
Targa Badlands

New Town to Stanley Pipeline: Tree and Shrub Survival Report 2015-2016

ND PSC Case Number: PU-14-625

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1.0 Introduction and Regulatory Background

The New Town to Stanley Pipeline Project (the Project) was completed in 2014 in Mountrail County, North Dakota, within portions of Township 152N, Range 92W; Township 153N, Range 91W; Township 154N, Range 91W; Township 155N, Range 91W; and Township 156N, Range 91W (see Appendix A, Figure 1). The Project is operated by Targa Badlands LLC (Targa) and includes two terminals with storage tanks and an underground pipeline for the transport and storage of crude petroleum. The length of the pipeline is 167,371 feet (31.70 miles). At the origin of the pipeline, near New Town, the facility has a 30,000-barrel-capacity tank. At the terminus, near Stanley, the facility has a 25,000-barrel-capacity tank. The Project is under the jurisdiction of the North Dakota Public Service Commission (PSC). Construction of the Project required the removal of trees and shrubs within Project right-of-way.

Targa retained Lowham Walsh, LLC (Lowham Walsh) to assist in the preparation of a tree and shrub replacement plan for the Project, and the PSC approved the *Tree and Shrub Replacement Plan* in 2015. This first annual tree and shrub survival report documents the survival of the trees and shrubs for this Project over the past year. Please refer to the *Tree and Shrub Replacement Plan* for further background details.

2.0 Survival Requirements

The total number of trees and shrubs removed for the Project was estimated to be 75 individuals located on 11 different land ownership parcels; the total number to be replaced was 150 based on the 2:1 replacement requirement. Targa opted to replace the trees at a ratio of 2.2:1 in anticipation of potential tree or shrub mortality during the three-year monitoring period. At the end of three years, 75% of the required 150 trees to be replaced, or 113, will be required to have survived to meet the obligation to the PSC. All correspondence with the PSC can be found in Appendix E of the *New Town to Stanley Pipeline: Tree and Shrub Planting Report 2015* (Lowham Walsh 2015).

3.0 Planting Review

Eight of the 11 landowners in the Project Area requested replacement of trees on their property. The remaining three landowners waived replacement of trees and shrubs on their property. One landowner, Douglas Kinnoin, preferred to waive tree replacement on his property and had the trees donated to and planted on the Stanley City Cemetery/Dog Park grounds. The other landowners, Sherri Reynolds and Tara Salute, were initially unresponsive to correspondence. In a telephone conversation between Ms. Reynolds and Travis Tucker of Targa, Ms. Reynolds verbally waived replacement of trees on her property, requesting that replacement trees be donated to the city of New Town, North Dakota. These trees were planted in an urban housing project in the city.

Lowham Walsh discussed tree and shrub removal from State Trust Land with Mr. Mike Haupt and learned that North Dakota Department of State Trust Lands employees may not sign any documents, or provide any items as gifts, except to another state agency or department. Mr. Haupt suggested donation of four silver buffaloberry (*Shepherdia argentea*) shrubs to the North Dakota Department of Game and Fish, and suggested Kent Luttschwager as a point of contact. A discussion with Mr. Luttschwager resulted in a rapid agreement to plant four buffaloberry bushes on the Van Hook Wildlife Management Area property, southeast of New Town. Landowner correspondence can be found in Appendix D of the *New Town to Stanley Pipeline: Tree and Shrub Planting Report 2015* (Lowham Walsh 2015).

Trees and shrubs were supplied by TC Nursery in Burlington, North Dakota, and are described in the *Tree and Shrub Replacement Plan* for the Project. Trees obtained by TC Nursery were inspected and found to be free from injurious insects and plant diseases. Planting locations, planting pictures, and nursery stock inspection certificates can be found in Appendices A, B, and C of the *New Town to Stanley Pipeline: Tree and Shrub Planting Report 2015* (Lowham Walsh 2015). A total of 163 trees were planted.

4.0 2015-2016 Survival

The plantings of each of the landowners were visited in September 2016. Trees or shrubs that had any portion of living plant material were considered alive. Of the 163 trees originally planted for the Project, 144 were alive in the fall of 2016 (Table 1). Sixteen trees were dead when the survivorship status was assessed. Three bushes are of unknown status due to Lowham Walsh employees being unable to locate the plantings. Trees of unknown status were considered to be dead because their survival status cannot be confirmed as “alive.” Since the 163 trees planted for the mitigation exceeded the planting requirement of 150 trees, the current survival rate is above the required 75% and is at 96%.

Mortality of trees and shrubs assessed for this study is primarily attributed to the use of the planting areas by cattle. Due to the presence of cattle tracks and droppings in the direct vicinity of some of the dead plantings, it has been surmised that cattle trampling has contributed to the mortality of eight trees and/or shrubs or 50% of the total dead trees or shrubs. It is Targa’s goal to have a minimum of 113 trees or shrubs survive to the end of the study period.

Table 1. New Town to Stanley Tree and Shrub 2015–2016 Survival Count

Landowner	Recipient	Number of Replacements Planted	2016 Count	Survival Rate	Tree/Shrub Species Planted
Douglas Kinnoin	Stanley Cemetery/Dog Park	7	7 Alive	100%	Downy Hawthorn
Mike and Julene Lahti	Mike and Julene Lahti	4	3 Alive 1 Dead	75%	Buffaloberry
Paul Ness	Paul Ness	15	8 Alive 7 Dead	53%	Buffaloberry
Darryl and Pam Locken	Darryl and Pam Locken	26	26 Alive	100%	Green Ash
Michael and Steven Littlefield	Michael and Steven Littlefield	9	8 Alive 1 Dead	89%	Buffaloberry
Jack and Karen Pennington	Steve Pennington	7	3 Alive 1 Dead 3 Unknown ¹	43%	Buffaloberry
Gary and Sylvia Lahtinen	Nathan Lahtinen	4	2 Alive 2 Dead	50%	Green Ash
		2	1 Alive 1 Dead		Canada red Chokecherry
State of North Dakota	North Dakota, Department of Game and Fish	4	4 Alive	100%	Buffaloberry
Ardell and Mavis Moe	Ardell and Mavis Moe	37	35 Alive 2 Dead	95%	Canada red Chokecherry
Targa Badlands LLC	Targa Badlands LLC	35	34 Alive 1 Dead	97%	Downy Hawthorn
Sherri Reynolds and Tara Salute	City of New Town	13	13 Alive	100%	Green Ash
		Planted	Verified Alive	Percent Alive	Required Survival
TOTALS		163 (150 required)	144	96%²	113
<p>1. Lowham Walsh employees were unable to locate the trees/shrubs.</p> <p>2. The survival rate was calculated using the mitigation requirements for tree replacement. The mitigation requirement for this project was 150 trees. Therefore the overall survivorship of the trees and shrubs was calculated by using 144/150=96%.</p>					

5.0 References

Lowham Walsh, LLC. 2015. *Targa Badlands Newtown and Stanley Pipeline: Tree and Shrub Planting Report 2015*. Available at: <http://www.psc.nd.gov/database/documents/14-0625/051-010.pdf>.

Appendix A Overview of Tree and Shrub Planting Locations

