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TO: Board of Directors

FROM: Dan Schulz, Resources Coordinator

DATE: April 10, 2019

SUBJECT: Recreation, Forestry & Wildlife Subcommittee Meeting

Minutes

On Tuesday, April 9, 2019, the Recreation, Forestry and Wildlife Subcommittee met in the District conference room at 5PM. Subcommittee members present were Chair-Anthony Schutz, Gary Aldridge, Tom Green, Ray Stevens and Sarah Wilson. Others present were Ariana Kennedy, Larry Ruth, Dan Schulz and Paul Zillig.

The first agenda item was consideration of a seeding proposal from Prairie Plains Resource Institute to seed the Petersen tract for the Prairie Corridor on Haines Branch Project. Schulz reviewed the attached proposal along with a project map showing the location of the Petersen tract. Schulz indicated the cost for the seeding proposal was \$3,780.00 and that the District will be reimbursed by the City of Lincoln the cost for the seeding with project funds.

It was moved by Aldridge, seconded by Stevens and unanimously approved to recommend that the Board of Directors approve the seeding proposal from Prairie Plains Resource Institute to seed the Petersen tract located in the NE ½ of Section 34, and the NW ¼ of Section 35, Township 9 North, Range 5 East of the 6th PM, Lancaster County, Nebraska at a cost not to exceed \$3,780.00.

The second agenda item was consideration of a pasture lease agreement with Tom Donahue to graze the Allen tract of the Little Salt Fork Marsh Preserve



Wildlife Management Area. Schulz reviewed the attached agreement. It was noted by the subcommittee that the grazing term shown on the balance sheet should be for three months instead of four months (change was made on the attached copy of the agreement). Schulz indicated Donahue will remove and install new fencing on the north boundary of the Allen tract in exchange for the grass grazed by his cattle (see attached).

It was moved by Wilson and seconded by Stevens to recommend the Board of Directors enter into the pasture lease agreement with Tom Donahue to graze the Allen tract.

Voting in favor of the motion – Green, Schutz, Stevens and Wilson.

Not voting – Aldridge.

The third agenda item was consideration of a pasture lease agreement with Clint Ratkovec to graze the southern portion of the Warner Community Wetland Management Area (see attached). Schulz explained the fencing work to be done by Ratkovec was in exchange for the grass grazed by his cattle (see attached).

It was moved by Wilson and seconded by Stevens to recommend that the Board of Directors enter into the pasture lease agreement with Clint Ratkovec to graze the southern portion of the Warner Community Wetland Management Area.

It was noted by the subcommittee and questioned under Rent, 5(e), removal date of fencing and grazing equipment. A friendly amendment to the motion to change the date was accepted. This date was changed in the attached copy of the agreement from June 1, 2019, to November 15, 2019.

Voting in favor of the motion – Green, Schutz, Stevens and Wilson.

Not voting – Aldridge.

The next agenda item was an update on the flood damage to the Lied Platte River Bridge. Kennedy presented information on site visits by staff, the Game & Parks Commission and the Papio-Missouri River NRD. She showed videos and pictures of the flooding, damage to the bridge and the trail on the Papio side of the bridge.

Staff also mentioned the status of the bridge closure; steps needed to evaluate the damage; and the application for FEMA cost-share funds for repairs. The bridge is expected to be closed for several months.

The next agenda item was an update by Aldridge on his efforts to promote the District's Community Forestry Program. He went through a list of communities and various organizations he's contacted to encourage them to consider applying for the program's funding. He suggested information in the program brochure and the District's website to be harmonized.

The last item was a report by Zillig on a letter received by three Directors concerning two incidents of dogs being injured at Cottontail Wildlife Management Area. He indicated legal counsel was preparing a memo for the Board.

Schutz adjourned the meeting at 6:18PM.



Petersen Tract HDLE Prairie Restoration Proposal

March 20, 2019

Prairie Plains Resource Institute (PPRI) has been providing high-diversity/local ecotype (HDLE) prairie restoration services in central and eastern Nebraska since 1980. Our work includes multiple examples in Lancaster County, including 9 plantings within the Haines Branch corridor and 6 plantings at Spring Creek Prairie.

PPRI has partnered with Lincoln Parks & Recreation and Lower Platte South NRD in the past, and is again offering ecological restoration services in the effort to establish examples of high-quality prairie within the corridor. Specifically, this seeding project will be implemented on the Petersen Tract located in the NE ¼ of S34 and the NW ¼ of S35, T9N, R5E, Lancaster County, Nebraska.

Geographic Information System (GIS) analysis shows the project site is 7.6 acres in size, with over 45 feet of relief sloping to the west. The soils range from clay loam to silt loam and are moderately well drained to well drained (Appendix D; figure 2). Thus, although somewhat small, the site's variance in topography and soil types call for over 200 species to be seeded, which will result in a rich prairie plant community restoration (figure 1).

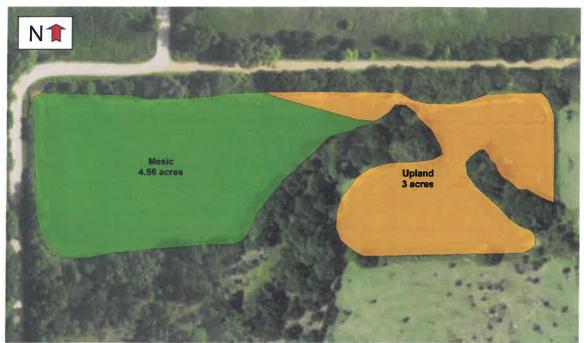


Figure 1. Petersen Tract seeding units derived from SSURGO soil unit boundaries and LIDAR data.

With myriad wildflower species blooming throughout the growing season, these diverse native plant communities provide superior butterfly and pollinator habitat while preserving some of the local native plant genetic material that has been lost to years of agricultural conversion and urban development. Furthermore, HDLE restorations are resilient to drought and other extreme climatic and weather events because they are populated with the progeny of the very plants that evolved in Nebraska over centuries of such harsh conditions.

These newly restored acres will enhance stream buffering capabilities, slowing runoff and providing increased filtering services. The site will also provide excellent upland game and nongame habitat, as well as expanding education and recreation opportunities in the area.

Project Specifics:

- An upland prairie seed mix will be broadcast onto the eastern portion of the site no later than May 15th, 2019, at a cost of \$500.00 per acre, for a total of \$1,500.00.
- A mesic (lowland tailgrass) prairie seed mix will be broadcast onto the western portion of the site no later than May 15th, 2019, at a cost of \$500.00 per acre, for a total of \$2,280.00.
- The upland seed mix will contain no less than 117 species (Appendix A).
- The mesic seed mix will contain no less than 149 species (Appendix B).
- Additionally, a wetland mix (139 species) will be sown (at no extra charge) in the lowest spots on 0.52 acres of Nodaway series soils (Appendix D).
- The upland and mesic seed mixes will be planted at no less than 8 gallons of combine harvested grass seed per acre, 2.0 gallons of hand-collected forb mix per acre.
- 100% of this seed mix was harvested from wild populations of native plants within 150 miles of the project site.
- PPRI will use an EZ Flow drop spreader pulled by an ATV to broadcast the seed.
- Any GPS/GIS data generated by PPRI during the restoration process will be made available to LPSNRD and/or the City of Lincoln.
- This seed mix will provide high quality monarch/pollinator habitat, enhancing the overall conservation value of the area.
- The established native plant community will provide high quality upland game and nongame habitat.
- The established native plant community will provide educational and recreational opportunities to the public.

Appendix A: HDLE Upland Seeding Species List (117 spp.)

Grasses (19)

Andropogon gerardii Big Bluestem Bouteloua curtipendula Side-oats Grama Digitaria cognata Fall Witchgrass Elymus canadensis Canada Wildrye Virginia Wildrye Elymus virginicus Eragrostis spectabilis Purple Lovegrass Porcupine Grass Hesperostipa spartea Koeleria macrantha June Grass

Panicum acuminatum Tapered Rosette Grass
Panicum oligosanthes Scribner's Panicum

Panicum virgatum Switchgrass

Pascopyrum smithii Western Wheatgrass
Paspalum straminuem Slender Paspalum
Schizachyrium scoparium Little Bluestem
Sorghastrum nutans Indiangrass
Sphenopholis ohtusata

Sphenopholis obtusata Prairie Wedgegrass
Sporobolus asper Tall Dropseed
Sporobolus heterolepis Prairie Dropseed
Tridens flavus Purpletop

Sedges/Rushes (6)

Carex brevior Fescue Sedge
Carex gravida Heavy Sedge
Carex mesochorea Midland Sedge
Carex molesta Troublesome Sedge
Juncus dudleyi Dudley Rush
Juncus tenuis Tenuis Rush

Legumes (18)

Amorpha canescens Leadplant Astragalus canadensis Canada Milkvetch Astragalus crassicarpus Buffalo Bean Cassia chamaecrista Partridge Pea White Prairieclover Dalea candidum Foxtail Dalea Dalea leporina Dalea purpurea Purple Prairieclover Desmanthus illinoensis Illinois Bundleflower Desmodium canadense Canada Tickclover Desmodium canescens Hoary Tickclover Illinois Tickclover Desmodium illinoense Glycyrrhiza lepidota Wild licorice

Lespedeza capitata Roundhead Bushclover

Lotus purshianus Deervetch

Psoralea argophylla Silver-leaf Scurf Pea

Psoralea tenuiflora Wild Alfalfa
Schrankia nuttallii Sensitivebriar
Strophostyles leiosperma Wild Bean

Composites (37)

Achillea millefolium Yarrow Artemisia ludoviciana Sagewort Heath Aster Aster ericoides Aster oblongifolius **Aromatic Aster** Brickellia eupatoroides False Boneset Chrysopsis villosa Golden Aster Cirsium altissimum Tall Thistle Cirsium flodmanii Flodman Thistle Echinacea angustifolia Purple Coneflower Marsh Fleabane Erigeron philadelphicus Tall Joe Pye Weed Eupatorium altissimum Euthamia graminifolia Grassleaf Goldenrod Gnaphalium obtusifolium Fragrant Cudweed

Grindelia squarrosa Gumweed

Helianthus maximilianii Maximillian Sunflower

Helianthus rigidus
Heliopsis helianthoides
Lactuca canadensis
Lactuca ludoviciana
Liatris aspera
Liatris punctata
Liatris squarrosa
Prepathes aspera

Stiff Sunflower
False Sunflower
Canada Lettuce
Wild Lettuce
Rough Gayfeather
Dotted Gayfeather
Scaly Blazing Star
Rough Rattlespake Ro

Prenathes aspera Rough Rattlesnake Root
Ratibida columnifera Upright Prairie Coneflower

Rudbeckia hirta Black-eyed Susan Senecio plattensis Prairie Ragwort

Silphium integrifolium Entire-leaf Rosinweed

Silphium laciniatum Compass Plant
Silphium perfoliatum Cup Plant
Solidago canadensis Canada Goldenrod

Solidago gigantea
Solidago missouriensis
Solidago mollis
Solidago rigida
Solidago speciosa
Vernonia baldwinii
Giant Goldenrod
Missouri Goldenrod
Sestern Goldenrod
Stiff Goldenrod
Showy Goldenrod
Western Ironweed

Vernonia fasciculata Ironweed

Misc. Forbs (37)

Agalinis aspera Tall False Foxglove Canada Garlic (Seed) Allium canadense Allium canadense Canada Garlic (Sets) Anemone cylindrica Candle Anemone Prairie Dogbane Apocynum cannabinum Showy Milkweed Asclepias speciosa Asclepias sullivantii Sullivant's Milkweed Asclepias syriaca Common Milkweed **Butterfly Milkweed** Asclepias tuberosa Asclepias verticillata Whorled Milkweed Callirhoe alcaeoides Pale Poppy Mallow Callirhoe involucrata Purple Poppy Mallow

Calylophus serrulatus Ceanothus herbaceous

Euphorbia marginata Gaura parviflora

Gentiana puberulenta Linum sulcatum Mirabilis nyctaginea Monarda fistulosa Oenothera villosa

Onosmodium molle Penstemon gracilis

Penstemon grandiflorus Physalis longifolia Plantago patagonica Potentilla arguta

Pycnanthemum virginianum

Rosa arkansana Rosa woodsii Salvia azurea Silene anterrhina

Sisyrinchium campestre Symphoricarpos orbiculatus

Tradescantia bracteata Verbena stricta Verbena urticifolia

Serrate-leaf Primrose New Jersey Tea

Snow-On-The-Mountain

Velvety Guara **Downy Gentian** grooved Flax Wild Four O'clock Wild Bergamot

Common Evening Primrose

Marbleseed

Slender Penstemon Shell-leaf Penstemon Common Ground-cherry

Wooly Plantain Prairie Cinquefoil Mountain Mint Wild Rose Wood's Rose Pitcher Sage Sleepy Catchfly

Prairie Blue-eyed Grass

Coralberry

Bracted Spiderwort Hoary Vervain Elm-leaf Verbena

Appendix B: HDLE Mesic (Lowland Tallgrass) Seeding Species List (149 spp.)

Grasses (20)

Andropogon gerardii
Calamagrostis stricta
Digitaria cognata
Elymus canadensis
Elymus trachycaulus
Elymus virginicus
Eragrostis spectabilis
Hordeum jubatum
Hordeum pusillum
Koeleria macrantha

Panicum acuminatum
Panicum oligosanthes
Panicum virgatum

Pascopyrum smithii Schizachyrium scoparium Sorghastrum nutans Spartina pectinata Sphenopholis obtusata Sporobolus asper

Tridens flavus

Big Bluestem
Northern Reedgrass
Fall Witchgrass
Canada Wildrye
Slender Wheatgrass
Virginia Wildrye
Purple Lovegrass
Foxtail Barley
Little Barley
June Grass

Tapered Rosette Grass Scribner's Panicum

Switchgrass

Western Wheatgrass

Little Bluestem Indiangrass Prairie Cordgrass Prairie Wedgegrass Tall Dropseed Purpletop

Sedges/Rushes (21)

Carex brachyglossa Carex brevior Carex crawei Carex cristatella Carex gravida Carex gravida Carex laeviconica Carex mesochorea Carex molesta Carex molesta Carex pellita Carex scoparia Carex tribuloides Carex vulpinoidea Fimbristylis puberula Juncus dudleyi Juncus interior Juncus tenuis

Schoenoplectus pungens

Scirpus pallidus Scirpus pendulus Yellowfruit Sedge Fescue Sedge Crawe's Sedge Crested Sedge Wetland Gravida Heavy Sedge Smooth Cone Sedge

Midland Sedge Troublesome Sedge Troublesome Sedge Wooly Sedge

Blunt Broomsedge Fox Sedge Hairy Fimbry Dudley Rush Interior Rush Tenuis Rush

Broom Sedge

Common Threesquare

Pale Bulrush Rufous Bulrush

Legumes (17)

Desmodium illinoense

Leadplant

Canada Milkvetch
Partridge Pea
White Prairieclover
Foxtail Dalea
Purple Prairieclover
Illinois Bundleflower
Canada Tickclover
Hoary Tickclover

Illinois Tickclover

Glycyrrhiza lepidota Lespedeza capitata Lotus purshianus Psoralea argophylla Psoralea tenuiflora Schrankia nuttallii Strophostyles leiosperma Wild licorice
Roundhead Bushclover
Deervetch
Silver-leaf Scurf Pea
Wild Alfalfa
Sensitivebriar

Composites (46) Achillea millefolium Arnoglossum plantagineum Artemisia ludoviciana Aster ericoides Aster novae-angliae Aster prealtus Aster simplex Boltonia asteroides Brickellia eupatoroides Cirsium altissimum Cirsium flodmanii Coreopsis tinctoria Echinacea angustifolia Erigeron philadelphicus Erigeron strigosus Eupatorium altissimum Euthamia graminifolia Gnaphalium obtusifolium Grindelia squarrosa Helenium autumnale Helianthus grosseserratus Helianthus maximilianii Helianthus rigidus Helianthus tuberosus

Helianthus tuberosus Heliopsis helianthoides Hieracium longipilum

Iva annua

Lactuca canadensis Lactuca ludoviciana Liatris lancifolia Liatris punctata Prenathes aspera

Ratibida columnifera Rudbeckia hirta Rudbeckia laciniata Senecio plattensis Silphium integrifolium Silphium laciniatum Silphium perfoliatum

Solidago canadensis Solidago gigantea Solidago missouriensis

Solidago rigida Solidago speciosa Vernonia baldwinii Vernonia fasciculata Yarrow

Wild Bean

Pale Indian Plantain

Sagewort Heath Aster

New England Aster Blue Willowleaf Aster Tall White Aster

False Aster
False Boneset
Tall Thistle
Flodman Thistle
Plains Correopsis

Purple Coneflower
Marsh Fleabane
Daisy Fleabane
Tall Joe Pye Weed
Grassleaf Goldenrod
Fragrant Cudweed

Gumweed Sneezeweed

Sawtooth Sunflower Maximillian Sunflower

Stiff Sunflower
Jerusalem Artichoke
False Sunflower
Longbeard Hawkweed
Small Marsh Elder
Canada Lettuce
Wild Lettuce

Thickspike Gayfeather Dotted Gayfeather Rough Rattlesnake Root Upright Prairie Coneflower

Black-eyed Susan Cutleaf Coneflower Prairie Ragwort Entire-leaf Rosinweed

Compass Plant
Cup Plant

Canada Goldenrod Giant Goldenrod Missouri Goldenrod Stiff Goldenrod Showy Goldenrod Western Ironweed

Ironweed

Misc. Forbs (45)

Allium canadense Allium canadense Anemone canadensis Anemone cylindrica Apocynum cannabinum Asclepias speciosa Asclepias sullivantii Asclepias syriaca Asclepias verticillata Callirhoe alcaeoides Callirhoe involucrata Calylophus serrulatus

Gaura parviflora Gentiana puberulenta Linum sulcatum Lobelia siphilitica Lobelia spicata Mirabilis nyctaginea Monarda fistulosa Oenothera villosa

Euphorbia marginata

Onosmodium molle

Penstemon digitalis Penstemon gracilis Penstemon grandiflorus Physalis longifolia Plantago patagonica

Polygonum pensylvanicum

Polytaenia nuttallii Potentilla arguta Potentilla norvegica Prunella vulgaris

Pycnanthemum virginianum

Rosa arkansana Rosa woodsii Salvia azurea

Sisyrinchium campestre Sisyrinchium montanum Teucrium canadense Thalictrum dasycarpum Tradescantia bracteata Verbena hastata

Verbena stricta Verbena urticifolia

Symphoricarpos orbiculatus

Canada Garlic (Sets) Canada Garlic (Seed) Meadow Anemone Candle Anemone Prairie Dogbane Showy Milkweed Sullivant's Milkweed Common Milkweed Whorled Milkweed Pale Poppy Mallow Purple Poppy Mallow Serrate-leaf Primrose Snow-On-The-Mountain

Velvety Guara Downy Gentian **Grooved Flax** Blue Cardinal Flower Palespike Lobelia Wild Four O'clock Wild Bergamot

Common Evening Primrose

Marbleseed

Smooth Penstemon Slender Penstemon Shell-leaf Penstemon Common Ground-cherry

Wooly Plantain

Pennsylvania smartweed

Prairie Parsley Prairie Cinquefoil Norwegian Cinquefoil

Self-heal Mountain Mint Wild Rose Wood's Rose Pitcher Sage

Prairie Blue-eyed Grass Strict Blue-eyed Grass American Germander Purple Meadow Rue **Bracted Spiderwort** Blue Vervain

Hoary Vervain Elm-leaf Verbena Coralberry

Appendix C: HDLE Wetland Overseeding Species List (139 spp.)

Prairie Wedgegrass

Grasses (15)

Alopecurus aequalis Shortawn Foxtail Calamagrostis canadensis Blueioint Calamagrostis stricta Northern Reedgrass **Elymus** trachycaulus Slender Wheatgrass **Elymus** Virginia Wildrye virginicus Large Manna Grass Glyceria grandis Glyceria striata Manna grass Hordeum jubatum Foxtail Barley Leersia oryzoides Rice Cut Grass Muhlenbergia racemosa Marsh Muhly **Tapered Rosette Grass** Panicum acuminatum Panicum Scribner's Panicum oligosanthes Western Wheatgrass Pascopyrum smithii Spartina pectinata **Prairie Cordgrass**

obtusata

Sedges/Rushes (34)

Sphenopholis

bebbii Bebb's Sedge Carex Yellowfruit Sedge Carex brachyglossa Carex brevior Fescue Sedge Carex crawei Crawe's Sedge cristatella Crested Sedge Carex Carex emoryi Emory's Sedge Heavy Sedge Carex gravida Carex gravida Wetland Gravida hystericina Bottlebrush Sedge Carex Carex interior Interior Sedge laeviconica Smooth Cone Sedge Carex Troublesome Sedge Carex molesta Carex pellita Wooly Sedge Clustered Field Sedge praegracilis Carex sartwellii Sartwell's Sedge Carex Carex scoparia **Broom Sedge** Carex stipata Saw-beak Sedge Carex tribuloides Blunt Broomsedge Fox Sedge Carex vulpinoidea Common Spikerush Eleocharis palustris Eleocharis erythropoda Bald Spikerush puberula Hairy Fimbry Fimbristylis **Juncus** balticus Baltic Rush **Dudley Rush** Juncus dudlevi Interior Rush Juncus interior **Juncus** marginatus Grassleaf Rush Tenuis Rush tenuis Juncus Juncus torreyi Torrey's Rush Chairmaker's Rush Schoenoplectus acutus Common Threesquare Schoenoplectus pungens Scirpus atrovirens Dark Green Bulrush Scirpus maritimus Prairie Bulrush pallidus Pale Bulrush Scirpus

Scirpus pendulus Rufous Bulrush

Legumes (6)

Astragalus canadensis Canada Milkvetch
Cassia chamaecrista Partridge Pea
Dalea leporina Foxtail Dalea
Desmanthus illinoensis Illinois Bundleflower
Glycyrrhiza lepidota Wild licorice

Lotus purshianus Deervetch

Composites (32)

millefolium Yarrow Achillea Aster ericoides Heath Aster New England Aster Aster novae-angliae Blue Willowleaf Aster Aster prealtus Aster simplex Tall White Aster Threelobe Beggarticks **Bidens** comosa

Boehmeria cylindrica False Nettle
Boltonia asteroides False Aster
Coreopsis tinctoria Plains Correopsis
Erigeron philadelphicus Marsh Fleabane
Erigeron strigosus Daisy Fleabane

Eupatorium maculatum Spotted Joe Pye Weed

Eupatorium perfoliatum Boneset
Euthamia graminifolia Grassleaf Goldenrod

Grindelia squarrosa Gumweed Helenium autumnale Sneezeweed

Helenium autumnale Sneezeweed (Fertig) Helianthus Sawtooth Sunflower grosseserratus Jerusalem Artichoke Helianthus tuberosus Small Marsh Elder lva annua Lactuca canadensis Canada Lettuce Lactuca ludoviciana Wild Lettuce

Liatris lancifolia Thickspike Gayfeather
Ratibida columnifera Upright Prairie Coneflower

Rudbeckia hirta Black-eyed Susan
Rudbeckia laciniata Cutleaf Coneflower
Senecio plattensis Prairie Ragwort
Silphium integrifolium Entire-leaf Rosinweed

Silphium perfoliatum Cup Plant

Solidago canadensis Canada Goldenrod Solidago gigantea Giant Goldenrod

Vernonia fasciculata Ironweed

Misc. Forbs (52)

Agalinis tenuifolia Slender False Foxglove
Alisma trivale American Water Plantain
Allium canadense Canada Garlic (Sets)
Allium canadense Canada Garlic (Seed)
Ammania coccinea Tooth Cup

Anemone canadensis Meadow Anemone
Anemone cylindrica Candle Anemone
Apocynum cannabinum Prairie Dogbane

Asclepias incarnata Swamp Milkweed **Asclepias** speciosa Showy Milkweed Sullivant's Milkweed **Asclepias** sullivantii **Asclepias** svriaca Common Milkweed **Asclepias** verticillata Whorled Milkweed **Epilobium** coloratum Cinnamon Willow Herb Gentiana andrewsii **Bottle Gentian Impatiens** capensis Spotted Touch-me-not Lippia lanceolata Fog Fruit Lobelia cardinalis Cardinal Flower Lobelia siphilitica Blue Cardinal Flower Lobelia Palespike Lobelia spicata Lycopus americanus American Bugleweed Lycopus asper Rough Bugleweed Lysimachia ciliata Fringed Loosestrife Lythrum alatum Winged Lythrum Mentha arvensis Field Mint Oenothera villosa Common Evening Primrose Penstemon digitalis Smooth Penstemon Slender Penstemon Penstemon gracilis Penthorum sedoides Ditch Stonecrop **Physalis** Iongifolia Common Ground-cherry Swamp Smartweed Polygonum coccineum Polygonum hydropiperoides Mild Water Pepper Polygonum lapathifolium Pale Smartweed Polygonum pensylvanicum Pennsylvania smartweed Polytaenia nuttallii Prairie Parsley Potentilla arguta Prairie Cinquefoil Potentilla norvegica Norwegian Cinquefoil Prunella vulgaris Self-heal Pycnanthemum virginianum Mountain Mint **Cursed Crowfoot** sceleratus Ranunculus Sagittaria Shortbeak Arrowhead brevirostra Sagittaria calycina Hooded Arrowhead Sagittaria latifolia Broadleaf Arrowhead Scutellaria galericulata Marsh Skullcap Strict Blue-eyed Grass Sisyrinchium montanum Teucrium canadense American Germander Thalictrum dasycarpum Purple Meadow Rue Tradescantia bracteata **Bracted Spiderwort** Tradescantia occidentale Western Spiderwort Verbena hastata Blue Vervain Verbena stricta Hoary Vervain Verbena urticifolia Elm-leaf Verbena

Appendix D: Non-technical Soil Descriptions

Judson C series (27.4%) 2.07 acres: |"Nontechnical description"|"SOI"|"461"|"This gently sloping, moderately well drained soil formed in colluvium and alluvium on foot slopes and alluvial fans. It has a silt loam surface layer and moderately permeable silty clay loam subsoil."|"98120"|"98120:m:65417"

Kennebec series (32.5%) 2.46 acres: |"Nontechnical description"|"SOI"|"462"|"This nearly level, moderately well drained soil formed in alluvium on bottom land. It has a silt loam surface layer and moderately permeable silt clay loam underlying material. It is occasionally flooded."|"98121"|"98121:m:65418"

Shelby series (33.2%) 2.51 acres: |"Nontechnical description"|"SOI"|"479"|"This deep, strongly sloping, moderately well drained soil formed in glacial till on uplands. It has a clay loam surface layer and moderately slowly permeable clay loam subsoil."|"98145"|"98145:m:65443"

Nodaway series (6.9%) 0.52 acres: |"Nontechnical description"|"SOI"|"120"|"This deep, nearly level, moderately well drained soil formed in alluvium on bottom land. It has a silt loam surface layer and moderately permeable, silt loam underlying material. It has many entrenched, meandering stream channels and is frequently flooded."|"98132"|

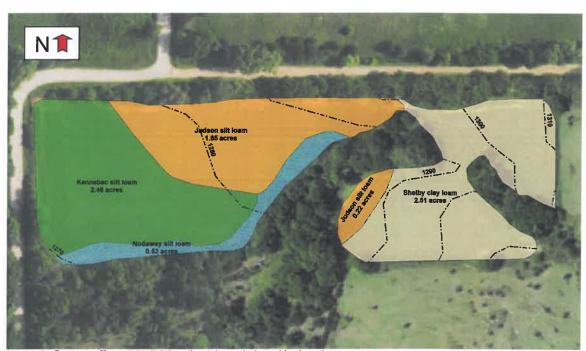
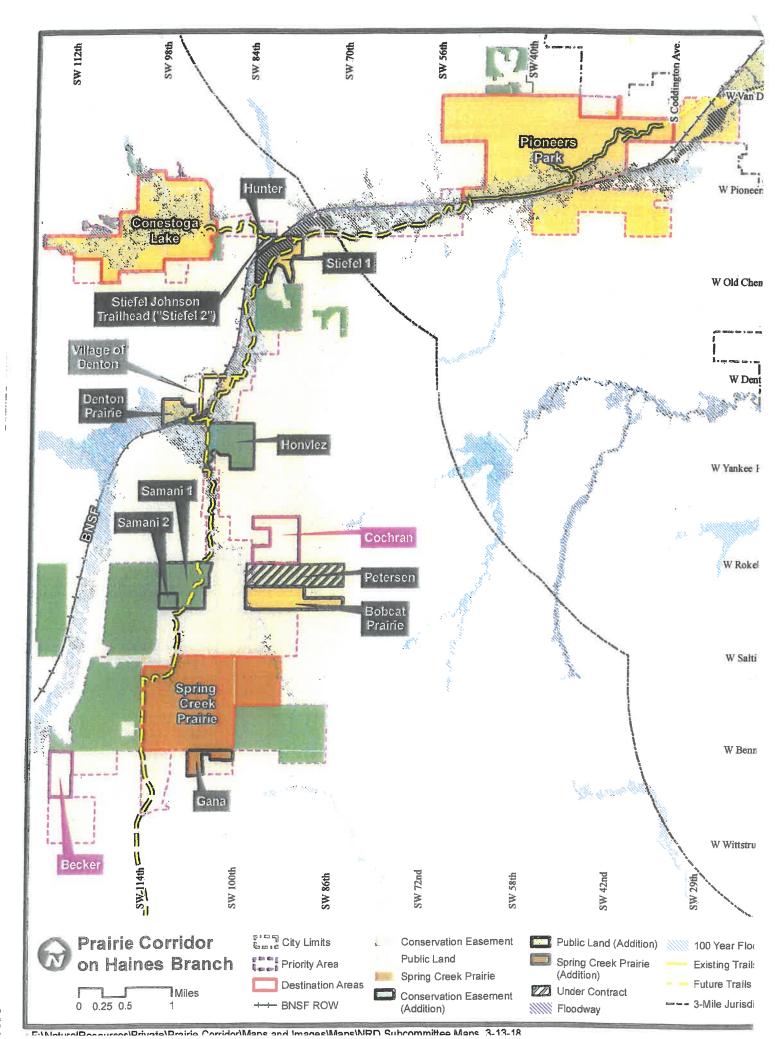


Figure 2. Petersen Tract SSURGO soil unit boundaries with elevation contours.



PASTURE LEASE AGREEMENT

This Agreement made and entered into effective as of the dated executed by both parties by and between **LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT**, a political subdivision of the State of Nebraska, 3125 Portia, PO Box 83581, Lincoln, Nebraska 68501-3581, referred to in this Agreement as "the District" and **TOM DONAHUE**, 670 Raymond Road, Lincoln, Nebraska 68428, referred to in this Agreement as "Donahue", collectively referred to in this Agreement as "the Parties."

WITNESSETH:

RECITALS

- A. The District is the owner a certain tract of land containing 66 acres, more or less, located in the South Half of the Northeast Quarter (S1/2NE1/4) Section 34, Township 12 North, Range 6 East of the 6th P.M., Lancaster County, Nebraska, commonly referred to as "the Allen Saline Wetland", as further described and shown on Exhibit "A" attached hereto and incorporated herein by this reference, and referred to in this Agreement as "the Property."
- B. Donahue wishes to lease the Property as pasture for the purpose of grazing cattle and the District is willing to lease the Property to Donahue for that purpose, under the terms and conditions as set forth in this Agreement.

NOW, THEREFORE, in consideration of the above Recitals and the mutual promises and covenants contained in this Agreement, the Parties agree as follows:

- 1. **Lease Premises.** The District leases the Property to Donahue as a pasture for cattle and Donahue leases the Property from the District to graze cattle.
- 2. **Term.** The term of the Pasture Lease shall be for a period beginning June 1, 2019, and shall terminate on September 1, 2019, unless sooner terminated by the District pursuant to paragraph 3 below, or mutually extended by the Parties.
- 3. **Early Termination.** The District, in its sole discretion, may terminate this Agreement at any time, upon five (5) days written notice, if a condition or conditions exist that in the opinion of the District will permanently or severely damage the viability of the Property as a saline wetland or if Donahue violates the grazing limitation provided in paragraph 7 below.
- 4. Occupancy and Use. Donahue shall occupy and use the Property only as pasture for grazing cattle, as further described and provided for in this Agreement. Donahue shall not use the Property for any other purpose without the prior written consent of the District.

- 5. **Rent.** There is no cash rent due to the District for the rental of the Property by Donahue. In lieu of cash rent; however, Donahue shall, at his sole cost and expense, provide certain services and furnish certain equipment and materials, as follows:
 - (a) Remove approximately 590 feet of existing fence and replace such fence with a new four (4) strand wire fence with top and bottom strands of smooth wire and middle two (2) strands of barbed wire, to be completed by November 1, 2019;
 - (b) Provide one or more electric fence chargers and install and maintain a suitable electric fence, fencers, fence posts and all other materials or equipment suitable for grazing cattle, all of which shall be removed from the Property no later than September 30, 2019; and
 - (c) Provide adequate watering devises, tanks, mineral blocks and all other equipment, material, and supplies necessary for the proper feeding and care of the cattle to be pastured on the Property, all of which shall be removed from the Property no later than October 15, 2019.
- 6. Grazing and Haying. Donahue may graze cattle on the Property beginning on June1, 2019 provided however that all cattle shall be removed from the Property no later than September, 1, 2019. The anticipated grazing schedule is part of a rotation of 18 cow/calf pairs on the properties of the District, and the Nebraska Game & Parks Commission. This herd will be allowed onto the District's property and the Game and Parks Commission during the lease period. Violation of this provision shall constitute grounds for early termination of this Agreement pursuant to paragraph 3 above, unless Donahue first obtains in writing the consent of the District. The District may request Donahue to reduce the number of cattle on the Property, if adequate hay is not available for feed and Donahue shall promptly comply with such request.

THE DISTRICT MAKES NO WARRANTY IN THIS AGREEMENT, EXPRESSED OR IMPLIED AND SPECIFICALLY DISCLAIMS ANY WARRNTY THAT SUITABLE GRASS FOR GRAZING CATTLE WILL BE AVAILABLE ON THE PROPERTY DURING THE ENTIRE GRAZING PERIOD.

- 7. **Inspection.** The District shall have the right to inspect the Property at all reasonable times without notice.
- 8. **Improvements.** Donahue shall make no improvements to the Property other than what is required in paragraph 5 above, without the prior written consent of the District.
- 9. **Insurance.** Donahue shall obtain and keep in full force during the term of this Agreement, commercial liability insurance and automobile liability insurance covering his actions under this Agreement, each in the minimum amount of \$1,000,000.00. Donahue shall include the District as a name insured on the policy of

insurance, waive the right of subrogation, and furnish a certificate of insurance to the District prior to the commencement of this Agreement.

- 10. **Indemnification.** Donahue shall indemnify, defend, and hold harmless the District and its officers, directors, agents, and employees, from and against all claims, damages, liabilities, and court awards, including expenses, and reasonable attorney fees if allowed under Nebraska law, to the extent caused by the negligence or any wrongful act, error, or omission of Donahue or his agents or employees, resulting from or related to Donahue's actions as set forth in this Agreement. Donahue shall provide the District with prompt notice of any claim for which he or the District may be liable. The District shall provide Donahue with prompt notice of any claim for which indemnification may be sought under this paragraph.
- 11. **Dispute Resolution.** Before either party to the Agreement may bring suit in any court concerning any issue relating to this Agreement, such Party must first seek in good faith to resolve the issue through negotiation or other form of nonbinding alternate dispute resolution mutually acceptable to the Parties.
- 12. **Assignment.** No Party to this Agreement may assign this Agreement to any other person or entity without the prior written consent of the other party.
- 13. **No Waiver.** No assent, express or implied, by either party to any breach of the other Party shall be deemed to be a wavier or any succeeding or continuing breach.
- 14. **Amendments.** No amendment or other modification to this Agreement shall be effective unless it is in writing and approved by the Parties. Such amendment shall become effective only after it has been executed by the Parties.
- 15. **Notice**. Any Notice or other communication required to be given to either party under this Agreement shall be in writing and shall be given in person, by overnight courier, or by certified mail return receipt requested to other party as follows:

LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT, 3125 Portia, PO Box 83581, Lincoln, Nebraska 68501-3581, Attention Dan Schulz.

TOM DONAHUE, 670 Raymond Road, Lincoln, Nebraska 68428,

Either party may amend this notice provision in writing addressed to the other party.

- 16. **Governing Law.** This Agreement shall be governed by the laws of the State of Nebraska.
- 17. **Counterparts.** This Agreement may be executed in one or more counterparts, each of which shall be deemed an original but all of which shall constitute one and the same instrument.
- 18. **Severability.** Whenever possible, each provision of this Agreement will be interpreted in such a manner as to be effective and valid under applicable law, but if any provision is held to be invalid, illegal, or unenforceable in any respect under applicable law or rule in any jurisdiction, such invalidity, illegality, or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed

- and enforced in such jurisdiction as if such invalid, illegal, or unenforceable provision had never been contained herein.
- 19. **Entire Agreement.** This Agreement constitutes the final, complete and exclusive statement of the Agreement of the Parties with respect to the subject matter in this Agreement, and supersedes any and all other prior and contemporaneous agreements and understandings, both written and oral, between the Parties.
- 20. **Headings.** Headings used in this Agreement are provided for convenience only and shall not be used to construe meaning or intent.
- 22. **Binding Effect.** This Agreement shall be binding upon and shall inure to the benefit of the Parties, their heirs, personal representatives and successors and permitted assigns.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the effective date first above stated.

| Executed | , 2019 | |
|--------------------|----------------|--|
| Paul D. Zillig, Ge | eneral Manager | |
| Executed | , 2019 | |
| TOM DONAHU | JE | |





Wetland Managment Areas - Public Owned Sections

BALANCE SHEET

PASTURE LEASE - DONAHUE

ALLEN SALINE WETLAND TRACT

2019

Pasture rent on 68 acres for 3 months - \$26/acre for 18 cow/calf pairs \$1,768.00 LPSNRD

Fence project – remove & replace approximately 590 feet of fence

Cost at \$3.00/foot \$1,770.00 Permittee

PASTURE LEASE AGREEMENT

This Agreement made and entered into effective as of the dated executed by both parties, by and between **LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT**, a political subdivision of the State of Nebraska, 3125 Portia, PO Box 83581, Lincoln, Nebraska 68501-3581, referred to in this Agreement as "the District" and Clint Ratkovec, 2420 31st Road, Brainard, Nebraska 68626, referred to in this Agreement as "Ratkovec", collectively referred to in this Agreement as "the Parties."

WITNESSETH:

RECITALS

- A. The District is the owner of a certain tract of land containing approximately 130 acres, more or less, located south of Interstate 80 in the Southeast Quarter of the Northwest Quarter (SE1/4NW1/4) and the South Half of the Northeast Quarter (S1/2NE1/4) Section 26, Township 11 North, Range 7 East of the 6th P.M., Lancaster County, Nebraska, commonly referred to as "the Warner Saline Wetland", as further described and shown on Exhibit "A" attached hereto and incorporated herein by this reference, and referred to in this Agreement as "the Property."
- B. Ratkovec wishes to lease the Property as pasture for the purpose of grazing cattle and the District is willing to lease the Property to Ratkovec for that purpose, under the terms and conditions as set forth in this Agreement.

NOW, THEREFORE, in consideration of the above Recitals and the mutual promises and covenants contained in this Agreement, the Parties agree as follows:

- 1. **Lease Premises.** The District leases the Property to Ratkovec as a pasture for cattle and Ratkovec leases the Property from the District to graze cattle.
- 2. **Term.** The term of the Pasture Lease shall be for a period beginning June 1, 2019 and shall terminate on November 1, 2019, unless sooner terminated by the District pursuant to paragraph 3 below, or mutually extended by the Parties.
- 3. **Early Termination.** The District, in its sole discretion, may terminate this Agreement at any time, upon five (5) days written notice, if a condition or conditions exist that in the opinion of the District will permanently or severely damage the viability of the Property as a saline wetland or if Ratkovec violates the grazing limitation provided in paragraph 7 below.
- 4. **Occupancy and Use.** Ratkovec shall occupy and use the Property only as pasture for grazing cattle, as further described and provided for in this Agreement. Ratkovec shall not use the Property for any other purpose without the prior written consent of the District.

- 5. **Rent.** There is no cash rent due to the District for the rental of the Property by Ratkovec. In lieu of cash rent; however, Ratkovec shall, at his sole cost and expense, provide certain services and furnish certain equipment and materials, as follows:
 - (a) Remove and dispose of 20-8 inch diameter by 8 feet long treated wooden fence posts in existing south fence line as shown on Exhibit A, wood post replacement and fence repair.
 - (b) Provide and install 22-8 inch diameter by 8 feet long treated wooden fence posts four of which shall be used to build or rebuild three "H" braces with three treated wooden supports. The location of the H braces will be field directed by the District.
 - (c) Upon installation of new treated wooden posts, Ratkovec will repair and tighten fence wire as shown on Exhibit A, fence repair.
 - (d) Remove and replace 750 feet of existing fence with new four strand barbed wire fence to be completed no later than June 1, 2019.
 - (e) Provide if necessary, one or more electric fence chargers and install and maintain a suitable electric fence, fencers, fence posts and all other materials or equipment suitable for grazing cattle, all of which shall be removed from the Property no later than November 15, 2019; and
 - (f) Provide adequate watering devises, tanks, mineral blocks and all other equipment, material, and supplies necessary for the proper feeding and care of the cattle to be pastured on the Property, all of which shall be removed from the Property no later than November 15, 2019.
- 6. **District's Obligations.** The District shall provide the use of a well for livestock watering located in the southeast corner of the property as shown on Exhibit A.
- 7. Grazing. Ratkovec may graze <u>AND WATER</u> cattle on the Property beginning on June 1, 2019, provided however that all cattle shall be removed from the Property no later than November 1, 2019. No more than 28 cow/calf pairs shall be allowed to be kept on the Property at any one time. Violation of this provision shall constitute grounds for early termination of this Agreement pursuant to paragraph 3 above, unless Ratkovec first obtains in writing the consent of the District. The District may request Ratkovec to reduce the number of cattle on the Property, if adequate forage is not available for feed and Ratkovec shall promptly comply with such request. Ratkovec may use horses or motor vehicles and fencing equipment to perform fence work and to work cattle during the term of the lease

THE DISTRICT MAKES NO WARRANTY IN THIS AGREEMENT, EXPRESSED OR IMPLIED AND SPECIFICALLY DISCLAIMS ANY WARRNTY THAT SUITABLE GRASS AND WATER FOR GRAZING CATTLE WILL BE AVAILABLE ON THE PROPERTY DURING THE ENTIRE GRAZING PERIOD.

8. **Inspection.** The District shall have the right to inspect the Property at all reasonable times without notice.

- 9. **Improvements. Ratkovec** shall make no improvements to the Property other than what is required in paragraph 5 above, without the prior written consent of the District.
- 10. **Insurance. Ratkovec** shall obtain and keep in full force during the term of this Agreement, commercial liability and automobile liability insurance covering his actions under this Agreement, each in the minimum amount of \$1,000,000.00. Ratkovec shall include the District as a name insured on the policy of insurance, waive the right of subrogation, and furnish a certificate of insurance to the District prior to the commencement of this Agreement.
- 11. **Indemnification. Ratkovec** shall indemnify, defend, and hold harmless the District and its officers, directors, agents, and employees, from and against all claims, damages, liabilities, and court awards, including expenses, and reasonable attorney fees, to the extent caused by the negligence or any wrongful act, error, or omission of Ratkovec or his agents or employees, resulting from or related to Ratkovec's actions as set forth in this Agreement. Ratkovec shall provide the District with prompt notice of any claim for which he or the District may be liable. The District shall provide Ratkovec with prompt notice of any claim for which indemnification may be sought under this paragraph.
- 12. **Dispute Resolution.** Before either party to the Agreement may bring suit in any court concerning any issue relating to this Agreement, such Party must first seek in good faith to resolve the issue through negotiation or other form of nonbinding alternate dispute resolution mutually acceptable to the Parties.
- 13. **Assignment.** No Party to this Agreement may assign this Agreement to any other person or entity without the prior written consent of the other party.
- 14. **No Waiver.** No assent, express or implied, by either party to any breach of the other Party shall be deemed to be a wavier or any succeeding or continuing breach.
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- 16. **Notice**. Any Notice or other communication required to be given to either party under this Agreement shall be in writing and shall be given in person, by overnight courier, or by certified mail return receipt requested to other party as follows:

LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT, 3125 Portia, PO Box 83581, Lincoln, Nebraska 68501-3581, Attention Dan Schulz.

Clint Ratkovec, 2420 31st Road, Brainard, Nebraska.

Either party may amend this notice provision in writing addressed to the other party.

- 17. Governing Law. This Agreement shall be governed by the laws of the State of Nebraska.
- 18. **Counterparts.** This Agreement may be executed in one or more counterparts, each of which shall be deemed an original but all of which shall constitute one and the same instrument.

- 19. Severability. Whenever possible, each provision of this Agreement will be interpreted in such a manner as to be effective and valid under applicable law, but if any provision is held to be invalid, illegal, or unenforceable in any respect under applicable law or rule in any jurisdiction, such invalidity, illegality, or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed and enforced in such jurisdiction as if such invalid, illegal, or unenforceable provision had never been contained herein.
- 20. **Entire Agreement.** This Agreement constitutes the final, complete and exclusive statement of the Agreement of the Parties with respect to the subject matter in this Agreement, and supersedes any and all other prior and contemporaneous agreements and understandings, both written and oral, between the Parties.
- 21. **Headings.** Headings used in this Agreement are provided for convenience only and shall not be used to construe meaning or intent.
- 22. **Binding Effect.** This Agreement shall be binding upon and shall inure to the benefit of the Parties, their heirs, personal representatives and successors and permitted assigns.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the effective date first above stated.

LOWER PLATTE SOUTH NATURAL RESOURCES DISTRICT, a political subdivision of the State of Nebraska,

| Execu | ted | 2019 | |
|-------|-----------------------|---------------|--|
| BY: | Paul D. Zillig, Ger | neral Manager | |
| Execu | ted Clint Ratkovec | 2019 | |
| | Signature | | |

Exhibit A: Warner Wetlands Warner Wetlands Wood post replacement and Fence repair Remove and replace fence (red) 1--80 Warner Wetlands Livestock Well Wood post replacement and fence repair Remove and replace fence Map Created: March 2019 - Lower Platte South NRD 500 1,000

BALANCE SHEET

PASTURE LEASE – RATKOVEC

WARNER SOUTH SALINE WETLAND

2019

Pasture rent on 130 acres for 5 months - \$32/acre for 28 cow/calf pairs \$4,160 LPSNRD

South fence line repair \$1,958.88
South fence line remove and replace 750 feet at \$3.00/foot \$2,250.00

\$4,208.88 Ratkovec