota are hardier than those biota found in coldwater streams and consideration of coldwater streams would be protective of warmwater biota, thus the focus on coldwater and trout systems.
2585-9	Dolph, Christine	Thank you for your comments on the Draft EIS. Your comment was considered in development of the FEIS. Changes have been made to Chapter 10.

Responses to Comments – Citizen

Response#	Commenter	Response
2587-1	Dougherty, Michael	Thank you for your comments on the Draft EIS. 10 miles downstream was selected for the ROI, because it was considered to be not overly conservative, and crossing widths for the RAs were unavailable. The Applicant surveyed the streams and rivers for the APR only, so small (less than 30 feet wide) and large (30 feet wide or greater) crossings are only known for this route. It would be biased to only run the two downstream buffers (30 miles for large rivers, and 10 miles for small streams) along the APR. Furthermore, it was determined that it would be overly conservative to run a 30-mile downstream buffer for all water crossings, especially since many of these water bodies are ditches and terminate within a few miles.
1317-1	Downing, Mary Theresa	Thank you for your comments on the Draft EIS. It is unclear what details are included with the referenced direct mail promotion, and it is outside of the scope of the EIS and this response to evaluate its veracity. The methodology for evaluating existing conditions, impacts and mitigation related to employment is discussed within Chapters 5 and 6 of the FEIS. A quantitative analysis for each alternative is based on anticipated numbers of workers per construction spread. The FEIS clarifies that based on Minnesota labor contracts, at least 50% of workers would be local, and the FEIS assumes that some of the construction jobs generated by the project would be permanent, although this is based on unquantifiable market demand. Additional qualitative analysis regarding other jobs anticipated to be generated by the project is also included in the aforementioned chapters. Finally, the methodology of the IMPLAN model is included in one of the FEIS appendices; based on an IMPLAN model, a research report prepared by the University of Minnesota Duluth (April 18, 2017) identified that the Line 3 Project is estimated to support, directly and indirectly, approximately 8,600 jobs over the two-year period.
1237-1	Draper, Janet	Thank you for your comments on the Draft EIS. Your comment was considered in development of the FEIS.
1212-1	Drescher, Tod	Thank you for your comments on the Draft EIS. The High Consequence Areas (HCAs), Areas of Interest (AOIs) and Regions of Interest (ROIs) in Chapter 10, Accidental Crude Oil Releases, was developed based on input from the Minnesota Department of Natural Resources, Minnesota Department of Health, and Minnesota Pollution Control Agency, and well as existing information and relevant case studies.

Responses to Comments – Citizen

Response#	Commenter	Response
1319-1	Dvorak, Andrew	Thank you for your comments on the Draft EIS. Tribal resources are addressed primarily in Chapters 9 and 11; however, references are provided throughout the EIS to note where specific resources analyses (e.g., wild rice, cultural sites) include a discussion of impacts to American Indian tribes and tribal resources.
1319-2	Dvorak, Andrew	<p>The site selection process for modeling is discussed in detail in Section 10.3.3.1.</p> <p>As indicated in Section 10.3, on June 3, 2019 the Minnesota Court of Appeals ruled that the Revised Final Line 3 EIS of February 12, 2018 was inadequate because it failed to specifically address the potential impact of an oil spill into the Lake Superior watershed. In order to address the court’s opinion Enbridge commissioned a modeling analysis on behalf of and with input from the Minnesota Department of Commerce, Energy Environmental Review Analysis Staff for one additional hypothetical crude oil release from a pipeline crossing within the Lake Superior watershed (Stantec et al. 2019; Appendix V).</p> <p>When considered together with the seven previously modeled sites, Little Otter Creek as the eighth representative release site can be used to further characterize the range of trajectory, fate, and potential consequences of an oil spill in the project area. Using the same assumptions used for the other sites, the spill modeling was used to predict the potential trajectory of released oil, the fate of released oil, and the potential effects of accidental oil releases on the natural and human environment. The intent of these analyses was to infer a range of potential effects that may occur at this and other locations in Minnesota with similar biophysical and human use characteristics.</p>

Responses to Comments – Citizen

Response#	Commenter	Response
1319-3	Dvorak, Andrew	<p>The modeled sites were chosen based on a thorough site selection process that included state and federal agencies and MN Department Of Commerce Energy Environmental Review and Analysis. Additional details are provided in Section 10.3.3.1.</p> <p>As indicated in Section 10.3, on June 3, 2019 the Minnesota Court of Appeals ruled that the Revised Final Line 3 EIS of February 12, 2018 was inadequate because it failed to specifically address the potential impact of an oil spill into the Lake Superior watershed. In order to address the court’s opinion Enbridge commissioned a modeling analysis on behalf of and with input from the Minnesota Department of Commerce, Energy Environmental Review Analysis Staff for one additional hypothetical crude oil release from a pipeline crossing within the Lake Superior watershed (Stantec et al. 2019; Appendix V).</p> <p>When considered together with the seven previously modeled sites, Little Otter Creek as the eighth representative release site can be used to further characterize the range of trajectory, fate, and potential consequences of an oil spill in the project area. Using the same assumptions used for the other sites, the spill modeling was used to predict the potential trajectory of released oil, the fate of released oil, and the potential effects of accidental oil releases on the natural and human environment. The intent of these analyses was to infer a range of potential effects that may occur at this and other locations in Minnesota with similar biophysical and human use characteristics.</p>
1319-4	Dvorak, Andrew	<p>Since there would be few additional staff members hired for operation of the Project, there would be very little change in income tax or sales tax revenues due to increased spending by permanent operational staff. Therefore, the impact on income tax and sales tax revenues would be permanent, but at most negligible. Operation of the pipeline would have no measureable impact on local employment, per capita household income, median household income, or unemployment in the ROI.</p>
1319-5	Dvorak, Andrew	<p>Section 5.3.4.1 of the FEIS does state that Enbridge has appealed the amount of property taxes paid between 2012 and 2016, and that to date the appeal has not been settled. Tax implications associated with retirement/abandonment of the existing Line 3 are uncertain at this time.</p>

Responses to Comments – Citizen

Response#	Commenter	Response
2071-1	Dvorak, Elanor	Thank you for your comments on the Draft EIS. The Applicant, Enbridge, has not supplied the mentioned plan.
2071-2	Dvorak, Elanor	Additional information regarding the benefit of such analyses has been included throughout Chapter 8 of the FEIS.
2071-3	Dvorak, Elanor	Additional information regarding the benefit of additional buoyancy analyses has been included within Section 8.3 of the FEIS.
2594-1	Dvorak, Eleanor	Thank you for your comments on the Draft EIS. The regulatory framework is discussed in Chapter 3 of the FEIS.
2594-2	Dvorak, Eleanor	Publicly available datasets related to natural resources were used in the development of the FEIS. Discussion and maps are provided in Chapters 5 and 6.
2594-3	Dvorak, Eleanor	Important resources that potentially could be impacted by the proposed project were identified in the EIS process, including sensitive and high priority or critical resources. The Executive Summary highlights impacts to resources that were considered among the most important.
2594-4	Dvorak, Eleanor	All available land use acreages were used within the EIS.
0514-1	Eagle, Jane	Thank you for your comments on the Draft EIS. The Draft EIS noted that only three reports were reviewed; the additional reports now have been reviewed. Revisions to Sections 5.4.2 and 6.4.2 have been made to show this.

Responses to Comments – Citizen

Response#	Commenter	Response
0514-2	Eagle, Jane	<p>The FEIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release. Spill impact analysis was limited to the expected areas of impact, which are 2500 ft. and 10 miles downstream from the pipeline.</p> <p>As indicated in Section 10.3, on June 3, 2019 the Minnesota Court of Appeals ruled that the Revised Final Line 3 EIS of February 12, 2018 was inadequate because it failed to specifically address the potential impact of an oil spill into the Lake Superior watershed. In order to address the court’s opinion Enbridge commissioned a modeling analysis on behalf of and with input from the Minnesota Department of Commerce, Energy Environmental Review Analysis Staff for one additional hypothetical crude oil release from a pipeline crossing within the Lake Superior watershed (Stantec et al. 2019; Appendix V).</p> <p>When considered together with the seven previously modeled sites, Little Otter Creek as the eighth representative release site can be used to further characterize the range of trajectory, fate, and potential consequences of an oil spill in the project area. Using the same assumptions used for the other sites, the spill modeling was used to predict the potential trajectory of released oil, the fate of released oil, and the potential effects of accidental oil releases on the natural and human environment. The intent of these analyses was to infer a range of potential effects that may occur at this and other locations in Minnesota with similar biophysical and human use characteristics.</p>
0514-3	Eagle, Jane	<p>The 30-year timeframe was chosen to match the economic life of the project indicated by the Applicant. For purposes of comparison across alternatives, the EIS targets a consistent timeframe that is long enough to understand typical annual operating impacts/tradeoffs of the alternatives.</p>

Responses to Comments – Citizen

Response#	Commenter	Response
0674-1	Eger, Andrea	Thank you for your comments on the Draft EIS. The proposed project Environmental Protection Plan (EPP) (Appendix E in the DEIS), details wetland protection and reclamation requirements that would be implemented during construction and reclamation within wetland areas. As specified in this plan, wetland topsoil would be salvaged and stockpiled, protected from compaction, contamination, and any construction impacts. Subsoils within the construction ROW would be protected from compaction. Therefore, upon replacement, these soils would be expected to be suitable substrate to provide for natural regeneration. Section 2.7.2.4 of the DEIS notes the plan also implements any further restoration and long-term monitoring guidance required by USACE in the required CWA Section 404 permit or by the local government unit in relation to the Wetland Conservation Act permit. The EPP does not call for use of pesticides in wetland areas.
0673-1	Eger, Andrea	Thank you for your comments on the Draft EIS. The ROI for comparisons among alternatives encompasses a 2,500-foot-wide distance extending in each direction from the centerline of the alternative (pipeline routes and transportation mode corridor); thus, the total area assessed is a 5,000-foot-wide corridor centered on the pipeline route, rail bed, or roadway. The ROI was identified as the distance that released oil could spread on flat ground (calculated to be 1,214 feet from the centerline) plus an additional distance of 1,050 feet for estimated down-gradient migration in groundwater (if groundwater were contacted); the estimated total distance of approximately 2,264 feet was rounded up to 2,500 feet. This ROI was determined to be an appropriate distance, based on a review of existing information and relevant case studies to be applied comprehensively across the HCA and AOI resources listed above, with the exception of certain drinking water resources, which are discussed in more detail in Section 10.4.2.1.1. The numbers and/or acres of HCAs and AOIs within the ROI for each alternative were determined by overlaying GIS layers for each HCA and AOI with the ROI.
0673-2	Eger, Andrea	The figure in the executive summary has been revised to demonstrate amount spilled per volume transported. The EIS has been updated to include discussion on the properties of dilbit as it weathers.
1568-1	Enbridge Energy	This change has been made.

Responses to Comments – Citizen

Response#	Commenter	Response
1568-2	Enbridge Energy	No change has been made to this text. Additional information on the White Earth Reservation has been added.
1568-3	Enbridge Energy	This change has been made.
1568-4	Enbridge Energy	This change has been made.
1568-5	Enbridge Energy	This change has been made.
1568-6	Enbridge Energy	No change has been made to this statement; the EIS considers a range of alternatives.
1568-7	Enbridge Energy	This change has been made.
1568-8	Enbridge Energy	A change has been made to reference the resolutions passed by various American Indian tribes and organizations.
1568-9	Enbridge Energy	This change has been made.
1568-10	Enbridge Energy	No change has been made to the EIS. Table 7.3-24 discusses this.
1568-11	Enbridge Energy	The changes have been made.
1568-12	Enbridge Energy	Clarification has been included in the paragraph.
1568-13	Enbridge Energy	No change has been made to the EIS.
1568-14	Enbridge Energy	This reference has been updated.
1568-15	Enbridge Energy	The changes have been made.
1568-16	Enbridge Energy	The changes have been made. The text in this section of the Executive Summary has been revised.
1568-17	Enbridge Energy	The word "far" has been removed.

Responses to Comments – Citizen

Response#	Commenter	Response
1568-18	Enbridge Energy	No footnotes are associated with Table ES-3. The references to these have been removed; and additional text was included to further explain this table.
1568-19	Enbridge Energy	This change has been made.
1568-20	Enbridge Energy	This change has been made.
1568-21	Enbridge Energy	This change has been made.
1568-22	Enbridge Energy	No change has been made to the EIS
1568-23	Enbridge Energy	This change has been made.
1568-24	Enbridge Energy	This change has been made.
1568-26	Enbridge Energy	The text noted has been removed.
1568-28	Enbridge Energy	Edits have been made accordingly.
1568-29	Enbridge Energy	This change has been made.
1568-30	Enbridge Energy	This change has been made.
1568-31	Enbridge Energy	This change has been made.
1568-32	Enbridge Energy	This change has been made.
1568-33	Enbridge Energy	This change has been made.
1568-34	Enbridge Energy	Appendix B describes a process using nitrogen gas and a series of pigs to purge the line of product prior to cleaning and rinsing. After that, Enbridge proposes to disconnect and seal the various sections. They do not intend to fill each emptied section with inert gas after cleaning. This process follows the process described in Commerce's reference.

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Response#	Commenter	Response
1568-35	Enbridge Energy	The changes have not been made.
1568-36	Enbridge Energy	This change has been made.
1568-37	Enbridge Energy	This change has been made.
1568-38	Enbridge Energy	This change has been made.
1568-39	Enbridge Energy	This change has been made.
1568-40	Enbridge Energy	This change has been made.
1568-41	Enbridge Energy	This change has been made.
1568-42	Enbridge Energy	The changes have been made.
1568-43	Enbridge Energy	As RA-06, RA-07, and RA-08 would cross the Minnesota Coastal Zone, this section has been left as is.
1568-44	Enbridge Energy	The changes have been made.
1568-45	Enbridge Energy	This change has been made.
1568-46	Enbridge Energy	This change has been made.
1568-47	Enbridge Energy	This change has been made.
1568-48	Enbridge Energy	This change has been made.
1568-49	Enbridge Energy	This comment has been considered; however, no changes were made.
1568-50	Enbridge Energy	This change has been made.
1568-51	Enbridge Energy	Publicly available datasets and field reports were used to develop the FEIS.
1568-52	Enbridge Energy	This change has been made.

Responses to Comments – Citizen

Response#	Commenter	Response
1568-53	Enbridge Energy	This comment has been considered; however, no changes made.
1568-54	Enbridge Energy	Karst bedrock removed from statement.
1568-55	Enbridge Energy	The text as noted has been changed to reflect blasting will be approximately 1/4 mile in length.
1568-56	Enbridge Energy	Modified text to reflect blasting comment as noted in DR01-70.
1568-57	Enbridge Energy	Corrected text to identify WPA within ROI of APR.
1568-58	Enbridge Energy	Text modified to reflect karst topography along SA-04.
1568-59	Enbridge Energy	Summary information was modified to reflect that the APR crosses more highly susceptible groundwater and is there for somewhat more critical in this respect.
1568-60	Enbridge Energy	This comment has been considered; however, no changes made.
1568-61	Enbridge Energy	Text added to include USACE Section 404/10 requirement.
1568-62	Enbridge Energy	Deleted text.
1568-63	Enbridge Energy	Text modified to reflect county permit requirements.
1568-64	Enbridge Energy	Text has been modified to reflect that 17 wild rice lakes occur within 0.5 mile of APR.
1568-65	Enbridge Energy	Text revised to show these resources are within 0.5 mi of APR.
1568-66	Enbridge Energy	GIS analysis shows 4 wild rice lakes and ~5 acres impacted. Text modified as such.
1568-67	Enbridge Energy	The text has been deleted.
1568-68	Enbridge Energy	Modified text per comment.
1568-69	Enbridge Energy	Comment noted, although impacts discussion related to fens is still relevant, and has not been revised.

Responses to Comments – Citizen

Response#	Commenter	Response
1568-70	Enbridge Energy	This change has been made.
1568-71	Enbridge Energy	The text has been corrected to reflect 1/4 mile of blasting.
1568-72	Enbridge Energy	All acreage numbers in the tables have been checked and all are now consistent with one another.
1568-73	Enbridge Energy	The text was modified to reflect the blasting comment as noted in DR01-70.
1568-74	Enbridge Energy	This statement is about existing conditions, and not impacts.
1568-75	Enbridge Energy	The Environmental Assessment Worksheet (EAW) indicates 3.4 acres of permanent access roads and 1.2 acres for mainline valves (MLVs), and 60.2 acres for facilities. The EIS has been updated.
1568-76	Enbridge Energy	The EIS has been updated.
1568-77	Enbridge Energy	The EIS has been updated.
1568-78	Enbridge Energy	The EAW indicates 3.4 acres of permanent access roads and 1.2 acres for MLVs, and 60.2 acres for facilities. Table 5.2.2-4 and other pertinent sections of the EIS for the preferred route and SA-04 have been updated.
1568-79	Enbridge Energy	The text has been changed to reflect the incomplete and preliminary nature of MBS site mapping to the following statement: Delineation of MBS Sites is an on-going effort. These data are therefore incomplete and are considered to be preliminary. What are available for intersection with the Applicant's proposed project and CN Alternatives are illustrated in Figure 5.2.3-2.
1568-80	Enbridge Energy	Table 5.2.3-3 has been revised. All noxious weeds and invasive plant species mapped along the APR and Alternative SA-04 are listed, distinguished by route. Data from all traversed states are included. In addition, respective states' noxious weed law status categories are included for all listed species and all common names have been revised for accuracy.
1568-81	Enbridge Energy	Verified total stated in Table 5.2.3-16 is correct. Revised total shown in Table 5.2.3-18 to be consistent. Checked all other values in table 5.2.3-18 for accuracy and consistency with source text and tables.

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Response#	Commenter	Response
1568-82	Enbridge Energy	This edit has been made.
1568-83	Enbridge Energy	A statement was added that no salmon occur in APR-crossed streams or rivers.
1568-84	Enbridge Energy	Text modified to reflect that these type management units may be in the vicinity of the Applicant's proposed project.
1568-85	Enbridge Energy	Publicly available datasets and field reports were used to develop the FEIS.
1568-86	Enbridge Energy	The sentence is reference refers to existing Line 3, not the Applicant's proposed project as the comment suggests. The route of the existing Line 3 pipeline does cross a wildlife refuge.
1568-87	Enbridge Energy	Table 5.2.4-6 was corrected to reflect text.
1568-88	Enbridge Energy	This was corrected to match crossing method noted in Appendix G.
1568-89	Enbridge Energy	The table title was revised to show streams within 0.5 mi of the Applicant's preferred route (APR).
1568-90	Enbridge Energy	Although APR does not cross Pembina WPA, an access road will impact 1.5 acres. These changes have been made to Table 5.2.4-8.
1568-91	Enbridge Energy	The text has been revised.
1568-92	Enbridge Energy	Text has been revised to indicate that conservation measures have not been received by the Applicant from the USFWS or Minnesota DNR regarding rookeries.
1568-93	Enbridge Energy	Text has been revised to indicate that the aboveground portion of the TransAlaska Pipeline is limited.
1568-94	Enbridge Energy	Table 5.2.3-8 has been updated to more accurately reflect the dominant vegetation present in the Applicant's proposed project and SA-04.
1568-95	Enbridge Energy	The table has been modified to reflect impacts discussed for SA-04.
1568-96	Enbridge Energy	The text was revised to further define consultation under Section 7 of the Endangered Species Act.

Responses to Comments – Citizen

Response#	Commenter	Response
1568-97	Enbridge Energy	The text was revised to avoid confusion between federal and state processes concerning listed species.
1568-98	Enbridge Energy	Publicly available datasets and field reports were used to develop the FEIS. The 2014 northern long-eared bat mist-net and telemetry survey report was added to the bulleted list.
1568-99	Enbridge Energy	The text was revised to reflect the species presented in Table 5.2.5-3.
1568-100	Enbridge Energy	Table 5.2.5-3 and associated text was updated to include Cass County in the geographic range for the rusty patched bumble bee.
1568-101	Enbridge Energy	The sentence in reference summarizes the species included in Table 5.2.5-4, including the northern long-eared bat. Additionally, the section in reference includes a sentence indicating the northern long-eared bat is a Minnesota state species of special concern. As such, no change was made.
1568-102	Enbridge Energy	Illinois was removed from the state/status column of Table 5.2.5-4.
1568-103	Enbridge Energy	Publicly available datasets and field reports were used to develop the FEIS. Reference was changed to Merjent 2016c.
1568-104	Enbridge Energy	Publicly available datasets and field reports were used to develop the FEIS.
1568-105	Enbridge Energy	The text was revised to include a restricted speed limit as a typical conservation measure to reduce impacts to gray wolves.
1568-106	Enbridge Energy	The text was revised to include results from the 2014 and 2015 bat mist-net and telemetry surveys conducted within the Applicant's proposed project.
1568-107	Enbridge Energy	Publicly available datasets and field reports were used to develop the FEIS. Text was revised to indicate that three potentially suitable habitat areas for the Dakota skipper and Poweshiek skipperling were found along the Applicant's proposed project during the initial desktop habitat assessment.

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Response#	Commenter	Response
1568-108	Enbridge Energy	The section in reference includes language indicating that the Applicant's proposed project would not cross any high use areas for the rusty patched bumble bee. A text revision was made to clarify that hibernating queens are present in the winter.
1568-109	Enbridge Energy	Text revised to indicate temporary to short term and negligible construction impacts are expected for the Dakota skipper. Details regarding the survey results for each species precede the referenced text.
1568-110	Enbridge Energy	Text was revised to include restricted vehicular speed limits as a conservation measure to minimize/avoid impacts to the gray wolf.
1568-111	Enbridge Energy	Text was revised to indicate that operational impacts on the northern long-eared bat would only occur if trees are allowed to grow larger than 3 inches diameter at breast height between maintenance activities.
1568-112	Enbridge Energy	Text revised to indicate permanent, negligible construction impacts are expected for the Dakota skipper and Poweshiek skipperling. Details regarding the survey results for each species precede the referenced text.
1568-113	Enbridge Energy	Text was revised to indicate that operational impacts on the Canada lynx and gray wolf are both expected to be temporary and minor.
1568-114	Enbridge Energy	A footnote clarification was added to the table in reference, and to similar tables.
1568-115	Enbridge Energy	Revised per comment.
1568-116	Enbridge Energy	References to the APR crossing of the Pembina WPA removed.
1568-117	Enbridge Energy	Sentence removed per comment.
1568-118	Enbridge Energy	FEIS paragraph revised per comment.
1568-119	Enbridge Energy	Confirmed that no county-owned lands would be crossed by SA-04.
1568-120	Enbridge Energy	Revised per comment.

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Response#	Commenter	Response
1568-121	Enbridge Energy	The text has been revised to address comment.
1568-122	Enbridge Energy	The text has been revised to address comment.
1568-123	Enbridge Energy	The number of acres of trees logged is corrected in Chapter 5. The numbers in Chapter 6 are correctly reported. No changes were made in Chapter 6.
1568-124	Enbridge Energy	The text has been revised to address comment. Additional details will be provided in the air permit.
1568-125	Enbridge Energy	This comment has been considered; however, no changes were made. No record of how these emissions are estimated is available. The difference in the emissions is expected to be minor.
1568-126	Enbridge Energy	No change made to EIS. The social cost of carbon provides context for the long term costs associated with GHG emissions.
1568-127	Enbridge Energy	No change made to EIS, life cycle analysis included per scope. While C-intensity of electricity will change over the next 30 years, the exact trajectory is speculative at best, and for comparative purposes going through that exercise doesn't really add much value.
1568-128	Enbridge Energy	The text has been revised to address comment.
1568-129	Enbridge Energy	No changes made. The acres of trees logged is taken from Table 5.3.1-9. Forested Land Crossed by System Alternative SA-04 (acres) and is correct as-is.
1568-130	Enbridge Energy	Air emissions associated with continued operations are ongoing and considered part of the existing environment. Air emissions associated with integrity digs for continued use of existing Line 3 have not been quantified in the EIS. The incremental emissions from other options are provided.
1568-131	Enbridge Energy	The table has been revised per the comment received.
1568-132	Enbridge Energy	The table has been revised per the comment received.
1568-133	Enbridge Energy	The table has been revised per the comment received.

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Response#	Commenter	Response
1568-134	Enbridge Energy	The text has been revised per the comment received.
1568-135	Enbridge Energy	Section 5.3.1.3.3 addresses how active mining activities may be disrupted: construction activities would temporarily prevent development of these resources for duration of construction, but mineral resources outside of the permanent right-of-way and permanent facilities could be available for extraction after construction was complete. Sections 5.3.1.2 and 5.3.1.3 do not attempt to quantify the value of mineral resources; rather, construction and operations impacts anticipated to occur to mineral resources are compared based on acreage, not monetary value.
1568-136	Enbridge Energy	Footnote added to Table 5.3.1-11
1568-137	Enbridge Energy	Available data was used to provide the analyses discussed within the FEIS.
1568-138	Enbridge Energy	The text has been revised per the comment received.
1568-139	Enbridge Energy	The text has been revised per the comment received.
1568-140	Enbridge Energy	The text has been revised per the comment received.
1568-141	Enbridge Energy	Paragraph already addresses concern stated in comment; therefore, no further revisions were made.
1568-142	Enbridge Energy	As stated in the section referenced in the comment, it was assumed that all workers would be non-local and bring their families in order to establish a "worst-case scenario" within the population analysis. Statements throughout the FEIS note that this is unlikely.
1568-143	Enbridge Energy	Table 5.3.3-15 is correct (15 Populated Areas); text in document has been revised per the comment received.
1568-144	Enbridge Energy	Section 5.3.3.3.1 does discuss impacts to traffic; therefore, no further revisions were made.
1568-145	Enbridge Energy	The report has been included as Appendix R.

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Response#	Commenter	Response
1568-146	Enbridge Energy	Based on our review, it is already clear that these impacts are positive; therefore, no further revisions were made.
1568-147	Enbridge Energy	The text has been revised per the comment received.
1568-148	Enbridge Energy	As noted in the comment, the referenced report was provided by the Applicant as part of direct testimony and was considered.
1568-149	Enbridge Energy	To the extent possible, NRHP data has been incorporated into the section. However, it will only include those that are already listed and not those that are recommended as eligible.
1568-150	Enbridge Energy	This sentence has been removed.
1568-151	Enbridge Energy	Impacts to Tribal Lands is discussed in Section 6.2.3, Aesthetics/Visual Resources. This Section details the impacts to crossing of American Indian reservations in the State of Minnesota.
1568-152	Enbridge Energy	Utilizing the principles of the USFS' SMS provided a method to consistently analyze visual impacts and landscapes along the entire Project. The methodology was used for the entire route of the pipeline in order to maintain consistency in the analysis. Federal management standards are routinely utilized for non-public lands in order to provide a defensible analysis.
1568-153	Enbridge Energy	Section 6.2.3.2.1 revised to reflect correct acreages in Table 6.2.1-2
1568-153	Enbridge Energy	Utilizing the principles of the USFS' SMS provided a method to consistently analyze visual impacts and landscapes along the entire Project. The methodology was used for the entire route of the pipeline in order to maintain consistency in the analysis. Federal management standards are routinely utilized for non-public lands in order to provide a defensible analysis.
1568-154	Enbridge Energy	Enbridge has confirmed that RA-03AM would not cross the Crane Meadows Wildlife Refuge. Mention of the Crane Meadows Wildlife Refuge removed from the FEIS.

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Response#	Commenter	Response
1568-155	Enbridge Energy	Road crossings updated per GIS analysis. Correct road crossings for the APR is now 320. Paragraph dealing with other states omitted
1568-156	Enbridge Energy	Road crossings updated per GIS analysis. Correct road crossings for the APR is now 320. Paragraph dealing with other states omitted.
1568-157	Enbridge Energy	Clarifications regarding 401 permitting have been added to the paragraph.
1568-158	Enbridge Energy	The footnotes have been revised for clarification.
1568-159	Enbridge Energy	Due to the existence of Gully 30, this discussion has not been removed.
1568-160	Enbridge Energy	Revised to say "Coarse-textured soils are present."
1568-161	Enbridge Energy	Errors in the table were corrected.
1568-162	Enbridge Energy	EIS updated
1568-163	Enbridge Energy	Noted.
1568-164	Enbridge Energy	EIS updated
1568-165	Enbridge Energy	A further description of Minnesota's Wildlife Action Network (WAN) is provided in Section 5. A reference to that section has been added to Section 6.3.5.2.1.
1568-166	Enbridge Energy	The gray wolf (not associated with the Great Lakes Distinct Population Segment) and whooping crane have been removed from Table 6.3.5-1.
1568-167	Enbridge Energy	Citation removed.
1568-168	Enbridge Energy	Reference to the whooping crane has been removed from this sentence.
1568-169	Enbridge Energy	Table 6.3.5-45 revised to match the numbers presented in Tables 6.3.5-21 and 6.3.5-22.

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Response#	Commenter	Response
1568-170	Enbridge Energy	To the extent possible, NRHP data will be incorporated into the section. However, it will only include those that are already listed and not those that are recommended as eligible.
1568-171	Enbridge Energy	The table has been revised per the comment received.
1568-172	Enbridge Energy	Text has been revised to state that 13 populated areas are located along/near the Applicant's Preferred Route. Clearbrook appears in Table 6.5.3-1 twice, but is only counted once; hence 13 populated areas.
1568-173	Enbridge Energy	The text has been revised per the comment received.
1568-174	Enbridge Energy	Sufficient examples have already been provided; therefore, no further revisions have been made.
1568-175	Enbridge Energy	Section 6.5.3.3.1 of the FEIS includes discussion on what constitutes as worst-case scenario. "In the event that two construction spreads are adjacent to each other during construction, a maximum of 1,200 workers could be present in a county at a given time. In the largest county crossed by the Applicant's preferred route (Crow Wing County), it would represent a 2-percent increase in population. In the smallest county crossed by the route (Red Lake County), this would represent 30 percent of the county's total population. Additionally, Kittson County (27 percent), Marshall County (13 percent), and Clearwater County (14 percent) all would experience population increases over 10 percent of their current population. For these counties, additional strain may be expected in a worst-case scenario. Added population would create more traffic on roadways and emergency services, as discussed in Section 6.2.5. As discussed in Section 6.2.4, the total housing available is expected to be adequate. While adequate housing may be available across the ROI and the potential population increase would be less than 10 percent for most counties, 4 of the 12 counties (Red Lake, Kittson, Marshall, and Clearwater) could experience more than a 10-percent increase in population if all workers from two construction spreads were present in the county at the same time. This could result in congestion on the roads and within the service industry area (e.g., restaurants, gas stations). However, the worst-case scenario of two construction spreads operating close to each other would be temporary as pipeline construction moves along the route, and any local impacts would diminish."

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Response#	Commenter	Response
1568-176	Enbridge Energy	Based on our review, it is already clear that these impacts are positive; therefore, no further revisions were made.
1568-177	Enbridge Energy	The report has been included as Appendix R.
1568-178	Enbridge Energy	This paragraph has been updated accordingly.
1568-179	Enbridge Energy	The reference to hibernacula has been removed.
1568-180	Enbridge Energy	The un-impacted wild rice waterbodies have been removed from the paragraph.
1568-181	Enbridge Energy	The statement has been clarified to demonstrate that the APR would also not impact the referenced WMA's.
1568-182	Enbridge Energy	The RSA section has been updated to reflect that no further analysis is merited because this RSA is non-viable.
1568-183	Enbridge Energy	No changes have been made.
1568-184	Enbridge Energy	The statement has been revised to reflect that no comparison between the RSA and the APR is made.
1568-185	Enbridge Energy	This portion of the text has been removed and moved to the section on treaties.
1568-186	Enbridge Energy	The figures in Chapter 9 have been revised, and a new figure has been added. The references to the figures have been updated throughout the chapter.
1568-187	Enbridge Energy	This section has been re-organized to more clearly show what existing regulations are at the federal and state level.
1568-188	Enbridge Energy	This text has been revised to show that these are the sentiments of members of the Mille Lacs Band. In this manner, it is not referencing the APR's geographic crossing of these wildlife refuges.
1568-189	Enbridge Energy	This paragraph has been revised and moved within the section to show that these are locations that are contain potential waterfowl habitat more generally within Minnesota.

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Response#	Commenter	Response
1568-190	Enbridge Energy	The context for this paragraph is to show the types of resources that are present. As such, no change has been made, as it does not reference where the Applicant's preferred route or route alternatives would cross.
1568-191	Enbridge Energy	Table 6.3.2.1-6 was revised per GIS analysis of rice lakes. Text for this comment was revised to match the table in Chapter 6. Also, a similar table is included in Chapter 5.
1568-192	Enbridge Energy	This text has been removed per the comment received.
1568-193	Enbridge Energy	The reference to Brave Heart, M.Y.H. 2011 has been removed. Additional references regarding this topic are provided.
1568-194	Enbridge Energy	The EIS has been updated to account for the information provided as part of this comment.
1568-195	Enbridge Energy	EIS updated. Major now used for spills >10,000 bbl. Catastrophic reserved for failure discussion.
1568-196	Enbridge Energy	<p>The AER data and results should not be used in the EIS. Oilfield pipelines are different than transmission pipelines in many ways that affect the failure rate by mechanism. Less stable crude is more corrosive, third party damage is less likely, SCADA is not typical on oilfield lines. This said, the potential impact of the AER data on the AFF is minor. This is discussed in risk analysis memo attached to Chapter 10.</p> <p>Application of a consistent bias in the failure rate calculations would enable a comparative assessment to be made, however the DEIS used the AER data inconsistently, not consistently. It drew from the AER data to produce a 3rd party damage contribution to the upland pipeline lengths.</p>
1568-197	Enbridge Energy	Although the text of the EIS states the scaling performed using the rupture failure rate of 5%, the use of this scaling in the calculated frequencies could not be validated. Another references place the rupture frequency to total leak frequency at from 5-23% over the past 16 years (CONCAWE)
1568-198	Enbridge Energy	Third party damage rates for AER data will not be an appropriate dataset to use for the Line 3 project. Another reference report the 3rd party fraction of total leaks at 68% (CONCAWE)

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Response#	Commenter	Response
1568-199	Enbridge Energy	<p>Equipment failure rates are a separate category from mainline pipe failures. Direct comparisons cannot be made between equipment only failure rates and equipment and pipeline failures.</p> <p>The AER data is dominated by oilfield flowlines and gathering systems, the equipment failure rates will not be comparable to transmission pipeline equipment failure rates.</p> <p>It appears that the authors of the EIS defined an additive factor, based on the described equipment failure rate of $5 \times 10^{-5}/\text{mi} \cdot \text{yr.}$, and applied it to pipeline lengths traversing upland areas, hence no attempt was made to co-locate the equipment failure rates with the proposed location of pump stations.</p>
1568-200	Enbridge Energy	<p>Failure rate by cover was developed from 4 sources; Enbridge DOS 2014, DOS 2017, Stantec 2017 and AER. Failure rate by spill magnitude was developed from 3 sources: Stantec and Barr 2017, Stantec 2017 and DOS 2017.</p> <p>Explanation of these AFF and validity are provided in the risk analysis memo attached to Chapter 10.</p>
1568-201	Enbridge Energy	This is a known issue and the failure probability calculation could not be verified.
1568-202	Enbridge Energy	The EIS has been updated to account for the information provided as part of this comment.
1568-203	Enbridge Energy	Table 10.2-4 provides Estimated Annual Probabilities of Failure and Recurrence Intervals for the Applicant's Preferred Route and Route Alternatives between Clearbrook and Carlton, however the failure rates basis is the same for the Applicant's preferred route and SA-04, as discussed in the EIS.
1568-204	Enbridge Energy	Probability is quantified as a number between 0 and 1 and does not have a unit of measure. If the EIS was discussing percent probability then the % unit would have been used.
1568-205	Enbridge Energy	The EIS has been updated to account for the information provided as part of this comment.
1568-206	Enbridge Energy	The EIS has been updated to account for the information provided as part of this comment.
1568-207	Enbridge Energy	The EIS has been updated to account for the information provided as part of this comment.

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Response#	Commenter	Response
1568-208	Enbridge Energy	The EIS has been updated to account for the information provided as part of this comment.
1568-209	Enbridge Energy	The EIS has been updated to account for the information provided as part of this comment.
1568-210	Enbridge Energy	The EIS has been updated to account for the information provided as part of this comment.
1568-211	Enbridge Energy	The EIS has been updated to account for the information provided as part of this comment.
1568-212	Enbridge Energy	The EIS has been updated to account for the information provided as part of this comment.
1568-213	Enbridge Energy	The EIS has been updated to account for the information provided as part of this comment.
1568-214	Enbridge Energy	The EIS indicates following clean-up efforts that successfully removed approximately 75 percent of the released oil, the U.S. Geological Survey, Minnesota Pollution Control Agency (Minnesota PCA), Enbridge, and Beltrami County established the National Crude Oil Spill Research Site in Bemidji to evaluate the migration and evolution of the remaining contaminant plume.
1568-215	Enbridge Energy	The EIS has been updated to account for the information provided as part of this comment.
1568-216	Enbridge Energy	The EIS has been updated to account for the information provided as part of this comment.
1568-217	Enbridge Energy	The EIS has been updated to account for the information provided as part of this comment.
1568-218	Enbridge Energy	The EIS has been updated to account for the information provided as part of this comment.
1568-219	Enbridge Energy	The EIS has been updated to account for the information provided as part of this comment.
1568-220	Enbridge Energy	The EIS has been updated to account for the information provided as part of this comment.
1568-221	Enbridge Energy	Commodity production limited to Publicly managed resources (forests and wild rice harvest areas)
1568-222	Enbridge Energy	The EIS has been updated to account for the information provided as part of this comment.

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Response#	Commenter	Response
1568-223	Enbridge Energy	EIS refers only to bioaccumulation of toxic products, such as metals, associated with hydrocarbons, not bioaccumulation of hydrocarbons.
1568-224	Enbridge Energy	Noted.
1568-225	Enbridge Energy	This information is incorporated when discussing soil impacts and use of fertilizer to promote biodegradation. The discussion referenced is discussing the impacts to vegetation from spills.
1568-226	Enbridge Energy	The EIS has been updated to account for the information provided as part of this comment.
1568-227	Enbridge Energy	The EIS has been updated to account for the information provided as part of this comment.
1568-228	Enbridge Energy	Discussion provided in Section 10.1
1568-229	Enbridge Energy	The EIS has been updated to account for the information provided as part of this comment.
1568-230	Enbridge Energy	The reference has been added to the chapter.
1568-231	Enbridge Energy	The text has been revised per the comment received.
1568-232	Enbridge Energy	The text has been revised per the comment received.
1568-233	Enbridge Energy	The comment states that, "field surveys for sensitive flora were conducted in this area between 2013 and 2016, and no threatened or endangered plant species were found." However, while the comment only mentions plant species, the section specifically mentions tree removal and potential effects on the northern long-eared bat. Furthermore, it is unclear what surveys have been completed for the MPL-Laporte 115kV project, which could identify the potential for impacts within the environmentally relevant area. Therefore, we believe that the FEIS language in section 12.3.1.4.5 is accurate.

Responses to Comments – Citizen

Response#	Commenter	Response
1568-234	Enbridge Energy	Chapter 9 has been revised to show that only the route alternatives were evaluated in detail. However, it also notes that the system alternative (SA-04) if it were to be considered as a potential route would have similar impacts, especially when discussed from a qualitative perspective and the impact on non-physical elements of tribal resources (e.g., spirituality, connections to the environment).
1568-235	Enbridge Energy	The text has been revised per the comment received.
1568-236	Enbridge Energy	The comment has been considered. No change made.
1568-237	Enbridge Energy	Missing citation is included in the FEIS.
2603-1	Enbridge Energy	The Executive Summary was written in order to provide highlights and key outcomes of the analyses. MN 4410.2300 B. indicates the summary should stress the major findings, areas of controversy, and the issues to be resolved. The Executive Summary includes this information.
2603-2	Enbridge Energy	The Executive Summary has been revised to account for changes made throughout the document, as well as to account for comments received during the public comment period. While compliance with regulations and permit conditions may help to mitigate potential impacts, these are not true mitigation measures.
2603-3	Enbridge Energy	Table 5.2.1.2-3 identifies the state and crossing milepost for each crossing to make the locations more clear.
2603-4	Enbridge Energy	The e-docket numbers have been added to the section.
2603-5	Enbridge Energy	Section 4.2.5.3 indicates the need for other permits if SA-04 were to be considered as a project.
2603-6	Enbridge Energy	Text within Chapter 3 has been revised to account for the information provided as part of this comment.
2603-7	Enbridge Energy	SA-04 is a conceptual alternative. It is not one that has been submitted by an applicant for permitting or review. The purpose of the alternative is to provide an appropriate comparison within the evaluation of CN alternatives.

Responses to Comments – Citizen

Response#	Commenter	Response
2603-8	Enbridge Energy	See comment response to #2603-7.
2603-9	Enbridge Energy	See comment response to #2603-7.
2603-10	Enbridge Energy	The measure of 193.3 CO ₂ -e tons/year emissions is estimated correctly. However, the no displacement scenario presents a case for “new 760,000 of WCSB heavy” in addition to the “existing line 3,” which amounts to 193 million tons CO ₂ e plus 80.5 million tons of CO ₂ e, totaling 273.5 million tons of CO ₂ e per year. This is represented in Table 5.27-11 correctly.
2603-11	Enbridge Energy	Thank you for the information provided as part of this comment. This information was reviewed and considered for the development of the Final EIS. Additional information has been included in the discussion of the route alternatives in Chapter 4, as well as throughout the EIS.
2603-12	Enbridge Energy	Thank you for the information provided as part of this comment. This information was reviewed and considered for the development of the Final EIS. Additional discussion has been added to Chapter 7 for each of the route segment alternatives evaluated as part of the EIS.
2603-13	Enbridge Energy	Thank you for your comments on the Draft EIS. Additional information has been included in Sections 8.3 and 8.4.
2603-14	Enbridge Energy	Cumulative impacts are discussed in Chapter 12; additional information also has been added to Chapter 8 with regard to removal.
2603-15	Enbridge Energy	Thank you for your comment. Additional information regarding potential future mitigation and regulatory liability has been added throughout Chapter 8.
2603-16	Enbridge Energy	Additional information regarding potential subsidence has been included in Section 8.3.
2603-17	Enbridge Energy	References to Chapter 9 have been made throughout the EIS to note where information also may be discussed with relation to the American Indian tribes.

Responses to Comments – Citizen

Response#	Commenter	Response
2603-18	Enbridge Energy	A statement was added to Chapter 9 to show why the focus is on the route alternatives, rather than the CN alternatives (i.e., SA-04). This addition shows how impacts would be similar in type, although in a different geographic location.
2603-19	Enbridge Energy	<p>Quotations within Chapter 9 have been attributed to the individuals who have made them.</p> <p>Information included within Chapter 9 from the TASC report is not represented as having a legal meaning or requirement. It simply notes some resource areas; in some cases, a second source is provided.</p> <p>The first sentence within the hunting discussion has been adjusted to more accurately show that the GLIFWC publication references regulations when hunting on ceded lands. An additional source was provided, as well.</p> <p>The figures have been revised; source information is provided as part of the legend (e.g., DNR, MPCA). The cultural corridors are noted as being developed through consultation with tribal members. This information is provided in a footnote.</p>
2603-20	Enbridge Energy	Chapter 9 was revised to include additional discussion on the potential impacts to tribal resources. This particular section was revised to show this refers to direct impacts on tribal resources that are located within reservations.
2603-21	Enbridge Energy	<p>Additional text is included in Chapter 9 to show that while the emphasis is on American Indian tribes, lands, and resources within Minnesota, the potential for impacts extends beyond the boundaries of the state.</p> <p>Where information was obtained from the tribes or where geographic place names could be provided, Chapter 9 provides this information.</p>

Responses to Comments – Citizen

Response#	Commenter	Response
2603-22	Enbridge Energy	<p>The discussion of the project description is provided in Chapter 2. It provides the various details of what will be done if the project receives the necessary permits and approvals.</p> <p>A section has been added to show how the Applicant’s preferred route does not cross American Indian Reservations and notes the consideration made to avoid the two reservations for which the existing Line 3 crosses. However, text was added to show that if differences in boundaries are considered for the White Earth Reservation, the APR (and RA-03AM) would cross this land.</p>
2603-23	Enbridge Energy	Information on RSA-05 has been added to the project description in Chapter 2. This addition includes the rationale as noted in the comment provided.
2603-24	Enbridge Energy	Information has been incorporated into Sections 5.4 and 6.4 to account for the additional archaeological surveys and results of these investigations that were not accounted for within the draft EIS. However, as the primary basis of the analysis was on SHPO database records, further discussion of the Applicant’s specific methodology and reporting was not necessary.
2603-25	Enbridge Energy	<p>A section has been added to Chapter 9 to more clearly show the federal regulations associated with tribal consultation.</p> <p>A statement also is provided within Chapter 9 under state regulations to show that the SHPO will continue to consult with the Applicant and other agencies.</p> <p>A specific reference to the Army Corps of Engineers process is not noted within Chapter 9. Policies associated with the Army Corps are noted in Appendix P, and information on needed permits/consultation is noted in the Executive Summary and Chapter 3.</p>
2603-26	Enbridge Energy	The information received from American Indian tribes and tribal organizations is provided in Appendix P. As noted in the comment provided, sensitive information is not included.

Responses to Comments – Citizen

Response#	Commenter	Response
2603-27	Enbridge Energy	Chapter 9 has been revised to include additional discussion regarding potential impacts to tribal resources. In this manner, references were provided to individual sections within Chapters 5 and 6. An additional discussion was included in Chapter 11, Environmental Justice, as well, to document potential impacts to American Indian tribes.
2603-28	Enbridge Energy	While specific references were not provided to the report noted as part of this comment, references to Chapter 10 were noted to indicate where the discussion of spills is located.
2603-29	Enbridge Energy	While specific references were not provided to the report noted as part of this comment, references to Chapter 10 were noted to indicate where the discussion of spills is located.
2603-30	Enbridge Energy	While specific references were not provided to the report noted as part of this comment, references to Chapter 10 were noted to indicate where the discussion of spills is located.
2603-31	Enbridge Energy	Chapter 9 was re-organized. Additional information has been provided on the various treaties, including how usufructuary rights are addressed and how reservations were formed.
2603-32	Enbridge Energy	The introduction to the impacts assessment in Chapter 9 has been revised to more clearly show that a portion of the discussion is a summary of the information provided in Chapters 6, 8, and 10 and thereby represents the more quantitative approach to the analysis and that a portion noted as overall impacts accounts for the more qualitative approach.
2603-33	Enbridge Energy	The statement regarding impacts “as difficult, if not impossible, to mitigate” refers to those that are qualitative in nature. In this regard, it does not detract from mitigation measures noted in other chapters of the EIS.

Responses to Comments – Citizen

Response#	Commenter	Response
2603-34	Enbridge Energy	The particular project cited as part of this comment was a joint federal/state effort due to the involvement of the USDA. In this regard, the tribal consultation requirements and responsibilities are different than for this EIS, which is a state requirement. Chapter 9 was re-organized to more clearly show the responsibilities for consultation for federal and state agencies. In this manner, the impacts and mitigation discussed as a part of that project do not necessarily correlate to what is provided as part of this EIS.
2603-35	Enbridge Energy	<p>Additions have been made to Chapter 9 to acknowledge that other pipelines are present within the Mainline Corridor and are in operation.</p> <p>One of the purposes of Chapter 9 was to include information specific to tribes that may be impacted by the Applicant’s preferred route and the route alternatives. While a pipeline may be built in other parts of the country as noted in this comment, this EIS considers the unique resources and input by the American Indian tribes with a particular interest in Minnesota and with an ancestral or geographic tie to the project location. This may lead to different types of information included in this environmental review document, as well as different views and perspectives as to what the pipeline means. Where possible, quotations and input provided by the tribes is included in Chapter 9 and in Appendix P.</p>
2603-36	Enbridge Energy	Appropriate citations and information related to the applicant’s efforts have been included in Section 10.2.
2603-37	Enbridge Energy	Additional information has been included throughout Section 10.3.
2603-38	Enbridge Energy	Section 10.3.1 has been updated to include additional discussion on methods of modeling releases.
2603-39	Enbridge Energy	The identified definitions have been included in Section 10.2.
2603-40	Enbridge Energy	The identified details have been included in Section 10.2.1.1.2.
2603-41	Enbridge Energy	Additional information related to adhesion has been included in Section 10.2.1.2.1.
2603-42	Enbridge Energy	The proposed additions in this comment were reviewed. No changes were made to the FEIS.
2603-43	Enbridge Energy	This information is discussed in Section 10.3.1.

Responses to Comments – Citizen

Response#	Commenter	Response
2603-44	Enbridge Energy	The modeling work is presented in Section 10.3.1.
2603-45	Enbridge Energy	Additional information on the models and methods has been included in Section 10.3.1.
2603-46	Enbridge Energy	Additional summary information has been included in Section 10.3.5 and 10.3.6.
2603-47	Enbridge Energy	Recovery of various groups is discussed throughout Section 10.4.2.
2603-48	Enbridge Energy	The DOC had discussions with the MPCA to determine the appropriate way to evaluate Environmental Justice (EJ) impacts. Within this analysis, it was determined that a comparison to each county and the 10 percentage points greater was important as the route passes through some of the poorest counties within the State. This methodology is an acceptable one per industry standards.
2603-49	Enbridge Energy	While a table as noted in the comment was not included in the Final EIS, additional information was provided on American Indian tribes
2603-50	Enbridge Energy	Distances have been added to this statement.
2603-51	Enbridge Energy	The names of tribal members provided quotes has been provided in Chapter 9. A list of all those included in the interviews also is included.
2603-52	Enbridge Energy	Section 11 of the EIS addresses concerns regarding sex trafficking that have been raised by commenters, local communities, and other communities where pipelines have been sited or proposed. The EIS cites two sources when noting that increases in sex trafficking, particularly among Native populations, is well documented (National Congress of American Indians Policy Research Center 2016), and that American Indian and minority populations can be at higher risk based on various factors (Minnesota Department of Health [MDH] 2014). The conclusion can be generally drawn that these concerns have the potential to be amplified with the addition of a cash-rich workforce. To address this potential, and to address the concern that rural areas may not have resources necessary to detect and prevent these activities, Section 11.4 of the FEIS indicates that the applicant may provide funding to local and tribal law enforcement to support efforts to awareness and prevention.

Responses to Comments – Citizen

Response#	Commenter	Response
2603-53	Enbridge Energy	Additions to Chapter 11 have been made to provide a summary of the resource-specific impacts. References to the individual sections also are included.
2603-54	Enbridge Energy	The e-docket numbers have been added to the Section.
2603-55	Enbridge Energy	A sentence has been added to show that this analysis focuses on projects located within Minnesota.
2603-56	Enbridge Energy	The information provided as part of this comment has been considered in developing the cumulative impacts discussion. Additional information has been added to Chapter 8 on removal as an individual activity.
0825-1	Fahlstrom, Jeanne	Thank you for your comments on the Draft EIS. If Line 3 is abandoned in place it will be cleaned out to remove existing product.
0825-2	Fahlstrom, Jeanne	Section 8.4.1 of the FEIS notes the approximate cost of removal as well as an estimate for the number of potential jobs created during a removal effort - approximately half of the jobs generated by construction of a new Line 3.
0825-3	Fahlstrom, Jeanne	Thank you for your comments on the Draft EIS. Your comment was considered in development of the FEIS. Changes have been made to Chapter 10.
2610-1	Ferber, Margaret	Thank you for your comments on the Draft EIS. Sections 5.3 and 6.5 of the FEIS assesses the potential Project-related impacts with respect to commodity production; recreation and tourism; and employment, income, and tax revenues.
2610-2	Ferber, Margaret	The comment has been considered in the development of the FEIS.
2611-1	Ferber, Rich	Thank you for your comments on the Draft EIS. Impact analysis on surficial aquifers is included in the FEIS.
2612-1	Ferguson, Catherine	Thank you for your comments on the Draft EIS. The multiple use designations, applied standards and criteria, and impairment (or not) make comparison of basic physicochemical parameters difficult when assessing a waterbody in comparison to another. Although reduced dissolved oxygen may be critical for support of various biota in one system, this may not hold true for all. This is the basis for the statement.

Responses to Comments – Citizen

Response#	Commenter	Response
2612-2	Ferguson, Catherine	The soil analysis was derived from SSURGO and STATSGO2 data developed by soils surveys conducted by the NRCS. While details specific to every soil component of every mapped soil was not provided, the characteristics that may be sensitive to disturbance, including prime farmland, soils highly erodible by water or wind, hydric soils, compaction-prone soils, stony/rocky soils and coarse-textured soils, shallow bedrock, hydric soils, and similar features were evaluated. These same factors are used in the hydrogeologic sensitivity of near-surface materials in regards to oil spill impacts.
2612-3	Ferguson, Catherine	As shown in Section 5.2.1.1.1, the ROI for the evaluation consists of a 1,000 foot buffer to either side of the centerline. The same ROI is used for both the evaluation of the Applicant's proposed project and SA-04.
2612-4	Ferguson, Catherine	Potential impacts from oil spills to resources within 2,500 feet of and 10-mile downstream of SA-04 are evaluated. Spill models were run to demonstrate the transport and fate of spills at select locations, but are not intended to represent all potential oil spills for any route.
2612-5	Ferguson, Catherine	The correct acreage is 5 acres of impact to wild rice lakes. This was determined using GIS-based technology and laying the corridor size onto spatial depictions of wild rice lakes.
2612-6	Ferguson, Catherine	Section 5.3.3.3.1 Enbridge estimates that each construction spread would require about 600 workers, resulting in a total maximum workforce of 4,200 workers across seven different construction spreads between Neche, North Dakota, and Superior, Wisconsin.
0519-1	Fountain, Elizabeth	Thank you for your comments on the Draft EIS. As noted in Section 11.4 of the FEIS, the applicant may employ various measures to minimize or mitigate impacts to environmental justice communities. The applicant may work with companies and subcontractors hired to construct, restore and operate the pipeline to prepare and implement an education plan or awareness campaign regarding the issue of sexual abuse or sex trafficking. Additionally, the applicant may provide funding to support the efforts of local and tribal law enforcement on this and other safety-related issues, which would enable local entities to tailor approaches and solutions to the local community.

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Response#	Commenter	Response
0297-1	Frechette, Allen	Thank you for your comments on the Draft EIS. Chapter 12 of the FEIS includes a discussion on the cumulative potential effects of the Certificate of Need and route alternatives, and reasonably foreseeable future actions including "public infrastructure" on potential development impediments and other impacts of a socioeconomic nature. Some types of public infrastructure, such as other pipelines and electric transmission lines, are compatible with a pipeline corridor and can be co-located within the same corridor. Many other types of land development are compatible in the "vicinity of a pipeline", e.g. agriculture, forestry, etc.
0297-2	Frechette, Allen	The FEIS discusses abandonment and removal as different alternatives with Chapter 8. The proposed method is abandonment.
0297-3	Frechette, Allen	The requested edits were not made as the text accurately states the level of risk as identified by Enbridge.
0297-4	Frechette, Allen	The requested edits were not made as the text accurately states the federal requirements for abandonment that do exist.
0297-5	Frechette, Allen	The commenter contends that oil extraction and refining should be included in the analysis; however, these activities are included in the existing baseline activities and would occur with or without approval of the new pipeline. Therefore, they are not a trigger for the proposed pipeline or triggered by the pipeline and are properly excluded from the analysis.
2621-1	Friends of the Headwaters	Thank you for your comments on the Draft EIS. Per Minnesota Rules 4410.2700, Commerce considers all timely substantive comments on the draft EIS consistent with the scoping decision. The material in the appendices to this comment letter provided by FOH has been considered to the extent that FOH draws on the material in their comments providing specific reference to the EIS and providing rationale for an addition, clarification, correction, discussion of uncertainty or application of alternative methodology in the EIS.

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Response#	Commenter	Response
2621-2	Friends of the Headwaters	<p>In a letter dated May 16, 2017 to Administrative Law Judge Ann C. O'Reilly, the Department requested that the ALJ determine whether data regarding oil spills in the draft environmental impact statement (DEIS) filed May 15, 2017, at Table 10.3.1 on page 10-36 is public or non-public. A hearing on this matter was held on August 3, 2017. To-date, no order has been issued by the ALJ.</p> <p>The commenter's suggestion that the Department "choose values" and conduct new modeling using a different model and approach does not resolve the non-public data issue; furthermore, the recommendation that the Department "choose values" is entirely inconsistent with the commenter's assertions that the modeling should include a site specific damage assessment, which would clearly require, as a first step, site specific assessment of release associated with a full bore rupture.</p>

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Response#	Commenter	Response
2621-3	Friends of the Headwaters	<p>The specific impacts of large oil releases are highly dependent on incident-specific factors that are impossible to predict with certainty. For example, as the commenter notes, the largest ever inland spill in Grand Rapids did not produce the damages a model may have suggested from a spill of its magnitude because incident-specific conditions happened to include ice cover on the Prairie River.</p> <p>One purpose of the EIS is to provide decision makers with relevant information for their decision. Detailed modeling of site/situation specific environmental damages is so incident-specific, it does not provide decision makers with particularly actionable information about which alternative is environmentally preferable.</p> <p>In fact, this sort of impact modeling is likely to provide a false level of precision that is counterproductive. The modeling approach used in the EIS is intended to provide information relevant to a reasoned choice among the alternatives by focusing on several components of spill risk that can be considered to develop a broader understanding of the risks and tradeoffs of different routes.</p> <p>These risk components include: 1) Modeling of fate and transport of spilled oil in a suite of locations spanning a range of different environmental conditions; 2) characterization of the general probability of a spill occurring for different modes and different routes; 3) description of how resources are typically impacted by spilled oil; and 4) quantification of the resources exposed along the various alternatives under consideration.</p> <p>Potential impacts to wild rice associated with an oil spill are discussed in Chapter 10, as well as part of the water resources in Chapters 5 and 6.</p>
2621-4	Friends of the Headwaters	<p>A discussion of access limitations is included in Section 10.5.3.2.</p> <p>In the preparation of the DEIS, no actionable, systematic method for assessing the ease or difficulty of access along the entire length of each pipeline route could be identified. In the absence of such an analysis, direct comparison of ease of access across the different routes cannot be made. However, regardless of the route or the number of areas with difficult access, specific spill response strategies will be developed for areas with difficult access when a final route is selected.</p>

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Response#	Commenter	Response
2621-5	Friends of the Headwaters	A discussion of long term impacts of oil on the environment, based on a review of observed impacts from historical spills studied by government agencies, academic researchers, and industry professionals, has been included as Section 10.2.2.
2621-6	Friends of the Headwaters	Please see response to comment #2621-03 for a discussion of site specific impact analysis.
2621-7	Friends of the Headwaters	Please see response to comment #2621-03 for a discussion of site specific impact analysis. Additional discussion of the rationale for site selection and the range of characteristics represented by the sites has been included in Section 10.3.4.1.
2621-8	Friends of the Headwaters	See response to comment #2621-03 for a discussion of site specific impact analysis.
2621-9	Friends of the Headwaters	10 miles downstream was selected, because it was considered to be not overly conservative, and crossing widths for the RAs were unavailable. The Applicant surveyed the streams and rivers for the APR ONLY, so small (<10 m wide) and large (10 m or > wide) crossings are only known for this route. It would be biased to only run the 2 downstream buffers (30 miles for large rivers, and 10 miles for small streams) along the APR. Furthermore, we determined that it would be overly conservative to run a 30-mile downstream buffer for all water crossings, especially since many of these water bodies are ditches and terminate within a few miles.

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Response#	Commenter	Response
2621-10	Friends of the Headwaters	<p>"The representative-site modeling approach, as applied and presented in the EIS has the benefit of providing a means to analyze the potential trajectory (movement), fate (behavior and weathering), and effects of hypothetical spill scenarios under a variety of environmental circumstances. The locations and environmental conditions (as well as the hypothetical volumes of oil in the release scenarios) were selected in a conservative manner to effectively maximize oil transport and impacts to create simulations of various scenarios. The modeling results can be used to qualify and quantify the consequences of a worst-case discharge for risk assessment purposes. The conservatively-developed site approach also fosters the understanding of the potential worst-case circumstances that pipeline engineers and emergency and spill response officials need to factor into planning.</p> <p>That said, the modeling of representative sites can never comprehensively forecast all conceivable outcomes of hypothetical spill scenarios at the virtually infinite number of unique locations along the along the Line 3 pipeline. Each oil spill incident is a unique event in terms of the specific circumstances that affect the behavior, trajectory, fate, and effects of the oil. Case studies of past spill events in the US and around the world have demonstrated that many different factors determine the outcome of each incident. Limitations of the models are discussed in the EIS.</p>
2621-11	Friends of the Headwaters	<p>Please see response to comment #2621-03 for a discussion of site specific impact analysis.</p> <p>Additional discussion of the rationale for site selection, including Mosquito Creek (Table 10.3-1), and the range of characteristics represented by the sites has been included in Section 10.3.4.1.</p>
2621-12	Friends of the Headwaters	<p>Please see response to comment #2621-03 for a discussion of site specific impact analysis.</p> <p>Additional discussion of potential impacts of a spill on wild rice/economic value of wild rice resources has been included in Section 10.4.2.</p>
2621-13	Friends of the Headwaters	<p>The deficiencies of the pinhole release report are noted. Supplemental case studies and supporting data are provided in the EIS to address issues mentioned here.</p>

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Response#	Commenter	Response
2621-14	Friends of the Headwaters	<p>SA-04 is a system alternative evaluated to aid the Commission's evaluation of whether or not to grant a CN for the proposed project. A system alternative is not a routing alternative, as no entity has proposed to build such a pipeline, detailed routing and design have not been conducted, and a route permit could not be issued for SA-04.</p> <p>Instead, a system alternative is a serves as a broader, system level point of comparison to the Applicant's Proposed project and the other CN alternatives. The level of analysis of SA-04 is in line with this concept.</p>
2621-15	Friends of the Headwaters	<p>The Applicant has requested a specific route width and right-of-way (ROW) widths.</p> <p>The EIS assumes that the requested route and ROW will be adequate, and that if a route permit is granted, the Applicant will comply with permitted route and ROW widths. The EIS, therefore, analyzes impacts within the corresponding footprint.</p>
2621-16	Friends of the Headwaters	<p>No notable changes are anticipated on the existing (recently upgraded) infrastructure in Wisconsin or elsewhere in conjunction with the Applicant's proposal.</p> <p>Therefore, new impacts associated with the Applicant's proposal are limited to the length of the proposed Line 3 route and do not extend through Wisconsin to an end destination in Illinois. The EIS compares the new impacts associated with the Applicant's proposal (extending from Neche to Superior) to the new impacts associated with the significantly longer SA-04 (extending from Neche to Joliet).</p>
2621-17	Friends of the Headwaters	<p>The EIS acknowledges that Minnesota's non-proliferation policy is likely to lead to the proposal of another oil or gas pipeline in the same corridor should Enbridge's proposal be approved and provides an evaluation of cumulative effects of such a proposal (see Chapter 12, Table 12.2-1).</p>

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Response#	Commenter	Response
2621-18	Friends of the Headwaters	<p>In assessing past actions and their associated impacts, the EIS analysis assumes impacts are now part of the existing environment and are included in the affected environment described in Chapters 5 and 6 (Minn. R. 4410.0200, Subp. 11a).</p> <p>The 30 year time-frame for the analysis within the EIS was chosen to match the economic life of the project indicated by the Applicant. For purposes of comparison across alternatives, the EIS targets a consistent time-frame that is long enough to understand typical annual operating impacts/tradeoffs of the alternatives.</p>
2621-19	Friends of the Headwaters	<p>The Department cannot verify the commenter's assertion that Enbridge intends to increase the capacity of the proposed line, and no reference has been provided by the commenter. The "reasonably likely to occur" threshold (Environmental Quality Board Guide to Minnesota Environmental Review Rules, May 2010: https://www.eqb.state.mn.us/sites/default/files/documents/Guide%20to%20MN%20ER%20Rules-May%202010.pdf accessed 7/27/2017) does not appear to be met.</p> <p>This includes:</p> <ol style="list-style-type: none"> 1. Applications for permits have not been filed with any units of government; 2. Detailed plans and specifications have not been prepared; 3. This is not a future development indicated by adopted comprehensive plans, and zoning or other ordinances; 4. It is not clear that historic or forecasted development trends would support it; and 5. Any other factors, for example funding status for the project, do not suggest that this is a reasonably foreseeable project or that has sufficiently detailed information available about the project (e.g., size or placement of the pump stations indicated by the commenter) to contribute to the understanding of cumulative potential effects.
2621-20	Friends of the Headwaters	Please see comment response #2621-18.

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Response#	Commenter	Response
2621-21	Friends of the Headwaters	<p>Please see comment response #2621-17.</p> <p>Regarding Line 66, consistent with EQB guidance, in looking to the future, the cumulative potential effects analysis addresses other projects actually planned for which a basis of expectation has been laid and for which sufficiently detailed information available about the project (e.g. size or placement of the pump stations indicated by the commenter) to contribute to the understanding of cumulative potential effects.</p> <p>The speculative “Twin Line 61” has not been included in our review because no proposal has been made for such a project with sufficient detail to address in this review. If proposed, such a project would undergo environmental review in the appropriate jurisdictions</p>
2621-22	Friends of the Headwaters	Chapter 12 has been revised to include additional information on cumulative impact analyses.
2621-23	Friends of the Headwaters	Chapter 12 has been revised to include additional information on cumulative impact analyses.
2621-24	Friends of the Headwaters	Chapter 12 has been revised to include additional information on cumulative impact analyses.
2621-25	Friends of the Headwaters	Please see comment response #2621-15.
2621-26	Friends of the Headwaters	Drilling mud releases (“frac-outs”) are discussed in Section 5.2.1.1.3, Section 6.3, and Section 6.5.
2621-27	Friends of the Headwaters	Please see response to comment #2621-03 for a discussion of site specific impact analysis.
2621-28	Friends of the Headwaters	Drilling mud releases (“frac-outs”) are discussed in Section 5.2.1.1.3, Section 6.3, and Section 6.5.
2621-29	Friends of the Headwaters	Please see response to comment #2621-15.

Responses to Comments – Citizen

Response#	Commenter	Response
2621-30	Friends of the Headwaters	<p>1. The predictive risk analysis was removed due to issues with its application. Historic pipeline incident data was expanded to detail historic incident rates and causes. Current spill probabilities for a new pipeline using modern metallurgy and coating technologies would likely be less than historic incidents caused by corrosion or other internal failures.</p> <p>2. There is a state of the art practice that defines responsible and rigorous use of expert opinion based estimation of parameters in risk assessments in place of other sources of basic data, some of which are recognized and sponsored by the National Academy of Engineering, there is no need to provide guidance on a study-by-study basis.</p> <p>3. If qualitative risk analysis (QRA) is used, sensitivity analysis to key failure rate parameters should always be performed.</p> <p>4. QRA is not a new science and clear documentation and best practice includes all of these recommendations.</p>
2621-31	Friends of the Headwaters	Please see response to comment #2621-17.
2621-32	Friends of the Headwaters	<p>Providing this information on a per year basis vs. the lifetime of project makes no material difference to the comparison of the alternatives, or informing a reasoned choice between alternatives by the Commission.</p> <p>The predictive risk analysis was removed due to issues with its application. Historic pipeline incident data was expanded to detail historic incident rates and causes. Current spill probabilities for a new pipeline using modern metallurgy and coating technologies would likely be less than historic incidents caused by corrosion or other internal failures.</p>
2621-33	Friends of the Headwaters	Please see response to comment #2621-15.
2622-1	Friends of the Headwaters	Thank you for your comments on the Draft EIS. Available design details are provided in Chapter 4 of the FEIS.

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Response#	Commenter	Response
2622-2	Friends of the Headwaters	The EIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release.
2621-1	Friends of the Headwaters	Thank you for your comments on the Draft EIS. Per Minnesota Rules 4410.2700, Commerce considers all timely substantive comments on the draft EIS consistent with the scoping decision. The material in the appendices to this comment letter provided by FOH has been considered to the extent that FOH draws on the material in their comments providing specific reference to the EIS and providing rationale for an addition, clarification, correction, discussion of uncertainty or application of alternative methodology in the EIS.
2622-3	Friends of the Headwaters	Thank you for your comments on the Draft EIS. Your comment has been considered in development of the FEIS.
2621-2	Friends of the Headwaters	In a letter dated May 16, 2017 to Administrative Law Judge Ann C. O'Reiley the Department requested that the requests that the ALJ determine whether data regarding oil spills in the draft environmental impact statement (DEIS) filed May 15, 2017, at Table 10.3.1 on page 10-36 is public or nonpublic. A hearing on this matter was held on X date. To-date, no order has been issued by the ALJ. The commenter's suggestion that the Department "choose values" and conduct new modeling using a different model and approach does not resolve the non-public data issue, furthermore, the recommendation that the Department "choose values" is entirely inconsistent with the commenter's assertions that the modeling should include a site specific damage assessments, which would clearly require, as a first step, site specific assessment of release associated with a full bore rupture
2622-4	Friends of the Headwaters	Release incident data for the Applicant and the industry are now presented in the FEIS.

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2621-3	Friends of the Headwaters	The specific impacts of large oil releases are highly dependent on incident-specific factors that are impossible to predict with certainty. For example, as the commenter notes, the largest ever inland spill in Grand Rapids did not produce the damages a model may have suggested from a spill of its magnitude because incident-specific conditions happened to include ice cover on the Prairie River. One purpose of the EIS is to provide decision-makers with relevant information for their decision. Detailed modeling of site/situation specific environmental damages is so incident-specific, it does not provide decision-makers with particularly actionable information about which alternative is environmentally preferable. In fact, this sort of impact modeling is likely to provide a false level of precision that is counterproductive. The modeling approach used in the EIS is intended to provide information relevant to a reasoned choice among the alternatives by focusing on several components of spill risk that can be considered to develop a broader understanding of the risks and tradeoffs of different routes. These risk components include 1) Modeling of fate and transport of spilled oil in a suite of locations spanning a range of different environmental conditions 2) Characterization of the general probability of a spill occurring for different modes and different routes 3) Description of how resources are typically impacted by spilled oil 4) Quantification of the resources exposed along the various alternatives under consideration.
2622-5	Friends of the Headwaters	Thank you for your comments on the Draft EIS. Your comment has been considered in development of the FEIS.
2621-4	Friends of the Headwaters	A discussion of access limitations is included in Section 10.5.3.2.1. In the preparation of the DEIS, no actionable, systematic method for assessing the ease or difficulty of access along the entire length of each pipeline route could be identified. In the absence of such an analysis, direct comparison of ease of access across the different routes cannot be made, however, regardless of the route or the number of areas with difficult access, specific spill response strategies will be developed for areas with difficult access when a final route is selected.
2622-6	Friends of the Headwaters	PHMSA will address pipeline integrity management requirements in areas where HCAs could not be avoided

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Response#	Commenter	Response
2621-5	Friends of the Headwaters	A discussion of long term impacts of oil on the environment, based on a review of observed impacts from historical spills studied by government agencies, academic researchers and industry professionals, has been included as Section 10.3.2.4 of the FEIS.
2622-7	Friends of the Headwaters	The FEIS has been updated to include discussion on the properties of dilbit as it weathers.
2621-6	Friends of the Headwaters	See response to comment 2621-3 for a discussion of site specific impact analysis.
2622-8	Friends of the Headwaters	Thank you for your comments on the Draft EIS. Your comment has been considered in development of the FEIS.
2621-7	Friends of the Headwaters	See response to comment 2621-3 for a discussion of site specific impact analysis. Additional discussion of the rationale for site selection and the range of characteristics represented by the sites has been included in Section 10.3.3 of the FEIS.
2621-8	Friends of the Headwaters	See response to comment 2621-3 for a discussion of site specific impact analysis.
2621-9	Friends of the Headwaters	Thank you for your comments on the Draft EIS. Your comment was considered in development of the FEIS
2621-10	Friends of the Headwaters	Thank you for your comments on the Draft EIS. Your comment was considered in development of the FEIS
2621-11	Friends of the Headwaters	See response to comment 2621-3 for a discussion of site specific impact analysis. Additional discussion of the rationale for site selection, including Mosquito Creek, and the range of characteristics represented by the sites has been included in Section 10.3.3 of the FEIS.
2621-12	Friends of the Headwaters	See response to comment 2621-3 for a discussion of site specific impact analysis. Additional discussion of potential impacts of a spill on wild rice/economic value of wild rice resources has been included in Section 10.4.3 of the FEIS
1332-1	Gaither, Daniel	Thank you for your comments on the Draft EIS. The referenced citations have been updated.

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Response#	Commenter	Response
1332-2	Gaither, Daniel	Sources have been re-checked throughout the document in preparation of the Final EIS. Per the comment received, the source for "historical trauma" has been re-checked and replaced.
1332-3	Gaither, Daniel	The FEIS has been corrected. Predicted volume out data is considered “public” data and is provided in Chapter 10.
1332-4	Gaither, Daniel	The 30 year time-frame was chosen to match the economic life of the project indicated by the Applicant. For purposes of comparison across alternatives, the EIS targets a consistent time-frame that is long enough to understand typical annual operating impacts/tradeoffs of the alternatives.
1332-5	Gaither, Daniel	Discussion of Enbridge's required ongoing responsibility for the pipeline is provided in Section 8.3.1.1 of the FEIS.
1332-6	Gaither, Daniel	Discussion of Enbridge's required ongoing responsibility for the pipeline is provided in Section 8.3.1.1 of the FEIS.
1332-7	Gaither, Daniel	Enbridge's Application materials use the term “construction right-of-way” when referring to the temporary construction areas located alongside the permanent right-of-way that would be used temporarily for construction of the pipeline (Section 2.7.1.2). The Applicant uses the term “construction workspace” to encompass additional temporary workspaces, or ATWS (Section 2.3.5). This EIS uses the term “construction work area” when referring to the temporary construction areas located alongside the permanent right-of-way, and uses the term “ATWS” when referring to the ATWS required for staging equipment, storing some excavation spoil materials, and providing additional workspace where required for special construction methods. Table 2.4-1 provides the dimensions for each of these areas.

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Response#	Commenter	Response
1332-8	Gaither, Daniel	<p>The methodology used to complete the environmental justice analysis in Chapter 11 is commonly used to characterize potential EJ communities. The potential impacts of the project are described within the EIS and further discussed in Chapter 11 to discuss the potential for disproportionately high and adverse impacts to the EJ census tracts within the region of impact. This analysis is further expanded to include a qualitative discussion of potentially affected communities such as American Indian populations or tribal members who use potentially-impacted resources like wild rice. This discussion and these impacts are not limited to the census tracts, and the section has been updated to indicate that micropopulations not captured by census data may also be adversely impacted. Several sources were reviewed to better understand the concerns related to sex trafficking. These concerns have been raised in recent local media, by commenters, local communities, and other communities where pipelines have been sited or proposed. Two sources are cited to support this concern; Section 11 indicates that increases in sex trafficking, particularly among Native populations, is well documented (National Congress of American Indians Policy Research Center 2016), and that American Indian and minority populations can be at higher risk based on various factors (Minnesota Department of Health [MDH] 2014). The discussion concludes that these concerns have the potential to be amplified with the addition of a cash-rich workforce. To address this potential, the EIS has been revised to clarify that the applicant may provide funding to support the efforts of local and tribal law enforcement to address this issue.</p>
1012-1	Gaither, Jami	<p>Thank you for your comments on the Draft EIS. Chapter 11 of the FEIS identifies potential environmental justice communities in the region of interest. These communities were determined based on a quantitative analysis using census data. Additional discussion is provided to qualitatively characterize unique communities within the area of interest, to ensure consideration of populations that may not be fully captured by census tract data. Chapter 11 describes the potential for disproportionately high and adverse impacts to these communities, and identifies project impacts that may affect EJ communities. As noted in Chapter 11, a finding of disproportionate impact, or the identification of environmental justice communities, does not preclude approval of the project or selection of a route alternative; however, it does require detailed efforts to avoid, mitigate, minimize, rectify, reduce, and/or eliminate the impacts. Measures that the applicant may undertake to minimize or mitigate adverse impacts are discussed in Chapter 11.4.</p>

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Response#	Commenter	Response
1012-2	Gaither, Jami	The FEIS provides data on the Applicant’s spill history as well as comparisons of the Applicant’s spill and incident rate compared to other crude oil pipeline operators, both in Minnesota and nationwide.
1013-1	Garriott, Grant and Kathy	Thank you for your comments on the Draft EIS. Section 5.3.2 of the FEIS establishes a baseline of the recreational resources that could be affected by the Applicant's project and Certificate of Need alternatives. The section also assesses potential impacts to such resources. Table 5.3.2-3 summarizes these impacts - resulting construction and operational impacts are anticipated to be minor to negligible.
0680-1	Gibson Wall, Mae	Thank you for your comments on the Draft EIS. The 30 year time-frame was chosen to match the economic life of the project indicated by the Applicant. For purposes of comparison across alternatives, the EIS targets a consistent time-frame that is long enough to understand typical annual operating impacts/tradeoffs of the alternatives.

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Response#	Commenter	Response
0680-2	Gibson Wall, Mae	<p>The FEIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release.</p> <p>As indicated in Section 10.3, on June 3, 2019 the Minnesota Court of Appeals ruled that the Revised Final Line 3 EIS of February 12, 2018 was inadequate because it failed to specifically address the potential impact of an oil spill into the Lake Superior watershed. In order to address the court’s opinion Enbridge commissioned a modeling analysis on behalf of and with input from the Minnesota Department of Commerce, Energy Environmental Review Analysis Staff for one additional hypothetical crude oil release from a pipeline crossing within the Lake Superior watershed (Stantec et al. 2019; Appendix V).</p> <p>When considered together with the seven previously modeled sites, Little Otter Creek as the eighth representative release site can be used to further characterize the range of trajectory, fate, and potential consequences of an oil spill in the project area. Using the same assumptions used for the other sites, the spill modeling was used to predict the potential trajectory of released oil, the fate of released oil, and the potential effects of accidental oil releases on the natural and human environment. The intent of these analyses was to infer a range of potential effects that may occur at this and other locations in Minnesota with similar biophysical and human use characteristics.</p>

Responses to Comments – Citizen

Response#	Commenter	Response
0680-3	Gibson Wall, Mae	<p>The FEIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release. Spill impact analysis was limited to the expected areas of impact 2500 ft. and 10 miles downstream from the pipeline.</p> <p>As indicated in Section 10.3, on June 3, 2019 the Minnesota Court of Appeals ruled that the Revised Final Line 3 EIS of February 12, 2018 was inadequate because it failed to specifically address the potential impact of an oil spill into the Lake Superior watershed. In order to address the court’s opinion Enbridge commissioned a modeling analysis on behalf of and with input from the Minnesota Department of Commerce, Energy Environmental Review Analysis Staff for one additional hypothetical crude oil release from a pipeline crossing within the Lake Superior watershed (Stantec et al. 2019; Appendix V).</p> <p>When considered together with the seven previously modeled sites, Little Otter Creek as the eighth representative release site can be used to further characterize the range of trajectory, fate, and potential consequences of an oil spill in the project area. Using the same assumptions used for the other sites, the spill modeling was used to predict the potential trajectory of released oil, the fate of released oil, and the potential effects of accidental oil releases on the natural and human environment. The intent of these analyses was to infer a range of potential effects that may occur at this and other locations in Minnesota with similar biophysical and human use characteristics.</p>
0835-1	Goodwin/Yaashiik, Dawn	<p>Thank you for your comments on the Draft EIS. The FEIS states that vulnerable populations, such as children, those with respiratory diseases, and the elderly, could be particularly sensitive to airborne pollutant releases following a spill and would likely experience moderate respiratory impacts depending on their proximity to the incident, current health status, and seasonal/weather conditions in the aftermath of the spill. In the event of a spill, spill response teams will be at the site as soon as possible.</p>
0835-2	Goodwin/Yaashiik, Dawn	<p>Additional discussion of removal of the existing Line 3 has been added to Section 8.4 of the FEIS.</p>

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Response#	Commenter	Response
0833-1	Goodwin/Yaashiik, Dawn	Thank you for your comments on the Draft EIS. Chapter 9 of the FEIS has been updated to show that traditional practices continue today.
0833-2	Goodwin/Yaashiik, Dawn	Chapter 9 of the FEIS has been updated to show that traditional practices continue today.
0833-3	Goodwin/Yaashiik, Dawn	The FEIS focuses on impacts to waterbodies of concern and tribal issues associated with those waterbodies.
0833-4	Goodwin/Yaashiik, Dawn	The FEIS focuses on impacts to waterbodies of concern and tribal issues associated with those waterbodies.
0833-5	Goodwin/Yaashiik, Dawn	The FEIS focuses on impacts to waterbodies of concern and tribal issues associated with those waterbodies.
0833-6	Goodwin/Yaashiik, Dawn	The cumulative potential impacts of climate change are discussed in the Executive Summary and Section 12.5 of the FEIS. Section 12.5 also discusses climate change trends in Minnesota and the Midwest.
2632-1	Graeve, Ken	Thank you for your comments on the Draft EIS. Acreages have been reviewed for discrepancies and edited as appropriate.
2632-2	Graeve, Ken	Thank you for your comment. A detailed analysis of all impacts to all of the various and site-specific natural resources was beyond the scope of the EIS process.

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Response#	Commenter	Response
2630-1	Graeve, Ken	<p>Thank you for your comments on the Draft EIS. Section 5.2.3 - Vegetation, Section 6.3.3 - Vegetation address specific potential direct and indirect impacts in terms of the spread of noxious weeds and invasive plants. This is quantified to the degree possible by noting the specific known locations of state-listed noxious weeds, and invasive plant species, within the ROI of the Proposed Project as well as alternative routes. The impact analysis integrates the plan for preventing the spread of invasive species, as addressed in Section 1.6 - Controlling Spread of Undesirable Species, of the Environmental Protection Plan (EPP), Appendix E of the DEIS. Appendix A to this document lists the known State-listed noxious weeds, and invasive terrestrial and aquatic plant species, as well as invasive fish and invertebrate species known to occur within the vicinity of the Proposed Project and alternative routes, by state. The EPP outlines construction-related environmental policies, procedures, and protection measures that would be implemented during project construction and operation specifically to avoid introduction and spread of noxious weeds.</p>
2630-2	Graeve, Ken	<p>Section 5.2.3 - Vegetation, Section 6.3.3 - Vegetation address specific potential direct and indirect impacts in terms of the spread of noxious weeds and invasive plants. This is quantified to the degree possible by noting the specific known locations of state-listed noxious weeds, and invasive plant species, within the ROI of the Proposed Project as well as alternative routes. The impact analysis integrates the plan for preventing the spread of invasive species, as addressed in Section 1.6 - Controlling Spread of Undesirable Species, of the Environmental Protection Plan (EPP), Appendix E of the DEIS. Appendix A to this document lists the known State-listed noxious weeds, and invasive terrestrial and aquatic plant species, as well as invasive fish and invertebrate species known to occur within the vicinity of the Proposed Project and alternative routes, by state. The EPP outlines construction-related environmental policies, procedures, and protection measures that would be implemented during project construction and operation specifically to avoid introduction and spread of noxious weeds.</p>

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Response#	Commenter	Response
2630-3	Graeve, Ken	<p>Section 5.2.3 - Vegetation, Section 6.3.3 - Vegetation, and Chapter 7 of the DEIS all address specific potential direct and indirect impacts to terrestrial vegetation in terms of potential impacts from spread of noxious and invasive plant species. These include discussions of potential impacts specifically to Sites of Biodiversity significance. Also addressed are specific impacts to forested and wetland communities from activities associated with construction and operations associated with the Proposed Project and alternative routes, including roads. Section 5.2.5 - Unique Natural Resources and Section 6.3.5 - Unique Natural Resources discuss specific potential direct and indirect impacts to special status plant species and plant communities. The impact analysis integrates the plan for preventing the spread of invasive species, as addressed in Section 1.6 - Controlling Spread of Undesirable Species, of the Environmental Protection Plan (EPP), Appendix E of the DEIS. Appendix A to this document lists the known State-listed noxious weeds, and invasive terrestrial and aquatic plant species, as well as invasive fish and invertebrate species known to occur within the vicinity of the Proposed Project and alternative routes, by state. The EPP outlines construction-related environmental policies, procedures, and protection measures that would be implemented during project construction and operation specifically to avoid introduction and spread of noxious weeds.</p>
2630-4	Graeve, Ken	<p>This comment addresses the potential efficacy of implementation of the project Environmental Protection Plan (EPP), Appendix E of the DEIS, not on the EIS itself. As a practical matter, it is impossible to predict if any noxious weeds or invasive plant species, from their known population locations, would be introduced or spread through construction and operation activities of the Proposed Project, without implementation of weed control activities detailed in the EPP. That is why the EPP has addressed this topic comprehensively and, when applied assiduously, should reduce the potential for weed or invasive species introduction or spread to the levels estimated in the DEIS impact analysis in Section 5.2.3 - Vegetation, Section 6.3.3 - Vegetation, and Chapter 7.</p>

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Response#	Commenter	Response
2630-5	Graeve, Ken	It is not within the scope of the EIS to address perceived issues and concerns with state weed laws or their enforcement. Nor can the Proposed Project be responsible for existing regional conditions regarding the number and spread of state-listed, and other, invasive plant species. As stated in the Project Environmental Protection Plan (EPP), the intention of the Project "... is to minimize the potential introduction and/or spread of undesirable species (i.e., invasive species, noxious weeds, or crop diseases) along the construction ROW due to pipeline construction activities." Section 1.6 of the EPP details prevention and control measures to be implemented to accomplish this goal. Implementation of these measures was integrated into the impact analysis in Section 5.2.3 - Vegetation and Section 6.3.3 - Vegetation, by addressing specific potential direct and indirect impacts in terms of the spread of noxious weeds and invasive plants. This is quantified to the degree possible by noting the specific known locations of state-listed noxious weeds, as well as other known invasive plant species, within the ROI of the Proposed Project as well as alternative routes.
0397-1	Gustofson, Cedrik	Thank you for your comments on the Draft EIS. Section 6.5.4 of the FEIS clarifies that it is likely that the Applicant would hire local residents during construction of any of the alternative routes for a portion of its workforce - based on current labor agreements in Minnesota at least 50% of workers will be expected to be employed from local union halls.
1535-1	Harper, Sarah	Thank you for your comments on the Draft EIS. The executive summary of the FEIS provides information on the purpose of the EIS and the decisions they inform, while Section 1.4 provides details about broader policy implications.
2653-1	Hauser, Patricia	Thank you for your comments on the Draft EIS. An acronym and abbreviations list has been provided in the FEIS.
2653-2	Hauser, Patricia	Table ES-1 has been revised in the FEIS.
2653-3	Hauser, Patricia	Figures throughout the EIS have been revised. Some of the major rivers noted in this figure are identified by the blue line or noted by name.

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Response#	Commenter	Response
2653-4	Hauser, Patricia	The text has been revised to show what is presented in the figure. Please note, Figure ES-4 has been revised; it also includes additional information as compared to that provided within the draft document.
2653-5	Hauser, Patricia	All surface water crossed by all alternatives was determined based on state and federal national hydrologic databases. Modification, as relevant, to impacted waterbodies has been modified in the FEIS based on subsequent analysis.
2653-6	Hauser, Patricia	This comment was considered in revising the figures for the Executive Summary. For this figure, the title was adjusted; however, no other changes were made.
2653-7	Hauser, Patricia	No changes have been made to this figure; however, please note - the measurement for this figure is acres and not miles.
0842-1	Hess, Russell	Thank you for your comments on the Draft EIS. Additional discussion of rail transport has been included in Section 10.1.2.2.
2662-1	Hill, Janet	Thank you for your comments on the Draft EIS. Chapter 4 provides information on each of the alternatives. SA-04 is described in detail in this chapter. The appearance of this route may look different depending on the scale of each map (which is shown on each of the various figures).
2662-2	Hill, Janet	Thank you for your comments on the Draft EIS. Your comment was considered in development of the FEIS. Changes have been made to Chapter 10.
2662-3	Hill, Janet	Available data on the health risk of bitumen have been presented.
2662-4	Hill, Janet	Thank you for your comments on the Draft EIS. Your comment was considered in development of the FEIS. Changes have been made to Chapter 10.

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Response#	Commenter	Response
2662-5	Hill, Janet	SA-04 is a system alternative evaluated to aid the Commission's evaluation of whether or not to grant a CN for the proposed project. A system alternative is not a routing alternative, as no entity has proposed to build such a pipeline, detailed routing and design have not been conducted, and a route permit could not be issued for SA-04. Instead, a system alternative is a serves as a broader level point of comparison to the Applicant's Proposed project and the other CN alternatives. The level of analysis of SA-04 is in line with this concept.
2662-6	Hill, Janet	The scope of analysis of impacts to recreation and tourism resources included within Chapter 5 is explained in greater detail within Section 5.3.2.1 of the FEIS: "In addition, Minnesota Administrative Rules Part 7853.0600, Subpart 2(J) requires listing of 'state critical areas, state WMAs; state scientific and natural areas; state wild, scenic, and recreational rivers; state parks; state scenic wayside parks; state recreational areas; state forests; state trails; state canoe and boating rivers; state zoos, and designated trout lakes through which the route passes, as mapped on the inventory of significant resources by the State Planning Agency.' Chapter 10 of the FEIS deals specifically with accidental releases/spills, including potential impacts to recreation and tourism areas and related resources resulting from a release/spill.
2662-7	Hill, Janet	For analysis of construction impacts Chapter 5 provides: The ROI for the analysis of potential impacts on groundwater during construction generally consists of the pipeline, rail, or truck corridor and a 1,000-foot buffer on either side of the centerline of the Applicant's proposed project and the CN Alternatives. This includes Alternative SA-04. Operational impacts are addressed per established corridor size.
1982-1	Hill, Janet	Thank you for your comments on the Draft EIS. Enbridge has not supplied information regarding security of the SCADA system.
1982-2	Hill, Janet	Additional information regarding inspections and monitoring is presented in Section 8.3.
1982-3	Hill, Janet	Soil acidity is related to corrosion, which is discussed within Section 8.3.
0126-1	Hill, Jenny	Thank you for your comments on the Draft EIS. Requirements that Enbridge must abide by are discussed in Section 8.3.1.1 of the FEIS, according to State Statutes.

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Response#	Commenter	Response
2667-1	Honor the Earth - Blackburn, Paul	<p>Thank you for your comments on the Draft EIS.</p> <p>In an effort to address comments raised in scoping and comments on the DEIS and in an effort to respond to feedback and collaboration from federal and state agencies, tribal governments and natural resource staff, non-governmental agencies, citizens, and a host of other participants, an extensive range of topics have been addressed in the EIS.</p> <p>Information provided by the applicant has been reviewed and included in the EIS as appropriate based on the professional expertise of the team that prepared the EIS including DOC EERA staff, MN DNR staff, MPCA staff and staff from a team of consultants (see Chapter 13).</p>
2667-2	Honor the Earth - Blackburn, Paul	<p>This EIS assumes that the Applicant will comply with all necessary permits that would be required for the construction and operation of the pipeline, if a Certificate of Need and route permit are approved by the Commission.</p> <p>While the comment notes past permit violations, the evaluations within the EIS are based on the project for which applications were submitted and the commitments outlined by the Applicant. Assessing impacts based on assumed permit violation is not an approach that the Department finds to be practical or defensible.</p>
2667-3	Honor the Earth - Blackburn, Paul	<p>While the Applicant has reported that the ultimate design capacity of this pipeline is 915,000 barrels per day, the Applicant has indicated that this is not the level of throughput that they are seeking to permit and that further engineering design studies would be required to determine the number of pump stations needed to achieve this ultimate design capacity level.</p> <p>Should the Applicant choose to seek this expanded capacity in the future, they would need to apply for a Certificate of Need from the Commission, and the proposal would be subject to environmental review at that time.</p>
2667-4	Honor the Earth - Blackburn, Paul	Please see response to comment #2667-125.

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Response#	Commenter	Response
2667-5	Honor the Earth - Blackburn, Paul	The EIS approach on the Purpose and Need is explained in Chapter 1 of the EIS. Chapter 2 describes the Applicant's proposal, including an explanation of the Applicant's rationale for pursuing the project. Chapter 2 does not represent the Department's assessment of need.
2667-6	Honor the Earth - Blackburn, Paul	No notable changes are anticipated on the existing (recently upgraded) infrastructure in Wisconsin or elsewhere in conjunction with the Applicant's proposal. No proposal has been made for capacity expansions with sufficient detail to address in this review. If proposed, such a project would undergo environmental review in the appropriate jurisdictions.
2667-7	Honor the Earth - Blackburn, Paul	Please see response to comment #2667-129.
2667-8	Honor the Earth - Blackburn, Paul	Please see response to comment #2667-125.
2667-9	Honor the Earth - Blackburn, Paul	Please see response to comment #2667-128.
2667-10	Honor the Earth - Blackburn, Paul	Chapter 1 provides a discussion of the treatment of purpose and need in the EIS. Chapter 4 provides for a discussion of alternatives, including the continued use of existing line 3 at its existing capacity of 390,000 barrels per day.

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Response#	Commenter	Response
2667-11	Honor the Earth - Blackburn, Paul	<p>The range of alternatives evaluated is consistent with the scope of this EIS. As described in Section 4.2.3 of the EIS, under the current version of the proposed consent decree, increasing the capacity of the existing Line 3 to a higher operating capacity would require significant investment by Enbridge to repair and maintain the existing facilities.</p> <p>Based on a review of the proposed consent decree, the extent of effort/disturbance required to simply maintain a capacity of 390,000 barrels per day, and a review of Enbridge's rationale regarding the feasibility of this option, the alternative of increasing the throughput on the existing line 3 was not evaluated in the EIS.</p> <p>The Department did evaluate two alternatives that eliminate the need for an entirely new pipeline route, including the continued use of existing line 3 at its existing capacity, use of existing line 3 at its existing capacity supplemented by up to 370,000 bpd of transport via alternative modes, and up to 760,000 bpd of transport via alternative modes, RA-07 and RA-08 (see Sections 4.2.8 and 4.2.9).</p>
2667-12	Honor the Earth - Blackburn, Paul	<p>The Department's treatment of the purpose and need is described in Chapter 1 of the EIS. It is not clear whether existing and other proposed pipelines meet the need for this proposed project; however, further information on the economic need or viability of other regional pipelines to transport the volume of additional oil proposed by the Applicant's project will be developed in the Certificate of Need hearing process.</p> <p>The environmental implications of a Commission determination that existing and/or other proposed pipelines meet the need for the proposed project is addressed in the review of continued operation of existing line 3 at 390,000 barrels per day. This analysis (i.e., the environmental impacts associated with the Certificate of Need alternatives) is provided in Chapter 5 of the EIS.</p>
2667-13	Honor the Earth - Blackburn, Paul	<p>The EIS evaluates the environmental impacts of a range of alternatives, providing for an assessment of the impacts of options for transport that may be considered by the Commission. The economics of the CN alternatives will be evaluated by the Department of Commerce Division of Energy Resources Energy Planning and Advocacy and other parties as part of the contested case hearing.</p>

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Response#	Commenter	Response
0859-1	Honor the Earth - Laduke, Winona	Thank you for your comments on the Draft EIS. The denial of the Certificate of Need by the Commission for a new oil pipeline is not a mechanism through which specific operational changes to other infrastructure can be mandated, such as action to shut down or remove existing Line 3 or any of the other mainline pipelines. Therefore, action to shut down and remove pipelines in the mainline corridor is not included in the “no-action” alternative.
0858-1	Honor the Earth - Laduke, Winona	Thank you for your comments on the Draft EIS. The comment was considered in development of the FEIS.
0858-2	Honor the Earth - Laduke, Winona	The comment was considered in development of the FEIS.
0858-3	Honor the Earth - Laduke, Winona	Chapter 12 of the FEIS focuses on the cumulative potential effects of greenhouse gas emissions on climate, while the specific greenhouse gas emissions associated with the proposed Project and its alternatives are discussed in Sections 5.2.7 and 6.3.7 of the FEIS.
0868-1	Honor the Earth - Maxwell, Thane	Thank you for your comments on the Draft EIS. Essentially correct. Please note predictions are not a guarantee of outcome. The predictive risk analysis was removed due to issues with its application. Historic pipeline incident data was expanded to detail historic incident rates and causes. Current spill probabilities for a new pipeline using modern metallurgy and coating technologies would likely be less than historic incidents caused by corrosion or other internal failures.
0868-2	Honor the Earth - Maxwell, Thane	The EIS discusses the abandonment of only Line 3.

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Response#	Commenter	Response
0867-1	Honor the Earth - Maxwell, Thane	<p>As indicated in Section 10.3, on June 3, 2019 the Minnesota Court of Appeals ruled that the Revised Final Line 3 EIS of February 12, 2018 was inadequate because it failed to specifically address the potential impact of an oil spill into the Lake Superior watershed. In order to address the court’s opinion Enbridge commissioned a modeling analysis on behalf of and with input from the Minnesota Department of Commerce, Energy Environmental Review Analysis Staff for one additional hypothetical crude oil release from a pipeline crossing within the Lake Superior watershed (Stantec et al. 2019; Appendix V).</p> <p>When considered together with the seven previously modeled sites, Little Otter Creek as the eighth representative release site can be used to further characterize the range of trajectory, fate, and potential consequences of an oil spill in the project area. Using the same assumptions used for the other sites, the spill modeling was used to predict the potential trajectory of released oil, the fate of released oil, and the potential effects of accidental oil releases on the natural and human environment. The intent of these analyses was to infer a range of potential effects that may occur at this and other locations in Minnesota with similar biophysical and human use characteristics.</p>
0867-2	Honor the Earth - Maxwell, Thane	The first was the chance of a small spill and the second was chance of pinhole releases.
0867-3	Honor the Earth - Maxwell, Thane	A discussion of buoyancy controls is presented in Section 8.3.1.4 of the FEIS.
0867-4	Honor the Earth - Maxwell, Thane	In the near term, impacts on socioeconomics from Line 3 abandonment are anticipated to be minimal. Abandonment could decrease tax revenues or shift them to other taxing authorities. In the longer term, impacts on socioeconomics, particularly agricultural production, could be significant due to subsidence and/or exposure of pipeline. These potential impacts could be lessened by monitoring, adaptive management, and site-specific mitigation measures
2062-1	Honor the Earth - Slagle, Nicolette	Thank you for your comments on the Draft EIS. Additional information related to corrosion and the failing coating has been included within Section 8.3 of the FEIS.

Responses to Comments – Citizen

Response#	Commenter	Response
2053-1	Honor the Earth - Slagle, Nicolette	Thank you for your comments on the Draft EIS. Section 195.563 of 49 CFR Subpart H – Corrosion Control states that cathodic protection must be in operation no later than 1 year after the pipeline is constructed. This does not mean Enbridge would wait a full year to install the system. It is typically installed as part of the construction process. The buried pipeline would also be protected from external corrosion by application of a coating.
2053-2	Honor the Earth - Slagle, Nicolette	While ultraviolet light does degrade various type of plastic pipe, the effect on steel pipe is de minimis.
2053-3	Honor the Earth - Slagle, Nicolette	Tribal consultation is discussed in Chapter 9. A formal consultation policy is provided in Appendix P. Revisions have been made to Chapter 9 to show that consultation does not equate to consent of a project.
2030-1	Honor the Earth - Slagle, Nicolette	Thank you for your comments on the Draft EIS. The occurrence of 17 wild rice lakes within 0.5 mile of the Applicant's Preferred Route does not mean all of these lakes will be affected. Only 4 lakes would be affected. The amount of acreage impacted would be less than 5 acres.
0909-1	Honor the Earth - Slagle, Nicolette	Thank you for your comments on the Draft EIS. The referenced cost estimate was provided by Enbridge to Cardno. There has been no further verification of the removal cost estimate.
0525-1	Horyza, Tim	Environmental benefits are discussed throughout the EIS for the Applicant's proposed project/preferred route and the alternatives. These are noted as positive impacts.
1027-1	Houston, Jennifer	Thank you for your comments on the Draft EIS. Tribal resources are addressed primarily in Chapters 9 and 11; however, references are provided throughout the EIS to note where specific resources analyses (e.g., wild rice, cultural sites) include a discussion of impacts to American Indian tribes and tribal resources.
1027-2	Houston, Jennifer	Potential impacts to affected natural resources are discussed in Chapters 5 and 6, and how American Indian tribes experience and interact with these resources is summarized in Chapters 9 and 11. This constitutes the analysis of treaty rights within this EIS.
1027-3	Houston, Jennifer	The draft EIS noted that only three reports were reviewed; the additional reports now have been reviewed. Revisions to Sections 5.4.2 and 6.4.2 have been made to show this.

Responses to Comments – Citizen

Response#	Commenter	Response
1027-4	Houston, Jennifer	As noted in Section 11.4 of the FEIS, the applicant may work with companies and subcontractors hired to construct, restore and operate the pipeline to prepare and implement an education plan or awareness campaign regarding the issue of sexual abuse or sex trafficking. The section has been revised to clarify that the applicant may also provide funding to support the efforts of local and tribal law enforcement on this and other safety-related issues, which would enable local entities to tailor approaches and solutions to the local community.
1027-5	Houston, Jennifer	<p>As indicated in Section 10.3, on June 3, 2019 the Minnesota Court of Appeals ruled that the Revised Final Line 3 EIS of February 12, 2018 was inadequate because it failed to specifically address the potential impact of an oil spill into the Lake Superior watershed. In order to address the court’s opinion Enbridge commissioned a modeling analysis on behalf of and with input from the Minnesota Department of Commerce, Energy Environmental Review Analysis Staff for one additional hypothetical crude oil release from a pipeline crossing within the Lake Superior watershed (Stantec et al. 2019; Appendix V).</p> <p>When considered together with the seven previously modeled sites, Little Otter Creek as the eighth representative release site can be used to further characterize the range of trajectory, fate, and potential consequences of an oil spill in the project area. Using the same assumptions used for the other sites, the spill modeling was used to predict the potential trajectory of released oil, the fate of released oil, and the potential effects of accidental oil releases on the natural and human environment. The intent of these analyses was to infer a range of potential effects that may occur at this and other locations in Minnesota with similar biophysical and human use characteristics.</p>
1027-6	Houston, Jennifer	The 30 year time-frame was chosen to match the economic life of the project indicated by the Applicant. For purposes of comparison across alternatives, the EIS provides a consistent time that is long enough to understand typical annual operating impacts/tradeoffs of the alternatives.

Responses to Comments – Citizen

Response#	Commenter	Response
1027-7	Houston, Jennifer	<p>The EIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release.</p> <p>As indicated in Section 10.3, on June 3, 2019 the Minnesota Court of Appeals ruled that the Revised Final Line 3 EIS of February 12, 2018 was inadequate because it failed to specifically address the potential impact of an oil spill into the Lake Superior watershed. In order to address the court’s opinion Enbridge commissioned a modeling analysis on behalf of and with input from the Minnesota Department of Commerce, Energy Environmental Review Analysis Staff for one additional hypothetical crude oil release from a pipeline crossing within the Lake Superior watershed (Stantec et al. 2019; Appendix V).</p> <p>When considered together with the seven previously modeled sites, Little Otter Creek as the eighth representative release site can be used to further characterize the range of trajectory, fate, and potential consequences of an oil spill in the project area. Using the same assumptions used for the other sites, the spill modeling was used to predict the potential trajectory of released oil, the fate of released oil, and the potential effects of accidental oil releases on the natural and human environment. The intent of these analyses was to infer a range of potential effects that may occur at this and other locations in Minnesota with similar biophysical and human use characteristics.</p>
1027-8	Houston, Jennifer	<p>This has been corrected. The applicant (primary responsible party or PRP) and their contractors are the responders. Spill recovery efforts are monitored, and as needed directed, by the Federal and State on-scene coordinators. If the PRP’s response efforts are deemed to be inadequate, the NCP authorizes mobilization of federal and state resources, funded by the Oil Spill Liability Trust Fund, which in turn will bill the PRP for funds expended in the response.</p>

Responses to Comments – Citizen

Response#	Commenter	Response
1027-9	Houston, Jennifer	Section 6.2.4.3 of the FEIS includes a discussion on the presence of an oil or gas pipeline, or pipeline easement, and potential effects on property values. A review of relevant literature provided limited to no conclusive evidence that the presence of a pipeline and associated easement would have an effect - negative or otherwise - on surrounding property values. Table 6.2.4-5 within the aforementioned section summarizes the findings reviewed. Ultimately, landowner property values are a product of many local or regional market variables, of which the presence of a pipeline is only one. The discussion clarifies that spills, ruptures and other incidents potentially resulting in "legacy contamination" may have a greater impact on property values. The magnitude of such impacts is highly dependent on the specific nature of the contamination. As stated within Table 8.3-1, in the long term, socioeconomic impacts can be lessened by monitoring, adaptive management, and site-specific mitigation measures. As stated within FEIS Section 8.3.1.1.1, the Applicant would continue to be responsible for preventing discharges and contamination, as spelled out in Minnesota Statutes.
1027-10	Houston, Jennifer	Long-term monitoring and mitigation is discussed in Section 8.3.1 of the FEIS.
1027-11	Houston, Jennifer	Discussion of buoyancy is provided in Section 8.3.1.4 of the FEIS.
1027-12	Houston, Jennifer	Discussion of buoyancy and surface subsidence is provided in Section 8.3.1.4, and Appendix B Section 7.2, respectively of the FEIS. Further discussion of corrosion is provided in Appendix B Section 4.
1027-13	Houston, Jennifer	Discussion of abandonment of Line 3 only is provided in this EIS.
1027-14	Houston, Jennifer	Enbridge states risks associated with removal in Appendix B and Section 3.1 of the FEIS. Additional discussion related to pipe spacing and potential for removal is included in Section 8.4.
1027-15	Houston, Jennifer	Enbridge has been, and will continue to be responsible for such contamination as regulated by State Statutes identified in Section 8.3.1.1 of the FEIS.
1027-16	Houston, Jennifer	The affected area width, or Region of Interest (ROI), is discussed under the Methodology heading of each sub-section within Chapter 5.

Responses to Comments – Citizen

Response#	Commenter	Response
1027-17	Houston, Jennifer	Additional information regarding installation in wetlands, and subsequent restoration, is included in Section 2.7.2.
1027-18	Houston, Jennifer	Section 2.3.2 has been updated to indicate the requirement of 49 CFR that cathodic protection systems be operational within one year of construction.
1027-19	Houston, Jennifer	Section 5.3.4.1 of the FEIS does state that Enbridge has appealed the amount of property taxes paid between 2012 and 2016, and that to date the appeal has not been settled. Tax implications associated with retirement/abandonment of the existing Line 3 are uncertain at this time.
2669-1	Howe, Arthur	Thank you for your comments on the Draft EIS. Section 10.5.1 of the FEIS discusses the applicant's programs in place to help prevent spills. This includes additional training for personnel. The applicant has not indicated the potential use of drones.
2669-2	Howe, Arthur	Case studies of several significant spills and discussion of their impacts to various resources have been included in the EIS. Section 10.5.3.1 of the FEIS discusses the use of the Region 5 Regional Response Team's Inland Response Tactics Manual, which provides techniques and methods for responding to various spill conditions. Specific actions and equipment are discussed in Section 10.6.1.
0693-1	Howley, Nora	Thank you for your comments on the Draft EIS. The 30 year time-frame was chosen to match the economic life of the project indicated by the Applicant. For purposes of comparison across alternatives, the EIS targets a consistent time-frame that is long enough to understand typical annual operating impacts/tradeoffs of the alternatives.

Responses to Comments – Citizen

Response#	Commenter	Response
2764-1	Hubbard County Coalition of Lake Associations	Thank you for your comments on the Draft EIS. The FEIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release. The spill model does include winter, spring and summer conditions. Case studies of several significant spills and discussion of their impacts to various resources have been included. Discussion of access and weather conditions impacts to response times is included in the FEIS.
2764-2	Hubbard County Coalition of Lake Associations	State plan/recreational areas, State parks, Wildlife Management Areas (WMAs), and Waterfowl production areas are included in the assessment crude oil exposures and impacts.
2764-3	Hubbard County Coalition of Lake Associations	Thank you for your comment. Each project presents its own unique characteristics. Relative to water crossings, project-specific information is required and relevant for assessing impacts or required mitigation measures.
2764-4	Hubbard County Coalition of Lake Associations	Section 5.2.3 - Vegetation, Section 6.3.3 - Vegetation, and Chapter 7 of the DEIS all address specific potential direct and indirect impacts to terrestrial vegetation in terms of potential impacts from spread of noxious and invasive plant species. The analysis is quantified to the degree possible by noting the specific known locations of state-listed noxious weeds, and invasive plant species, within the ROI of the Proposed Project as well as alternative routes. The impact analysis integrates the plan for preventing the spread of invasive species, as addressed in Section 1.6 - Controlling Spread of Undesirable Species, of the Environmental Protection Plan (EPP), Appendix E of the DEIS. Appendix A to this document lists the known State-listed noxious weeds, and invasive terrestrial and aquatic plant species, as well as invasive fish and invertebrate species known to occur within the vicinity of the Proposed Project and alternative routes, by state. The EPP outlines construction-related environmental policies, procedures, and protection measures that would be implemented during project construction and operation specifically to avoid introduction and spread of noxious weeds.

Responses to Comments – Citizen

Response#	Commenter	Response
2764-5	Hubbard County Coalition of Lake Associations	SA-04 is a system alternative evaluated to aid the Commission's evaluation of whether or not to grant a CN for the proposed project. A system alternative is not a routing alternative, as no entity has proposed to build such a pipeline, detailed routing and design have not been conducted, and a route permit could not be issued for SA-04. Instead, a system alternative is a serves as a broader level point of comparison to the Applicant's Proposed project and the other CN alternatives. The level of analysis of SA-04 is in line with this concept.
0694-1	Hughes, Joan	Thank you for your comments on the Draft EIS. The 30-year timeframe was chosen to match the economic life of the project indicated by the Applicant. For purposes of comparison across alternatives, the EIS targets a consistent timeframe that is long enough to understand typical annual operating impacts/tradeoffs of the alternatives.
1985-1	Hulstrand, Karen	Thank you for your comments on the Draft EIS. Enbridge has not supplied a list of the chemical makeup of the product. Information related to the potential components is provided in Chapter 5.
0831-1	International Union of Operating Engineers - George, Jason	Thank you for your comments on the Draft EIS. Section 6.5.4 of the FEIS clarifies that it is likely that the Applicant would hire local residents during construction of any of the alternative routes for a portion of its workforce - based on current labor agreements in Minnesota at least 50% of workers will be expected to be employed from local union halls.
0831-2	International Union of Operating Engineers - George, Jason	Section 6.5.4 of the FEIS clarifies that it is likely that the Applicant would hire local residents during construction of any of the alternative routes for a portion of its workforce - based on current labor agreements in Minnesota at least 50% of workers will be expected to be employed from local union halls.
0831-3	International Union of Operating Engineers - George, Jason	The comment was considered in development of the FEIS.

Responses to Comments – Citizen

Response#	Commenter	Response
1030-1	International Union of Operating Engineers, Local 49 - George, Jason	Thank you for your comments on the Draft EIS. Chapters 5 and 6 of the FEIS included updated information regarding anticipated impacts of the project and various alternatives on employment, including labor requirements for various alternatives based on an estimate of 600 workers per construction spread. Specifically, Section 6.5.4.3 clarifies that jobs would be created for local labor as current labor agreements in Minnesota require that at least 50% of workers would be expected to be employed from local union halls. The FEIS also clarifies that some of these jobs would likely become permanent, based in part on overall labor market demand.
1030-2	International Union of Operating Engineers, Local 49 - George, Jason	Chapters 5 and 6 of the FEIS, specifically Sections 6.5.4.3, clarify that jobs would be created for local labor as current labor agreements in Minnesota require that at least 50% of workers would be expected to be employed from local union halls.
1030-3; 1030-4	International Union of Operating Engineers, Local 49 - George, Jason	Section 11 of the EIS addresses concerns regarding sex trafficking that have been raised by commenters, local communities, and other communities where pipelines have been sited or proposed. The EIS cites two sources when noting that increases in sex trafficking, particularly among Native populations, is well documented (National Congress of American Indians Policy Research Center 2016), and that American Indian and minority populations can be at higher risk based on various factors (Minnesota Department of Health [MDH] 2014). The conclusion can be generally drawn that these concerns have the potential to be amplified with the addition of a cash-rich workforce. To address this potential, and to address the concern that rural areas may not have resources necessary to detect and prevent these activities, Section 11.4 of the FEIS indicates that the applicant may provide funding to local and tribal law enforcement to support efforts to awareness and prevention.

Responses to Comments – Citizen

Response#	Commenter	Response
0696-1	Jeffrey, Susu	<p>Thank you for your comments on the Draft EIS.</p> <p>A discussion of alternatives is presented in Chapter 4. Specifically, a no action alternative, which is the denial of the CN, is discussed in Section 4.2.2. The purpose of the CN process is to determine whether the particular project being proposed is needed. There is no legal authority in a CN proceeding of a separate proposed project (at the state or with the Public Utilities Commission) to evaluate the ongoing need of an existing project. Once constructed, the safety and operation of an existing pipeline is regulated by the United States Department of Transportation, Pipeline and Hazardous Materials Safety Administration. In this particular case, Enbridge has entered into a consent decree with the United States Environmental Protection Agency that allows for the continued operation of the existing Line 3 if a replacement for the line is not approved. In other words, if the proposed Line 3 project is not approved by the Commission, the continued operation of the existing Line 3 will be regulated by the Federal government, not the State of Minnesota. Accordingly, shutting down and removing existing pipelines in the mainline corridor is not included in the No Action Alternative.</p>
0696-2	Jeffrey, Susu	<p>The EIS states that vulnerable populations, such as children, those with respiratory diseases, and the elderly, could be particularly sensitive to airborne pollutant releases following a spill and would likely experience moderate respiratory impacts depending on their proximity to the incident, current health status, and seasonal/weather conditions in the aftermath of the spill. In the event of a spill, spill response teams will be at the site as soon as possible (see Chapter 10).</p>
0697-1	Jewett, Kelly	<p>Thank you for your comments on the Draft EIS. An evaluation of potential impacts associated with oil spills is provided in Chapter 10, and an evaluation of potential impacts to low-income populations is included in Chapter 11. Appendix E provides the Environmental Protection Plan from the Applicant. This provides information on their procedures in case of a spill.</p>
2375-1	Johnson, Deanna	<p>Thank you for your comments on the Draft EIS. Chapter 3 of the FEIS discusses the regulatory framework.</p>
2375-2	Johnson, Deanna	<p>The comment was considered in development of the FEIS.</p>

Responses to Comments – Citizen

Response#	Commenter	Response
2375-3	Johnson, Deanna	The comment was considered in development of the FEIS.
2375-4	Johnson, Deanna	Information on Itasca State Park has been added in the FEIS.
2375-5	Johnson, Deanna	References to impaired waters crossed by the various alternatives was based on georeferenced data on stream segments and alternative crossings, and the waterbody's determination of water quality impairment as determined by MPCA.
2375-6	Johnson, Deanna	10 miles downstream was selected for the ROI, because it was considered to be not overly conservative, and crossing widths for the RAs were unavailable. The Applicant surveyed the streams and rivers for the APR only, so small (less than 30 feet wide) and large (30 feet wide or greater) crossings are only known for this route. It would be biased to only run the two downstream buffers (30 miles for large rivers, and 10 miles for small streams) along the APR. Furthermore, it was determined that it would be overly conservative to run a 30-mile downstream buffer for all water crossings, especially since many of these water bodies are ditches and terminate within a few miles.
2375-7	Johnson, Deanna	In Section 5.2.6.2.1, Itasca State Park is noted as being proximate to the Applicant's proposed project. In Section 6.3.6.2.1 and Section 6.3.6.2.2, the Applicant's preferred route and RA-03AM are noted as being proximate to Itasca State Park. Sections 5.4.2.6 and 5.4.3.1 were revised to include Itasca State Park, as the NRHP listed property is located within the ROI for the Applicant's proposed Project. Sections 6.4.2.1, 6.4.2.2.1, 6.4.3.1, and 6.4.3.2 were revised to include Itasca State Park, as the NRHP listed property is located within the ROI for the Applicant's Preferred Route and RA-03AM.
2375-8	Johnson, Deanna	Section 5.4 has been revised to focus on the data available from the Minnesota Historical Society databases. At the time of developing the EIS, this was the most complete data available. A discussion of Itasca State Park is included in Sections 5.4 and 6.4. This discussion, however, relates only to its NRHP significance, as per the cultural resources discussion. Its status as one of the National Natural Landmarks has been added to Section 5.2.6 and Section 6.3.6. Additional discussion of the Itasca State Park is also found in the wildlife sections, as it relates to the IBA (Important Bird Area).

Responses to Comments – Citizen

Response#	Commenter	Response
2375-9	Johnson, Deanna	Thank you for your comment.
2375-10	Johnson, Deanna	The analyses performed on the Applicant's Preferred Route and route alternatives are for the purpose of this EIS. Routing issues, including the public's concerns with a new pipeline corridor potentially being established as documented within comment and testimony in the Sandpiper docket, are discussed in Chapter 1.
2375-11	Johnson, Deanna	References to the Minnesota Department of Commerce Energy Environmental Review and Analysis (DOC-EERA)'s Scoping Summary Report for Line 3 Replacement and Sandpiper Pipeline Projects, and related dockets are included within the FEIS.
2375-12	Johnson, Deanna	Minnesota Department of Commerce, Energy Environmental Review and Analysis (DOC-EERA) staff has prepared this FEIS in consultation with the Commission's Executive Secretary, and with assistance from the Minnesota Department of Natural Resources (Minnesota DNR) and Minnesota Pollution Control Agency (Minnesota PCA). Route Alternative RA-03AM analyzed in the FEIS, was initially proposed by the Minnesota PCA and modified with input from Minnesota DNR, largely reflects the alternative referenced by the commenter. Compared to other alternatives, this option reroutes around fens, fish hatcheries, and communities, and avoids specific Wildlife Management Areas.
2375-13	Johnson, Deanna	Comments made by the public and agencies including the MPCA and DNR regarding the Sandpiper Projects are acknowledged per references throughout the FEIS, including references to the Sandpiper docket and routing issues (FEIS Chapter 1). Chapter 12 of the FEIS addresses cumulative potential effects pertaining to the Applicant's Proposed Project/Preferred Route and Certificate of Need Alternatives and Route Alternatives pertaining to this EIS, including resources impacted, as well as cumulative spills, by all alternatives that would share an environmentally relevant area with the reasonably foreseeable action of addition of pipeline in the same corridor.
2375-14	Johnson, Deanna	Climate change is affecting many natural resources. Thank you for your comment.
2375-15	Johnson, Deanna	The executive summary of the FEIS provides information on the purpose of the EIS and the decisions they inform, while Section 1.4 provides details about broader policy implications.

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Response#	Commenter	Response
2375-16	Johnson, Deanna	The executive summary of the FEIS provides information on the purpose of the EIS and the decisions they inform, while Section 1.4 provides details about broader policy implications.
2375-17	Johnson, Deanna	Each alternative is analyzed based on its overall impacts along its proposed route.
0851-1	Johnson, Deanna	Thank you for your comments on the Draft EIS. Chapter 13 of the FEIS includes a list of preparers for the Document. Information provided by Enbridge and others throughout the FEIS has been noted as such.
0851-2	Johnson, Deanna	An updated list of preparers is provided in Chapter 13.
0851-3	Johnson, Deanna	An updated list of preparers is provided in Chapter 13.
0851-4	Johnson, Deanna	The FEIS focuses on impacts to waterbodies of concern and relevant natural resources potentially affected by the alternatives presented.
0851-5	Johnson, Deanna	Thank you for the comment. In cooperation with the Minnesota Department of Commerce, the Minnesota Pollution Control Agency and Minnesota Department of Natural Resources were both included in the DEIS and FEIS process.
2769-1	Johnson, Gregory	Thank you for your comments on the Draft EIS. Section 195.563 of 49 CFR Subpart H – Corrosion Control states that cathodic protection must be in operation no later than 1 year after the pipeline is constructed. This does not mean Enbridge would wait a full year to install the system. It is typically installed as part of the construction process. The buried pipeline would also be protected from external corrosion by application of a coating.
2768-1	Johnson, Gregory	Thank you for your comments on the Draft EIS. SA-04 is a conceptual alternative. It is not one that has been submitted by an applicant for permitting or review. The purpose of the alternative is to provide an appropriate comparison within the evaluation of CN alternatives.

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Response#	Commenter	Response
2768-2	Johnson, Gregory	SA-04 is a conceptual alternative. It is not one that has been submitted by an applicant for permitting or review. The purpose of the alternative is to provide an appropriate comparison within the evaluation of CN alternatives.
2767-1	Johnson, Gregory	Thank you for your comments on the Draft EIS. A detailed analysis of all impacts to all of the various and site-specific natural resources was not possible under the FEIS process.
2381-1	Joo, Misa	Thank you for your comments on the Draft EIS. Information regarding tribal consultation is provided in Chapter 9 and Appendix P of the FEIS. A tribal consultation policy was developed in March 2016.
2381-2	Joo, Misa	Tribal resources are addressed primarily in Chapters 9 and 11; however, references are provided throughout the EIS to note where specific resources analyses (e.g., wild rice, cultural sites) include a discussion of impacts to American Indian tribes and tribal resources.
2381-3	Joo, Misa	Potential impacts to affected natural resources are discussed in Chapters 5 and 6, and how American Indian tribes experience and interact with these resources is summarized in Chapters 9 and 11. This constitutes the analysis of treaty rights within this EIS.
2381-4	Joo, Misa	Chapter 11 of the FEIS has been expanded to include additional information on the assessment of and impacts to potential EJ communities. As described in the section, the identification of potential EJ communities or the potential for disproportionately high and adverse impacts does not preclude approval of the project or selection of a route alternative; however, it does require detailed efforts to avoid, mitigate, minimize, rectify, reduce, and/or eliminate the impacts. Section 11.4 of the EIS describes the measures that may be undertaken by the applicant to minimize or mitigate adverse impacts. As noted in this section, the applicant may work with companies and subcontractors hired to construct, restore and operate the pipeline to prepare and implement an education plan or awareness campaign regarding the issue of sexual abuse or sex trafficking. Section 11.4 has been revised to clarify that the applicant may also provide funding to support the efforts of local and tribal law enforcement on this and other safety-related issues, which would enable local entities to tailor approaches and solutions to their community, and/or to collaborate with experts in this field.

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Response#	Commenter	Response
2381-5	Joo, Misa	The draft EIS noted that only three reports were reviewed; the additional reports now have been reviewed. Revisions to Sections 5.4.2 and 6.4.2 have been made to show this.
2381-6	Joo, Misa	<p>The FEIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release.</p> <p>As indicated in Section 10.3, on June 3, 2019 the Minnesota Court of Appeals ruled that the Revised Final Line 3 EIS of February 12, 2018 was inadequate because it failed to specifically address the potential impact of an oil spill into the Lake Superior watershed. In order to address the court’s opinion Enbridge commissioned a modeling analysis on behalf of and with input from the Minnesota Department of Commerce, Energy Environmental Review Analysis Staff for one additional hypothetical crude oil release from a pipeline crossing within the Lake Superior watershed (Stantec et al. 2019; Appendix V).</p> <p>When considered together with the seven previously modeled sites, Little Otter Creek as the eighth representative release site can be used to further characterize the range of trajectory, fate, and potential consequences of an oil spill in the project area. Using the same assumptions used for the other sites, the spill modeling was used to predict the potential trajectory of released oil, the fate of released oil, and the potential effects of accidental oil releases on the natural and human environment. The intent of these analyses was to infer a range of potential effects that may occur at this and other locations in Minnesota with similar biophysical and human use characteristics.</p>

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Response#	Commenter	Response
2381-7	Joo, Misa	<p>The FEIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release.</p> <p>As indicated in Section 10.3, on June 3, 2019 the Minnesota Court of Appeals ruled that the Revised Final Line 3 EIS of February 12, 2018 was inadequate because it failed to specifically address the potential impact of an oil spill into the Lake Superior watershed. In order to address the court’s opinion Enbridge commissioned a modeling analysis on behalf of and with input from the Minnesota Department of Commerce, Energy Environmental Review Analysis Staff for one additional hypothetical crude oil release from a pipeline crossing within the Lake Superior watershed (Stantec et al. 2019; Appendix V).</p> <p>When considered together with the seven previously modeled sites, Little Otter Creek as the eighth representative release site can be used to further characterize the range of trajectory, fate, and potential consequences of an oil spill in the project area. Using the same assumptions used for the other sites, the spill modeling was used to predict the potential trajectory of released oil, the fate of released oil, and the potential effects of accidental oil releases on the natural and human environment. The intent of these analyses was to infer a range of potential effects that may occur at this and other locations in Minnesota with similar biophysical and human use characteristics.</p>
2381-8	Joo, Misa	<p>Information about Potential Impacts of Line 3 Abandonment are detailed in Section 8.3.1 and Table 8.3-1. "In the near term, impacts on socioeconomics are anticipated to be minimal. Abandonment could decrease tax revenues or shift them to other taxing authorities. In the longer term, impacts on socioeconomics, particularly agricultural production, could be significant due to subsidence and/or exposure of pipeline. These potential impacts could be lessened by monitoring, adaptive management, and site-specific mitigation measures."</p>

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Response#	Commenter	Response
2381-9	Joo, Misa	Enbridge has analyzed and modeled potential subsidence of the abandoned Line 3 in its proposed abandonment plan (see Appendix B). This analysis includes projecting loss of pipeline wall thickness due to corrosion over time, possible failure modes for the pipeline, and estimated subsidence levels should the pipeline fail.
2381-10	Joo, Misa	Additional information is included in Chapter 8 regarding the distance between existing pipelines in the Mainline corridor (see Table 8.4-2).
2381-11	Joo, Misa	Information regarding the temporary restoration of wetlands is provided in Appendix E. This outlines the methods that the Applicant will take to restore the conditions to the pre-condition state.
2381-12	Joo, Misa	Cathodic protection is discussed in Chapter 8 of the FEIS.
2381-13	Joo, Misa	The cumulative potential impacts of climate change are discussed briefly in Executive Summary and additional details in Section 12.5. Section 12.5 also discusses climate change trends in Minnesota and the Midwest.
2381-14	Joo, Misa	Chapter 1 of the FEIS clearly states that the EIS is a factual document that is designed to inform public deliberations and government decision-making, but does not make specific recommendations regarding the Certificate of Need (or Route Permit) for the Project. The Commission will consider if the consequences to society of granting the Certificate of Need are more favorable than the consequences of denying the Certificate, among other decision factors per Minnesota Administrative Rules Chapter 7853, stated in the FEIS Executive Summary.

Responses to Comments – Citizen

Response#	Commenter	Response
2349-1	Jordahl Redlin, Erin	Thank you for your comments on the Draft EIS. Ten miles downstream was selected for the ROI, because it was considered to be not overly conservative, and crossing widths for the RAs were unavailable. The Applicant surveyed the streams and rivers for the APR only, so small (less than 30 feet wide) and large (30 feet wide or greater) crossings are only known for this route. It would be biased to only run the two downstream buffers (30 miles for large rivers, and 10 miles for small streams) along the APR. Furthermore, it was determined that it would be overly conservative to run a 30-mile downstream buffer for all water crossings, especially since many of these water bodies are ditches and terminate within a few miles.
2349-2	Jordahl Redlin, Erin	Permitting requirements will adhere to all state and federally-relevant regulations. All relevant state and federal agencies will be involved in permitting decisions relative to streams, lakes and other natural resources.
2387-1	Kennedy, Lucille Allison	Thank you for your comments on the Draft EIS. Potential impacts to affected natural resources are discussed in Chapters 5 and 6, and how American Indian tribes experience and interact with these resources is summarized in Chapters 9 and 11. This constitutes the analysis of treaty rights within this EIS.

Responses to Comments – Citizen

Response#	Commenter	Response
2387-2	Kennedy, Lucille Allison	Additional information has been added to the discussion of impacts to wild rice (based on limited availability of public information) in Sections 5.2.1 and 6.3.1, as well as in Chapters 9 and 10. Additional information has been added to the discussion of cultural resources in Sections 5.4 and 6.4. In these sections, impacts to archaeological sites, which may include American Indian artifacts, are discussed for both the CN alternatives and the route alternatives. With respect to Chapter 11, several sources were reviewed to better understand the concerns related to sex trafficking. These concerns have been raised in recent local media, by commenters, local communities, and other communities where pipelines have been sited or proposed. Two sources are cited to support this concern; Chapter 11 indicates that increases in sex trafficking, particularly among Native populations, is well documented (National Congress of American Indians Policy Research Center 2016), and that American Indian and minority populations can be at higher risk based on various factors (Minnesota Department of Health [MDH] 2014). The discussion concludes that these concerns have the potential to be amplified with the addition of a cash-rich workforce. To address this potential, Section 11.4 of the EIS notes that the applicant may work with companies and subcontractors hired to construct, restore and operate the pipeline to prepare and implement an education plan or awareness campaign regarding the issue of sexual abuse or sex trafficking. Section 11.4 has been revised to clarify that the applicant may also provide funding to support the efforts of local and tribal law enforcement on this and other safety-related issues, which would enable local entities to tailor approaches and solutions to their community, and/or to collaborate with experts in this field.
2387-3	Kennedy, Lucille Allison	Additional information has been included in Chapter 10.
2387-4	Kennedy, Lucille Allison	Discussion of emergency response are required by the Consent Decree, which is discussed is Section 8.3.1 of the FEIS.

Responses to Comments – Citizen

Response#	Commenter	Response
2387-5	Kennedy, Lucille Allison	Information about Potential Impacts of Line 3 Abandonment are detailed in Section 8.3.1 and Table 8.3-1. "In the near term, impacts on socioeconomics are anticipated to be minimal. Abandonment could decrease tax revenues or shift them to other taxing authorities. In the longer term, impacts on socioeconomics, particularly agricultural production, could be significant due to subsidence and/or exposure of pipeline. These potential impacts could be lessened by monitoring, adaptive management, and site-specific mitigation measures."
2387-6	Kennedy, Lucille Allison	The EIS uses social cost of carbon (SCC) values that were assessed using a 3-percent discount rate developed by the Interagency Working Group to provide an estimate of potential climate change damages for the Applicant's proposed project and CN Alternatives based on total direct and indirect GHG emissions. The SCC is a useful measure to assess the benefits of CO ₂ reductions.
1035-1	Kilpatrick, Julie	Thank you for your comments on the Draft EIS. Your comment has been considered in the development of the FEIS.

Responses to Comments – Citizen

Response#	Commenter	Response
1035-2	Kilpatrick, Julie	<p>The FEIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release.</p> <p>As indicated in Section 10.3, on June 3, 2019 the Minnesota Court of Appeals ruled that the Revised Final Line 3 EIS of February 12, 2018 was inadequate because it failed to specifically address the potential impact of an oil spill into the Lake Superior watershed. In order to address the court’s opinion Enbridge commissioned a modeling analysis on behalf of and with input from the Minnesota Department of Commerce, Energy Environmental Review Analysis Staff for one additional hypothetical crude oil release from a pipeline crossing within the Lake Superior watershed (Stantec et al. 2019; Appendix V).</p> <p>When considered together with the seven previously modeled sites, Little Otter Creek as the eighth representative release site can be used to further characterize the range of trajectory, fate, and potential consequences of an oil spill in the project area. Using the same assumptions used for the other sites, the spill modeling was used to predict the potential trajectory of released oil, the fate of released oil, and the potential effects of accidental oil releases on the natural and human environment. The intent of these analyses was to infer a range of potential effects that may occur at this and other locations in Minnesota with similar biophysical and human use characteristics.</p>

Responses to Comments – Citizen

Response#	Commenter	Response
1034-1	Kilpatrick, Julie	<p>The FEIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release.</p> <p>As indicated in Section 10.3, on June 3, 2019 the Minnesota Court of Appeals ruled that the Revised Final Line 3 EIS of February 12, 2018 was inadequate because it failed to specifically address the potential impact of an oil spill into the Lake Superior watershed. In order to address the court’s opinion Enbridge commissioned a modeling analysis on behalf of and with input from the Minnesota Department of Commerce, Energy Environmental Review Analysis Staff for one additional hypothetical crude oil release from a pipeline crossing within the Lake Superior watershed (Stantec et al. 2019; Appendix V).</p> <p>When considered together with the seven previously modeled sites, Little Otter Creek as the eighth representative release site can be used to further characterize the range of trajectory, fate, and potential consequences of an oil spill in the project area. Using the same assumptions used for the other sites, the spill modeling was used to predict the potential trajectory of released oil, the fate of released oil, and the potential effects of accidental oil releases on the natural and human environment. The intent of these analyses was to infer a range of potential effects that may occur at this and other locations in Minnesota with similar biophysical and human use characteristics.</p>
1035-3	Kilpatrick, Julie	A discussion of potential buoyancy mitigation measures is provided in Section 8.3.1.4 of the FEIS. Corrosion rates are discussed in Appendix B Section 4.3.1.4.
1034-2	Kilpatrick, Julie	A discussion of potential buoyancy mitigation measures is provided in Section 8.3.1.4 of the FEIS. Corrosion rates are discussed in Appendix B Section 4.3.1.4.
2400-1	Kroeger, Amelia	Thank you for your comments on the Draft EIS. Surface water quality can vary based on factors such as whether the waterbody in question has uses for public consumption, aquatic life or other valued attributes. The requirements for meeting various standards or criteria are based on each individual waterbody's potential to meet the standards for the use as designated by the state.

Responses to Comments – Citizen

Response#	Commenter	Response
2400-2	Kroeger, Amelia	Section 5.2.1.1.4 of the FEIS discusses multiple additives that may be used in drilling mud to help prevent loss of circulation. Section 5.2.1.2.3 discusses that only additives that have been approved by Minnesota Pollution Control Agency will be used.
2400-3	Kroeger, Amelia	The Applicant's preferred alternative would cross over approximately 5 acres of wild rice lake habitat. The alternative SA-04, like other alternatives, would not impact any wild rice lakes. The current FEIS has been corrected to reflect these numbers. The applicant would be required to meet all state construction requirements for constructing within a wetland/waterbody prior to approval. Mitigation would be required for all impacts to state resources.
0335-1	Kuhns, Matt	Thank you for your comments on the Draft EIS. Long-term considerations are discussed in various sections within Chapter 8 of the FEIS. Additional technical long-term considerations are provided in Appendix B.
0335-2	Kuhns, Matt	Section 8.3.1.1 of the FEIS discusses the requirements laid out in State Statutes that Enbridge must abide by.
0335-3	Kuhns, Matt	Section 11 of the EIS addresses concerns regarding sex trafficking that have been raised by commenters, local communities, and other communities where pipelines have been sited or proposed. The EIS cites two sources when noting that increases in sex trafficking, particularly among Native populations, is well documented (National Congress of American Indians Policy Research Center 2016), and that American Indian and minority populations can be at higher risk based on various factors (Minnesota Department of Health [MDH] 2014). The conclusion can be generally drawn that these concerns have the potential to be amplified with the addition of a cash-rich workforce. To address this potential, and to address the concern that rural areas may not have resources necessary to detect and prevent these activities, Section 11.4 of the FEIS indicates that the applicant may provide funding to local and tribal law enforcement to support efforts to awareness and prevention. Evaluating the effectiveness of these plans is beyond the scope of this EIS. Tribal resources are addressed primarily in Chapters 9 and 11; however, references are provided throughout the EIS to note where specific resources analyses (e.g., wild rice, cultural sites) include a discussion of impacts to American Indian tribes and tribal resources.

Responses to Comments – Citizen

Response#	Commenter	Response
1039-1	LaBerge, Kathy	Thank you for your comments on the Draft EIS. The FEIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release.
2410-1	Learmont, R	Thank you for your comments on the Draft EIS. Section 5.3.4.1 of the FEIS does state that Enbridge has appealed the amount of property taxes paid between 2012 and 2016, and that to date the appeal has not been settled. Tax implications associated with retirement/abandonment of the existing Line 3 are uncertain at this time.
2410-2	Learmont, R	The FEIS is not intended to provide information on the specifics of easements and the agreements between the Applicant (Enbridge) and property owners.
2410-3	Learmont, R	An assessment of whether removal (or partial removal) is viable has been included in Sections 8.4 and 8.5 of the FEIS. Such conditions may be conditions of a permit.
2408-1	Learmont, R	Thank you for your comments on the Draft EIS. Chapter 10 of the FEIS provides historic pipeline incident data including detailed historic incident rates and causes. Current spill probabilities for a new pipeline using modern metallurgy and coating technologies would likely be less than historic incidents caused by corrosion or other internal failures.
2407-1	Learmont, R	Thank you for your comments on the Draft EIS. The EIS and supporting maps were generated based on available data, while route alternatives data were supplied by the applicant.
2407-2	Learmont, R	Alternate route data was provided by the applicant.
2406-1	Learmont, R	Thank you for your comments on the Draft EIS. Additional information related to abandonment and removal has been included in Chapter 8 of the FEIS. This includes potential further studies related to both alternatives.
2406-2	Learmont, R	Additional information has been included in Chapter 8 to help present the viability of each option.

Responses to Comments – Citizen

Response#	Commenter	Response
2406-3	Learmont, R	If the Applicant is issued a Certificate of Need and route permit by the Commission, Enbridge could exercise the power of eminent domain to acquire land for the Project. Enbridge cannot use eminent domain to acquire a pipeline right-of-way across federal/state public or tribal lands. A detailed discussion of eminent domain is outside the scope of the FEIS.
2406-4	Learmont, R	The FEIS assumes that the Applicant will obtain and comply with all necessary permits and approvals that would be required for the construction and operation of the pipeline if a Certificate of Need and route permit are approved by the Commission. A list of required permits and approvals for the Applicant’s proposed project is presented in Table 3.6-1. It is the responsibility of each respective permitting authority to monitor and/or pursue enforcement of permit conditions with the Applicant.
2390-1	Leech Lake Area Watershed Foundation	Thank you for your comments on the Draft EIS. Publicly available datasets and field reports were used in developing the FEIS.
2390-2	Leech Lake Area Watershed Foundation	Thank you for your comment. It was considered in development of the FEIS. The FEIS assumes that the Applicant will obtain and comply with all necessary permits and approvals that would be required for the construction and operation, including any USEPA requirements, of the pipeline if a Certificate of Need and route permit are approved by the Commission. A list of required permits and approvals for the Applicant’s proposed project is presented in Table 3.6-1.
2390-3	Leech Lake Area Watershed Foundation	Publicly available datasets and field reports were used in developing the FEIS.
2390-4	Leech Lake Area Watershed Foundation	Case studies of several significant spills have been included.

Responses to Comments – Citizen

Response#	Commenter	Response
2390-5	Leech Lake Area Watershed Foundation	If the applicant (primary responsible party or PRP) spill response efforts are deemed to be inadequate, the NCP authorizes mobilization of federal and state resources, funded by the Oil Spill Liability Trust Fund, which in turn will bill the PRP for funds expended in the response. If it appears that there are significant impacts on natural resources due to a spill, a Natural Resource Damage Assessment (NRDA) may be initiated. NRDA is a legal process under the Oil Pollution Act of 1990 (OPA 90) that is used by federal, state, and tribal governments (referred to as “trustees”) to seek compensation for natural resource damages and restore vegetation; fish, wildlife, and their habitat; recreation resources; and other affected resources to pre-spill baseline conditions.
2390-6	Leech Lake Area Watershed Foundation	SA-04 is a system alternative evaluated to aid the Commission's evaluation of whether or not to grant a CN for the proposed project. A system alternative is not a routing alternative, as no entity has proposed to build such a pipeline, detailed routing and design have not been conducted, and a route permit could not be issued for SA-04. Instead, a system alternative is a serves as a broader level point of comparison to the Applicant's Proposed project and the other CN alternatives. The level of analysis of SA-04 is in line with this concept.
2390-7	Leech Lake Area Watershed Foundation	Discussion of access and weather conditions impacts to response times is included in the EIS.
2390-8	Leech Lake Area Watershed Foundation	SA-04 is a system alternative evaluated to aid the Commission's evaluation of whether or not to grant a CN for the proposed project. A system alternative is not a routing alternative, as no entity has proposed to build such a pipeline, detailed routing and design have not been conducted, and a route permit could not be issued for SA-04. Instead, a system alternative is a serves as a broader level point of comparison to the Applicant's Proposed project and the other CN alternatives. The level of analysis of SA-04 is in line with this concept.
2390-9	Leech Lake Area Watershed Foundation	The comment has been considered in the development of the FEIS.

Responses to Comments – Citizen

Response#	Commenter	Response
2390-10	Leech Lake Area Watershed Foundation	Additional information related to water resources for each route alternative has been included in Section 6.3.1 of the FEIS.
2390-11	Leech Lake Area Watershed Foundation	All construction and operational activities associated with pipelines must comply with the National Invasive Species Act.
2390-12	Leech Lake Area Watershed Foundation	Thank you for your comment. Groundwater resources are considered during evaluation of all alternatives. The quality of the groundwater has been considered based on protective regulations and designated groundwater protection areas for all alternatives.
2390-13	Leech Lake Area Watershed Foundation	Thank you for your comment. The analysis of impacts to groundwater considered the nature and potential viability of the resource as a water source. Groundwater analysis also considered the geologic nature of the underlying substrate and its capacity to limit or enhance impacts to groundwater regionally.
2390-14	Leech Lake Area Watershed Foundation	The ROI was identified as the distance that released oil would typically spread on flat ground (calculated to be 1,214 feet from the centerline) plus an additional distance of 1,050 feet for estimated down-gradient migration in groundwater (if groundwater were contacted); the estimated total distance of approximately 2,264 feet was rounded up to 2,500 feet. 10 miles downstream was selected, because it was considered to be not overly conservative, and crossing widths for the RAs were unavailable. The Applicant surveyed the streams and rivers for the APR ONLY, so small (<10 m wide) and large (10 m or > wide) crossings are only known for this route. It would be biased to only run the 2 downstream buffers (30 miles for large rivers, and 10 miles for small streams) along the APR. Furthermore, we determined that it would be overly conservative to run a 30-mile downstream buffer for all water crossings, especially since many of these water bodies are ditches and terminate within a few miles.
2390-15	Leech Lake Area Watershed Foundation	Publicly available datasets and field reports were used in the development of the FEIS.

Responses to Comments – Citizen

Response#	Commenter	Response
2390-16	Leech Lake Area Watershed Foundation	Thank you for your comment. It was considered in development of the FEIS. Potential degradation of surface water quality from construction and operation of the proposed project is discussed in Sections 5.2.1.2.4 and 6.3.1.2.4 of the FEIS.
2390-17	Leech Lake Area Watershed Foundation	The cumulative potential effects of climate change and trends in Minnesota and the Midwest are discussed in Section 12 of DEIS.
2390-18	Leech Lake Area Watershed Foundation	The EIS has been updated to include discussion on the properties of dilbit as it weathers.
2390-19	Leech Lake Area Watershed Foundation	Please refer to Greenhouse Gases in Section 5.2.7.2 of the FEIS. Also discussed in this Section are life-cycle GHG emissions from extraction to the end-use.
2390-20	Leech Lake Area Watershed Foundation	Chapter 8 of the FEIS discusses abandonment and removal.
2390-21	Leech Lake Area Watershed Foundation	Comment noted. As described in Chapter 11, per the regulatory framework, the identification of potential EJ communities or the potential for disproportionately high and adverse impacts does not preclude approval of the project or selection of a route alternative; however, it does require detailed efforts to avoid, mitigate, minimize, rectify, reduce, and/or eliminate the impacts. Section 11.4 of the EIS describes the measures that may be undertaken by the applicant to minimize or mitigate adverse impacts. With respect to the potential for sexual abuse or sex trafficking, Chapter 11.4 notes that the applicant may work with companies and subcontractors hired to construct, restore and operate the pipeline to prepare and implement an education plan or awareness campaign regarding the issue of sexual abuse or sex trafficking. This section has also been revised to clarify that the applicant may also provide funding to support the efforts of local and tribal law enforcement on this and other safety-related issues, which would enable local entities to tailor approaches and solutions to their community, and/or to collaborate with experts in this field.

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Response#	Commenter	Response
2390-22	Leech Lake Area Watershed Foundation	Thank you for your comment. It was considered in development of the FEIS. 10 miles downstream was selected for the ROI, because it was considered to be not overly conservative, and crossing widths for the route alternatives were unavailable.
2390-23	Leech Lake Area Watershed Foundation	10 miles downstream was selected, because it was considered to be not overly conservative, and crossing widths for the RAs were unavailable. The Applicant surveyed the streams and rivers for the APR ONLY, so small (<10 m wide) and large (10 m or > wide) crossings are only known for this route. It would be biased to only run the 2 downstream buffers (30 miles for large rivers, and 10 miles for small streams) along the APR. Furthermore, we determined that it would be overly conservative to run a 30-mile downstream buffer for all water crossings, especially since many of these water bodies are ditches and terminate within a few miles.
2390-24	Leech Lake Area Watershed Foundation	While the entire project is discussed generally, the scope of the analysis provided in this EIS is specific to the portion of the pipeline crossing through Minnesota.
2390-25	Leech Lake Area Watershed Foundation	The comment has been considered in development of the FEIS.
2390-26	Leech Lake Area Watershed Foundation	An updated list of preparers is provided in Chapter 13.
2390-27	Leech Lake Area Watershed Foundation	The methodologies used for each water resource type are discussed in their respective subsections within Section 5.2.1.
2390-28	Leech Lake Area Watershed Foundation	As required under Section 195.563 of 49 CFR Subpart H – cathodic protection must be in operation no later than 1 year after the pipeline is constructed. This does not mean Enbridge would wait a full year to install the system. It is typically installed as part of the construction process. The buried pipeline would also be protected from external corrosion by application of a coating.

Responses to Comments – Citizen

Response#	Commenter	Response
2390-29	Leech Lake Area Watershed Foundation	The applicant stated in their Certificate of Need application that the existing pipeline must run at reduced pressures due to its current state, and therefore cannot achieve the desired flow rate. They state that the proposed 36" pipeline is capable of higher flows than requested, but that they do not intend to pump at that rate.
2390-30	Leech Lake Area Watershed Foundation	Available design information for each alternative has been used to develop Chapter 6 of the FEIS.
2390-31	Leech Lake Area Watershed Foundation	For analysis of construction impacts Chapter 5 provides: The ROI for the analysis of potential impacts on groundwater during construction generally consists of the pipeline, rail, or truck corridor and a 1,000-foot buffer on either side of the centerline of the Applicant's proposed project and the CN Alternatives. This includes Alternative SA-04. Operational impacts are addressed per established corridor size.
2390-32	Leech Lake Area Watershed Foundation	An updated list of preparers is provided in Chapter 13.
2390-33	Leech Lake Area Watershed Foundation	Publicly available datasets and field reports were used in developing the FEIS.
2390-34	Leech Lake Area Watershed Foundation	Construction of the pipeline across streams and waterbodies will be required to meet all state and federal approved methods and construction techniques and mitigation of effects to water quality and associated fauna.
2390-35	Leech Lake Area Watershed Foundation	In Section 5.2.6.2.1, Itasca State Park is noted as being proximate to the Applicant's proposed project. In Section 6.3.6.2.1 and Section 6.3.6.2.2, the Applicant's preferred route and RA-03AM are noted as being proximate to Itasca State Park. Sections 5.4.2.6 and 5.4.3.1 were revised to include Itasca State Park, as the NRHP listed property is located within the ROI for the Applicant's proposed Project. Sections 6.4.2.1, 6.4.2.2.1, 6.4.3.1, and 6.4.3.2 were revised to include Itasca State Park, as the NRHP listed property is located within the ROI for the Applicant's Preferred Route and RA-03AM.

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Response#	Commenter	Response
2390-36	Leech Lake Area Watershed Foundation	The text accurately states that approximately 5 acres of wild rice habitat will be affected by the Applicant's propose project. It is unclear what table you are referring to regarding 3 acres of impact.
2390-37	Leech Lake Area Watershed Foundation	"Construction spread" estimates were provided by the Applicant. Technical information on construction spreads can be found in FEIS Chapter 2.
2390-38	Leech Lake Area Watershed Foundation	Thank you for your comment. Certain locations are not a Census designated area.
1738-1	Lelchuk, Steve	Thank you for your comments on the Draft EIS. SCADA system can be automatic control or just notifications of issue.
1806-1	Lemley, Kylie	Thank you for your comments on the Draft EIS. Appendix E, Environmental Protection Plan (EPP) provides revegetation and seeding in wetlands. Unsaturated wetlands shall be reseeded with a seed mix of native grasses as provided in the EPP. In cases where there is the concern for potential soil erosion post construction an annual companion crop (such as oats) to assist in reducing soil erosion in the first growing season while native grasses become established. This is a typical soil erosion practice used through the U.S.
1806-2	Lemley, Kylie	As noted in Section 11.4 of the FEIS, the applicant may work with companies and subcontractors hired to construct, restore and operate the pipeline to prepare and implement an education plan or awareness campaign regarding the issue of sexual abuse or sex trafficking. Section 11.4 has been revised to clarify that the applicant may also provide funding to support the efforts of local and tribal law enforcement on this and other safety-related issues, which would enable local entities to tailor approaches and solutions to their community, and/or to collaborate with experts in this field.

Responses to Comments – Citizen

Response#	Commenter	Response
1380-1	Levi, Bruce T. and Kathy J.	Thank you for your comments on the Draft EIS. Noise and vibration are discussed in Section 6.2.2. This section provides the methodology and discussion of the impacts anticipated with the construction and operation of the proposed pipeline project. Please note, the location of potential pump stations for all of the route alternatives is not provided, as such the analysis for this type of operation is limited.
1380-2	Levi, Bruce T. and Kathy J.	Table 6.2.2-8 provides information on the noise levels and potential impacts from pump station operations. As shown, the information is provided to the nearest sensitive receptor. This methodology often is used in analyses, such as the one provided within an EIS.
1380-3	Levi, Bruce T. and Kathy J.	<p>The Minnesota State noise standards are discussed in detail in Section 6.2.2.1.1. Additionally, Table 6.2.2-4 details the state standards for day and nighttime hours.</p> <p>Noise measurement readings from sensitive receptors is the established method for acquiring noise data for analyzing noise impacts. Noise readings are only conducted when winds are light and they cannot be recorded if the wind speed is above a certain threshold. Additionally, Minn. R. 7030.0040 states that the noise readings must be conducted within the applicable noise area classification (NAC) or as stated in the FEIS, sensitive receptor. When noise measurements are being captured, an average of the decibel level is recorded in order to remove any outlier noise readings (i.e., wind gusts).</p>
1380-4	Levi, Bruce T. and Kathy J.	This comment will be considered. Enbridge will only release reports/data to the public that are deemed appropriate for public release.
1380-5	Levi, Bruce T. and Kathy J.	This comment will be considered. Enbridge will only release reports/data to the public that are deemed appropriate for public release.
1380-6	Levi, Bruce T. and Kathy J.	Potential impacts associated with the view of pump stations are provided in Section 6.2.3.3. The Two Inlets pump station is noted as being partially visible to nearby receptors. While lights are not discussed, it is shown that this station would be partially screened.
1380-7	Levi, Bruce T. and Kathy J.	Information has been added to Chapter 2 to identify the e-Dockets information for three of the four connected actions that will be addressed by the state of Minnesota.

Responses to Comments – Citizen

Response#	Commenter	Response
1380-8	Levi, Bruce T. and Kathy J.	Thank you for pointing out this closer sensitive receptor. While Enbridge concedes that this sensitive receptor referred to in the comment is closer to the proposed pump station than the one surveyed from, the existing conditions and impacts of the sensitive receptor that was surveyed remain valid. The ambient noise levels recorded for the sensitive receptor at Two Inlets pump station would likely be similar to noise levels recorded at the closer sensitive receptor pointed out in the comment due to their close distance to each other and similar adjacent vegetation. Therefore, the impacts reported in Section 6.2.2.3 remain correct. Any changes as a result of recording noise levels at the other sensitive receptor, would not alter the concluding results of the study.
1380-9	Levi, Bruce T. and Kathy J.	Concur with the comment. Viewshed impacts related to the Two Inlets Pump Station changed to permanent and major. Due to the open area of the proposed pump station and open views from the nearby residences and highway, it was determined that nearby users could likely experience a higher degree of impact.
1810-1	Lindh, Ruth	Thank you for your comments on the Draft EIS. Information from the Consent Decree, including responsibility and timeframe, have been added to Section 8.3.1.1 of the FEIS.
2772-1	Long Lake Area Association	Thank you for your comments on the Draft EIS. Project alternatives, and associated natural resources that could be potentially affected, were identified during the EIS process using GIS-based analysis. ROIs considered those areas distal and but reasonably proximal to the selected alternative. Impacts were based on corridors identified during GIS analysis.
2772-2	Long Lake Area Association	Information cited in the comment regarding 2013 Hubbard County GIS and Assessor information is not disputed. It appears that this comment is regarding the Route Segment Alternative noted above. Please refer to previous response regarding project alternatives. Chapter 6 of the FEIS includes discussion on property taxes (existing conditions and impact assessment).
2772-3	Long Lake Area Association	Thank you for your comments on the Draft EIS. Your comment was considered in development of the FEIS.
2772-4	Long Lake Area Association	Thank you for your comments on the Draft EIS. Your comment was considered in development of the FEIS.

Responses to Comments – Citizen

Response#	Commenter	Response
0708-1	Lowery, Katy	Thank you for your comments on the Draft EIS. The 30 year time-frame was chosen to match the economic life of the project indicated by the Applicant. For purposes of comparison across alternatives, the EIS targets a consistent time-frame that is long enough to understand typical annual operating impacts/tradeoffs of the alternatives.
0706-1	Lowery, Katy	Thank you for your comments on the Draft EIS. This EIS assumes that the Applicant will comply with all necessary permits that would be required for the construction and operation of the pipeline, if a Certificate of Need and route permit are approved by the Commission. While the comment notes that the safety record of the Applicant is not provided, the evaluations within the EIS are based on the project for which applications were submitted and the commitments outlined by the Applicant.
2423-1	Ludington, Mary	Thank you for your comments on the Draft EIS. An updated list of EIS preparers is provided in Chapter 13.
2423-2	Ludington, Mary	SA-04 is a conceptual alternative. It is not one that has been submitted by an applicant for permitting or review. The purpose of the alternative is to provide an appropriate comparison within the evaluation of CN alternatives.
1386-1	Lund, Lisa	Thank you for your comments on the Draft EIS. The figure in the executive summary has been revised to demonstrate amount spilled per volume transported.
1386-2	Lund, Lisa	Section 4.2.2 discusses the option of No Certificate Granted.
1386-3	Lund, Lisa	This comment has been considered in development of the FEIS.
1386-4	Lund, Lisa	Section 8.3.1.1 of the FEIS discusses Enbridge's current and ongoing liability and responsibility under the Minnesota Statutes 115E.
1386-5	Lund, Lisa	Potential impacts regarding abandonment and removal of the pipeline are discussed in Chapter 8 of the FEIS.

Responses to Comments – Citizen

Response#	Commenter	Response
1386-6	Lund, Lisa	An analysis of Audubon Important Bird Areas (IBAs), Migratory Bird Treaty Act (MBTA)-protected birds, and Bald and Golden Eagle Protection Act (BGEPA)-protected birds near the proposed project and alternative routes, is presented in Sections 5.2.4 and 6.3.4 of the FEIS. Additionally, an analysis of rare species, including species of concern, is presented in Sections 5.2.5 and 6.3.5 of the FEIS.
1386-7	Lund, Lisa	Section 10.3 of the FEIS discusses independent modeling performed by Stantec.
1386-8	Lund, Lisa	<p>The FEIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release.</p> <p>As indicated in Section 10.3, on June 3, 2019 the Minnesota Court of Appeals ruled that the Revised Final Line 3 EIS of February 12, 2018 was inadequate because it failed to specifically address the potential impact of an oil spill into the Lake Superior watershed. In order to address the court’s opinion Enbridge commissioned a modeling analysis on behalf of and with input from the Minnesota Department of Commerce, Energy Environmental Review Analysis Staff for one additional hypothetical crude oil release from a pipeline crossing within the Lake Superior watershed (Stantec et al. 2019; Appendix V).</p> <p>When considered together with the seven previously modeled sites, Little Otter Creek as the eighth representative release site can be used to further characterize the range of trajectory, fate, and potential consequences of an oil spill in the project area. Using the same assumptions used for the other sites, the spill modeling was used to predict the potential trajectory of released oil, the fate of released oil, and the potential effects of accidental oil releases on the natural and human environment. The intent of these analyses was to infer a range of potential effects that may occur at this and other locations in Minnesota with similar biophysical and human use characteristics.</p>
1386-9	Lund, Lisa	Noted. Available Applicant data were included.
1386-10	Lund, Lisa	Noted. Available Applicant data were included.
1386-12	Lund, Lisa	The comment was considered in development of the FEIS.

Responses to Comments – Citizen

Response#	Commenter	Response
1386-12	Lund, Lisa	The comment was considered in development of the FEIS.
1049-1	Lundin, Martha	Thank you for your comments on the Draft EIS. The figure in the executive summary has been revised to demonstrate amount spilled per volume transported.
1050-1	Madden, Alice	Thank you for your comments on the Draft EIS. Section 10.4.2.2 of the FEIS provides an analysis of downstream impacts associated with spills.
1050-2	Madden, Alice	Potential impacts to affected natural resources are discussed in Chapters 5 and 6, and how American Indian tribes experience and interact with these resources is summarized in Chapters 9 and 11. This constitutes the analysis of treaty rights within this EIS.
1388-1	Maertens, Gerald	Thank you for your comments on the Draft EIS. SA-04 is a conceptual alternative. It is not one that has been submitted by an applicant for permitting or review. The purpose of the alternative is to provide an appropriate comparison within the evaluation of CN alternatives.
1388-2	Maertens, Gerald	Table 10.7-4 includes data in Table 10.4-8 color-coded. Section 10.4 and 10.7 have the same data in the tables.
1388-3	Maertens, Gerald	SA-04 is a conceptual alternative. It is not one that has been submitted by an applicant for permitting or review. The purpose of the alternative is to provide an appropriate comparison within the evaluation of CN alternatives.
1388-4	Maertens, Gerald	SA-04 is a conceptual alternative. It is not one that has been submitted by an applicant for permitting or review. The purpose of the alternative is to provide an appropriate comparison within the evaluation of CN alternatives.
1388-5	Maertens, Gerald	The comment was considered in development of the FEIS.
0713-1	Marine-Rietmann, Kara	Thank you for your comments on the Draft EIS. Section 10.6.3 “Liability and Compensation” of the FEIS thoroughly discusses the laws and standards that will be followed if a spill occurs.

Responses to Comments – Citizen

Response#	Commenter	Response
2432-1	Mattison, Willis	Thank you for your comments on the Draft EIS. Revisions have been made to Chapter 13, List of Preparers.
2432-2	Mattison, Willis	Thank you for providing your comment regarding an eco-system approach. The methodology used for each resource area is noted within the EIS. These methods are typical of the individual fields for which the analysis addresses.
2432-3	Mattison, Willis	Contrasting impacts to resources along each route was accomplished by considering the intersects of groundwater and surface water resources along each alternative route. A comprehensive evaluation of landscape and outlying characteristics was beyond the scope of the EIS.
2432-4	Mattison, Willis	SA-04 is a conceptual alternative. It is not one that has been submitted by an applicant for permitting or review. The purpose of the alternative is to provide an appropriate comparison within the evaluation of CN alternatives.
2432-5	Mattison, Willis	Section 5.2.1.3 provides a discussion of the methodology used for evaluating potential impacts to wetlands. The analysis of the proposed project includes a discussion of mitigation measures as some have been provided as part of the applicant proposed measures; whereas for other CN alternatives, these are conceptual, in that a specific project has not been developed by an applicant. The region of interest (ROI) for each is noted in the methodology, as well.
2432-6	Mattison, Willis	Each resource area was evaluated with regard to the potential impacts that may occur as a result of the proposed project (Chapter 5) and the Applicant's preferred route (Chapter 6), as well as for alternatives. Where appropriate, information was provided as to level of impact that would be anticipated to occur. Summary information is provided for each resource area in the form of a table at the end of each section.
2432-7	Mattison, Willis	The EIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release. Case studies of several significant spills and discussion of their impacts to various resources have been included in the FEIS.

Responses to Comments – Citizen

Response#	Commenter	Response
2432-8	Mattison, Willis	Your comment has been considered in the review of the document. Chapter authors reviewed each section and where appropriate made revisions in response to comments and/or to incorporate new/updated information.
2002-1	McGowan, Dan	Thank you for your comments on the Draft EIS. Chapters 5 and 6 of the FEIS included updated information regarding anticipated socioeconomic impacts of the project and various alternatives on employment, including labor requirements for various alternatives based on an estimate of 600 workers per construction spread. Specifically, Section 6.5.4.3 clarifies that jobs would be created for local labor as current labor agreements in Minnesota require that at least 50% of workers would be expected to be employed from local union halls. The FEIS also clarifies that some of these jobs would likely become permanent, based in part on overall labor market demand.
2002-2	McGowan, Dan	Sections in the FEIS pertaining to impacts of the project on employment clarify that it is likely that the Applicant would hire local residents during construction of any of the alternative routes for a portion of its workforce - based on current labor agreements in Minnesota at least 50% of workers will be expected to be employed from local union halls. The FEIS also states that as construction jobs are typically permanent in nature, permanent jobs may result from said construction - but that this is also dependent on an unquantifiable backlog of other construction project demand, and that based on this assumption it is likely that direct construction-related employment would have a minor positive impact on county-level unemployment and per capita and/or median household income levels.
2002-3	McGowan, Dan	The comment was considered in development of the FEIS.
2002-4	McGowan, Dan	SA-04 is a conceptual alternative. It is not one that has been submitted by an applicant for permitting or review. The purpose of the alternative is to provide an appropriate comparison within the evaluation of CN alternatives.
1401-1	Mena, Ugo	Thank you for your comments on the Draft EIS. Section 8.3.1.1 of the FEIS discusses Enbridge's current and ongoing liability and responsibility under the Minnesota Statutes 115E.

Responses to Comments – Citizen

Response#	Commenter	Response
1822-1	Menghini, Paul	Thank you for your comments on the Draft EIS. Your comment was considered in development of the FEIS.
2049-1	Merjent - Ronayne, Angela	Thank you for your comments on the Draft EIS. The data contained in the site-specific field surveys conducted by Merjent on the Applicant’s proposed project are utilized and referenced throughout the FEIS.
2462-1	Minnesota 350	<p>Thank you for your comments.</p> <p>These approximate oil volume data are included within the EIS to provide context. Enbridge filings to FERC may differ for a variety of reasons. The 290,000 barrels per day estimate is based on Enbridge forecast data in Table 7.B-1 in their certificate of need application for the Line 3 project. The approximately 400,000 barrel per day estimate for the amount of oil shipped on the Minnesota Pipeline system to Minnesota refineries is based on historical peak volume data provided in Minnesota Pipeline Company’s July 2014 Application for a Certificate of Need, available here:</p> <p>https://mn.gov/commerce/energyfacilities/documents/34034/CN%20Application%207-25-14.pdf.</p>
2462-2	Minnesota 350	Enbridge’s proposed new pipeline would be capable of carrying 760,000 barrels of Canadian heavy crude oil per day; however, the pipeline also may be capable of carrying 915,000 barrels per day. The Applicant has indicated that this is not the level of throughput that they are seeking to operate and that further engineering design studies would be required to determine the number of pump stations needed to achieve this ultimate design capacity level. Should the Applicant choose to seek this expanded capacity in the future, they would need to apply for a Certificate of Need from the Commission and the proposal would be subject to environmental review at that time.
2462-3	Minnesota 350	This sentence has been revised to show that tribal members value both the reservations and ceded lands for hunting, fishing, and gathering. Additional discussions of treaties is provided in Chapter 9.

Responses to Comments – Citizen

Response#	Commenter	Response
2462-4	Minnesota 350	<p>The Executive Summary includes a statement to show that in addition to the Commission, the EIS can be used by other permitting agencies, the public, and Enbridge.</p> <p>Chapter 3 provides additional information regarding the regulatory framework and where the EIS fits into the overall decision making process for the Certificate of Need and route permit. In this chapter, information more clearly shows how the public is involved within the process (see Section 3.3).</p>
2462-5	Minnesota 350	<p>Please see updates to Chapter 13 that provide additional detail on EIS preparers. The EIS was a collaboration between DOC, MPCA, MN DNR and consulting teams from Ecology and Environment, Inc., as well as Cardno.</p> <p>Material for the EIS was developed based on independent analysis, review of materials submitted by the Applicant, and review of materials submitted by commenters on the EIS.</p> <p>No single individual drafted a section of the EIS; sections were often drafted by multiple authors, with multiple levels of review and revision. As a result, the new information provided in Chapter 13 does not attempt to parse individual components of the EIS and assign them to individual preparers. It, however, does provide a listing of contributors and their degrees/professional certifications.</p>
2462-6	Minnesota 350	<p>MEPA requires that decision makers be informed of the environmental impacts of permitting decisions before they issue a permit. As indicated in MN Rules 4410.0300, environmental documents are to be used as guides in issuing, amending, and denying permits and carrying out other responsibilities of governmental units to avoid or minimize adverse environmental effects and to restore and enhance environmental quality.</p> <p>Consistent with this purpose, the evaluation of impacts in the EIS attempts to inform the Commission about the impacts of the decisions before them. The range of alternatives for which impacts have been assessed is consistent with the range of decision options before the Commission.</p> <p>As such, the EIS has not attempted to characterize the environmental impacts associated with decision alternatives that are not available to the Commission. One of the decision alternatives that would not be available to the Commission would be to require the Applicant to cease operation of Line 3.</p>

Responses to Comments – Citizen

Response#	Commenter	Response
2462-7	Minnesota 350	The EIS explores a range of CN alternatives, including alternatives that assume the Applicant (or entities other than the Applicant) could be expected to meet shipper demand for the oil through other means. Chapter 4 provides a discussion of each of these alternatives.
2462-8	Minnesota 350	Section 4.2.4 provides a discussion of the "use of other pipelines."
2462-9	Minnesota 350	SA-04 is a system alternative evaluated to aid the Commission's evaluation of whether or not to grant a CN for the proposed project. A system alternative is not a routing alternative as no entity has proposed to build such a pipeline, detailed routing and design have not been conducted, and a route permit could not be issued for SA-04. Instead, a system alternative serves as a broader level point of comparison to the Applicant's proposed project and the other CN alternatives. The level of analysis of SA-04 is in line with this concept.
2462-10	Minnesota 350	Table ES-1 was revised to assist the reader; accompanying text also was provided to depict the information in the table.
2462-11	Minnesota 350	Figures throughout the Executive Summary have been re-formatted for better visibility in the FEIS.
2462-12	Minnesota 350	The text regarding this sentence has been revised to show that "if a CN is issued," the Commission will then consider issuance of a route permit.
2462-13	Minnesota 350	Revisions were made within the Executive Summary to acknowledge that the Leech Lake Band of Ojibwe would need to provide their permission and that their comments submitted publicly for the draft EIS indicate that they were not in support of the Project on their lands.
2462-14	Minnesota 350	Figures throughout the Executive Summary have been re-formatted for better visibility in the FEIS.
2462-15	Minnesota 350	There are no reasonably foreseeable actions related to lines 1, 2 and 4. See Chapter 12 for a discussion of how "reasonably foreseeable actions" are defined.
2462-16	Minnesota 350	See revised Figure ES-4 in the FEIS. Note that total volumes transported via each mode have been added to the discussion to provide context for spill volume and frequency (barrels spilled per barrel transported).

Responses to Comments – Citizen

Response#	Commenter	Response
2462-17	Minnesota 350	<p>The EIS compares the impacts associated with the Applicant's proposal (extending from Neche, North Dakota to Superior, Wisconsin) to the impacts associated with the significantly longer SA-04 (extending from Neche to Joliet, Illinois).</p> <p>For the assessment of the impacts of SA-04, the EIS evaluates impacts in North Dakota, Iowa, and Illinois, in addition to Minnesota because these are the states through which SA-04 passes.</p> <p>As a majority of SA-04 is located outside of Minnesota, the majority of impacts occur outside of this state.</p> <p>Comments received on the Draft EIS have indicated that impacts outside of Minnesota (for example lifecycle greenhouse gas emissions) are relevant considerations in the Commission's decision. In this case, the magnitude and intensity of impacts associated with the construction and operation of an alternative that largely skirts Minnesota is a relevant part of understanding the environmental tradeoffs in the decisions before the Commission.</p>
2462-18	Minnesota 350	<p>The chart (Table 10.7-3 – now 10.7-2) for which this comment appears to reference indicates the "Summary of Potentially Exposed Resources of Concern from an Unanticipated Release of Crude Oil along the Applicant's Proposal and Certificate of Need Alternatives (acres)." This table is an indicator of resources present, not an indicator of severity of impact or difficulty of clean-up.</p> <p>Chapter 10 provides discussion of crude oil spill impacts on various ecological systems and resources.</p>
2462-19	Minnesota 350	Construction impacts for each CN alternative are discussed in detail in Chapter 5 of the EIS.
2462-20	Minnesota 350	The EIS evaluates the environmental impacts of a range of alternatives, "bookending" the impacts of options for transport that may be considered by the commission.
2462-21	Minnesota 350	<p>The Index of Biotic Integrity (IBI) is used in evaluation of impacts to surface water and impacts to aquatic resources throughout both Chapter 5 and Chapter 6 of the EIS.</p> <p>Please see Section 5.2.4 and 6.3.4.</p>

Responses to Comments – Citizen

Response#	Commenter	Response
2462-22	Minnesota 350	Figures throughout the Executive Summary have been re-formatted for better visibility in the FEIS.
2462-23	Minnesota 350	<p>The table (Table ES-2) referenced as part of this comment provides a summary of the exposed resources of concern (in acres). It is intended to demonstrate the potential for exposure and to provide a snapshot of information that is included in Chapter 10 of the EIS.</p> <p>The Executive Summary is not meant to be exhaustive, but instead to present key findings and to help readers understand the types of questions addressed by the EIS. In this manner, the addition of a new table to this section – “Will the proposed Project damage forests and wildlife habitat in northern Minnesota far more than any other alternatives?” – is not needed.</p> <p>Figure ES-6 was revised to include a more detailed title; accompanying text also was revised to include additional information about the contents of the bar graphs depicted in the figure.</p>
2462-24	Minnesota 350	<p>Section 1.4 of the EIS provides a discussion of the purpose and need.</p> <p>The EIS evaluates the environmental impacts of a range of alternatives, "bookending" the impacts of options for transport that may be considered by the commission. A more detailed discussion of alternatives is provided in Chapter 4.</p>
2462-25	Minnesota 350	Please see Sections 4.2.6 and 4.2.7 for a discussion of the development of truck and rail alternatives and underlying assumptions.
2462-26	Minnesota 350	Figure ES-4 has been revised. The associated text provides a discussion of the spill size/frequency tradeoffs between alternate transport modes. Chapter 10 provides additional information on the various transport modes and the potential for spills.
2462-27	Minnesota 350	The Executive Summary, which is referenced by this comment, is intended to provide only a short synopsis of key findings. Discussion of each alternative is provided in Chapter 4. In particular, this chapter provides the assumptions made for each alternative.

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Response#	Commenter	Response
2462-28	Minnesota 350	All of the alternatives evaluated in this EIS result in the emission of greenhouse gases. Removal of existing line 3 would also result in stationary and mobile combustion emissions for the operation of construction equipment for the excavation and removal of the line. If removal of existing Line 3 resulted in a net decrease in production and consumption of western Canadian crude, the overall effect would be a reduction in global emissions.
2462-29	Minnesota 350	This comment was considered in developing the FEIS. Table ES-3, however, was not amended, except to revise the title to more accurately show that the reference is to operations. Additional text was added to describe the contents of the table.
2462-30	Minnesota 350	The 30-year timeframe was chosen to match the economic life of the project indicated by the Applicant. For purposes of comparison across alternatives, the EIS targets a consistent timeframe that is long enough to understand typical annual operating impacts/tradeoffs of the alternatives.
2462-31	Minnesota 350	The label for Figure ES-8 has been revised.
2462-32	Minnesota 350	<p>Lifecycle greenhouse gas implications of potential upstream and downstream changes were assessed consistent with the scope for the EIS.</p> <p>As greenhouse gas impacts are global in nature, impacts could be assessed generically assuming increased production and consumption somewhere, but without any need for a site specific assessment or detailed understanding of what particular upstream and downstream developments may take place.</p> <p>Extending this lifecycle assessment beyond greenhouse gases would require a more specific set of plans or proposals than are available at this time. Environmental impacts associated with new plans and proposals for expansion would undergo environmental review under the environmental review program in the appropriate jurisdiction.</p>
2462-33	Minnesota 350	Section 12.6 provides a discussion of the cumulative impacts of climate change on Minnesota, as well as discussion of the impacts of climate change on the project. Chapter 9 provides a discussion more specific to American Indian tribes.

Responses to Comments – Citizen

Response#	Commenter	Response
2462-34	Minnesota 350	This particular statement has been struck from the document. A discussion of risks and impacts related to abandonment and removal is provided in Chapter 8.
2462-35	Minnesota 350	Additional analysis of adjacent pipeline spacing and the viability of removal as an alternative has been included in Section 8.4.
2462-36	Minnesota 350	The text in the Executive Summary has been updated to clarify that the acreage provided refers to the stretch from Clearbrook to Carlton.
2462-37	Minnesota 350	The Executive Summary, which is referenced by this comment, is intended to provide only a short synopsis of key findings. Discussion of potential impacts associated with the construction of CN alternatives is included in Chapter 5 for each specific resource area, including habitat loss and habitat fragmentation.
2462-38	Minnesota 350	Enbridge's proposed new pipeline would be capable of carrying 760,000 barrels of Canadian heavy crude oil per day; however, the pipeline also may be capable of carrying 915,000 barrels per day. The Applicant has indicated that this is not the level of throughput that they are seeking to operate and that further engineering design studies would be required to determine the number of pump stations needed to achieve this ultimate design capacity level. Should the Applicant choose to seek this expanded capacity in the future, they would need to apply for a Certificate of Need from the Commission and the proposal would be subject to environmental review at that time.
2462-39	Minnesota 350	References throughout the document have been updated in the FEIS to refer to the project more generally as the Line 3 Project. The footers and many of the figures also have been revised to show this.

Responses to Comments – Citizen

Response#	Commenter	Response
2462-40	Minnesota 350	<p>Section 1.4 explains the Department's rationale for the treatment of overarching policy issues. MEPA requires that decision makers be informed of the environmental impacts of permitting decisions before they issue a permit.</p> <p>As indicated in MN Rules 4410.0300, environmental documents are to be used as guides in issuing, amending, and denying permits and carrying out other responsibilities of governmental units to avoid or minimize adverse environmental effects and to restore and enhance environmental quality. Consistent with this purpose, the evaluation of impacts in the EIS attempts to inform the Commission about the impacts of the decisions before them.</p> <p>The EIS does not provide a global assessment of these overarching policy issues; however, where the policy issues specifically relate to the CN or route alternatives, the EIS provides a project-level assessment.</p> <p>Information regarding the purpose of the EIS is provided in the Executive Summary, along with the type of information that is included within it.</p>
2462-41	Minnesota 350	<p>The Commission is charged in the CN decision with determining public purpose for which the right of eminent domain should be allowed by the State of Minnesota. This EIS has been prepared to help inform that decision.</p>
2462-42	Minnesota 350	<p>These approximate oil volume data are included within the EIS to provide context. Enbridge filings to FERC may differ for a variety of reasons. The 290,000 barrels per day estimate is based on Enbridge forecast data in Table 7.B-1 in their certificate of need application for the Line 3 project. The approximately 400,000 barrel per day estimate for the amount of oil shipped on the Minnesota Pipeline system to Minnesota refineries is based on historical peak volume data provided in Minnesota Pipeline Company's July 2014 Application for a Certificate of Need, available here:</p> <p>https://mn.gov/commerce/energyfacilities/documents/34034/CN%20Application%207-25-14.pdf.</p>

Responses to Comments – Citizen

Response#	Commenter	Response
2462-43	Minnesota 350	Line 3 is one of seven oil pipelines in the Enbridge Mainline corridor in Minnesota from the border with North Dakota to Clearbrook. Line 3 is one of six oil pipelines in the Enbridge Mainline corridor in Minnesota from the Clearbrook to Superior. This is noted as such in Section 1.2.
2462-44	Minnesota 350	These approximate oil volume data are included within the EIS to provide context. Enbridge filings to FERC may differ for a variety of reasons. The 290,000 barrels per day estimate is based on Enbridge forecast data in Table 7.B-1 in their certificate of need application for the Line 3 project. The approximately 400,000 barrel per day estimate for the amount of oil shipped on the Minnesota Pipeline system to Minnesota refineries is based on historical peak volume data provided in Minnesota Pipeline Company’s July 2014 Application for a Certificate of Need, available here: https://mn.gov/commerce/energyfacilities/documents/34034/CN%20Application%207-25-14.pdf .
2462-45	Minnesota 350	Section 2.2 addresses Enbridge’s objectives for the proposed Line 3 project, including restoring the capability of line 3 to carry heavy crude and increase capacity, which they have indicated would allow operational flexibility to the Enbridge system, since line 3 is restricted to carrying lighter crudes.
2462-46	Minnesota 350	As indicated in MN Rules 4410.0300, environmental documents are to be used as guides in issuing, amending, and denying permits and carrying out other responsibilities of governmental units to avoid or minimize adverse environmental effects and to restore and enhance environmental quality. Consistent with this purpose, the evaluation of impacts in the EIS attempts to inform the Commission about the impacts and issues relevant of the decisions before them. Based on the information provided as part of this comment, it is not clear how the information it suggests to be included would be used to assist the Commission or other permitting agency.
2462-47	Minnesota 350	The statement noted in this comment is intended to provide information on one aspect of the order. No changes have been made to the EIS.
2462-48	Minnesota 350	The wording provided as part of this comment has been considered.

Responses to Comments – Citizen

Response#	Commenter	Response
2462-49	Minnesota 350	Multiple consultants and agencies contributed to the preparation of this EIS. A list of preparers is provided for those who contributed to the FEIS.
2462-50	Minnesota 350	Chapter 4 of the EIS provides an explanation of each of the CN alternatives. As shown, the quantity of trains and trucks is not assumed to be at the level of the new proposed line.
2462-51	Minnesota 350	<p>Enbridge has requested that the Commission permit a 750-foot route width (375 feet on each side of the pipeline centerline). The 50-foot permanent right-of-way would be located within this 750-foot corridor. The 750-foot route width would encompass construction workspace for the pipeline and associated facilities; it would allow Enbridge to make small-scale refinements of the pipeline centerline within the corridor, as needed, prior to and during construction.</p> <p>Once construction is complete and as-builts are filed, Enbridge will maintain easements for the 50-foot permanent right-of-way and will not have any long-term occupation of or claim to the 750-foot route width.</p>
2462-52	Minnesota 350	The EIS has been revised to refer to the Applicant's proposed project as the Line 3 Project. Where applicable, the word "replacement" has been deleted.
2462-53	Minnesota 350	The 30-year timeframe was chosen to match the economic life of the project indicated by the Applicant. For purposes of comparison across alternatives, the EIS targets a consistent timeframe that is long enough to understand typical annual operating impacts/tradeoffs of the alternatives.
2462-54	Minnesota 350	Figure 2.1.1 shows existing pipelines. Per the comment, the Sandpiper pipeline and Line 65 are not existing pipelines, so they have not been included in the figure.
2462-55	Minnesota 350	Section 1.4 of the EIS provides a discussion of the purpose and need.

Responses to Comments – Citizen

Response#	Commenter	Response
2462-56	Minnesota 350	<p>MEPA requires that decision makers be informed of the environmental impacts of permitting decisions before they issue a permit. As indicated in MN Rules 4410.0300, environmental documents are to be used as guides in issuing, amending, and denying permits and carrying out other responsibilities of governmental units to avoid or minimize adverse environmental effects and to restore and enhance environmental quality.</p> <p>Consistent with this purpose, the evaluation of impacts in the EIS attempts to inform the Commission about the impacts of the decisions before them. The range of alternatives for which impacts have been assessed is consistent with the range of decision options before the Commission. The EIS evaluates the environmental impacts of a range of alternatives, "bookending" the impacts of options for transport that may be considered by the commission.</p> <p>A discussion of alternatives is presented in Chapter 4. Specifically, a no action alternative, which is the denial of the CN, is discussed in Section 4.2.2. Note that the purpose of the CN process is to determine whether the particular project being proposed is needed. There is no legal authority in a CN proceeding of a separate proposed project (at the state or with the Public Utilities Commission) to evaluate the ongoing need of an existing project. Once constructed, the safety and operation of an existing pipeline is regulated by the United States Department of Transportation, Pipeline and Hazardous Materials Safety Administration. In this particular case, Enbridge has entered into a consent decree with the United States Environmental Protection Agency that allows for the continued operation of the existing Line 3 if a replacement for the line is not approved. In other words, if the proposed Line 3 project is not approved by the Commission, the continued operation of the existing Line 3 will be regulated by the Federal government, not the State of Minnesota. Accordingly, shutting down and removing existing pipelines in the mainline corridor is not included in the No Action Alternative.</p>

Responses to Comments – Citizen

Response#	Commenter	Response
2462-57	Minnesota 350	<p>No notable changes are anticipated on the existing (recently upgraded) infrastructure in Wisconsin or elsewhere in conjunction with the Applicant's proposal. Therefore, new impacts associated with the Applicant's proposal are limited to the length of the proposed Line 3 route and do not extend through Wisconsin to an end destination in Illinois.</p> <p>The EIS compares the new impacts associated with the Applicant's proposal (extending from Neche, North Dakota to Superior, Wisconsin) to the new impacts associated with the significantly longer SA-04 (extending from Neche to Joliet, Illinois).</p>
2462-58	Minnesota 350	The reference to Line 67 throughput has been updated.
2462-59	Minnesota 350	Chapter 10 provides a discussion of the factors that contribute to the probability for a potential release to occur.
2462-60	Minnesota 350	Additional analysis of adjacent pipeline spacing and the viability of removal as an alternative has been included in Section 8.4
2462-61	Minnesota 350	References within the FEIS have been reviewed. Where possible, links were revised, and in some cases, new sources were provided.
2371-1	Minnesota Center for Environmental Advocacy	Thank you for your comments on the Draft EIS. Section 2.2 of the FEIS discusses the project purpose.
2371-2	Minnesota Center for Environmental Advocacy	Additional information from various resource groups has been included in the FEIS to present accurate data and findings in an unbiased manner.
2371-3	Minnesota Center for Environmental Advocacy	Impacts of long-term reliance on oil are outside the scope of the EIS. The comment regarding alternatives has been considered in preparation of the alternatives.

Responses to Comments – Citizen

Response#	Commenter	Response
2371-4	Minnesota Center for Environmental Advocacy	Seven CN alternatives and 5 route alternatives were evaluated within the FEIS. Chapter 4 provides more description on each alternative.
2371-5	Minnesota Center for Environmental Advocacy	Seven CN alternatives and 5 route alternatives were evaluated within the FEIS. Chapter 4 provides more description on each alternative.
2371-6	Minnesota Center for Environmental Advocacy	Seven CN alternatives and 5 route alternatives were evaluated within the FEIS. Chapter 4 provides more description on each alternative.
2371-7	Minnesota Center for Environmental Advocacy	Impacts to various resources from integrity digs is provided in Chapter 5 and 6 of the FEIS. Third-party verification of the number and cost estimate of integrity digs anticipated as part of the proposed project is outside the scope of the EIS.
2371-8	Minnesota Center for Environmental Advocacy	Long-term mitigation measures are included within Section 8.3.1 of the FEIS.
2371-9	Minnesota Center for Environmental Advocacy	Positive and negative impacts of the removal alternative are discussed in Section 8.4.1 of the FEIS.
2371-10	Minnesota Center for Environmental Advocacy	Seven CN alternatives and 5 route alternatives were evaluated within the FEIS. Chapter 4 provides more description on each alternative.
2371-11	Minnesota Center for Environmental Advocacy	The comment has been considered in preparation of the FEIS.
2371-12	Minnesota Center for Environmental Advocacy	The comment has been considered in preparation of the FEIS.

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Response#	Commenter	Response
2371-13	Minnesota Center for Environmental Advocacy	The comment has been considered in preparation of the FEIS.
2371-14	Minnesota Center for Environmental Advocacy	The comment has been considered in preparation of the FEIS.
0828-1	Minnesota Environmental Partnership	Thank you for your comments on the Draft EIS. The FEIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release.

Responses to Comments – Citizen

Response#	Commenter	Response
0828-2	Minnesota Environmental Partnership	<p>The Environmental Justice section of the FEIS has been revised to include additional information, including impacts resulting from the CN Alternatives. A Minnesota pipeline spill analysis has also been added to Section 10.1.3.2 of the FEIS and a 10-mile downstream ROI was used in development of Chapter 10. While only seven sites were modeled as part of the analysis, they represent a broad range of stream/waterbody characteristics such that the results of the modeling help illustrate potential impacts in different types of waters.</p> <p>As indicated in Section 10.3, on June 3, 2019 the Minnesota Court of Appeals ruled that the Revised Final Line 3 EIS of February 12, 2018 was inadequate because it failed to specifically address the potential impact of an oil spill into the Lake Superior watershed. In order to address the court’s opinion Enbridge commissioned a modeling analysis on behalf of and with input from the Minnesota Department of Commerce, Energy Environmental Review Analysis Staff for one additional hypothetical crude oil release from a pipeline crossing within the Lake Superior watershed (Stantec et al. 2019; Appendix V).</p> <p>When considered together with the seven previously modeled sites, Little Otter Creek as the eighth representative release site can be used to further characterize the range of trajectory, fate, and potential consequences of an oil spill in the project area. Using the same assumptions used for the other sites, the spill modeling was used to predict the potential trajectory of released oil, the fate of released oil, and the potential effects of accidental oil releases on the natural and human environment. The intent of these analyses was to infer a range of potential effects that may occur at this and other locations in Minnesota with similar biophysical and human use characteristics.</p>

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Response#	Commenter	Response
0827-1	Minnesota Environmental Partnership	<p>The FEIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release.</p> <p>As indicated in Section 10.3, on June 3, 2019 the Minnesota Court of Appeals ruled that the Revised Final Line 3 EIS of February 12, 2018 was inadequate because it failed to specifically address the potential impact of an oil spill into the Lake Superior watershed. In order to address the court’s opinion Enbridge commissioned a modeling analysis on behalf of and with input from the Minnesota Department of Commerce, Energy Environmental Review Analysis Staff for one additional hypothetical crude oil release from a pipeline crossing within the Lake Superior watershed (Stantec et al. 2019; Appendix V).</p> <p>When considered together with the seven previously modeled sites, Little Otter Creek as the eighth representative release site can be used to further characterize the range of trajectory, fate, and potential consequences of an oil spill in the project area. Using the same assumptions used for the other sites, the spill modeling was used to predict the potential trajectory of released oil, the fate of released oil, and the potential effects of accidental oil releases on the natural and human environment. The intent of these analyses was to infer a range of potential effects that may occur at this and other locations in Minnesota with similar biophysical and human use characteristics.</p>
0827-2	Minnesota Environmental Partnership	Additional information regarding abandonment has been included in Section 8.3 of the FEIS.
2373-1	Minnesota Public Interest Research Group (MPIRG)	Thank you for your comments on the Draft EIS. Enbridge release incident data are presented in Chapter 10 of the EIS. Case studies of several significant spills, including the 2010 spill, have been included.
2373-2	Minnesota Public Interest Research Group (MPIRG)	Non-pipeline methods of transportation are discussed and evaluated in Chapter 5.

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Response#	Commenter	Response
2373-3	Minnesota Public Interest Research Group (MPIRG)	The comment was considered in development of the FEIS.
2373-4	Minnesota Public Interest Research Group (MPIRG)	Abandonment and removal are discussed in detail in Chapter 8 of the FEIS.
2373-5	Minnesota Public Interest Research Group (MPIRG)	The potential for toxic products could remain in soil, plant tissues, or prey items after cleanup and continue to bio-accumulate up the food chain is discussed in the EIS.
2373-6	Minnesota Public Interest Research Group (MPIRG)	Case studies of several significant spills and discussion of their impacts to various resources have been included.
2373-7	Minnesota Public Interest Research Group (MPIRG)	Enbridge did not provide additional information regarding soil restoration in wetlands.
2373-8	Minnesota Public Interest Research Group (MPIRG)	Available data on the health risk of bitumen have been presented.
2373-9	Minnesota Public Interest Research Group (MPIRG)	The cumulative effects of global warming on all aspects of the environment and ecological community is beyond the scope of the EIS process. Regulatory agencies, based on their mission, will have the authority to consider all aspects of this issue from an overall industry perspective.
2373-10	Minnesota Public Interest Research Group (MPIRG)	Case studies of several significant spills, including the 2010 spill, have been included.
2373-11	Minnesota Public Interest Research Group (MPIRG)	The FEIS is limited to potential effects within the United States.

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Response#	Commenter	Response
2373-12	Minnesota Public Interest Research Group (MPIRG)	Case studies of several significant spills and discussion of their impacts to various resources have been included in the FEIS. Section 10.4.2.1.1 discusses potential effects of a spill on the food chain.
2373-13	Minnesota Public Interest Research Group (MPIRG)	The FEIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release.
2373-14	Minnesota Public Interest Research Group (MPIRG)	USDOT is mandated to regulate pipeline safety under Title 49 U.S. Code Chapter 601. The Pipeline and Hazardous Materials Safety Administration (PHMSA) is the agency within USDOT that has jurisdiction and is responsible for developing and enforcing regulations for the safe, reliable, and environmentally sound operation of interstate pipelines. PHMSA’s regulations encompass design, construction, testing, operation, maintenance, and emergency response for hazardous liquid pipelines and related facilities.[1] 49 Code of Federal Regulations (CFR) 195 (Transportation of Hazardous Liquids by Pipeline) include Subparts A through H, establish reporting requirements, design requirements, construction requirements, pressure testing, operation and maintenance, integrity management, required qualifications of pipeline personnel, and corrosion control. For a new hazardous liquid pipeline, high consequence areas must be identified prior to operation, and hazardous liquid pipeline operators are required to develop and submit to PHMSA a written Integrity Management Plan (IMP) within 1 year of the start of operation (49 CFR 195.452). [1] Parts 190, 194, 195, 198, and 199 are relevant to hazardous liquid (including crude oil) pipelines. Parts 194 and 195 address issues that are directly related to pipeline system integrity and oil spill risk assessment and environmental consequences. The regulations at 49 CFR 194 (Response Plans for Onshore Oil Pipelines) contain requirements for onshore oil spill response plans that are intended to reduce the environmental impact of oil unintentionally discharged from onshore oil pipelines. Parts 190, 198, and 199 address issues that are tangential to pipeline system integrity, including rulemaking procedures, regulations for grants and state aid for safety programs, and required drug and alcohol testing for operators of pipeline facilities.
2373-15	Minnesota Public Interest Research Group (MPIRG)	The comment was considered in the development of the FEIS.

Responses to Comments – Citizen

Response#	Commenter	Response
2373-16	Minnesota Public Interest Research Group (MPIRG)	"Operation Impacts" in the FEIS detail the measurements of the growth and any associated impacts due to the operation of the project, which occurs once construction is complete.
2373-17	Minnesota Public Interest Research Group (MPIRG)	<p>As indicated in Section 10.3, on June 3, 2019 the Minnesota Court of Appeals ruled that the Revised Final Line 3 EIS of February 12, 2018 was inadequate because it failed to specifically address the potential impact of an oil spill into the Lake Superior watershed. In order to address the court's opinion Enbridge commissioned a modeling analysis on behalf of and with input from the Minnesota Department of Commerce, Energy Environmental Review Analysis Staff for one additional hypothetical crude oil release from a pipeline crossing within the Lake Superior watershed (Stantec et al. 2019; Appendix V).</p> <p>When considered together with the seven previously modeled sites, Little Otter Creek as the eighth representative release site can be used to further characterize the range of trajectory, fate, and potential consequences of an oil spill in the project area. Using the same assumptions used for the other sites, the spill modeling was used to predict the potential trajectory of released oil, the fate of released oil, and the potential effects of accidental oil releases on the natural and human environment. The intent of these analyses was to infer a range of potential effects that may occur at this and other locations in Minnesota with similar biophysical and human use characteristics.</p>
2373-18	Minnesota Public Interest Research Group (MPIRG)	Such period-of-time conditions may be included with a route approval. However, this document can only address current regulatory requirements.
2373-19	Minnesota Public Interest Research Group (MPIRG)	Publicly available datasets and field reports were used in the development of the FEIS.

Responses to Comments – Citizen

Response#	Commenter	Response
2466-1	Monicken, Melodee	Thank you for your comments on the Draft EIS. Dilbit diluent is natural gas condensate. The lighter compounds aromatics and alkanes tend to be the more toxic parts of crude oil, most of which evaporates in the hours and days after spilling. These components also tend to be the more toxic parts of the oil. The heavier components, such as the PAHs and polar compounds are more persistent in the environment. While extensive studies of long-term dilbit toxicity in the environment are not available, comparisons to the long term effects of heavy crude impacts are the most applicable.
2438-1	Monicken, Melodee	Thank you for your comments on the Draft EIS. See revisions to Chapter 13, List of Preparers.
2438-2	Monicken, Melodee	The National Academies of Sciences, Engineering, and Medicine 2016 data is included in the EIS. The EIS has been updated to include discussion on the properties of dilbit as it weathers.
2438-3	Monicken, Melodee	As shown in Section 5.2.1.1.1, the ROI for the evaluation consists of a 1,000 foot buffer to either side of the centerline. The same ROI is used for both the evaluation of the Applicant's proposed project and SA-04.
2438-4	Monicken, Melodee	Section 5.2.1.1.3 describes the drilling mud Enbridge has proposed to use. No further information has been provided.
0718-1	Moore, Marian	Thank you for your comments on the Draft EIS. The FEIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release. Spill impact analysis was limited to the expected areas of impact, which are 2500 ft. and 10 miles downstream from the pipeline.
0718-2	Moore, Marian	Leak detection falls under monitoring and maintenance, which is discussed in Section 8.3 of the FEIS. Mitigation measures for the abandoned line are discussed in 8.3.1. Pipe exposure via buoyancy is discussed in 8.3.1.4. Only the abandonment of Line 3 is considered as part of the EIS. Section 6.2.4.3 includes a discussion of available studies on the effects of the presence of pipelines and/or easements on property values. Findings are inconclusive, disputed or show minimal to no relationship between pipeline easements and property values. Reaching a conclusion that property values would be generally impacted - positively or negatively - by the presence of a pipeline easement would be speculative at best.

Responses to Comments – Citizen

Response#	Commenter	Response
0718-3	Moore, Marian	The draft EIS noted that only three reports were reviewed; the additional reports now have been reviewed. Revisions to Sections 5.4.2 and 6.4.2 have been made to show this.
0718-4	Moore, Marian	The FEIS States: 10.1.1.1.1 Remote Area Analysis Rapid detection and response can reduce crude oil exposures and impacts on resources. Remote areas may be less accessible to spill response teams and therefore potentially more vulnerable to effects from crude oil spills. When a final route is selected, spill response strategies will be developed for areas with difficult access.
0719-1	Moore, Tisha	<p>The FEIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release. Spill impact analysis was limited to the expected areas of impact, which are 2500 ft. and 10 miles downstream from the pipeline.</p> <p>As indicated in Section 10.3, on June 3, 2019 the Minnesota Court of Appeals ruled that the Revised Final Line 3 EIS of February 12, 2018 was inadequate because it failed to specifically address the potential impact of an oil spill into the Lake Superior watershed. In order to address the court’s opinion Enbridge commissioned a modeling analysis on behalf of and with input from the Minnesota Department of Commerce, Energy Environmental Review Analysis Staff for one additional hypothetical crude oil release from a pipeline crossing within the Lake Superior watershed (Stantec et al. 2019; Appendix V).</p> <p>When considered together with the seven previously modeled sites, Little Otter Creek as the eighth representative release site can be used to further characterize the range of trajectory, fate, and potential consequences of an oil spill in the project area. Using the same assumptions used for the other sites, the spill modeling was used to predict the potential trajectory of released oil, the fate of released oil, and the potential effects of accidental oil releases on the natural and human environment. The intent of these analyses was to infer a range of potential effects that may occur at this and other locations in Minnesota with similar biophysical and human use characteristics.</p>

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Response#	Commenter	Response
0719-2	Moore, Tisha	Potential impacts to the federally listed endangered rusty patched bumble bee from the Applicant's proposed route, CN alternatives, and route alternatives are presented in Sections 5.2.5 and 6.3.5 of the FEIS. Potential impacts to non-listed bee and other insect species are presented in Sections 5.2.4 and 6.3.4 of the FEIS, and due to the implementation of BMPs for use of herbicides, are expected to be minimal.
0719-3	Moore, Tisha	Correct, the DEIS is designed to address macrofauna and the most significant and relevant plant species. Effects to algae and similar taxa are considered by design through the assessment of water quality standards and criteria.
0870-1	Morgan, Jordan	Thank you for your comments on the Draft EIS. An extensive discussion on the Social Cost of Carbon (SCC) can be found within Section 5.2.7 of the FEIS, including the economic values of the 30-year SCC for direct and indirect emissions. Furthermore, as stated within the referenced section, the SCC does internalize net agricultural productivity; human health; property damages from increased flood risk; and changes in energy system costs, such as reduced costs for heating and increased costs for air conditioning.
0870-2	Morgan, Jordan	As noted in Chapter 11, a quantitative and qualitative analysis of impacts to environmental justice communities was conducted for the project. The quantitative analysis used census data to characterize the region of interest. The EIS expanded its analysis to include a qualitative discussion of potentially affected communities and associated impacts, acknowledging the unique connection of American Indian tribal members to reservation lands, ceded lands, and the project area. The analysis contains a robust discussion of potential EJ communities, impacts, and possible mitigation measures. The FEIS was revised to include additional detail on impacts as they pertain to environmental justice communities, and to include discussion of CN alternatives.
0720-1	Morrell, Melody	Thank you for your comments on the Draft EIS. Federal regulations regarding pipeline abandonment are discussed in Section 8.1. Enbridge's ongoing responsibility for the abandoned pipeline is discussed in Section 8.3.
1407-1	Morrow, Chuck & Ellen	Thank you for your comments on the Draft EIS. Information on water quality for potentially affected streams was obtained from both state and federal agency data bases.

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Response#	Commenter	Response
1407-2	Morrow, Chuck & Ellen	Sections 2.1 and 2.2 of the FEIS provide a summary of the project and describe its purpose.
1407-3	Morrow, Chuck & Ellen	Crude oil from the Hardisty terminal in Alberta, Canada, would be transported in the Line 3 pipeline to the Clearbrook and Superior terminals. From these locations, oil would be distributed into existing pipelines, for delivery from the Clearbrook terminal to Minnesota refineries and from the Superior terminal to refineries in the Midwest, on the Gulf of Mexico, and in eastern Canada. Chapter 2 of the FEIS provides additional details about the project.
1407-4	Morrow, Chuck & Ellen	Horizontal directional drilling fluid is discussed in Section 5.2.1.1.3 of the FEIS.
1407-5	Morrow, Chuck & Ellen	Thank you for your comment. [How was 3 acres of wild rice waterbodies within the ROW determined? Section 5.2.1.2.4 Disturbance of Wild Rice Waterbodies]
1407-6	Morrow, Chuck & Ellen	Various sections within Chapters 5 and 6 of the FEIS, including Section 5.3.4 and Section 6.5.4 address baseline employment conditions within the counties crossed by the Applicant's proposed project/preferred route and alternatives, and anticipated impacts on employment as a result of construction and operations. Section 6.5.4 of the FEIS clarifies that it is likely that the Applicant would hire local residents during construction of any of the alternative routes for a portion of its workforce - based on current labor agreements in Minnesota at least 50% of workers will be expected to be employed from local union halls.
1056-1	Mosner, Jeff	Thank you for your comments on the Draft EIS. The cumulative potential impacts of climate change are discussed in the Executive Summary and in Section 12.5 of the FEIS. Section 12.5 also discusses climate change trends in Minnesota and the Midwest. Additional relevant documents used for GHG discussion are provided in Sections 5.2.7.5 and 12.6.
1056-2	Mosner, Jeff	The lifecycle GHG intensity of various crude oils is discussed in the Section 5.2.7.3 of the FEIS. The average life cycle GHG emissions for heavy ECSB are calculated based on higher value of CO ₂ e/bbl of crude oil. This provides conservative estimates of life cycle greenhouse gas emissions in Table 5.27-11.

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Response#	Commenter	Response
0878-1	Munter, John	Thank you for your comments on the Draft EIS. A discussion of alternatives is provided in Section 6.3 of the FEIS.
0878-2	Munter, John	A discussion of applicable regulations and agencies is provided in Chapter 3 of the FEIS.
0876-1	Munter, John	Thank you for your comments on the Draft EIS. The referenced figure was provided by Enbridge as a typical situation only, and does not necessarily reflect the exact pipeline configuration throughout the entire length.
0875-1	Munter, John	Thank you for your comments on the Draft EIS. The comment was considered in the development of the FEIS.
0875-2	Munter, John	As part of the Project, Enbridge proposes to abandon the existing Line 3, permanently removing it from service, following state and federal regulations, which outline the process and requirements for pipeline abandonment.
0874-1	Munter, John	Thank you for your comments on the Draft EIS. The pipe will be coated to retard external corrosion. PHMSA is aware of the effect of buoyancy on pipeline stresses and recommends that pipelines have sufficient cover and be neutrally buoyant to prevent movement.
0875-3	Munter, John	The comment has been considered in preparation of the FEIS.
0874-2	Munter, John	The comment was considered in the development of the FEIS.
2449-1	Munter, John	Thank you for your comments on the Draft EIS. The Environmental Justice section of the FEIS has been revised to include additional information, including impacts resulting from the CN Alternatives.
2449-2	Munter, John	To minimize the potential for introduction of invasive species during construction, the Applicant would implement an invasive species minimization plan. In addition, environmental inspectors would monitor construction activities to ensure compliance with permit conditions and the invasive species plan, reducing the potential for introduction of invasive species during construction. Additional details regarding invasive species impacts to native aquatic species can be found in Section 5.2.4 and 6.3.4.

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Response#	Commenter	Response
2449-3	Munter, John	This EIS assumes that the Applicant will obtain and comply with all necessary permits and approvals that would be required for the construction and operation of the pipeline, if a Certificate of Need and route permit are approved by the Commission. Environmental inspectors would monitor construction activities to ensure compliance with permit conditions and the invasive species plan, reducing the potential for introduction of invasive species during construction. Additional details regarding invasive species impacts to native aquatic species can be found in Section 5.2.4 and 6.3.4.
2447-1	Munter, John	Thank you for your comments on the Draft EIS. The comment was considered in development of the FEIS.
2447-2	Munter, John	Thank you for your comments on the Draft EIS. Your comment was considered in development of the FEIS.
2447-3	Munter, John	SA-04 is a conceptual alternative. It is not one that has been submitted by an applicant for permitting or review. The purpose of the alternative is to provide an appropriate comparison within the evaluation of CN alternatives.
2007-1	Munter, John	Thank you for your comments on the Draft EIS. Section 1.4 of the FEIS generally discusses overarching policy issues that are beyond the scope of the EIS.
2006-1	Munter, John	Thank you for your comments on the Draft EIS. Additional discussion on the spacing of adjacent pipes has been included in Section 8.4.
2005-1	Munter, John	Thank you for your comments on the Draft EIS. Additional discussion regarding spacing of adjacent pipes has been provided in Section 8.4.
1833-1	Munter, John	Thank you for your comments on the Draft EIS. Publicly available data were used to present the findings.
1833-2	Munter, John	The comment was considered in development of the FEIS.
1829-1	Munter, John	Thank you for your comments on the Draft EIS. Additional information regarding spacing of adjacent pipelines is provided in Section 8.4.
1423-1	Munter, John	Thank you for your comments on the Draft EIS. The FEIS has been corrected in the pinhole leak discussion.

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Response#	Commenter	Response
1422-1	Munter, John	Thank you for your comments on the Draft EIS. Karst analysis is based on data provided in surveys by the USGS, Minnesota Geological Survey and the Department of Geology and Geophysics at the University of Minnesota. Karst lands in Minnesota typically developed in Paleozoic carbonate and sandstone bedrock, which occur in the southeast portion of the state. Only SA-04 is present in this area of Minnesota
1421-1	Munter, John	Thank you for your comments on the Draft EIS. The comment has been considered in development of the FEIS.
1420-1	Munter, John	Thank you for your comments on the Draft EIS. The comment has been considered in development of the FEIS.
1419-1	Munter, John	Thank you for your comments on the Draft EIS. SA-04 is a system alternative evaluated to aid the Commission's evaluation of whether or not to grant a CN for the proposed project. A system alternative is not a routing alternative, as no entity has proposed to build such a pipeline, detailed routing and design have not been conducted, and a route permit could not be issued for SA-04. Instead, a system alternative is a serves as a broader level point of comparison to the Applicant's Proposed project and the other CN alternatives. The level of analysis of SA-04 is in line with this concept.
1417-1	Munter, John	Thank you for your comments on the Draft EIS. Permanent berms, as approved by permit conditions, would be installed on all slopes greater than 3 percent to prevent erosion and sedimentation into surface waters once construction is complete, unless otherwise specified by permit conditions.
1415-1	Munter, John	Thank you for your comments on the Draft EIS. Further discussion of removal has been included in Section 8.4 of the FEIS.
1412-1	Munter, John	Thank you for your comments on the Draft EIS. All work will require monitoring and measures to reduce and eliminate the spread of invasive species, both terrestrial and aquatic. Waterbody crossing plans will include the use of various techniques to reduce transfer of any aquatic nuisance species to other water bodies. This is part of the permitting process if and when the Applicant is granted a Certificate of Need.

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Response#	Commenter	Response
1411-1	Munter, John	Thank you for your comments on the Draft EIS. The executive summary of the FEIS provides information on the purpose of the EIS and the decisions they inform, while Section 1.4 provides details about broader policy implications.
1410-1	Munter, John	Thank you for your comments on the Draft EIS. Specifics regarding third-party monitoring of the pipeline are not known at this time. Monitoring associated with abandonment and removal of the existing Line 3 is discussed in Chapter 8 of the DEIS.
1410-2	Munter, John	An invasive species control plan will be required by the Applicant.
0872-1	Munter, John	Thank you for your comments on the Draft EIS. Additional information regarding cathodic protection on an abandoned pipeline has been included in Section 8.3.
2450-1	Murcia, Brent	Thank you for your comments on the Draft EIS. As a practical matter, re-visiting the timeframe for operational impacts and revising all of the analysis is not possible. A 30 year time window was chosen to match the economic life of the project indicated by the Applicant. For purposes of comparison across alternatives the EIS targets a consistent time window that is long enough to understand typical annual operating impacts/tradeoffs of the alternatives. Extending the timeframe and re-doing the analysis doesn't appear to add any value in this comparison.
2450-2	Murcia, Brent	The FEIS now includes historic incident data.
2450-3	Murcia, Brent	As noted in Chapter 11, a quantitative and qualitative analysis of impacts to environmental justice communities was conducted for the project. The quantitative analysis used census data to characterize the region of interest. The EIS expanded its analysis to include a qualitative discussion of potentially affected communities and associated impacts, acknowledging the unique connection of American Indian tribal members to reservation lands, ceded lands, and the project area. The analysis contains a robust discussion of potential EJ communities, impacts, and possible mitigation measures. The FEIS was revised to include additional detail on impacts as they pertain to environmental justice communities, and to include discussion of CN alternatives.

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Response#	Commenter	Response
2450-4	Murcia, Brent	Potential impacts to affected natural resources are discussed in Chapters 5 and 6 of the FEIS, and how American Indian tribes experience and interact with these resources is summarized in Chapters 9 and 11. This constitutes the analysis of treaty rights within this EIS.
2450-5	Murcia, Brent	Chapter 8 of the FEIS discusses the abandonment and removal alternatives, and discusses that a similar analysis will be needed for the proposed Line 3 at the end of its service life.
1427-1	Nameth, Matthew	Thank you for your comments on the Draft EIS. Tribal consultation is discussed in Chapter 9 of the FEIS. Materials from consultation efforts are provided in Appendix P.
1427-2	Nameth, Matthew	<p>As indicated in Section 10.3, on June 3, 2019 the Minnesota Court of Appeals ruled that the Revised Final Line 3 EIS of February 12, 2018 was inadequate because it failed to specifically address the potential impact of an oil spill into the Lake Superior watershed. In order to address the court’s opinion Enbridge commissioned a modeling analysis on behalf of and with input from the Minnesota Department of Commerce, Energy Environmental Review Analysis Staff for one additional hypothetical crude oil release from a pipeline crossing within the Lake Superior watershed (Stantec et al. 2019; Appendix V).</p> <p>When considered together with the seven previously modeled sites, Little Otter Creek as the eighth representative release site can be used to further characterize the range of trajectory, fate, and potential consequences of an oil spill in the project area. Using the same assumptions used for the other sites, the spill modeling was used to predict the potential trajectory of released oil, the fate of released oil, and the potential effects of accidental oil releases on the natural and human environment. The intent of these analyses was to infer a range of potential effects that may occur at this and other locations in Minnesota with similar biophysical and human use characteristics.</p>
1427-3	Nameth, Matthew	Section 8.3 of the FEIS provides discussion of further analysis to determine buoyancy, subsidence, and corrosion location. Appendix B provides calculations on corrosion rates.
0879-1	Natzel, Sharon	Thank you for your comments on the Draft EIS. The analysis considered groundwater and surface water impacts from the various alternative routes.

Responses to Comments – Citizen

Response#	Commenter	Response
1429-1	Neihart, Ken	Thank you for your comments on the Draft EIS. System alternative SA-04 was evaluated as an alternative to inform the Certificate of Need decision. It is not considered as part of the route alternatives to inform the routing permit decision. Figures ES-9, ES-10, ES-11, and Table ES-4 only cover the route alternatives considered as part of the routing permit.
1429-2	Neihart, Ken	The FEIS assumes that the Applicant will comply with all necessary permits or approvals that would be required for the construction and operation of the pipeline, if a Certificate of Need and route permit are approved by the Commission. Table 3.6-1 provides a list of additional permits and approvals required for the Line 3 Project. Potential connected actions, including transmission lines, are discussed in Section 2.10 of the FEIS.
1429-3	Neihart, Ken	Thank you for your comment. Economic and Employment data are included in the document.
1429-4	Neihart, Ken	Chapter 13 of the FEIS provides a list of preparers.
1429-5	Neihart, Ken	Enbridge has indicated that the new pipeline would allow transport of 760,000 barrels per day (bpd), an increase over the current Line 3 operating level of 390,000 bpd. Additional details on the project can be found in Chapter 2.
1748-1	Nelson, Jamie Kyle	Thank you for your comments on the Draft EIS. The figure in the executive summary has been revised to demonstrate amount spilled per volume transported. When volume of releases is compared to the volume crude oil transported, rail and truck transport release a significantly higher percentage of the volume transported, 0.309% and 0.154% respectively. Comparatively pipeline transport release and average of 0.006% of the volume of crude oil transported.
0321-1	Nielsen, Karen	Thank you for your comments on the Draft EIS. A detailed plan is not included with the EIS. Please see Appendix E - Environmental Protection Plan. If a permit is issued, additional conditions may be included.
0321-2	Nielsen, Karen	Section 2.3.2.3 has been amended for clarification; 49 CFR requires the cathodic protection be operational within 1 year, though it would likely be installed during construction.

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Response#	Commenter	Response
0321-3	Nielsen, Karen	The applicant may employ various measures to minimize or mitigate impacts to environmental justice communities. As noted in section 11.4 of the FEIS, the applicant may work with companies and subcontractors hired to construct, restore and operate the pipeline to prepare and implement an education plan or awareness campaign regarding the issue of sexual abuse or sex trafficking. Additionally, the applicant may provide funding to support the efforts of local and tribal law enforcement on this and other safety-related issues.
1570-1	Northern Water Alliance	Thank you for your comments on the Draft EIS. The scope of analyses included in the FEIS is focused on evaluation of the Applicant's Proposed Project/Applicant's Preferred Route and Certificate of Need and Route Alternatives. Chapters 1 and 3 detail the methodology and regulatory requirements of the EIS.
1570-2	Northern Water Alliance	The cumulative potential effects of climate change and trends in Minnesota and the Midwest are discussed in Section 12 of DEIS. Additional relevant documents used for GHG discussion are provided in Section 12.6 and Section 5.2.7.5.
1570-3	Northern Water Alliance	For a discussion on liability, please see Section 8.3.1.1 of the FEIS.
1570-4	Northern Water Alliance	The FEIS has been updated to include discussion on the properties of dilbit as it weathers.
1570-5	Northern Water Alliance	Please refer to Greenhouse Gases in Section 5.2.7.2. Also discussed in this Section are life-cycle GHG emissions from extraction to the end-use.
1570-6	Northern Water Alliance	The Consent Decree discussed in 8.3.1 of the FEIS requires the abandoned pipeline not be used again in the future.
1570-7	Northern Water Alliance	The FEIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release. The spill model does include winter, spring and summer conditions.
1570-8	Northern Water Alliance	An updated discussion of alternatives is provided in Section 6.3 of the FEIS.

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Response#	Commenter	Response
1570-9	Northern Water Alliance	Thank you for the comment. The goal of the EIS is to analyze impacts to all water resources from construction and operation of the Project. There are many non-Project associated water resource issues that are beyond the scope of the EIS. State and federal agencies will have permitting authority if the Project goes forward. Many of the issues noted by your comment are relevant to these agencies.
1570-10	Northern Water Alliance	Groundwater levels vary; levels and appropriate mitigation that could be required will be evaluated on a site by site basis during construction.
2043-1	Northern Water Alliance	Thank you for your comments on the Draft EIS. Potential impacts to wild rice lakes and harvest areas has been included in the analysis.
2043-2	Northern Water Alliance	The FEIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release. 10 miles downstream was selected, because it was considered to be not overly conservative, and crossing widths for the RAs were unavailable. The Applicant surveyed the streams and rivers for the APR ONLY, so small (<10 m wide) and large (10 m or > wide) crossings are only known for this route. It would be biased to only run the 2 downstream buffers (30 miles for large rivers, and 10 miles for small streams) along the APR. Furthermore, we determined that it would be overly conservative to run a 30-mile downstream buffer for all water crossings, especially since many of these water bodies are ditches and terminate within a few miles.
0443-1	Novacek, Lance	Thank you for your comments on the Draft EIS. Various sections within Chapters 5 and 6 of the FEIS, including Section 5.3.4 and Section 6.5.4 address baseline employment conditions within the counties crossed by the Applicant's proposed project/preferred route and alternatives, and anticipated impacts on employment as a result of construction and operations.
1436-1	Oldham, Nancy	Thank you for your comments on the Draft EIS. The FEIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release.

Responses to Comments – Citizen

Response#	Commenter	Response
0633-1	Olson, James	Thank you for your comments on the Draft EIS. Dilbit diluent is natural gas condensate, not solvent.
0729-1	Olson, Josh	Thank you for your comments on the Draft EIS. Publicly available datasets and field reports were used to develop the FEIS. The sentence in question could not be found on page 7-4.
0729-2	Olson, Josh	Publicly available datasets and field reports were used to develop the FEIS. The reference in question has been removed from the document and replaced with valid sources.
1226-1	Ostrove, Joan	Thank you for your comments on the Draft EIS. PHMSA is aware of the effect of buoyancy on pipeline stresses and recommends that pipelines have sufficient cover and be neutrally buoyant to prevent movement.
1226-2	Ostrove, Joan	Thank you for your comment on the Draft EIS. Your comment was considered in development of the FEIS.
1571-1	Otto, Wichahpi	Thank you for your comments on the Draft EIS. Your comment was considered in development of the FEIS.
1571-2	Otto, Wichahpi	Various chapters of the FEIS, including Chapter 3 ("Regulatory Framework") address the regulatory requirements that must be considered within the analyses of the FEIS.
1571-3	Otto, Wichahpi	The EIS assumes that if the permits are issued, the Applicant will abide by all federal, tribal, state, and local laws and regulations. Where applicable, this would include laws governing its construction.
1440-1	Otto, Wichahpi	Thank you for your comments on the Draft EIS. Your comment was considered in development of the FEIS.
1440-2	Otto, Wichahpi	Thank you for your comments on the Draft EIS. Your comment was considered in development of the FEIS.
1440-3	Otto, Wichahpi	The predictive risk analysis was removed due to issues with its application. Historic pipeline incident data was expanded to detail historic incident rates and causes. Current spill probabilities for a new pipeline using modern metallurgy and coating technologies would likely be less than historic incidents caused by corrosion or other internal failures. Case studies of several significant spills and discussion of their impacts to various resources have also been included.

Responses to Comments – Citizen

Response#	Commenter	Response
1440-4	Otto, Wichahpi	Additions have been made to Chapter 11 to provide more information on how adverse impacts to environmental justice communities are analyzed and addressed. As described in Chapter 11, a the identification of a potential environmental justice community, or the potential for disproportionately high and adverse impacts, does not preclude approval of the project or selection of a route alternative; however, it does require detailed efforts to avoid, mitigate, minimize, rectify, reduce, and/or eliminate the impacts. Section 11.4 of the FEIS identifies several measures that may be undertaken by the applicant to minimize or mitigate impacts to environmental justice communities.
2334-1	Parr, Jackie	Thank you for your comments on the Draft EIS. Potential impacts to affected natural resources are discussed in Chapters 5 and 6 of the FEIS, and how American Indian tribes experience and interact with these resources is summarized in Chapters 9 and 11. This constitutes the analysis of treaty rights within this EIS.
2334-2	Parr, Jackie	Several sources were reviewed to better understand the concerns related to sex trafficking. These concerns have been raised in recent local media, by commenters, local communities, and other communities where pipelines have been sited or proposed. Two sources are cited to support this concern; Section 11 indicates that increases in sex trafficking, particularly among Native populations, is well documented (National Congress of American Indians Policy Research Center 2016), and that American Indian and minority populations can be at higher risk based on various factors (Minnesota Department of Health [MDH] 2014). The discussion concludes that these concerns have the potential to be amplified with the addition of a cash-rich workforce. To address this potential, the EIS has been revised to clarify that the Applicant may provide funding to support the efforts of local and tribal law enforcement to address this issue.
2334-3	Parr, Jackie	Section 195.563 of 49 CFR Subpart H – Corrosion Control states that cathodic protection must be in operation no later than 1 year after the pipeline is constructed. This does not mean Enbridge would wait a full year to install the system. It is typically installed as part of the construction process. The buried pipeline would also be protected from external corrosion by application of a coating.
2334-4	Parr, Jackie	Section 8.3 and Appendix B discusses corrosion rates, subsidence, and exposure.

Responses to Comments – Citizen

Response#	Commenter	Response
2334-5	Parr, Jackie	Additional information regarding abandonment and potential future mitigation has been added to Section 8.3 of the FEIS.
1441-1	PaStarr, Brian	Thank you for your comments on the Draft EIS. The FEIS assesses the impacts from the Applicant's proposed project, and Project-related impacts with respect to tax revenues are discussed in Sections 5.3 and 6.5 of the FEIS. Assessing the socioeconomic impacts from decreasing tax revenue along existing Line 3 corridor after it has been abandoned/removed is outside the scope of the FEIS.
2844-1	Patterson, David	Thank you for your comments on the Draft EIS. The scope of analysis of impacts to recreation and tourism resources included within Chapter 5 is explained in greater detail within Section 5.3.2.1 of the FEIS: "In addition, Minnesota Administrative Rules Part 7853.0600, Subpart 2(J) requires listing of 'state critical areas, state WMAs; state scientific and natural areas; state wild, scenic, and recreational rivers; state parks; state scenic wayside parks; state recreational areas; state forests; state trails; state canoe and boating rivers; state zoos, and designated trout lakes through which the route passes, as mapped on the inventory of significant resources by the State Planning Agency.'" Regarding the second part of this comment - Section 5.3.2.3.1 does not deal with the impact to tourism and recreation due to a spill - analyses within Chapter 5.3.2 of the FEIS pertain to normal construction and operation of the pipeline. Chapter 10 of the FEIS deals specifically with accidental releases/spills, including potential impacts to recreation and tourism areas and related resources resulting from a release/spill.
2844-2	Patterson, David	The vast majority of spills are small (less than 1 barrel).
2013-1	Pearson, Andy	Thank you for your comments on the Draft EIS. For purposes of comparison across alternatives, a consistent time window of 30yrs was chosen to match the economic life of the project indicated by the applicant and to understand typical annual operating impacts/tradeoffs of the alternatives.
1851-1	Pearson, Andy	Thank you for your comments on the Draft EIS. Chapter 10 of the FEIS address the potential for unanticipated releases and the potential consequences of such releases.
1844-1	Pearson, Andy	The required capacity is discussed in Section 2.1 of the FEIS.

Responses to Comments – Citizen

Response#	Commenter	Response
0884-1	Pearson, Andy	Thank you for your comments on the Draft EIS. An extensive discussion on the Social Cost of Carbon (SCC) can be found within Section 5.2.7 of the FEIS, including the economic values of the 30-year SCC for direct and indirect emissions. Furthermore, as stated within the referenced section, the SCC does internalize net agricultural productivity; human health; property damages from increased flood risk; and changes in energy system costs, such as reduced costs for heating and increased costs for air conditioning.
0884-2	Pearson, Andy	The Applicant’s proposed project is the “action” evaluated in this FEIS. The pipeline distribution route and terminus beyond the Superior terminal is outside the approved scope of the FEIS.
2338-1	Perez, Lourdes	Thank you for your comments on the Draft EIS. The Department of Commerce is consulting with American Indian tribes. Information on consultation is provided in Chapter 9 and Appendix P of the FEIS.
2338-2	Perez, Lourdes	Tribal resources are addressed primarily in Chapters 9 and 11; however, references are provided throughout the EIS to note where specific resources analyses (e.g., wild rice, cultural sites) include a discussion of impacts to American Indian tribes and tribal resources.
2338-3	Perez, Lourdes	Potential impacts to affected natural resources are discussed in Chapters 5 and 6, and how American Indian tribes experience and interact with these resources is summarized in Chapters 9 and 11. This constitutes the analysis of treaty rights within this EIS.

Responses to Comments – Citizen

Response#	Commenter	Response
2338-4	Perez, Lourdes	Chapter 11 of the FEIS has been expanded to include additional information on the assessment of and impacts to potential EJ communities. As described in the section, the identification of potential EJ communities or the potential for disproportionately high and adverse impacts does not preclude approval of the project or selection of a route alternative; however, it does require detailed efforts to avoid, mitigate, minimize, rectify, reduce, and/or eliminate the impacts. Section 11.4 of the EIS describes the measures that may be undertaken by the applicant to minimize or mitigate adverse impacts. As noted in this section, the applicant may work with companies and subcontractors hired to construct, restore and operate the pipeline to prepare and implement an education plan or awareness campaign regarding the issue of sexual abuse or sex trafficking. Section 11.4 has been revised to clarify that the applicant may also provide funding to support the efforts of local and tribal law enforcement on this and other safety-related issues, which would enable local entities to tailor approaches and solutions to their community, and/or to collaborate with experts in this field.
2338-5	Perez, Lourdes	The Draft EIS noted that only three reports were reviewed; the additional reports now have been reviewed. Revisions to Sections 5.4.2 and 6.4.2 have been made to show this.
2339-1	Perkins, John and Gerald	Thank you for your comments on the Draft EIS. Section 4.2.2 addresses a no-action alternative.
2339-2	Perkins, John and Gerald	Sections 5.3 and 6.5 of the FEIS assesses the potential Project-related impacts with respect to commodity production; recreation and tourism; and employment, income, and tax revenues.
2339-3	Perkins, John and Gerald	Thank you for your comments on the Draft EIS. Your comment was considered in development of the FEIS.
2339-4	Perkins, John and Gerald	The range of alternatives for which impacts have been assessed in the EIS is consistent with the scope of the project. The contribution to the GHG emissions is discussed in the Section 5.2.7 and Section 6.3.7.
2339-5	Perkins, John and Gerald	The comment was considered in development of the FEIS.

Responses to Comments – Citizen

Response#	Commenter	Response
2339-6	Perkins, John and Gerald	As stated in the FEIS Executive Summary, construction of the SA-04 route would be expected to fragment less habitat than the Applicant's Preferred Route. The effects of SA-04 and the other Certificate of Need alternatives on habitat and fish and wildlife are addressed in FEIS Section 5.2.4. Chapter 1 of the FEIS states that the EIS is a factual document that is designed to inform public deliberations and government decision-making, but does not make specific recommendations regarding the Certificate of Need (or Route Permit) for the Project.
2339-7	Perkins, John and Gerald	System alternative SA-04 was evaluated as an alternative to inform the Certificate of Need decision. It is not considered as part of the route alternatives to inform the routing permit decision.
2339-8	Perkins, John and Gerald	System alternative SA-04 was evaluated as an alternative to inform the Certificate of Need decision. It is not considered as part of the route alternatives to inform the routing permit decision.
2339-9	Perkins, John and Gerald	Thank you for your comments on the Draft EIS. Your comment was considered in development of the FEIS.
2339-10	Perkins, John and Gerald	Alternative transportation modes are discussed in Section 5.2.4 of the FEIS.
2339-11	Perkins, John and Gerald	Average number of transport incidents per transit method (pipeline, rail, or truck) based on data acquired from the Pipeline and Hazardous Materials Safety Administration. The average volume of yearly transport based on Energy Information Administration United States Refinery Receipts of Crude Oil by Method or Transportation data.
1445-1	Peterson, Mary	Thank you for your comments on the Draft EIS. Sections 5.3 and 6.5 of the FEIS assesses the potential Project-related impacts with respect to commodity production; recreation and tourism; and employment, income, and tax revenues.

Responses to Comments – Citizen

Response#	Commenter	Response
0732-1	Peterson, Robert	Thank you for your comments on the Draft EIS. Section 6.2.4.3 of the FEIS includes discussion on potential impacts to property values resulting from the presence of an oil or gas pipeline and/or pipeline easement, including related infrastructure. A review of relevant literature is summarized in Table 6.2.4-5. Findings were inconclusive, disputed, or showed minimal to no relationship between pipeline easements and property values. At least one of the studies included in the aforementioned literature review, a 2008 study on the impacts of the South Mist Pipeline Expansion on property values in Oregon, included a review of a pipeline project with above-ground valves and other above-ground components; this study found that the pipeline had no statistically significant relationship with residential property values. Any effect on property values resulting from disruption due to protests and related issues would be purely speculative and cannot be reasonably anticipated.
2776-1	Phillips, Joni	Thank you for your comments on the Draft EIS. FEIS population data was derived from the United States Census Bureau for populated areas crossed by the project. The referenced study does not provide data for every populated area identified as crossed in the FEIS. For data and analysis consistency, the United States Census Bureau was used for the analysis since it provides adequate coverage.
2776-2	Phillips, Joni	While not called out by name, the resources within the Big Sandy watershed are part of the potential spill impact analysis.
2776-3	Phillips, Joni	Thank you for your comment. Your comment was considered in development of the FEIS.
1061-1	Phillips, Joni	Thank you for your comments on the Draft EIS. Your comments have been considered in development of the FEIS.

Responses to Comments – Citizen

Response#	Commenter	Response
1061-2	Phillips, Joni	The methodology utilized for analysis of existing conditions of, impacts on and mitigation for population is discussed within the associated sections of Chapters 5 and 6 of the FEIS. While population data utilized may in fact discount the presence of second homeowners, it is difficult to assess second homeowner population in a spatial and temporal context. The analysis for impacts on population is broken into two components: impacts associated with the non-local workforce re-locating to communities near the Project, and impacts associated with construction and operation of the pipeline near densely populated areas. The qualitative assessment of potential impacts on population, based on these components, is unlikely to change based on the presence of second homeowners.
1061-3	Phillips, Joni	Thank you for your comments on the Draft EIS. Your comments have been considered in development of the FEIS.
1061-4	Phillips, Joni	As stated in Chapter 1 of the FEIS, the EIS is intended to evaluate the impacts of granting a Certificate of Need for the proposed action against denial of the CN by considering alternatives including continued use of the existing Line 3; use of alternative pipeline systems or modes of transport such as trucks and trains to support adequate, reliable, and efficient supply; and alternative methods of supplementing the existing Line 3 to support adequate, reliable, and efficient supply. The EIS also evaluates proposed and alternative routes, contingent on CN approval. Reasonably foreseeable actions are also discussed within Chapter 12 of the FEIS. Future speculative pipelines are outside of the scope of the EIS.
1061-6	Phillips, Joni	Additional information regarding discharge of hydrostatic test water and source water has been included in Section 2.7.1.13 of the FEIS.
1061-6	Phillips, Joni	Additional information regarding discharge of hydrostatic test water and source water has been included in Section 2.7.1.13 of the FEIS.
1061-7	Phillips, Joni	Table 3.6-1 of the FEIS discusses DOH permit requirements.
1061-8	Phillips, Joni	Thank you for your comments on the Draft EIS. Your comments have been considered in development of the FEIS.

Responses to Comments – Citizen

Response#	Commenter	Response
1061-9	Phillips, Joni	Data were evaluated equally for all alternatives.
1061-10	Phillips, Joni	Thank you for your comment. Your comment was considered in development of the FEIS.
0735-1	Phillips, Joni	Thank you for your comments on the Draft EIS. The AFF extrapolated over a period of time would provide the potential of failure over that period of time. The EIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release.
0734-1	Phillips, Joni	Thank you for your comments on the Draft EIS. It is unclear what is specifically meant by "social impact" of the pipeline. Various chapters of the FEIS, including Chapters 5, 6, and 11 do address factors that could be considered "social impacts". Chapters 5 and 6 of the FEIS include analysis of the potential economic impacts of the project on recreation, property values, and taxes. Statements that construction will remove recreational income and property values will decrease across the board are incorrect, as discussed within the aforementioned chapters. An analysis of potential environmental impacts of accidental releases, spills and leaks can be found in Chapter 10.
0734-2	Phillips, Joni	Thank you for your comment. Section 10.5 of the EIS goes into detail about spill prevention, preparedness and response.
0736-1	Pilot, Robert	Thank you for your comments on the Draft EIS. Case studies of several significant spills and discussion of their impacts to various resources have been included. The National Academies of Sciences, Engineering, and Medicine 2016 and other non-US studies are included in the FEIS.
0852-1	Pine River Watershed Alliance - Johnson, Gregory	Thank you for your comments on the Draft EIS. Cathodic protection is discussed in Chapter 8 of the FEIS.
0852-2	Pine River Watershed Alliance - Johnson, Gregory	Impacts to water resources, which includes watersheds, from the certificate of need and route alternatives is discussed in Sections 5.2.1 and 6.3.1 of the FEIS.

Responses to Comments – Citizen

Response#	Commenter	Response
1447-1	Pine River Watershed Alliance - Steve, Roe	Thank you for your comments on the Draft EIS. Your comments were considered in development of the FEIS.
2322-1	Power Shift Network	Thank you for your comments on the Draft EIS. Your comment was considered in development of the FEIS.
2322-2	Power Shift Network	Thank you for your comments on the Draft EIS. Your comment was considered in development of the FEIS.
2322-3	Power Shift Network	The comment has been considered in development of the FEIS.
2322-4	Power Shift Network	Additional information regarding the future retirement of the proposed Line 3 has been included in Section 8.1 of the FEIS.
2042-1	Pranis, Kevin	Thank you for your comments on the Draft EIS. Section 6.5.4 of the FEIS clarifies that it is likely that the Applicant would hire local residents during construction of any of the alternative routes for a portion of its workforce - based on current labor agreements in Minnesota at least 50% of workers will be expected to be employed from local union halls.
2042-2	Pranis, Kevin	Discussion of railroad transport is discussed in Section 4.2 of the FEIS.
0241-1	Ragole, Rose	Thank you for your comments on the Draft EIS. Information on gallons per barrel has been included in Section 2.1 of the FEIS. Information on oil releases is included throughout Section 10 of the FEIS.
1065-1	Rausch, Ellis	Thank you for your comments on the Draft EIS. The FEIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release.

Responses to Comments – Citizen

Response#	Commenter	Response
1065-2	Rausch, Ellis	A discussion of alternatives is presented in Chapter 4. Specifically, a no action alternative, which is the denial of the CN, is discussed in Section 4.2.2. The purpose of the CN process is to determine whether the particular project being proposed is needed. There is no legal authority in a CN proceeding of a separate proposed project (at the state or with the Public Utilities Commission) to evaluate the ongoing need of an existing project. Once constructed, the safety and operation of an existing pipeline is regulated by the United States Department of Transportation, Pipeline and Hazardous Materials Safety Administration. In this particular case, Enbridge has entered into a consent decree with the United States Environmental Protection Agency that allows for the continued operation of the existing Line 3 if a replacement for the line is not approved. In other words, if the proposed Line 3 project is not approved by the Commission, the continued operation of the existing Line 3 will be regulated by the Federal government, not the State of Minnesota. Accordingly, shutting down and removing existing pipelines in the mainline corridor is not included in the No Action Alternative.
0743-1	Renner, Pat	Thank you for your comments on the Draft EIS. Spill impact analysis was limited to the expected areas of impact, which are 2500 ft. and 10 miles downstream from the pipeline.
0743-2	Renner, Pat	Comment noted. Potential impacts of the project on environmental justice communities are described in Chapter 11 of the FEIS.
0899-1	Richardson, Allen	Thank you for your comments on the Draft EIS. The typical configuration and distance between pipelines is provided in Section 4.3.4.3 of the FEIS.
0897-1	Richardson, Allen	Thank you for your comments on the Draft EIS. Section 8.4.1 of the FEIS notes the approximate cost of a potential removal effort as well as an estimate for the number of potential jobs created during a hypothetical removal effort (approximately half of the jobs generated by construction of a new Line 3). This can be compared with employment and jobs anticipated to be created by the project, for which discussion can be found in Chapters 5 and 6.

Responses to Comments – Citizen

Response#	Commenter	Response
0897-2	Richardson, Allen	Section 8.4.1 of the FEIS notes the approximate cost of a potential removal effort as well as an estimate for the number of potential jobs created during a hypothetical removal effort (approximately half of the jobs generated by construction of a new Line 3). This can be compared with employment and jobs anticipated to be created by the project, for which discussion can be found in Chapters 5 and 6.
0748-1	Rietmann, Dean	Thank you for your comments on the Draft EIS. Chapters 5 and 6 of the FEIS include analysis of the potential economic impacts of the project on federal/state public lands, water resources, and air quality. An analysis of potential environmental impacts of accidental releases, spills and leaks can be found in Chapter 10.
1069-1	Roe, Steve	Thank you for your comments on the Draft EIS. Your comments were considered in development of the FEIS.
0563-1	Rozycki, Margaret	Thank you for your comments on the Draft EIS. The 30 year time-frame was chosen to match the economic life of the project indicated by the Applicant. For purposes of comparison across alternatives, the EIS targets a consistent time-frame that is long enough to understand typical annual operating impacts/tradeoffs of the alternatives. The EIS uses social cost of carbon (SCC) values that were assessed using a 3-percent discount rate developed by the Interagency Working Group to provide an estimate of potential climate change damages for the Applicant's proposed project and CN Alternatives based on total direct and indirect GHG emissions. The SCC is a useful measure to assess the benefits of CO ₂ reductions.
2100-1	Russell, Scott	Thank you for your comments on the Draft EIS. Text has been added to Chapter 9 of the FEIS to include the names of elders and tribal leaders that were interviewed as part of the consultation.
2473-1	Sattinger, Stan	Thank you for your comments on the Draft EIS. The cumulative potential effects of climate change and trends in Minnesota and the Midwest are discussed in Chapter 12 of the FEIS. The range of alternatives for which GHG emissions are estimated and impacts have been assessed in the EIS are consistent with the acceptable industry standard and scope of the project. Please note that Table 6.3.7-14 shows construction emissions only between Clearbrook and Carlton for the Applicants Proposed Project and route alternatives whereas Table 5.2.7-6 shows construction emissions for the entire route of the Applicants Proposed Project and the CN alternatives.

Responses to Comments – Citizen

Response#	Commenter	Response
2473-2	Sattinger, Stan	The construction emissions are calculated based on standard industry wide estimation procedures and provide conservative estimates. Please note that Table 6.3.7-14 shows construction emissions only between Clearbrook and Carlton for the Applicants Proposed Project and route alternatives whereas Table 5.2.7-6 shows construction emissions for the entire route of the Applicants Proposed Project and the CN alternatives.
2473-3	Sattinger, Stan	Thank you for your comments on the Draft EIS. Your comment was considered in development of the FEIS.
2050-1	Sattinger, Stan	Thank you for your comments on the Draft EIS. Additional discussion regarding the probability of spills has been included in Section 10.1.3.1.3.
2050-2	Sattinger, Stan	The comment has been considered in the development of the FEIS.
0564-1	Sauve, Dan	Thank you for your comments on the Draft EIS. That has been recognized and corrected in the FEIS.
0564-2	Sauve, Dan	Additional analysis of the potential for incidents to occur has been included in Section 10.1.2.
0338-1	Schaitberger, Sharli	Thank you for your comments on the Draft EIS. The FEIS is focused on impacts to waterbodies of concern and tribal issues associated with those waterbodies.
0338-2	Schaitberger, Sharli	The FEIS is focused on impacts to waterbodies of concern and tribal issues associated with those waterbodies.
0338-3	Schaitberger, Sharli	The FEIS is focused on impacts to waterbodies of concern and tribal issues associated with those waterbodies.
0338-4	Schaitberger, Sharli	Section 8.2 of the FEIS discusses the applicable regulatory requirements. No requirement exists mandating the removal of a pipeline.
0465-1	Shea, Brian	Thank you for your comments on the Draft EIS. Figure ES-4 of the FEIS has been updated to compare the “Average Yearly Transport (Thousand Barrels)” to “Percent Volume Spilled” per type of transport.

Responses to Comments – Citizen

Response#	Commenter	Response
0465-2	Shea, Brian	Thank you for your comments on the Draft EIS. The information mentioned has been considered while revising the executive summary.
0465-3	Shea, Brian	The figure in the executive summary has been revised in the FEIS to demonstrate amount spilled per volume transported.
0465-4	Shea, Brian	The information mentioned has been considered while revising the executive summary.
0758-1	Siegel, Lauren	Thank you for your comments on the Draft EIS. Discussion of existing conditions, impacts and mitigation on employment, other socioeconomic factors, and other resources within the FEIS is focused on the Certificate of Need alternatives and Route alternatives identified and discussed in greater detail in Chapter 4 and throughout the FEIS.
2803-1	Sierra Club	<p>The EIS includes extensive analyses of environmental, economic, employment, and sociological impacts of the proposed project and reasonable alternatives as required in Minn. R. 4410.2300 and as described in the EIS scoping document.</p> <p>Minn. R. 4410.0300, Subp.3 indicates that environmental documents are to be used as guides in issuing, amending, and denying permits and carrying out other responsibilities of governmental units.</p> <p>Since the EIS is intended to inform the Commission's decision-making, the extensive information in the EIS is therefore organized by CN and route criteria in order to help the Commission evaluate the environmental implications of its two separate decisions.</p>
2803-2	Sierra Club	The comment maintains that information that relates directly to permit decision-making matters is "discretionary." On the contrary, under Minn. R. 4410.2000, one of the primary purposes of an EIS is to provide information for governmental units. The EIS, therefore, contains information required for permitting to the extent practicable. The EIS helps inform the Commission's decisions, but does not substitute for it.

Responses to Comments – Citizen

Response#	Commenter	Response
2803-3	Sierra Club	<p>Chapter 1 describes the approach to purpose and need for the EIS.</p> <p>As described in Section 4.1 of the Alternatives Screening Report for the Line 3 Replacement Project, September 21, 2016, project “purpose and need” was not used to screen out alternatives to evaluate in this EIS. The Sierra Club scoping comment letter, dated May 26, 2016, provides a rationale for this approach.</p> <p>In addition, the EIS is not based on Enbridge’s proposed purpose. Chapter 2 is a description of Enbridge’s proposed project. Section 2.2, which is part of the project description, is a summary of Enbridge’s explanation of why they are proposing the project. Therefore, Section 2.2 by definition is Enbridge’s description of their project purpose.</p>
2803-4	Sierra Club	<p>The purpose and need for the EIS is provided in the Executive Summary under the heading of "What is the purpose of this Environmental Impact Statement?" This section identifies how the EIS is used to help decision makers.</p> <p>The decision makers then will use the EIS to help determine if a permit should be issued.</p> <p>The EIS relies extensively on agency and other expert independent analysis of environmental and engineering information. Where applicable, information from the Applicant was reviewed, assessed, and included in the analysis.</p>
2803-5	Sierra Club	<p>The EIS is organized primarily to inform the Commission’s threshold decisions on the Certificate of Need and the route permit, but it also contains information applicable to other permits.</p> <p>It is impracticable to develop all of the detailed information and final designs required for all “downstream” permits required for eventual construction (such as for all wetlands or public water crossings). That level of detail would be developed during final, detailed design and permitting, if a CN is granted and a route selected.</p>

Responses to Comments – Citizen

Response#	Commenter	Response
2803-6	Sierra Club	<p>The analysis of the alternatives categories requested in the comment is provided in Section 3 of the Final Scoping Decision Document for Line 3 Pipeline Replacement Project, dated December 5, 2016.</p> <p>Chapter 4 of the EIS provides information regarding each of the alternatives that is carried forward for analysis.</p>
2803-7	Sierra Club	<p>The Applicant (Enbridge) has stated in Section 10.1 of their CN application that if the CN were denied, they would continue to operate Line 3 and the required integrity management program, as long as practicable. For this reason, this is included as one of the alternatives.</p> <p>Table ES-1 and Table 4.2-1 provide information on the CN alternatives carried forward.</p>
2803-8	Sierra Club	<p>A discussion of alternatives is presented in Chapter 4. Specifically, a no action alternative, which is the denial of the CN, is discussed in Section 4.2.2. The purpose of the CN process is to determine whether the particular project being proposed is needed. There is no legal authority in a CN proceeding of a separate proposed project (at the state or with the Public Utilities Commission) to evaluate the ongoing need of an existing project. Once constructed, the safety and operation of an existing pipeline is regulated by the United States Department of Transportation, Pipeline and Hazardous Materials Safety Administration. In this particular case, Enbridge has entered into a consent decree with the United States Environmental Protection Agency that allows for the continued operation of the existing Line 3 if a replacement for the line is not approved. In other words, if the proposed Line 3 project is not approved by the PUC, the continued operation of the existing Line 3 will be regulated by the Federal government, not the State of Minnesota. Accordingly, shutting down and removing existing pipelines in the mainline corridor is not included in the No Action Alternative.</p>
2803-9	Sierra Club	<p>The EIS does not assume that oil is needed and that moving it by pipeline, rail, or truck is inevitable. Instead, the EIS provides an analysis of the environmental implications of potential outcomes should the Commission find that the demand does exist (See Table ES-1 and Table 4.2-1).</p>

Responses to Comments – Citizen

Response#	Commenter	Response
2803-10	Sierra Club	<p>It is not clear whether these alternative pipelines could meet the need for this proposed project.</p> <p>However, the Certificate of Need hearing process will evaluate additional information on the economic need or viability of other regional pipelines to transport the volume of additional oil proposed by the Project.</p> <p>The environmental impacts associated with these other pipelines have been (or would be) evaluated in other jurisdictions. Therefore, the “other pipeline” CN alternatives are not evaluated in the EIS. Chapter 4 of the EIS provides information on the alternatives that are carried forward.</p>
2803-11	Sierra Club	<p>Thank you for your comments regarding the Scoping Decision Document. While general information is included as part of the comment, specific information related to an action for the EIS is not provided. Therefore, the Department did not revise the EIS based on this comment.</p>
2803-12	Sierra Club	<p>The EIS was not revised based on this comment as no specific rationale was provided as to indicate how this measurement is relevant to the environmental analysis.</p> <p>The reader can easily calculate million barrels per day-miles, should it be relevant, by multiplying route miles by pipeline capacity.</p>
2803-13	Sierra Club	<p>The project description has been revised to show that the Applicant is required to implement the measures as a regulatory requirement.</p> <p>Chapter 2 provides a discussion of the project description.</p>
2803-14	Sierra Club	<p>As this is a large, complex project, Chapter 5 and Chapter 6 include extensive descriptions of the environmental setting for the proposed project/Applicant’s preferred route and various alternatives (CN and route). It would be redundant to also include this information as part of the project description in Chapter 2.</p>

Responses to Comments – Citizen

Response#	Commenter	Response
2803-15	Sierra Club	<p>Estimated project cost is typically included in the project description in an EIS, in part, in order to help analyze socioeconomic impacts (Section 5.3 and Section 6.5).</p> <p>In addition, the details on Enbridge’s proposed measures during construction are included in the project description, because they are a critical component of the project itself. The EIS assesses potential impacts in part based on the Applicant complying with the commitments in their permit applications. The additional “mitigation” needed to reduce remaining environmental impacts are then considered in the EIS as potential permit conditions as well.</p>
2803-16	Sierra Club	The comment has been addressed. The final EIS has been revised to eliminate statements that appear to promote the Applicant or its plans.
2803-17	Sierra Club	EIS Chapter 2 is a description of Enbridge’s proposed project. Section 2.2, which is part of the project description, is a summary of Enbridge’s explanation of why they are proposing the project. Therefore, Section 2.2 by definition is Enbridge’s description of their project purpose.
0257-1	Slagle, Nicolette	Thank you for your comments on the Draft EIS. Flush water disposal is addressed in Section 8.3 of the FEIS. Please see Table 3.6-1 for a list of required permits and approvals for the Line 3 Project.
0257-2	Slagle, Nicolette	Section 4.3.1.2 of the FEIS discusses hoop stress reduction from internal pressure after the removal of product.
1467-1	Smith, Cynthia	Thank you for your comments on the Draft EIS. Your comment was considered in development of the FEIS.
1468-1	Smokey, Steven	Thank you for your comments on the Draft EIS. Permanent structures that are seasonally used such as cabins and lake homes will be captured in the route segment alternative analysis through the "developed" National land Cover Database category. For RSA-White Elk Lake, Table 7.3-5 details the land cover percentages impacted by the APR's route segment, and the route segment alternative.
1468-2	Smokey, Steven	The revised version of the EIS provides the most accurate evaluation of waterbodies proximal and potentially impacted by the Project. All information was derived from state and federal GIS databases.

Responses to Comments – Citizen

Response#	Commenter	Response
1468-3	Smokey, Steven	Information regarding cultural resources (those listed within the Minnesota Historical Society databases) has been added to Chapter 7. While the databases show that no resources have been identified within this route segment alternative (RSA), the potential for previously undocumented resources exists. If this RSA were to be constructed, additional surveys would likely be required.
0765-1	Sonim, Andrea	Thank you for your comments on the Draft EIS. Chapter 8 and Appendix B of the FEIS includes an assessment of the abandonment and removal of the existing Line 3, including a discussion on anticipated cleaning solution.
2065-1	Sorour, Mahyar	<p>The FEIS contains discussion of releases, the fate and transport of spills and case histories of the effects of spills to resources. The selected sites were to show potential behavior of spills at various conditions and are not intended to be a prediction of all potential release locations and volumes.</p> <p>As indicated in Section 10.3, on June 3, 2019 the Minnesota Court of Appeals ruled that the Revised Final Line 3 EIS of February 12, 2018 was inadequate because it failed to specifically address the potential impact of an oil spill into the Lake Superior watershed. In order to address the court’s opinion Enbridge commissioned a modeling analysis on behalf of and with input from the Minnesota Department of Commerce, Energy Environmental Review Analysis Staff for one additional hypothetical crude oil release from a pipeline crossing within the Lake Superior watershed (Stantec et al. 2019; Appendix V).</p> <p>When considered together with the seven previously modeled sites, Little Otter Creek as the eighth representative release site can be used to further characterize the range of trajectory, fate, and potential consequences of an oil spill in the project area. Using the same assumptions used for the other sites, the spill modeling was used to predict the potential trajectory of released oil, the fate of released oil, and the potential effects of accidental oil releases on the natural and human environment. The intent of these analyses was to infer a range of potential effects that may occur at this and other locations in Minnesota with similar biophysical and human use characteristics.</p>
1475-1	Spangler, Carolyn	Predicted volume out data is considered “public” data and is provided in Chapter 10.

Responses to Comments – Citizen

Response#	Commenter	Response
0568-1	Specht, Hannah	Thank you for your comments on the Draft EIS. The ROI was identified as the distance that released oil would typically spread on flat ground (calculated to be 1,214 feet from the centerline) plus an additional distance of 1,050 feet for estimated down-gradient migration in groundwater (if groundwater were contacted); the estimated total distance of approximately 2,264 feet was rounded up to 2,500 feet. 10 miles downstream was selected, because it was considered to be not overly conservative, and crossing widths for the RAs were unavailable. The Applicant surveyed the streams and rivers for the APR ONLY, so small (<10 m wide) and large (10 m or > wide) crossings are only known for this route. It would be biased to only run the 2 downstream buffers (30 miles for large rivers, and 10 miles for small streams) along the APR. Furthermore, we determined that it would be overly conservative to run a 30-mile downstream buffer for all water crossings, especially since many of these water bodies are ditches and terminate within a few miles.
2114-1	Squire, Decourcy	Thank you for your comments on the Draft EIS. Enbridge has asserted that public disclosure of potential release volumes is a security risk that could be exploited. A non-redacted version was available to the Department of Commerce.
1080-1	Squire, DeCourcy	Thank you for your comments on the Draft EIS. Enbridge has asserted that public disclosure of potential release volumes is a security risk that could be exploited. A non-redacted version was available to the Department of Commerce. The EIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release.
1080-2	Squire, DeCourcy	The predictive risk analysis was removed due to issues with its application. Historic pipeline incident data was expanded to detail historic incident rates and causes. Current spill probabilities for a new pipeline using modern metallurgy and coating technologies would likely be less than historic incidents caused by corrosion or other internal failures.

Responses to Comments – Citizen

Response#	Commenter	Response
0966-1	Stout Heller, Karen	Thank you for your comments on the Draft EIS. This topic is addressed in Section 1.6 - Controlling Spread of Undesirable Species, in the Environmental Protection Plan (EPP), Appendix E of the DEIS. The EPP outlines construction-related environmental policies, procedures, and protection measures that would be implemented during project construction and operation specifically to avoid introduction and spread of noxious weeds. This section also address use of herbicides for additional control of noxious weeds and invasive plants. These actions were integrated into the impact analysis, which includes reed canarygrass on the list of potential invasive plant species considered.
1540-1	Striegel, Gerald	Thank you for your comments on the Draft EIS. The life-cycle GHG estimates provided in Table 5.2.7-11 show the full range of possible outcomes for general comparison purposes. The life cycle emissions are calculated assuming worst-case throughput and provide a conservative estimates of GHG emissions. For additional information, please refer to the reference documents list provided in Section 5.2.7.5.
1540-2	Striegel, Gerald	For additional information, please refer to the reference documents list provided in Section 5.2.7.5.
1540-3	Striegel, Gerald	Thank you for your comments on the Draft EIS. Your comment was considered in development of the FEIS.
2692-1	Striegel, Gerald	Thank you for your comments on the Draft EIS. The life-cycle GHG estimates provided in Table 5.2.7-11 show the full range of possible outcomes for general comparison purposes. The life cycle emissions are calculated assuming worst case throughput and provide a conservative estimates of GHG emissions. For additional information, please refer to the reference documents list provided in Section 5.2.7.5.
1543-1	Suppan, Sara	Thank you for your comments on the Draft EIS. Potential impacts to the federally-listed endangered rusty patched bumble bee from the Applicant's proposed route, CN alternatives, and route alternatives are presented in Sections 5.2.5 and 6.3.5 of the FEIS. Potential impacts to non-listed bee and other insect species are presented in Sections 5.2.4 and 6.3.4 of the FEIS, and due to the implementation of BMPs for use of herbicides, are expected to be minimal.

Responses to Comments – Citizen

Response#	Commenter	Response
1543-2	Suppan, Sara	Effects from spills considers in most cases impacts to water quality and prominent taxa such as fish and large invertebrates. Effects noted to water quality will have subsequent relevance for lower taxa such as algae and microorganisms.
1081-1	Suppan, Sara	Thank you for your comments on the Draft EIS. You are correct. There is a myriad of effects that can occur within an aquatic ecosystem as a result of a spill. Seasonal aspects and oil type can result in differing exposure and water quality effects. The FEIS approach was to note the issues of greatest concern and most likely measureable effects.
1081-2	Suppan, Sara	Under state and federal regulations, the Applicant will be required to develop an SPCC plan for addressing release of oil. The plan would require response techniques to be employed in the event of a spill under all circumstances.
1081-5	Suppan, Sara	Cumulative potential effects of reasonably foreseeable actions are assessed in Chapter 12. The methodology for assessing cumulative potential impacts is described in Section 12.1 and 12.2.
1081-5	Suppan, Sara	Cumulative potential effects of reasonably foreseeable actions are assessed in Chapter 12. The methodology for assessing cumulative potential impacts is described in Section 12.1 and 12.2.
1081-5	Suppan, Sara	Cumulative potential effects of reasonably foreseeable actions are assessed in Chapter 12. The methodology for assessing cumulative potential impacts is described in Section 12.1 and 12.2.
2262-1	Suppan, Steve	Thank you for your comments on the Draft EIS. The comment was considered in development of the FEIS.

Responses to Comments – Citizen

Response#	Commenter	Response
2262-2	Suppan, Steve	<p data-bbox="680 329 1955 548">As indicated in Section 10.3, on June 3, 2019 the Minnesota Court of Appeals ruled that the Revised Final Line 3 EIS of February 12, 2018 was inadequate because it failed to specifically address the potential impact of an oil spill into the Lake Superior watershed. In order to address the court’s opinion Enbridge commissioned a modeling analysis on behalf of and with input from the Minnesota Department of Commerce, Energy Environmental Review Analysis Staff for one additional hypothetical crude oil release from a pipeline crossing within the Lake Superior watershed (Stantec et al. 2019; Appendix V).</p> <p data-bbox="680 581 1955 841">When considered together with the seven previously modeled sites, Little Otter Creek as the eighth representative release site can be used to further characterize the range of trajectory, fate, and potential consequences of an oil spill in the project area. Using the same assumptions used for the other sites, the spill modeling was used to predict the potential trajectory of released oil, the fate of released oil, and the potential effects of accidental oil releases on the natural and human environment. The intent of these analyses was to infer a range of potential effects that may occur at this and other locations in Minnesota with similar biophysical and human use characteristics.</p> <p data-bbox="680 873 1955 979">The EIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release. Case studies of several significant spills, including the 2010 spill, have been included.</p> <p data-bbox="680 1011 1709 1036">Predicted volume out data is considered “public” data and is provided in Chapter 10.</p>

Responses to Comments – Citizen

Response#	Commenter	Response
2261-1	Suppan, Steve	Thank you for comments on the Draft EIS. For purposes of comparison across alternatives, a consistent time window of 30 years was chosen to match the economic life of the project indicated by the applicant and to understand typical annual operating impacts/tradeoffs of the alternatives. The cumulative potential effects of climate change and trends in Minnesota and the Midwest are discussed in Chapter 12 of the FEIS. Recognizing that the totality of climate change is not attributable to any single action, but is exacerbated by a series of actions, the analysis does not attempt to directly link the emissions from a single action to an incremental change in climate. The lifecycle GHG intensity of various crude oils is discussed in the Section 5.2.7.3. The average life cycle GHG emissions for heavy ECSB are calculated based on higher value of CO ₂ e/bbl of crude oil. This provides conservative estimates of life cycle gas emissions in Table 5.27-11. Further details can be found in the list of referenced documents provided in Section 5.2.7.5.
2262-3	Suppan, Steve	Extensive discussion on the Social Cost of Carbon (SCC) can be found within Section 5.2.7 of the FEIS, including the economic values of the 30-year SCC for direct and indirect emissions. Furthermore, as stated within the referenced section, the SCC does internalize net agricultural productivity; human health; property damages from increased flood risk; and changes in energy system costs, such as reduced costs for heating and increased costs for air conditioning. It is untenable to expect that any and all damages can be captured within SCC calculations.
2261-2	Suppan, Steve	The range of alternatives evaluated as part of the EIS is consistent with the scope. The lifecycle GHG intensity of various crude oils is discussed in the Section 5.2.7.3. The average life cycle GHG emissions for heavy ECSB are calculated based on higher value of CO ₂ e/bbl of crude oil. This provides conservative estimates of life cycle gas emissions in Table 5.27-11. Further details can be found in the list of referenced documents provided in Section 5.2.7.5.
2262-4	Suppan, Steve	See response to comment 2262-1.
2261-3	Suppan, Steve	Chapter 3 discusses the regulatory framework.

Responses to Comments – Citizen

Response#	Commenter	Response
2263-1	Sutherland, Aimee	Thank you for your comments on the Draft EIS. Tribal resources are addressed primarily in Chapters 9 and 11 of the FEIS; however, references are provided throughout the EIS to note where specific resources analyses (e.g., wild rice, cultural sites) include a discussion of impacts to American Indian tribes and tribal resources.
2263-2	Sutherland, Aimee	<p>The EIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release. Section 195.563 of 49 CFR Subpart H – Corrosion Control states that cathodic protection must be in operation no later than 1 year after the pipeline is constructed. This does not mean Enbridge would wait a full year to install the system. It is typically installed as part of the construction process. The buried pipeline would also be protected from external corrosion by application of a coating.</p> <p>As indicated in Section 10.3, on June 3, 2019 the Minnesota Court of Appeals ruled that the Revised Final Line 3 EIS of February 12, 2018 was inadequate because it failed to specifically address the potential impact of an oil spill into the Lake Superior watershed. In order to address the court’s opinion Enbridge commissioned a modeling analysis on behalf of and with input from the Minnesota Department of Commerce, Energy Environmental Review Analysis Staff for one additional hypothetical crude oil release from a pipeline crossing within the Lake Superior watershed (Stantec et al. 2019; Appendix V).</p> <p>When considered together with the seven previously modeled sites, Little Otter Creek as the eighth representative release site can be used to further characterize the range of trajectory, fate, and potential consequences of an oil spill in the project area. Using the same assumptions used for the other sites, the spill modeling was used to predict the potential trajectory of released oil, the fate of released oil, and the potential effects of accidental oil releases on the natural and human environment. The intent of these analyses was to infer a range of potential effects that may occur at this and other locations in Minnesota with similar biophysical and human use characteristics.</p>

Responses to Comments – Citizen

Response#	Commenter	Response
2266-1	Tas, Rhonwen	Thank you for your comments on the Draft EIS. 10 miles downstream was selected for the ROI, because it was considered to be not overly conservative, and crossing widths for the RAs were unavailable. The Applicant surveyed the streams and rivers for the APR only, so small (less than 30 feet wide) and large (30 feet wide or greater) crossings are only known for this route. It would be biased to only run the two downstream buffers (30 miles for large rivers, and 10 miles for small streams) along the APR. Furthermore, it was determined that it would be overly conservative to run a 30-mile downstream buffer for all water crossings, especially since many of these water bodies are ditches and terminate within a few miles.
1547-1	Terhark, Nancy	Thank you for your comments on the Draft EIS. Chapter 13 of the FEIS provides a list of preparers.
2267-1	The Nature Conservancy	Thank you for your comments on the Draft EIS. Chapter 12 of the FEIS addresses potential cumulative effects of the Applicant's Proposed Project/Preferred Route (APR) and Certificate of Need/Route Alternatives and Reasonably Foreseeable Actions. The comment pertains to cumulative impacts resulting from the entire Applicant's Preferred Route and/or Alternatives. This information can be found in Chapters 5 and 6. As discussed in Chapter 12 of the FEIS, corridor sharing by the APR and reasonably foreseeable actions would be possible in many cases and is discussed in greater detail within Chapter 12. General effects to fish and wildlife species from habitat loss/fragmentation is discussed in Sections 5.2.4 and 6.3.4. Effects to federal and state protected species and habitats from habitat loss/fragmentation is discussed in Sections 5.2.5 and 6.3.5.
2267-2	The Nature Conservancy	Climate change will affect various supporting habitats that could potentially result in various plant and animal taxa becoming vulnerable. Detailed analysis of this phenomenon was not possible within the scope of the DEIS, but it is well understood.
2267-3	The Nature Conservancy	Cumulative potential effects are discussed in Chapter 12.
1488-1	Therkilsen, Jennifer	Thank you for your comments on the Draft EIS. Construction methods are detailed in Section 2.7 of the FEIS.

Responses to Comments – Citizen

Response#	Commenter	Response
1488-2	Therkilsen, Jennifer	The soil analysis was derived from SSURGO and STATSGO2 data developed by soils surveys conducted by the NRCS. While details specific to every soil component of every mapped soil was not provided, the characteristics that may be sensitive to disturbance, including prime farmland, soils highly erodible by water or wind, hydric soils, compaction-prone soils, stony/rocky soils and coarse-textured soils, shallow bedrock, hydric soils, and similar features were evaluated. These same factors are used in the hydrogeologic sensitivity of near-surface materials in regards to oil spill impacts.
1488-3	Therkilsen, Jennifer	The workforce figure is 4,200.

Responses to Comments – Citizen

Response#	Commenter	Response
1489-1	Thibault, Rachel & Jack	<p>The predictive risk analysis was removed due to issues with its application. Historic pipeline incident data was expanded to detail historic incident rates and causes. Current spill probabilities for a new pipeline using modern metallurgy and coating technologies would likely be less than historic incidents caused by corrosion or other internal failures.</p> <p>The EIS acknowledges the spill model runs were not intended to be a prediction of all possible spills, but to show fates and trajectory for the types of oil in different environmental conditions within the first 24 hours of a release.</p> <p>As indicated in Section 10.3, on June 3, 2019 the Minnesota Court of Appeals ruled that the Revised Final Line 3 EIS of February 12, 2018 was inadequate because it failed to specifically address the potential impact of an oil spill into the Lake Superior watershed. In order to address the court’s opinion Enbridge commissioned a modeling analysis on behalf of and with input from the Minnesota Department of Commerce, Energy Environmental Review Analysis Staff for one additional hypothetical crude oil release from a pipeline crossing within the Lake Superior watershed (Stantec et al. 2019; Appendix V).</p> <p>When considered together with the seven previously modeled sites, Little Otter Creek as the eighth representative release site can be used to further characterize the range of trajectory, fate, and potential consequences of an oil spill in the project area. Using the same assumptions used for the other sites, the spill modeling was used to predict the potential trajectory of released oil, the fate of released oil, and the potential effects of accidental oil releases on the natural and human environment. The intent of these analyses was to infer a range of potential effects that may occur at this and other locations in Minnesota with similar biophysical and human use characteristics.</p>
1493-1	Trooien, Troy	Thank you for your comments on the Draft EIS. Additional information from the Consent Decree has been included in Section 8.3 of the FEIS.
1493-2	Trooien, Troy	Thank you for your comments on the Draft EIS. Your comments were considered in development of the FEIS.

Responses to Comments – Citizen

Response#	Commenter	Response
1493-3	Trooien, Troy	Section 8.3.1.1 of the FEIS discusses Enbridge's current and ongoing liability and responsibility under the Minnesota Statutes 115E.
1493-4	Trooien, Troy	Additional information has been provided in Section 8.4 of the FEIS.
1493-5	Trooien, Troy	Please see Section 8.4 of the FEIS for additional information related to heavy equipment and timber mats.
1933-1	Tyra, S	Thank you for your comments on the Draft EIS. Your comments were considered in development of the FEIS.
1933-2	Tyra, S	The SCADA system would only monitor the pipeline system for normal operation.
1933-3	Tyra, S	Seismic activity would have to be much greater to impact pipeline integrity.
1552-1	Ulrich, Wendy	Thank you for your comments on the Draft EIS. The intent of Table ES-1 in the FEIS is to provide an overview of the regulations in Part 7853. It does not provide the federal, state, and/or tribal permits (or approvals) needed. This information is included in Chapter 3, Regulatory Framework.
1268-1	Urgo, Sandra	<p>As indicated in Section 10.3, on June 3, 2019 the Minnesota Court of Appeals ruled that the Revised Final Line 3 EIS of February 12, 2018 was inadequate because it failed to specifically address the potential impact of an oil spill into the Lake Superior watershed. In order to address the court's opinion Enbridge commissioned a modeling analysis on behalf of and with input from the Minnesota Department of Commerce, Energy Environmental Review Analysis Staff for one additional hypothetical crude oil release from a pipeline crossing within the Lake Superior watershed (Stantec et al. 2019; Appendix V).</p> <p>When considered together with the seven previously modeled sites, Little Otter Creek as the eighth representative release site can be used to further characterize the range of trajectory, fate, and potential consequences of an oil spill in the project area. Using the same assumptions used for the other sites, the spill modeling was used to predict the potential trajectory of released oil, the fate of released oil, and the potential effects of accidental oil releases on the natural and human environment. The intent of these analyses was to infer a range of potential effects that may occur at this and other locations in Minnesota with similar biophysical and human use characteristics.</p>

Responses to Comments – Citizen

Response#	Commenter	Response
1497-1	Voss, Nick	Thank you for your comments on the Draft EIS. Your comment was considered in development of the FEIS.
1497-2	Voss, Nick	Within the EIS, all analyses of impacts were based on Applicant proposed routes and potential alternatives. Siting routes considered all natural resources and potential effects.
1497-3	Voss, Nick	Additional information regarding the potential for removal has been included in Section 8.4 of the FEIS.
0775-1	Vraa, Ken	Thank you for your comments on the Draft EIS. Chapter 5 of the FEIS addresses potential impacts to localized, surficial groundwater.
1233-1	Walker, Gretchen	Thank you for your comments on the Draft EIS. In development of the FEIS, it was assumed that the Applicant would obtain all necessary permits and approvals, as required by federal and state law, prior to construction if a Certificate of Need and route permit are approved by the Commission.
1233-2	Walker, Gretchen	In development of the FEIS, it was assumed that the Applicant would obtain all necessary permits and approvals, as required by federal and state law, prior to construction if a Certificate of Need and route permit are approved by the Commission.
1233-3	Walker, Gretchen	Impacts on songbirds and their habitats from fragmentation was considered in development of the FEIS.
0492-1	Warner, Mike	Thank you for your comments on the Draft EIS. Additional information has been included in Section 10.1.2.2 regarding potential risks associated with transport by rail.
0492-2	Warner, Mike	Section 5.3.3.3.1 of the FEIS states "While it is likely that Enbridge would use some local workers, it was assumed as a conservative estimate that all workers would be non-local and would need to re-locate to the area during construction."
2284-1	Watts, Elizabeth	Thank you for your comments on the Draft EIS. Potential impacts to affected natural resources are discussed in Chapters 5 and 6 of the FEIS, and how American Indian tribes experience and interact with these resources is summarized in Chapters 9 and 11. This constitutes the analysis of treaty rights within this EIS.

Responses to Comments – Citizen

Response#	Commenter	Response
2284-2	Watts, Elizabeth	Chapter 11 of the FEIS has been expanded to include additional information on the assessment of and impacts to potential EJ communities. As described in the section, the identification of potential EJ communities or the potential for disproportionately high and adverse impacts does not preclude approval of the project or selection of a route alternative; however, it does require detailed efforts to avoid, mitigate, minimize, rectify, reduce, and/or eliminate the impacts. Section 11.4 of the EIS describes the measures that may be undertaken by the applicant to minimize or mitigate adverse impacts. As noted in this section, the applicant may work with companies and subcontractors hired to construct, restore and operate the pipeline to prepare and implement an education plan or awareness campaign regarding the issue of sexual abuse or sex trafficking. Section 11.4 has been revised to clarify that the applicant may also provide funding to support the efforts of local and tribal law enforcement on this and other safety-related issues, which would enable local entities to tailor approaches and solutions to their community, and/or to collaborate with experts in this field.
2284-3	Watts, Elizabeth	If the commenter observes a violation of any permit during construction or operation, the violation should be reported to the proper agency or to the State of Minnesota. Such violations are handled outside of the EIS process and would be investigated by the appropriate authorities.
2785-1	Weber, John	Thank you for your comments on the Draft EIS. Enbridge provided the estimated cost within the Certificate of Need Application, Section 1.0 (Docket No. PL-6668/CN13-473).
2785-2	Weber, John	Vegetation maintenance along the permanent right-of-way to remove woody vegetation and maintain the right-of-way in an herbaceous vegetative state will occur periodically. Operation impacts to insect pollinators are expected to be temporary and minor.
2785-3	Weber, John	Sentence was revised to include the percentage of cultivated cropland located within SA-04.
2785-4	Weber, John	Sentence was revised to include the percentage and acreage of the Dakota Tallgrass Prairie Wildlife Management Area that will potentially be impacted by SA-04 during construction.

Responses to Comments – Citizen

Response#	Commenter	Response
2785-5	Weber, John	Species-specific field surveys were conducted only within the route associated with the Applicant's proposed project. The results from these surveys are incorporated into the FEIS.
2785-6	Weber, John	Table 5.2.4-3 lists the wildlife conservation lands within 0.5-mile of SA-04. The acreage reported in this table is all of the lands that are within 0.5-mile of project. Table 5.2.6-3 details the acreage that will be directly impacted, both during construction and operation. This acreage in Table 5.2.6-3 is drastically smaller than that reported in Table 5.2.4-3 because it is only detailing the lands directly impacted, not all of the lands within 0.5-mile.
2785-7	Weber, John	SA-04 does not avoid impacts to all wildlife management areas and refuges. Further details on the wildlife conservation lands potentially affected by System Alternative SA-04 can be found in Table 5.2.4-11 of the FEIS.
2785-8	Weber, John	A small percentage of the SA-04 ROI would cross through habitats within Minnesota's Wildlife Action Network. Further details regarding Minnesota's Wildlife Action Network can be found in Section 5.2.5.2.3.
2785-9	Weber, John	The impact of construction on the local timber industry over a 30-year, versus 50-year period, is still expected to be long term and negligible.
2785-10	Weber, John	The FEIS notes (in Section 5.3.4.1) that Enbridge has appealed the amount of property taxes it paid between 2012 and 2016, alleging that the Minnesota Department of Revenue overvalued the value of the pipeline property, resulting in overpayment of taxes to counties and Minnesota. The appeal has not been settled at the time the FEIS document was prepared.
2785-11	Weber, John	The same footnote is used for both tables because the same referenced model was utilized to derive estimates reported within the tables. Using a different model for each route would result in an incorrect comparison due to the use of different datasets. It is unclear why the commenter believes that different data should be utilized. Please refer to the methodology included within the IMPLAN model (Appendix R).

Responses to Comments – Citizen

Response#	Commenter	Response
2785-12	Weber, John	The referenced statements in the FEIS are based on available information: that few new jobs related specifically to operations of the pipeline would be required, and that it is likely (based on available information) that property tax revenues would likely be the largest ongoing source of revenue to counties in the Region of Interest. It is unknown whether Enbridge would challenge future property tax payments.
2785-13	Weber, John	The pipeline will cross through numerous counties in Minnesota with varying zoning regulations. Zoning was analyzed at a county level for the Project, so if a county does not have approved zoning regulations, a zoning analysis could not be conducted for it. Land use impacts for Hubbard and Clearwater counties was included in the analysis through the NLCD database.
2785-14	Weber, John	Sections 8.3 and 8.4 of the FEIS have provided additional information related to regulatory responsibility and ongoing liability of the applicant.
2785-15	Weber, John	Additional information related to the ongoing liability has been included in Section 8.3 of the FEIS.
2785-16	Weber, John	Additional information regarding adjacent pipeline spacing has been provided in Section 8.4.
2785-17	Weber, John	Additional information regarding potential future mitigation and regulatory requirements has been included in Section 8.3 of the FEIS.
2785-18	Weber, John	Thank you for your comments on the Draft EIS. Your comment was considered in development of the FEIS.
2285-1	Wegscheid, Darril	Thank you for your comments on the Draft EIS. Information supplied by the applicant has been evaluated and analyzed independently. The EIS has provided discussion on positive and negative impacts that may occur over the short- and long-term.

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Response#	Commenter	Response
2285-2	Wegscheid, Darril	Sections in the FEIS pertaining to impacts of the project on employment clarify that it is likely that the Applicant would hire local residents during construction of any of the alternative routes for a portion of its workforce - based on current labor agreements in Minnesota at least 50% of workers will be expected to be employed from local union halls. The FEIS also states that as construction jobs are typically permanent in nature, permanent jobs may result from said construction - but that this is also dependent on an unquantifiable backlog of other construction project demand, and that based on this assumption it is likely that direct construction-related employment would have a minor positive impact on county-level unemployment and per capita and/or median household income levels. The comment that "hours of employment by month" should be utilized instead of "jobs" would not provide a more detailed picture of permanent jobs created, as this metric would only identify potential hours worked during the project, not whether these jobs would be permanent. Indeed, it is infeasible to identify how many permanent jobs would be created because, as stated above, a permanent construction job is often a job that is spatially temporary in the sense that workers move from project to project, and dependent on an unquantifiable backlog of other construction project demand. Due to this uncertainty, therefore, this discussion includes both quantitative (4,200 workers across seven construction spreads) and qualitative analysis. The EIS states that employment impacts related to operations are anticipated be minimal.
2294-1	White, Stephanie	Thank you for your comments on the Draft EIS. Potential impacts to water bodies proximal to the Project have been considered during the FEIS process. Stringent best management practices will be required for limiting impacts to water bodies that have been deemed important resources by regulatory agencies.
2293-1	White, Stephanie	Thank you for your comments on the Draft EIS. Section 5.2.1.1.3 of the FEIS describes the drilling mud Enbridge has proposed to use. No further information has been provided.
1557-2	Whitefish Area Property Owners Association	Discussion of the referenced sections is provided in Chapter 5 of the FEIS.

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Response#	Commenter	Response
0925-1	Whitefish Area Property Owners Association	Thank you for your comments on the Draft EIS. The majority of the economic analysis and other technical information for the CN decision will be provided by the Applicant, other parties, and the public that are participating in the contested case hearing.
0925-2	Whitefish Area Property Owners Association	Potential impacts to Drinking Water Supply Management Areas (DWSMAs) and vulnerability, Wellhead protection areas, Hydrogeologic sensitivity, Domestic wells and sensitivity, and Public wells are evaluated in the EIS in Chapters 5 and 6.
0925-3	Whitefish Area Property Owners Association	Potential impacts to Aquatic Management Areas, Lakes of Biological Significance, Minnesota Biological Survey Sites of Biodiversity Significance (MBS Sites), Native plant communities, Wetland bank easements, Wild rice lakes, Muskie lakes, Sensitive lakeshore areas, and Scientific and Natural Areas are evaluated in the EIS.
0925-4	Whitefish Area Property Owners Association	Enbridge release incident data are presented in the FEIS.
2296-1	Whitefish Area Property Owners Association	Thank you for your comments on the Draft EIS. Chapter 2 of the FEIS defines and describes in detail the proposed project.
2296-2	Whitefish Area Property Owners Association	The executive summary of the FEIS provides information on the purpose of the EIS and the decisions they inform, while Section 1.4 provides details about broader policy implications.
2296-3	Whitefish Area Property Owners Association	Such distances have been analyzed using the available data provided by the applicant.
2296-4	Whitefish Area Property Owners Association	Evaluation of the Applicant's financial risk avoidance is outside of the scope of this EIS. It is unknown how many subsidiary and partnership companies would own segments of the pipeline, and this information is outside of the scope of this EIS.

Responses to Comments – Citizen

Response#	Commenter	Response
2296-5	Whitefish Area Property Owners Association	The comment was considered in development of the FEIS.
2296-6	Whitefish Area Property Owners Association	The suggested change was made.
2296-7	Whitefish Area Property Owners Association	This information has been considered in the development of the FEIS.
2296-8	Whitefish Area Property Owners Association	The executive summary of the FEIS provides information on the purpose of the EIS and the decisions they inform, while Section 1.4 provides details about broader policy implications.
2296-9	Whitefish Area Property Owners Association	Chapter 12 of the FEIS contains a thorough analysis of the potential cumulative effects associated with adding another pipeline within the corridor of the Applicant's Preferred Route and Route Alternatives outside of the Mainline Corridor, i.e. RA-03AM and RA-06, including effects on planning and zoning, aesthetics, vegetation, and other resources. A list of the projects considered as a "reasonably foreseeable actions" is provided in Table 12.2-1.
2296-10	Whitefish Area Property Owners Association	The comment has been considered in development of the FEIS.
2296-11	Whitefish Area Property Owners Association	Such terminology was provided by commenters during the scoping phase. The EIS has provided specific locations related to alternatives based on the data provided by the applicant.
2296-12	Whitefish Area Property Owners Association	General construction and operation impacts to surface water, including lakes, are discussed in Sections 5.2.1.2 and 6.3.1.2.

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Response#	Commenter	Response
2296-13	Whitefish Area Property Owners Association	Existing conditions of the applicants preferred route are discussed in Section 6.3.1.1.2 of the FEIS.
2296-14	Whitefish Area Property Owners Association	Section 5.2.1.2.3 provides a discussion of the Pine River Watershed.
2296-15	Whitefish Area Property Owners Association	Water quality and designated trout streams that occur within the Pine River Watershed were considered during impact assessment for all alternatives.
2296-16	Whitefish Area Property Owners Association	Section 5.2.1.2 provide information on surface water in the vicinity of the Applicant’s proposed project and CN Alternatives, including streams, rivers, lakes, wild rice waterbodies, and wetlands. The section assesses the potential for construction and operation of the proposed Project to affect surface water resources. Surface water impacts that could occur during construction and operation are evaluated and compared for the Applicant’s proposed project and the CN Alternatives. The impact analysis focuses on potential impacts on surface waters associated with the following concerns: Runoff and flows – increases in stormwater runoff and erosion, increases in TSS concentrations and increased sedimentation, changes in stream flows from water withdrawals and discharges, and disruption of flow paths or local hydrologic connectivity; Surface water and aquatic habitat quality – degradation of surface water quality, degradation of aquatic habitat from instream and other construction activities, degradation of water quality and habitat from releases of drilling mud during HDD crossings; Channel morphology and stability – changes in channel morphology and stability caused by channel and streambank modifications; and Disturbance of wild rice waterbodies.
2296-17	Whitefish Area Property Owners Association	SA-04 is a system alternative evaluated to aid the Commission's evaluation of whether or not to grant a CN for the proposed project. A system alternative is not a routing alternative, as no entity has proposed to build such a pipeline, detailed routing and design have not been conducted, and a route permit could not be issued for SA-04. Instead, a system alternative is a serves as a broader level point of comparison to the Applicant's Proposed project and the other CN alternatives. The level of analysis of SA-04 is in line with this concept.

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Response#	Commenter	Response
2296-18	Whitefish Area Property Owners Association	Socioeconomic impacts are discussed in Section 5.3.
2296-19	Whitefish Area Property Owners Association	Enbridge release incident data are presented in the FEIS. Case studies of several significant spills, including the 2010 spill, have been included.
1558-1	Whitefish Area Property Owners Association - Watson, Thomas	Thank you for your comments on the Draft EIS. Effects to various taxa and populations are dealt with in both Chapters 5 and 6. Impacts that could result in reduced water quality and subsequent impacts to the carrying capacity for fish are also addressed in Chapters 5 and 6.
1558-2	Whitefish Area Property Owners Association - Watson, Thomas	Thank you for your comments on the Draft EIS. Your comment was considered in development of the FEIS
1557-1	Whitefish Area Property Owners Association - Watson, Thomas	Thank you for your comments on the Draft EIS. Analysis of impacts to groundwater resources is provided in Chapters 5 and 6. In both chapters the type of underlying geology has been considered for assessing potential impacts to groundwater.
1089-1	Wilber, Julia	Thank you for your comments on the Draft EIS. Your comment was considered in development of the FEIS.
1089-2	Wilber, Julia	The vast majority of these spills are less than 1 barrel.
1091-1	Wissinger, Julie	Thank you for your comments on the Draft EIS. Your comment was considered in development of the FEIS.

Responses to Comments – Citizen

Response#	Commenter	Response
1091-2	Wissinger, Julie	Ten miles downstream was selected, because it was considered to be not overly conservative, and crossing widths for the RAs were unavailable. The Applicant surveyed the streams and rivers for the APR ONLY, so small (<10 m wide) and large (10 m or > wide) crossings are only known for this route. It would be biased to only run the 2 downstream buffers (30 miles for large rivers, and 10 miles for small streams) along the APR. Furthermore, we determined that it would be overly conservative to run a 30-mile downstream buffer for all water crossings, especially since many of these water bodies are ditches and terminate within a few miles.
0788-1	Yarik, Josh	Thank you for your comments on the Draft EIS. Appendix B, Section 7.2 of the FEIS discusses structural integrity and surface subsidence due to corrosion of the abandoned line.
0788-2	Yarik, Josh	As discussed in Chapter 2 of the FEIS: The Applicant anticipates that the physical life of the Line 3 pipeline (i.e., the number of years that the pipeline would be capable of transporting crude oil) would be indefinite given appropriate construction, maintenance, and integrity systems. The economic life of the Project (i.e., the number of years that continued operation of the Project would be feasible) is anticipated to be no less than 30 years.
0788-3	Yarik, Josh	Information regarding the eventual removal of the proposed pipeline was not provided by Enbridge. The EIS discusses regulations for abandonment of pipelines in Section 8.2 of the FEIS.
0792-1	Zimmerman, Catherine	Thank you for your comments on the Draft EIS. Potential impacts to the federally-listed endangered rusty patched bumble bee from the Applicant's proposed route, CN alternatives, and route alternatives are presented in Sections 5.2.5 and 6.3.5 of the FEIS. Potential impacts to non-listed bee and other insect species are presented in Sections 5.2.4 and 6.3.4 of the FEIS, and due to the implementation of BMPs for use of herbicides, are expected to be minimal.
2869-1	Jaakola, Lyz	Thank you for your comments on the Draft EIS. The Executive Summary provides information on how comments are incorporated into the development of the EIS and how the public can participate after the publication of the Final EIS.

Responses to Comments – Citizen

Response#	Commenter	Response
2874-1	Jaakola, Lyz	Thank you for your comments on the Draft EIS. Chapter 9 has been revised to include additional information on the sovereignty of tribes, as well as how consultation does not equate to consent.
2874-2	Jaakola, Lyz	The maps presented in Chapter 9 were developed in coordination with multiple tribes. Sensitive information was not displayed in these maps; however, where information was provided regarding important cultural areas, it was considered in evaluating potential impacts. For instance, a Section 5.4 and 6.4 include information on traditional cultural properties (TCPs), which include wild rice lakes.
2874-3	Jaakola, Lyz	Cultural resources were discussed in Sections 5.4 and 6.4. These sections focus on those resources that are documented in databases or noted in previously conducted surveys. A discussion of National Register listed sites and traditional cultural properties (TCPs) was added. Cultural resources are quantified to the extent that the number of archaeological and historic resources were noted. The “quantification” of impacts is more difficult, as sites are unique in what they consist of, how they are important, and if they retain integrity.
2886-1	Topping, Debra	Thank you for your comments on the Draft EIS. As part of the EIS, a number of maps are included to help illustrate the discussion of existing conditions and/or potential impacts. They show a range of topics depending on the section in which they are included. Maps specific to tribal resources are provided in Chapter 9.
2878-1	LaPorte, Joyce and Topping, Debra	Thank you for your comments on the Draft EIS. Information regarding the burial ground near Highway 23 was included in Sections 5.4 and 6.4, as well as in Chapter 9. As shown, this area is approximately 3 miles from the closest route alternative. Appendix O provides the Applicant’s Unanticipated Discovery Plan for cultural resources. This outlines their planned procedures in case of an inadvertent find. Additional monitoring has been included as a mitigation measure (see Sections 5.4 and 6.4).

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Response#	Commenter	Response
2871-1, 2871-2	Lamb, Sheila	<p>Thank you for your comments on the Draft EIS.</p> <p>Information on the storage of pipe is provided in Chapter 2. Section 2.3.4 in particular provides information on temporary contractor and material/pipe storage yards. Section 2.7.1.7 includes information regarding observations of existing pipe being stored.</p> <p>Transportation and public services are discussed in Section 6.5. As part of this discussion, information is provided on the potential impacts associated with roads and highways and emergency services. However, the EIS does not provide information on the actual dollar amounts associated with these impacts. Additional information may be found in Appendix E, which provides the Applicant’s Environmental Protection Plan. This contains a section on highways and roads.</p>
2871-3	Lamb, Sheila	A discussion of potential impacts associated with spills is provided in Chapter 10. Section 10.6.3 provides information on costs associated with clean-up.
2871-4	Lamb, Sheila	Chapter 8 provides information on the impacts associated with the abandonment of a pipeline. Section 10.2.2.4.16 provides information on the impacts of oil spills on human health.
2882-1	Northrup, Korey	<p>Thank you for your comments on the Draft EIS.</p> <p>Figure 4.3.3 provides a depiction of the existing Mainline system. This figure, therefore, shows the number of existing pipelines present. Chapter 8 provides information on the abandonment and removal of a pipeline, as well as information regarding the existing pipeline spacing. Chapter 12 provides information on reasonably foreseeable future actions, among which is a pipeline project (Line 67).</p> <p>Pipeline fatigue as described as part of this comment refers to the presence of multiple pipelines; however, fatigue also can refer to a process of structural degradation caused by fluctuations or cycles of stress or strain within the pipe itself.</p>

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Response#	Commenter	Response
2869-1	Killsfirst, Buster	<p>Thank you for your comments on the Draft EIS.</p> <p>Chapters 5 and 6 provide the bulk of the discussion of the impacts on particular resources, including those of the natural and built environment. Chapter 8, 9, 10, and 11 provide more in depth discussions of particular issues, including removal and abandonment, tribal resources, accidental oil releases, and environmental justice.</p> <p>Section 6.5 provides a discussion of transportation and emergency services. While this information is presented, the EIS does not provide a discussion of monetary costs of security during and after construction of the pipeline. The inclusion of this type of information is outside that needed within the EIS for the Commission to utilize in their decision-making process for the CN and route permits.</p>