



October 30, 2023

Steve Kahl
Executive Director
North Dakota Public Service Commission
600 East Boulevard; Department 408
Bismarck, ND 58505-0480

Re: Basin Electric Power Cooperative
Neset to North Shore 230 kV Transmission Line Project – Mountrail County
Case No. PU-21-49 Tree and Shrub Mitigation Plan

Dear Mr. Kahl:

Basin Electric Power Cooperative (Basin Electric) contracted Western EcoSystems Technologies (WEST) to inventory trees and shrubs that may be potentially cleared, grubbed, cut, or otherwise removed during construction of the Neset to North Shore 230 kV Transmission Line Project (Project) so mitigation could occur in accordance with the North Dakota Public Service Commission's (NDPSC) Tree and Shrub Mitigation Specifications for Case No. PU-21-150.

Tree and Shrub Inventory

Prior to construction activities, WEST inventoried trees and woody shrubs in the construction right-of-way (ROW), defined as 62.5 feet on either side of the transmission center line. A total of 381 trees and 3,424 shrubs were inventoried within the construction ROW. The attached letter report prepared by WEST details the species and locations of the trees and shrubs that were to be affected by construction activities.

Replacement Plan

The Tree and Shrub Mitigation Specifications for Case No. PU-21-49 states that both trees and shrubs must be replaced on a minimum two-to-one basis. The planned construction activities of the project do not anticipate grubbing or otherwise removal of shrub roots; therefore, 762 tree replacements are needed for the Project. Basin Electric has committed to replace 1,374 trees which is 180% of the total required.

Basin Electric contacted all 16 landowners for which trees will be removed on their property. 11 waived the option to have trees replaced on their property. Of the 1,374 replacement trees, 374 will be planted by the landowners or Basin Electric at landowner chosen locations and 1,000 will be planted by the Natural Resources Conservation Service (NRCS) and North Dakota Game and Fish Department on the Van Hook Wildlife Management Area, all of which will be in Mountrail County. Basin Electric will purchase all replacement trees through the local NRCS office.

The table below displays the number, species, and location of the trees and shrubs to be replaced.

Property	Location	Species		Number to be Planted
		Common Name	Scientific Name	
Van Hook WMA	T151N, R91W, S4	Green Ash	<i>Fraxinus pennsylvanica</i>	150
		Arnold Hawthorn	<i>Crataegus arnoldiana</i>	200
		Hybrid Poplar	<i>Populus x canadensis</i>	200
		American Elm	<i>Ulmus americana</i>	100
		Common Chokecherry	<i>Prunus virginiana</i>	50
		Black Hills Spruce	<i>Picea glauca</i>	50
		Russian Almond	<i>Prunus tenella</i>	100
		Black currant	<i>Ribes nigrum</i>	75
		Redosier dogwood	<i>Cornus sericea</i>	75
Ed Will Trust	T157N, R94W, S26	Russian Olive	<i>Elaeagnus angustifolia</i>	50
		American Elm	<i>Ulmus americana</i>	50
Jeff and Nancy Larson	T157N, R94W, S21	Rocky Mountain Juniper	<i>Juniperus scopulorum</i>	2
Lisa Holmen	T157N, R93W, S22	Green Ash	<i>Fraxinus pennsylvanica</i>	2
Ruby Enger	T157N, R94W, S25	Russian Olive	<i>Elaeagnus angustifolia</i>	50
		American Elm	<i>Ulmus americana</i>	75
		Green Ash	<i>Fraxinus pennsylvanica</i>	75
		Black Hills Spruce	<i>Picea glauca</i>	50
John Vachal	T155N, R93W, S22	Hybrid Poplar	<i>Populus x canadensis</i>	5
		Black Hills Spruce	<i>Picea glauca</i>	15

All tree and shrub plantings are proposed to occur in the spring of 2024. Yearly survival inspections will be completed, and, if deemed necessary to achieve the overall goal of a 75% survival rate after 2 years, Basin Electric will replant lost trees. Two years after completion of the planting, Basin Electric will file a summary document detailing the benefits of the tree and shrub mitigation to landowners, farmers and ranchers, the community, wildlife, and the environment. The summary will also report the number of surviving replacement trees and shrubs.

Basin Electric requests NDPSC approval for the Tree and Shrub Mitigation Plan for Case No. PU-21-49. Please contact me at rking@bepc.com or 701.557.5558 if you have any questions, comments, or concerns regarding this submittal.

Sincerely,



Ryan King
Environmental Coordinator

Enclosure: Tree-Shrub Inventory for Neset to North Shore Transmission Line Project



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April 4, 2022

Kevin Solie
Basin Electric Power Cooperative
1717 East Interstate Ave
Bismarck, North Dakota 58503

RE: Tree-Shrub Inventory for Naset to North Shore Transmission Line Project

Dear Mr. Solie,

Western EcoSystems Technology, Inc. conducted the pre-construction tree and shrub inventory for the Naset to North Shore Transmission Line Project in Mountrail County, North Dakota (Project). The tree and shrub inventory was conducted in accordance to the Public Service Commission permit requirements to inventory trees and shrubs prior to construction to allow for mitigation efforts. Surveys were conducted by a biologist familiar with the tree-shrub inventory methods in North Dakota.

Woody shrubs and trees in the construction right-of-way, defined as 62.5 feet either side of the transmission line, were inventoried ahead of construction following a direct count (Figure 1). A total of 3,424 shrubs and 389 trees were inventoried within the construction right-of-way (Table 1).

Trees that are cut down, run over, or otherwise removed should to be replaced at a ratio of 2:1. Shrubs that are grubbed or dugout also should to be replaced at a ratio of 2:1. Shrubs that are simply run over or cut at ground level (e.g., along a travel route between structures) but otherwise the roots are left intact are expected to re-grow and will not need to be replaced. Shrubs that were located within a 10-foot radius of each structure are expected to be fully excavated or otherwise disturbed to the point of prohibiting regrowth and should be planned for replacement at 2:1. For planning purposes, the 389 trees and 4 shrubs should be planned for replacement at 2:1 for a total of 778 trees and 8 shrubs. The number of replacement trees and shrubs by landowner are listed in Appendix A.

Please let me know if you need any further information regarding this effort.

Sincerely,

Clayton Derby
CSO

Table 1. Number and species of trees and shrubs inventoried within the construction right-of-way of the Neset to North Shore Transmission Line Project.

Species	Number of Trees/Shrubs
<i>Shrubs</i>	
buffaloberry	1,250
caragana species	1
chokecherry	671
elderberry	20
juneberry	663
silverberry	557
snowberry	262
<i>Subtotal</i>	3,424
<i>Trees</i>	
American elm	68
Black Hills spruce	2
common poplar	50
green ash	75
hawthorn	61
juniper	1
Russian olive	53
unknown species	79
<i>Subtotal</i>	389
Total	3,813

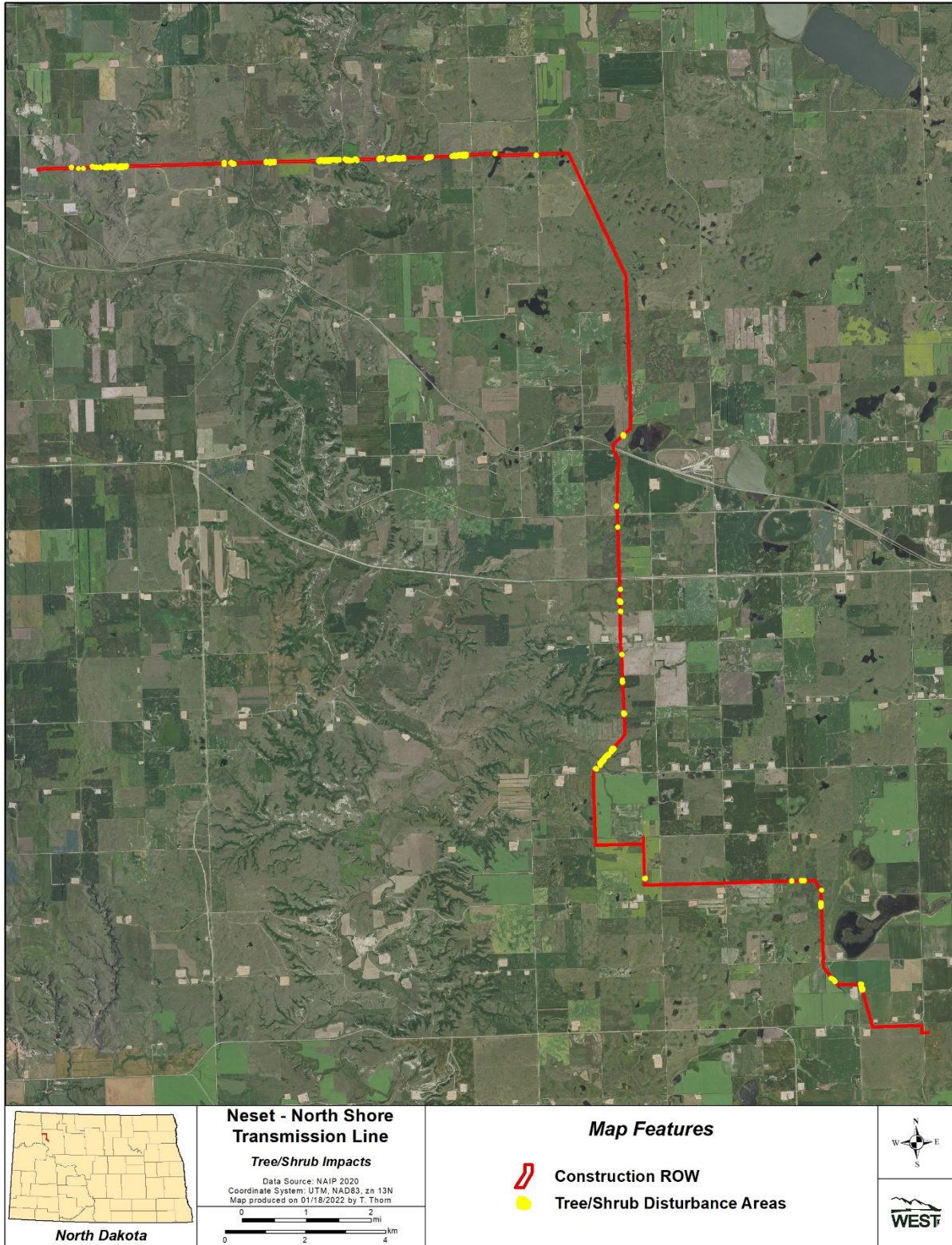


Figure 1. Map of Neset to North Shore Transmission Line Project with tree and shrub areas to be cleared within construction right-of-way.

Appendix A. Replacement number (2:1 ratio factored) and species of trees and shrubs (by landowner) for the Naset to North Shore Transmission Line Project.

LANDOWNER	Species	Number to be planted
BRANDON ROHDE	green ash	12
	unknown tree species	76
		88
BRIAN & LYNN ROSENCRANS	snowberry	2
		2
CLARK & KATHLEEN CVANCARA	green ash	18
	hawthorn	2
		20
COLIN VACHAL	common poplar	98
	American elm	8
		106
DOUGLAS & CEYLON FEIRING	green ash	2
	American elm	2
	hawthorn	16
		20
EDWARD L. WILL TRUST	Russian olive	48
	American elm	34
	unknown tree species	2
		84
JANICE MOORE	hawthorn	10
	green ash	16
	chokecherry	2
		28
JEFFREY & NANCY LARSON	juniper	2
		2
JEFFREY LAPICA	Russian olive	14
	hawthorn	14
		28
MICHAEL LEE	green ash	2
		2
RUBY ENGER	Russian olive	44
	American elm	72
	green ash	72
	unknown tree species	26
		214
WILLIAM R. CHAMLEY	Black Hills spruce	4
		4

LANDOWNER	Species	Number to be planted
PROSTAFF ENTERPRISES LLC	American elm	20
		20
SHAWN IWEN	green ash	12
		12
JOHN VACHAL	common poplar	2
	unknown tree species	16
		18
ALAN & LINDA VACHAL	green ash	16
	hawthorn	80
	unknown tree species	38
	chokecherry	2
	elderberry	2
		138