

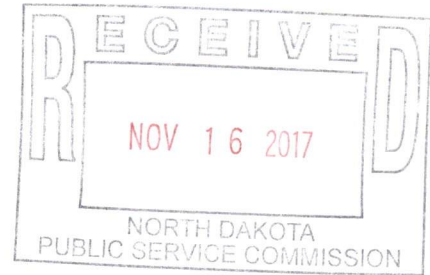


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 Senior Regulatory Advisor  
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Enbridge Energy,  
 Limited Partnership  
 5400 Westheimer Court  
 Houston, Texas 77056  
 USA

November 15, 2017

Mr. Darrell Nitschke  
 Executive Secretary  
 North Dakota Public Service Commission  
 600 E. Boulevard Avenue, Dept. 408  
 Bismarck, ND 58505-0480



RE: Case Nos. PU-10-612, PU-10-613, PU-11-232 and PU-11-606  
 Tree and Shrub Mitigation

On behalf of North Dakota Pipeline Company, LLC, please find enclosed five (5) copies of North Dakota Pipeline and North Dakota Forest Service – Mitigation Tree Planting Partnership: 2017 Final Project Report, applicable to the following projects:

- Bakken Pipeline Project (Case No. PU-10-612);
- Beaver Lodge Loop Project (Case No. PU-10-613);
- Berthold Station Expansion Project (Case No. PU-11-232); and
- Little Muddy Station Connection Project (Case No. PU-11-606).

Please contact me should you have any questions.

Sincerely,

Erica Powell  
 Senior Regulatory Advisor

Cc: Sara Cardwell, ND PSC

**132 PU-11-606** Filed: 11/16/2017 Pages: 7  
**Forest Service Mitigation Tree Planting Partnership - final project report**

Enbridge Pipelines (North Dakota) LLC  
 Erica Powell, Senior Regulatory Advisor

**159 PU-11-232** Filed: 11/16/2017 Pages: 7  
**Forest Service Mitigation Tree Planting Partnership - final project report**

Enbridge Pipelines (North Dakota) LLC  
 Erica Powell, Senior Regulatory Advisor

**254 PU-10-613** Filed: 11/16/2017 Pages: 7  
**Forest Service Mitigation Tree Planting Partnership - final project report**

Enbridge Pipelines (North Dakota) LLC  
 Erica Powell, Senior Regulatory Advisor

**200 PU-10-612** Filed: 11/16/2017 Pages: 7  
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 Erica Powell, Senior Regulatory Advisor



## NORTH DAKOTA FOREST SERVICE

"To care for, protect and improve forest and natural resources to enhance the quality of life for present and future generations."

October 30, 2017

Andrew Orthober  
Environmental Analyst, Environment Projects (US), Enbridge  
1409 Hammond Avenue- Second Floor  
Superior, WI 54880

Dear Mr. Orthober,

Attached is the 2017 Final Project Report for the North Dakota Mitigation Tree Planting Partnership Program between the North Dakota Forest Service (NDFS) and Enbridge Pipelines (North Dakota) LLC, an approved program to mitigate the loss of 1,353 trees and shrubs to comply with the North Dakota Public Service Commission mitigation requirements. This three year program was financed through an award from the Enbridge Pipelines (North Dakota) LLC to the North Dakota Forest Service.

As of December 31, 2014, 1095 trees and shrubs were planted on the properties of landowners having lost trees and shrubs through the construction of the Little Muddy and Beaver Lodge Loop pipelines. An additional 774 trees and shrubs were planted on the properties of willing landowners at alternate locations including the Parshall Bay Recreation Area, bringing the total number of trees and shrubs planted to 1,869.

The 2017 inspections indicated that 89% or 1,663 of the trees and shrubs have survived, far exceeding the minimum program requirements of 75%. The final third-year survival count was conducted at each planting site at the end of the 2017 field season.

Thank you for the opportunity to assist Enbridge Pipelines (North Dakota) LLC with its mitigation tree planting obligations set forth by the North Dakota Public Service Commission. Please do not hesitate to contact our office if you need further assistance or information.

Sincerely,

Larry A. Kotchman  
State Forester

Enclosure

**Enbridge Little Muddy & Beaver Lodge Loop Pipelines  
Mitigation Tree Planting Partnership  
2017 Final Project Report**

**Prepared for:  
Andrew Orthober  
Environmental Analyst, Environment Projects (US), Enbridge  
1409 Hammond Avenue- Second Floor  
Superior, WI 54880**



**Larry Kotchman, State Forester  
NDSU- North Dakota Forest Service  
307 First Street East  
Bottineau, ND 58318  
October 18, 2017**

## Overview

Mitigation criteria established by the Public Service Commission (PSC) ensures that trees and shrubs lost or destroyed during construction projects are replaced at a 2:1 ratio. As a result of the Enbridge Little Muddy and Beaver Lodge Loop pipeline projects (case numbers PU-10-612, PU-10-613, PU-10,232 and PU-11-606) a minimum of 1,230 trees and shrubs needed to be planted to satisfy the mitigation requirements for this project. An additional number of trees and shrubs were scheduled to be planted to offset unanticipated mortality, bringing the total number originally scheduled to be planted to 1,353. A minimum of 75% of these replacements needed to be living at the end of three growing seasons to satisfy criteria. Landowners impacted by the project were offered a choice of having replacement trees and shrubs planted on their property or planted elsewhere at alternative locations. The remaining number of trees and shrubs were planted at alternative locations through cooperative projects with tree planting entities and private landowners.

The NDFS administered a mitigation tree planting program in cooperation with local soil conservation districts and private tree planting vendors. Interested landowners desiring to establish appropriate conservation tree plantings applied with the NDFS for assistance. Eligible landowners were encouraged to work directly with local soil conservation district partners and private tree planting vendors to secure professional tree planting design assistance and tree planting services. Practice specifications are influenced by species suitability, soil characteristics, topography, land-use and the landowner's objectives. Eligible conservation tree planting practices included, but were not limited to, living snow fences, windbreaks, wildlife plantings, riparian restoration and buffers, and vegetative fuel breaks.

## 2017 Report

As of December 31, 2014, the tree and shrub mitigation planting requirements resulting from the Enbridge Little Muddy and Beaver Lodge Loop pipeline projects were completed. 1,869 trees and shrubs were planted at 11 locations. Previously, the plantings were field inspected and survival counts revealed that 91% or 1,700 trees and shrubs were alive. All sites were again field inspected in October 2017 and, despite drought conditions during the growing season, survival counts revealed that 89% or 1,663 trees and shrubs are alive. This excellent survival can be attributed to multiple factors. The tree planting vendors did a very good job with the planning and planting of tree stock. On all sites, follow-up care and maintenance is evident.

<b>Location</b>	<b>Number of Trees and Shrubs Planted</b>
Parshall Bay Recreation Area	189
Impacted Landowner's Property	1,095
Alternate Locations	585
<b>Total</b>	<b>1,869</b>

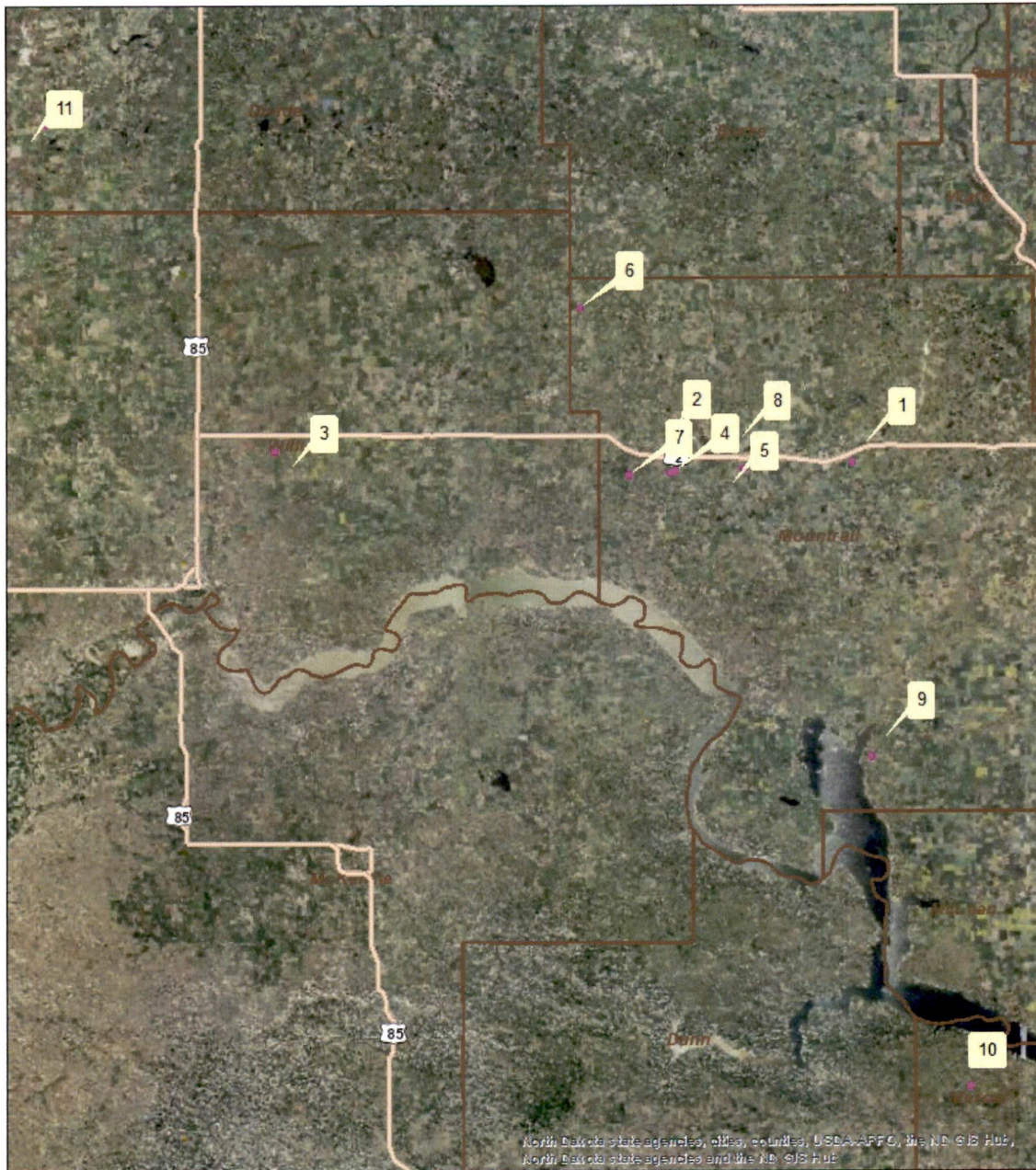
The total number of trees and shrubs planted exceeds the number targeted in the tree plantings agreement. The plantings were visited and inventoried by the NDFS Forestry and Fire Management Team Leader. The NDFS has ensured compliance with mitigation requirements by conducting the final third-year field inspection at the end of the 2017 field season. Details of plantings locations that were inspected are in attached Appendix A. The following table describes the activities undertaken and the status of each as of October 18, 2017.

<b>Activity</b>	<b>Status as of October 2017</b>
Enbridge provides funding to the NDFS, a map of the construction project showing the project route and indicating the preserved right-of-way and/or any restrictions relating to tree or shrub planting, the names and contact information of landowners directly impacted by the construction process, and copies of any communication with the impacted landowners relating to the replacement of trees and shrubs on their property.	Completed
NDFS works with SCDs and private vendors to develop specific plans for landowners impacted by the construction project and wishing to have trees and shrubs replaced on their property. All plantings will follow NRCS specifications ND-CPA-4s will be completed.	Completed
NDFS receives applications to the Tree Conservation Assistance Program, an established program, which serves to identify suitable locations for off-site tree planting projects. All plantings will follow NRCS specifications ND-CPA-4s will be completed.	Completed
NDFS reviews applications and appropriate locations for off-site plantings that are selected. Plans are forwarded to SHPO for cultural resource review. NDFS develops award letters and agreements. Agreements are signed with landowners.	Completed
Sites are prepared for tree planting by mechanical or chemical means. Trees are ordered from nurseries. Trees are delivered from nurseries and stored in coolers. Site is inspected and staked for planting. Trees are planted. Fabric weed barrier is installed.	Completed
Invoice sent to NDFS. Reimbursements are made through NDSU Business Office.	Completed
Landowners maintain projects as per agreement.	Ten year agreements initiated in 2013, 2014
NDFS inspects the tree and shrub plantings to determine mortality after at least one growing season.	Conducted April- November 2015 - 2017
NDFS provides Enbridge with an annual report (2013-2017) detailing the progress of the mitigation project, number and locations of plantings, and the monitoring of the plantings.	Completed December 2013 - 2017

Appendix A- Planting Information

Project Type	County	Quarter	Section	Township	Range	Number Planted	Number Surviving	Map Reference Number
Impacted Landowner's Property	Mountrail	NW	25	156	91	30	29	1
	Mountrail	NW	31	156	93	72	72	2
	Williams	NW	19	156	99	15	15	3
	Mountrail	NE	31	156	93	62	60	4
	Mountrail	SW	29	156	92	476	405	5
	Mountrail	SE	18	158	94	200	194	6
	Mountrail	E2	33	156	94	200	191	7
	Mountrail	SW	21	156	92	40	39	8
Parshall Bay Rec. Area	Mountrail	SW	2	151	91	189	179	9
Alternate Locations	Mercer	NW	12	146	90	321	273	10
	Divide	NW	27	161	102	264	206	11
Totals	All Locations	-	-	-	-	1,869	1,663	-

# Tree Mitigation Planting Locations



0 5 10 20 Miles

