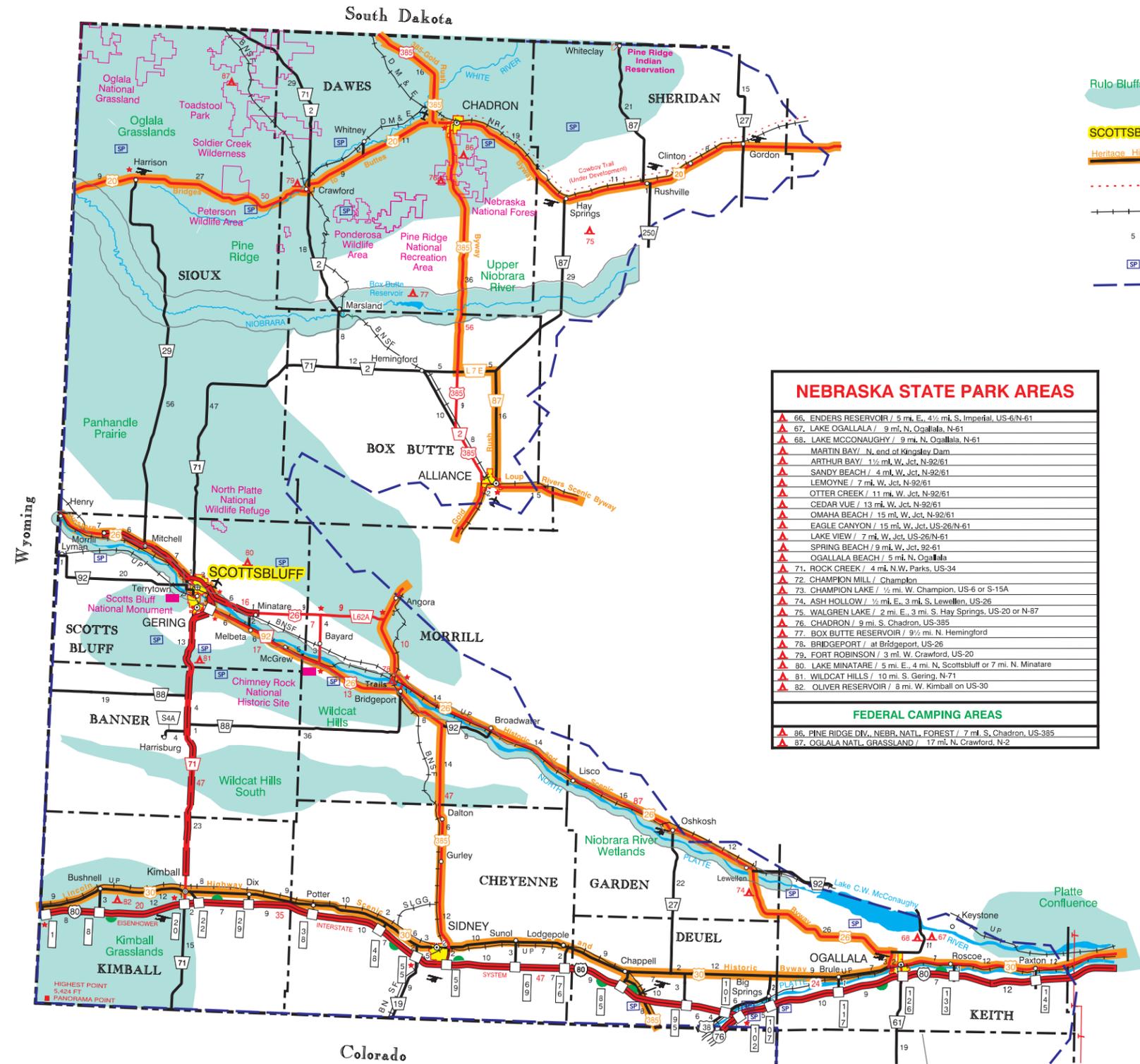




Nebraska Department of Roads

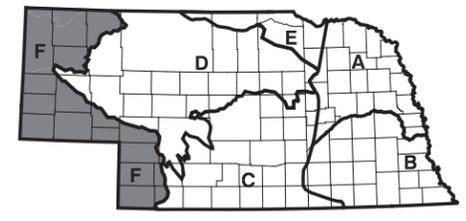
PLAN FOR THE ROADSIDE ENVIRONMENT

Landscape Region F

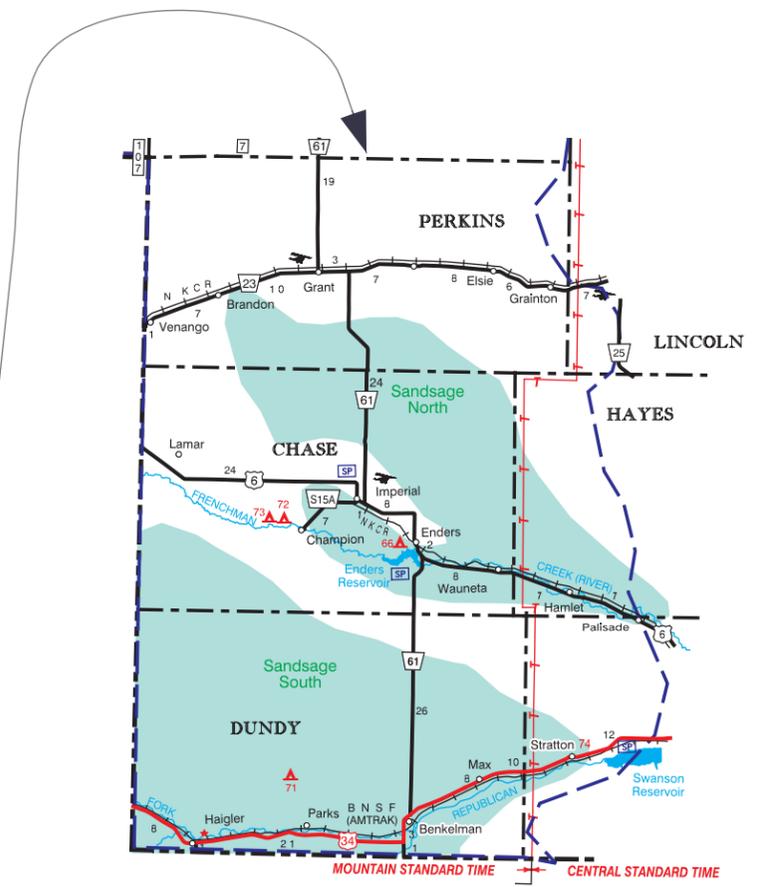


LEGEND

- Rulo-Bluffs Biologically Unique Landscape (From the Nebraska Natural Legacy Project)
- SCOTTSBLUFF Major Communities
- Heritage Highway Scenic Byway
- - - Bike Trail
- Railroad
- 5 Mileage Numbers
- SP State Wildlife Management Area
- - - Region Boundary



NEBRASKA STATE PARK AREAS	
▲ 66. ENDERS RESERVOIR / 5 mi. E., 4 1/2 mi. S. Imperial, US-6/N-61	
▲ 67. LAKE OGALLALA / 9 mi. N. Ogallala, N-61	
▲ 68. LAKE MCCONAUGHY / 9 mi. N. Ogallala, N-61	
▲ MARTIN BAY / N. end of Kingsley Dam	
▲ ARTHUR BAY / 1 1/2 mi. W. Jct. N-92/61	
▲ SANDY BEACH / 4 mi. W. Jct. N-92/61	
▲ LEMOYNE / 7 mi. W. Jct. N-92/61	
▲ OTTER CREEK / 11 mi. W. Jct. N-92/61	
▲ CEDAR VIEW / 13 mi. W. Jct. N-92/61	
▲ OMAHA BEACH / 15 mi. W. Jct. N-92/61	
▲ EAGLE CANYON / 15 mi. W. Jct. US-26/N-61	
▲ LAKE VIEW / 7 mi. W. Jct. US-26/N-61	
▲ SPRING BEACH / 9 mi. W. Jct. 92-61	
▲ OGALLALA BEACH / 5 mi. N. Ogallala	
▲ 71. ROCK CREEK / 4 mi. N.W. Parks, US-34	
▲ 72. CHAMPION MILL / Champion	
▲ 73. CHAMPION LAKE / 1/2 mi. W. Champion, US-6 or S-15A	
▲ 74. ASH HOLLOW / 1/2 mi. E., 3 mi. S. Lewellen, US-26	
▲ 75. WALGREN LAKE / 2 mi. E., 3 mi. S. Hay Springs, US-20 or N-87	
▲ 76. CHADRON / 9 mi. S. Chadron, US-385	
▲ 77. BOX BUTTE RESERVOIR / 9 1/2 mi. N. Hemingford	
▲ 78. BRIDGEPORT / at Bridgeport, US-26	
▲ 79. FORT ROBINSON / 3 mi. W. Crawford, US-20	
▲ 80. LAKE MINATARE / 5 mi. E., 4 mi. N. Scottsbluff or 7 mi. N. Minatare	
▲ 81. WILDCAT HILLS / 10 mi. S. Gering, N-71	
▲ 82. OLIVER RESERVOIR / 8 mi. W. Kimball on US-30	
FEDERAL CAMPING AREAS	
▲ 86. PINE RIDGE DIV., NEBR. NATL. FOREST / 7 mi. S. Chadron, US-385	
▲ 87. OGALLALA NATL. GRASSLAND / 17 mi. N. Crawford, N-2	



Boundaries (indicated on map) - Landscape Region F encompasses the western portion of Nebraska and includes all or part of 19 counties: Sioux, Scotts Bluff, Banner, Kimball, Dawes, Box Butte, Morrill, Cheyenne, Sheridan, Garden, Deuel, Keith, Perkins, Chase, Hayes, Dundy, Hitchcock, and a small amount in Lincoln and Cherry. NDOR District 5 encompasses the majority of this region in the panhandle. A small portion is in the southwest corner of NDOR District 6 and the remainder of the region is within the western end of NDOR District 7.



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Description – Region “F”

Environmental Components

- **Climate**

- Plant hardiness zone – Using the USDA Plant Hardiness Zone Map, Landscape Region “F” covers two zones. The panhandle is zone 4b with a range of annual minimum temperatures from -25 to -20 degrees Fahrenheit. Zone 5a, -20 to -15 degrees Fahrenheit begins in the very southern edge of the panhandle and continues to the south through the southwest corner of the state.
- Annual rainfall – precipitation ranges from 12 to 17 inches in this region. Humidity is generally very low.

- **Landform** – Landscape Region “F” has dramatic changes in elevation and over relatively short distances contain a high diversity of habitats. Canyons, jagged buttes, pine forests, flat to rolling crop lands and moderate relief rangeland and an area of badlands in the northwest corner occur in this region.

- **General soil types** – Region “F” soils are shallow compared to the loess deposits further east. In the northwest corner, they have weathered in place from local sandstone and siltstone. Clay soils associated with the badlands along and south of the South Dakota border are weathered from shale and exhibit some of the highest shrink-swell potential in the state. Rock outcrops are frequent around the Pine Ridge escarpment and Wildcat Hills. Along the Platte River, coarse silt and sand are the dominant soils. The southern portion of the panhandle is composed of a thin silt loam that is equally susceptible to wind or water erosion. Southwest Nebraska (north of the Republican River) is primarily silt loam but deeper than the area of loess in the panhandle. This area is also vulnerable to wind and water erosion.

- **Hydrology**

- Rivers and streams – The North Platte River flows southeasterly and bisects the northern portion of Landscape Region “F” known as the Panhandle of Nebraska. The Niobrara and White Rivers are in the north portion of the region. The White River has its origin in northern Sioux County and flows northeast into South Dakota.

At the southern edge of the panhandle, the South Platte River enters from Colorado and continues east. Further south, Frenchman Creek and the Republican River enter from Colorado and Kansas and flows to the east.

- Wetlands and Lakes – Naturally occurring playas are found throughout Landscape Region “F,” and are generally only wet during periods of heavy or sustained rains. There are also a number of small creeks which may or may not be wet year round and associated wet meadows and springs.



- **Plant Communities**

- Herbaceous – Restoring plant communities in Landscape Region “F” is difficult and takes much more time than most other portions of Nebraska. Experience has shown that it may be even more difficult and time consuming than working in Landscape Region “D”, the Sandhills. There are two distinct prairie types: shortgrass and mixed grass. Shortgrass prairies are dominated by buffalograss, blue grama, side-oats grama, and purple threeawn. Examples of the more than 100 forb species include milkvetches, scarlet guara, cutleaf ironplant, spine-fruit prickley pear, purple locoweed, slender-flower scurfpea, prairie coneflower.

The mixed grass prairie is typically dominated by blue grama, prairie sandreed, threadleaf sedge, needle-and-thread grass, little bluestem and western wheatgrass. An example of some of the forbs in this prairie found in the mixed grass prairie include scarlet guana, dotted gayfeather, skeleton plant, cutleaf ironplant, lemon scurfpea, and scarlet globe mallow.

In the northwest, mixed grass prairie species such as big sagebrush and silver sagebrush may be prominent. The western loess midgrass prairie may have big bluestem, switchgrass and sideoats grama more common. Other forbs may include western ragweed, fringed sage and prairie coneflower.

There is some dune prairie and sandsage prairie in areas bordering the Sandhills.

Badlands are mainly unvegetated.

Western alkaline meadows along the North Platte contain inland saltgrass, alkali sacaton, clustered field sedge, foxtail barley, and meadow bluegrass. Some forbs include spearscale, alkali aster, viscid camphor-daisy, and thelesperma.

- Woody – The shortgrass prairie does not usually have woody plants. Mixedgrass prairie may have shrubs such as skunkbush sumac, winter fat, fringed sage, snowberry, yucca, and broom snakeweed. Leadplant and sandsage can occur in the western mixed grass prairie. In the dune prairie on the edge of the Sandhills, leadplant, dwarf prairie rose, western poison ivy and yucca may occur.



Ponderosa pine is the prominent woody species in this region, expectantly throughout the Pine Ridge area and Wildcat Hills. These areas may also include some quaking aspen and green ash. Common shrubs in the understory are Saskatoon serviceberry, dwarf juniper, fragrant sumac and mountain mahogany. Eastern red cedar is becoming invasive in some areas, especially prairie, pasture, and rangeland areas. Control of seed-producing trees may be necessary in these areas.

Riparian woodlands are dominated by cottonwood and peachleaf willow with green ash, boxelder, Russian olive and junipers. Shrubs such as chokecherry and buffaloberry are also in these areas.

- Invasive plants – Bromegrass, Canada thistle, leafy spurge and red cedar are examples of invasive species steadily encroaching on prairie remnants, pastures and the roadsides. Phragmites, tamarix, and Reed’s canarygrass are examples of the invasives threatening the stream and river courses, as well as wetlands.

- Protected plants – The following plants are listed as threatened or endangered by state and/or federal agencies:

Ute Lady’s Tresses (*Spiranthes diluvialis*)

Colorado Butterfly Plant (*Gaura neomexicana coloradenis*)

- **Animals** – The following species are listed as threatened or endangered by state and/or federal agencies:

Northern Redbelly Dace
(*Phoxinus eos*)

Finescale Dace
(*Phoxinus neogaeus*)

Bald Eagle
(*Haliaeetus leucocephalus*)

Piping Plover (*Charadrius melodus*)

River Otter (*Lutra canadensis*)

Black-Footed Ferret (*Mustela nigripes*)

Swift Fox (*Vulpes velox*)

Mountain Plover (*Charadrius montanus*)

Interior Least Tern

(*Sterna antillarum athalassos*)

- **Biologically Unique Landscapes and Habitats** (as defined in The Nebraska Natural Legacy Project) are areas of the state that have been identified as key habitats that offer the highest likelihood that they will persist over the long term. These areas were selected based on known occurrences of ecological communities and at-risk species and offer the best opportunity for conserving the full array of biological diversity in Nebraska. Disturbance to these areas should be minimized. Habitat preservation in the landscape design is highly desirable. Opportunities to enhance and restore critical habitat should be considered in these areas.

Listed here are the Biologically Unique Landscapes that occur in this landscape region:

Kimball Grasslands – occurs in southwest Kimball County, North Platte River Wetlands – along the North Platte River from Lake McConaughy west to the Wyoming border;

Oglala Grasslands – occurs in the northern portion of Sioux County and most of Dawes County with a small portion in northwest Sheridan County; Panhandle Mixedgrass Prairies – occurs in the southern half of Sioux County and portions of Scotts Bluff, Morrill, and Box Butte Counties;

Pine Ridge – occurs in portions of Sioux, Dawes, and Sheridan Counties; Upper Niobrara River – occurs in portions of Sioux, Dawes, and Sheridan Counties;

Upper Niobrara River – occurs as a two-mile wide buffer on each side of the river from the Wyoming line to Cherry County; Wildcat Hills – two areas, one immediately south of the North Platte River in Scotts Bluff, Banner, and Morrill Counties;

Sandsage Prairie – occurs in the southwest corner of Nebraska in Dundy, Chase, Perkins, Hayes, and Hitchcock.

Sociological Components

- **Area history** – Landscape Region “F” has a wide diversity in topography and very limited annual precipitation. The Oregon and Mormon Trails crossed the region with prominent landmarks such as Chimney Rock and Scotts Bluff. The 1904 Kincaid Act allowed homesteaders to increase their land claims to 640 acres which made farming less risky and changed cattle ranching. The northern portion of the panhandle has a high percentage of land area in public ownership.

The Pine Ridge Indian Reservation is in this region.

- **Economic features** – Ranching, sugar beet production, and winter wheat are primary. Nature-based recreation and tourism is the second largest industry in the region at locations like Lake McConaughy, Fort Robinson, Chadron State Park, Oglala National

Grasslands, Toadstool Geologic Park, and both hunting and fishing are a part of the nature-based recreation.

Federal lands in this region include: Oglala National Grassland in Sioux and Dawes County; Toadstool Park in Sioux County; Pine Ridge National Recreation Area in Dawes County; Agate Fossil Beds National Monument in Sioux County; Scotts Bluff National Monument in Scotts Bluff County; North Platte National Wildlife Refuge in Scotts Bluff County; Chimney Rock National Historic Site in Morrill County; Soldier Creek Wilderness in Sioux County; Ponderosa Wildlife area in Dawes County; and Nebraska National Forest in Dawes County.

- **Land use/Ag type** – Nearly half of the crop ground is irrigated in this landscape region. Sugar beets have been a primary crop in these areas with corn on the increase. Dryland crops are winter wheat, dry edible beans and more recently, sunflowers.

In the northern panhandle, 87 percent of the ground is in grass used for grazing.

The panhandle has a higher percentage of land area in public ownership than other portions of the state.

- **Major communities** – Scottsbluff, Gering, Alliance, Chadron, Kimball, Sidney, and Ogallala.

- **Transportation**

Major highways – portion of I-80, US-30, US-34, US-26, US-20, N-71, US-385, N-61.

Railroads – Burlington Northern Santa Fe, Nebraska Kansas Colorado Railnet, Union Pacific, Dakota, Minnesota & Eastern Railroad Corporation.

Scenic highways – “Bridges to Buttes Byway” on US-20 from the Wyoming border east to Valentine in Landscape Region “D”.

“385-Gold Rush Byway” – US-385 from the Colorado border to the South Dakota border, completely in this landscape region.

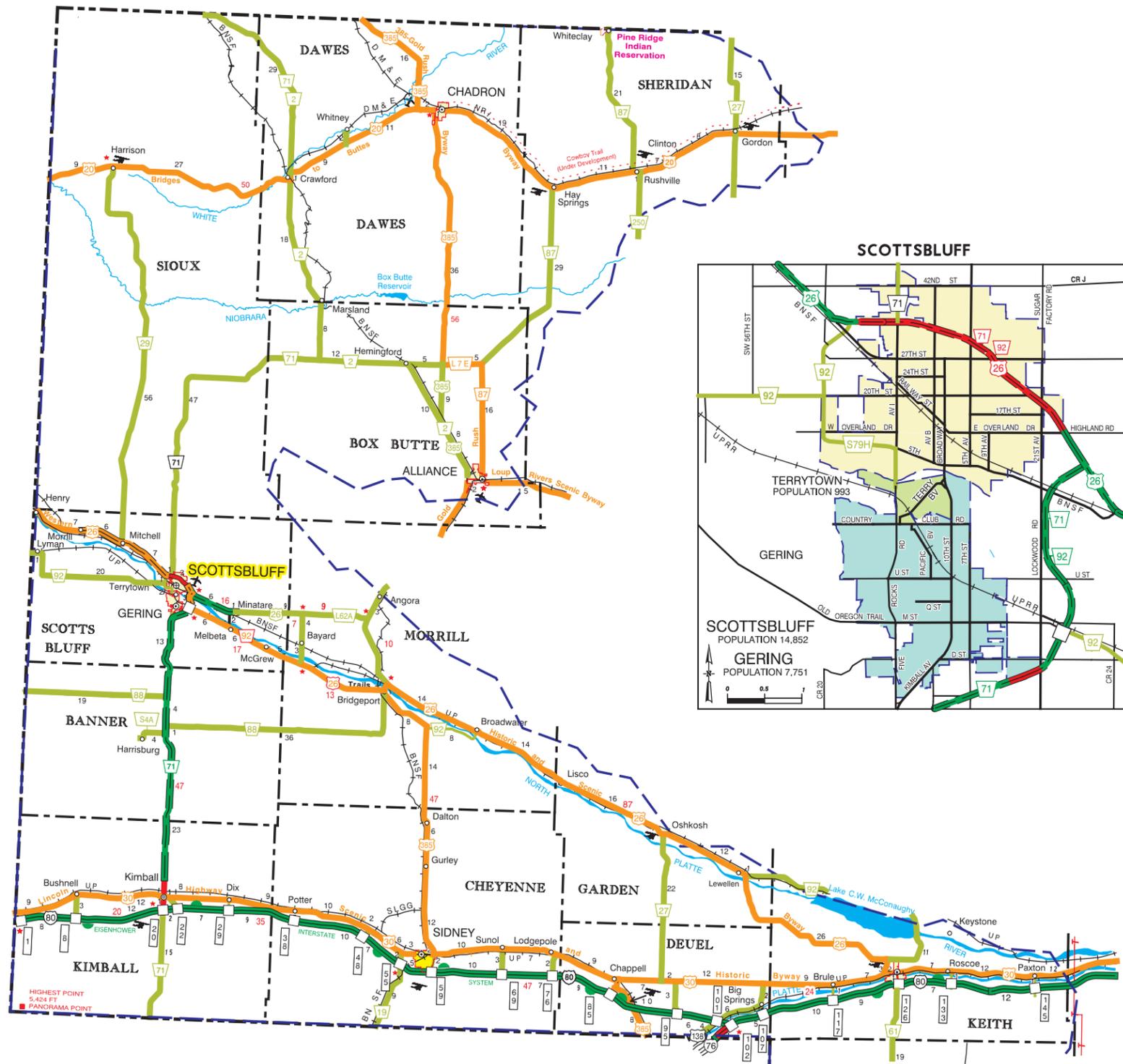
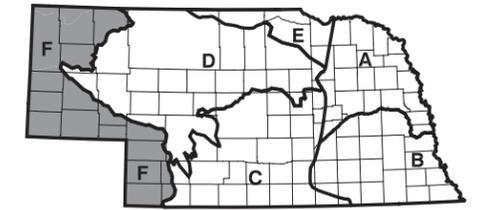
“Western Trails & Historic Scenic Byway” – N-92/US-26 Wyoming border to Ogallala, completely in this region.

“Lincoln Highway Scenic & Historic Byway” – the portion of US-30 from the Wyoming border to Ogallala.

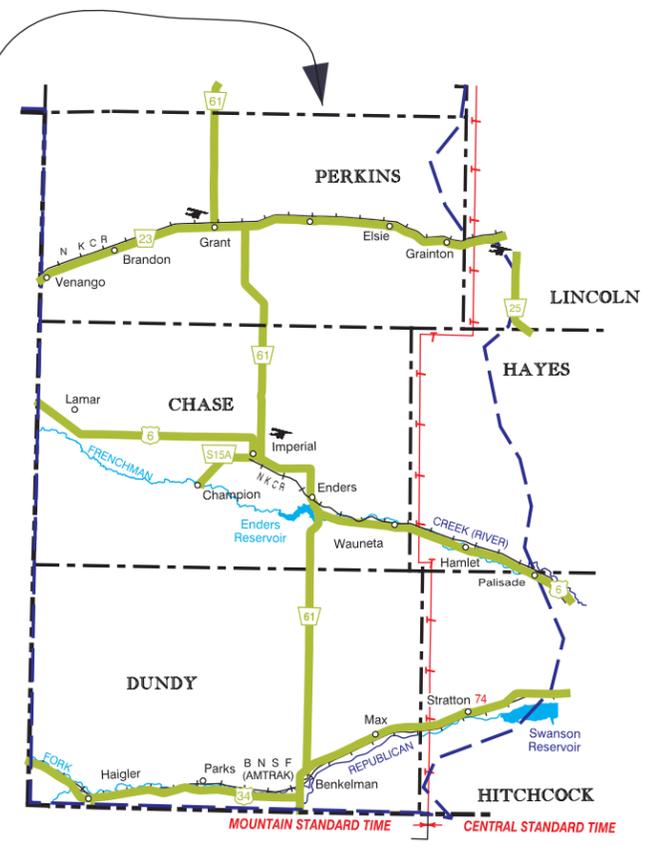
Bike routes – Cowboy Trail – Chadron east, exiting the region east of Gordon.



Landscape Region F Corridor Classification Map



- LEGEND**
- Metropolitan Corridor
 - Community Center Corridor
 - Community Edge Corridor
 - Rural Interstate/Expressway Corridor
 - Rural Highway Corridor
 - Scenic Corridor
 - ... Bike Trail
 - Railroad
 - Region Boundary



MOUNTAIN STANDARD TIME CENTRAL STANDARD TIME



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Corridor Objectives – Landscape Region “F”

Landscape Region “F” contains a large number of Biologically Unique Landscapes that will influence construction and landscape treatments in these corridors.

The Metropolitan Corridor

This corridor type is not used in this region at this time.

Community Edge and Center Corridors

The communities in Landscape Region “F” are primarily smaller and often have less defined edge and center areas. Traffic calming should be a major consideration along with maintaining and enhancing the community’s unique identity.

Rural Interstate/Expressway Corridor

Within Landscape Region “F” this corridor type remains the primary long distance and higher travel speed route containing a high percentage of heavy vehicles. Treatments to help prevent monotony and providing points of interest to improve wayfinding can be addressed.

Rural Highway Corridor

Much of the area adjacent to this corridor is range land in the northern portion with more crop ground and pasture in the southern part of the region. Almost every highway in this corridor type in this region goes through a biologically unique landscape as shown on the Landscape Region “F” map. This highway corridor is also important for wildlife (plant and animal) as a passage between these areas and secondarily as habitat itself. However, in this region there is much less need of habitat since the adjacent ground has often not been significantly altered by man. Unique areas such as the Wildcat Hills, Pine Ridge and the badlands at Toadstool Monument should be treated carefully. Views to Chimney Rock should be preserved and enhanced if possible. Techniques to help prevent monotony and control of blowing snow are both very important in this region for this corridor.

Scenic Corridor

Within Landscape Region “F” there are portions of 6 designated scenic highways. Each of these routes has a unique character to be maintained

The overriding landscape objective in this corridor type is to preserve the existing views and scenic qualities that brought rise to the scenic designation. All work within these corridors should be in context with the adjacent surroundings.

Screening of objectionable views needs to be strongly considered in this corridor type, along with the framing of special views.

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Typical Plant Species for Use in Landscape Region “F”

The listings to follow are recommendations of native species of plant material for use in the landscape region. This list is expected to broaden the demand for additional native species increases in the future. Micro-climates within Region “F” strongly influence appropriate locations for shrubs and trees.

Shrubs

Botanical Name	Common Name
<i>Amelanchier alnifolia</i>	Saskatoon Serviceberry
<i>Atriplex canescens</i>	Fourwing Saltbush
<i>Artemisia cana</i>	Silver Sagebrush
<i>Artemisia tridentata</i>	Big Sagebrush
<i>Cercocarpus montenus</i>	Mountain Mahogany
<i>Cornus sericea</i>	Redosier Dogwood
<i>Juniperus communis</i>	Prostrate Juniper
<i>Prunus americana</i>	American Plum
<i>Prunus besseyi</i>	Western Sandcherry
<i>Prunus virginiana</i>	Common Chokecherry
<i>Rhus trilobata</i>	Skunkbush Sumac
<i>Ribes odoratum</i>	Clove Currant
<i>Ribes aureum</i>	Golden Currant
<i>Rosa arkansana</i>	Arkansas Rose
<i>Rosa woodsii</i>	Woods Rose
<i>Salix exigua</i>	Sandbar Willow
<i>Shepherdia argentea</i>	Silver Buffaloberry
<i>Symphoricarpos occidentalis</i>	Western Snowberry

Trees

Botanical Name	Common Name
<i>Acer negundo</i>	Boxelder
<i>Celtis occidentalis</i>	Hackberry
<i>Fraxinus pennsylvanica</i>	Green Ash
<i>Juniperus virginiana</i>	Eastern Red Cedar
<i>Juniperus scopulorum</i>	Rocky Mountain Juniper
<i>Pinus flexilis</i>	Limbar Pine
<i>Pinus ponderosa</i>	Ponderosa Pine
<i>Populus deltoides</i>	Eastern Cottonwood
<i>Populus tremuloides</i>	Quaking Aspen
<i>Quercus gambelii</i>	Gambel Oak
<i>Quercus macrocarpa</i>	Bur Oak
<i>Salix amygdaloides</i>	Peach Leaf Willow
<i>Ulmus americana</i>	American Elm

Grasses

Botanical Name	Common Name
<i>Andropogon gerardii</i>	Big Bluestem
<i>Andropogon hallii</i>	Sand Bluestem
<i>Bouteloua curtipendula</i>	Sideoats Grama
<i>Bouteloua gracilis</i>	Blue Grama
<i>Buchloe dactyloides</i>	Buffalograss
<i>Calamovilfa longifolia</i>	Prairie Sandreed
<i>Elymus canadensis</i>	Canada Wildrye
<i>Elymus lanceolatus</i>	Thickspike Wheatgrass
<i>Eragrostis trichodes</i> *	Sand Lovegrass*
<i>Koeleria macrantha</i>	Prairie Junegrass
<i>Nassella viridula</i>	Green Needlegrass
<i>Panicum virgatum</i>	Switchgrass
<i>Pascopyrum smithii</i>	Western Wheatgrass
<i>Pseudoroegneria spicata</i> ▪	Bluebunch Wheatgrass
<i>Schizachyrium scoparium</i>	Little Bluestem
<i>Sorghastrum nutans</i>	Indiangrass
<i>Sporobolus cryptandrus</i>	Sand Dropseed

* Limited to Chase, Dundy, and Perkins Counties

▪ Use in Sioux and Dawes Counties

Sedges

Botanical Name	Common Name
<i>Carex brevior</i>	Fescue Sedge
<i>Carex filifolia</i>	Threadleaf Sedge
<i>Carex gravida</i>	Heavy Sedge
<i>Carex inops, ssp. heliophila</i> *	Sun Sedge

*Limited to Box Butte, Dawes, Sheridan, and Sioux Counties

Legumes

Botanical Name	Common Name
<i>Amorpha canescens</i>	Leadplant
<i>Astragalus canadensis</i> *	Canadian Milkvetch
<i>Dalea canida</i>	White Prairie Clover
<i>Dalea purpurea</i>	Purple Prairie Clover
<i>Psoralea spp.</i>	Scurfpea

*Use in northern counties in Region "F"

Wildflowers

Botanical Name	Common Name
<i>Achillea millefolium</i>	Yarrow
<i>Anemone canadensis</i>	Canada Anemone
<i>Antennaria parvifolia</i>	Pussy-toes
<i>Argemone polyantheos</i>	Prickly Poppy
<i>Aster ericoides</i>	White Heath Aster
<i>Aster ericoides</i>	White Heath Aster
<i>Aster laevis*</i>	Smooth Blue Aster*
<i>Callirhoe involucrata</i>	Purple Poppy Mallow
<i>Cleome serrulata</i>	Rocky Mountain Bee Plant
<i>Echinacea angustifolia</i>	Black Samson
<i>Erysimum asperum</i>	Western Wallflower
<i>Gaillardia pulchella</i>	Indian Blanket Flower
<i>Gaura coccinea</i>	Scarlet Gaura
<i>Helianthus pauciflorus</i>	Stiff Sunflower
<i>Liatris lancifolia</i>	Lanceleaf Blazing Star
<i>Liatris punctata</i>	Dotted Blazing Star
<i>Linum lewisii</i>	Blue Flax
<i>Machaeranthera pinnatifida</i>	Cutleaf Ironplant/Lacy Tansyaster
<i>Machaeranthera tanacetifolia</i>	Tansy Aster
<i>Monarda fistulosa</i>	Wild Bergamot
<i>Oligoneuron rigidum</i>	Stiff Goldenrod
<i>Penstemon grandiflorus*</i>	Shell-leaf Penstemon*
<i>Ratibida columnifera</i>	Upright Prairie Coneflower
<i>Ratibida columnifera, red</i>	Mexican Red Hat
<i>Rosa arkansana</i>	Prairie Rose
<i>Rudbeckia hirta</i>	Black-eyed Susan
<i>Senecio plattensis</i>	Prairie Ragwort
<i>Solidago missouriensis</i>	Missouri Goldenrod
<i>Sphaeralcea coccinea</i>	Scarlet Globemallow
<i>Tradescantia occidentalis</i>	Prairie Spiderwort
<i>Verbena hastata</i>	Blue Vervain

*Use in northern counties in Region "F"



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