- **Section A - Introduction**

1) **The Plan states "*the dams would extend across the entire streambed and would be built to a height to withstand the highest water anticipated at the time of construction.*" Define the term "highest water anticipated" and provide details on how this value would be calculated and/or determined for each waterway crossing.**

Enbridge Response:

As discussed in Enbridge's Environmental Impact Report ("EIR", dated August 2020), Enbridge would construct temporary dams for dry crossings using sandbags, inflatable dams, aqua-dams, sheet piling, and/or steel plates both upstream and downstream of the proposed trench line to isolate the work area from the stream flow. The dams will extend across the entire streambed and will be built to a height to withstand the highest water levels anticipated at the time of construction. Water will either be pumped around the isolated work zone or will be directed into flume pipes extending through the temporary dams and across the isolated area to maintain downstream flow throughout the construction process. Enbridge will attempt to cross larger waterbodies proposed as a dry crossing technique under either normal or low flow conditions. Enbridge will delay initiating a crossing under high flow conditions.

With respect to the term "highest water anticipated," Enbridge interprets that term to mean water flow up to the top of the waterbody bank, which is typically above the ordinary high-water mark ("OHWM"). Because the water is at or above the OHWM, the "highest water anticipated" accounts for "high flow" conditions, as defined below in response to Data Request Question #2 Section A-Introduction. If water is visually observed to be at or above the OHWM, Enbridge will delay the crossing. Enbridge will have sufficient pumps and/or flumes on site to transport the water volumes up to the OHWM, as well as back-up pumps should the water levels rise during the crossing, or a pump fails. Enbridge will monitor the three- and five-day regional weather forecasts prior to initiating a crossing. If a significant rain event is forecasted within the anticipated timing of the crossing, the crossing will be delayed until after stream conditions have subsided to below the OHWM.

2) **Define the terms "normal flow," "low flow," and "high flow," and provide details on how these values would be calculated and/or determined for each waterway crossing.**

Enbridge Response:

Consistent with industry best practices, Enbridge proposes to visually assess water flow conditions in real time immediately prior to and during construction (please see Enbridge's response to WDNR Data Request Question #1 Section A-Introduction above) to assess flow conditions at each waterway crossing. Consistent with relevant industry and regulatory standards, Enbridge proposes the following definitions for "high flow," "normal flow," and "low flow:"

- "High Flow" means water flow at a waterbody crossing that is at or above the OHWM.
- "Normal Flow" means water flow at a waterbody crossing that is below the OHWM during normal weather conditions.
- "Low Flow" means water flow at a water body crossing during a prolonged period of dry weather.

In the event water is visually observed to be at or above the OHWM (i.e., "high flow" conditions), Enbridge will delay work at the waterway crossing in order to ensure appropriate management and protection of the environmental resource and to ensure the safety of all persons in and around the work area.

3) **Provide details on how waterways would be assessed (off-site and on-site) for flow conditions (normal, low, medium, high) prior to beginning crossing activities.**

Enbridge Response:
Please see Enbridge's response to WDNR Data Request Question #1 and #2 Section A-Introduction above.

4) **Provide details on how Enbridge would ensure that the most appropriate waterway crossing method (dry crossing, wet trench, HDD, etc.) would be performed if on-site conditions do not match expected conditions.**

Enbridge Response:
As described in Enbridge's application materials and subsequent filings, Enbridge proposes to cross waterbodies that are dry or have no perceptible water flow at the time of crossing using an open cut crossing technique. If a waterbody has perceptible water flow, Enbridge proposes to use a dry crossing (i.e., dam and pump or flume) or trenchless (i.e., HDD or Direct Pipe) method. Enbridge has included the proposed crossing method for each waterbody in the application materials. Enbridge has included the proposed crossing methods as Attachment 1 (provided electronically as an Excel file). If a waterbody is flowing at high flow conditions (e.g., due to spring runoff or storm events), Enbridge will delay the crossing until streamflow conditions subside, as described above. Enbridge will monitor the three- and five-day regional weather forecasts prior to initiating a crossing. If a significant rain event is forecasted within the anticipated date of the crossing, the crossing will be delayed until after stream flow has subsided to below the OHWM (i.e., normal flow conditions return). This approach accounts for anticipated conditions that could be encountered during construction and ensures that waterway crossings are performed in the most appropriate and safe manner. Since no instream disturbance is anticipated with the proposed HDD and Direct Pipe crossings, Enbridge is not proposing to delay construction at these locations under high flow water conditions unless extreme flood conditions were present at the trenchless construction area. Enbridge has planned and conducted field reviews, which included significant geological investigations at the proposed HDD/Direct Pipeline locations, to confirm that conditions are conducive for using the proposed crossing methods. Enbridge does not anticipate modifying these crossing methods. In the rare case that Enbridge should encounter unexpected conditions that make the proposed installation methods infeasible, Enbridge would discuss alternative crossing methods with the respective agencies.

5) **Provide details on how site-specific bank stabilization materials would be determined prior to construction.**

Enbridge Response:
Enbridge has assessed each pipeline waterbody crossing, where temporary disturbance of the waterbody banks will occur, to determine the most appropriate restoration method. As part of that assessment, Enbridge identified eight waterbodies that Enbridge believes will require additional bank stabilization methods based on site-specific pre-construction conditions. Enbridge submitted the site-specific plans to both the USACE (January 19, 2023) and WDNR (January 23, 2023). These plans are also included with the U.S. Army Corps of Engineers data request response included as Attachment 2. The remaining waterbodies can be restored using native material in accordance with Enbridge's Environmental Protection Plan ("EPP"), with appropriate erosion and sediment controls as discussed in the EPP. Enbridge has included its EPP

as Attachment 3. Where a dry crossing method is used to cross a flowing waterbody, Enbridge will complete permanent streambank stabilization prior to restoring flow. This will include restoring the stream banks as near as practicable to pre-construction conditions unless that slope is determined to be unstable. If Enbridge determines that a slope is unstable, the banks will be reshaped to prevent slumping. Once the banks are reshaped, disturbed soils will be seeded and mulched and/or erosion control blankets will be installed within a 50-foot buffer on either side of the stream. Temporary slope breakers will also be installed on all sloped approaches to streams, to divert water away from the disturbed soils, in accordance with Section 8.9 of the EPP. Enbridge will work with the respective agencies through the Independent Third-Party Monitor to assess and approve alternative restoration methods if unstable soils and/or site-specific factors encountered that require additional restoration efforts, such as installation of rock rip-rap, to stabilize disturbed stream banks. Rock rip-rap will only be used where site-specific conditions require it and where Enbridge has acquired applicable permits or approvals.

6) **Provide details on how Enbridge would determine excavated material would not be required as backfill.**

Enbridge Response:
Enbridge proposes to backfill the excavated trench with the native material removed from the trench during the excavation process. Once the pipeline is installed, Enbridge will backfill the ditch with the native materials up to the pre-construction substrate/soil elevation. Enbridge will leave a slight crown over the excavated trench in upland areas and wetlands to account for the anticipated minor settling of soils in these areas. No crown will be left in stream beds. Excavated native material will be visually assessed for materials that are inappropriate for backfill (e.g., material that could damage the pipeline and/or protective coating). If inappropriate backfill material is observed, Enbridge will either screen the native substrate/soil to remove inappropriate material or, alternatively, use clean sand obtained from licensed sand/gravel facilities to backfill the trench around the installed pipe. Native material will then be used to complete backfilling of the excavated trench. Enbridge will install trench breakers at the end of sections backfilled with non-native material to minimize the potential for subsurface drainage along the backfilled ditch. Excess subsoil material not used for backfilling the ditch will be transported to an adjacent upland area, within the approved construction workspace, that has been stripped of topsoil. The material will be spread and feathered to blend with the natural topography and grade, after which the stripped topsoil will be re-spread (such disturbed areas will be restored in accordance with the EPP, restoration plans, landowner agreements, and applicable permit conditions). Material not appropriate for incorporation into an adjacent upland area (e.g., large rocks) will be hauled off the Project worksite to an Enbridge approved, licensed disposal facility or licensed sand/gravel facility. Large rocks/boulders may be left on site if specifically requested by the landowner.

7) **Provide details on the proposed upland disposal locations for excavated material (and show on a map).**

Enbridge Response:
Please see Enbridge's response to WDNR Data Request Question #6 Section A-Introduction above. The locations where excess excavated material may be generated and thus where disposal locations may be needed cannot be precisely determined prior to construction. Instead, the locations and need for these areas are based on site conditions encountered at the time of construction. Enbridge is not proposing to stack/pile excess soils on the right-of-way for permanent disposal as this may result in future erosions/stabilization concerns as well as potentially have a long-term effect on drainage patterns. Areas disturbed as part of the

construction process will be restored in accordance with the EPP, restoration plans, landowner agreements, and applicable permit conditions.

8) **Provide details on how Enbridge would ensure bed and bank stability post-construction and achieve restoration to pre-construction conditions.**

Note: Monitoring waterway crossings after snowmelt and larger storm events can help identify erosion problems that may need further site restoration and could otherwise impact downstream water quality.

Enbridge Response:

Restoration and Mitigation Measures to Achieve Pre-construction Conditions Following Installation of the Pipeline

As described in previous filings with the WDNR and USACE, Enbridge will implement a variety of restoration and stabilization measures to restore stream bed and banks to pre-construction conditions. Consistent with Enbridge's response to WDNR Data Request Question # 5 Section A-Introduction above, waterbody restoration will be performed at open cut crossings [crossings where the banks and stream bed are excavated using an open cut method or a dry crossing (i.e., dam and pump and flume) method]. During backfilling, bed elevations will be manually assessed to ensure that the elevations of the backfilled trench match the elevations of the adjacent up- and downstream bed to the extent practicable. Visual observations at the time of backfilling will also confirm that there are no obstructions in the bed that could impede normal water flow. The streambanks will be restored as near as practicable to preconstruction slopes and elevations unless the original slope is determined to be unstable. As described in Enbridge's response to WDNR Data Request Question #5 Section A-Introduction above, Enbridge may stabilize disturbed stream banks with rock riprap or other bank protection best management practices ("BMPs"), with WDNR and USACE approval, if there is a potential for significant bank erosion.

Temporary slope breakers will be installed on all sloped approaches to streams in accordance with the spacing requirements detailed in the EPP (please see Attachment 3). Trench breakers will also be installed at the stream banks, as necessary, where slopes are adjacent to the waterbodies to prevent subsurface water flow and erosion along the trench line. Trench breakers typically consist of non-biodegradable geotextile sandbags filled with rock-free subsoil or sand and placed from the bottom of the trench to near the top surrounding the pipe. Permanent stabilization will be initiated within twenty-four (24) hours unless site and weather conditions delay permanent installation.

Once the banks are reshaped, they will be seeded and stabilized using erosion control BMPs as specified in the EPP. Stream bank vegetation will be reestablished using the seed mix in Appendix B of the EPP, unless applicable agencies specify otherwise. Where a waterbody is within a wetland, the banks will be reseeded with the applicable wetland seed mix.

The travel lane portion of the construction right-of-way and the temporary bridge will remain in place until pipeline construction activities (including final cleanup) are complete. Enbridge will remove temporary bridges during the final cleanup and restoration phase of construction after installation of the new pipeline and right-of-way access is no longer required. Permanent slope breakers will be installed across the full width of the right-of-way during final cleanup. Enbridge will remove temporary sediment control devices across the construction right-of-way only after achieving vegetative cover, in accordance with permit conditions.

Post-Construction Waterbody Monitoring to Confirm Restoration
Enbridge has developed a Wetland and Waterbody Post-Construction Monitoring Plan ("Monitoring Plan"), which was submitted to agencies on January 23, 2023 and is also included as Attachment 4. The goal of the post-construction waterbody monitoring program will be to assess quantitatively and/or qualitatively the success of post-construction waterbody restoration through documentation of physical waterbody parameters including bed and bank elevations and contours, bank and bed composition and stabilization, and water quality, depth, and flow. The protocol was developed to establish a standardized monitoring procedure that will be used to evaluate the effectiveness of waterbody restoration efforts, to document overall success, and to identify areas that may require additional remediation.

Waterbody Monitoring Methodology
Enbridge proposes to visually monitor each waterbody crossing during the first, second, and fifth growing seasons following construction to confirm the successful stabilization of streambanks during high and low flow regimes, and restoration of waterbody flow relative to the pre-construction baseline data. If possible, the subsequent monitoring will be performed during the same season/time of year as the Year 1 monitoring. During each visit Enbridge will document:

- Bank and near bank (i.e., within 50 feet of the bank) stabilization and revegetation;
- Any observed soil slumping or erosion;
- Bank height and width;
- Waterbody depth and flow;
- Streambed characteristics and composition of the substrate; and
- The presence of fish habitat, such as undercut banks, instream structures (e.g., logs), and potential spawning gravel.

Each of these physical parameters will be documented at the crossing location and recorded on a USACE wetland determination data form along with the date, time, and location of the observation, the waterbody name, and additional notes on the condition of the surrounding right-of-way, any evidence of third-party activity (e.g., off-road-vehicles, grazing, recent construction, etc.), any evidence of erosion, flooding, or notable changes in bank or channel morphology.

In addition to recording physical attributes, during the first year of monitoring, Enbridge will collect grab samples approximately 50- to 100-meters upstream and downstream of the pipeline crossing locations of flowing streams that Enbridge proposes to sample. Samples will be analyzed for dissolved oxygen ("DO"), pH, conductivity, temperature, chemical oxygen demand ("COD"), turbidity (field measurement) and total suspended solids ("TSS"). For the three 303(d) impaired waterbodies (i.e., Bay City Creek, Trout Brook, and Marengo River), the sampling will also include the applicable 303(d) listed impairment of fecal coliform or total phosphorous. Fecal coliform, total phosphorus, as well as the COD and TSS analysis will be completed by a certified laboratory using standard analytical methodologies. DO, pH, conductivity, and temperature measurements will be collected in the field using standard analytical methodologies (please see Enbridge's response to WDNR Data Request Question #9 Section B-Water Quality Section). Additional sampling will be conducted in subsequent monitoring years for any stream that exhibits substantial differences between the upstream and downstream samples for any of the measured attributes.

Post-Construction Waterbody Restoration Success Criteria
Waterbody restoration shall be considered successful if all of the following criteria are satisfied:

- The waterbody bank is stable and successfully revegetated (based on the appropriate wetland/upland success criteria);
- The height and width of the stream bank approximates the preconstruction baseline conditions and/or adjacent undisturbed bank areas;
- The depth and flow characteristics (i.e., free flow without construction related impediment) of the waterbody approximates the preconstruction baseline conditions and/or adjacent undisturbed areas;
- The composition of the bed substrate approximates the preconstruction baseline conditions and/or adjacent undisturbed bed areas; and
- The collected water quality parameters up and downstream of the crossing are similar.

Wetland and Waterbody Post-Construction Restoration and Corrective Actions
Enbridge will work closely with the WDNR and the USACE to determine success of the post-construction restoration, or if additional measures or corrective actions are needed in the unlikely event performance standards are not reached after the planned monitoring is completed. Post-construction restoration activities will be adaptive [i.e., based on the results of monitoring, changing site conditions (e.g., land use), and geared toward the final goal of restoring pre-construction characteristics of the resource (i.e., vegetation and hydrology)]. Enbridge will evaluate the potential resource impacts from conducting additional restoration compared to taking no action with continued monitoring when determining whether corrective action is needed.

While the specific corrective actions required will vary by crossing, corrective measures that may be implemented include:

- Installation of additional erosion controls or sediment barriers to stabilize soils and capture or redirect runoff;
- Regrading or recontouring to restore topography or hydrology as necessary;
- Implementation of integrated approaches to invasive or noxious weed infestations as outlined in Enbridge's Invasive and Noxious Species Management Plan ("INS Plan") and in accordance with Section 4.0 of Enbridge's EPP (Enbridge's INS Plan is included as Attachment 5);
- Reseeding and/or the addition of soil amendments, or supplementing the original seed mix to meet success criteria; and
- Supplemental plantings of trees and/or shrubs in selected areas to enhance stabilization or vegetation diversity.

Enbridge will address site stabilization issues that are identified during monitoring. Erosion and sediment control BMP deficiencies that have the potential to allow silt-laden water to enter wetlands or waterbodies will be prioritized and promptly addressed to prevent resource impacts. If the selected erosion and sediment control BMP is not effective at a particular location, other solutions will be evaluated, such as re-contouring an area to alleviate a drainage flow pattern that is causing erosion or adding additional erosion and sediment control BMPs to divert drainage to a well-vegetated area.

Examples of topography or hydrology-related conditions that may require additional restoration include unexpected ponding, unexpected drainage, and/or disruptions to flow patterns causing changes in pre-construction wetland hydrology. Corrective actions, such as regrading or

recontouring, will be implemented if crowning, subsidence, or the restored grade is determined to be interfering with the goal of re-establishing vegetative communities according to the local ecotype or pre-construction wetland hydrology. Enbridge will reference pre-construction baseline data, including available pre-construction ground elevation data, in the event topography or hydrology related conditions requiring additional restoration are identified.

Corrective actions for unexpected alterations to groundwater flow related to changes in topography may include regrading and/or recontouring. Any additional temporary actions required in a wetland or waterbody will be conducted according to pertinent permit requirements and in consultation with the WDNR and USACE.

If the cover of invasive species within a particular community type is too high within the construction workspace compared to the percent cover of the same species in adjacent undisturbed areas outside of the construction workspace, Enbridge will manage the issue in accordance with the INS Plan.

Monitoring may determine that some areas have not fully achieved revegetation success criteria after the first growing season. Causes may include insufficient seed germination as a result of weather conditions, soil conditions, disturbance from cattle or wildlife, competition from invasive species, or erosion. Enbridge will reseed areas that are not adequately revegetated during the monitoring period. Other actions may also be taken, such as regrading areas to correct topography, fertilizing low nutrient soils, decompacting soils, setting up exclusion areas to stop grazing or foraging, implementing the INS Plan, and/or supplementing seed mixes.

9) **Provide details on how Enbridge would ensure the beds of waterways are backfilled to the original horizons, substrates, and elevations.**

Enbridge Response:
As described in Enbridge's response to WDNR Data Request Question #8 Section A-Introduction above, during backfilling Enbridge will visually assess the bed elevations of the backfilled trench and will match it to the elevations of the adjacent up- and downstream bed. Visual observations at the time of backfilling will also confirm that there are no obstructions in the bed that could impede normal water flow.

Enbridge proposes to monitor each waterbody crossing during the first, second, and fifth growing seasons following construction to confirm the successful stabilization of streambanks during high and low flow regimes, and restoration of waterbody flow relative to the pre-construction baseline data. This monitoring will identify any potential restoration concerns and the need for additional reclamation measures should any issues including sparse bank vegetation, unstable banks or observed erosion of stream banks, and/or stream bed elevational differences (e.g., higher/lower streambed over the ditch-line). This information will be compared to baseline data collected prior to construction, including:

- Civil survey elevation information and/or lidar information along the proposed centerline of each stream starting and extending approximately 50 feet back from the top of each stream bank (where stream depth and velocity allows for safe access);
- Additional photographs documenting upstream, downstream and of each bank crossing at the proposed centerline;
- Visual assessment of streambed characteristics (i.e., observed streambed materials and characteristics such as gravel, cobble, riffles, and pools);
- Visual assessment of fish habitat such as undercut banks, instream structures (e.g., logs), and potential spawning gravel; and

- Visual evidence of bank erosion at or near the proposed centerline crossing

During the first year of post-construction monitoring, Enbridge will evaluate each open cut and dry crossing by visually comparing the stream conditions to the preconstruction baseline information to determine if post-construction conditions are similar to pre-construction conditions. Enbridge will also assess the progression of bank revegetation and document any restoration site concerns. Enbridge will coordinate with the respective agencies to develop a site-specific restoration/reclamation plan in the event differences are identified during the post construction monitoring of waterbodies. Enbridge's Operations will also conduct frequent aerial patrols of the pipeline right-of-way in accordance with federal frequency requirements (49 CFR §195.412). Aerial patrol personnel are trained to look for potential erosion and/or changes at streams that could affect the pipeline such as scouring, new beaver dam impoundments, or similar changes. If any issues are identified during aerial patrols, Enbridge will dispatch ground personnel to investigate the locations further to ensure that Project related post-construction waterbody issues are properly evaluated and addressed in coordination with the appropriate agency.

10) **Provide greater detail on how waterway and wetland crossings would be monitored pre- and post- construction to ensure proper restoration of the resource.**

Enbridge Response

Enbridge submitted its Monitoring Plan to the WDNR on January 23, 2023. This plan described Enbridge's proposed post-construction monitoring of wetlands and waterbodies. Enbridge's Monitoring Plan is also included in this filing as Attachment 4. Please also see Enbridge's response to WDNR Data Request Question #8 Section A-Introduction above.

11) **Provide details on how waterway and wetland restoration would be determined "successful," including measurable standards that would need to be met in order for the resource to be determined successfully restored.**

Enbridge Response

Enbridge submitted its Monitoring Plan to the WDNR on January 23, 2023. Enbridge's Monitoring Plan is also included in this filing as Attachment 4. This plan described Enbridge's proposed post-construction monitoring of wetlands and waterbodies, including success criteria. Please also see Enbridge's response to WDNR Data Request Question #8 Section A-Introduction above.

12) **Provide information on any additional sampling, evaluation, protective measures, crossing details, etc. that would be applied specifically to trout streams, including in-water work within trout timing restrictions.**

Enbridge Response:

Enbridge's proposed plans and minimization measures are designed to equally protect each resource, to the extent practicable. Enbridge is not proposing to conduct in-water work within classified trout streams or perennial tributaries to classified trout streams during the instream spawning restriction period of September 15th through May 15th. Enbridge used published data to identify classified trout streams crossed by the proposed Project. This published data included

WDNR's Trout Stream Maps (https://WDNR.wisconsin.gov/topic/Fishing/trout/streammaps.html) and WDNR's lists of trout streams in Ashland and Iron counties as well as the WDNR's Surface Water Data Viewer (https://dnrmaps.wi.gov/H5/?Viewer=SWDV). As discussed in Enbridge's comments to the Draft Environmental Impact Statement (filed with the WDNR on April 15, 2022) Enbridge proposes to install the pipe using the HDD or direct pipe waterbody crossing method at all but two pipeline centerline crossings of designated trout streams. Enbridge proposes to reduce the width of the cleared construction right-of-way and the maintained permanent right-of-way at these HDD crossings to 30 feet, with the exception of Tyler Forks, where it will be 50 feet.

13) **Provide the crossing method and alternative crossing method(s) anticipated for use at each surface water crossing, dependent on estimated flow conditions, time of year, timing restrictions, etc. at time of crossing. Include if Enbridge anticipates flowing, standing water, or dry channel conditions at time of crossing.**

Enbridge Response:

As described in Enbridge's response to WDNR Data Request Question #4 Section A-Introduction above, Enbridge has identified the proposed crossing method for each waterbody crossed by the proposed pipeline centerline in its application materials and subsequent filings. A copy of the waterbody crossing table is included as Attachment 1. Enbridge proposes to cross waterbodies that are dry or have no perceptible flow at the time of crossing using an open cut crossing technique. These may include ephemeral and intermittent waterbodies classified by field surveys conducted in 2019 and 2020. If a waterbody has perceptible flow, including ephemeral and intermittent waterbodies, Enbridge proposes to use a dry crossing (i.e., dam and pump or flume) method.

If a waterbody is flowing at high flow conditions either due to spring runoff or storm events, regardless of designation as an ephemeral, intermittent, or perennial stream, Enbridge will delay the crossing until streamflow conditions subside, as described above. A dynamic and safety-first approach accounts for anticipated conditions that will be encountered during construction while recognizing and planning for the possibility that conditions and circumstances can change. The time of year that the crossing is completed will be dependent on issuance of the respective Project permits and any instream work timing restriction waivers that may be granted by the WDNR. Enbridge will abide by the respective timing restricts for those waterbodies where waivers are not granted. However, the crossing method, as described above, will be determined based on presence/absence of flowing water, not by the time of year or in-stream work timing restrictions. Potential delays in accessing each site, either due to weather conditions or permit conditions, could result in an increased construction season, thereby extending the overall duration of construction and delaying final site clean-up and restoration.

14) **During construction, trucks and equipment would be washed to prevent the spread of sediment and invasive species between sites.**
   a. **Provide details on the holding ponds for the washing sites, including their proximity to natural resources.**
   b. **Provide details on how Enbridge would contain, treat, and dispose of the washing water to prevent the wastewater from entering wetlands, waterways, and groundwater.**
   c. **Provide details on how Enbridge would sample and monitor wetlands,**

waterways, and groundwater for water quality (including turbidity, hydrocarbons, etc.) to ensure the wastewater is not impacting the resources.

Enbridge Response:

As discussed in the INS Plan, the treatment method selected for an invasive or noxious species population will depend on several factors, including, but not limited to, the time of year, species-specific biology, proximity to sensitive species, and construction activities and the timing of those activities. As described in the INS Plan, Enbridge's proposes to pre-treat invasives species with herbicide prior to construction; however, this may not be feasible in all locations. Pre-treatment may also be precluded if permits are delayed and construction must begin outside of the growing season when herbicides treatments would be ineffective. Where herbicide treatment is not feasible or practicable, Enbridge proposes to implement alternative methodologies to minimize the transport and/or spread of invasive and noxious species. These alternative methods will be selected at the time of construction. Should treatment not be possible during construction, Enbridge will manage invasive and noxious species as appropriate during the restoration and/or post-construction monitoring phases. The Monitoring Plan establishes performance standards for the management of invasive and noxious species to ensure that these infestations are appropriately managed.

Where an alternative cleaning method is selected that involves use of high-pressure water, Enbridge proposes to set up a containment structure to collect the wash water. Containment structures will not be excavated holding ponds but may consist of a water impermeable geotextile lined sump area, a commercially available containment structure, or similar structure established in upland locations within the construction workspace located a minimum of 50 feet from a wetland and/or waterway where approved workspace allows. Wash water will be pumped from the collection structure into tanker trucks and hauled to an appropriate wastewater treatment plant for disposal. Enbridge will visually inspect the containment structure daily to identify potential leaks or releases of water that may include hydrocarbons. If a structure leak is identified, Enbridge will repair the leak or discontinue use of the structure. Enbridge will collect a soil sample from the area where the leak occurred and conduct a field sheen test to identify if free hydrocarbons are present. If a hydrocarbon sheen is observed, Enbridge will conduct further analysis to assess the extent of possible contamination. Soils contaminated with hydrocarbons will be collected and disposed of in accordance with applicable regulations.

- **Section B - Water Quality**

  WDNR requests the following water quality indicator data (chemical, physical, biological) be collected upstream, downstream, and within water crossing locations for all proposed waterway and wetland* crossings during pre-construction (i.e., baseline conditions), active construction, and post-construction. See below for additional information requests relating to this statement.

Requested Water Quality Indicator Data Pre- and Post-Construction		
Chemical	**Physical**	**Biological**
Total Phosphorus	**Temperature**	**Fish Community**
Nitrogen – Total Kjeldahl	**Turbidity**	**Macroinvertebrates**
Nitrate + Nitrite	**Channel width, depth**	**Fish kills (presence, locations, species)**
Ammonia	**Riparian disturbance**	
Dissolved Oxygen	**Vegetative cover, vegetative buffers**	**Brook Trout Redds (presence, locations)**
Sulfate	**Fish habitat**	
Total Mercury	**Bed and bank scouring, deposition**	
Conductivity	**Bed and bank substrate, substrate embeddedness**	
pH		
Total Suspended Solids	**Monthly minimum, mean, and maximum recorded flows and velocities**	
Chemical Oxygen Demand (COD)		
Biological Oxygen Demand (BOD)	**Presence of oil and grease**	
Polycyclic Aromatic Hydrocarbons (PAHs)		
Compounds associated with oil and fuel used in construction or operation		
Compounds associated with the crude oil and natural gas liquids transported in Line 5		
Compounds associated with horizontal directional drilling		
Perfluoroalkyl and polyfluoroalkyl substances (PFAS)		
Requested Water Quality Indicator Data During Active Construction		
Chemical	**Physical**	**Biological**
Dissolved Oxygen	**Turbidity**	**Fish kills (presence, locations, species)**
Conductivity	**Presence of oil and grease**	
pH		

[*] *Specifically, wetlands that are high-quality, open water, have groundwater influences (e.g., springs or seeps), and those that have shallow bedrock*

1) **Provide a detailed assessment of existing (baseline) data for each ephemeral, intermittent, and perennial waterway, waterbody, and wetland[*] that would be crossed by the project via access roads, temporary workspaces, and pipeline installation. The assessment should include an evaluation of:**
    a. **Available data (physical, chemical, and biological; see table of requested parameters; provide tables).**
    b. **The data source (including link, reference information).**
    c. **The relevancy and applicability of the baseline data to the proposed project (for example, location of sampling in reference to the proposed surface water crossing).**
    d. **The baseline data parameters that are missing/still needed (see table of requested parameters).**
    e. **Proposed plan of how Enbridge would acquire these baseline data prior to beginning the project, including the number and frequency of sample collection. WDNR requests Enbridge submit any collected, pre-construction (baseline) data to WDNR, USACE, and interested tribes prior to construction.**

Enbridge Response:

1 a, b, and c: Available Data and Data Source:

Enbridge has reviewed public water quality data for the stream crossed by the Project. Data sources reviewed include the WDNR Surface Water Integrated Monitoring System (SWIMS) database (Surface Water Integrated Monitoring System (SWIMS) Database | | Wisconsin DNR) and the U.S. EPA Water Quality Exchange Network (Water Quality Data Home). The data set reviewed included data from 2010 to present. Attachment 6 includes a list of the relevant available parameter information from these two public data bases that correspond to the parameters requested by the WDNR. Attachment 6 also provides sample location information, as documented in the applicable databases. Attachment 7 includes mapping showing where the water quality information was collected (based on database information), as referenced to the proposed Project.

1 d and e: Missing Parameters and Enbridge's Proposed Plan:

As shown in Attachment 6, there is limited available data for waterbodies crossed by the Project. To supplement the existing public data, Enbridge proposes to collect additional pre-construction baseline data from waterbodies and select wetlands within the Project workspace. As discussed in Enbridge's Draft Water Quality Monitoring Plan, Enbridge had proposed to collect and analyze water quality samples for dissolved oxygen, pH, conductivity, temperature, chemical oxygen demand, turbidity, and total suspended solids from perennial waterbodies crossed by the Project. These parameters are consistent with monitoring requirements from other recent linear projects permit conditions issued by the WDNR. These are also parameters that could potentially have short-term impacts during instream construction activities based on Enbridge's experience. Enbridge has reviewed the requested water quality parameters listed in the WDNR's Data Request Question 1 (Section B -Water Quality). Based upon Enbridge's significant experience with linear construction projects as well as other recent water quality sampling programs, many of the listed parameters are unlikely to be altered long-term by the Project's short-term disturbance within the waterway. However, Enbridge will collect baseline data for the parameters in Table B1-1 to further support the Department's Section 401 water quality certification and to document the absence of adverse impacts to water quality as result of the Project.

Table B1-1 lists the chemical, physical, and biological parameters that Enbridge proposes to collect.

Table B1-1
Water Quality Parameters to be Sampled Pre-Construction and Post-Construction

Chemical	Physical	Biological
Total Phosphorus	Temperature	Mussels
Nitrogen – Total Kjeldahl	Turbidity	Fish kills (presence, locations, species)
Nitrate + Nitrite	Channel width, depth	Brook Trout Redds (presence, locations)
Ammonia	Riparian disturbance	
Dissolved Oxygen	Vegetative cover, vegetative buffers	
Sulfate	Fish habitat	
Total Mercury	Bed and bank scouring, deposition	
Conductivity	Bed and bank substrate, substrate embeddedness	
pH		
Total Suspended Solids	Presence of oil and grease	
Chemical Oxygen Demand (COD)		
Biological Oxygen Demand (BOD)		

Polycyclic Aromatic Hydrocarbons (PAHs)		
Total Petroleum Hydrocarbons (TPH)		
Perfluoroalkyl and polyfluoroalkyl substances (PFAS)		
Water Quality Parameters to be Sampled During Active Construction		
Chemical	**Physical**	**Biological**
Dissolved Oxygen	Turbidity	Fish kills (presence, locations, species)
Conductivity	Presence of oil and grease	
pH		

Pre-Construction Sampling

Enbridge will collect baseline water quality samples from each ephemeral, intermittent, and perennial stream crossed by the Project including waterbodies crossed by the pipeline, waterbodies crossed by access roads, and waterbodies within the construction workspace but not actually crossed if there is water present. Enbridge will visit each identified waterbody in 2023 and within approximately five days prior to construction to collect a water quality sample for chemical analysis from the proposed paired upstream and downstream sampling locations, as identified in Enbridge's response to WDNR Data Request Question #2 (Section B-Water Quality), below. If water is not present at the time of the initial site visit in 2023, Enbridge will conduct a second site visit to collect a water quality sample. Enbridge will only collect water quality samples from those waterbodies that have water present at the sampling sites and at the time of site visit in sufficient quantity/depth to allow sample collection without fouling. Enbridge will collect additional water quality chemical sampling within approximately five days prior to initiating instream work at each waterbody where water is present at the time of construction. Where water is present, Enbridge will also collect water quality samples for chemical analysis from the streams that will be crossed by temporary clean-span bridges. This sampling will be conducted prior to bridge installation and following bridge removal.

Similar to the plan for sampling waterbodies, Enbridge will collect water quality samples from wetlands that have standing and/or flowing water within or immediately adjacent to the construction work area at the time of survey in sufficient quantity/depth to allow for sample collection without fouling. Samples will be collected from locations approximately 50 feet on either side of the construction workspace, if landowner permission for access has been granted.

Post-Construction Sampling

In accordance with Enbridge's Draft Water Quality Monitoring Plan, Enbridge will also collect additional water quality samples following completion of instream construction activities. Sample collection will occur daily for three additional days and at one week and one month post-construction at approximately the same locations as the active construction samples. Samples will be analyzed for the same parameters as proposed for active construction.

Following completion of the Project, Enbridge will revisit each waterbody and collect water quality samples for testing the same pre-construction parameters at the paired upstream and downstream sampling locations, as identified in Enbridge's response to WDNR Data Request Question #2 (Section B-Water Quality), below. If water is not present at the time of the initial site visit, Enbridge will conduct a second site visit to collect a water quality sample. Enbridge will only collect water quality samples from those waterbodies that have water present at the sampling sites and at the time of site visit in sufficient quantity/depth to allow sample collection without fouling.

As specified in Enbridge's Wetland and Waterbody Post Construction Monitoring Plan (Monitoring Plan), during the first year of post-construction monitoring, Enbridge will evaluate each open cut (wet trench) and/or dry crossing and visually compare stream conditions to preconstruction baseline information to determine if post-construction conditions are similar to pre-construction conditions. Additionally, Enbridge will assess the progression of bank revegetation and document any restoration site concerns. If notable differences are identified during the post construction monitoring of waterbodies, Enbridge will coordinate with the respective agencies to develop a site-specific restoration/reclamation plan. Enbridge will take representative photographs of each waterbody to document post-construction conditions.

2) **Provide a summary for each the selected water quality parameters, including its function and how the parameter would assist in evaluating water quality due to pipeline crossing activities.**

Enbridge Response:

Waterbody Water Quality Parameters

Enbridge proposes to collect the water quality parameters listed in Table B1-1 both pre- and post-construction at the selected upstream and downstream sampling locations. Attachment 8 provides a summary of each of the selected water quality parameters, including its function and how the parameter would assist in evaluating water quality due to pipeline crossing activities.

For waterbodies crossed by the proposed pipeline centerline, Enbridge will select a sample location approximately 100 feet upstream of the proposed construction workspace limits and approximately 100 feet downstream of the proposed construction workspace limits. For waterbodies crossed only by access roads, Enbridge will select a sample location approximately 25 feet upstream and downstream of the proposed bridge location. Enbridge notes that it proposes to use only clear span bridges with no instream support/disturbance; therefore, 25 feet upstream and downstream should be a sufficient distance to document pre-construction and post-construction water quality conditions. Enbridge does not propose to collect water quality samples from temporary bridge locations during active construction. For waterbodies that are within the construction workspace, but not crossed by the pipeline centerline (e.g., waterbody sasa1008e at milepost 0.59), Enbridge will identify a single representative sample location at the edge of the construction workspace for collection of pre-construction and post-construction samples. Similar to access roads, Enbridge does not propose to collect water quality samples from waterbodies within the construction workspace, but not crossed by the pipeline centerline during active construction.

The paired upstream/downstream sampling sites will be selected that have comparable physical parameters such as stream width, depth, flow, and substrate. Approximate sampling locations are depicted on the attached maps (please see Attachment 9). Actual sampling locations will be finalized during the first sampling event and locations will be recorded using GPS to allow relocation for future sampling events. If the stream does not exist 100 feet upstream (i.e., above the headwater) or if there are landowner access restrictions, the upstream site will be adjusted accordingly. Similarly, downstream locations will be adjusted, if necessary, to honor landowner access restrictions.

Waterbody Physical Water Quality Parameters

As part of Enbridge's stream surveys conducted in 2019 and 2020, Enbridge collected baseline physical information for each stream. That information was submitted with the respective wetland and waterbody survey reports filed with Enbridge's original application and supplemental filings.

In addition to the information already provided, Enbridge will sample and record pre-construction and post-construction stream temperature (field measurement), turbidity (field measurement), and presence of oil and grease (if visually evident) at the paired upstream and downstream sampling locations as well as at the proposed pipeline centerline crossing. Prior to construction, Enbridge will revisit each stream to assess any potential changes to the stream physical characteristics that may have occurred since the original delineation due to scour, erosion, or similar natural forces. Prior to construction, Enbridge will also refresh contour information by collecting additional high resolution LiDAR information for the pipeline route. Changes between the original delineation and the pre-construction assessment will be noted. Enbridge will collect additional high resolution LiDAR information for the pipeline route one-year post-construction and evaluate potential changes associated with construction of the Project.

Stream substrate embeddedness will be visually estimated (average amount of embeddedness to the nearest 10 percent) at the upstream, downstream and proposed crossing location in accordance with WDNR Guidelines for Evaluating Habitat of Wadable Streams. Enbridge does not propose to collect and record monthly minimum, mean, and maximum stream flows and velocities for each waterbody. Collecting this data is not proposed because stream flow are functions of weather and groundwater discharges, and not installation of a pipeline. Enbridge will measure stream velocity at the paired upstream-downstream sampling locations to determine if there is a difference in stream flow associated with Project-related activities.

Waterbody Biological Water Quality Parameters

Enbridge does not propose to conduct fish community surveys or macroinvertebrate surveys for the individual crossings. With respect to the intermittent and ephemeral streams crossed, such studies would most likely yield very limited results. With respect to the perennial waters crossed, such surveys would require access far outside of the authorized right of way to develop an accurate assessment of the fish communities and macroinvertebrates, also recognizing that fish and macroinvertebrates communities change based on seasons, weather, water flow rates, etc. Fish communities may also be impacted by other factors such as fishing, seasonal predation, and population variations associated with naturally occurring changes in forage base effecting stream carrying capacity and species composition. There are too many uncontrollable variables for these surveys to provide a scientific means to determine impacts from the pipeline activities. Enbridge will monitor for fish kills pre-construction, during active instream construction, and during post-construction inspections as this provides the most appropriate data. Based on literature assessing pipeline impacts to benthic macroinvertebrates, impacts will be short term, with typical recovery within the area of direct disturbance occurring within one year. Additionally, the width of the construction disturbance is only a small fraction of the waterbody lengths, and any impacts would be temporary. Based on these facts, fish and macroinvertebrate population surveys in the right of way would not yield useful data regarding stream-level populations or regarding any temporary impacts on the stream-level populations.

Enbridge will conduct surveys for mussels at each perennial waterbody crossed by the pipeline where a non-trenchless installation method will be used to install the pipeline. Please see Data Request Question #4 of Section B-Water Quality, for a further description of Enbridge's proposed mussel monitoring.

Wetland Water Quality Sampling

Enbridge proposes to collect the same pre-construction and post-construction chemical water quality parameters and select physical water quality parameters (i.e., temperature, turbidity, presence of oil and grease) from wetlands that have standing water present at the time of sampling. Similar to waterbodies, Enbridge will make a second site visit to each wetland in 2023 if there is no water present at the time of the first site visit. Enbridge does not propose to collect

water quality samples from wetlands that do not have standing water present. Additionally, Enbridge does not propose to collect water quality samples from wetlands during active construction. Since water levels in wetlands are not predictable and because Wisconsin classifies any area capable of supporting aquatic or hydrophytic vegetation and which has soils indicative of wet conditions as a wetland regardless of whether standing water is present, mapping wetland sample locations is not feasible or practicable and therefore have not been included. Sample sites will be selected in the field based on standing/flowing water conditions at the time of sample collection.

Alternative Chemical Water Quality Parameters

Crude oils and refined petroleum products are complex mixtures of many thousands of different hydrocarbon compounds derived from naturally occurring geological formations. Each has physical and chemical properties (e.g., viscosity, density, solubility, volatility) that reflect its composition and affect its transport and fate, once discharged into the environment (NRC, 2003[1]). Because there are so many different chemicals in crude oil and in other petroleum products, it is not practical to measure each one separately. As an alternative to testing for *Compounds associated with oil and fuel used in construction or operation as well as compounds associated with the crude oil and natural gas liquids transported in Line 5,* Enbridge proposes to sample for Total Petroleum Hydrocarbons (TPH). TPH is a mixture of chemicals comprised mainly of hydrocarbons. Enbridge will test for TPH using an EPA approved analytical method (see Attachment 8).

3) **Provide a list (with source, reference information) of the protocols and methods that would be followed during sample collection.**

Enbridge Response:

A table listing the chemical parameters and associated testing protocols and methods is included as Attachment 8. Enbridge has also developed the attached Surface Water Sampling Quality Assurance Project Plan ("QAPP") (please see Attachment 10).

4) **Provide details on mussel surveys, rare mussels, and monitoring pre-construction.**

Enbridge Response:

Based on a review of the Wisconsin Natural Heritage Working List (https://dnr.wisconsin.gov/sites/default/files/topic/NHI/NHIWorkingList.pdf), there are 24 species of mussels in Wisconsin listed as Special Concern (five species), Endangered (11 species), or Threatened (eight species). Enbridge consulted with the WDNR and completed an Endangered Resources Review ("ERR") of the Project area (latest review completed February 2023 – ER Log #20-034). The search consisted of a query of the Wisconsin Natural Heritage Inventory ("NHI") database for endangered resources records in the proposed Project area. The Project area that was evaluated included the proposed facilities and workspace, and a buffer area surrounding the proposed facilities. The buffer area encompassed one mile for terrestrial and wetland species and two miles for aquatic species. No protected mussels were identified within the proposed facility sites, workspace, or associated buffer areas.

Although no known state or federally protected mussels have been previously documented in the Project area which would require mussel surveys, Enbridge will voluntarily conduct a preliminary

[1] National Research Council (NRC), 2003. Oil in the Sea III: Inputs, Fates and Effects. National Academy Press, Washington, D.C. 280p.

mussel habitat assessment at each perennial waterbody crossed by the pipeline centerline via a non-trenchless installation method (e.g., dam and pump or flume method). Where suitable mussel habitat is present, Enbridge will conduct a quantitative mussel survey within the Project workspace following the methodology listed in the WDNR Guidelines for Sampling Freshwater Mussels in Wadable Streams. Enbridge will notify the applicable agencies if a federal or state listed protected mussel is identified and work with the agencies to develop minimization plans, as applicable. Enbridge will conduct a post-construction survey for mussels five years after completion of pipeline installation to document recolonization of the disturbed streambed.

5) **Provide information on how sampling protocols/methods would differ by crossing installation method (open-cut trench, HDD, etc.).**

Enbridge Response:
Enbridge is proposing to use the same pre-construction and post-construction sampling protocols/methods for all of the proposed waterbody crossing methods. Similarly, Enbridge is proposing to use the same sampling methods during construction for the respective parameters listed in Table B1-1 associated WDNR Data Request Question #1 Section B-Water Quality. Enbridge will collect water quality samples at the paired upstream-downstream sampling sites during active construction in waterbodies that have flowing water during temporary dam installation and dam removal. At a minimum, water quality samples will be collected during installation/removal of temporary dams and every six hours during active instream construction. Additional sampling will occur if there is an observable difference in water quality conditions (e.g., increased turbidity) between the upstream and downstream sampling locations. In the event of an instream release of drilling fluid associated with an HDD crossing, Enbridge would sample is accordance with procedures outlined in response to WDNR Data Request Question #2 (Section F-Horizontal Directional Drills and Direct Pipe Crossings).

6) **Provide information on how sampling protocols/methods would differ between wadable and non-wadable streams/rivers.**

Enbridge Response:
Based on Enbridge's field assessments, all perennial waterbodies, with the exception of the White River, are wadable under normal to low flow conditions. For pre-construction and post-construction chemical and select physical (e.g., temperature and turbidity) sampling parameters, Enbridge will collect the samples as near as safely practicable to the channel center or thalweg by wading. During construction, Enbridge will have a small watercraft available at the White River to collect chemical and physical water samples (including DO, pH, conductivity, temperature, and turbidity). Enbridge will also have a small watercraft available during the crossing of the Marengo River, Brunsweiler River, Silver Creek, Bad River, Tyler Forks, and Potato River should these crossings occur under higher water flow conditions that preclude wading for safety reasons. It should be noted that Enbridge proposes to cross all these rivers using a trenchless crossing method. Again, all other streams are expected to be wadable under normal flow conditions. Enbridge does not propose to conduct instream activities during high water events.

7) **Provide information on how sampling methods would provide accurate and representative water quality samples of the resource, accounting for seasonal variations, extreme weather events, and cold water habitat communities.**

Enbridge Response:
As discussed in Enbridge's response to WDNR Data Request Question #1 and #2 (Section B-Water Quality), Enbridge proposes to collect chemical water quality samples at all waterbodies with water at the time of survey in 2023. If a waterbody does not have water at the time of sampling, Enbridge will make a second attempt in 2023 to collect water at the site. Enbridge will conduct a final pre-construction round of sampling within approximately five days prior to construction. Enbridge's proposed sampling program is designed to document existing water quality chemistry at the paired upstream-downstream sampling locations for each waterbody (as applicable) and to assess potential changes in the tested parameters as it relates to the Project. Enbridge recognizes that there may be variability in chemical parameters throughout a typical season due to inputs from natural and/or anthropogenic activities; however, the paired upstream-downstream sampling methodology will assess potential change in the measured water quality parameters as it relates to the Project.

8) **Provide information on who would be performing the water quality sampling pre-construction, during construction, and post-construction, including who would ensure that monitoring protocols would be followed.**

Enbridge Response:
Enbridge will select one or more contractors to perform water quality sampling after protocols have been approved by the WDNR. The selected firm(s) will be responsible for ensuring that the monitoring protocols are being followed and will have the qualifications necessary to collect pre-during, and post-construction water quality samples.

9) **Define the term "standard analytical methods" in reference to collecting monitoring data and laboratory analysis.**

Enbridge Response:
Enbridge defines the term "standard analytical methods" as those federal and/or state established and approved sample collection, preservation, and analytical methods for the analysis of water and wastewater, including but not limited to methods included in NR 219, Wis. Admin. Code. Enbridge will work with qualified firms to collect the water quality samples and conduct the appropriate laboratory analyses.

10) **Provide a list (with source, reference information, contact info) of the certified laboratory(s) that would be contracted to analyze the off-site water quality samples.**

Enbridge Response:
Enbridge has not yet selected or contracted with a specific certified commercial laboratory or laboratories at this time because the specific sampling parameters are relevant to the vetting and vendor selection process. Enbridge will only select and use commercial laboratories that are appropriately accredited to conduct testing for the specific analytics required for the Project.

11) **Provided details on quality assurance and quality control for field data collection and lab analysis techniques, including the protocol/method source and reference information.**

Enbridge Response:
Enbridge has included a table referencing the lab analysis techniques for the specific chemical parameters that Enbridge proposes to document (please see Attachment 8). Enbridge has also developed a quality assurance plan (please see Attachment 10) that describes Enbridge's proposed field sampling protocols, lab sampling protocols, and quality assurance/quality control protocols. Enbridge will verify the analysis technique and laboratory-specific quality assurance protocols used by the selected laboratory following selection of the laboratory.

12) **The proposed Plan states three of the 27 waterbodies proposed to be sampled are listed under Section 303(d) of the Clean Water Act as impaired and sampling of these sites will include analysis for the respective impairment. Provide details on the additional analysis for impairment that would be conducted for the Section 303(d) waters listed in the Plan.**

Enbridge Response:
For the three 303(d) impaired waterbodies (Bay City Creek, Trout Brook, Marengo River), Enbridge proposes to collect water sample to test for the specific impairment(s) listed for each waterbody (i.e., Bay City Creek – total phosphorus; Trout Brook and Marengo River – fecal coliform). Testing methods will follow EPA and/or WDNR testing requirements (see response to WDNR Data Request Question #11 Section B-Water Quality). Similar to other testing, Enbridge will collect water quality samples for the respective impairment upstream and downstream of Enbridge's crossing location. Enbridge will also note any potential observed sources for total phosphorus and/or fecal coliform near the crossing location (e.g., observed landowner application of fertilizers or solid/liquid manure).

13) **Provide photographs upstream and downstream of crossing locations, as well as at the crossing locations pre-construction, during construction, and post-construction to evaluate restoration success.**

Enbridge Response:
As described in Enbridge's response to WDNR Data Request Question #8 (Section A-Introduction), Enbridge proposes to monitor each waterbody crossing during the first, second, and fifth growing seasons following construction. Pre-construction, during construction, and first year post-construction photographic documentation will be provided to the agencies as part of the first-year post-construction monitoring report. Subsequent photographs of post-construction waterbody conditions will be provided in each post-construction monitoring report as discussed in Enbridge's Monitoring Plan (please see Attachment 4).

14) **Provide updated maps showing water quality sampling locations for all proposed surface water crossings, including upstream, downstream, and crossing locations.**

Enbridge Response:
As discussed in Enbridge's response to WDNR Data Request Question #2 (Section B-Water Quality) for waterbodies crossed by the proposed pipeline centerline, Enbridge will select a sample location approximately 100 feet upstream of the proposed construction workspace limits

and approximately 100 feet downstream of the proposed construction workspace limits. For waterbodies crossed only by access roads via temporary clear-span bridges, Enbridge will select a sample location approximately 25 feet upstream and downstream of the proposed bridge location. For waterbodies that are within the construction workspace, but not crossed by the pipeline centerline (e.g., waterbody sasa1008e at milepost 0.59), Enbridge will identify a single representative sample location at the downstream edge of the construction workspace.

Paired upstream/downstream sampling sites will be selected that have comparable physical parameters such as stream width, depth, flow, and substrate. Approximate sampling locations are depicted on the attached maps (please see Attachment 9). Actual sampling locations will be finalized during the first sampling event and locations will be recorded using GPS to allow relocation for future sampling events. If the stream does not exist 100 feet upstream (e.g., above the headwaters) or if there are landowner access restrictions, the upstream site will be adjusted accordingly. Similarly, downstream locations will be adjusted, if necessary, to honor landowner access restrictions.

Enbridge proposes to collect the same chemical water quality parameters from wetlands that have standing water present at the time of sampling. Similar to waterbodies, Enbridge will make a second site visit to each wetland if there is no water present at the time of the first site visit. Enbridge does not propose to collect water quality samples from wetlands that do not have standing water present. Since water levels in wetlands are not predictable, mapping showing sample locations has not been included. Sample sites will be selected in the field based on standing/flowing water conditions at the time of sample collection.

15) **Provide details on how proposed sampling locations were selected for the Project's proposed surface water crossings (including upstream and downstream) and how these locations would provide an accurate and representative water quality sample for the resource, accounting for seasonal variations and extreme weather events.**

Note: Oftentimes, on the more remote sections of the proposed reroute, the first public road crossing can be miles downstream. It is requested Enbridge should instead choose a more appropriate and standardized downstream sampling point and use public road crossings only when they fall within an appropriate distance or when landowner access to the closer appropriate monitoring location is not obtainable. This is especially important for the Bad River and Tyler Forks River crossings, since there are no downstream public road access points prior to the watercourse entering the external boundaries of the Bad River Reservation.

Enbridge Response:

As described in Enbridge's data request responses to the USACE (please see Attachment 2), during construction Enbridge proposes to collect samples at approximately 100 feet upstream and downstream of the crossing where Enbridge has secured landowner permission for off right-of-way access or will access the sample site from the waterbody where safe stream conditions allow (i.e., depth). Samples will be collected during the installation of temporary dams and during the removal of the temporary dams. The upstream sample collection distance of 100 feet was chosen so it would be above the influence of construction-related activities but close enough to the waterbody crossing to minimize the potential for additional non-construction related inputs that could distort the results. These upstream samples will provide baseline water quality information for each crossing at the actual time of the pipe installation. The downstream sampling locations

were selected based on the modeling conducted by RPS to be representative of stream conditions below the construction work area. The sediment modeling conducted by RPS (see Attachment 12) indicates that most of the suspended sediments will settle close to the crossing area. Based on that modeling, 100 feet downstream is sufficiently close to register any effects but far enough downstream to allow for uniform mixing of any elevated sediments within the water column and stream width. The 100-foot distance also takes into account the potential access limitations at each respective waterbody. Enbridge's landowner agreements for construction and operation of the pipeline workspace do not include authorization to use or access any portions of the property or stream farther from the crossing area, nor can they authorize access to any neighboring property further upstream/downstream for sampling. Enbridge also must consider safety and the protection of its employees, contractors, and construction personnel. Sampling locations that would require the clearing of new paths for access or require walking in the stream for a considerable distance away from the proposed workspace would increase the hazards and risks, especially during high-flow and cold-weather months. Additionally, walking up and down the stream bed to access sampling locations could result in additional and unnecessary sedimentation and environmental disturbance, which could also affect the sampling results.

Enbridge proposes to collect ***additional*** water quality samples at the first downstream public road crossing when:

- Field turbidity sample results (Nephelometric Turbidity Unit or "NTU"[2]) 100 feet downstream of the crossing location are greater than 5 NTUs over upstream level when the upstream levels are 50 NTUs or less; or,
- When the downstream NTU readings 100 feet downstream of the crossing location are greater than 10 percent above upstream NTU readings when the upstream readings are greater than 50 NTUs.

As previously mentioned, Enbridge's landowner agreements for construction and operation of the pipeline workspace do not include authorization to use or access any portions of the property or stream farther from the crossing area. Enbridge's plan to use public access points, such as road crossings, will allow timely and unimpeded collection of additional water quality samples further downstream should NTU readings 100 feet downstream warrant it.

16) **Provide details on how the number of sampling locations for each site (upstream, downstream, at the crossing location) were chosen for the proposed surface water crossings and how the number of sampling locations for each site would provide a complete, accurate, and representative water quality sample for the surface water crossing.**

Enbridge Response:

Due to the small widths of the waterbodies (e.g., the RPS Sediment Discharge Modeling Report indicates that roughly two-thirds are less than 5 feet across), water quality is expected to be consistent across these watercourses and there are no know direct sources of contamination. Paired sample sites will be selected to be representative of the stream area to be crossed by the pipeline and/or associated work areas such as access roads. The wetland and waterbody crossing table provided for the project documents the waterbody crossing widths summarized in the RPS Sediment Discharge Modeling Report (please see Attachment 12). Also, as discussed in the RPS report, if there is a temporary alternation of water quality conditions associated with construction activities, it is expected that the water column would be thoroughly mixed and representative of

[2] A Nephelometric Turbidity Unit ("NTU") is a measure of the opaqueness of a fluid due to the presence of suspended solids (inorganic or biological). The higher the concentration of suspended solids in the water, the higher the turbidity is and the dirtier it looks.

site conditions within a short distance downstream.

17) **Provide details on how Enbridge would ensure and monitor for pipeline integrity post-construction. Provide an integrity management plan that incorporates water quality monitoring and assessment.**

Enbridge Response:
The pipeline will be operated and maintained in accordance with PHMSA's exclusive safety standards at 49 C.F.R. Part 195. In accordance with Section 195.452, Enbridge will prepare and implement an Integrity Management Program that is appropriate for maintaining the safety and integrity of the Relocation. Section 195.452 does not require that water quality monitoring and assessment be part of an Integrity Management Program for a pipeline that is located in a high consequence area.

18) **Provide details on water quality sampling methods to evaluate effects of storm events.**

Enbridge Response:
Please see Enbridge's response to WDNR Data Request Question #1 and #2 (Section B- Water Quality) regarding Enbridge's proposed water quality sampling plan. Enbridge does not propose to conduct water quality sampling following storm events.

19) **Provide details on how data would be analyzed and interpreted to evaluate project impacts on the resources.**

Enbridge Response:
A series of statistical hypothesis tests (e.g., paired t-tests or Wilcoxon signed-rank tests) will be performed on the surface water monitoring dataset to compare upstream and downstream monitoring points for each sampled waterbody crossing where upstream-downstream data was able to be collected. These methods are commonly used to determine if statistically significant differences exist between groups of samples, and the results will assist in identifying potential Project impacts.

- **Section C - Preconstruction Sampling**

1) **Provide details on how Enbridge would ensure ephemeral and intermittent waterways will be assessed for baseline conditions and water quality, considering these waterways do not have continuous flow throughout the year.**

Enbridge Response:
Please see Enbridge's response to WDNR Data Request Question #1 and #2 (Section B-Water Quality) regarding Enbridge's proposed water quality sampling plan.

2) **Provide details on how the currently proposed pre-construction sampling Plan to perform grab samples approximately 5 days prior to the start of the stream crossing accurately reflects existing baseline conditions of the waterway/waterbody, considering seasonal variations and weather events.**

Enbridge Response:

As stated in Enbridge's response to WDNR Data Request Questions #1, #2, and #7 Section B-Water Quality, Enbridge is proposing to collect paired upstream-downstream chemical water quality samples in 2023 and approximately 5 days prior to the start of instream construction (assuming a construction start in 2024) to document chemical and select physical water quality conditions. Enbridge's proposed sampling program is designed to document existing water quality chemistry at the paired upstream-downstream sampling locations for each waterbody (as applicable) and to assess potential changes in the tested parameters as it relates to the Project. As previously discussed, Enbridge recognizes that there may be variability in chemical parameters throughout a typical season due to inputs from natural and/or anthropogenic activities; however, the paired upstream-downstream sampling methodology will assess potential change in the measured chemical water quality parameters as it relates to the Project. Enbridge's proposed water quality parameter testing immediately following pipeline installation would document if the parameters tested indicate a difference in water quality following pipeline installation. If testing indicates that water quality below the crossing location is not comparable to water quality at the upstream sampling station, Enbridge will investigate to determine what site-specific conditions may be contributing to the difference in tested parameters and if those differences are associated with the Project.

3) **Provide details on how the currently proposed pre-construction sampling Plan to perform grab samples approximately 5 days prior to the start of the stream crossing accurately reflects federal, tribal, and state-recommended water quality sampling methods and protocols.**

Enbridge Response:

As previously discussed, Enbridge proposes to use standard water quality sampling procedures to collect and analyze site-specific water quality samples and assess potential changes in those parameters as they relate to the Project. Enbridge's proposed sampling is discussed in WDNR Data Request Question #1 and #2 Section B-Water Quality. Grab samples (individual samples collected at a specific time) are representative of the conditions at the time the sample is collected and provide information regarding sampled parameters at the time of sample collection. Collection of grab samples upstream and downstream of the crossing location within approximately 5 days prior to the start of instream activities will provide a representative baseline for conditions at the time of construction. Grab samples during active construction will allow for a comparison of the sample parameters as it relates to potential changes in the specific parameter that may be attributable to Project activities. Similarly, analysis of grab samples post-construction during the restoration phase of the Project will also allow for a comparison of the sample parameters as it relates to potential changes in the specific parameter that may be attributable to the Project. 40 CFR Part 136 allows the selection of a sample collection procedure (grab sample vs. composite sample) for most water quality parameters.

4) **The Plan states *"Enbridge has identified…30 streams for preconstruction water quality sampling."* Provide details on why the remaining waterways (those not listed in the Plan), and wetlands crossed by/relevant to the Project are not proposed to be sampled for water quality.**

Enbridge Response:
As indicated above, Enbridge has modified and expanded its proposed plan to collect baseline water quality samples for select chemical analysis at all waterbodies with water present at the time of sampling. Please see Enbridge's response to WDNR Data Request Question #1 and #2 (Section B-Water Quality).

- **Section D - Active Construction Sampling**

1) **Provide information on how impacts to fish, mussels, and macroinvertebrates would be avoided and minimized during open-cut trenching of the waterways, including how these organisms would be able to safely navigate and inhabit these areas during active construction.**

Enbridge Response:
As described above, Enbridge proposes to use the open cut crossing method only at waterbodies that are dry or have no perceptible flow at the time of crossing. Fish, mussels, and macroinvertebrates are not anticipated to be present under dry stream conditions, with the possible exception of organisms that may be living in the interstitial space between substrate material (hyporheic zone). Enbridge will adhere to instream crossing timing windows, and approved timing restriction waivers, for pipe installation that avoid sensitive spawning periods. If there is perceptible flow, Enbridge will use a dry crossing technique, which will temporarily isolate the construction workspace from stream flow as well as aquatic organisms. This will limit both the duration and area of disturbance (primarily limiting it to the period of construction and the area between the temporary upstream and downstream dams at each crossing) and the potential for downstream sedimentation. This, in turn, will minimize harm to aquatic organisms. As stated in the Draft Environmental Impact Statement (Section 6.14.9), some mortality of less mobile organisms, such as small fish and invertebrates, may occur within the trench and possibly the rest of the workspace between the upstream and downstream dams where a dry crossing construction method is used. However, the affected area within any one stream will be small. The excavated area will be approximately 18 feet wide at the top of the trench and extend across the channel.

2) **Provide a monitoring and response plan that includes the following:**
    a. **How Enbridge would determine water quality and aquatic communities may be/are in decline during construction, including the number and frequency of sampling that would take place to ensure representative water quality data of the resource**
    b. **Steps Enbridge would immediately take if monitoring data indicated a decline in water quality or a violation of water quality standards.**
    c. **Steps Enbridge would immediately take if monitoring data indicated a decline in fish or macroinvertebrate health.**
    d. **Actions Enbridge would take to respond to and stop the further decline of water quality and aquatic community health.**
    e. **Actions Enbridge would take to restore the water quality and aquatic**

community health after a decline during construction.

f. **Actions Enbridge would take to monitor the restoration actions.**

Enbridge Response:

a. Enbridge will evaluate the potential for decline in water quality based on the water quality sampling that it conducts during construction and the type of crossing method that is employed. It is important to understand that dam and pump and flume crossings will be conducted quickly and that by the time laboratory results for samples taken during construction will not be available until after the crossings are completed. Therefore, the primary way water quality impacts will be identified during active dam and pump and flume crossing construction, will be measured increases in suspended sediments, which the modelling by RPS indicates will occur for a short period of time in the vicinity of the crossing area. If field sampling indicates sediment loads much higher than predicted or extending further downstream than predicted Enbridge will take the steps outlined in response b below.

b. As described above, it is important to understand that dam and pump and flume crossings will be conducted quickly and that by the time laboratory results are received, these crossings will be completed. Similarly, should an inadvertent return occur, Enbridge expects the event would a relatively short duration. Therefore, the primary way water quality impacts will be identified during dam and pump and flume crossings will be field observations and NTU field measurements. If there is an inadvertent return in a waterbody, Enbridge's contractor will implement the corrective actions and mitigation measures outlined in its site-specific Inadvertent Return Plans (please see Attachment 2). If field sampling indicates sediment loads much higher than predicted or extending further downstream than predicted for dam and pump or flume crossings Enbridge will take the following steps:

    1. Inspecting the worksite to determine if there is an observable cause of the increase (failed erosion control, bank erosion or slumping, leaking dam, etc.)
    2. Correct any failures identified by the inspection of the worksite. This may include repairing existing erosion controls of installing additional erosion and sediment controls, relocating dewatering operation, and/or repairing the dams.
    3. Continue water quality monitoring to confirm issue is addressed.

c. Enbridge does not anticipate that it will be possible to determine if there is an unexpected decline in fish or macroinvertebrate health during active construction unless there is an obvious fish kill. As described in Enbridge's application materials and subsequent filings, aquatic organisms that may be present within the isolated segment of the stream crossing (between the upstream and downstream dams), could be injured or killed during active instream excavation and/or backfilling. Enbridge will reduce this risk by installing the isolation dams as close as practicable to each other, factoring in room needed to safely complete pipeline installation activities while maintaining dam integrity.

d. See response b above. Enbridge does not anticipate any long-term impacts associated with horizonal directional drilling. The only potential water quality and aquatic habitat impacts of drilling would be associated with an inadvertent return of drilling fluid into the water should it occur. The potential for an inadvertent return will end when the drilling operation is complete, and the pipe is pulled into place. Enbridge will identify any issues through ongoing environmental inspections, which will continue until restoration is deemed successful. Issues that that are identified by these inspections and that could result in ongoing water quality impacts or degradation of aquatic habitat will

be promptly remedied.

e. Enbridge would remedy water quality and aquatic habitat degradation as described in the previous response. Enbridge does not anticipate any long-term water quality impacts as sedimentation and the effects of any inadvertent returns of drilling fluid would be temporary. Enbridge also does not anticipate long term habitat effects as the disturbed bed and banks will be restored and the adjacent soils would be revegetated. Enbridge will conduct post-construction monitoring to evaluate the success of its restoration efforts. If an unanticipated long-term degradation of water quality or aquatic habitat is identified, it will be evaluated and appropriately remedied in consultation with the applicable agencies.

f. Enbridge submitted its Monitoring Plan to the WDNR on January 23, 2023 (please see Attachment 4). This plan described Enbridge's proposed post-construction monitoring of wetlands and waterbodies, including success criteria. Please also see Enbridge's response to WDNR Data Request Questions #8 and #9 Section A-Introduction above.

3) **Provide details on how water quality monitoring during active pipe construction/installation would differ by installation method (open-cut trench, HDD, etc.).**

Enbridge Response:

The general water quality monitoring procedures and testing protocols will be similar for all crossing methods of flowing waters. However, the monitoring distance downstream of the crossing locations will be adapted to the crossing methods consistent with the RPS modeling results. Specifically, the RPS modelling indicates that the potential downstream transport of drilling fluid associated with an inadvertent return during an HDD would be greater than the potential downstream transport of sediments associated with either a dam and pump or flume crossing. To address this, Enbridge will expand the distance downstream from the crossing where water quality sampling will be conducted, as appropriate, based on site-conditions in the event of an inadvertent return. The distance will depend on the extent of any sediment plume that is generated, which in turn will be a function of the magnitude of the release and flow conditions. Enbridge will take a sample within the sediment plume, and at a location approximately 2,000 meters downstream or at the next available downstream public access point.

4) **Provide details on the screening structure(s) that would be used to pump and transfer water as part a flow bypass system, including how the structure(s) would be designed to avoid and minimize impacts to fisheries, aquatic plants, and macroinvertebrates during its use.**

Enbridge Response:

The use of pumps to maintain stream flow around the construction work areas has the potential to entrain or impinge fish and other aquatic invertebrates. This potential impact would be minimized by using fine mesh screens on the intakes of the pumping system. Enbridge has developed the attached typical screening diagram to depict the proposed screening methods to reduce potential impingement/entrainment of aquatic organisms (please see Attachment 11). It is possible that fish and larvae as well as all forms of aquatic invertebrates small enough to pass through these screens could still be subject to entrainment, although the duration of this effect would be short and would cease when the crossing is completed and normal streamflow is restored.

5) **Provide details on how excavated native soil would be isolated from entering wetlands, waterways, and sensitive areas during open-cut construction in waterways.**

Enbridge Response:
As described in Enbridge's application materials and the EPP (see EPP typical figures 14, 15, and 16), Enbridge proposes to install erosion and sediment control BMPs at each open cut waterbody crossing to contain excavated material. Enbridge's proposed methods establish a minimum 20-foot buffer from the water's edge so that vegetation removal and bank disturbance will be minimized to the greatest extent practicable. These measures will contain and prevent disturbed soil from eroding and entering waterways, wetlands, and other associated sensitive areas.

6) **Provide details on how waterway beds consisting of silty substrate would be backfilled and stabilized after excavation.**

Enbridge Response:
Based on Enbridge's field delineation data, the substrate of waterbodies crossed by the pipeline centerline range from silt/clay to a combination of bedrock/boulder/cobble and gravel. As discussed above, Enbridge proposes to backfill the excavated trench with the native material that is removed from the trench during the excavation process. If native material is determined to be inappropriate for backfill (e.g., the material could damage the pipeline and/or the protective coating), Enbridge will use clean sand obtained from licensed sand/gravel facilities to backfill the trench. Enbridge will install trench breakers at the end of sections backfilled with non-native material to minimize the potential for subsurface drainage along the backfilled trench. Excess subsoil material not used to backfill the trench will be transported to an adjacent upland area that has been stripped of topsoil and incorporated into the subsoil. If requested by the respective agencies, Enbridge will cap the backfilled ditchline with up to one foot of clean, washed gravel, not to exceed the undisturbed streambed elevation.

7) **If in the field, Enbridge determines that the preferred waterway crossing is no longer conducive due to site conditions or seasonal restrictions (fish-timing, high flows, etc.), provide information on:**
   a. **How Enbridge would re-evaluate their construction plans to safely install the pipeline across the waterway while avoiding and minimizing impacts to aquatic organisms and the resource.**
   b. **How Enbridge would re-evaluate their water quality monitoring protocols and ensure that appropriate sampling methods are performed during construction.**

Enbridge Response:
Please see Enbridge's response to WDNR Data Request Question #4 (Section A-Introduction.

8) **Provide details on the proposed pipeline installation methods on known trout streams during trout immigration for spawning times.**

Enbridge Response:
As discussed in Enbridge's response to WDNR Data Request Question #12 (Section A-Introduction) above, Enbridge is not proposing to conduct in-water work within classified trout

streams or perennial tributaries to classified trout streams during the instream spawning restriction period of September 15th through May 15th. Enbridge used published data to identify classified trout streams crossed by the Project. Enbridge proposes to install the pipe using the Direct Pipe or HDD method at all but two pipeline centerline crossings of classified trout streams. Use of these methods will avoid instream disturbance within these waterbodies. As described in Enbridge's response to WDNR Data Request Question #13 (Section A-Introduction) above, Enbridge will abide by instream work timing restrictions and/or timing restriction waivers that may be granted by the WDNR.

9) **The Plan states *"instream trenching and backfilling would typically be complete within 24 hours or less on minor waterbodies (less than 10 feet wide) and 48 hours or less on intermediate (between 10 and 100 feet wide) or as directed by applicable permits. Use of dry crossing techniques would require additional time associated construction and removal of temporary dams."* Based on these times, there would be approximately one or two samples taken at the work site/crossing. Provide information on how sampling methods, including the sampling locations and number of samples, would provide accurate and representative water quality data for the resource within this timeframe.**

Enbridge Response:

The 24- and 48-hour timelines listed above are specific to open-cut waterbody crossings. As described above, Enbridge proposes to only cross waterbodies that are dry or with no perceptible flow using the open-cut waterbody crossing technique. If a waterbody is dry at the time of construction, no water quality samples will be collected as no water is present.

Enbridge's proposal to use a dry crossing method for any waterbodies that are flowing (and would not be crossed using a trenchless method) during construction will require some additional time to construct the temporary dams upstream and downstream of the construction area. Once installed these dams will isolate the construction area from the flow of the waterbody. As such the extra time to complete an open cut dry crossing is more than offset by the benefit of avoiding the direct water quality impacts that would result from trenching a waterbody without isolating the construction area.

Enbridge is committed to collecting water quality samples during placement and removal of the temporary dams used in the dry crossing technique. Enbridge is also committed to taking water quality samples during dam installation and removal (see USACE data request responses, dated January 23, 2023). As discussed in those responses, Enbridge selected the downstream sampling location to be representative of stream conditions below the construction work area. The modeling conducted by RPS (please see Attachment 12) indicates that most of the suspended sediments will settle close to the crossing area. Consistent with the RPS modeling, 100 feet downstream is sufficiently close to register any water quality effects, but far enough downstream to allow for uniform mixing of any elevated sediments within the water column and stream width. The 100-foot distance also takes into account the potential access limitations at each respective waterbody. During the crossing, water is isolated from the nature streamflow; therefore, Enbridge believes that more frequent water quality monitoring is not necessary unless there has been a breach of the temporary dams or sediment laden water is somehow released downstream. Periodic sampling during the timeframe that the streamflow is isolated will provide a detailed record of water quality conditions. Additionally, Enbridge is committed to collecting and analyzing water quality samples daily for three additional days upstream of the crossing location and downstream of the crossing location at approximately the same locations as the active

construction samples. The collection and analysis of water quality samples at these additional upstream and downstream locations will provide an even more comprehensive picture of water quality conditions. Enbridge will also collect additional samples at one-week post construction and one-month post construction. The upstream and downstream sample data will be compared to evaluate if there is any difference in water quality between the two sample sites.

10) **Provide details on how the collection of additional water quality samples (for turbidity) at the first downstream public road crossing would provide accurate water quality data, representative of true downstream turbidity and turbidity impacts.**

Enbridge Response:

As described in Enbridge's response to WDNR Data Request Question #15 (Section B-Water Quality) above and Enbridge's data responses to the USACE (responses dated January 19, 2023), during construction Enbridge proposes to collect samples at approximately 100 feet upstream and downstream of the crossing where Enbridge has secured landowner permission for off right-of-way access, or will access the sample site from the waterbody where safe stream conditions allow (i.e., depth). Water quality samples will be collected during the installation of temporary dams and during the removal of the temporary dams. Enbridge hired RPS to conduct sediment modelling to predict the transport and deposition of sediments resulting from the proposed waterbody crossing methods. The downstream sampling location was selected, using RPS' modeling, to be representative of stream conditions below the construction work area.

As part of RPS' sediment modelling study RPS also evaluated the transport and deposition of sediments associated with an accidental, inadvertent return occurring in a large watercourse during HDD installation. The modelling evaluated a range of scenarios with differing drilling fluid release volumes (PilotHole vs. Final Ream Pass) and seasonally-appropriate river flow conditions (low, average, and high), each conservatively assuming a 1-hour release duration before the discharge was stopped. The study predicts that the discharge into the watercourse would produce initially large total suspended sediment concentrations near the release site (more than 20,000 mg/L) due to the large volume of drilling fluid (bentonite) released in a relatively short period of time. The largest concentrations were predicted for the larger release volume (Final Ream Pass) scenario under low river flow conditions, where dilution and dispersion would be lowest. TSS concentrations predicted farther downstream (e.g., 500-1,000 m) were on the order of 10-300 mg/L. By 2,000 m (or 2 km) downstream, the TSS concentrations for all modelled scenarios would be below the calculated threshold of 19 mg/L (which is below the predicted normal, non-storm event background level identified for this study). Therefore, TSS concentrations associated with any inadvertent return would be indistinguishable from background levels by the time the affected water reaches the Reservation boundary. Enbridge's has used the modelling results to develop the proposed downstream water sampling plan for inadvertent returns.

As discussed above, the sediment modeling conducted by RPS (please see Attachment 12) indicates that most of the suspended sediments will settle close to the crossing area. As such, sampling near the waterbody crossing location will provide the best information regarding the potential effects of construction. Enbridge believes 100 feet downstream is sufficiently close to register any effects, but far enough downstream to allow for uniform mixing of any elevated sediments within the water column and stream width. The 100-foot distance also takes into account the potential access limitations at each respective waterbody. Enbridge also must consider safety and the protection of its employees, contractors, and construction personnel. Sampling locations that require bushwacking along or walking in the stream for a considerable distance away from the proposed workspace would increase the hazards and risks. Additionally, walking up and down the stream bed to access sampling locations could result in additional sedimentation and environmental disturbance that could affect and distort the results. Finally,

Enbridge's landowner agreements for construction and operation of the pipeline workspace do not include authorization to use or access any portions of the property or stream farther from the crossing area.

Enbridge will collect ***additional*** water quality samples at the first downstream public road crossing when:

- Field turbidity sample results (NTUs) are greater than 5 NTUs over upstream level when the upstream levels are 50 NTUs or less; or,
- When the downstream NTU readings are greater than 10 percent above upstream NTU readings when the upstream readings are greater than 50 NTUs.

Similar to the access restrictions at the proposed waterbody crossing locations, Enbridge can only use public access points, such as road crossings or points where Enbridge has acquired landowner permission, to collect additional water quality samples further downstream.

If turbidity samples taken at the first public access point downstream indicate turbidity levels are higher than those measures at 100 feet downstream, it is possible that the source of that increased turbidity would be from other inputs within the watershed, such as through other tributaries not crossed by the pipeline workspace. Enbridge would attempt to locate the source of the additional turbidity through observations made from public crossings of other waterbodies between the pipeline crossing and the downstream sample site; however, as noted above, Enbridge's authorization to access private land within the respective counties is limited. The modeling performed by RPS indicates that the elevated TSS levels and deposition of sediments resulting from the proposed dry crossing methods would be finite, of short duration, and highly localized. Modeled TSS concentrations (resulting from any installation method) are expected to meet the Bad River Band's water quality standards before reaching the Reservation and will thus not degrade downstream water quality. Collecting additional water quality samples at public access points, such as road bridges, when water quality parameters are elevated at approximately 100 feet downstream of the crossing location will provide additional documentation that water quality of waters entering the Bad River Reservation has not been degraded.

11) **Provide details on how Enbridge will equate NTU to TSS values.**

Enbridge Response:

Enbridge submitted a Sediment Discharge Modeling Report (the RPS report referenced in our previous response) ("Sediment Report") to the WDNR on February 13, 2023. As noted in the Sediment Report, there is a correlation between turbidity and TSS that can be used to assess the equivalent concentration of TSS.

As part of the Sediment Report, RPS (which is a recognized expert in modeling and predicting the effects of suspended sediment transport, including downstream TSS concentrations) conducted a statistical analysis of turbidity and TSS using 34 available historical observations of collocated turbidity and TSS measurements at the Bad River gage near Odanah, Wisconsin between 1987 and 1993. The observed TSS concentrations ranged from approximately 1 to 200 mg/L and between 0 to 50 NTU, with a strong general trend ($r2 = 88.06\%$) of greater TSS corresponding with higher levels of turbidity. Based on the correlation established in the RPS report (please see Attachment 12), Enbridge will convert NTU to TSS using the following formula: *TSS (mg/L) = 3.869 * NTU – 6.194*. As discussed in the Sediment Report, an increase of 5 NTU over natural background (at 50 NTU), would be the equivalent of an increase of approximately 19.3 mg/L TSS. Enbridge proposes to use the calculated TSS threshold of 19 mg/L above background as one reporting threshold to denote a potential temporary exceedance of water

quality standards.

12) **Provide the source (including reference information) of the Plan's proposed method for turbidity samples; provide details on how Enbridge will document the location, substrate, depth of fines, etc. where samples are taken:**

Enbridge would collect additional water quality samples at the first downstream public road crossing when:

- ***Field turbidity sample results (Nephelometric Turbidity Unit or NTU2) are greater than 5 NTUs over upstream level when the upstream levels are 50 NTUs or less; or,***

- ***When the downstream NTU readings are greater than 10 percent above upstream NTU readings when the upstream readings are greater than 50 NTUs.***

Enbridge Response:
Enbridge proposes to sample for turbidity using a LaMotte 2020we/wi Turbidimeter, Hanna Instruments HI 98703Turbidimeter, or similar meter and follow the manufactures directions for use and calibration. These EPA-compliant meters comply with standard method 180.1, the standard for determining turbidity in drinking, ground, surface, waste, and seawater samples. Sampling locations will be recorded on a sample data sheet (e.g., 100 feet upstream, 100 feet downstream, first downstream bridge). Existing substrate conditions will be visually assessed at each sample site and recorded on the data sheet. Enbridge is not proposing to measure the depth of fines as this would result in additional instream disturbance.

- **Section E - Post Construction Sampling**

1) **Provide details on mussel surveys, rare mussels, and monitoring post-construction.**

Enbridge Response:
As discussed in Enbridge's response to WDNR Data Request Question #4 Section B-Water Quality above, based on a review of the Wisconsin Natural Heritage Working List (https://dnr.wisconsin.gov/sites/default/files/topic/NHI/NHIWorkingList.pdf), there are 24 species of mussels in Wisconsin listed as Special Concern (five species), Endangered (11 species) or Threatened (eight species). Enbridge consulted with the WDNR and completed an Endangered Resources Review ("ERR") of the Project area (latest review completed February 2023 – ER Log #20-034). None of these protected mussels were identified within the Project workspace or associated buffer areas. Please see Enbridge's response to WDNR Data Request Question #4 (Section B – Water Quality) for a further discussion of Enbridge's mussel monitoring plan.

2) **Define the timeframe for the term "post-construction" as it applies to the Project; clarify if post- construction would include the operation, maintenance, possible spills, decommissioning activities of the pipeline.**

Enbridge Response:
Enbridge defines the time frame of "post-construction" as that period of time beginning when final site contouring has been completed, site seeding has occurred, and erosion controls (temporary and/or permanent) have been installed. The post-construction time period extends until the construction right-of-way has reached the revegetation goals (as discussed in Enbridge's

Monitoring Plan – Attachment 4) and site-stabilization requirements associated with stormwater site-stabilization requirements have been met. Post-construction does not include the operation, maintenance, or decommissioning of the pipeline, including potential releases occurring during its operation – all such activities are exclusively governed by PHMSA's safety standards at 49 C.F.R. Part 195. Enbridge defines "life of the Project" to encompass the period from commencement of construction to the end of the "post-construction" monitoring period.

3) **Provide details on how site restoration and stabilization would be evaluated immediately upon water crossing completion daily for three additional days, one-week post construction, and one- month post-construction.**

Enbridge Response:

As discussed in Enbridge's data request responses to the USACE (dated January 19, 2023), Enbridge proposes to analyze for dissolved oxygen ("DO"), pH, conductivity, temperature, chemical oxygen demand ("COD"), turbidity (field measurement) and total suspended solids ("TSS") upstream and downstream of the crossing for three additional days for waterbodies with flowing water as well as one week post-construction and one month post-construction. COD and TSS analysis will be completed by a certified laboratory using standard analytical methodologies. DO, pH, conductivity, and temperature measurements will be collected in the field using standard analytical methodologies (as discussed in Enbridge's response to WDNR Data Request Question #9 Section B-Water Quality Section). Enbridge will also visually inspect the stream banks to identify potential bank stability concerns and/or contour concerns as well as visually compare streambed elevations of the backfilled ditch to adjacent undisturbed streambed. Enbridge will also visually assess the appearance of the backfilled trench and compare the appearance of the backfilled area to adjacent undisturbed areas (e.g., similar sediment composition). Upstream-downstream water quality chemical parameters (discussed above) will be compared to evaluate potential differences that could potentially be caused by pipeline construction activities (e.g., elevated downstream NTU and/or TSS). Observed notable physical parameter differences will be discussed with the Third-Party Compliance Monitor and respective agencies to develop a corrective action plan.

4) **Provide details on how restoration of the natural waterway flow would be evaluated immediately upon water crossing completion daily for three additional days, one-week post construction, and one-month post-construction.**

Enbridge Response:

As discussed in Enbridge's data request responses to the USACE (dated January 19, 2023), Enbridge proposes to measure stream flow upstream and downstream of the crossing for three additional days as well as one-week post-construction and one month post construction (for waterbodies with flowing water). Enbridge will also visually inspect the stream flow conditions to identify stream flow conditions upstream and downstream of the backfilled trench to document if stream elevation differences in the backfilled ditch (either high or low) may be affecting downstream water movement. Upstream-downstream flow rates will be compared to evaluate potential differences that could potentially be caused by pipeline construction activities. Notable differences will be discussed with the respective agencies to conduct further investigations and develop a corrective action plan, if applicable.

5) **Provide details on how site restoration and stabilization would be evaluated past one-month post- construction.**

Enbridge Response:
Please see Enbridge's response to WDNR Data Request Question #8 (Section A-Introduction) above as well as Enbridge's Monitoring Plan (please see Attachment 4).

6) **Provide details on how the currently proposed frequency, locations, and number of post- construction sampling would accurately reflect long-term restoration, stabilization, and water quality for the resources.**

Enbridge Response:
Please see Enbridge's response to WDNR Data Request Question #8 (Section A-Introduction) above as well as Enbridge's Monitoring Plan (please see Attachment 4).

7) **Provide a post-construction monitoring plan, including the number of years and frequency of water quality sampling and monitoring, that would take place post-construction to ensure representative water quality data of the resources.**

Enbridge Response:
Please see Enbridge's response to WDNR Data Request Question #8 above (Section A-Introduction) as well as Enbridge's Monitoring Plan (please see Attachment 4).

8) **Provide details on the number of years of restoration, stabilization, and natural flow restoration and monitoring that would take place post-construction.**

Enbridge Response:
Please see Enbridge's response to WDNR Data Request Question #8 above (Section A-Introduction Section) as well as Enbridge's Monitoring Plan (please see Attachment 4).

9) **Provide details on post-construction monitoring that would take place after storm events to ensure waterway restoration remains successful; provide details on how this monitoring would relate to Enbridge's integrity management plan for the pipeline.**

Enbridge Response:
Please see Enbridge's response to WDNR Data Request Question #8 above (Section A-Introduction) as well as Enbridge's response to WDNR Data Request Question #2 (Section E-Post-Construction Sampling). Post-construction monitoring is not related to Enbridge's Integrity Management Plan for the pipeline. Whereas post-construction monitoring is designed to address construction-related impacts that are subject to WDNR's jurisdiction, Enbridge's Integrity Management Plan relates to operation of the pipeline, in accordance with PHMSA's standards at 49 C.F.R. Part 195 that exclusively govern the pipeline's safe operation.

- **Section F - Horizontal Directional Drills and Direct Pipe Crossings**

HDD Inadvertent Return (Waterways):

1) **Provide details on how bentonite will be contained during directional boring and prevented from entering surface waters.**

Enbridge Response:
Drilling fluid used in the HDD drilling process would be contained within the excavated drilling entrance and exit holes, onsite containment pits, steel roll-off containers, or similar containment structures to prevent migration outside of the proposed Project workspace and to maximize the reuse of the materials in the drill process and minimize the overall quantity of bentonite needed to successfully complete the crossing. Enbridge's site-specific HDD Inadvertent Release Mitigation and Monitoring Plans, which was submitted to the WDNR on January 23, 2023 includes a description of prevention measures that will be implemented for each HDD.

2) **Provide details on the types of water quality samples that would be taken in the event of an inadvertent return within a waterway, including a sample collection protocol/method (include source, reference information).**

Enbridge Response:
In the unlikely event of an in-water release of drilling fluid due to an inadvertent return, Enbridge would collect water quality samples in accordance with the Pre-Construction/Post-Construction chemical and physical parameters (i.e., temperature and turbidity) as listed in Table B1-1and as discussed in Data Request Question #2 Section B-Water Quality response. Enbridge would collect these samples within the primary plume area. Additional samples would be collected in consultation with the applicable regulating agencies. Sample collection methods and analysis will follow those methods described above. As previously discussed, the Project will only use agency-approved drilling mud additives.

3) **Provide details on how the collection of water quality samples at each public road crossing downstream of an instream inadvertent return to the exterior boundary of the Bad River Reservation would provide accurate and representative water quality evaluations of an inadvertent return and its impacts on the resource.**

Enbridge Response:
Please see Enbridge's response to WDNR Data Request Question #10 (Section D-Active Construction) As previously discussed in Enbridge's response to the USACE data request (responses submitted to the WDNR on January 23, 2023), Enbridge's landowner agreements for construction and operation of the pipeline workspace do not include authorization to use or access any portions of the property or stream outside of the Project workspace. Enbridge also has to consider safety and the protection of its employees, contractors, and construction personnel. Sampling locations that require bushwacking along or walking in the stream for a considerable distance away from the proposed workspace would increase the hazards and risks. Additionally, walking up and down the stream bed to access sampling locations could result in additional sedimentation and environmental disturbance that could affect the sample results as well as aquatic organisms.

As proposed, Enbridge will collect additional water quality samples at the first downstream public road crossing when:

- Field turbidity sample results (Nephelometric Turbidity Unit or "NTU"[3]) are greater than 5 NTUs over upstream level when the upstream levels are 50 NTUs or less; or,
- When the downstream NTU readings are greater than 10 percent above upstream NTU readings when the upstream readings are greater than 50 NTUs.

Similar to the access restrictions at the proposed crossing locations, Enbridge can only use public access points such as road crossings or points where Enbridge has acquired landowner permission to collect additional water quality samples further downstream.

4) **Provide details on how Enbridge would collect water quality samples downstream of the instream inadvertent return if there are no public road crossings downstream; include information on how the sample collection location would provide accurate and representative water quality evaluations of an inadvertent return and its impacts on the resource.**

Enbridge Response:
There are only two waterbodies Enbridge proposes to cross using the HDD technique where a public road does not cross the river prior to the river entering the Bad River Reservation, the Bad River and Tyler Forks. In the unlikely event of an instream inadvertent return in the Bad River, Enbridge would either use a shallow draft watercraft to access the downstream sampling site or would work with the State to access the river within the Copper Falls State Park. Similarly, Enbridge would use a shallow draft watercraft (depending on water levels at the time of construction) to access a downstream sampling location on Tyler Forks. Please see Enbridge's response for WDNR Data Request Question #3 Section F-Horizontal Directional Drills and Direct Pipe Crossings regarding assessment to impacts on the resource.

5) **Provide details on how the collection of water quality samples from stream banks would provide accurate and representative water quality evaluations of the waterway during an instream inadvertent return and its impacts on the resource.**

Enbridge Response:
As described in the RPS Sediment Modeling Report (please see Attachment 12), a modeled inadvertent return into a small waterbody resulted in a predicted uniform TSS concentration across the river channel originating at the inadvertent return source. Maximum TSS concentrations in larger waterbodies was greater near the inadvertent return source and generally attenuated as downstream distance increased, but concentrations also varied spatially based on the varying velocity, channel morphology, and depth, with the highest concentrations toward the center of the watercourse. Enbridge will attempt to collect water quality samples across the width of the waterbody if site conditions at the time of crossing allow safe access. As described above, Enbridge will also have a shallow watercraft available at each larger waterbody to assist with sample collection and access.

6) **The Plan states *"Enbridge notes that changes in downstream water quality may be due to inputs from tributaries where the confluence of the tributary and the primary waterbody being sampled occurs upstream of the sampling location."* Provide details on how Enbridge would**

[3] A Nephelometric Turbidity Unit ("NTU") is a measure of the opaqueness of a fluid due to the presence of suspended solids (inorganic or biological). The higher the concentration of suspended solids in the water, the higher the turbidity is and the dirtier it looks.

assess whether changes in water quality are from an inadvertent return or from natural confluence.

Enbridge Response:
Many of the waterbodies crossed by the proposed Project have confluences with other ephemeral, intermittent and perennial waterbodies, including waterbodies that flow through actively cultivated lands. It is possible that one of these tributaries could contribute to changing water quality parameters (e.g., higher concentrations of suspended solids) between the proposed downstream sampling location and the first downstream public access point (i.e., road crossing). If water quality parameters are significantly different at the public access point than from the proposed sampling point (100 feet downstream of the crossing), Enbridge would inspect the right-of-way segment that could potentially drain to tributaries that have a confluence above the public access point, looking for areas where runoff from the right-of-way may be the cause of the water quality parameter differences. If no locations are found that could potentially be the source, Enbridge will assume that the change is due to activities within the watershed, not associated with pipeline construction.

7) **Provide details on how samples taken every 6 hours would provide accurate and representative water quality evaluations of an inadvertent return and its impacts on the resource.**

Enbridge Response:
Please see Enbridge's response for WDNR Data Request Question #3 Section F-Horizontal Directional Drills and Direct Pipe Crossings regarding assessment to impacts on the resource.

8) **Provide details on how Enbridge would determine that an in-stream inadvertent return has been successfully stopped and/or contained.**

Enbridge Response:
Drilling fluid is comprised of a mixture of water and bentonite clay. An instream release of drilling fluid (inadvertent return) would be observable as a point-source increase in sediment within the waterbody. Enbridge has developed site-specific Inadvertent Response Mitigation and Contingency Plans for each proposed HDD (please see Attachment 2). These plans describe the actions that Enbridge would take to address an inadvertent return and precautions that would be taken prior to resuming drilling operations following an inadvertent return. Successful containment and/or stopping further release would result in no additional downstream observable sediment.

9) **Provide details on how water quality samples that are collected from each location daily for an additional five days at each sampling location would provide accurate and representative water quality evaluations of an inadvertent return and its impacts on the resource.**

Enbridge Response:
Please see Enbridge response for WDNR Data Request Question #4 Section F-Horizontal Directional Drills and Direct Pipe Crossings.

10) **Provide details on how inadvertent return events and water quality assessments would be reported to WDNR, USACE, and interested tribes.**

Enbridge Response:
As described in Enbridge's response to the USACE (submitted to the WDNR on January 23, 2023), Enbridge will promptly contact the Wisconsin spill hotline regarding any surface releases of inadvertent return material. Enbridge will also notify the Independent Compliance Monitor of a surface release. Additionally, Enbridge has committed to notifying the Bad River Band of an in-stream inadvertent return and will work with the Bad River Band to obtain permission to collect additional water samples within the Reservation boundary at public road crossing locations if upstream sampling locations indicate that downstream migration of suspended sediments associated with an inadvertent return progress into the Bad River Reservation. Samples will be collected every six hours from each location following discovery of an instream inadvertent return. Once the in-stream inadvertent return has been successfully stopped and/or contained, water quality samples will be collected from each location daily for an additional five days at each sampling location described above. Collected samples will be analyzed for DO, pH, conductivity, temperature, COD, turbidity (field measurement), and TSS. Testing results for the water quality parameters listed will be made available after Enbridge has received the lab results from the respective lab analyses.

HDD Inadvertent Return (Wetlands):

11) **Provide details on the types of wetland water quality samples that would be taken in the event of an inadvertent return within wetlands, including a sample collection protocol/method (include source, reference information).**

Enbridge Response:
Chemical water quality samples will be collected in wetlands with standing or flowing water if there is an inadvertent return in a wetland and there is a potential for drilling fluid to migrate. Enbridge will use the same protocol/methods to sample these wetlands as will be used to sample wadable waterbodies (see response to WDNR Data Request Question #2 Section F-Horizontal Directional Drills and Direct Pipe Crossings).

Collection of water quality samples within wetlands that lack standing or flowing water is impracticable and will not be conducted. Drilling fluid is comprised of a mixture of water and bentonite clay. An in-wetland release of drilling fluid (inadvertent return) would be observable as a point-source increase in sediment within the wetland. In these wetlands, as in other wetlands, Enbridge will implement the protocols and methods described in its inadvertent return plans to stop and/or contain the inadvertent return. Once the in-inadvertent return has been successfully stopped and/or contained in these wetlands, Enbridge will document the areal extent of the inadvertent return and the depth of any associated deposits to determine if removal of drilling fluid from the wetland is warranted.

12) **Provide details on the locations of water quality samples after an inadvertent release and how these locations would provide accurate and representative water quality evaluations of an inadvertent return and its impacts on the resource.**

Enbridge Response:

Chemical water quality samples will be collected in wetlands with standing or flowing water if there is an inadvertent return in a wetland and there is a potential for drilling fluid to migrate. Enbridge has assumed in inadvertent return in a wetland with standing water or flow would behave similar to a small waterbody. Specifically, based on the modelling performed by RPS, Enbridge expects there would be uniform TSS concentration across the width of the wetland originating at the inadvertent return source. Enbridge will select a sample location within the plume and approximately 50 feet outside of the furthest visual extent of the plume in the wetland. As described in response to WDNR Data Request Question #15 Section B-Water Quality, the sediment modeling conducted by RPS (see report submitted on February 13, 2023) indicates that most of the suspended sediments in the drilling fluid will settle close to the source.

13) **Provide details on how Enbridge would assess whether changes in water quality are from an inadvertent return or are naturally occurring.**

Enbridge Response:

Drilling fluid is comprised of a mixture of water and bentonite clay, and the only drilling fluid additives to be used on the Project have been reviewed and approved by the Department. A release of drilling fluid (an inadvertent return) in a wetland would be observable as a point-source increase in sediment within the wetland. As described in response to WDNR Data Request Question #12 Section F-Horizontal Directional Drills and Direct Pipe Crossings, Enbridge will sample within the inadvertent return plume and approximately 50 feet outside of the visible extent of the plume in the wetland. If there is flow in the wetland, the sediment plume is not expected to radiate upstream. As such, the upstream sample would represent background conditions and the downstream would represent background plus the inadvertent return. If there is no flow, the inadvertent return could radiate from the source in all directions. In this case, Enbridge will select a location that has not been impacted by the plume to represent background conditions.

14) **Provide details on how often water quality samples would be taken and how the timing of these samples would provide accurate and representative water quality evaluations of an inadvertent return and its impacts on the resource.**

Enbridge Response:

If an inadvertent return occurs in a wetland with flowing or standing water, Enbridge will implement water quality sampling similar to what is proposed for wadable streams. See Enbridge's responses to WDNR Data Request Questions #7 and #9 Section F-Horizontal Directional Drills and Direct Pipe Crossings.

15) **Provide details on how Enbridge would determine that a wetland's inadvertent return has been successfully stopped and/or contained.**

Enbridge Response:

A release of drilling fluid (inadvertent return) in a wetland would be observable as a point-source increase in sediment within the wetland. Enbridge has developed site-specific Inadvertent Response Mitigation and Contingency Plans for each proposed HDD (please see Attachment 2). These plans

describe the actions that Enbridge would take to address an inadvertent return and precautions that would be taken prior to resuming drilling operations following an inadvertent return. Successful containment and/or stopping further release would result in no additional accumulation or migration of observable sediment within the wetland.

16) **Provide details on how often water quality samples would be collected once an inadvertent return has been contained/stopped and how these samples would provide accurate and representative water quality evaluations of the inadvertent return and its impacts on the resource.**

Enbridge Response:
As discussed in response to WDNR Data Request Question #11 Section F-Horizontal Directional Drills and Direct Pipe Crossings, samples would only be collected in wetlands with standing or flowing water. Chemical water quality samples would be collected from within the inadvertent return plume area as well as an area where the is no visual sign of drilling fluid accumulation, approximately 50 feet outside of the affected area within the wetland (if standing or flowing water is present). Once the inadvertent return has been successfully stopped and/or contained, Enbridge will collect and analyze the parameters as listed in the Active Construction in Table B1-1 from each location daily for an additional five days at each sampling location described above. Testing results for the water quality parameters listed will be made available after Enbridge has received the lab results from the respective lab analyses.

Collection of water quality samples within wetlands that lack standing or flowing water is impracticable and will not be conducted in these wetlands.

17) **Provide details on how inadvertent return events and water quality assessments would be reported to WDNR, USACE, and interested tribes.**

Enbridge Response:
Enbridge will promptly contact the Wisconsin spill hotline regarding any surface releases of inadvertent return material in wetlands. Enbridge will also notify the Independent Compliance Monitor of a surface release. Enbridge will also notify the Bad River Band if the inadvertent return is in a wetland with flowing water where there is a potential for the inadvertent return to migrate with the flowing water.

Section G - Pipeline Leaks, Spills, Releases Post-Construction (Waterways and Wetlands):

1) **Provide details on how wetlands and waterways would be evaluated for pipeline leaks, spills, and/or return impacts after pipeline installation is complete.**

Enbridge Response:
The operation of the pipeline post-construction is governed exclusively by PHMSA and its regulations at 49 C.F.R. Part 195. Prior to operating a new pipeline, PHMSA requires that it be pressure tested (with water) under Part 195, Subpart E "without leakage." If a construction-related leak were to be identified as a result of the pressure test, the pipe would be replaced/repaired, and a pressure test would be re-performed. Once operational following the completion of a successful pressure test, the pipeline will be operated in accordance with PHMSA safety standards at Part 195 that are designed to prevent releases from a pipeline into the surrounding environment. See, e.g., Part 195 at Subpart F (which, among other requirements, specifies requirements for leak detection, control room management, pipeline integrity

management in high consequence areas), and Subpart H (which specifies requirements for corrosion control).

2) **Provide a detailed water monitoring and response plan that would be implemented in the event of a leak and/or spill. This response plan should differentiate between, and specifically address monitoring actions to be taken for, spills associated with construction equipment and/or a crude oil or natural gas liquid release during Line 5 operations.**

Enbridge Response:

Spills from construction equipment, either during active construction or operational maintenance activities would be addressed in accordance with Enbridge's Spill Prevention, Containment, and Control Measures included in Enbridge's EPP (please see Attachment 3). With respect to releases from the pipeline during operation, monitoring to identify any potential releases would be conducted in accordance with PHMSA's exclusive safety standards at 49 C.F.R. Part 195. This includes, but is not limited to: (i) operating the pipeline with an effective system for detecting leaks in accordance with 195.134 or 195.452, which includes a computational pipeline monitoring leak detection system that complies with API RP 1130 (see 195.444); (ii) control room procedures to monitor the pipeline in accordance with 195.446 via a SCADA system that alarms in response to leak triggers; (iii) operating the pipeline in accordance with an integrity management program that includes criteria and measures to maintain the integrity and safety of the pipeline in a manner to prevent any release into the surrounding environment (see 195.452); etc. In accordance with 49 C.F.R. Part 194, Enbridge also will update its emergency response plan, as appropriate, to address the Relocation. That emergency response plan will be approved by PHMSA, and as required by Part 194, it will identify procedures (including personnel, equipment, and response tactics/strategies) to respond to and mitigate any release from a worst-case discharge from the pipeline. Should any release occur, the federal government, typically through EPA for an onshore release, will "direct or monitor all Federal, State, and private actions to remove a discharge," which includes directing the preparation of, and approving, response plans to "ensure the effective and immediate removal of a discharge, and mitigation or prevention of a substantial threat of a discharge." See 33 U.S.C. 1321(c). Any response plan must be "in accordance with the National Contingency Plan" and will be site-specific, taking into requirements of any administrative order issued by EPA under Section 1321(e) and at the direction of the Federal On-Scene Coordinator ("FOSC"). While Enbridge may prepare and seek EPA's approval of that plan, it is EPA and FOSC that dictate its contents.

3) **Provide details on the types of wetland and waterway water quality samples that would be taken in the event of leaks and/or spills, including a sample collection protocol/method (include source, reference information).**

Enbridge Response:

Please see Enbridge's responses to WDNR Data Request Questions #18 and #19 Section F-Horizontal Directional Drills and Direct Pipe Crossings Section.

4) **Provide details on the locations of water quality samples after a leak and/or spill and how these locations would provide accurate and representative water quality data of the leak/spill and its impacts on the resource.**

Enbridge Response:
Please see Enbridge's responses to WDNR Data Request Question #18 and #19 Section F-Horizontal Directional Drills and Direct Pipe Crossings.

5) **Provide details on how Enbridge would assess whether changes in water quality are from the leak and/or spill or are naturally occurring.**

Enbridge Response:
Please see Enbridge's responses to WDNR Data Request Question #18 and #19 Section F-Horizontal Directional Drills and Direct Pipe Crossings.

6) **Provide details on how often water quality samples would be taken and how the timing of these samples would provide accurate and representative water quality data for the leak and/or spill and its impacts on the resource.**

Enbridge Response:
Please see Enbridge's responses to WDNR Data Request Questions #18 and #19 Section F-Horizontal Directional Drills and Direct Pipe Crossings.

7) **Clarify if/how Enbridge would conduct post-construction sampling as part of pipeline integrity checks and how Enbridge would detect small leaks (automated leak detection systems may not be effective at detecting small leaks).**

Enbridge Response:
Enbridge proposes to conduct sampling according to its Monitoring Plan (please see Attachment 4). Post-construction sampling will not be conducted as part of pipeline integrity checks. Please see Enbridge's responses to WDNR Data Request Question #18 and #19 Section F-Horizontal Directional Drills and Direct Pipe Crossings, which discuss PHMSA's safety standards that exclusively govern requirements for monitoring a pipeline for potential leaks of all sizes.

8) **Provide details on how Enbridge would determine that the leak and/or spill has been successfully stopped and/or contained.**

Enbridge Response:
Please see Enbridge's responses to WDNR Data Request Questions #18 and #19 Section F-Horizontal Directional Drills and Direct Pipe Crossings.

9) **Provide details on how often water quality samples would be collected once the leak and/or spill, has been contained/stopped and how these samples would provide accurate and representative water quality data of the leak and/or spills and its impacts on the resource.**

Enbridge Response:
Please see Enbridge's responses to WDNR Data Request Questions #18 and #19 Section F-Horizontal Directional Drills and Direct Pipe Crossings.

10) **Provide details on how leak and/or spill events and water quality assessments would be reported to WDNR, USACE, and interested tribes.**

Enbridge Response:
With respect to releases from construction equipment, Appendix E of Enbridge's EPP includes a listing of federal, state, and local agencies including reporting thresholds and timeframes. This will include notification through the State spill hotline. A release from Line 5 would be reported to the National Response Center in accordance with federal regulations. Enbridge's emergency response plan, which is prepared and administered by Enbridge in accordance with 49 C.F.R. Part 194 and approved by PHMSA, also includes procedures for notification of a release to appropriate authorities. With respect to any water quality assessments following a release, please see Enbridge's response to WDNR Data Request Question #19 Section F-Horizontal Directional Drills and Direct Pipe Crossings.

- ***Section H - Reporting***

1) **Provide greater detail on how Enbridge would assess water quality data for Project impacts and the extent of Project impacts (if any).**

Enbridge Response:
Please see response to WDNR Data Request Questions #2 and #4 Section H-Reporting below.

2) **Provide greater detail on water quality sampling reporting, including what would be included in the report, how data would be organized, how data would be interpreted and summarized, when the report would be shared with agencies, the opportunity for agency review and comment, etc.**

Enbridge Response:
The results of the water quality sampling will be summarized in an annual report. The report will include a brief introduction and a summary of the monitoring that was conducted including the date(s), locations, and project activities at the time the monitoring was performed. The report will include a methods section that describes how the monitoring and field test/laboratory analyses that were conducted and by whom.

The report will also include a results section that summarizes the findings. It is anticipated that most of the results will be summarized in tabular format, although graphics summarizing results may also be included. Data collected before, during and after construction will be presented and compared. Text in the results section will provide context for the data and point out trends and other data observations. The report will conclude with a discussion section. The content of the discussion section will be dictated by the results and cannot be predetermined at this time. Data sheets including any laboratory analyses and photos will be included as appendices to the reports. Enbridge will submit the respective reports by the end of the calendar year for the respective sampling periods. Agencies will be able to comment on the results if they choose to. Enbridge will respond to comments as appropriate in a separate document but does not plan on submitting revised reports.

If field/lab results indicate there are real time water quality impacts associated with the project, Enbridge will report the results to the WDNR and other appropriate agencies as described in response to WDNR Data Request Question #4 Section H-Reporting below.

3) **Provide details on how waterway and wetland restoration would be determined "successful," including measurable standards that would need to be met in order for the resource to be determined successfully restored. Provide details on how Enbridge would report these data and how they would conduct future monitoring until successful restoration is achieved.**

Enbridge Response:
Enbridge submitted its Monitoring Plan to the WDNR on January 23, 2023. This plan described Enbridge's proposed post-construction monitoring of wetlands and waterbodies, including success criteria. Enbridge's Monitoring Plan is also included in this filing as Attachment 4. Please also see Enbridge's response to WDNR Data Request Question #8 Section A-Introduction Section above.

4) **WDNR requests sampling data be reported immediately to WDNR, USACE, and interested tribes if field/lab results show possible water quality impacts from the Project. A summary report should be provided that includes data results (including laboratory analysis documents), data interpretation, applicability to the Project, mitigation and/or restoration actions, etc.**

Enbridge Response:
Enbridge will report the results of sampling data to the WDNR and other appropriate regulatory agencies if it determines in the field or receives subsequent laboratory results (lab results will take several days) that indicate water quality impacts have occurred associated with Project activities. The results will be included in a written report along with an interpretation of the results.

5) **WDNR requests annual reports be sent to WDNR, USACE, and interested tribes that provide relevant data and evaluations on the Project's impacts on water quality. Reports should include original laboratory analysis documents.**

Enbridge Response:
Please see Enbridge's Monitoring Plan (please see Attachment 4). Enbridge will provide reports consistent with the Monitoring Plan.

- **Section I - Other**

1) **For ease of use and orientation, please orient maps to have North facing upwards, whenever possible.**

Enbridge Response:
Enbridge will provide future mapping oriented with north facing upwards, whenever practicable.

2) **Provide details on how the proposed HDD installations would follow WDNR's HDD Technical Standard, including the following topics:**
    a. **The Standards Design Criteria used to help assess the initial condition of the**

wetland or waterway in question. This is needed to determine not only impacts from construction activities, but also allow assessment of whether the wetland or waterway is returned to pre-construction conditions.

b. **Geotechnical investigation borings.**
c. **Defining subsurface conditions to avoid risks to aquifer breaches and frac out.**

Enbridge Response:

Enbridge began planning for the proposed HDDs in 2019. Enbridge's planning, as described more fully below, included desktop analyses, field reviews and surveys at each crossing, and the use of experienced HDD design firms to develop site-specific plans for each HDD. These plans incorporate industry best management practices as well as Enbridge internal design standards, and incorporate and consider:

- geotechnical information based on the documenting subsurface geology;
- topography between the entry and exit locations;
- workspace for pipe fabrication;
- required depth below river bottom;
- surface resources such as wetlands and waterbodies;
- pipe diameter and associated installation radius; and
- drilling mud hydraulics.

WDNR Technical Standard 1072

Following issuance of WDNR Technical Standard 1072 for HDDs (issued October of 2022) Enbridge also reviewed and compared the Technical Standards to the work already completed for the Project. WDNR's 1072 -TS-19 Technical Standard can be summarized as including three major elements: initial design, plan development, and construction monitoring and reporting. The first elements include desktop site assessments and geotechnical investigations to identify and characterize water resource, constructability and subsurface conditions. Enbridge has determined that its plans meet WDNR Technical Standard 1072 requirements. A summary of how Enbridge has met the requirements in Technical Standard 1072 is described below. Table H2-1 in Attachment 13 lists each technical standard and its status relative to each of the proposed HDDs. As indicated on the table most of the standards have already been met. The few standards that are still pending will be completed prior to construction or will be part of the construction monitor during HDD installation.

INITIAL DESIGN

Desktop analysis

Enbridge conducted a number of desktop analyses during the initial planning and routing of the project. This was done to identify, wetland and waterbody resources, potential waterbody crossing locations as well as potential resources at these locations. The following specific sources of information were reviewed to identify potential wetlands and waterbodies as well as topography and general land conditions:

- U.S. Fish and Wildlife Service ("USFWS") National Wetlands Inventory Maps
- Wisconsin Department of Natural Resources ("WDNR") Wetland Inventory Maps
- ("WWI")
- U.S. Geological Survey ("USGS") Topographic Maps
- USGS National Hydrography Dataset
- U.S. Department of Agriculture Natural Resources Conservation Services ("NRCS") Soil Survey Geographic Database ("SSURGO")
- Google Earth Historical Imagery, Google Corp. accessed 2019
- Microsoft Aerial Imagery, Microsoft Corporation dated 2019

Field Surveys
Following initial desktop analyses, Enbridge conducted field surveys including civil survey, wetland surveys, waterbody surveys, protected species surveys, conventional cultural resource surveys, architectural surveys, and traditional cultural resource surveys. Enbridge also commissioned LiDAR data for the Project. Results of the field work have been submitted to the WDNR in various Project filings since February 2020.

Results of the field surveys were further used to evaluate and adjust the proposed route to avoid and/or minimize environmental impacts, adjust for constructability constraints, assess potential crossing methods (e.g., horizontal directional drill or HDD), and accommodate landowner requests.

Geotechnical Investigations
As part of the planning process, Enbridge conducted preconstruction geotechnical investigations to confirm the suitability of the subsurface material for each proposed HDD and design each crossing. A total of 46 boreholes were drilled to capture the subsurface materials data information at the proposed HDD locations. Laboratory soil tests of the extracted boring material were conducted to better identified the specific soils (e.g.., rock, clay, silt, sand) and mechanical properties (e.g., percent rock fracture, clay consistency, soil granulariy, etc.). The soil borings were advanced to a depth beyond the proposed HDD pathway and were conducted outside the proposed drill path to avoid creation of potential pathways for inadvertent returns. For each HDD, two to six boreholes were executed based on drill length and soil variability. Enbridge's preliminary design proposed 13 HDDs. The geotechnical analyses confirmed that the HDD was a viable installation method at 12 of these sites. Subsurface conditions were not ideal at one site and Enbridge elected to change the proposed crossing method at this site from a HDD to the direct pipe installation method. The final drilling profile was adjusted based on soil variability per the geotechnical field program, depth of cover to minimize risk of an inadvertent return and the mechanical property of the steel.

PLAN DEVELOPMENT
Execution plans were prepared for each drill using the desktop and field review data and information described above. Enbridge considered in the development of these plans the designs and events of the recent Line 3 Replacement Project in Minnesota with its HDD design engineering firm to assess modifications to the Project designs to further reduce the likelihood of an inadvertent return. Enbridge made modifications to the Project HDD designs as appropriate.

Specific elements of these plans considered/incorporated:

Location of Wetland and Waterbody Resources
Each plan was designed using the field delineation, biological survey and cultural resource survey information to avoid or minimize impacts on wetland and waterbody resources, rare species habitat, and cultural resources. As part of the overall constructability assessment, Enbridge completed a review of the resources needed to execute each drill. As part of this effort, Enbridge identified temporary workspaces required for the work, drilling equipment, and drill mud management. The design incorporates safety and mitigation measures necessary to protect the environment. These included setting back workspace from the water's edge, preserving riparian vegetation were practicable, and location workspace outside of wetland, particularly forested wetland to the extent possible.

Depth of Cover
Enbridge's proposed HDD designs incorporate a minimum of 40 feet to a maximum of 108 feet (exception for DPI with 29 feet where carrier pipe is supporting the hole under the watercourse

during boring) depth of cover below the primary waterbody being crossed by the HDD/Direct Pipe method.

Groundwater Conditions and Hydrofacture Pressure
Enbridge prepared a hydrofracture pressure curve for each HDD and adjusted the designs to provided a minimum safety factor of 2 for the drill paths. Groundwater elevations were also recorded during the field work to identify potential aquifer concerns including potential to encounter confined aquifers. Although groundwater was encountered, none of the 46 geotechnical bore locations showed signs of water pressure associated with a confined aquifer.

Spill Plan
Enbridge has developed a spill plan and any spills from construction equipment, either during active construction or operational maintenance activities will be addressed in accordance with Enbridge's Spill Prevention, Containment, and Control Measures included in Enbridge's EPP (please see Attachment 3).

Inadvertent Return Plans
Enbridge has prepared site-specific HDD Inadvertent Release Mitigation and Monitoring Plans, which were submitted to the WDNR on January 23, 2023. These plans include plan drawings showing the locations of workspace and sensitive resources, and a description of prevention measures that will be implemented for each HDD. For additional details regarding these plans see Enbridge's responses above to Information Requests under the heading of "Horizontal Directional Drills and Direct Pipe Crossings."

CONSTRUCTION

Environmental Training
Enbridge will provide environmental training of all construction personnel, including drill contractors prior to construction. Drilling crews will receive specific instruction regarding the drill plans that have been prepared, the sensitive resources in the vicinity of each drill, and the requirements and mitigation measures of Enbridge's Inadvertent Return Plans, spill plans, and erosion and sediment control plans. Enbridge will employ environmental inspectors that will revisit this information with the drilling contractor prior to the start of each drill.

Drill Monitoring
As described above and in the Inadvertent Return plans, the contractor will be required to continuously monitor the drilling operation. This will include monitoring drilling fluid returns to identify any significant loss of fluids and conducting visually inspections of the ground surface along the drill path consistent with the frequency indicated in the WNDR's Technical Standard. Enbridge's environmental inspectors will also monitor the drilling operation to verify that the contractor is complying with plan requirements.

Reporting
Enbridge will notify the WDNR Spills Hotline (1-800-943-0003) within 24 hours if drilling fluid enters an ERW or ORW or a substantial loss or gain has occurred. If a spill or inadvertent return enters a separate storm sewer inlet or drainage conveyance system, Enbridge will promptly notify the system owner that the discharge occurred, and include the estimated quantity of material discharged. If requested by WDNR staff, Enbridge will provide regular status reports to WDNR pursuant to the Technical Standard including:

- HDD status;
- monitoring and inspection summary;

- issues (including spills and IRs) and associated responses;
- estimated amount of fluid lost or gained;
- estimated amount of fluid recovered during IR response; and
- project-specific concerns and how they were addressed.

3) **Provide details on how groundwater quality and quantity (including artesian springs) would be sampled pre-construction, during active construction, post-construction, and throughout the lifetime of the Project; provide details on how water quality data would be evaluated for project- related impacts.**

Enbridge Response:
As stated in Enbridge's application materials, Enbridge will coordinate with landowners to test private wells within approximately 300 feet of the project workspace. Where landowners request, Enbridge will conduct preconstruction water quality and yield testing as well as post-construction testing. Pre-construction and post-construction samples will be compared to evaluate potential differences. Enbridge does not propose to sample groundwater quality or quantity beyond the scope of landowner approved well sampling. Enbridge completed multiple studies to identify areas along the proposed pipeline route with potential shallow confined aquifers, which could result in artesian flow if encountered during construction. The results of the studies indicated artesian conditions will not be encountered at the planned construction depths. Based on geotechnical analysis, it is also unlikely the proposed HDDs will encounter confined aquifers. However, if the HDD encounters a confined aquifer, the HDD installation methodologies can control/seal the drill path as drilling progresses.

4) **Provide details on how wildlife surveys and wildlife health would be collected and assessed pre- construction, during active construction, post-construction, and throughout the lifetime of the Project; provide details on how wildlife data would be evaluated for project-related impacts.**

Enbridge Response:
As described in the EIR and in Enbridge's supplemental filings, potential temporary and permanent impacts to wildlife species associated with the project will be minimal, including those associated with the conversion of habitat associated with maintaining a permanent 50-foot easement along the pipeline corridor. The WDNR's Draft EIS also discussed limited potential temporary and permanent impacts to wildlife. Enbridge will rely on ongoing WDNR wildlife survey and wildlife health programs throughout the lifetime of the project.

5) **Provide details on how air quality would be sampled pre-construction, during active construction, post-construction, and throughout the lifetime of the Project; provide details on how air quality data would be evaluated for project-related impacts.**

Enbridge Response:
The Project's potential impacts to air quality are discussed in the EIR (dated August 2020) as well as the DEIS. As discussed in the DEIS (Section 6.3), two types of impacts on air quality were analyzed: temporary impacts from construction-related emissions and long-term impacts associated with emissions generated from continued operation of a stationary source (e.g., valves, pumps, and storage tank emissions). Air quality impacts associated with construction of the proposed project would include generation of fugitive dust from exposed soil, emissions from fossil-fueled construction equipment, particulates from potential open burning (if required and authorized), and organic emissions from temporary fuel storage and refueling operations.

Generation of fugitive dust will be controlled by application of water as necessary, while construction equipment emissions are subject to regulation under 40 CFR Parts 1039 and 1068 depending on the type of engine. emissions from open burning will be minimized by limited open burn authorizations, and emissions from temporary fuel storage and refueling operations would be controlled through use of U.S. EPA authorized storage containers and pumps to the extent required by state and local agencies. Enbridge proposes to minimize the generation of fugitive dust by using control practices including dust suppression on the right-of-way and gravel/dirt access roads/public roads, limiting working hours in residential areas, and/or additional measures as appropriate based on site-specific conditions. Enbridge will implement, at a minimum, the measures as described in its EPP throughout all stages of construction to control air emissions. With respect to air quality monitoring, the WDNR operates a network of monitors through the State that are certified by U.S. EPA. Enbridge will rely on data from those monitors, as well as the monitors at the Bad River Tribal School in Odanah for any changes to air quality during construction and operation of the project.

6) **Provide details on how plant communities would be evaluated and sampled pre-construction, during active construction, post-construction, and throughout the lifetime of the Project; provide details on how plant communities would be evaluated for project-related impacts.**

Enbridge Response:

Enbridge completed wetland surveys and surveys to identify invasive and noxious weeds along the pipeline corridor. Enbridge's INS Plan (please see Attachment 5) addresses how Enbridge will treat invasive plant species before and during construction. Enbridge's Monitoring Plan (please see Attachment 4) addresses how Enbridge will monitor wetlands and evaluate restoration success, including treatment of invasive species post-construction. No assessment of plant communities will occur during construction as the construction workspace will be cleared of vegetation as part of the construction process. The successional restoration of the temporary workspace and re-establishing vegetation to prevent erosion into sensitive resources and to prevent introduction and/or spread of noxious weeds will be monitored consistent with that plan.

7) **Provide details on how impacts to wetlands and waterways would be avoided during vegetative clearing from the newly exposed soils and runoff potential.**

Enbridge Response:

Enbridge will implement, at a minimum, the measures as described in its EPP throughout all stages of construction and final restoration. Enbridge's EPP outlines construction-related environmental policies, procedures, and protection measures Enbridge developed as a baseline for construction. Enbridge developed the EPP based on prior experience implementing best management practices during construction, as well as the requirements specified in the Federal Energy Regulatory Commission's Upland Erosion Control, Revegetation, and Maintenance Plan (May 2013 Version) and Wetland and Waterbody Construction and Mitigation Procedures (May 2013 Version). Through execution of its EPP, Enbridge expects to meet or exceed federal, state, and local environmental protection and erosion control requirements, specifications, and practices.

During construction, Enbridge will prevent or reduce the discharge of sediment from disturbed areas into adjacent waters of the state by installing erosion and sediment control devices (ECDs) after initial clearing and before soil disturbance at the base of sloped approaches to

streams, wetlands, and roads, and in other areas as necessary to prevent sediment transport into sensitive resource areas. Temporary ECDs will also be installed at the edge of the construction right-of-way as necessary. ECDs will be inspected, at a minimum, weekly and within 24 hours after every precipitation event that produces 0.5 inch of rain or more during a 24-hour period. Temporary erosion control measures will be replaced by permanent erosion controls during final cleanup/restoration. All temporary and permanent erosion and sediment control measures will be in accordance with Enbridge's EPP, Enbridge's Erosion and Sediment Control Plan, the WDNR Storm Water Construction Technical Standards, and applicable permit requirements. Erosion and sediment control devices will be maintained until final stabilization.

8) **Provide details on how the Project's BMP's and erosion control measures would support wildlife migration and crossings.**

Enbridge Response:

Enbridge will install and maintain temporary erosion and sediment control BMPs in accordance with its EPP (please see Attachment 3) and applicable permit conditions. Wildlife that encounter these BMPs, such as silt fence, will typically either step/jump over the BMPs or will go around the BMPs. These BMPs will only be installed in locations necessary to prevent to erosion and transport of sediment off of the construction right-of-way and will not surround the entire approximately 41-mile-long Project length. Enbridge will work with the WDNR to install alternative BMPs, such as bio-logs, to allow smaller wildlife to cross at agency-identified areas. Enbridge's Environmental Inspectors will also visually inspect the perimeter ECDs for wildlife during their inspection of the ECDs. Any wildlife that appears trapped by the ECDs will be relocated to the other side of the right-of-way.