

Southeast Nebraska Community Wildfire Protection Plan

FOR THE COUNTIES OF BUTLER, CASS, GAGE, JOHNSON, LANCASTER, NEMAHA,
OTOE, PAWNEE, RICHARDSON, SARPY, SAUNDERS, AND SEWARD



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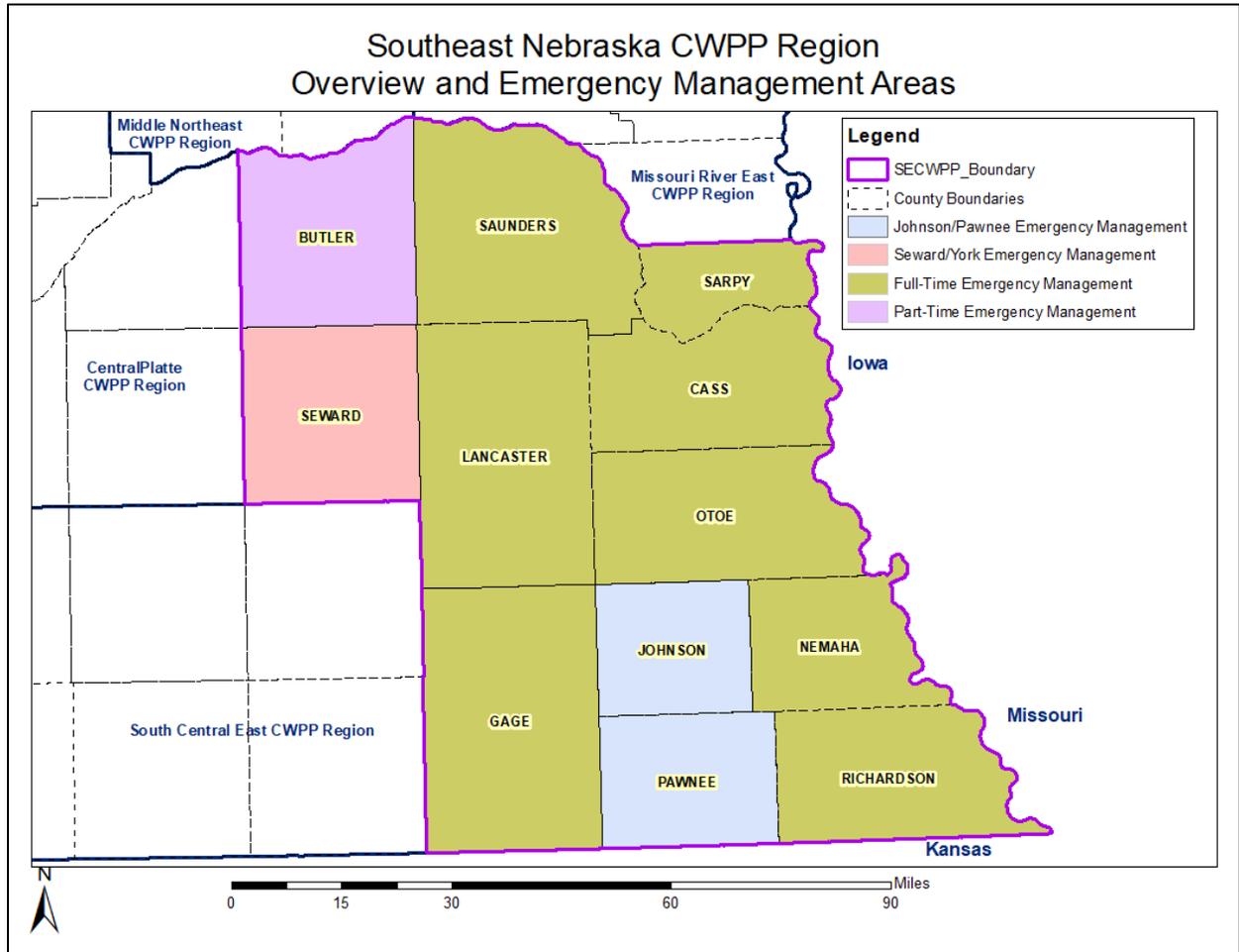
AUGUST, 2020



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Southeast Nebraska Community Wildfire Protection Plan



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FACILITATED BY THE

Nebraska Forest Service

IN COLLABORATION AND COOPERATION WITH

BUTLER, CASS, GAGE, JOHNSON, LANCASTER, NEMAHA, OTOE, PAWNEE,
RICHARDSON, SARPY, SAUNDERS, AND SEWARD COUNTIES

LOCAL VOLUNTEER FIRE DISTRICTS

COUNTY EMERGENCY MANAGEMENT DIRECTORS
SOUTHEAST NEBRASKA CWPP STEERING COMMITTEE

LOCAL MUNICIPAL OFFICIALS

LOCAL, STATE, AND FEDERAL NATURAL RESOURCES AGENCIES

AREA LANDOWNERS

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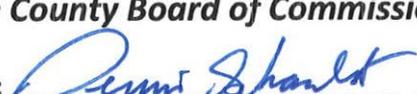
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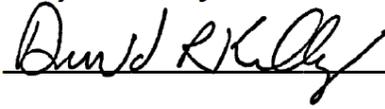
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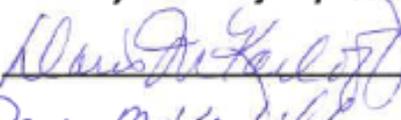
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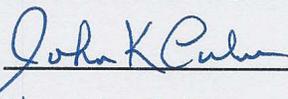
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Community Wildfire Protection Plan Acronyms

| Acronym | Meaning |
|----------------|---|
| BLM | Bureau of Land Management |
| BUL | Biologically Unique Landscape |
| CWPP; SECWPP | Community Wildfire Protection Plan; Southeast Nebraska Community Wildfire Protection Plan |
| FAP | Forest Action Plan |
| FEPP; FFP | Federal Excess Property Program; Firefighter Property |
| GIS | Geographic Information System |
| GPS | Global Positioning System |
| ID | Identification |
| LEOP | Local Emergency Operations Plan |
| MA; MAD | Mutual Aid; Mutual Aid District |
| MOU | Memorandum of Understanding |
| NE | Nebraska |
| NEMA | Nebraska Emergency Management Agency |
| NFS | Nebraska Forest Service |
| NGO | Non-Government Organization |
| NGPC | Nebraska Game and Parks Commission |
| NNLP | Nebraska Natural Legacy Project |
| NPPD | Nebraska Public Power District |
| NRCS | Natural Resources Conservation Service |
| NRD | Natural Resource District |
| NWCG | National Wildfire Coordinating Group |
| NWS | National Weather Service |
| RA | Risk Assessment |
| RH | Relative Humidity |
| RR | Risk Reduction |
| SEAT | Single Engine Air Tanker |
| SHP | State Historical Park |
| SP | State Park |
| SRA | State Recreation Area |
| SRIA | Structural Risk & Ignitability Analysis |
| USFS | US Forest Service |
| USFWS | US Fish and Wildlife Service |
| VFD; RFD; FD | Volunteer Fire Department; Rural Fire District/Dept.; Fire District/Dept. |
| WMA | Wildlife Management Area |
| WUI | Wildland Urban Interface |

Southeast Nebraska Community Wildfire Protection Plan

Introduction

The purpose of this Community Wildfire Protection Plan (CWPP) is to provide a tool for effectively managing fire and hazardous vegetative fuels and to bolster collaboration and communication among the various agencies and organizations who manage fire in Southeast Nebraska. Having a CWPP in place allows the Nebraska Forest Service (NFS) to apply for federal grant dollars to cost-share forest fuels reduction treatments in at-risk areas within the boundaries of the CWPP. It also may increase opportunities for counties, municipalities, and rural fire districts to seek grant funding for activities related to fire protection.

A CWPP can help people be proactive in their approach to wildfire. Some of the CWPP counties have experienced big wildfires. Between 2000 and 2018, CWPP area volunteer fire departments reported 45 fires greater than 199 acres in size that burned almost 32,000 acres. Because not all fire departments report every year, the actual numbers are likely much higher. In March, 2014, nineteen fire departments responded to a wildfire near Branched Oak Lake in Lancaster County. It charred about 1,000 acres, injuring a firefighter and damaging a home. That same day there were also wildfires in nearby Otoe and Saunders Counties.¹ In March, 2015, three fire departments responded to a wildfire in Seward County that burned about 200 acres near Garland. Firefighters were hindered by rough terrain and areas of dense, flammable eastern redcedar.²

These incidents demonstrate that intense fire behavior can start in rural areas, move aggressively over large expanses, and threaten population centers. For this reason the CWPP planning team has designated the entire CWPP region as Wildland Urban Interface (WUI). Treatment to reduce fuels will help lessen the risk of wildfire within the WUI. The NFS can utilize federal and state grant funding to cost-share fuels reduction treatments throughout the CWPP region.

Legislative Background

To be eligible for federal conservation cost-share funding assistance, the US government requires states to prepare action plans that lay out a strategy for forest and wildlife conservation. The Nebraska Game and Parks Commission (NGPC) published the Nebraska Natural Legacy Project (NNLP) in 2005 as the state's first Wildlife Action Plan (updated in 2011). It identified 40 biologically unique landscapes (BULs) to help prioritize where conservation work can best be directed. The Southeast CWPP region lies within the Tallgrass Prairie Ecoregion identified in the NNLP. All or parts of the Rainwater Basin, Southeast Prairies, Rulo Bluffs, Indian Cave Bluffs, Saline Wetlands, Lower Platte River, and Missouri River BULs are found within this CWPP boundary (see Appendix B).

In accordance with the 2008 Farm Bill's requirement for states to conduct a comprehensive analysis of their forests, in 2011 the NFS published the Statewide Forest Resource Assessment and Strategy, known as the Forest Action Plan (FAP). This plan was updated in 2015 and 2020. Priority forest areas were identified throughout the state using the National Land Cover Dataset. This dataset represents 15 land cover and land use types including open water, development, crops, shrubs, grasslands, wetlands, and forests. The Nemaha River Priority Landscape and parts of the Lower Platte River, Missouri River, and Blue Rivers Priority Landscapes are located within this CWPP boundary (Map 1). A full description of the Priority Landscapes is found in the Nebraska Forest Action Plan: <https://nfs.unl.edu/statewide-forest-action-plan>.

The Healthy Forest Restoration Act (US Congress, 2003) requires CWPPs to be developed collaboratively; identify and prioritize areas for fuels reduction and methods to reduce fuels on those areas; and recommend strategies to reduce structural ignitability. This CWPP addresses these requirements and other needs identified by stakeholders.

Plan Integration

The components of the State Emergency Operations Plan are patterned after the National Response Plan. The Nebraska Emergency Management Agency (NEMA) prepared a basic plan that details Nebraska's operational

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functions approach to the response and recovery phase of emergency management. It defines the roles and responsibilities of the responding and supporting agencies and organizations and defines broad policies, plans, and procedures.³

Each county has its own Local Emergency Operations Plan (LEOP). The content of these plans is defined by statute, which stipulates that each LEOP consist of specific components, including operations, organization and responsibilities; functional annexes supporting activities critical to emergency response and recovery; technical information on response procedures; protective measures unique to a hazard; and methods for use in emergency operations. It is the responsibility of local emergency management staff to maintain the LEOP according to the guidance from the State.³ While wildfire is not discussed in detail in most LEOPs, each contains an “Annex F” that covers fire services and includes a listing of county fire departments and mutual aid partners, as well as equipment lists. Fire department information is listed in Appendix F of this CWPP. Mutual aid associations are listed in Appendix E.

Nebraska also has a state Hazard Mitigation Plan (HMP), which establishes the policies, plans, guidelines, and procedures for the Hazard Mitigation Program in Nebraska. NEMA coordinated with regional emergency management agencies, Natural Resource Districts (NRDs), and counties to update and maintain multi-jurisdictional hazard mitigation plans throughout the state.⁴ Butler and Saunders Counties are included in the Lower Platte North NRD’s plan. Cass and Lancaster Counties are part of the Lower Platte South NRD’s HMP. Gage County is in the Lower Big Blue NRD’s plan. Johnson, Nemaha, Otoe, Pawnee, and Richardson Counties are included in the Nemaha NRD’s HMP. Sarpy County is in the Pappio-Missouri NRD’s plan. Seward County is in the Upper Big Blue NRD’s plan. Appendix D contains links to these HMPs.

This CWPP strives to coordinate with existing state, federal, tribal, and local plans and provides specific detail on wildfire hazards, areas at-risk from wildfire, emergency operations and capacity, and critical infrastructure. It includes an action plan addressing wildfire-specific issues including a risk assessment procedure, risk reduction measures, preparedness recommendations, training and education, fuels mitigation strategies, and a monitoring and evaluation plan.

Goals and Objectives

State Action Plan Goals and Objectives

This CWPP and the results of its implementation relate directly or indirectly to all of the FAP goals and objectives:

1. Enhance and promote the role of Nebraska’s forest and trees for climate mitigation and help Nebraskans adapt to the global change in climate
2. Manage the trees, and forest landscapes to include rural and community forest settings
3. Manage the function of the forest and tree systems in Nebraska for sustained benefits
4. Improve, protect, and enhance fish and wildlife habitat in Nebraska
5. Restore fire-adapted landscapes to reduce risk of wildfire impacts on Nebraska’s trees, forests, and communities
6. Manage for the health and productivity of Nebraska’s trees and forests
7. Manage and build the capacity of Nebraska’s trees and forests to benefit our forest products, industry, ranching and farming, and our communities, which are vital to Nebraska’s economy
8. Maintain the natural environments of Nebraska including our trees and forests, waterways, and rangelands
9. Maintain the water resources of Nebraska and the function of Nebraska’s forest and trees
10. Improve air quality and energy conservation
11. Connect people to trees and forests
12. Engage people to enhance their environmental stewardship

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Sustainable forest management maintains natural environments and reduces wildfire impacts in the region's riparian forests and adjacent communities, and reduces threats to ecosystem health. Healthy forests and grasslands, in turn, protect air and water resources and fish and wildlife habitat, and these ecosystems are better able to cope with a changing climate. Communities that plan for and reduce wildfire risks and engage in environmental stewardship activities may also reap both direct and indirect economic benefits of healthy forests in fire-adapted landscapes.

Implementation of this CWPP relates directly to the NNLP goals of conserving natural communities, keeping common species common, and protecting at-risk species. Sustainably managed, fire-adapted forests include a diversity of habitats for both at-risk and common species. Restoring unnaturally dense forests to a more natural mosaic vegetative pattern benefits both wildlife and human communities.

CWPP Goals and Objectives

The steering committee other stakeholders identified the following goals and objectives for this CWPP:

1. Identify hazards and areas at risk
 - a. Identify factors associated with wildfire risk
 - b. Evaluate areas to determine risk
2. Reduce wildfire risk to identified areas
 - a. Partner with landowners, land managers, fire personnel, and natural resources agencies and organizations to incorporate their concerns and objectives in fire management programs
 - b. Identify, prioritize, and treat hazardous fuels
 - c. Suppress unplanned ignitions to protect private property and natural and cultural resources from unacceptable impacts attributable to fire
 - d. Support emergency response through training and acquisition of equipment
3. Promote wildfire prevention and education
 - a. Increase public awareness of wildfire and damage from uncharacteristic wildfires
 - b. Educate the public in *Firewise*[®] landscaping and construction techniques
 - c. Reduce fire hazards through construction of defensible fuel spaces that protect communities and resources
 - d. Encourage communities to develop strategies to reduce wildfire risk; provide communities with tools to address human-caused fires
 - e. Encourage integration of fire prevention into schools; address accidental ignitions caused by children
4. Restore fire-adapted ecosystems
 - a. Provide training to enable rapid assessments of burned lands and the implementation of stabilization techniques
 - b. Encourage land managers to control non-native invasive plant species and to actively manage prolific and aggressive native species such as eastern redcedar
5. Enhance communications among fire departments, agencies, and organizations involved with fire management
 - a. Train fire departments in the use of the V-TAC and UHF mutual aid radio channels
 - b. Educate fire departments and 911 dispatchers about notifying assisting mutual aid departments which V-TAC or UHF channel will be used when arriving at an event
6. Establish a monitoring and evaluation process
 - a. Annually evaluate the CWPP implementation effectiveness and recommend changes as needed
 - b. Conduct monitoring of selected collaboratively developed projects and activities to assess progress and effectiveness

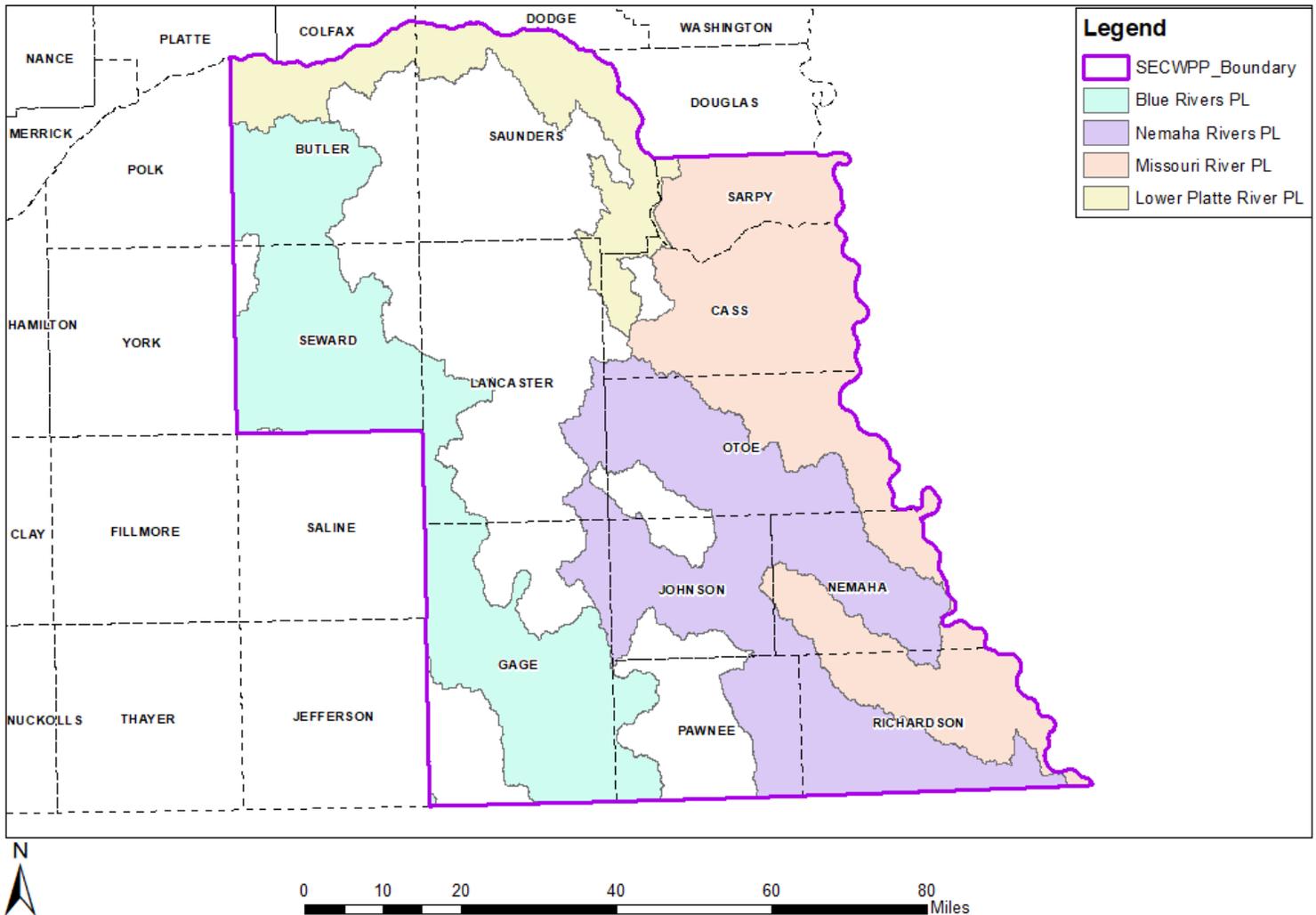
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Priority Landscapes

The area within the CWPP boundary contains a range of landscapes, including riparian woodlands, tallgrass prairie, and farmland. At the state level, the FAP identified Priority Landscapes to help focus effort and funding on landscape-scale projects (Map 1). Additionally, within each county, local stakeholders have identified “Areas of Concern”—specific areas that are most at risk for wildfire within the larger landscapes. Some of these overlap the statewide Priority Landscapes. Maps of these Areas of Concern appear in Appendix A.

Unnaturally dense and unhealthy woodlands and encroachment of eastern redcedar into grasslands continue to create extreme wildfire risk. Drought cycles are predicted to occur with increasing frequency. Communities can protect structures by reducing their ignitability, reducing the surrounding woody fuels, and improving access for emergency equipment. Priority Landscapes help focus management activities on areas most at-risk.

Southeast Nebraska CWPP Region Priority Landscapes



Map 1: The principal Priority Landscapes in this CWPP region are found in the counties along the Missouri, Platte, Nemaha, and Big Blue Rivers. These landscapes include many locally-identified Areas of Concern, but many at-risk locations, including WUIs surrounding communities, have been identified in other parts of the CWPP region, where hazard reduction activities can also be targeted. Areas of Concern maps are located in Appendix A.

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Process

The first step in the CWPP planning process was to establish a core working group of stakeholders to form a steering committee and planning team. Information about the purpose of the CWPP and an invitation to participate in the process was given to each of the 12 county boards within the region. Counties appointed individuals to the steering committee to help guide the process.

An outreach notice was sent to stakeholders and other potentially interested parties, including fire districts and emergency management personnel within the CWPP region, municipal governments, natural resources districts, federal and state agencies, state legislators, and non-government organizations. The steering committee was rounded out from responses to this outreach. Containing a mix of county board appointments and volunteers, it included representatives from local fire departments, local and state emergency management, NRDs, the NFS, NEMA, municipalities, the Natural Resources Conservation Service (NRCS), NGPC, the US Fish and Wildlife Service (USFWS), the National Park Service (NPS), and the Bureau of Indian Affairs (BIA).

The steering committee defined the region's WUI. For planning purposes, each county within the CWPP boundary is considered a WUI community. County officials, fire department personnel, and steering committee members designated areas of concern within each county that are particularly at-risk from wildfire. The committee established goals and objectives and provided the locally-focused framework for the CWPP.

The NFS sent a questionnaire to all of the fire departments in the CWPP region asking for current contact information, list of equipment, and pertinent issues, concerns, and priorities. Thirty-eight of the 102 fire departments returned the survey. Responses to this survey appear in Appendix F, along with information obtained from Annex F of each county's LEOP for all fire departments located entirely or partially within the CWPP boundary. The fire department survey and distribution list appear in Appendix G.

A news release describing the planning process was sent to local newspapers and radio stations providing contact information and encouraging public input. Information was posted on social media pages and a flyer was posted in county and municipal offices and in popular gathering places to extend the outreach. The stakeholder list, outreach letters, and media releases appear in Appendix H.

Feedback from the initial outreach was incorporated into a draft document, along with background information, risk assessment, and an action plan. After review by the steering committee, the draft was released for a 60-day public review period. Comments on the draft CWPP were incorporated into the final document which was then sent to the county boards for signature. Copies of the final document were sent to each county for distribution to local officials. The plan is also available online at <https://nfs.unl.edu/documents/CWPP/Southeast.pdf>.

Overview

This section contains background information common to all counties within the CWPP region. Information specific to only certain areas is included in the county sections.

Landforms, Climate and Weather

The Southeast Nebraska CWPP region lies within the Tallgrass Prairie Ecoregion. The northwest part of this region sits atop the Ogallala Aquifer, which underlies about 175,000 square miles in eight states from Texas to South Dakota.

Nebraska has a continental climate with cold winters and hot summers. The National Climatic Data Center reported 2012-2013 as central Nebraska's warmest, driest years on record, with some areas receiving less than half of normal rainfall. In recent decades droughts have become more severe, with peaks about every six years. Extreme drought and wildfire years occurred in 1988, 1994, 2000, 2006 and 2012. In 2018 and 2019, Nebraska did not follow that pattern, and was wetter and cooler than normal, with some areas producing a high amount

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of fine fuels that created heavier-than-normal fuel loads during the following months. Although Nebraska did not report extremely large wildfires in 2018 or 2019, many parts of the western United States did experience record heat and wildfires during the 2018 and 2019 fire seasons.

Weather data was obtained from the University of Nebraska High Plains Regional Climate Center⁵ and Iowa State University.⁶ Weather factors, including temperature, precipitation, humidity, and wind, define fire season, as well as fire direction and speed. There are two fire seasons in this area. The early fire season occurs from snowmelt and the last spring frost (when the previous year’s cured vegetation dries) until early May, then eases as vegetation greens up. The late season begins in mid to late summer as fine fuels, such as grasses and forbs, begin to dry. In most years the late season extends to mid-November, coinciding with agriculture crop harvests, leaf drop, and curing of prairie grasses. Wet springs can delay the onset of the early season, but they produce more fine fuels in ditches and across rangelands that, in late summer and fall, become tinder for sparks that can start wildfires. In drier years fine fuels can start curing by mid- to late July, but there is less growth, and consequently fewer fine fuels to catch sparks from trains, farm equipment, or motorists.

| County | April | | | July | | | October | | |
|------------|------------|---------|---------|------------|---------|---------|------------|---------|---------|
| | Max. Temp. | Precip. | Min. RH | Max. Temp. | Precip. | Min. RH | Max. Temp. | Precip. | Min. RH |
| Butler | 62.01 | 2.79 | 36.50 | 86.74 | 3.36 | 60.00 | 64.39 | 2.06 | 44.75 |
| Cass | 63.66 | 3.97 | 35.75 | 87.23 | 4.05 | 59.75 | 65.75 | 2.31 | 43.25 |
| Gage | 63.89 | 2.95 | 35.25 | 88.38 | 4.20 | 56.00 | 66.31 | 2.21 | 42.75 |
| Johnson | 63.82 | 2.95 | 33.00 | 88.04 | 4.28 | 58.00 | 66.37 | 2.31 | 41.25 |
| Lancaster | 63.46 | 2.79 | 33.50 | 87.86 | 3.91 | 52.00 | 65.74 | 2.21 | 40.50 |
| Nemaha | 64.12 | 3.37 | 36.25 | 87.79 | 4.78 | 58.00 | 66.34 | 2.51 | 42.50 |
| Otoe | 63.87 | 3.23 | 34.00 | 87.70 | 4.42 | 60.00 | 66.15 | 2.40 | 41.00 |
| Pawnee | 64.22 | 3.05 | 36.25 | 88.32 | 4.47 | 58.00 | 66.74 | 2.38 | 42.50 |
| Richardson | 64.75 | 3.18 | 36.25 | 88.54 | 4.85 | 58.00 | 66.94 | 2.57 | 42.50 |
| Sarpy | 63.32 | 3.74 | 35.75 | 86.53 | 3.85 | 59.75 | 65.14 | 2.28 | 43.25 |
| Saunders | 62.59 | 2.99 | 37.50 | 86.83 | 3.60 | 59.50 | 64.72 | 2.21 | 45.50 |
| Seward | 62.98 | 2.58 | 35.75 | 87.46 | 3.59 | 55.25 | 65.48 | 2.06 | 42.50 |

Table 1: Average maximum temperatures (degrees F), precipitation (inches) and median minimum relative humidity (percent) 1982-2018 for April, July, and October for Southeast Nebraska CWPP counties. RH data interpolated from selected weather stations.⁵

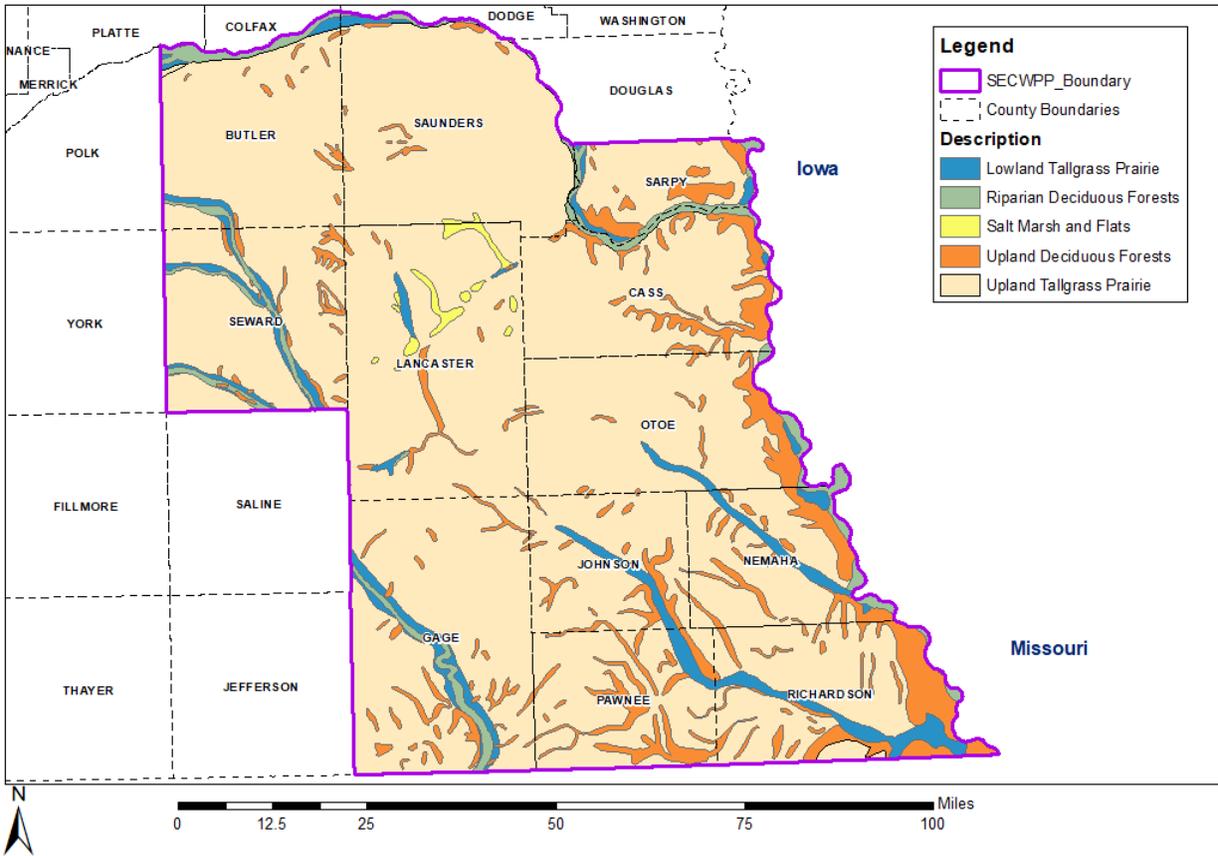
Wind is a primary factor in fire spread, even where fuels are light and/or discontinuous as it is in much of the plan area. Many areas are more than half agriculture and grass fuels. Wind rosettes for April, July, and October from eight stations in or near the plan area—Beatrice, Columbus, Falls City, Fremont, Lincoln, Nebraska City, Plattsmouth, and York—are in Appendix C.

Vegetation and Natural Communities

Native vegetation in the Southeast Nebraska CWPP Region is primarily tallgrass prairie, with riparian deciduous forests in the drainages.⁷ Eastern redcedar occurs in the deciduous woodlands along the Big Blue, Nemaha, Platte, and Missouri Rivers and their tributaries, and in some areas has encroached into the prairies. Agricultural fields occupy most of the rural areas in the region. A land cover map⁸ appears in Appendix A.

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Southeast Nebraska CWPP Region Vegetation Types



Map 2: The Southeast Nebraska CWPP counties are dominated by tallgrass prairie, with lowland tallgrass prairie and riparian deciduous forests along the rivers. Salt marshes and flats are scattered across the northern half of Lancaster County.⁷

Land Use

There are about 4,378,240 acres (6,841 sq. mi.) in the Southeast Nebraska CWPP region, which includes Butler, Cass, Gage, Johnson, Lancaster, Nemaha, Otoe, Pawnee, Richardson, Sarpy, Saunders, and Seward Counties. Public, tribal, and conservation lands include 28,949 acres in 71 NGPC Wildlife Management Areas (WMAs); 16,718 acres in 20 NGPC State Recreation Areas (SRAs); 117 acres in 6 other NGPC properties; 187 acres in USFWS Waterfowl Protection Areas in Seward Co.; 5,822 acres in 43 NRD-managed tracts; 235 acres managed by the NFS; 142 acres at Homestead National Monument managed by the National Park Service; 713 municipal watershed acres in 11 tracts; 5,150 acres in six US Department of Defense properties; and 13,436 acres in tribal lands. There are approximately 3,291 acres in Nebraska School Lands.⁹ There are also many county and municipal properties in the CWPP region. The remainder of the land in the Southeast CWPP area is privately owned. Non-profit conservation organizations manage 2,196 acres in 90 properties.

The US Army Corps of Engineers (USACE), owns 14 flood control lakes in the Lincoln and Omaha metropolitan area, including lakes in both the Southeast Nebraska and the Missouri River East CWPP Regions. These lakes are managed for conservation and public recreation by local entities (NGPC, NRDs, and municipalities) and those that lie within the SECWPP region are included in the above listing. Although the land is owned by the federal government, the recreation and associated land management responsibilities are handled by the lessees and partners. As landowners, USACE tries to promote fire protection, but the actual on-the-ground work and fire response is the responsibility of the partners managing the land. In the SECWPP region, the agency has specific

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wildfire-related concerns about Holmes Lake, located in the heart of Lincoln and surrounded by many homes and apartments. Visitation is high and agency staff believes the associated risks are high as well.

*Table 2: The US Army Corps of Engineers provided the following 2018 visitation estimates.**

| County | Lake | 2018 Visitation | Local Managing Entity |
|-----------|-----------------|-------------------|--------------------------|
| Lancaster | Holmes Lake | No data available | City of Lincoln |
| | Yankee Hill WMA | 29,588 | NGPC |
| Sarpy | Wehrspann | 98,408 | Papio-Missouri River NRD |
| Seward | Twin Lakes WMA | 31,673 | NGPC |

* USACE stresses that these are rough estimates; visitation rates have not been physically measured recently

Agriculture (crops and livestock) is the predominant use on rural private and school lands. Residential, commercial, manufacturing, and industrial land uses dominate the region’s 121 incorporated cities and villages and their immediate surroundings. Land use is primarily agricultural in the region’s 20 unincorporated communities. Rural residential land use exists in conjunction with agricultural operations. According to US census data, there are just over 628,329 permanent residents in the 12 counties within the CWPP region.

All counties in the CWPP region except Butler and Nemaha have county zoning plans in place. There are currently no restrictions in any of the counties for new building construction in fire-prone areas.

Popular outdoor recreational activities include hiking, biking, hunting, fishing, boating, and camping at federal, state, NRD, and municipal recreation areas in the region. Tables 2 and 3 include visitation data for some of the more popular recreation destinations.

*Table 3: The Nebraska Game and Parks Commission provided the following visitation estimates.**

| County | Unit Name | 2018 Visitation | 2019 Visitation |
|-----------|----------------------|-------------------|-------------------|
| Cass | E.T. Mahoney SP | 827,372 | 800,129 |
| | Platte River SP | 532,451 | 518,383 |
| | Louisville SRA | 307,141 | 269,628 |
| Gage | Rockford SRA | 9,114 | 8,770 |
| Lancaster | Branched Oak SRA | 142,391 | 122,464 |
| | Pawnee SRA | 351,434 | 277,894 |
| | Conestoga SRA | 19,693 | 15,552 |
| | Wagon Train SRA | 299,086 | 235,625 |
| | Stagecoach SRA | 103,853 | 85,809 |
| | Bluestem SRA | 89,655 | 83,231 |
| | Olive Creek SRA | 10,533 | 7,929 |
| Nemaha | Indian Cave SP | 261,100 | 224,100 |
| Otoe | Riverview Marina SRA | 27,500 | 700 |
| | Arbor Lodge SHP | No data available | No data available |
| Sanders | Memphis SRA | 9,980 | No data available |
| Sarpy | Schramm SRA | 38,551 | 24,995 |

* NGPC noted that numbers were down in 2019 due to flooding

Close to three million people visit NGPC park and recreation areas in the CWPP region each year.¹⁰ Although no visitor numbers are available for state WMAs, NGPC staff reports significant use by anglers and hunters.

Infrastructure

Webster defines infrastructure as: “the system of public works of a country, state, or region; also: the resources (such as personnel, buildings, or equipment) required for an activity.” In the Southeast Nebraska CWPP region, infrastructure includes county, state, tribal, and federal roads and bridges, communications systems, the power

Southeast Nebraska Community Wildfire Protection Plan

grid, water systems, hospitals, schools, parks and fairgrounds, public administration buildings, fire halls, public officials, law enforcement officers, and fire personnel. These systems, structures and people are critical to regional functionality. One of the goals of community planning is to protect the basic physical and organizational structure of communities. This infrastructure, in turn, protects citizens.

Regional infrastructure expedites access to a fire by emergency responders, allows them to communicate with one another and the public, facilitates evacuations and support functions, and assists recovery efforts after the event. It is important for both local and out-of-area responders to know what facilities and resources are available and where they are located.

Emergency evacuations depend on infrastructure. Immediate evacuation destinations are likely to be in areas away from the fire that have water, power, and room for gathering. Often fairgrounds and parks make good short-term destinations, as they have large parking areas, restrooms, and electricity. In a wildfire evacuation scenario, local officials will designate immediate evacuation destinations. During prolonged evacuation periods or when homes or access routes have been destroyed, longer range planning is needed. The Department of Homeland Security's website <https://www.ready.gov/evacuating-yourself-and-your-family> offers some ideas.

Prescribed Fire and Prescribed Burn Associations

In recent years, prescribed fire has increased as a method of keeping eastern redcedar encroachment in check, particularly in grasslands. Practitioners include individual landowners, groups of landowners in organized prescribed burn associations, non-profit organizations, and public agencies. The Tri-County Prescribed Burn Association operates in Lancaster, Seward, and Saline Counties. The Bohemian Alps Prescribed Burn Association operates in Butler and Saunders Counties.

Wildland Urban Interface

The WUI is defined as areas where homes and other structures are built near or on lands prone to wildfire. According to the "Ready, Set, Go!" program, managed by the International Association of Fire Chiefs, the WUI is not necessarily a place, but a set of conditions that can exist in nearly every community. It can be a major subdivision or it can be four homes on an open range. National Fire Protection Association literature states that conditions include, but are not limited to, the amount, type, and distribution of vegetation; the flammability of the structures in the area and their proximity to fire-prone vegetation and to other combustible structures; weather patterns and general climate conditions; topography; hydrology; average lot size; and road construction. The WUI exists in every state in the country, and in every county/community within the CWPP boundary. The CWPP planning team has designated the entire CWPP region as WUI. Site-specific WUI issues are listed in each county section of this CWPP.

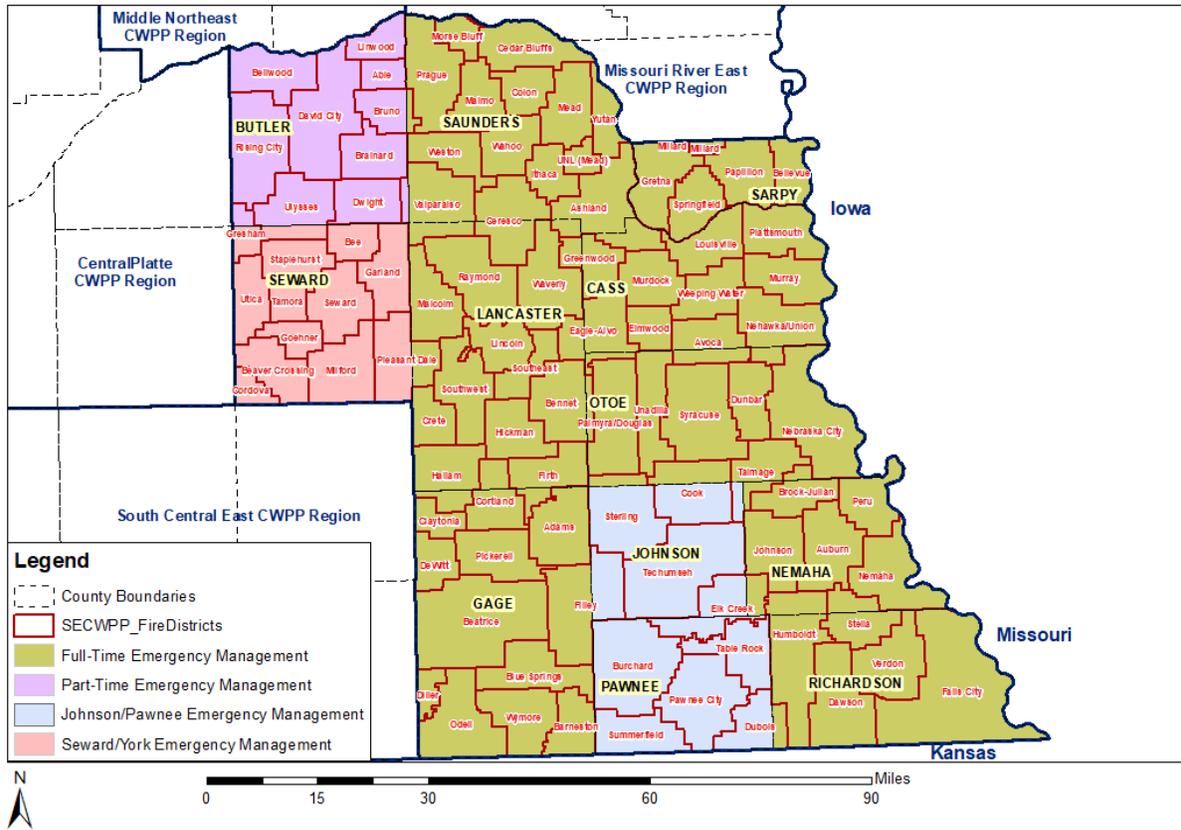
Fire Districts

There are 102 rural and municipal fire districts all or partially within the CWPP boundary. These are shown on Map 2. Reported fires by district are summarized in Table 5.

Each fire department was asked to provide current contact information, equipment lists, and a summary of their wildfire issues and concerns. The responses received appear in Appendix F.

Southeast Nebraska Community Wildfire Protection Plan

Southeast Nebraska CWPP Region Fire Districts and Emergency Management Areas



Map 3: Fire Districts all or partly within the Southeast Nebraska CWPP Region.

Wildfire Hazard: History and Impacts

Historic Role of Fire

Prior to European settlement, large fires (started by lightning or intentionally as management activities by indigenous people) were common, and these fires kept the prairies free of most woody vegetation. Table 4 shows the prairies in the Southeast Nebraska region may have experienced a replacement fire interval of 3 to 5 years prior to Euro-American influence. However, since settlement, people have become increasingly adept at suppressing wildfire. Without fire, over time, forests became densely overcrowded and woody vegetation encroached on prairies.

| Vegetation Community | Fire Severity | Fire Regime Characteristics | | | |
|---------------------------|----------------|-----------------------------|-----------------------|-----------------------|--------------------------|
| | | % of Fires | Mean Interval (years) | Min. Interval (years) | Maximum Interval (years) |
| Central Tallgrass Prairie | Replacement | 75 | 5 | 3 | 5 |
| | Mixed | 11 | 34 | 1 | 100 |
| | Surface or Low | 13 | 28 | 1 | 50 |

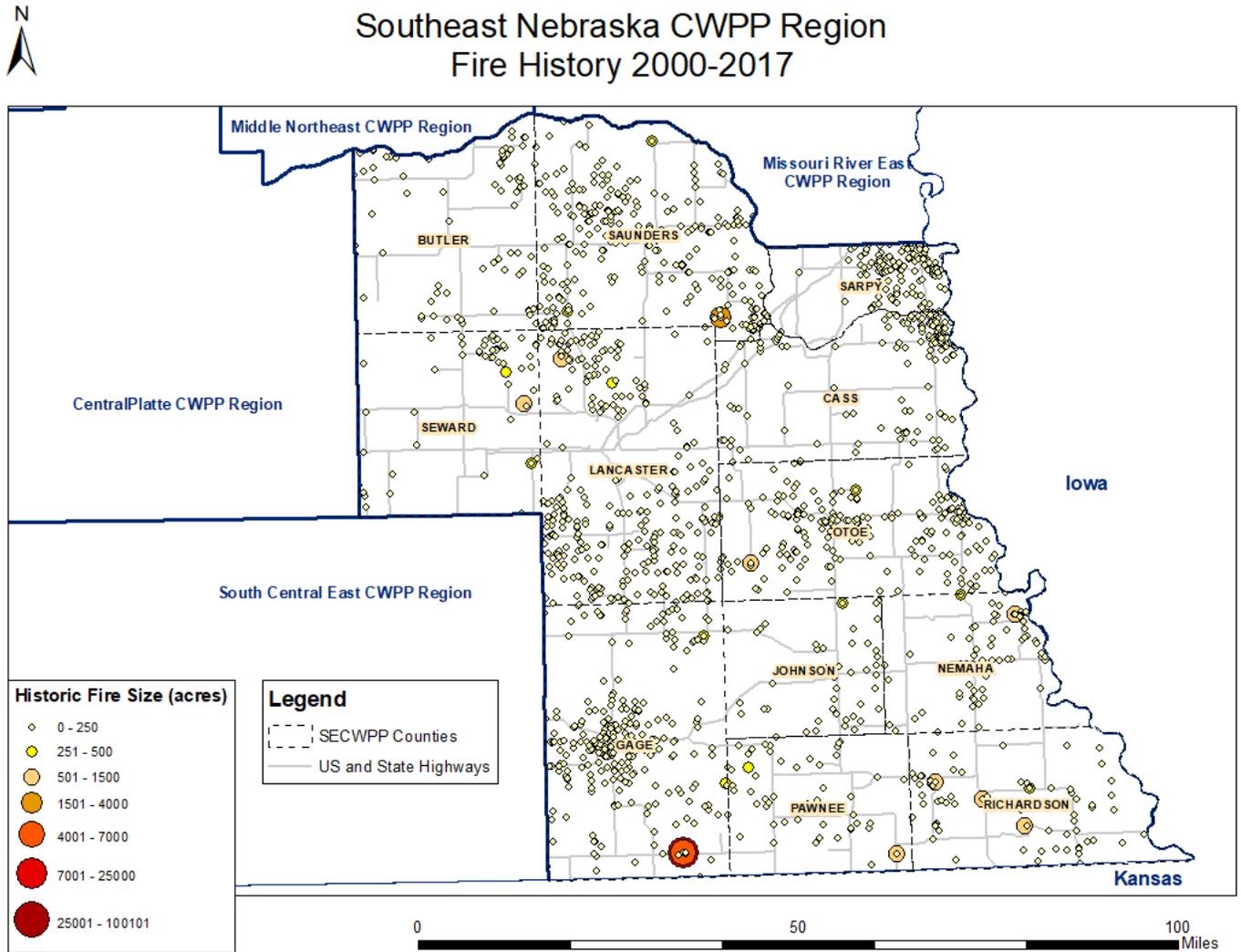
Table 4: Fire intervals for the Central Tallgrass Prairie type is shown above.¹¹

Local Fire History

Nebraska is no stranger to extremely large fires. In 1865 the US Army and ranchers intentionally set a 300 mile wide prairie fire during a dispute with Native Americans. The fire blackened the entire section of Nebraska south of the Platte River and west of Fort Kearny. It was visible from Colorado and Kansas, and eventually burned all the way to Texas. In Southeast Nebraska, wildfires exceeding 200 acres in size have occurred in nearly all of the

Southeast Nebraska Community Wildfire Protection Plan

CWPP counties, and fires larger than 1,000 acres have occurred in half of the counties. The largest fires reported to the NFS were 7,500 acres and 5,000 acres in Gage County in April, 2000; 2,000 acres in Saunders County in March, 2014; and 1,200 acres in Nemaha County in March, 2014. Map 3 shows the locations of some of the larger fires reported in the CWPP area since 2000. In 2012, fire departments from across the state, including southeast Nebraska, provided support for major wildfires that burned nearly half a million acres in the Pine Ridge and the Niobrara Valley areas of Nebraska. As observed that year, and evidenced in historical research, rivers are not always a barrier to fire spread.¹²



Map 4: Some of the larger fires reported in the CWPP area since 2000 are shown in the map above. Departments reported 48 fires greater than 200 acres that burned nearly 34,000 acres.

Some fire districts voluntarily report their annual fire response data to the NFS. Table 5 shows the fire data reported by fire departments from 2000 to 2018.¹³ Because the fire districts vary in their level of reporting, there is no accurate, comprehensive fire history available for the CWPP area.

| Fires Reported 2000-2018 | | | | | | | |
|--------------------------|---------------|---------------|-------------------|-------------------|---------------|---------------|----------------------|
| Department | # Fires Human | # Acres Human | # Fires Lightning | # Acres Lightning | Total # Fires | Total # Acres | Mutual Aid Responses |
| Abie | 17 | 188 | 0 | 0 | 17 | 188 | 5 |
| Adams | 37 | 214 | 3 | 573 | 40 | 787 | 5 |

Southeast Nebraska Community Wildfire Protection Plan

| Department | # Fires Human | # Acres Human | # Fires Lightning | # Acres Lightning | Total # Fires | Total # Acres | Mutual Aid Responses |
|----------------------|---------------|---------------|-------------------|-------------------|---------------|---------------|----------------------|
| Alvo | 5 | .05 | 0 | 0 | 5 | .05 | 0 |
| Ashland | 128 | 3,688 | 0 | 0 | 128 | 3,688 | 20 |
| Auburn | 58 | 225 | 1 | .01 | 59 | 225 | 11 |
| Avoca | 23 | 77 | 0 | 0 | 23 | 77 | 3 |
| Barneston | 32 | 13,624 | 0 | 0 | 32 | 13,624 | 8 |
| Beatrice City | 31 | 10 | 0 | 0 | 31 | 10 | 109 |
| Beatrice Rural | 189 | 1,266 | 3 | 1 | 192 | 1,267 | 13 |
| Beaver Crossing | 5 | 26 | 0 | 0 | 5 | 26 | 0 |
| Bee | 33 | 324 | 1 | .01 | 34 | 324 | 10 |
| Bellevue | 79 | 74 | 2 | 1 | 81 | 75 | 17 |
| Bellwood | 43 | 90 | 0 | 0 | 43 | 90 | 1 |
| Bennet | 148 | 675 | 2 | 11 | 150 | 686 | 15 |
| Blue Springs | 79 | 1,510 | 1 | .1 | 80 | 1,510 | 15 |
| Brainard | 22 | 295 | 0 | 0 | 22 | 295 | 5 |
| Brownville | 8 | 14 | 0 | 0 | 8 | 14 | 3 |
| Bruno | 7 | 41 | 0 | 0 | 7 | 41 | 0 |
| Burchard | 58 | 2,465 | 1 | .001 | 59 | 2,465 | 3 |
| Cedar Bluffs | 16 | 372 | 0 | 0 | 16 | 372 | 0 |
| Ceresco | 15 | 19 | 0 | 0 | 15 | 19 | 3 |
| Clatonia | 23 | 215 | 0 | 0 | 23 | 215 | 0 |
| Colon | 12 | 51 | 0 | 0 | 12 | 51 | 0 |
| Cook | 19 | 938 | 0 | 0 | 19 | 938 | 0 |
| Cordova | 9 | 111 | 0 | 0 | 9 | 111 | 1 |
| Cortland | 29 | 67 | 0 | 0 | 29 | 67 | 18 |
| Crete | 157 | 1,738 | 2 | 1 | 159 | 1,739 | 21 |
| David City | 58 | 754 | 0 | 0 | 58 | 754 | 1 |
| Dawson | 32 | 2,240 | 1 | 2 | 33 | 2,242 | 2 |
| Dewitt | 9 | 37 | 0 | 0 | 9 | 37 | 0 |
| Diller | 42 | 274 | 2 | 4 | 44 | 278 | 7 |
| Dubois | 8 | 1,098 | 0 | 0 | 8 | 1,098 | 0 |
| Dunbar | 12 | 112 | 0 | 0 | 12 | 112 | 11 |
| Dwight | 19 | 397 | 5 | 5 | 24 | 402 | 4 |
| Eagle | 30 | 195 | 1 | 1 | 31 | 196 | 4 |
| Elmwood | 7 | 16 | 0 | 0 | 7 | 16 | 11 |
| Elk Creek | 47 | 1,156 | 0 | 0 | 47 | 1,156 | 0 |
| Falls City Rural | 92 | 688 | 1 | 2 | 93 | 690 | 4 |
| Falls City Volunteer | 5 | 13 | 0 | 0 | 5 | 13 | 0 |
| Filley | 21 | 694 | 1 | 10 | 22 | 704 | 2 |
| Firth | 88 | 640 | 0 | 0 | 88 | 640 | 12 |
| Garland | 17 | 1,664 | 2 | 4 | 19 | 1,668 | 1 |
| Goehner | 3 | 11 | 0 | 0 | 3 | 11 | 6 |
| Greenwood | 44 | 182 | 1 | 2 | 45 | 183 | 1 |
| Gresham | 21 | 161 | 0 | 0 | 21 | 161 | 0 |
| Gretna | 5 | 70 | 0 | 0 | 5 | 70 | 0 |

Southeast Nebraska Community Wildfire Protection Plan

| Department | # Fires Human | # Acres Human | # Fires Lightning | # Acres Lightning | Total # Fires | Total # Acres | Mutual Aid Responses |
|---------------|---------------|---------------|-------------------|-------------------|---------------|---------------|----------------------|
| Hallam | 87 | 1,384 | 1 | 1 | 88 | 1,385 | 33 |
| Hickman | 125 | 877 | 0 | 0 | 125 | 877 | 18 |
| Humboldt | 42 | 1,929 | 1 | 2 | 43 | 1,931 | 4 |
| Ithaca | 20 | 29 | 0 | 0 | 20 | 29 | 1 |
| Johnson | 20 | 176 | 4 | 125 | 24 | 301 | 0 |
| Julian | 113 | 884 | 5 | 4 | 118 | 888 | 9 |
| Linwood | 25 | 168 | 1 | .1 | 26 | 168 | 1 |
| Louisville | 35 | 112 | 1 | .01 | 36 | 112 | 1 |
| Malcolm | 7 | 47 | 0 | 0 | 7 | 47 | 0 |
| Malmo | 16 | 49 | 0 | 0 | 16 | 49 | 0 |
| Mead | 21 | 227 | 0 | 0 | 21 | 227 | 46 |
| Milford | 1 | 1 | 0 | 0 | 1 | 1 | 0 |
| Morse Bluff | 16 | 291 | 0 | 0 | 16 | 291 | 4 |
| Murdock | 12 | 226 | 0 | 0 | 12 | 226 | 1 |
| Murray | 3 | 15 | 0 | 0 | 3 | 15 | 0 |
| Nebraska City | 126 | 1,029 | 1 | .01 | 127 | 1,029 | 3 |
| Nehawka | 21 | 143 | 0 | 0 | 21 | 143 | 15 |
| Nemaha | 13 | 1,209 | 0 | 0 | 13 | 1,209 | 0 |
| Odell | 28 | 124 | 0 | 0 | 28 | 124 | 2 |
| Palmyra | 10 | 209 | 0 | 0 | 10 | 209 | 2 |
| Papillion | 95 | 98 | 0 | 0 | 95 | 98 | 1 |
| Pawnee City | 40 | 1,139 | 0 | 0 | 40 | 1,139 | 5 |
| Peru | 38 | 927 | 0 | 0 | 38 | 927 | 3 |
| Pickrell | 7 | 130 | 0 | 0 | 7 | 130 | 0 |
| Plattsmouth | 131 | 1,149 | 0 | 0 | 131 | 1,149 | 32 |
| Pleasant Dale | 65 | 1,340 | 1 | .25 | 66 | 1,341 | 3 |
| Prague | 46 | 208 | 1 | 1 | 47 | 209 | 8 |
| Raymond | 63 | 1,699 | 0 | 0 | 63 | 1,699 | 17 |
| Rising City | 13 | 88 | 0 | 0 | 13 | 88 | 0 |
| Southeast | 29 | 92 | 0 | 0 | 29 | 92 | 3 |
| Southwest | 104 | 283 | 0 | 0 | 104 | 283 | 6 |
| Springfield | 3 | 3 | 0 | 0 | 3 | 3 | 0 |
| Staplehurst | 1 | 3 | 0 | 0 | 1 | 3 | 0 |
| Steinauer | 14 | 87 | 0 | 0 | 14 | 87 | 1 |
| Stella | 23 | 312 | 1 | 1 | 24 | 313 | 14 |
| Sterling | 38 | 885 | 2 | 6 | 40 | 891 | 0 |
| Syracuse | 88 | 612 | 0 | 0 | 88 | 612 | 16 |
| Table Rock | 44 | 1,401 | 2 | 2 | 46 | 1,403 | 0 |
| Talmage | 20 | 51 | 0 | 0 | 20 | 51 | 2 |
| Tamora | 7 | 132 | 0 | 0 | 7 | 132 | 2 |
| Tecumseh | 38 | 833 | 1 | .1 | 39 | 833 | 1 |
| Ulysses | 17 | 191 | 1 | .25 | 18 | 191 | 2 |
| Unadilla | 57 | 853 | 2 | 5 | 59 | 859 | 6 |

Southeast Nebraska Community Wildfire Protection Plan

| Department | # Fires Human | # Acres Human | # Fires Lightning | # Acres Lightning | Total # Fires | Total # Acres | Mutual Aid Responses |
|---------------|---------------|---------------|-------------------|-------------------|---------------|---------------|----------------------|
| Union | 15 | 247 | 0 | 0 | 15 | 247 | 12 |
| Utica | 11 | 83 | 0 | 0 | 11 | 83 | 2 |
| Valparaiso | 98 | 1,462 | 0 | 0 | 98 | 1,462 | 23 |
| Verdon | 19 | 807 | 1 | .01 | 20 | 807 | 1 |
| Wahoo | 63 | 805 | 0 | 0 | 63 | 805 | 4 |
| Waterloo | 55 | 79 | 6 | 1 | 61 | 79 | 13 |
| Waverly | 30 | 111 | 0 | 0 | 30 | 111 | 4 |
| Weeping Water | 11 | 23 | 0 | 0 | 11 | 23 | 0 |
| Weston | 32 | 77 | 1 | .03 | 33 | 77 | 5 |
| Wymore | 41 | 677 | 0 | 0 | 41 | 677 | 1 |
| Yutan | 24 | 23 | 0 | 0 | 24 | 23 | 2 |
| Total | 3,963 | 64,759 | 63 | 765 | 4,026 | 65,524 | 681 |

Table 5: Fires reported by Southeast Nebraska CWPP fire departments between 2000 and 2018. Departments reported a total of 314,961 volunteer hours for this period. Only departments that reported are listed. Some departments did not report every year. Actual numbers are higher.

Fire Hazard

In the years since European settlement, exclusion of low-intensity ground fires, limited forest management, and prolific regeneration of eastern redcedar have increased the fire danger in prairies and woodlands. This, combined with severe drought, created conditions conducive to the catastrophic wildfires of 2006 and 2012.

A statewide map of local mitigation planning areas is included in Appendix A. The Lower Platte North, Lower Platte South, Nemaha, Papio-Missouri, Lower Big Blue, and Upper Big Blue NRDs are the designated local mitigation planning areas for the Southeast Nebraska CWPP area. Each of the planning units has its own Multi-Jurisdictional Hazard Mitigation Plan that includes a discussion of wildfire hazard. Appendix D contains links to these plans. This CWPP builds on these plans to address specific wildfire concerns.

Planning team members and local fire departments identified specific “Areas of Concern” for each county in the CWPP region. These locations include the edges of municipalities and wooded areas along rivers and creeks where there are homes and other structures. Many of these areas have limited access and/or water availability. The team identified area-wide high-risk ignition sources such as dense undergrowth and, depending on time of year, dry weather conditions when fires can start from lightning and hot farm machinery. They also underscored the importance of addressing fuel load reduction in community mitigation plans. See Appendix A for maps.

Economic Impacts

Excessive fuel loading can affect local economies in many ways. It reduces available forage, and therefore the grazing carrying capacity, for livestock and wildlife. If woody fuels are removed by uncontrolled, high intensity wildfire, other resources are affected. Intense fires may induce hydrophobic soils, which significantly increase runoff and erosion in steep terrain. Loss of grazing capacity and decreased water quality can be long-lasting problems for landowners whose livelihoods depend on livestock and/or hunting income.

A proactive approach to reducing hazardous fuels can provide jobs and generate valuable wood products such as lumber, posts, and biomass. Mechanically thinning forests reduces the hazard and risk of intense wildfire, can improve grazing capacity and wildlife habitat, and can increase the amount of precipitation that reaches streams, lakes, and the water table. Adherence to the *Forestry Best Management Practices for Nebraska* (<https://nfs.unl.edu/documents/ruralforestry/NebraskaBMP.pdf>) by those conducting mechanical thinning operations can reduce the potential for soil erosion from equipment use.

Southeast Nebraska Community Wildfire Protection Plan

Emergency Operations

Responsibilities and Mutual Aid Agreements

Volunteer fire departments are the first line of defense against wildfires on private and state lands. During large wildfires, they rely on mutual aid agreements with neighboring jurisdictions. The 102 fire departments in the CWPP area belong to one or more of the 14 mutual aid associations that overlap the region: 3 & 33, Big 8, Butler Co., Cass Co., Lancaster Co., Nemaha Co., Northeast Fireman's Assoc., Otoe Co., Richardson Co., Saline Co., Saunders Co., Seward Co., Southeast, and Tri-MA. See Appendix E for a complete list of mutual aid associations and member fire departments.

Each county has an emergency management protocol. Johnson and Pawnee Counties share an emergency manager. Seward County is part of the Seward/York Emergency Management Area. Each of the other counties has its own emergency manager. Map 3 shows the SECWPP Local Emergency Management Areas.

In addition to notification by Sheriff's Department personnel and/or dispatch, emergency management areas have notification from "Code Red" that allows them to develop groups that can be called in an emergency situation for notification of evacuations, hazardous material incidents, and any other emergency notification, including wildfire. This allows notification of a large geographical area or a group of people. This is an 'opt-in' program which can be used to notify residents in the area of wildfire events, but would likely not reach all members.

The state introduced the Salamander ID card check-in system for emergency response personnel and equipment prior to the 2012 wildfires. This identification and credentialing system allows first responders (agencies, personnel, and equipment) to more efficiently respond to incidents. It streamlines the incident check-in process and tracks time spent on an incident for both personnel and equipment. The ID cards use bar codes that identify equipment, people and their qualifications, and can track volunteers.

The Mobile Express program is used to track an incident. The Rapid Tag program helps track volunteers. A volunteer's driver's license is swiped and the data used to print an identification card which is then used by Mobile Express to track the volunteer. The program can also be used to generate a printed "Battle Book" that lists equipment (with picture, description, and ID card) and personnel so that first responders can check into an incident via radio without having to physically check in. Training for this system is ongoing statewide.

Staging Areas and Safety Zones

The forested drainages are separated by expanses of grasslands and farm ground. There are abundant potential staging area locations in the uplands away from the drainages. Grazed pastures, green alfalfa fields, and fallow farmland can provide staging areas away from forested areas. Fairgrounds and city parks are generally good staging areas, depending on the particular location of a wildfire. Safety zone sites are designated by fire officials and will depend upon the wildfire location and characteristics.

Roads/Bridges

In addition to the federal and state highways, the region is served by a network of county-maintained roads. Farm and ranch trails provide additional access for emergency vehicles. Restricted bridges and roads which could limit truck/lowboy passage have not been mapped in most fire districts. Developing such a map has been identified as a need that should be addressed (see *Action Plan* section).

Communications

Some radio compatibility issues in Nebraska were addressed after the 2012 wildfire season. Location-specific information about communications is listed in each county section of this CWPP for those entities that responded to requests for information. Gaps in cellular service exist across a few parts of the CWPP region, particularly in steeper drainages.

Southeast Nebraska Community Wildfire Protection Plan

Some fire departments have access to data on infrastructure location via a secondary paging system called “I Am Responding.”

Capabilities and Capacity

A listing of apparatus and staffing for each fire district is included in Appendix F. Through the Federal Excess Property Program (FEPP) and Fire Fighter Property (FFP) program, a cooperative effort with the U.S. Forest Service, the NFS acquires and reconditions excess equipment which is no longer needed by the federal government. This equipment is then loaned to rural fire districts, which are responsible for maintenance. When no longer needed, the equipment is returned to the NFS and either re-assigned or sold, with the proceeds being returned to the US Treasury or state program. In 2019 there were 879 pieces of FEPP equipment in use by 297 rural fire districts and emergency management areas across Nebraska, valued at \$105,225,700. In the Southeast Nebraska CWPP Region, there are 157 pieces of FEPP equipment, valued at \$14,162,700 and housed at 55 fire stations and substations.

These programs allow fire districts to obtain essential fire-fighting equipment at an affordable price. The NFS Fire Shop can also provide cooperating fire districts resources to reduce vehicle maintenance costs. This includes securing parts for vehicles and providing complimentary maintenance checks. Mechanics can also provide routine vehicle maintenance at the NFS Fire Shop in Mead or fire districts may use a trusted local mechanic. Two NFS mobile repair units are available to respond to the maintenance needs of cooperating fire districts. These units can provide routine repairs, as well as on-site support for cooperating districts in the event of catastrophic fires.

The Wildfire Control Act of 2013 enabled the establishment of Single Engine Air Tanker (SEAT) bases in Nebraska. Nebraska has a long history of utilizing aerial applicators for fire suppression, and the addition of permanent bases further enhances fire aviation and initial attack capabilities. SEAT bases are staffed by NFS personnel during the fire season, working with a SEAT on contract to Nebraska through its partners at NEMA. The permanent SEAT bases are located at Valentine, Chadron, Alliance, Scottsbluff, and McCook. In addition, a mobile SEAT base to support operations at airports without a permanent base is completed and stationed at the Ogallala airport. The SEAT provides critical observation and access for remote areas. Tanker support is critical for locations away from towns and for actively growing wildfires located in difficult terrain or spreading quickly. The focus of the program is to provide quick initial attack on small wildfires, keeping them small.

Training

The NFS, Nebraska State Fire Marshal’s Office, and NEMA provide wildland fire training through classes in communities across the state, as well as mutual aid schools and State Fire School attended by thousands of people each year. In addition, the NFS sponsors the Nebraska Wildland Fire Academy, held annually in April at Fort Robinson SP. Launched as an interagency effort by the NFS and the USFS, the Academy provides opportunities for Nebraska volunteer firefighters to attend nationally-recognized wildland fire and incident management training at little or no cost, on a schedule that doesn’t require them to be away from home more than what is already required by their volunteer efforts. It utilizes the expertise of local, state, and federal firefighters to ensure the fire training needs of Nebraska and the surrounding region are met. It also enables local volunteers to enter the national red card system and develop certifications that are recognized across the nation. Classes cover a variety of topics ranging from beginning to advanced firefighting techniques, Firewise® landscaping and construction, leadership, and fire prevention education. The classes offer flexibility and can be fine-tuned to meet the needs of local fire departments. NFS delivered and sponsored course hours grew from just 73 in 2007 to 10,506 in 2019. Wildland fire instructors are based in Ainsworth, Chadron, and Lincoln.

Southeast Nebraska Community Wildfire Protection Plan

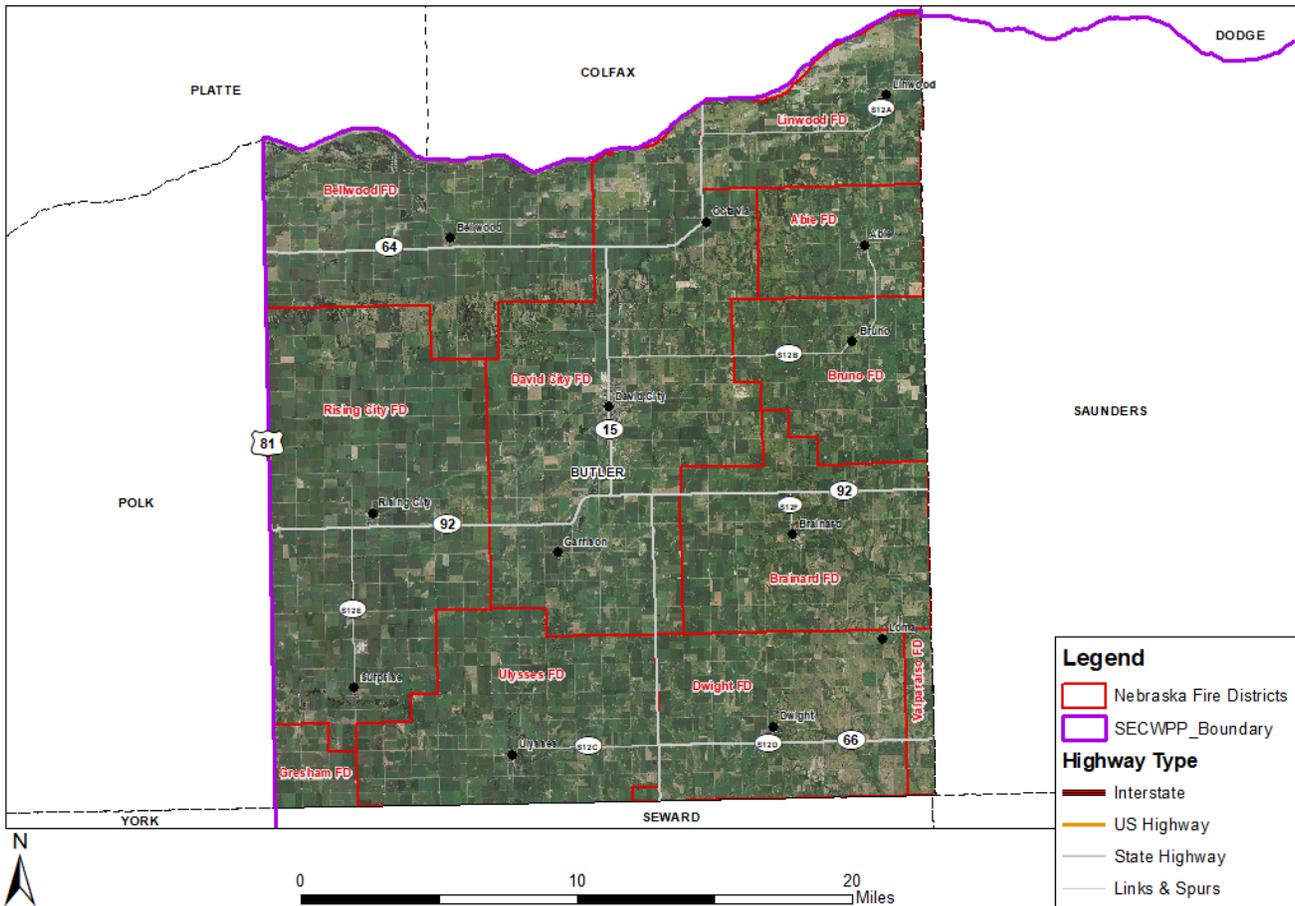
Community-Specific Considerations

BUTLER COUNTY

591 sq. miles

2017 population: 8,053

Southeast Nebraska CWPP Region Butler County Overview



Community Profile

Butler County lies in the northwest corner of the CWPP region. It is bounded on the east by Saunders County, on the south by Seward County, on the west by Polk County, and on the north by Colfax and Platte Counties. Incorporated municipalities include the county seat of David City (pop. 2,823), Abie (pop. 66), Bellwood (pop. 66), Brainard (pop. 317), Bruno (pop. 93), Dwight (pop. 195), Garrison (pop. 52), Linwood (pop. 88), Octavia (pop. 119), Rising City (pop. 356), Surprise (pop. 43), and Ulysses (pop. 160). Loma (2000 pop. 54) is an unincorporated community.

There are no federal lands within the county. State lands include 324 acres in three NGPC WMAs, and approximately 480 acres in school lands. There are 437 acres in three properties managed by three NRDs. Non-profit conservation lands include 166 acres in two Ducks Unlimited properties.

The entire county lies within the upland tallgrass prairie vegetation zone. Agriculture crop fields, hayland, and grazing lands cover much of the county. The Platte River forms the north county line. The main stem and the

Southeast Nebraska Community Wildfire Protection Plan

north branch of the Big Blue River enter from Polk County and run southeast, joining in the south central part of Butler County before exiting into Seward County. Most of the county's woodlands are located along the rivers and their tributaries.

The areas most at-risk from wildfire are the lands surrounding municipalities and recreational and residential areas along the rivers where there are heavy fuels and limited access. The Rising City Fire Department identified Summit Township, Adamy Addition and all along the south bluffs of the Platte River Valley east of Adamy Addition as areas of particular concern due to multiple structures, difficult access, rough terrain, one way in/out, heavy fuels, and lack of water within effective distance. Areas of concern in Butler County were identified by steering committee members, fire chiefs, or in the statewide Priority Lands analysis; a map of them is included in Appendix A. All of Butler County lies within the boundaries of the WUI as defined in the introduction to this CWPP.

Infrastructure and Protection Capabilities

Fire Districts and Emergency Management Area

Fire districts all or partly within Butler County include Abie, Bellwood, Brainard, Bruno, David City, Dwight, Gresham, Linwood, Rising City, Valparaiso, and Ulysses. The county has a part-time emergency management director.

Water Sources

Most communities have municipal water systems. Farms and ranches are on wells. The Platte, and Big Blue Rivers and their larger tributaries are reliable water sources. Windmills can provide water when they are operational. Ponds and stock tanks are located on farms and ranches throughout the county. During drought conditions some of the ponds may not be reliable water sources.

Utilities/Phone Service

The Butler Public Power District provides electric service. Both cellular and landline telephone services are available in the county.

Roads and Bridges

No specific information on roads or bridges was provided by Butler County officials.

Greatest Concerns

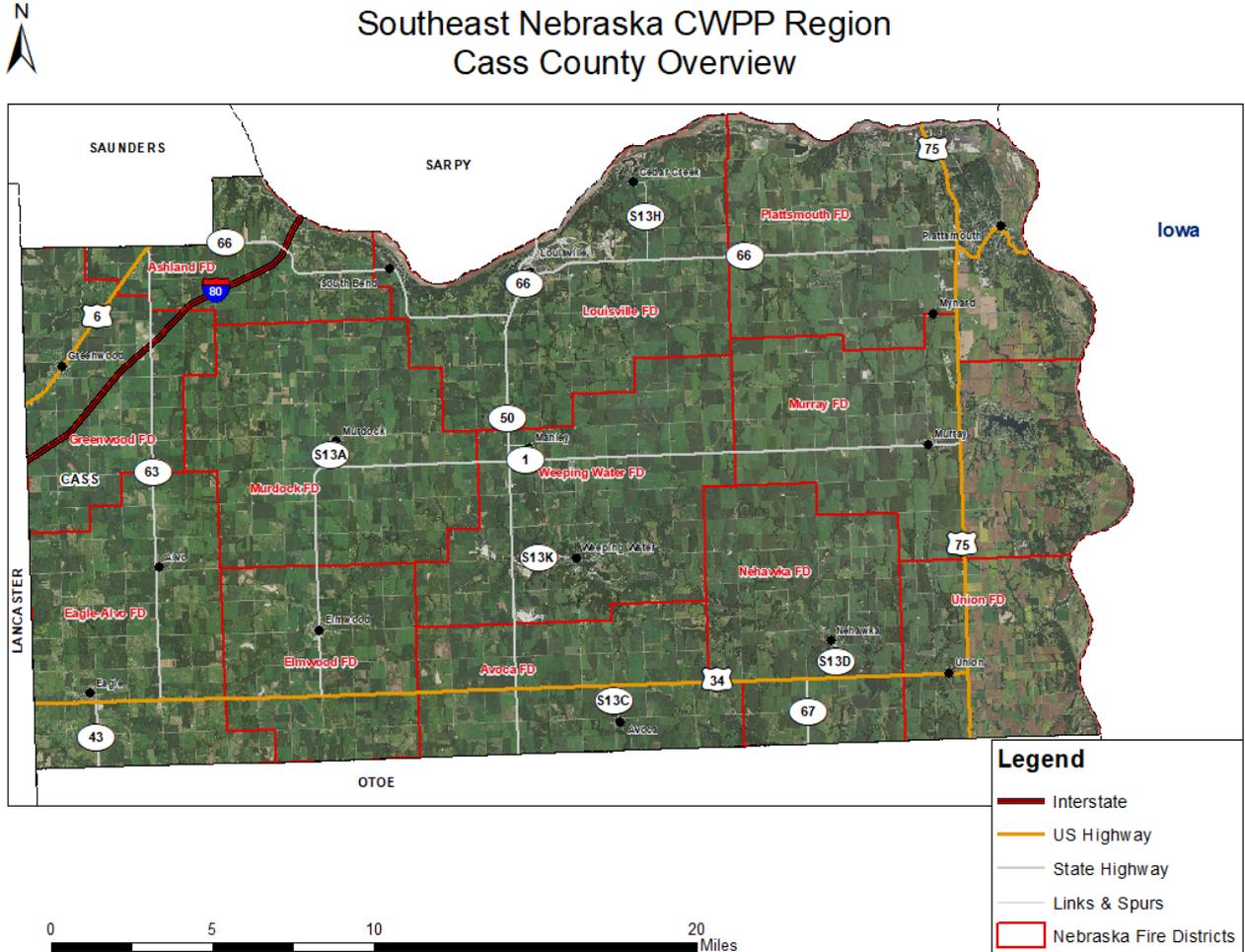
The Abie Fire Department noted that their greatest concerns are limited access, heavy fuel loads, and wind. The Rising City Fire Department's main concerns are manpower, equipment, water and access. The Ulysses Fire Department listed manpower as their chief concern.

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CASS COUNTY

566 sq. miles

2017 population: 25,889



Community Profile

Cass County lies along the east edge of the CWPP area. It is bounded on the north by Sarpy and Saunders Counties, on the west by Lancaster County, on the south by Otoe County and on the east by Iowa. Incorporated municipalities include the county seat of Plattsmouth (pop. 6,451), Alvo (pop. 135), Avoca (pop. 246), Cedar Creek (pop. 402), Eagle (pop. 1,024), Elmwood (pop. 648), Greenwood (pop. 586), Louisville (pop. 1,106), Manley (pop. 167), Murdock (pop. 236), Murray (pop. 475), Nehawka (pop. 208), South Bend (pop. 102), Union (pop. 239), and Weeping Water (pop. 1,078). Mynard (no pop. data available) is an unincorporated community.

The entire county lies within the tallgrass prairie vegetation zone. Agriculture crop fields, hayland, and grazing lands cover much of the county. The Platte River forms the north county line. The Missouri River forms the east county line. The North Fork of the Little Nemaha River rises in the southwestern part of the county, and flows into Otoe County. Most of the county’s woodlands are located along the rivers and their tributaries.

There are no federal lands within Cass County. State lands include 3,787 acres in five NGPC WMAs, 1,289 acres in four NGPC state parks, trails and recreation areas, 235 acres at the NFS Horning State Farm, and approximately 80 acres in school lands. There is a 113-acre property managed by the Lower Platte South NRD.

Southeast Nebraska Community Wildfire Protection Plan

The lands most at-risk from wildfire are in the northern and eastern parts of the county, along the Missouri and Platte Rivers, where topography is rough and woody fuels are dense in some areas, creating high fire hazard. The Ashland Fire Department listed lake communities with high home density, infrastructure or other resources at high risk, or populated areas with one way in/out as areas of primary concern in their district. Areas of Concern identified by steering committee members, fire chiefs, or in the statewide Priority Lands analysis are shown on a map of in Appendix A. All of Cass County lies within the WUI boundary as defined in the introduction to this CWPP.

Protection Capabilities and Infrastructure

Fire Districts and Emergency Management Area

Volunteer fire departments all or partly within this part of Cass County include Ashland, Avoca, Eagle-Alvo, Elmwood, Greenwood, Louisville, Murdock, Murray, Nehawka, Plattsmouth, Union, and Weeping Water. The county has a full-time emergency manager.

Water Sources

Most communities have municipal water systems. Farms and ranches are on wells. The rivers and their larger tributaries are generally reliable water sources. Windmills can provide water when they are operational. There are small ponds and stock tanks on farms and ranches throughout the county. During drought conditions many ponds may not be reliable water sources.

Utilities/Phone Service

Electric service is provided by the Omaha and Nebraska Public Power Districts. Both cellular and landline telephone services are available in the county.

Roads and Bridges

The Ashland Fire Department stated that some bridges in their district will not support equipment weight.

Greatest Concerns

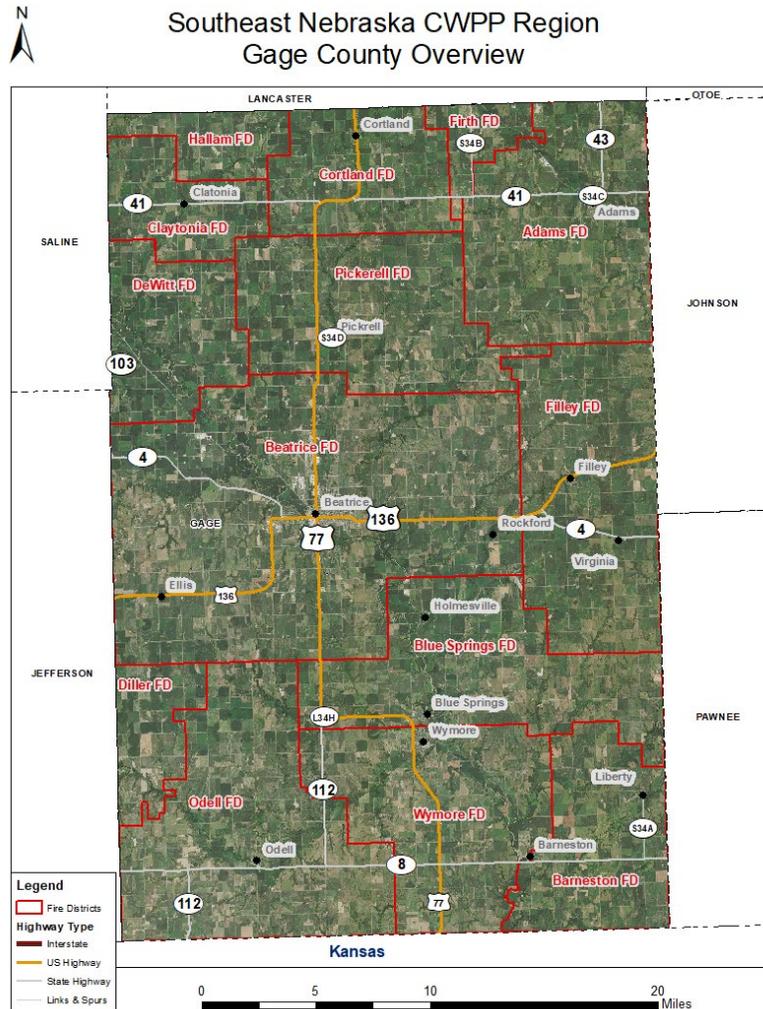
The Ashland Fire Department listed rapid advancement due to high winds as their chief concern.

Southeast Nebraska Community Wildfire Protection Plan

GAGE COUNTY

860 sq. miles

2017 population: 21,601



Community Profile

Gage County forms the southwest corner of the CWPP region. It is bounded on the west by Jefferson and Saline Counties, on the north by Lancaster County, on the east by Johnson and Pawnee Counties, and on the south by Kansas. Incorporated communities include the county seat of Beatrice (pop. 12,295), Adams (pop. 614), Barneston (pop. 111), Blue Springs (pop. 317), Clatonia (pop. 222), Cortland (pop. 474), Filley (pop. 128), Liberty (pop. 74), Odell (pop. 296), Pickrell (pop. 191), Virginia (pop. 58), and Wymore (pop. 1,384). Unincorporated communities include Ellis (no pop. data available), Holmesville (2010 pop. 51), and Rockford (no pop. data available).

The 142-acre Homestead National Monument is the only federal land within Gage County. State lands include 837 acres in five NGPC WMAs, 436 acres in one NGPC SRA, and approximately 200 acres in school lands. The Lower Big Blue NRD has approximately 539 acres in four recreation areas. Non-profit conservation lands include a 79-acre tract managed by Audubon.

The entire county lies within the tallgrass prairie vegetation zone. Agriculture crop fields, hayland, and grazing lands cover much of the county. The Big Blue River enters the northwest part of the county from Saline County and runs southeast into Kansas. The Middle Branch of the Big Nemaha River runs across the northeastern part of

Southeast Nebraska Community Wildfire Protection Plan

the county between Lancaster and Johnson Counties. Most of the county's woodlands are located along the rivers and their tributaries.

Locations of special concern include population centers adjacent to wildlands where topography is rough and woody fuels are dense in some areas, creating high fire hazard. The areas most at-risk from wildfire are located along the rivers and major creeks. The 2016 Lower Big Blue NRD plan stated that Gage County is at highest risk in their planning area, and the Village of Clatonia has identified wildfire as a top concern. The 2019 HMP for the City of Beatrice noted a concern for wildfire throughout the city due to the high amount of WUI, particularly the riverfront, Southeast Community College campus, industrial park, the airport, Good Samaritan facility, and homes along the edges of city boundaries. The Beatrice fire chief identified locations throughout the city and edges of town, as well as many rural subdivisions, as at-risk WUI areas with multiple structures, difficult access, rough terrain, and heavy fuels. Specifically listed were the Covered Bridge area, Country Club Lane, Country Meadows, Flowing Springs area, Wildwood, Chester St., and Montgomery St. The Dewitt fire chief identified Turkey Creek and the Big Blue River as having difficult access. Other locations were identified in the statewide Priority Lands analysis; a map of them is included in Appendix A. All of Gage County's population centers, dispersed farms and ranches, and wooded areas along the rivers and streams lie within the boundaries of the WUI as defined in the introduction to this CWPP.

Protection Capabilities and Infrastructure

Fire Districts and Emergency Management Area

The Adams, Barneston, Beatrice, Blue Springs, Clatonia, Cortland, DeWitt, Diller, Filley, Firth, Hallam, Odell, Pickerell, and Wymore Fire Districts lie all or partly within Gage County. The county has a full-time emergency manager.

Infrastructure

The Beatrice engineering department is currently working on a GIS layer for their infrastructure. Homestead National Monument has an infrastructure GIS layer for their park unit.

Water Sources

Most communities have municipal water systems. Farms and ranches are on wells. The rivers and their larger tributaries are generally reliable water sources. Windmills can provide water when they are operational. There are small ponds and stock tanks on farms and ranches throughout the area. During drought conditions many ponds may not be reliable water sources.

Utilities/Phone Service

Electric service is provided by the Wymore Utilities and the Norris and Nebraska Public Power Districts. Both cellular and landline telephone services are available in the county.

Roads and Bridges

The Odell VFD noted that there are small wood bridges within the district that will not support equipment weight. The Hallam fire chief said that many bridges in their district are shut down per the county engineer.

Greatest Concerns

Beatrice Fire and Rescue noted that their greatest concern is life safety. The DeWitt VFD said that their biggest concern is protecting homes and having the personnel to fight fires. The Hallam VFD identified high winds and dry crops as their greatest concerns. The Homestead National Monument staff said their primary concerns are visitor safety and protecting historical structures.

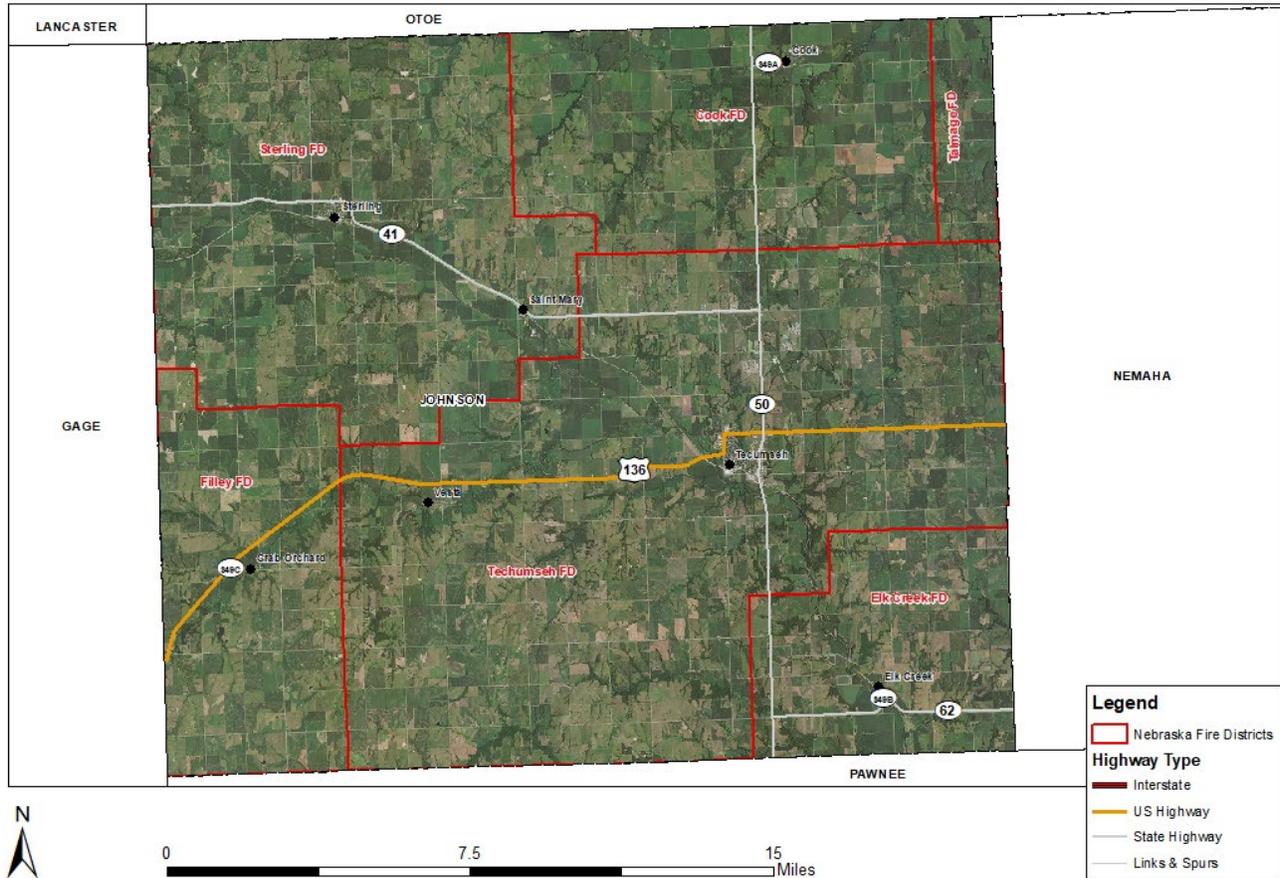
Southeast Nebraska Community Wildfire Protection Plan

JOHNSON COUNTY

377 sq. miles

2017 population: 5,185

Southeast Nebraska CWPP Region Johnson County Overview



Community Profile

Johnson County lies in the south central part of the CWPP area. It is bounded on the west by Gage County, on the north by Otoe County, on the east by Nemaha County, and on the south by Pawnee County. Incorporated municipalities include the county seat of Tecumseh (pop. 1,640), Cook (pop. 312), Crab Orchard (pop. 37), Elk Creek (pop. 95), and Sterling (pop. 464). Saint Mary and Vesta (no pop. data available) are listed as unincorporated communities in the county.

There are no federal lands in Johnson County. State lands include 2,459 acres in three NGPC WMAs and about 295 acres of school lands. The Nemaha NRD has approximately 161 acres in one recreation area. Non-profit conservation lands include 135 acres in two properties managed by Audubon and Pheasants Forever.

The entire county lies within the tallgrass prairie vegetation zone. Agriculture crop fields, hayland, and grazing lands cover much of the county. The North Fork of the Big Nemaha River crosses the county diagonally from northwest to southeast. The Middle Branch of the Big Nemaha River joins it west of Sterling. The South Fork of the Little Nemaha River dips into the northeast corner from Otoe County. Most of Johnson County's woodlands are located along the rivers and their tributaries.

Southeast Nebraska Community Wildfire Protection Plan

Locations of special concern include population centers adjacent to wildlands and wooded areas along the rivers and streams. In the 2015 Nemaha NRD plan, Johnson County listed wildfire as a top concern. The Cook fire chief identified the Village of Cook as an area of concern due to multiple structures. Other locations were identified in the statewide Priority Lands analysis; a map of these areas is included in Appendix A. All of Johnson County's population centers, rural areas, and wooded waterways lie within the boundaries of the WUI as defined in the introduction to this CWPP.

Protection Capabilities and Infrastructure

Fire Districts and Emergency Management Area

Volunteer fire departments all or partly within Johnson County include Cook, Elk Creek, Filley, Sterling, Talmage, and Tecumseh. The county shares an emergency manager with Pawnee County.

Water Sources

Most communities have municipal water systems. Farms and ranches are on wells. The rivers and their larger tributaries are generally reliable water sources. Windmills can provide water when they are operational. There are small ponds and stock tanks on farms and ranches throughout the area. During drought conditions many ponds may not be reliable water sources.

Utilities/Phone Service

Electric service in Johnson County is provided by the City of Tecumseh, Auburn Board of Public Works, the Omaha Public Power District, and the Nebraska Public Power District. Both cellular and landline telephone services are available in the county.

Roads and Bridges

The Cook, Elk Creek, Talmage, and Tecumseh fire chiefs said that there are bridges in their district not rated high enough to support their larger trucks.

Greatest Concerns

The Cook VFD noted that their greatest concerns are weather and water supplies. The Elk Creek VFD named water and manpower as their biggest concerns. The Talmage fire department said that being able to get in and out of rural farms and areas with no water are their main concerns. The Tecumseh fire chief identified getting control and making the public aware for safety considerations are his department's greatest concerns.

Southeast Nebraska Community Wildfire Protection Plan

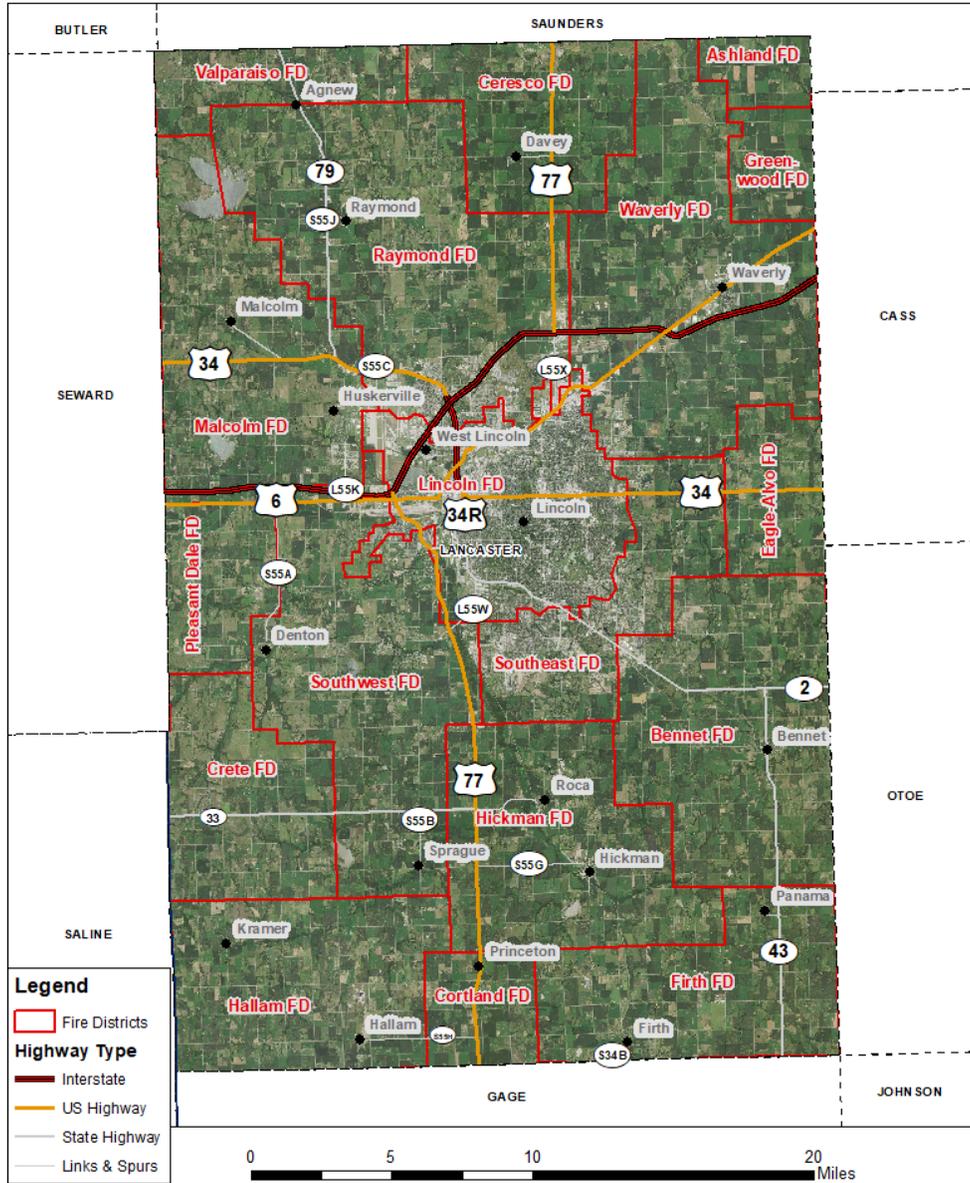
LANCASTER COUNTY

846 sq. miles

2017 population: 314,358



Southeast Nebraska CWPP Region Lancaster County Overview



Community Profile

Lancaster County is located near the center of the CWPP region. It is bounded on the north by Saunders County, on the east by Cass and Otoe Counties, on the south by Gage County, and on the west by Seward and Saline Counties. Incorporated municipalities include the state capitol and county seat of Lincoln (pop. 284,736), Bennet (pop. 892), Davey (pop. 156), Denton (pop. 204), Firth (pop. 577), Hallam (pop. 240), Hickman (pop. 2,221), Malcom (pop. 399), Panama (pop. 281), Raymond (pop. 183), Roca (pop. 290), Sprague (pop. 151), and Waverly (pop. 3,328). Agnew, Kramer, and Princeton (no pop. data) are listed as unincorporated communities. Huskerville is listed as a populated place within the City of Lincoln.

Southeast Nebraska Community Wildfire Protection Plan

Public lands in Lancaster County include 15,262 acres in 15 state WMAs and seven SRAs; 2,158 acres in 24 NRD properties; 178 Department of Defense acres; and 534 acres of state school lands. There are 1,402 acres in five large municipally-owned or managed areas, plus many smaller municipal and county-owned parks.

The entire county lies within the upland tallgrass prairie vegetation zone. Agriculture crop fields, hayland, and grazing lands cover much of the county. The main stem and the South Fork of the Little Nemaha River and the North and Middle Forks of the Big Nemaha River all rise in the southern and eastern parts of Lancaster County and exit into Otoe and Gage Counties. Most of the county's woodlands are located along the rivers and their tributaries.

Locations of special concern include population centers adjacent to wildlands and wooded areas along the rivers and streams. The Bennet fire chief expressed concern about "acreage subdivisions" and said that most developments, including one in the Village of Bennet, only have one way in and out. The Crete VFD said there is a lot of subdivision moving out from Lincoln. Many have only one-way in/out and have wildland conditions within 20 feet of structures. They have mapped these. The Hickman VFD identified several subdivisions in their district with a WUI between CRP grassland and acreage developments (Meadowlark Hills Addition-Blocks 1 & 2, Whitetail Ridge Addition, Poe Estates-Blocks 1 & 2, Cedar Woods Estates Addition); CRP surrounded by cropland and wooded drainageways vulnerable to harvest season ignition; rural acreages bordering wooded state recreation areas; and suburban subdivisions which directly abut cropland susceptible to harvest season ignitions. The Ashland Fire Department listed lake communities with high home density, infrastructure or other resources at high risk, or populated areas with one way in/out as areas of primary concern in their district. Lincoln Fire and Rescue stated that they are experiencing an increasing problem with urban/wildland interface due to "common areas" in new neighborhoods. They have experienced structural damage due to fire originating in these vegetation areas. LFR lacks wildland equipment and PPE for wildland firefighting. LSR must mutual aid these resources from mutual aid departments. This delay increases risk. Issues in these areas include multiple structures, difficult access, rough terrain, one way in/out, heavy fuels, lack of water within effective distance, and lack of wildland firefighting equipment. The Southwest Rural Fire Protection District is concerned about Wilderness Park, on the west edge of Lincoln, due to multiple structures, difficult access, rough terrain, one way in/out, and heavy fuels. The US Army Corps of Engineers, Missouri River Project staff noted that Holmes Lake in Lincoln is surrounded by dense urban housing. It has better access than the Omaha Lakes but still has a high risk. The Lower Platte South NRD noted some of their saline wetlands adjacent to residential areas. Other locations were identified in the statewide Priority Lands analysis; a map of these areas is included in Appendix A. All of Lancaster County's population centers, rural areas, and wooded waterways lie within the boundaries of the WUI as defined in the introduction to this CWPP.

Protection Capabilities and Infrastructure

Fire Districts and Emergency Management Area

18 volunteer fire departments lie all or partly within Lancaster County: Ashland, Bennet, Ceresco, Cortland, Crete, Eagle-Alvo, Firth, Greenwood, Hallam, Hickman, Lincoln, Malcolm, Pleasant Dale, Raymond, Southeast, Southwest, Valparaiso, and Waverly. Lincoln-Lancaster Emergency Management serves the entire county.

Land Management Activities Related to Fire and Related Fire History

Lincoln Parks

Pioneers Park reports they do not have a specific fire preparedness plan. Trails and roads cross the park and act as fire breaks. On a rotating basis, they selectively burn and hay 10-20% of the park annually. Forest thinning and cedar removal are conducted as needed due to dead or storm damage. At a minimum, all understory low growth vegetation is mowed at least annually.

They have been burning the less-trafficked areas for 12 years. Their burns cover between 2-20 acres when near buildings and roads, and 20-120 acres in the wilder areas. A cigarette ignited a wildfire in 2011, burning about

Southeast Nebraska Community Wildfire Protection Plan

170 acres before it was stopped at a grazed bison area by a quickly-installed tilled line. It burned within a quarter mile of their main building; the nearby Southwest Rural Fire Department attacked the wildfire while the urban Lincoln Fire and Rescue remained stationed at the structures to defend them if needed. They usually mow 20'-30' fire breaks in the fall along the roadways and prairie edges to help mitigate any potential wildfires at Pioneers Park Nature Center. There were also some smaller prescribed fires conducted by staff at Pioneers Park starting around 1980, but they were never larger than 20 acres and not annual.

In the Wilderness Park and Prairie Corridor properties, they count more on roadways as wildfire fire breaks, and they thin cedars to lessen the severity and intensity of potential wildfires. Mechanical thinning is done with help from many volunteer groups, Parks staff with loppers and chainsaws, and a track steer with forestry attachment. They generally thin from the edges and move inward.

The Pioneers Park Nature Center hosts volunteer prescribed fire training and information classes for the community. Several adjacent landowners have attended these and have reported that they value it as a preventative measure to against intense wildfires.

Because Lincoln Parks are in the urban interface, their burns are usually small, and they are mindful of smoke management. They will cancel burns if the smoke forecast changes. They are under strict standards for air quality; their governing agency, Lincoln-Lancaster County Health Department, used the Air Quality Index limit of 50 as the high end for six years; it's now been bumped up to 75.

Water Sources

Most communities have municipal water systems. Farms and ranches are on wells. The rivers and their larger tributaries are generally reliable water sources. Windmills can provide water when they are operational. There are small ponds and stock tanks on farms and ranches throughout the area. During drought conditions many ponds may not be reliable water sources.

Utilities/Phone Service

Electric service in Lancaster County is provided by the Nebraska Public Power District and the Lincoln Electric System. Both cellular and landline telephone services are available in the county.

Roads and Bridges

The Bennet VFD reported that some of the bridges on gravel roads will not support heavy equipment, and several bridges have been closed. The Crete VFD reported bridges that will support brush rigs but not a 3,000-gallon tanker. They have mapped these, as well as closed roads and bridges and impassible or dry-weather-only roads. The Hallam fire chief said that many bridges in their district are shut down per the county engineer.

Greatest Concerns

The Ashland Fire Department listed rapid advancement due to high winds as their chief concern. The Bennet Fire Department noted that their greatest concerns are the speed that a fire might spread and structures in the fire's path. The Crete VFD is looking to partner with their local university to create a comprehensive GIS layer for the district. They are currently mapping potential fire paths that would allow a wildfire to travel more than 2 miles. They stated that the wildland urban interface is their biggest problem. The Hallam fire chief named high winds and dry crops as their greatest concerns. The Hickman VFD identified having adequate numbers of personnel properly trained in wildland fire suppression as their biggest concern. Lincoln Fire and Rescue cites lack of specialized equipment, lack of training, and reliance on mutual aid as their main concerns. The US Army Corps of Engineers, Missouri River Project staff's greatest concern is threats to neighbors' properties and homes.

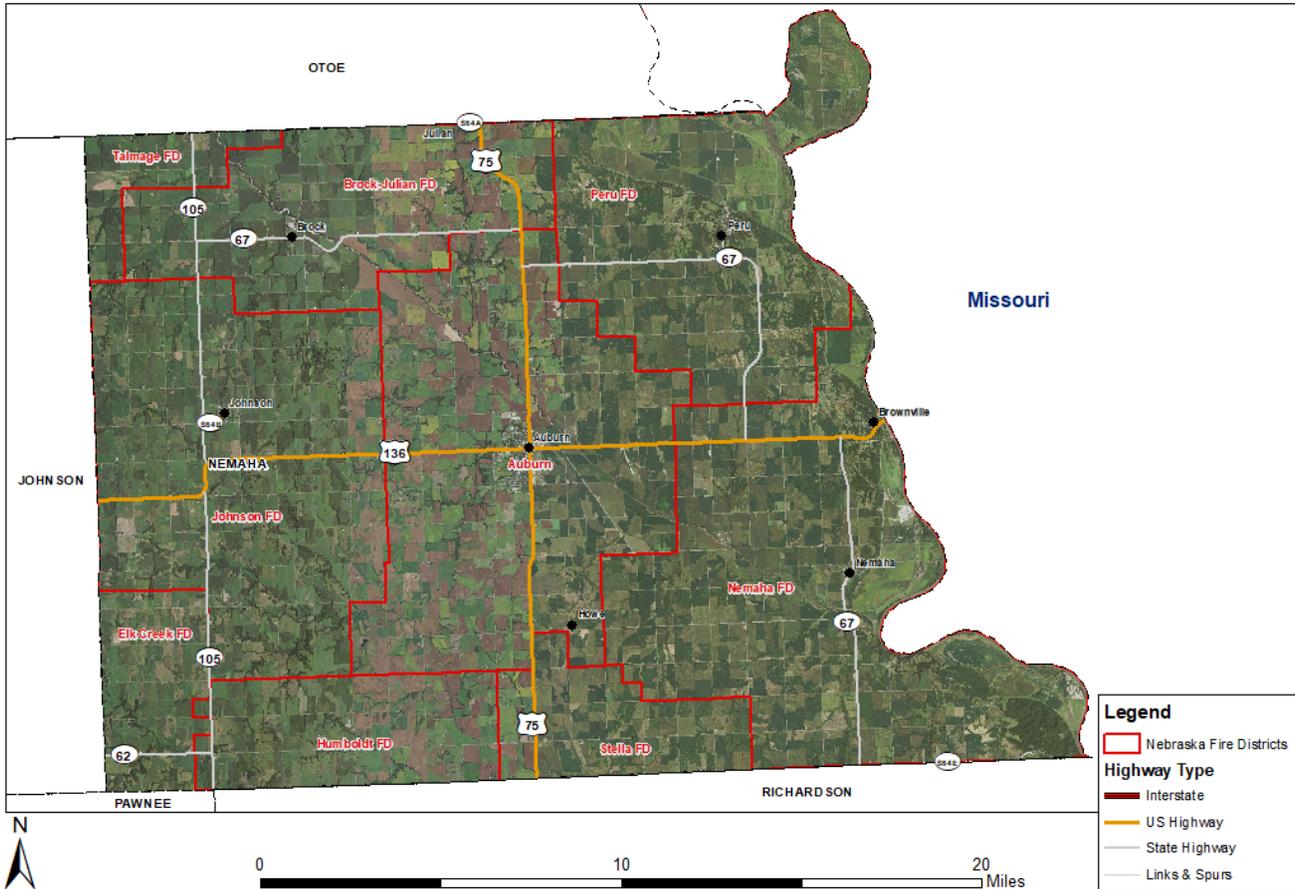
Southeast Nebraska Community Wildfire Protection Plan

NEMAHA COUNTY

410 sq. miles

2017 population: 6,949

Southeast Nebraska CWPP Region Nemaha County Overview



Community Profile

Nemaha County lies in the southeast part of the CWPP region. It is bounded on the north by Otoe County, on the west by Johnson County, on the south by Pawnee and Richardson Counties, and on the east by Missouri. Incorporated communities include the county seat of Auburn (pop. 3,302), Brock (pop. 107), Brownville (pop. 125), Johnson (pop. 325), Julian (pop. 55), Nemaha (pop. 141) and Peru (pop. 760). There are no unincorporated communities.

Besides municipal lands, public lands in Nemaha County include 5,503 acres in NGPC parcels (SP, SRAs, and WMAs) and 109 acres of state school lands.

The entire county lies within the tallgrass prairie vegetation zone. Agriculture crop fields, hayland, and grazing lands cover much of the region. The Missouri River forms Nemaha County's east boundary. The Little Nemaha River bisects the county from northwest to southeast. Most of the woodlands are located along the rivers and their tributaries.

Southeast Nebraska Community Wildfire Protection Plan

Locations of special concern include population centers adjacent to wildlands and wooded areas along the rivers and streams. In the 2015 Nemaha NRD plan, participants listing wildfire as a top concern include Nemaha County and the municipalities of Johnson, Julian, and Peru. The Peru fire chief noted that the Missouri River bluffs along the district's east edge have difficult access, rough terrain, and lack of water within effective distance. He also named areas containing multiple homes with a single access and surrounded by woodlands. The Talmage fire chief did not name individual locations, but said that rural homes with difficult access, multiple structures, heavy fuels, rough terrain, one way in/out, and lack of water within effective distance are concerning. Other locations were identified in the statewide Priority Lands analysis; a map of these areas is included in Appendix A. All of Nemaha County's population centers, rural areas, and wooded waterways lie within the boundaries of the WUI as defined in the introduction to this CWPP.

Protection Capabilities and Infrastructure

Fire Districts and Emergency Management Area

Volunteer fire districts all or partly within Nemaha County include Auburn, Brock-Julian, Elk Creek, Humboldt, Johnson, Nemaha, Peru, Stella, and Talmage. The county has a full-time emergency manager.

Water Sources

Most communities have municipal water systems. Farms and ranches are on wells. The rivers and their larger tributaries are generally reliable water sources. Windmills can provide water when they are operational. There are small ponds and stock tanks on farms and ranches throughout the area. During drought conditions many ponds may not be reliable water sources.

Utilities/Phone Service

Electric service in Nemaha County is provided by the Auburn Board of Public Works. Both cellular and landline telephone services are available in the county.

Roads and Bridges

The Elk Creek and Talmage fire chiefs said that there are bridges in their district not rated high enough to support their larger trucks. The Peru fire department identified one bridge west of Peru that will not allow trucks according to weight limit.

Greatest Concerns

The Elk Creek VFD named water and manpower as their biggest concerns. The Peru fire chief noted that dry conditions, wind, and limited access/rough terrain can be problematic. The Talmage fire department said that being able to get in and out of rural farms and areas with no water are their main concerns.

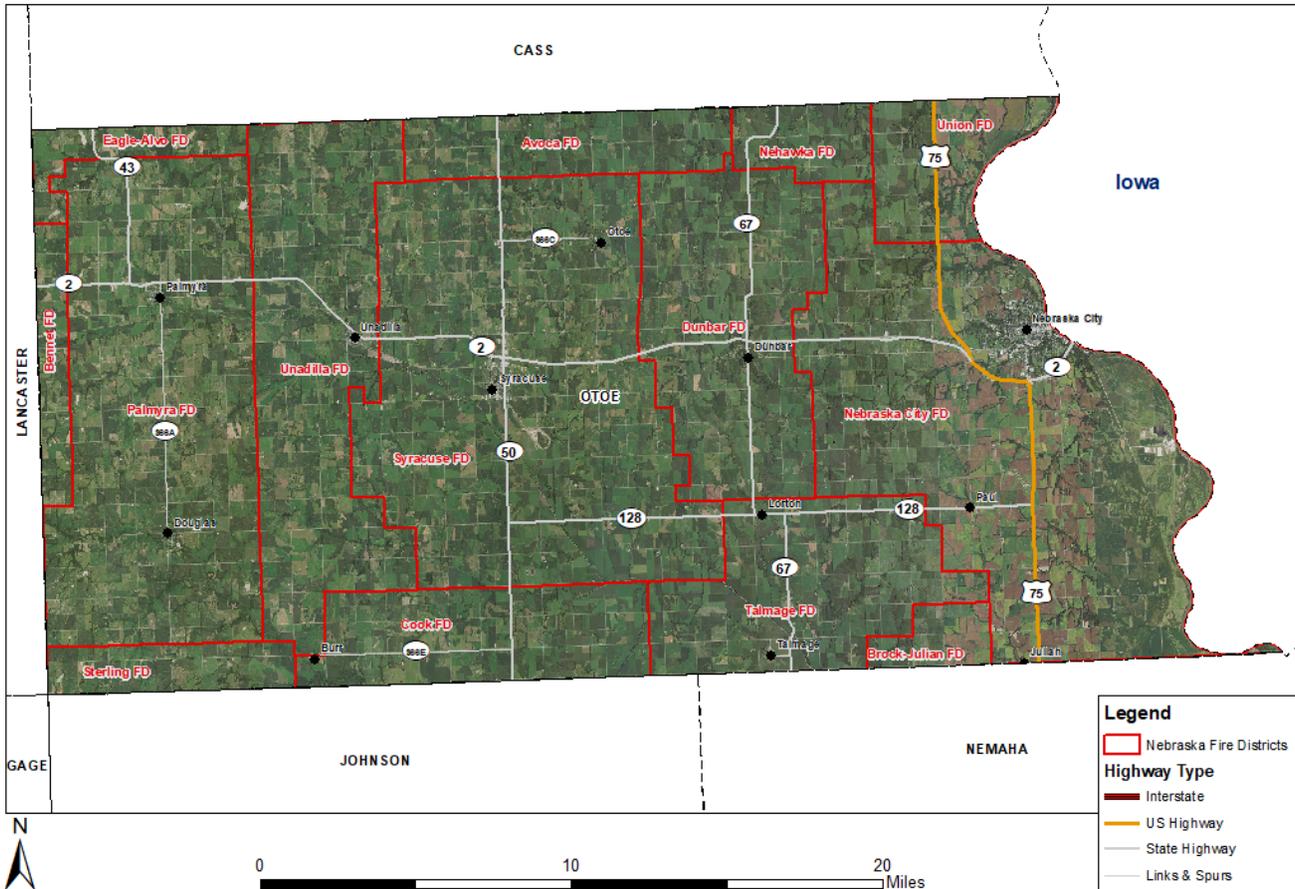
Southeast Nebraska Community Wildfire Protection Plan

OTOE COUNTY

619 sq. miles

2017 population: 16,027

Southeast Nebraska CWPP Region Otoe County Overview



Community Profile

Otoe County lies in the east central part of the CWPP region. It is bounded on the north by Cass County, on the west by Lancaster County, on the south by Johnson and Nemaha Counties, and on the east by Iowa.

Incorporated communities in the county include the county seat of Nebraska City (pop. 7,313), Burr (pop. 58), Douglas (pop. 178), Dunbar (pop. 192), Lorton (pop. 41), Otoe (pop. 175), Palmyra (pop. 563), Syracuse (pop. 1,985), Talmage (pop. 241), and Unadilla (pop. 321). Paul (no pop. data) is listed as an unincorporated community.

Besides municipal lands, public lands include 2,335 acres in five NGPC WMAs, one SRA and one State Historical Park; 39 acres in one NRD property; and 240 acres in state school lands. There is one 14-acre non-profit conservation property managed by Audubon.

The entire county lies within the tallgrass prairie vegetation zone. Agriculture crop fields, hayland, and grazing lands cover much of the region. The Missouri River forms Otoe County's east boundary. The main stem, north fork, and south fork of the Little Nemaha River enter the county from the north and west, joining into a single stream in the south central part of the county before exiting into Nemaha County. Most of the woodlands are located along the rivers and their tributaries.

Southeast Nebraska Community Wildfire Protection Plan

Locations of special concern include population centers adjacent to wildlands and wooded areas along the rivers and streams. In the 2015 Nemaha NRD plan, participants listing wildfire as a top concern included Otoe County and the municipalities of Douglas, Nebraska City, Palmyra, Syracuse, and Unadilla. The Douglas VFD identified an area southwest of Douglas with difficult access, rough terrain, one way in and out, heavy fuels, and lack of water within an effective distance. The Bennet fire chief expressed concern about “acreage subdivisions” and said that most developments only have one way in and out. The Talmage fire chief said that in the village of Lorton there are several dead end streets. Other locations were identified in the statewide Priority Lands analysis; a map of these areas is included in Appendix A. All of Otoe County’s population centers, rural areas, and wooded waterways lie within the boundaries of the WUI as defined in the introduction to this CWPP.

Protection Capabilities and Infrastructure

Fire Districts and Emergency Management Area

Volunteer fire departments all or partly within Otoe County include Avoca, Bennet, Brock-Julian, Cook, Dunbar, Eagle-Alvo, Palmyra-Douglas, Nebraska City, Nehawka, Sterling, Syracuse, Talmage, Unadilla, and Union. The county has a full-time emergency manager.

Water Sources

Most communities have municipal water systems. Farms and ranches are on wells. The rivers and their larger tributaries are generally reliable water sources. Windmills can provide water when they are operational. There are small ponds and stock tanks on farms and ranches throughout the area. During drought conditions many ponds may not be reliable water sources.

Utilities/Phone Service

Electric service in Otoe County is provided by the Omaha Public Power District and Nebraska City Utilities. Both cellular and landline telephone services are available in the county.

Roads and Bridges

The Bennet VFD reported that some of the bridges on gravel roads will not support heavy equipment, and several bridges have been closed. The Cook, Syracuse, and Talmage fire chiefs said that there are bridges in their district not rated high enough to support their larger trucks. The Douglas fire department ranked bridges as a major issue, stating they have three 3-ton bridges in their jurisdiction, and the only other access is minimum maintenance roads. The Nebraska City VFD expressed concern about possibly outdated bridges. The Unadilla fire chief ranked bridge limits as a primary issue.

Greatest Concerns

The Bennet Fire Department noted that their greatest concerns are the speed that a fire might spread and structures in the fire’s path. The Cook VFD noted that their biggest concerns are weather and water supplies. The Douglas fire chief said their major concerns are lack of personnel and distance to water sources. The Nebraska City VFD said that water tenders are their biggest concern. The Syracuse VFD noted that they have very few acres of grassland or timberland in their district; most of it is in cropland. The Talmage fire department said that being able to get in and out of rural farms and areas with no water are their greatest concerns. The Unadilla VFD listed containment as their primary concern and said lack of water within effective distance is an issue.

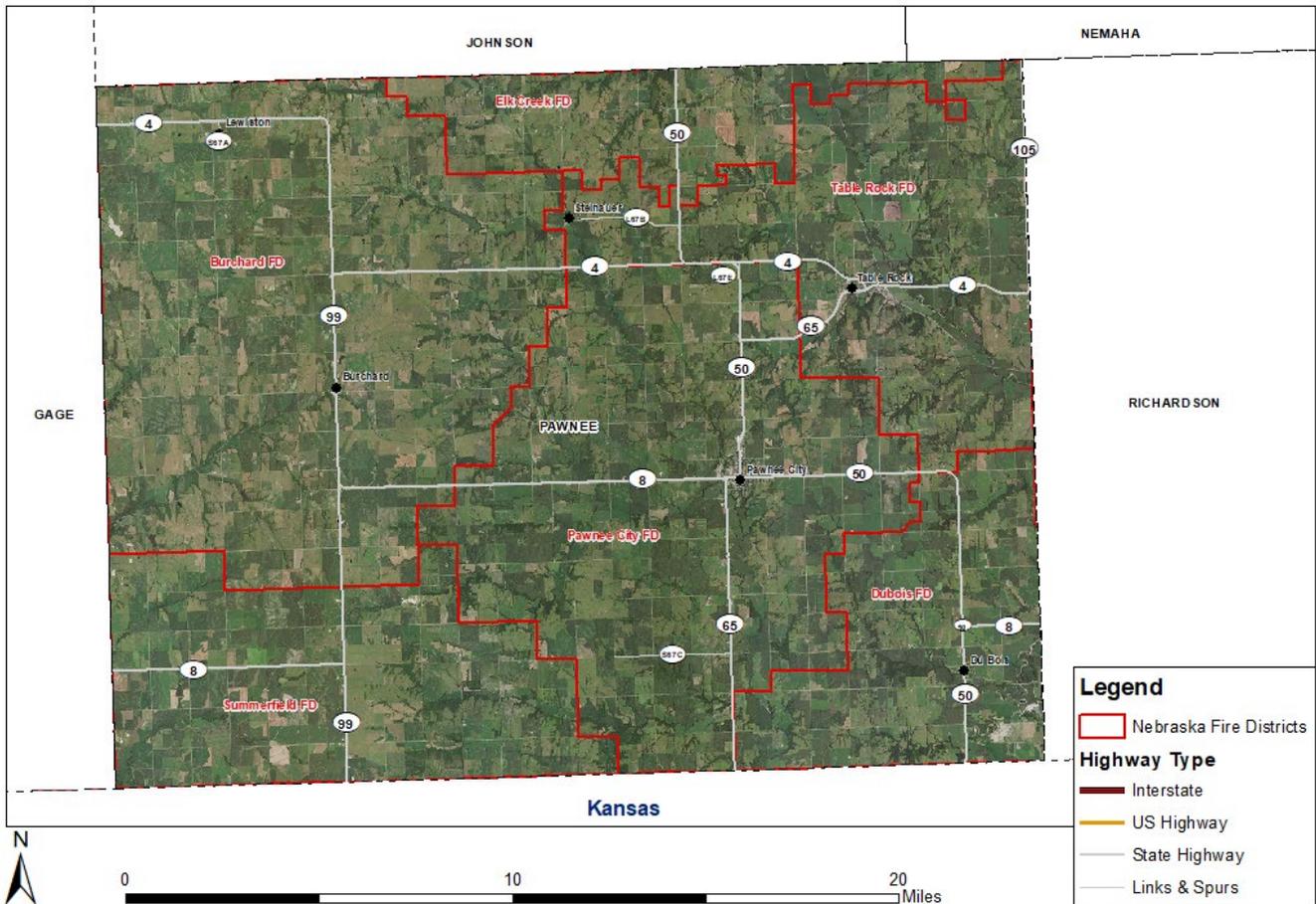
Southeast Nebraska Community Wildfire Protection Plan

PAWNEE COUNTY

433 sq. miles

2017 population: 2,641

Southeast Nebraska CWPP Region Pawnee County Overview



Community Profile

Pawnee County lies on the south central edge of the CWPP region. It is bounded on the west by Gage County, on the north by Johnson and Nemaha Counties, on the east by Richardson County, and on the south by Kansas. Incorporated communities in the county include the county seat of Pawnee City (pop. 824), Burchard (pop. 76), Du Bois (pop. 140), Lewiston (pop. 65), Steinauer (pop. 72), and Table Rock (pop. 258). There are no unincorporated communities.

Besides municipal lands, public lands include 3,117 acres in nine NGPC WMAs, 341 acres in one NRD property; and 127 acres in state school lands. There is one 396-acre non-profit conservation property managed by Audubon.

The entire county lies within the tallgrass prairie vegetation zone. Agriculture crop fields, hayland, and grazing lands cover much of the region. The North Fork of the Big Nemaha River enters the northeast part of county from Johnson County, and the South Fork enters the southeast corner from Kansas. Both exit into Richardson County. Most of the woodlands are located along the rivers and their tributaries.

Southeast Nebraska Community Wildfire Protection Plan

Locations of special concern include population centers adjacent to wildlands and wooded areas along the rivers and streams. In the 2015 Nemaha NRD plan, Pawnee County listed wildfire as a top concern. The Du Bois VFD identified Iron Horse Lake northwest of Du Bois as having difficult access, one way in and out, and lack of water within an effective distance. They also noted a rural part of a mutual aid area in northern Nemaha County, Kansas as having difficult access, rough terrain, and lack of water within an effective distance. The Table Rock VFD identified the Steinauer area as a concern due to multiple structures. Other locations were identified in the statewide Priority Lands analysis; a map of these areas is included in Appendix A. All of Pawnee County's population centers, rural areas, and wooded waterways lie within the boundaries of the WUI as defined in the introduction to this CWPP.

Infrastructure and Protection Capabilities

Fire Districts and Emergency Management Area

Volunteer fire departments all or partly within Pawnee County include Burchard, Du Bois, Elk Creek, Pawnee City, Summerfield, and Table Rock. The county shares an emergency manager with Johnson County.

Water Sources

Most communities have municipal water systems. Farms and ranches are on wells. The rivers and their larger tributaries are generally reliable water sources. Windmills can provide water when they are operational. There are small ponds and stock tanks on farms and ranches throughout the area. During drought conditions many ponds may not be reliable water sources.

Utilities/Phone Service

Electric service in Pawnee County is provided by the Omaha Public Power District. Both cellular and landline telephone services are available in the county.

Roads and Bridges

The Du Bois, Elk Creek, Summerfield, and Table Rock fire chiefs stated that there are bridges in their district that will not support equipment weight.

Greatest Concerns

The Du Bois and Elk Creek fire chiefs said their greatest concerns are water sources and manpower.

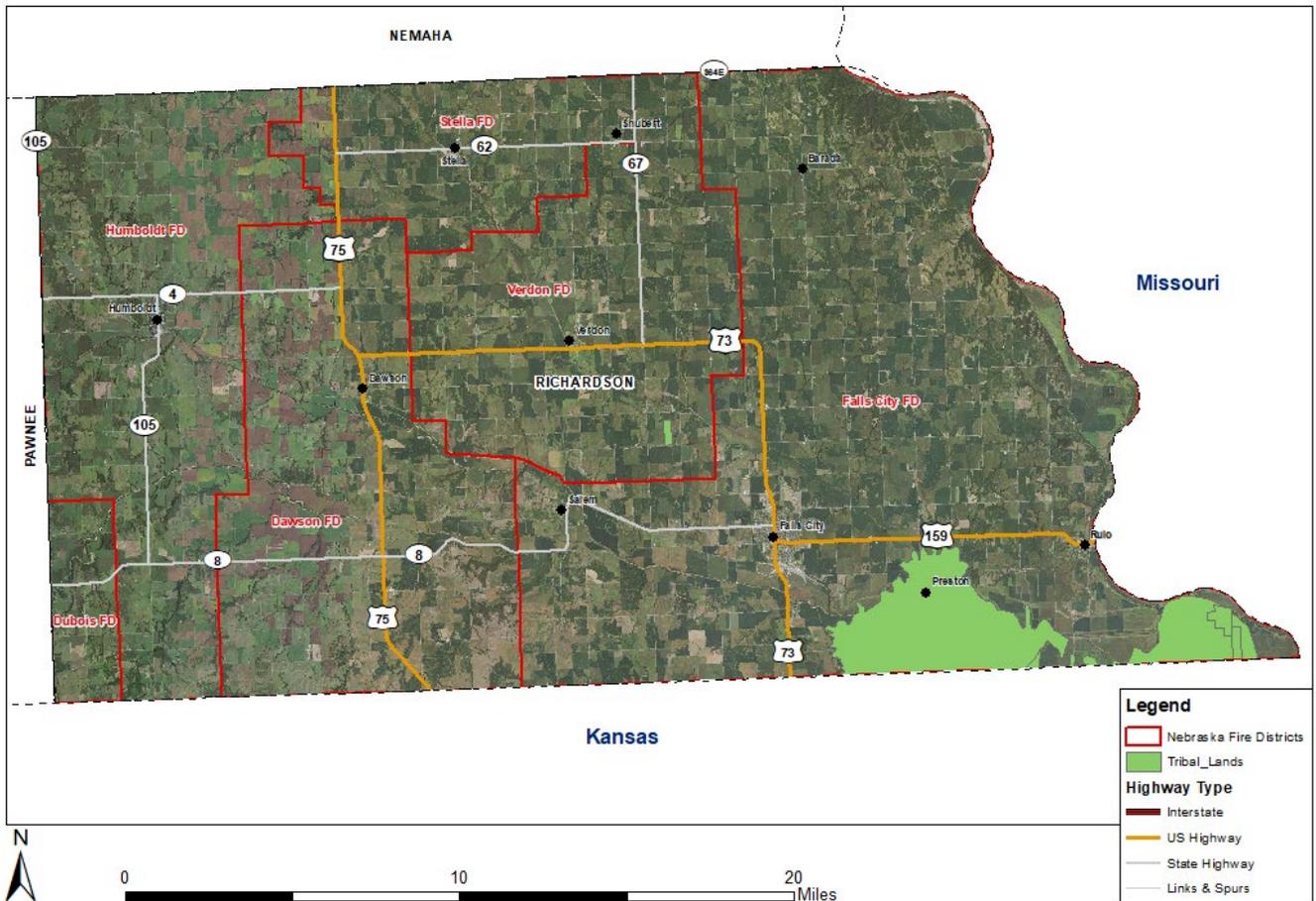
Southeast Nebraska Community Wildfire Protection Plan

RICHARDSON COUNTY

555 sq. miles

2017 population: 7,969

Southeast Nebraska CWPP Region Richardson County Overview



Community Profile

Richardson County forms the southeast corner of both the CWPP region and Nebraska. It is bounded on the west by Pawnee County, on the north by Nemaha County, on the east by Missouri, and on the south by Kansas. Incorporated communities include the county seat of Falls City (pop. 4,187), Barada (pop. 23), Dawson (pop. 136), Humboldt (pop. 813), Preston (pop. 26), Rulo (pop. 162), Salem (pop. 104), Shubert (pop. 139), Stella (pop. 144), and Verdon (pop. 161). There are no unincorporated communities in the county.

Besides municipal lands, public lands in Richardson County include 2,841 acres in six NGPC WMAs and one state park; 503 acres in one NRD property; and 570 acres of state school lands. There are 13,436 acres in tribal lands.

The entire county lies within the tallgrass prairie vegetation zone. Agriculture crop fields, hayland, and grazing lands cover much of the region. The Missouri River forms the east boundary of Richardson County. The North and South Forks of the Big Nemaha River enter the west part of the county from Pawnee County, joining to form the main stem of the Big Nemaha River before flowing into the Missouri River near the southeast corner. Most of the county's woodlands are located along the rivers and their tributaries.

Southeast Nebraska Community Wildfire Protection Plan

Locations of special concern include population centers adjacent to wildlands and wooded areas along the rivers and streams. The Du Bois VFD noted a rural part of a mutual aid area in northern Nemaha County, Kansas as having difficult access, rough terrain, and lack of water within an effective distance. The Falls City Municipal Fire Department identified several WUI areas of concern in and abutting the city, particularly the airport, an industrial tract with no hydrant between the railroads, and three multi-floor apartment complexes. Other locations were identified in the statewide Priority Lands analysis; a map of these areas is included in Appendix A. All of Richardson County's population centers, rural areas, and wooded waterways lie within the boundaries of the WUI as defined in the introduction to this CWPP.

Infrastructure and Protection Capabilities

Fire Districts and Emergency Management Area

Fire departments all or partly within Richardson County include Dawson, Du Bois, Falls City, Humboldt, Stella, and Verdon. The county has a full-time emergency manager.

Water Sources

Most communities have municipal water systems. Farms and ranches are on wells. The rivers and their larger tributaries are generally reliable water sources. Windmills can provide water when they are operational. There are small ponds and stock tanks on farms and ranches throughout the area. During drought conditions many ponds may not be reliable water sources.

Utilities/Phone Service

Electric service in Richardson County is provided by the Auburn Board of Public Works. Both cellular and landline telephone services are available in the county.

Roads and Bridges

The Du Bois and Verdon fire chiefs stated that there are bridges in their district that will not support equipment weight.

Greatest Concerns

The Du Bois fire chief said their greatest concerns are water sources and manpower. The Falls City Municipal Fire Department identified as concerns wind and lack of manpower at some times of the year. The Verdon VFD stated that their primary concerns are water supply and daytime manpower.

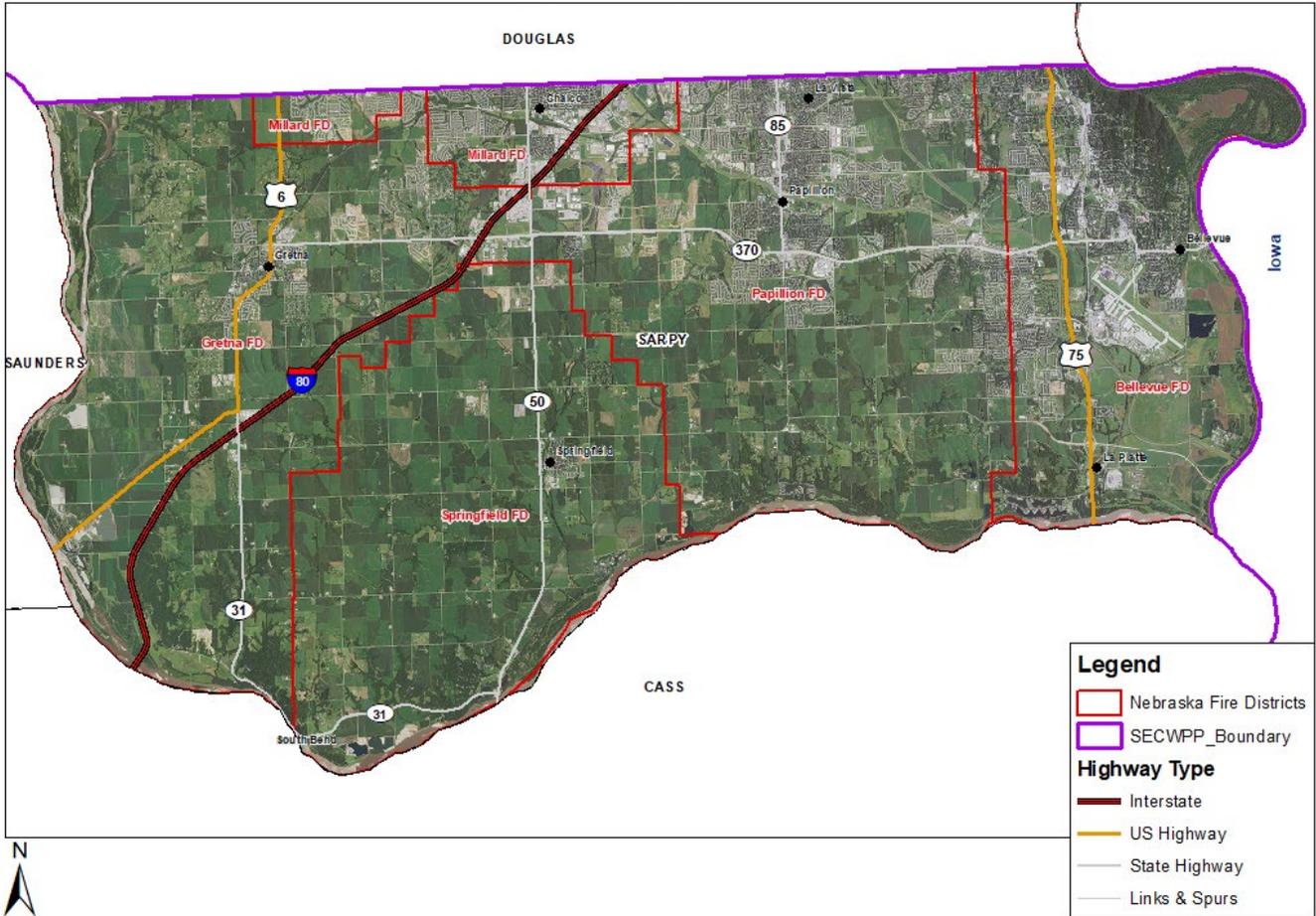
Southeast Nebraska Community Wildfire Protection Plan

SARPY COUNTY

248 sq. miles

2017 population: 181,439

Southeast Nebraska CWPP Region Sarpy County Overview



Community Profile

Sarpy County lies in the northeast corner of the CWPP region. It is bounded on the south by Cass County, on the west by Saunders County, on the north by Douglas County, and on the east by Iowa. Incorporated communities include the county seat of Papillion (pop. 19,539), Bellevue (pop. 53,424), Gretna (pop. 5,062), La Vista (pop. 17,116), and Springfield (pop. 1,603). Chalco (2018 pop. 11,689) is a suburb of Omaha that is listed as a census-designated place, but has no municipal government. La Platte (pop. 61) is listed as an unincorporated community.

Besides municipal lands, public lands in Sarpy County include 1,886 acres in four NGPC properties; 1,295 acres in two NRD recreation areas; 3,142 acres in US Department of Defense properties; and 257 acres of state school lands. In the northeast corner of the county there are 1,489 acres in the Fontanelle Forest Local Resource Management Area, and the Girl Scouts of America operate a 78-acre camp.

The entire county lies within the tallgrass prairie vegetation zone. Agriculture crop fields, hayland, and grazing lands cover most of the western and southern portions of the county. Urban areas encompass much of the northern and northeastern parts of the county. The Missouri River forms the east boundary of Sarpy County, and the Platte River forms its south and west boundaries. The Elkhorn River enters the northwest corner from

Southeast Nebraska Community Wildfire Protection Plan

Douglas County, and joins the Platte River near the middle of the west county line. Most of the county's woodlands are located along the rivers and their tributaries.

Locations of special concern include population centers adjacent to wildlands and wooded areas along the rivers and streams. The 2016 Papio-Missouri NRD Hazard Mitigation Plan's Sarpy County section identified top concerns for Bellevue: "The City of Bellevue is located [west of the 1,400-acre] Fontenelle Forest . . . on the Missouri River. Due to the proximity of the forest to homes, the local planning team identified wildfire as a hazard of concern for the city." Fontenelle Forest staff identified the structures in their public use areas, the areas adjacent to residential development and Gifford Farm, and a power line as areas of concern.

The Gretna fire chief said there is an area south of Gretna that has multiple structures, difficult access, rough terrain, heavy fuels, and lack of water within an effective distance. The Millard Suburban Fire District #1 identified an area northwest of 204th and Giles with difficult access, rough terrain, one way in and out, and lack of water within an effective distance. They also named Chalco Recreation Area as having difficult access, rough terrain, heavy fuels, and lack of water within an effective distance.

The Springfield fire chief identified the Meadow Oaks and Little Prairie subdivisions as areas of concern due to multiple structures, difficult access, rough terrain, one way in/out, heavy fuels, and lack of water within effective distance. The department also has broader concerns: "The Springfield Fire Department covers a mostly rural area of south central Sarpy County. There is significant growth going on in the county that is quickly changing the dynamic of our response area. Large commercial development is happening on our northern border and acreages are filling in the rural area."

A map of the county's Areas of Concern is included in Appendix A. All of Sarpy County's population centers, rural areas, and wooded waterways lie within the boundaries of the WUI as defined in the introduction to this CWPP.

Infrastructure and Protection Capabilities

Almost all of Sarpy County's GIS data is available on their public portal: <https://gis.sarpy.com>.

Fire Districts and Emergency Management Area

Fire departments all or partly within Sarpy County include Bellevue, Gretna, Millard, Papillion, and Springfield. The county has a full-time emergency manager.

Land Management Activities Related to Fire

Fontenelle Forest

Fontenelle Forest conducts prescribed fire on much of its upland forest and savanna. Primary fuel types are TL1, TL2, and TL6, with very little GR2 and TL5 interspersed. Only in periods of extreme drought is laddering likely. Although they have a fuel break in place at the southern end of their property on the floodplain, they do not conduct prescribed fire in the floodplain currently, due to insufficient fire breaks. Primary fuel types in these areas are GR6, GR8, TU2, TL2, SB2, with variability based on wetland conditions. Due to multiple flood events over the past 8 years, there is a significant amount of blowdown in some areas, along with snags. They have assessed a higher likelihood of ignition in a dry/dormant floodplain than in the uplands.

They work with the Bellevue Fire Department to secure burn permits, and pre-submit their burn plans for approval. They maintain their firebreaks before each prescribed burn. Their fire crew consists of staff and volunteers who have received National Wildfire Coordinating Group (NWCG) Wildland Firefighter Type II training and maintain an annual work capacity test of at least moderate level. They also work with partners who may not be trained through NWCG but conduct prescribed fire in their organizations. They notify neighbors and the community prior to burning. They consider their burns to occur in a true WUI, due to their buildings and infrastructure such as bridges/ boardwalks, and neighbor houses adjacent to burn units. They also plan for and

Southeast Nebraska Community Wildfire Protection Plan

monitor smoke, since they are in a metropolitan area. Their equipment consists of standard wildland firefighting hand tools, bladder bags, two UTV pump skids, and a 300-gallon pump skid with hoses on a pick-up truck. They also have a portable pump, leaf-blowers, chainsaws, and drip torches.

Water Sources

Most communities have municipal water systems. In the Papillion fire service area two water utilities provide service – the Metropolitan Utilities District and the City of Papillion. Farms and ranches are on wells. The rivers and their larger tributaries are generally reliable water sources. Windmills can provide water when they are operational. There are small ponds and stock tanks on farms and ranches throughout the area. During drought conditions many ponds may not be reliable water sources.

Utilities/Phone Service

Electric service in Sarpy County is provided by the Omaha Public Power District and Black Hills Energy. Both cellular and landline telephone services are available in the county.

Roads and Bridges

The Gretna fire VFD noted that there are bridges on county roads in their district that will not support equipment weight. The Millard Suburban Fire District #1 identified a bridge in their district that will not support equipment weight. The Papillion fire chief said that there are several private bridges over creeks and drainageways that will not support their equipment.

Greatest Concerns

The Gretna fire chief said their greatest concerns are evacuation and containment. The Millard Suburban Fire District #1 noted that their biggest concerns are getting personnel, apparatus, and water to the area. The Papillion fire chief said that their department's primary concerns are lack of off-road resources and the water supply. The Springfield Fire Department's greatest concerns are the number of rural acreages and high valuation homes with limited access and subdivisions with no water supply.

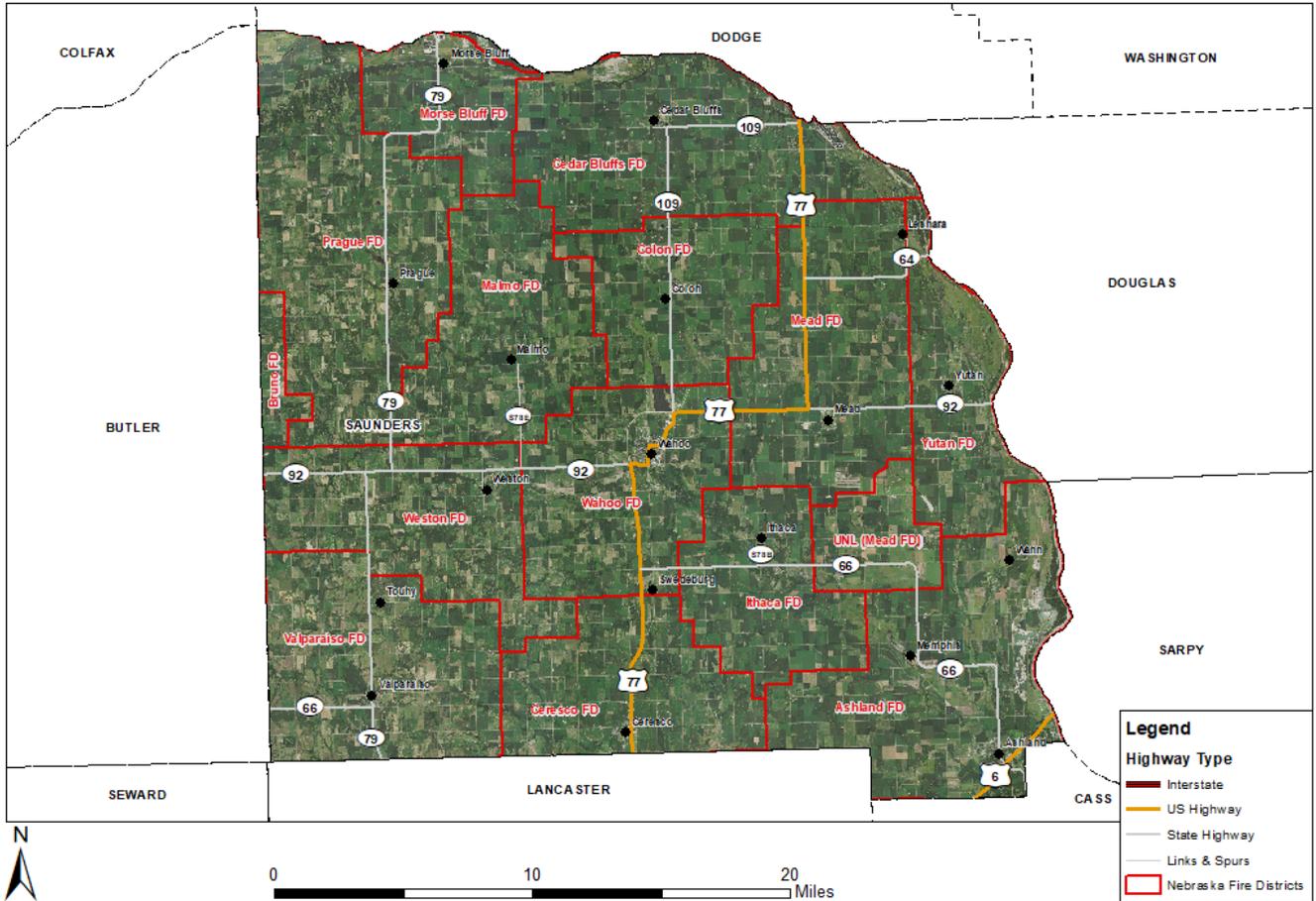
Southeast Nebraska Community Wildfire Protection Plan

SAUNDERS COUNTY

760 sq. miles

2017 population: 21,057

Southeast Nebraska CWPP Region Saunders County Overview



Community Profile

Saunders County lies on the north central edge of the CWPP region. It is bounded on the west by Butler County, on the south by Lancaster and Cass Counties, on the east by Cass, Sarpy, and Douglas Counties, and on the north by Dodge County. Incorporated communities include the county seat of Wahoo (pop. 4,471), Ashland (pop. 2,570), Cedar Bluffs (pop. 587), Ceresco (pop. 885), Colon (pop. 104), Ithaca (pop. 148), Leshara (pop. 114), Malmo (pop. 114), Mead (pop. 552), Memphis (pop. 114), Morse Bluff (pop. 137), Prague (pop. 304), Valparaiso (pop. 544), Weston (pop. 327), and Yutan (pop. 1,261). Wann (pop. 76), Swedeburg (no pop. data), and Touhy (no pop. data) are listed as unincorporated communities.

Besides municipal lands, public lands in Saunders County include 559 acres in six NGPC WMAs and two SRAs; 2,419 acres in four NRD properties; and 1,830 US Department of Defense acres. There are no state school lands.

The entire county lies within the upland tallgrass prairie vegetation zone. Agriculture crop fields, hayland, and grazing lands cover much of the region. The Platte River forms the north and east county boundaries. Most of the county's woodlands are located along the river and its tributaries.

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Locations of special concern include population centers adjacent to wildlands, croplands, and wooded areas along the rivers and streams. The Saunders County section of the 2015 Lower Platte North NRD plan states that “Wildfire has become more of a concern recently in agricultural areas as a result of crop residue.” The plan also listed wildfire as a top concern for the Village of Cedar Bluffs. The Lower Platte North NRD has concerns about the campgrounds at their Czechland Lake and Wanahoo Lake campgrounds and the bluff homes neighboring Wanahoo Lake on the west side.

The Mead VFD identified several locations in and near the Village of Mead as having multiple structures, difficult access, and many residents. These include the National Guard training facility, Joyce Circle, and the ethanol plant south of Mead. The Weston fire chief identified the village of Weston as at-risk due to multiple structures, high home density, and infrastructure. The Yutan fire department listed several developments in their district that have multiple structures, difficult access, rough terrain, one way in/out, heavy fuels, and/or lack of water within an effective distance. The Ashland VFD said that area lake communities with high home density, infrastructure or other resources at high risk, some with one way in/out are concerns.

Other locations were identified in the statewide Priority Lands analysis; a map of these areas is included in Appendix A. All of Saunders County’s population centers, rural areas, and wooded waterways lie within the boundaries of the WUI as defined in the introduction to this CWPP.

Infrastructure and Protection Capabilities

Fire Districts and Emergency Management Area

Fire departments all or partly within Saunders County include Ashland, Bruno, Cedar Bluffs, Ceresco, Colon, Ithaca, Malmo, Mead, Morse Bluff, Prague, Valparaiso, Wahoo, Weston, and Yutan. The county has a full-time emergency manager.

Protection Capabilities

The Lower Platte North NRD has a 200 yard firebreak every year at Wanahoo Lake.

Water Sources

Most communities have municipal water systems. Farms and ranches are on wells. The river and its larger tributaries are generally reliable water sources. Windmills can provide water when they are operational. There are small ponds and stock tanks on farms and ranches throughout the area. During drought conditions many ponds may not be reliable water sources.

Utilities/Phone Service

Electric service in Saunders County is provided by the Butler Public Power District. Both cellular and landline telephone services are available in the county.

Roads and Bridges

The Ashland, Mead and Yutan fire chiefs stated that there are bridges in their district that will not support equipment weight.

Greatest Concerns

The Mead fire chief said their greatest concerns are human safety and structures. The Weston VFD identified lack of personnel and equipment availability, depending on time of day, as their primary concern. The Yutan fire chief stated that their biggest concerns are protecting structures and lives. The Ashland VFD said that rapid advancement of fire due to high winds is their greatest concern.

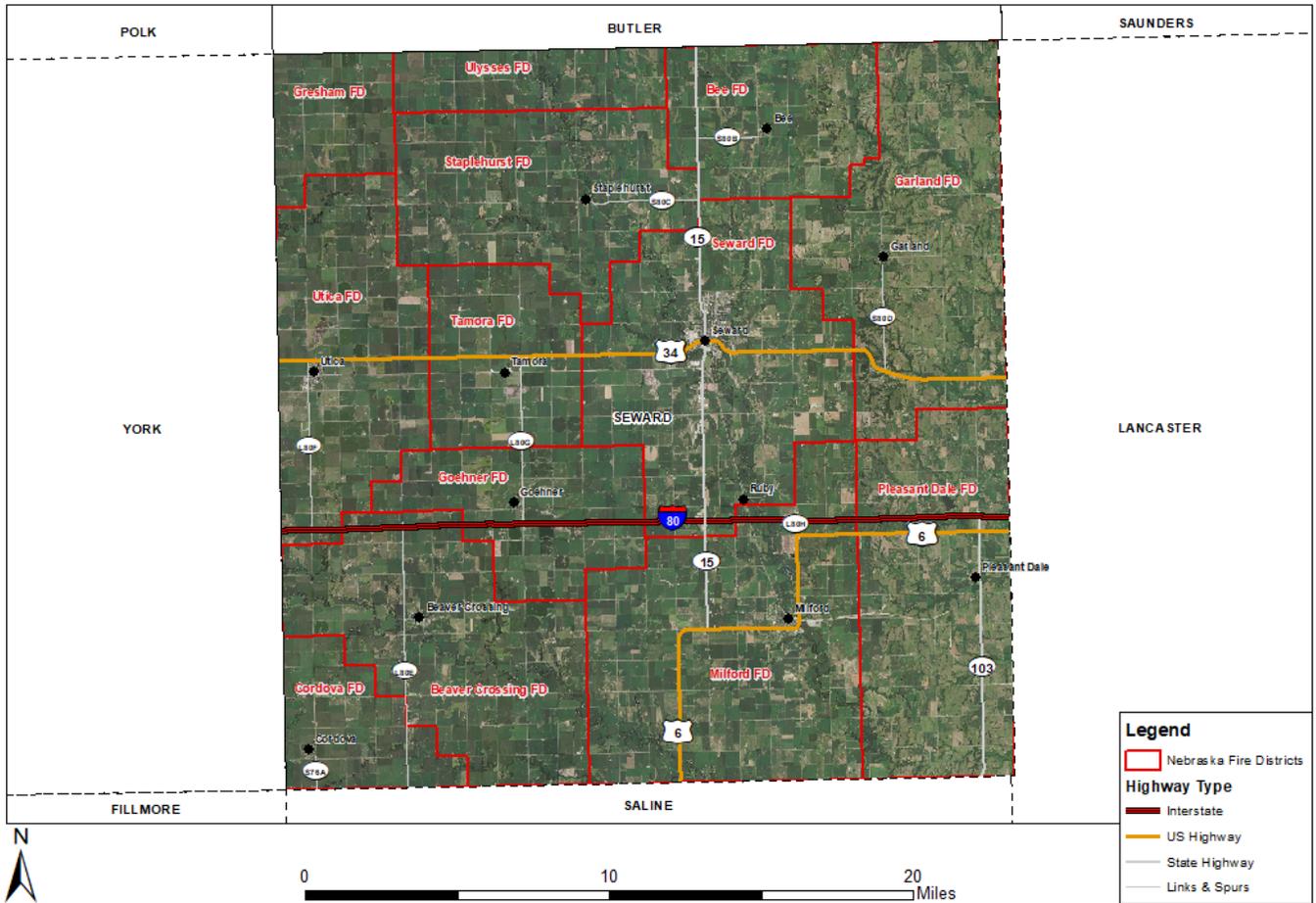
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SEWARD COUNTY

576 sq. miles

2017 population: 17,161

Southeast Nebraska CWPP Region Seward County Overview



Community Profile

Seward County is on the west edge of the CWPP region. It is bounded on the north by Butler County, on the east by Lancaster County, on the south by Saline County, and on the west by York County. Incorporated communities include the county seat of Seward (pop. 7,181), Beaver Crossing (pop. 409), Bee (pop. 187), Cordova (pop. 132), Garland (pop. 216), Goehner (pop. 155), Milford (pop. 2,080), Pleasant Dale (pop. 210), Staplehurst (pop. 233), and Utica (pop. 836). Ruby (no pop. data) and Tamora (pop. 70) are listed as unincorporated communities.

In addition to municipal lands, public lands in Seward County include 187 acres in one USFWS Waterfowl Production Area; 2,870 acres in eight NGPC WMAs and one SRA; 791 acres in three NRD properties; and 399 acres of state school lands.

The entire county lies within the tallgrass prairie vegetation zone. Agriculture crop fields, hayland, and grazing lands cover much of the region. The main stem of the Big Blue River bisects the county from north to south. The West Fork of the Big Blue River enters the southwest part of the county from York County, crosses the southwest corner of Seward County, and exits into Saline County. Most of Seward County's woodlands are located along the rivers and their tributaries.

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Locations of special concern include population centers adjacent to wildlands and wooded areas along the rivers and streams. The Seward section of the 2019 Upper Big Blue NRD plan suggested and gave high priority to the following mitigation for the Village of Bee: “Participate in the Nebraska Forest Service Wildland Fire Protection Program which provides services in wildfire suppression training, equipment, pre-suppression planning, wildfire preventions, and aerial fire suppression.” The plan said Village of Garland identified wildfire as a top hazard, but did not recommend specific mitigations.

The Tamora VFD noted that the Village of Tamora is a concern because multiple structures on its south side lie adjacent to 140 acres of grassland with heavy fuels and lack of water within an effective distance. A fire with a south wind would push it into town. The Crete VFD (abuts the southeast corner of the county and responds to fires in the area) said there is a lot of subdivision moving out from Lincoln. Many have only one-way in or out and have wildland conditions within 20 feet of structures. They have mapped these. Other locations were identified in the statewide Priority Lands analysis; a map of these areas is included in Appendix A. All of Seward County’s population centers, rural areas, and wooded waterways lie within the boundaries of the WUI as defined in the introduction to this CWPP.

Infrastructure and Protection Capabilities

Fire Districts and Emergency Management Area

Volunteer fire departments all or partly within Seward County include Beaver Crossing, Bee, Cordova, Garland, Goehner, Gresham, Milford, Pleasant Dale, Seward, Staplehurst, Tamora, Ulysses, and Utica. The county is part of the Seward/York Emergency Management Area.

Water Sources

Larger population centers have municipal water systems. Rural areas are on private wells. The Big Blue and West Fork Big Blue Rivers and their major tributaries are reliable water sources. Ponds and stock tanks are located throughout the county. During drought conditions some ponds may not be reliable sources of water.

Utilities/Phone Service

Electric service in Seward County is provided by the Seward County Public Power. Both cellular and landline telephone services are available in the county.

Roads and Bridges

The Cordova, Crete, and Tamora fire chiefs stated that there are bridges in their districts that will not support their equipment. The Crete VFD reported bridges that will support brush rigs but not a 3,000-gallon tanker. They have mapped these, as well as closed roads and bridges and impassible or dry-weather-only roads.

Greatest Concerns

The Cordova fire chief stated that loss of life and loss of structures are their greatest concerns. The Ulysses VFD said that manpower is usually an issue for them. The Crete VFD is looking to partner with their local university to create a comprehensive GIS layer for the district. They are currently mapping potential fire paths that would allow a wildfire to travel more than 2 miles. They stated that the wildland urban interface is their biggest problem.

Action Plan

This section of the CWPP addresses risk assessment, fire risk rating, treatment of structural ignitability, prioritization, and risk reduction and it recommends a plan of action for increasing emergency preparedness. The action plan includes wildfire risk reduction strategies, recommendations for increasing emergency preparedness, fuels mitigation practices, training, education, and maintenance. The final part of the action plan outlines a monitoring and evaluation process that can be used to track progress and periodically update the plan.

Establish and Implement a Risk Assessment Procedure

The Lower Platte North NRD, Lower Platte South NRD, Nemaha NRD, Papio-Missouri NRD, Lower Big Blue NRD, and Upper Big Blue NRD Multi-Jurisdictional Hazard Mitigation Plans identify their planning areas as being 100 percent at risk of wildfire. Most of these fires can be expected to be less than 100 acres in size. The plans include general wildfire risk assessments (but do not map specific at-risk areas) and some general mitigation alternatives. None of the plans identified Firewise® Community/ Defensible Space as a goal.

Risk assessment is a systematic process for identifying and assessing the range of elements that could lead to undesirable outcomes for a specific situation. Quantitative risk assessment requires calculations of the two primary components of risk: the magnitude of the potential loss and the probability that the loss will occur. For the WUI, a risk assessment is a step that identifies any feature/element of the landscape and structures that could create potential harm to a homeowner or community.¹⁴

It is important to understand the meaning of risk and hazard in relation to wildfire. **Risk** is the chance or probability of occurrence of fire. **Hazard** is the exposure to risk; in a wildfire situation, those hazards can be related to either the natural or the human-made environment. Natural hazards include fuel type and amount of fuels, topography, and weather. Human-made hazards include the limited availability of water, limited access to structures, limited green space around structures, and the ignitability of structures. The capability of firefighting resources will be compromised by the severity of both natural and human-made hazards.¹⁵

An assessment includes a review of the area's fire history, fuels/vegetation rating, topographic hazard analysis, weather hazard potential, access, water availability, defensible space, and structural ignitability. The Overview section of this plan contains information about the area's fire history, climate, weather, fuels/vegetation, and topography. Individual county sections provide details on water sources and access issues. Local fire department equipment lists appear in Appendix F. Defensible space and structural ignitability are addressed in this section of the plan.

Many actions can be taken to reduce the fire potential in both existing housing developments and planned new developments. People can assess the potential of a structure located in a wildland environment to withstand an approaching wildfire without the intervention of firefighting personnel and equipment. Assessments focus on proactive, pre-fire preventative actions rather than reactive fire suppression plans. Several excellent fire hazard assessment methodologies are widely available. Below are excerpts from the National Wildland/Urban Interface Fire Protection Program's methodology publication:¹⁶

First, it is important to understand how three ignition sources (radiation, convection, and firebrands) can impact a structure located in a wildland environment and how they affect certain building components—roofs, eaves/overhangs, walls, windows, vents, and attachments. Fire potential can be reduced when building a structure or altering an existing structure by conducting mitigation measures on the structure itself and in the surrounding wildland area. The following is a five-step method for assessing the hazards of a WUI area:

Step 1: Select the area to be evaluated.

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Step 2: Select the hazard components to be considered. These can include but are not limited to:

- Vegetative fuel hazards both in and beyond the immediate vicinity of the structure
- Structure density (lot size, structures per lot)
- Slope (steeper slopes are more hazardous)
- Weather (temperature, humidity, winds, drought patterns)
- Fire occurrence (increased fire probability where fires have occurred in the past)

Step 3: Rank the hazard components. Develop or use an existing system to define the significance of each component. The system, though subjective in nature, should be specific and consistent.

- Define a system to rank the hazard level of the components (i.e. low-medium-high or numeric)
- Evaluate and rank each individual component that is included in the assessment
- Develop an overall hazard rating system
- Calculate the overall hazard rating

Step 4: Compile the hazard rankings in a usable format that reveals the relationships between the individual hazards and categories of hazards. Three methods are often used to analyze the data collected:

- A geographic information system can define the hazards components and display each hazard on clear overlays, rather than on a single map, allowing analysis of various combinations of data
- A grid index system references specific points of interest on a map. The coordinates of the grid define the hazard rating of a specific property or area
- A matrix system describes the severity of each hazard for each area within the assessment

Step 5: Develop future actions—use the information developed to reduce fire loss potential in the WUI:

- Develop mitigation strategies to improve firefighter and public safety
- Develop fire response/evacuation plans
- Provide reference tools for planners, insurers, bankers, and local code adoption
- Develop region-wide cooperative fire protection agreements
- Perform cost/benefit analyses
- Implement or evaluate existing programs
- Strategically focus fuel reduction projects
- Distribute along with public fire safety education information to educate property owners, local and state governments and fire-service agencies

Fire Risk Rating and Ignitability

Homes in both forested and non-forested settings can be at risk from wildfires. Using a process such as the one described above, quantitative structure risk ratings can be handled under location-specific plans for incorporated communities or on an individual site basis in rural developments. With the exception of the incorporated municipalities and the residential and recreational subdivisions along rivers, most of the southeast Nebraska CWPP region is rural/agricultural with widely spaced home locations. There is an opportunity to perform structural risk and ignitability analysis and treatment activities for rural home sites at the same time fuels mitigation work is being conducted.

Prioritization

Appendix A contains maps depicting “Areas of Concern” that show the parts of each county considered to be at the highest risk from wildfire. The locations were identified by local fire officials, other stakeholders, and priority areas designated in the statewide FAP analysis. These include interface areas with neighborhoods directly adjacent to open spaces, intermix areas where homes are interspersed with natural fuels, and occluded interface areas where neighborhoods are isolated or surrounded by areas of natural fuels.¹⁷ A few sparsely

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populated areas were included because they have extremely limited access and rough terrain, and were deemed problematic by local fire departments.

The WUI focus areas within each county can be further prioritized based on data gathered during risk assessment for individual neighborhoods. The woodlands and recreational and rural residential subdivisions along the Platte, Big Blue, and Nemaha Rivers and their tributaries have high priority for hazardous woody fuels reduction. All of the rural population centers, edges of municipalities, unincorporated residential developments, and dispersed recreational developments have high priority for fuels treatment and Firewise® preparation. Further assessments may identify additional priority areas.

Wildfire Risk Reduction

The goal of risk reduction is to reduce the potential loss to life and property. Understanding that wildfire is inevitable can help communities prepare for wildfires. [Fire-Adapted Communities](#) are knowledgeable, engaged communities where actions of residents and agencies in relation to infrastructure, buildings, landscaping, and the surrounding ecosystem lessen the need for extensive protection actions. This enables the community to safely accept fire as part of the surrounding landscape. A successful fire-adapted community approach has the potential to save lives, homes, and communities, and millions of dollars in suppression costs annually.

There is a range of actions communities can undertake to become more fire-adapted. In general, the more elements that a community has addressed, the more fire-adapted the community will become. Major elements of a fire-adapted community include vegetation management, ignition-resistant homes, increasing local responders' understanding of wildfire, cooperation between jurisdictional authorities, and fuels treatments on both private and public lands to reduce hazardous fuels and create fuels buffers.

Homeowners can undertake mitigation measures that can decrease the potential destructive effects a wildfire might have on their property. Some measures are designed to modify the vegetative environment surrounding a structure to decrease potential ignition sources. Others focus on modifying a structure (or changing its location) to make the structure more resistant to ignition. To reduce the risk for the long term, actions need to be maintained over time.¹⁶

Common Practices

- Actively managing vegetation near the home by reducing density, conducting landscaping maintenance, and replacing flammable vegetation with ignition-resistant components. Greater efforts are needed within close proximity of the structure and gradually decreasing efforts beyond that.
- Maintaining structures free of needles, leaves, and other organic debris from decks, roofs, and near the base of exterior walls.
- Increasing ignition resistance of structures by actions such as using ignition-resistant roofing and covering exterior openings of structures, such as attic vents, eaves, soffits, and crawl spaces, with non-flammable wire mesh screening.
- Removing flammable materials from beneath structures and decks.
- Locating firewood, fuel tanks, and LPG tanks at a safe distance from structures.

Refer to Appendix I for an expanded list of common practices and a listing of several programs, such as "Firewise®" and "Ready Set Go," available to help homeowners and communities reduce wildfire risks.

Other Wildfire Mitigation Practices for Nebraska

Listed below are some of the wildfire-related mitigation practices recommended in hazard mitigation plans for other parts of Nebraska. Hazard mitigation planners in the Southeast Nebraska CWPP Region may want to review these when their plans are updated.

Southeast Nebraska Community Wildfire Protection Plan

- Acquire training and equipment for local fire departments
- Hazardous fuels reduction; defensible space
- Fire prevention program; wildfire education
- Participate in the Firewise® program
- Wildfire hazard identification and mitigation system
- Conduct maintenance to reduce risk (tree care and public landscape maintenance programs)
- Reduce risk through land use planning (landscaping ordinances)
- Require or encourage fire-resistant construction (the use of non-combustible materials)
- Incorporate wildfire mitigation in comprehensive planning
- Develop a wildland-urban interface code
- Expand water storage capacity/emergency water supplies/dry hydrants
- Rural water district and system upgrades; well and water system improvements

Although funding limitations affect any jurisdiction's ability to implement some of these practices, identifying them as critical needs helps prioritize them for funding assistance opportunities such as the NFS fire equipment program described earlier in this plan.

Recommendations for Increasing Emergency Preparedness

Communication

Regularly review local communications plans, revising as needed. Many jurisdictions in Nebraska have identified communications as a major issue when working under a mutual aid scenario. Various responders have different communications hardware, and often these are incompatible with one another. This is more than just a nuisance. Communication is vital to responder safety and to coordinating an effective response to wildfire. After some major communications mishaps during the large wildfires of 2012 many local and state emergency managers worked to resolve the issue by updating protocol and equipment. Having and using a comprehensive communications plan is integral to maintaining smooth operations.

Coordination

Coordination between responders is crucial in any emergency response situation. Local emergency managers need to be able to tie in their responses with neighboring and outside assisting jurisdictions. This framework is already in place and used by local emergency managers. One of the gaps common to many LEOPs is the lack of wildfire-specific information in those documents. In many, fire is lumped in with hazardous materials. The information contained in this CWPP is intended to augment existing information and support these LEOPs and the local Multi-Jurisdictional Hazard Plans.

Aerial Support

It is critical to maintain the Single Engine Air Tanker program authorized through the Wildfire Control Act of 2013. Without this quick-response capacity, the danger of a small fire in difficult terrain growing into a large wildfire escalates rapidly.

Maps and Data

Some county roads and bridges have weight and/or width limitations that may inhibit use by emergency vehicles. If bridges were removed or are in poor condition, detours are needed. Planners can work with counties and fire departments to identify and map all roads and bridges, specifically identifying those with weight or width limits. Distributing this to fire departments and other emergency responders would facilitate route planning. This information could also be used to help prioritize hazardous woody fuel treatment areas.

Incident Command staging areas have been identified as an issue in some parts of Nebraska. Planners may be able to help with this by pre-identifying potential staging locations near areas of wildfire concern such as recreation areas and rural subdivisions. Staging areas must be far enough away from a fire to reduce congestion

Southeast Nebraska Community Wildfire Protection Plan

and confusion for incident managers, yet close enough to efficiently provide resources. When a resource is needed, it is deployed from the staging area, with a controlled entry into the hazard zone. Staging areas need to be of sufficient size to accommodate multiple fire crews, engines, tankers, support vehicles, and equipment storage. Sites should have good access, water and power availability, and be able to accommodate communications needs. The information gathered for potential staging areas in the most at-risk locations can be provided to emergency managers, fire chiefs, and others to help them decide where to establish the staging area for a particular incident.

Equipment: Non-fire equipment has proven useful in many wildfire situations. Counties may want to consider adding an inventory of non-fire department resources (such as county road graders) to a centralized document.

Municipal water hydrants could be mapped and made available to emergency responders. Other map data that would be useful, especially in a format that could be easily accessed by hand-held devices, include types and locations of pipelines and pumping stations; power substations; power lines, towers and antennas for air resources to avoid; flammable material storage areas; and overhead water refill access points. GPS locations of stock tanks and other water sources on public lands could be provided to mutual aid responders.

Other: Counties can use technology to provide early detection systems and real-time fire weather information by retrofitting units and establishing new ones to complete the existing network

Increase Fire Response Reporting for Increased Equipment Availability

Since reporting is voluntary, not all fire districts report their wildfire responses to the NFS. Because of this, there is limited information available about the locations and sizes of historic wildfires within the CWPP counties. Increased reporting would provide data to geographically focus grant assistance on those areas most prone to wildfire. The NFS has a database already in place that could easily be used to help with this. Planners and fire departments are urged to work together to gather and report wildfire data to assist fuels mitigation efforts and increase funding opportunities for fire equipment.

Comprehensive fire reporting helps volunteer fire districts demonstrate a need for fire equipment such as that provided by the FEPP, Fire Fighter Property/State Fire Assistance, and Volunteer Firefighter Assistance programs described earlier in this document. There is a risk that incomplete reporting could imply that there is no pressing need for this type of equipment. This could potentially put the status of the program in jeopardy. As an incentive for participation, fire departments that report their responses are eligible to apply for this equipment.

Community Preparedness

Prepared communities reduce hazards, protect homes, and increase firefighter safety. Work with homeowners in WUI areas to establish and expand Firewise® Communities, Fire-Adapted Communities, and “Ready, Set, Go!” programs across the region. In a wildfire situation, responders often must quickly decide which homes have the best chance of being saved so they can focus their efforts on them. Some Nebraska fire departments have developed “triage” documents to help firefighters quickly assess these homes and neighborhoods. Preparation by property owners prior to a wildfire can contribute to firefighter safety and help them protect structures (see Appendix I).

Work with counties and municipalities to evaluate one-way-in/one-way-out subdivisions for potential addition of alternate ingress/egress routes. Estimate costs and identify potential grants or other financial assistance to address these issues. County zoning plans can be strengthened to include provisions to limit new construction in areas that are at high risk from wildfire, such as bluffs along rivers. Counties may want to consider both the monetary costs to taxpayers and the danger to fire department personnel responding to wildfires in these areas. At the very least, setbacks from the canyon rims, adequate emergency access, and specific Firewise® practices should be considered for implementation in the areas at highest risk.

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Training and Education

Firefighter Training

The NFS encourages all volunteer fire departments to participate fully in wildland training opportunities provided through the NFS, the State Fire Marshal's Office, and NEMA. Refer to the training overview earlier in this document. Although not all volunteer fire departments have mandatory fitness requirements, local departments can be encouraged to establish and participate in them, both for safety reasons and to lower insurance costs.

Educational Opportunities for Property Owners and the Public

The Firewise® and "Ready Set Go!" programs offer excellent guidelines for reducing the loss from wildfire for both in-town and rural structures. The NFS "Living with Fire" publications, for both prairie and woodland areas, are also valuable educational tools for property owners. Fire extinguisher inspections and operation training could be offered as part of Firewise® events that participating communities hold annually. Involving local communities in these voluntary programs increases public awareness regarding structure risk mitigation. See Appendix I.

When issuing building permits, county and municipal offices can distribute literature that includes recommended or required setbacks from canyon rims, lists of fire-resistant building materials, and fire-savvy landscaping suggestions. Service groups such as Rotary and Lions, and youth groups such as FFA, also may present opportunities for getting out wildfire planning information.

Fuels Mitigation Strategies

There are several approaches to reducing wildfire hazard through fuels management. In addition to active participation by property owners in the structural protection programs described above, practices such as prescribed grazing, prescribed fire, and mechanical fuels reduction can work together to provide protection over large areas containing a diversity of terrain and vegetative cover.

Prescribed Grazing

Grazing keeps fine fuels such as grasses in check. But overgrazed pastures are problematic for range and livestock health, as well as for wildlife. Landowners can work with range and wildlife management professionals to develop grazing plans that will benefit livestock while protecting grasslands and wildlife and managing fine fuels to reduce wildfire hazard.

The University of Nebraska's Institute of Agriculture and Natural Resources and the Natural Resources Conservation Service have specialists available to help landowners develop grazing systems that will address these concerns.

Prescribed Fire

Several federal and state agencies, prescribed burn associations, and some individual landowners use prescribed fire as a land management tool on federal, state and private lands. On grasslands, prescribed fire can be extremely efficient for keeping eastern redcedar encroachment in check. In forested settings, prescribed fire is more effective and safer when used to maintain woodlands after dense areas have been mechanically thinned. When tree densities are reduced prior to burning, it is easier to keep the fire on the ground, where it cleans up downed woody fuels without killing live trees. Crown fires are difficult to control, and they kill healthy trees.

Mechanical Fuels Reduction in High-Risk Wooded Settings

High-risk forested settings within the CWPP boundary are found mostly in cedar-encroached riparian bottoms, wooded recreation areas, and wooded and shrubby areas surrounding population centers. Mechanical thinning will decrease tree density to healthy levels and reduce eastern redcedar encroachment in deciduous forests. Wooded recreational and residential areas add the hazards of seasonal congestion, sometimes-limited or difficult access, and structures adjacent to highly-flammable vegetation.

Southeast Nebraska Community Wildfire Protection Plan

Slash (unusable limbs and tree tops left after thinning) can be chipped, mulched, or piled. Slash piles can present a fire hazard. Disposing of them by either burning during appropriate winter conditions or chipping on-site are acceptable means to mitigate this threat. Chips can help reduce soil erosion in disturbed areas. The chips should be spread, not piled, to allow vegetation to become established in these areas. Piles of chips not only prevent or delay revegetation, they also can be sources of spontaneous combustion.

The cost of mechanical fuels reduction depends on access, terrain, and tree density. Utilization of wood products generated by these treatments has the potential to offset the costs of doing the work. However, presently there is little local commercial market for this material. Researchers are currently working with the NFS to expand markets for wood products.

The NFS administers several federal and state grants that provide cost share to landowners to defray the cost of fuels reduction. Information about these programs can be found online at <https://nfs.unl.edu/fuels-assistance>. Landowners in counties that have a CWPP in place are eligible for these cost share programs.

Fuels Reduction in High-Risk Non-Forested Settings

Fuels management works best when it is conducted on a landscape basis. In addition to reducing woody fuels in forested areas, it is also important to manage the grass component on both forested areas and grasslands. Well-planned grazing can significantly reduce fire risk. Fuels treatments are only as effective as their weakest link. Unmanaged “islands” within managed areas pose a significant risk to the managed lands. Cost-share programs can encourage landowners to manage their forested and non-forested lands.

Much of the fuels reduction activity outside forested areas will involve creating defensible space around rural homes and other structures. The same Firewise® guidelines that apply in forested settings also apply in non-forested settings.

Maintenance

Reducing hazardous fuels is not a one-time event. Areas that have been treated by any method to reduce fuels must be maintained on a regular basis because the vegetation continues to grow. NFS fuels treatment agreements include a requirement that the work be maintained for a minimum of ten years after the project is completed. Treatment, particularly mechanical treatment, can be costly, so continued maintenance (keeping regrowth in check) not only prolongs the period of hazard protection, it also protects the monetary investment made by landowners and the cost-share program.

Monitoring and Evaluation

The objective of fuels mitigation treatments in forested settings is to reduce the stand density to levels which will remain effective for 20 to 30 years. The NFS maintains a database that quantifies the time and level of treatment performed under NFS agreements on forested properties statewide. This helps resource managers to evaluate when and where resources for future fuel treatments should be directed.

The extreme fire behavior in Nebraska during 2012 tested many of the fuels reduction treatments that were previously implemented. Wildfires provided an opportunity to observe the effectiveness of various types and intensities of treatments. Lessons learned from the 2012 fire season strengthened resource managers’ ability to plan suitable fuels mitigation treatments for Nebraska’s landscapes.

Schedule

The maintenance for this plan will be directed by the county boards in the CWPP region and coordinated with local fire officials and resource managers. Counties or their representatives will review the plan on an annual basis to evaluate progress, re-evaluate priorities for action items, and recommend updates as needed.

Southeast Nebraska Community Wildfire Protection Plan

Review of the strategy recommendations will be necessary as various projects or tasks are accomplished and the at-risk areas decline in hazard rating. Review will also be needed as infrastructure needs change or are met and the review should include representation of stakeholders who participated in the development of this plan.

A complete update of the plan every five years is recommended because infrastructure needs, population, and land use can change, fuels reduction projects may be completed, emergency services in outlying areas may expand, data are updated, and areas of extreme wildfire hazard expand or shrink.

Monitoring

Continued public involvement is needed to accomplish many of these recommendations. It is important that the process allows for continued collaboration with stakeholders on how best to meet their needs, while at the same time achieving the objectives of this plan. Counties and fire departments can formally or informally monitor progress and coordinate with agency stakeholders who monitor their efforts according to their internal protocol, documenting accomplishments and redesigning strategies as needed.

Evaluation

Annual assessment of the identified tasks is very important to determine whether or not progress is being made. Units of measure to consider when updating the plan in the future for the purpose of reporting accomplishments include:

1. Number of projects or activities accomplished which aid fire agency/emergency service response time
2. Number of transportation issues resolved that improve road systems for access, ingress/egress
3. Number of water sources added or upgraded to improve firefighting response
4. Number of pieces/types of equipment obtained
5. Number of firefighters and fire departments receiving training courses; course hours completed
6. Number of properties/acres treated for fuels reduction and type(s) of treatment used
7. Number of new or retrofitted ignition-resistant structures
8. Number of events with prevention message delivery, number of prevention courses attended/ conducted, number of news releases or prevention campaigns conducted, and number of prevention team meetings held
9. Number of partners/agencies/groups involved
10. Number of people contacted (meetings, courses, etc.) and number of educational items distributed (brochures, etc.)

Each participating agency/organization can assess their activities and projects using the units of measure listed above to determine progress. This plan does not function as a means of bypassing the individual processes and regulations of the participating agencies. Each project must adhere to any pertinent local, state, and federal rules. The CWPP is a coordinating document for activities related to wildfire education and outreach, information development, fire protection, and fuels treatment.

Five-Year Action Plan

The Action Plan proposed on the following page is intended to assist planners implement, evaluate, and keep the CWPP up to date. It lists the objectives developed by the planning team and the associated tasks needed to achieve each objective, suggests who might perform the tasks and when, provides benchmarks for evaluation, and identifies opportunities and limitations. When the CWPP is updated at the end of five years, a new action plan can be developed to accommodate new or expanded objectives for the ensuing five-years.

Southeast Nebraska Community Wildfire Protection Plan

| Five-Year Action Plan for the Southeast Nebraska CWPP 2020-2025 | | | | | |
|--|--|--|-------------|--|---|
| Objective | Task(s) | Who | When | Benchmark(s) | Opportunities/Limits |
| Risk Assessment (RA) | Identify/analyze elements | Local officials with NFS | Done | Checklist/Report | n/a |
| Structural Risk & Ignitability Analysis (SRIA) | Individual or neighborhood analysis for rural areas | Contractors, fire depts., others. | Ongoing | Checklist/Report | Opportunity to do this during fuel reduction projects or other site visits. Limits: funding and staff availability. |
| Prioritization of Areas of Concern | Assess/prioritize AoCs based on vulnerability | Local officials & fire departments | 2020-2022 | Maps Checklist Report | Opportunity to further prioritize based on RA & SRIA data |
| Risk Reduction (RR) | Identify practices | Local officials with NFS | Done | Checklist/Report | n/a |
| | Vegetation Management | Homeowners & landowners; local officials (for public property) | Ongoing | # Acres or Properties Treated | Agency cost share programs available |
| | Ignition-Resistant buildings | Homeowners, planning officials | Ongoing | # New buildings to code; # bldgs. retrofitted | Opportunity for new construction; retrofits can be costly |
| | Jurisdictional Cooperation | Local, state, federal officials | Ongoing | # of Mutual Aid Agreements, MOUs, etc. | Explore MOUs with non-traditional partners, NGOs, etc. |
| Increase Communications Effectiveness | Review Local Communications Plans | Local and state officials | Annually | Document changes/updates | n/a |
| Increase Data Availability | Map county roads/bridges with weight or width limits; other data | Local officials, contractors? | 2020-2025 | Completed maps by jurisdiction | May be able to piggy back data collection with other tasks |
| | Realtime fire weather information | State, Local | Ongoing | # of units | Retrofit units and establish new to complete network |
| | Provide early detection systems using technology | State, Local | Ongoing | # of units | May retrofit some units and establish new units |
| Increase Available VFD Equipment | Increase fire response reporting | Fire chiefs | Ongoing | # of Departments reporting | Opportunity for VFDs to acquire additional equipment |
| Increase Community Preparedness | Implement homeowner and community programs | Local officials, homeowner groups | Ongoing | # of programs established or expanded | NFS has staff available to help communities with this |
| | Evaluate subdivision in/out access | Local officials, VFDs, developers | 2020-2022 | Report/cost estimates | Explore grant funding to address costs |
| | Review County Zoning Plans for treatment of high fire risk areas | Local planning staffs | 2020-2022 | Recommendations to county officials | Consider canyon setbacks, access, building materials |
| Increase Response Effectiveness | Participate in firefighter training | VFDs | Ongoing | # of departments and firefighters receiving training | Many training options available through NFS & NEMA |
| Increase Public Awareness | News releases; Hold workshops, information sessions, etc. | Local officials, planners, VFDs | Ongoing | # of people reached | NFS has info & materials, can help with planning |
| | Provide literature to homeowners, developers, others | Local officials, planners, VFDs | Ongoing | # of people reached | NFS has brochures & handouts for general use |

Southeast Nebraska Community Wildfire Protection Plan

Endnotes

- 1 Korth, R. Fire burns land, house near Branched Oak Lake. Lincoln Journal Star. March 9, 2014. https://journalstar.com/news/local/crime-and-courts/fire-burns-land-house-near-branched-oak-lake/article_d7a3401e-bea4-5077-8bc7-a96f1bf6e1ae.html Accessed 10/15/2019.
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- 3 Nebraska Emergency Management Agency. Nebraska State and Local Plans. <https://nema.nebraska.gov/preparedness/nebraska-state-local-plans>. Accessed 10/4/2018.
- 4 Nebraska Emergency Management Agency. State of Nebraska Hazard Mitigation Plan. <https://nema.nebraska.gov/sites/nema.nebraska.gov/files/doc/hazmitplan.pdf>. Accessed 10/4/2018.
- 5 Temperature and precipitation data: University of Nebraska High Plains Regional Climate Center. <https://hprcc.unl.edu/datasets.php?set=CountyData>. Accessed on October 10, 2019.
- 6 Wind data: Iowa Environmental Mesonet. Station data and metadata for selected Nebraska stations. 1970-2019. https://mesonet.agron.iastate.edu/sites/windrose.phtml?network=NE_ASOS&station=OGA. Accessed October 10, 2019. Iowa State University. Accessed 9/13/2019.
- 7 Vegetation data: University of Nebraska, School of Natural Resources, 1993. <http://snr.unl.edu/data/geographygis/land.aspx>. Accessed April 13, 2020.
- 8 USDI US Geological Survey. 2011. NLCD 2011 Land Cover. <https://www.mrlc.gov/data/statistics/national-land-cover-database-2011-nlcd2011-statistics>
- 9 Estimate provided by Cort Dewing, Nebraska Board of Educational Lands and Funds, 5/11/2018.
- 10 Visitation numbers provided by the Nebraska Game and Parks Commission, 3/9/2020.
- 11 Fire regimes of the conterminous United States. US Forest Service Fire regime information on 256 vegetation communities. This information is taken from the [LANDFIRE Rapid Assessment Vegetation Models \[3\]](#), which were developed by local experts using available literature, local data, and/or expert opinion. This table summarizes fire regime characteristics for each plant community listed. USDA Forest Service Fire Effects Information System, https://www.fs.fed.us/database/feis/fire_regime_table/fire_regime_table.html and <https://www.feis-crs.org/feis/> accessed 11/5/2019.
- 12 Guyette, R.P., M.C. Stambaugh, and J.M. Marschall. 2011. A quantitative analysis of fire history at national parks in the Great Plains. A report prepared for the Great Plains Cooperative Ecosystem Studies Unit and National Park Service. 78 pp.
- 13 Nebraska Forest Service. Fire reports database. Accessed 3/2/2020.
- 14 Wildland Urban Interface Wildfire Mitigation Desk Reference Guide. (August, 2014). Retrieved from <http://www.nwcg.gov/pms/pubs/pms051.pdf> December 3, 2018.
- 15 Baker County Community Wildfire Protection Plan. Oregon. February 15, 2006.
- 16 National Wildland/Urban Interface Fire Protection Program. *Wildland/Urban Interface Fire Hazard Assessment Methodology*. Retrieved from <http://www.emnrd.state.nm.us/SFD/FireMgt/docs/wham.pdf> April 2, 2020.
- 17 International Fire Chiefs Association. *Community Wildfire Protection Plan: A Fire Service Leader's Guide*. Definitions retrieved from <https://www.iafc.org/topics-and-tools/resources/resource/community-wildfire-protection-plan-leaders-guide> December 3, 2018.

Southeast Nebraska Community Wildfire Protection Plan

List of Appendices

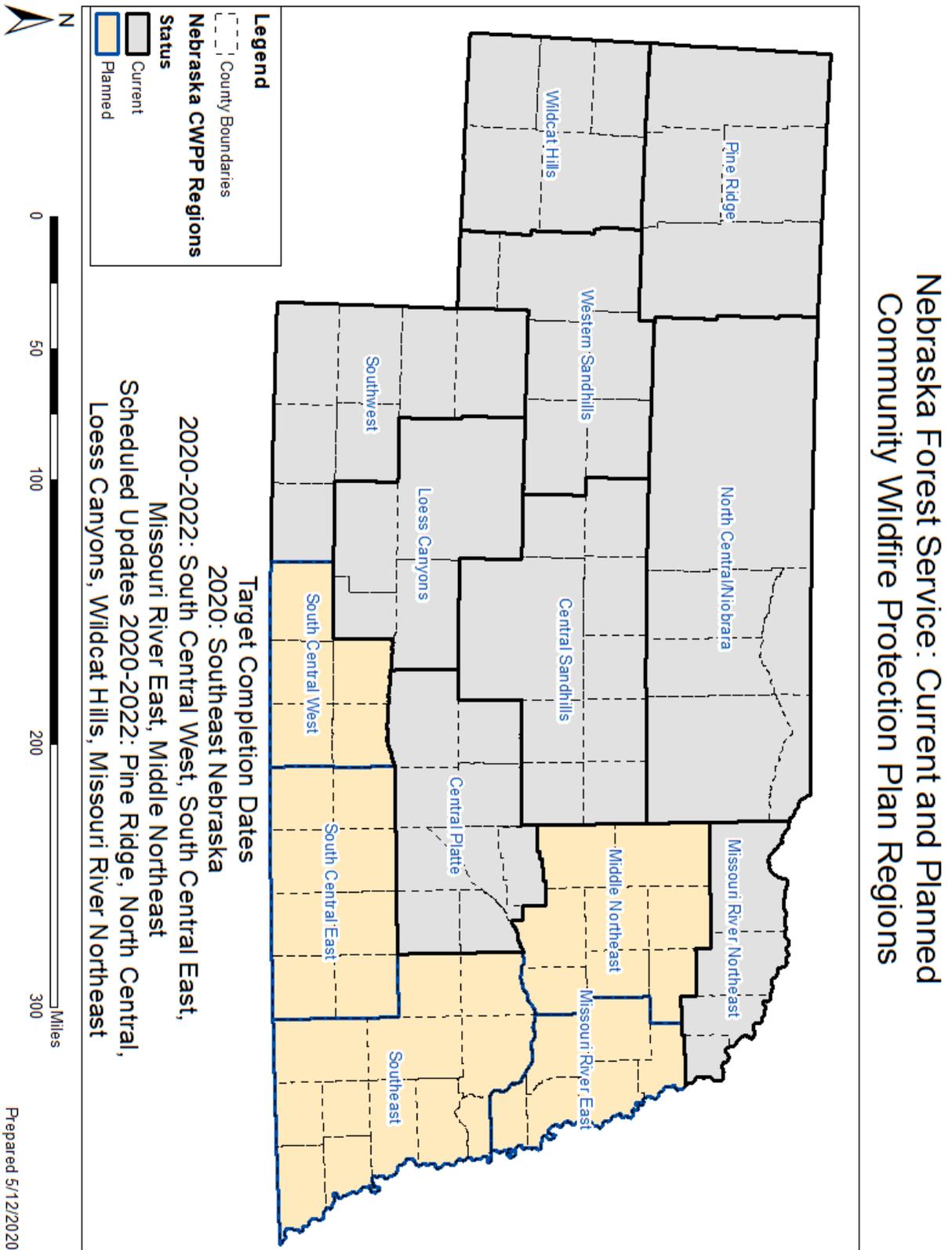
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Appendix A

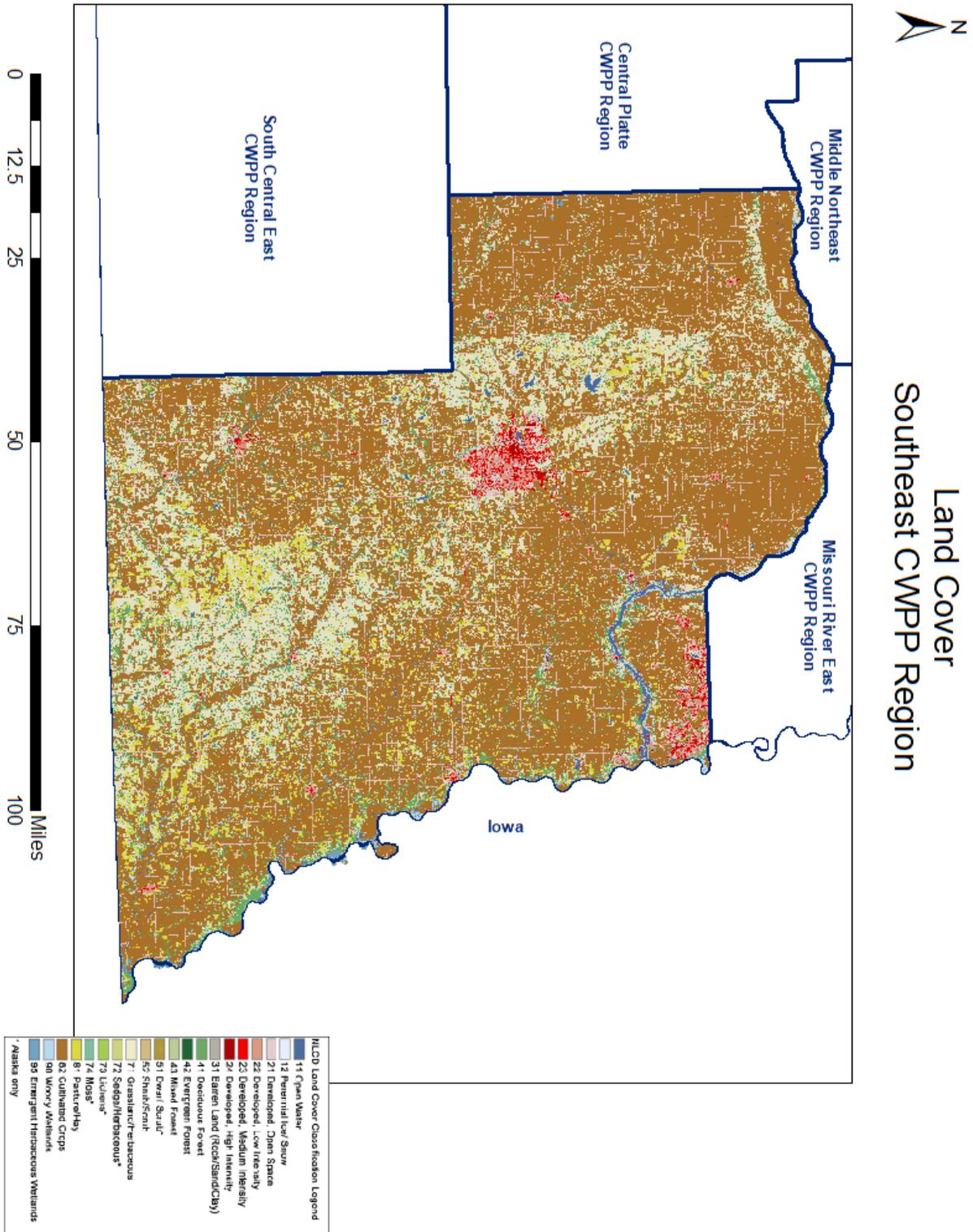
Maps

1. Nebraska CWPP Regions
2. Southeast Nebraska CWPP Region Land Cover
3. Nebraska Local Mitigation Planning Areas
4. Southeast Nebraska CWPP Areas of Concern
 - a. Butler County
 - b. Cass County
 - c. Gage County
 - d. Johnson County
 - e. Lancaster County
 - f. Nemaha County
 - g. Otoe County
 - h. Pawnee County
 - i. Richardson County
 - j. Sarpy County
 - k. Saunders County
 - l. Seward County

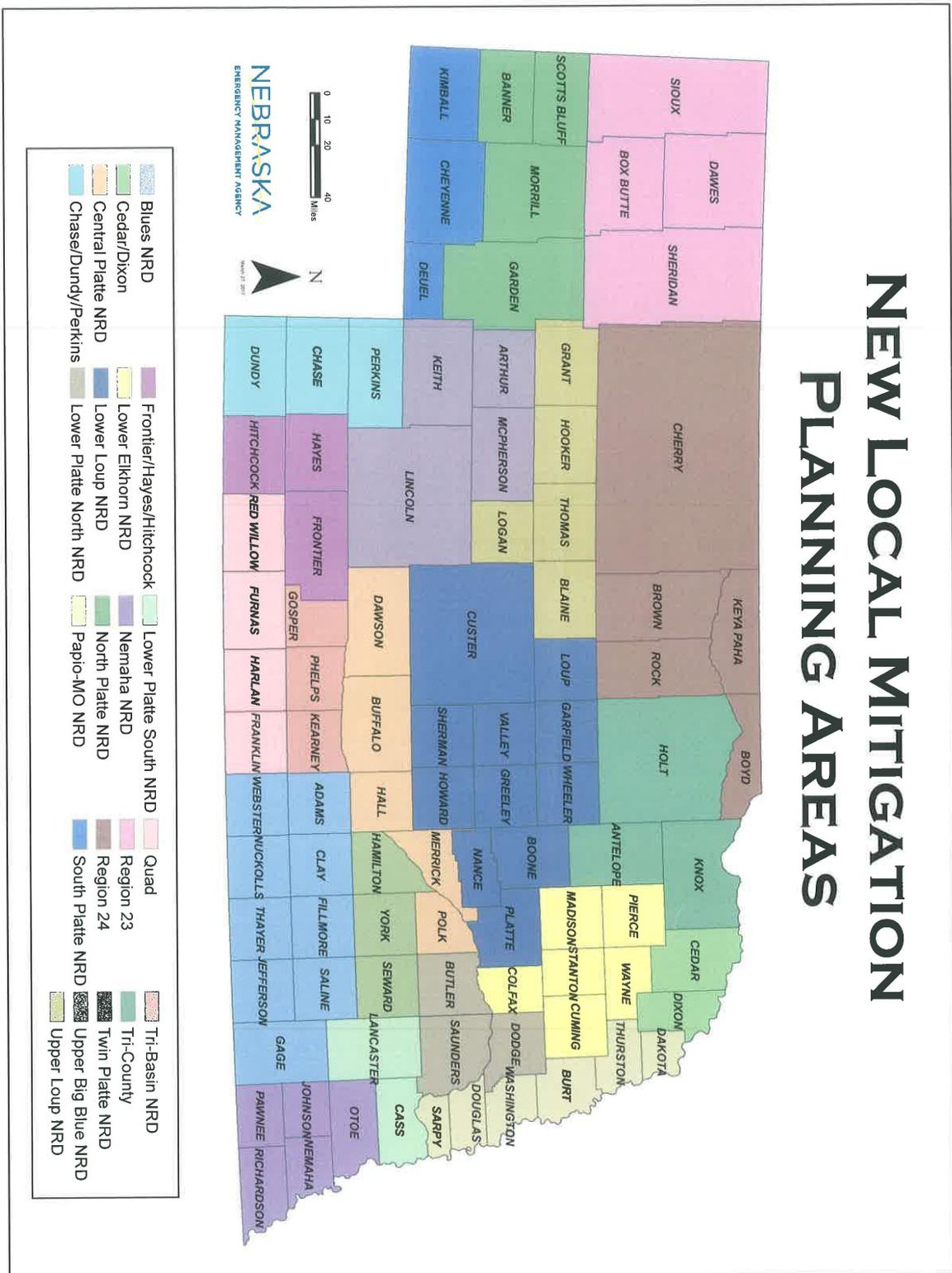
Map 1: Nebraska Community Wildfire Protection Plan Regions



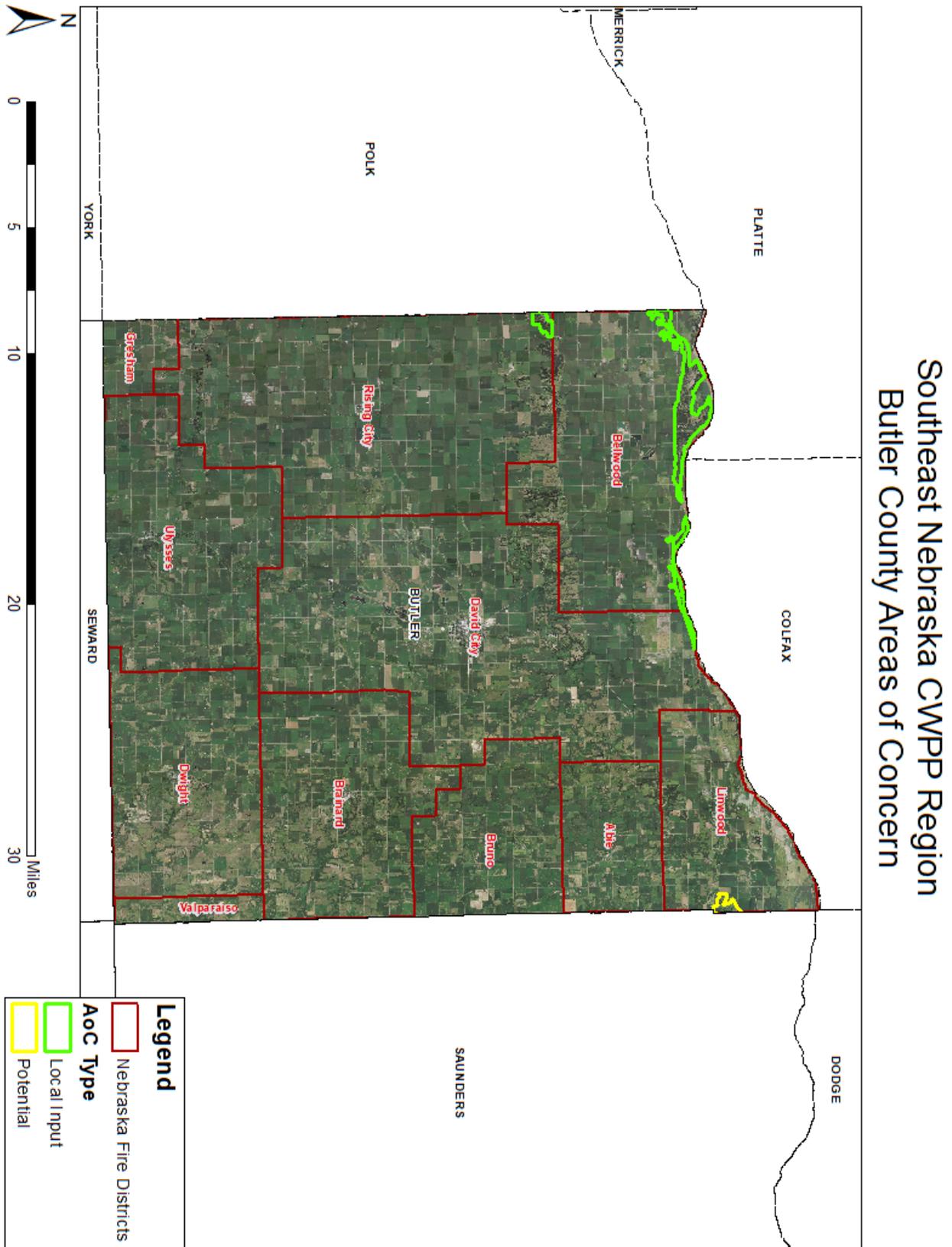
Map 2: Southeast Nebraska CWPP Region Land Cover



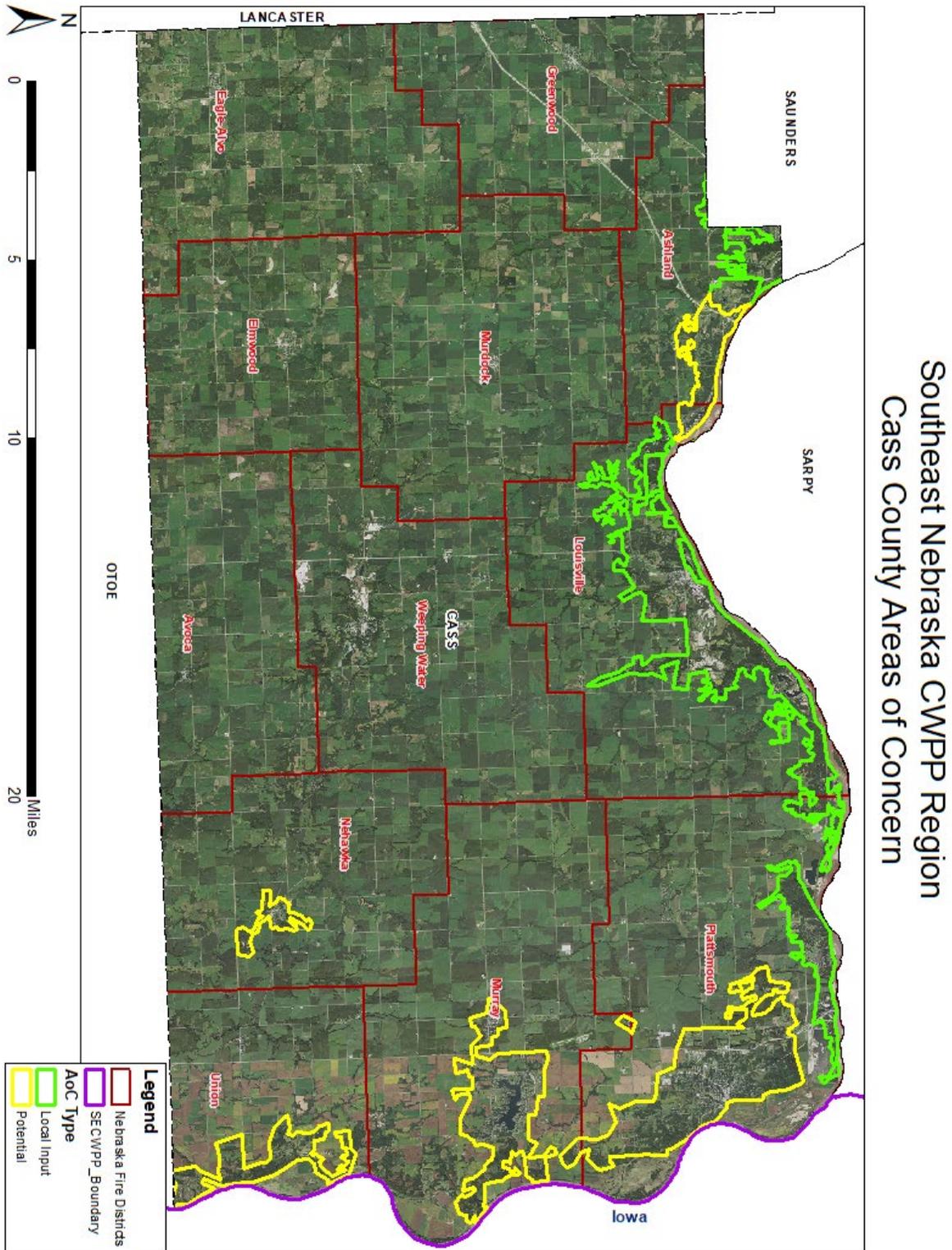
Map 3: Nebraska Local Mitigation Planning Areas



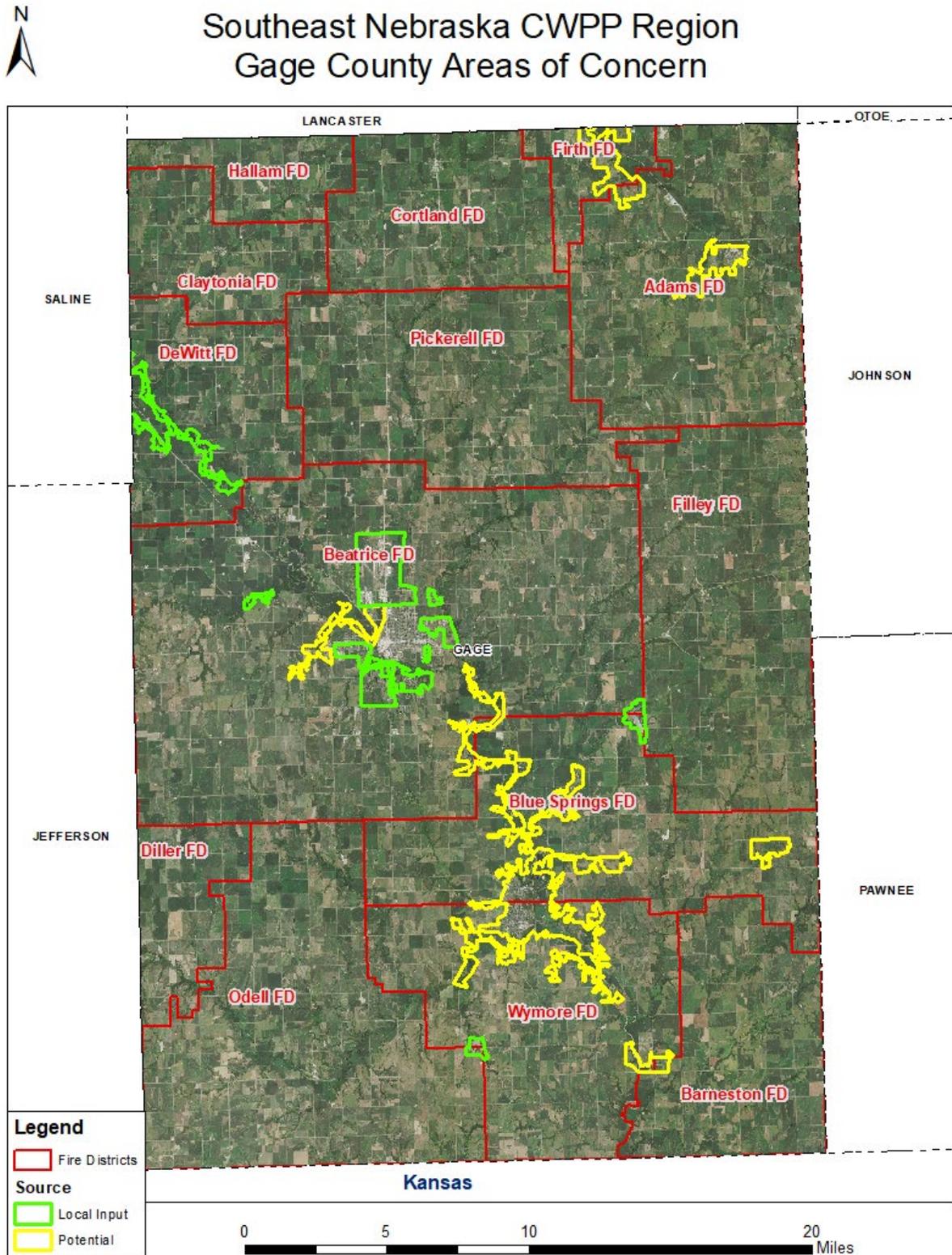
Map 4a: Butler County Areas of Concern



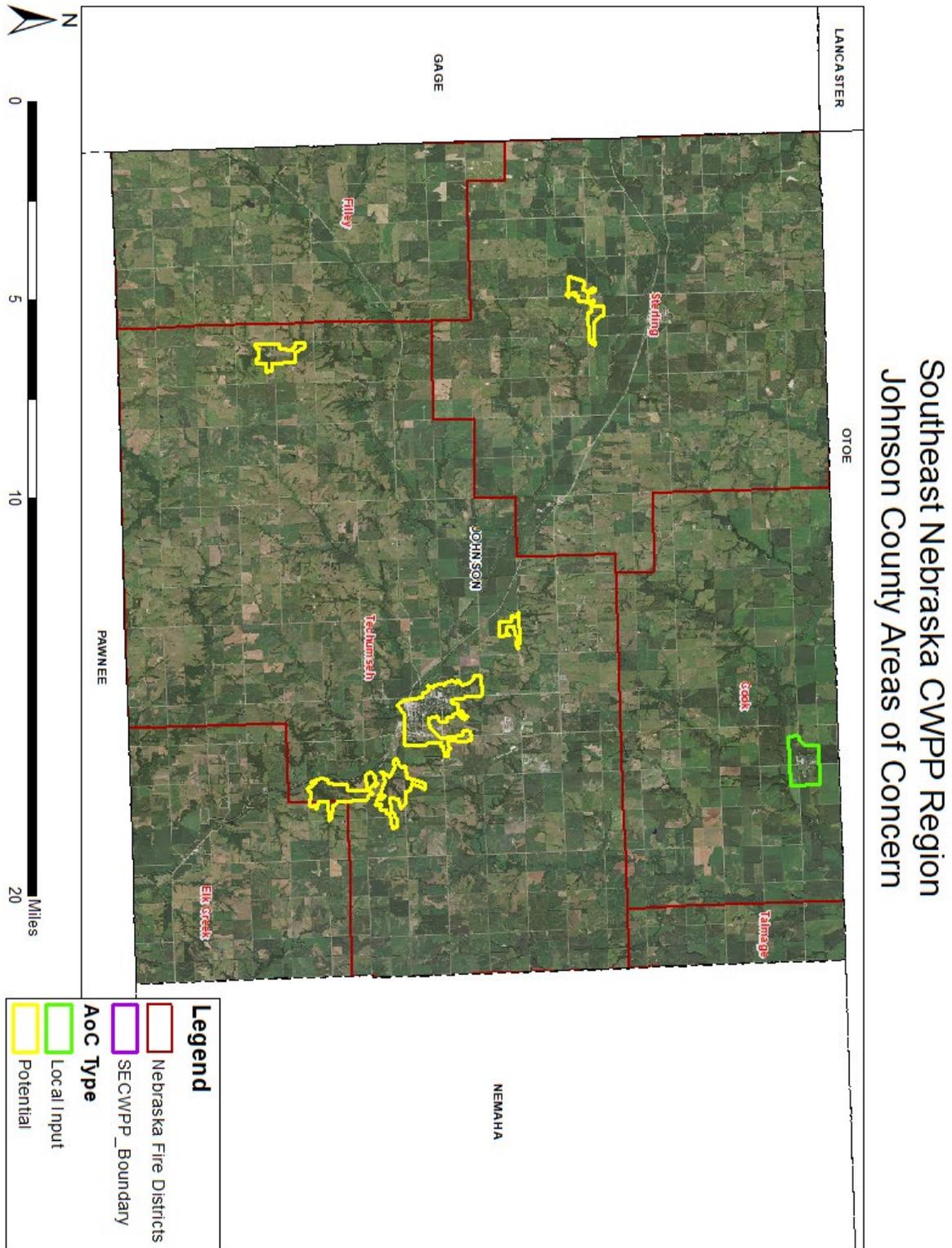
Map 4b: Cass County Areas of Concern



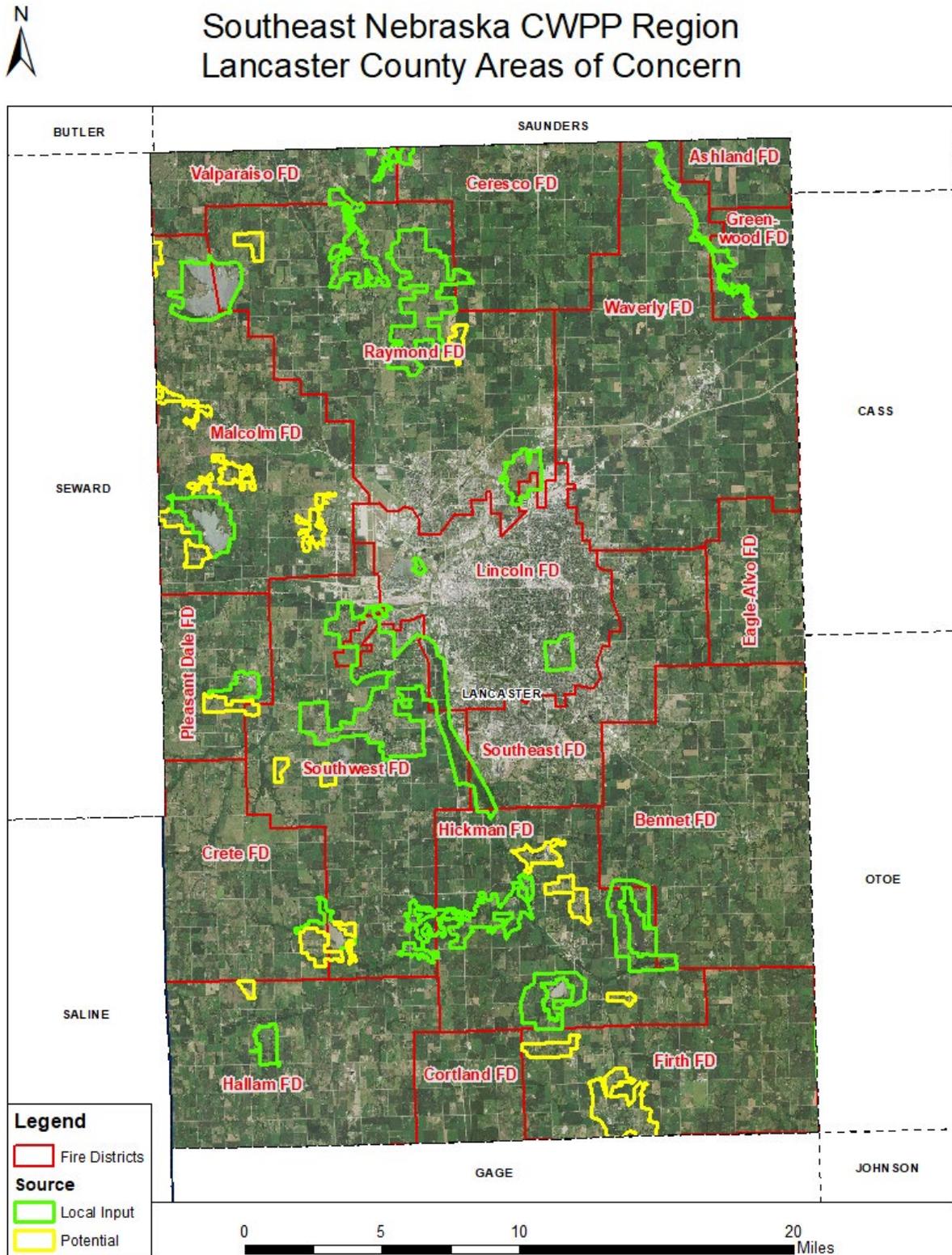
Map 4c: Gage County Areas of Concern



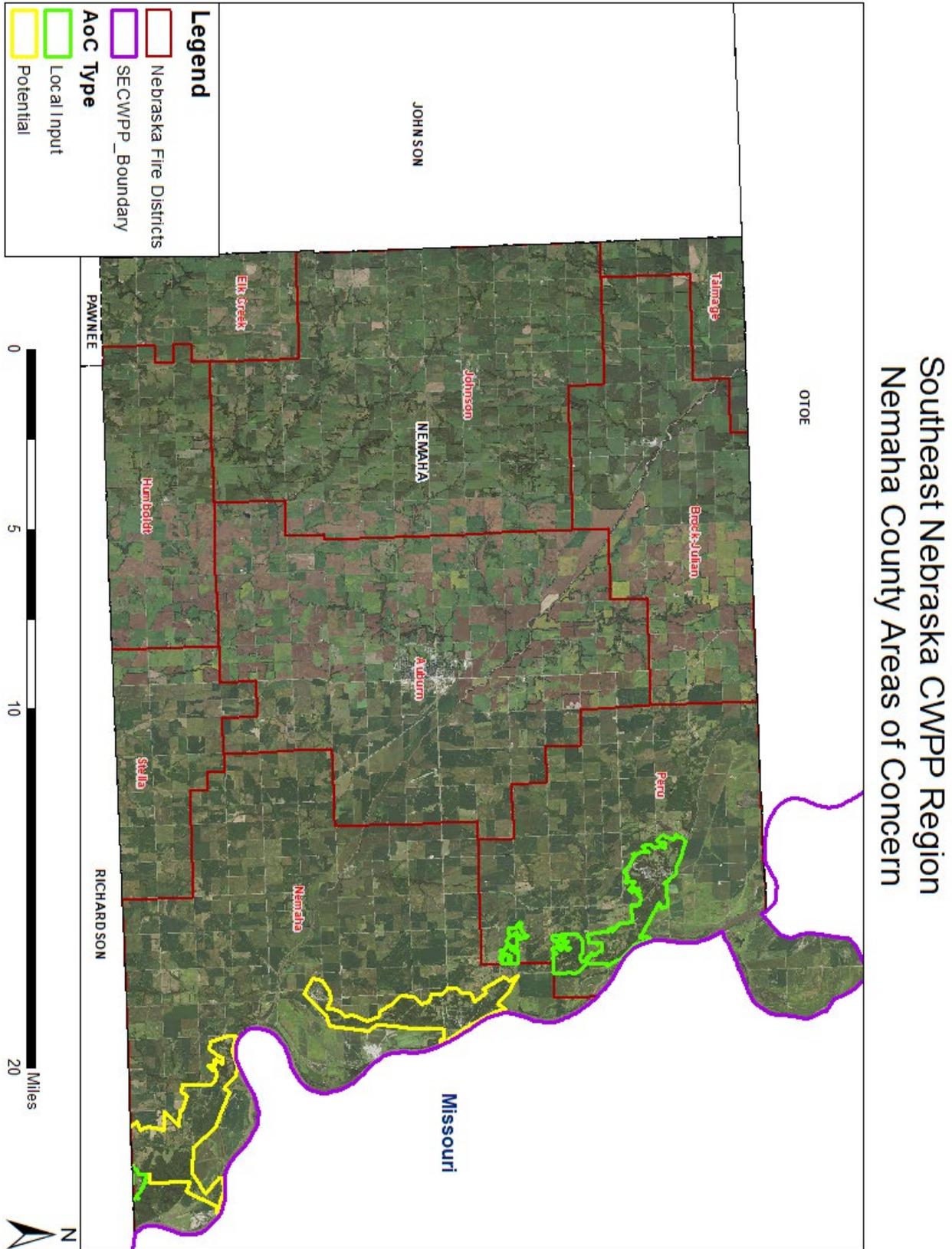
Map 4d: Johnson County Areas of Concern



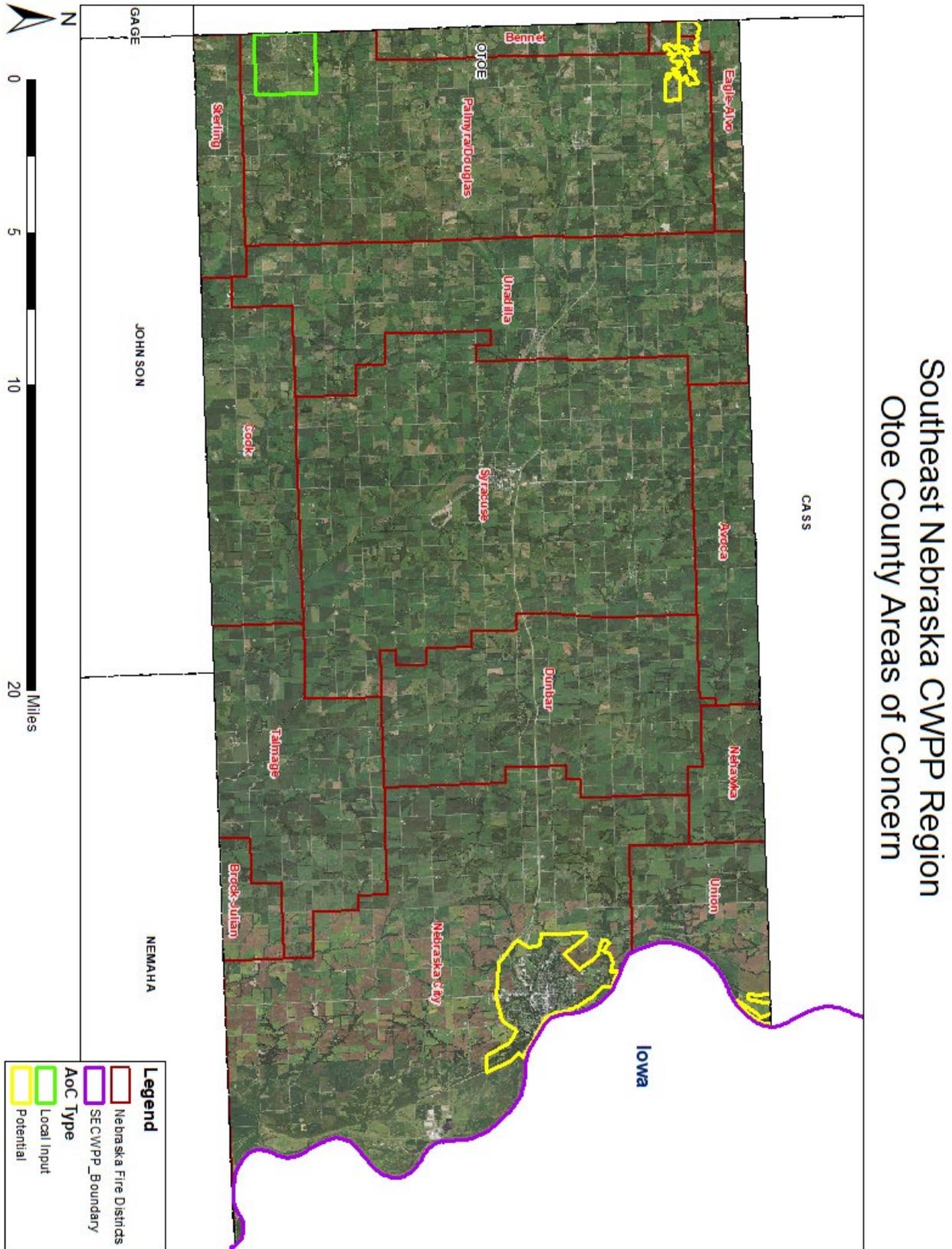
Map 4e: Lancaster County Areas of Concern



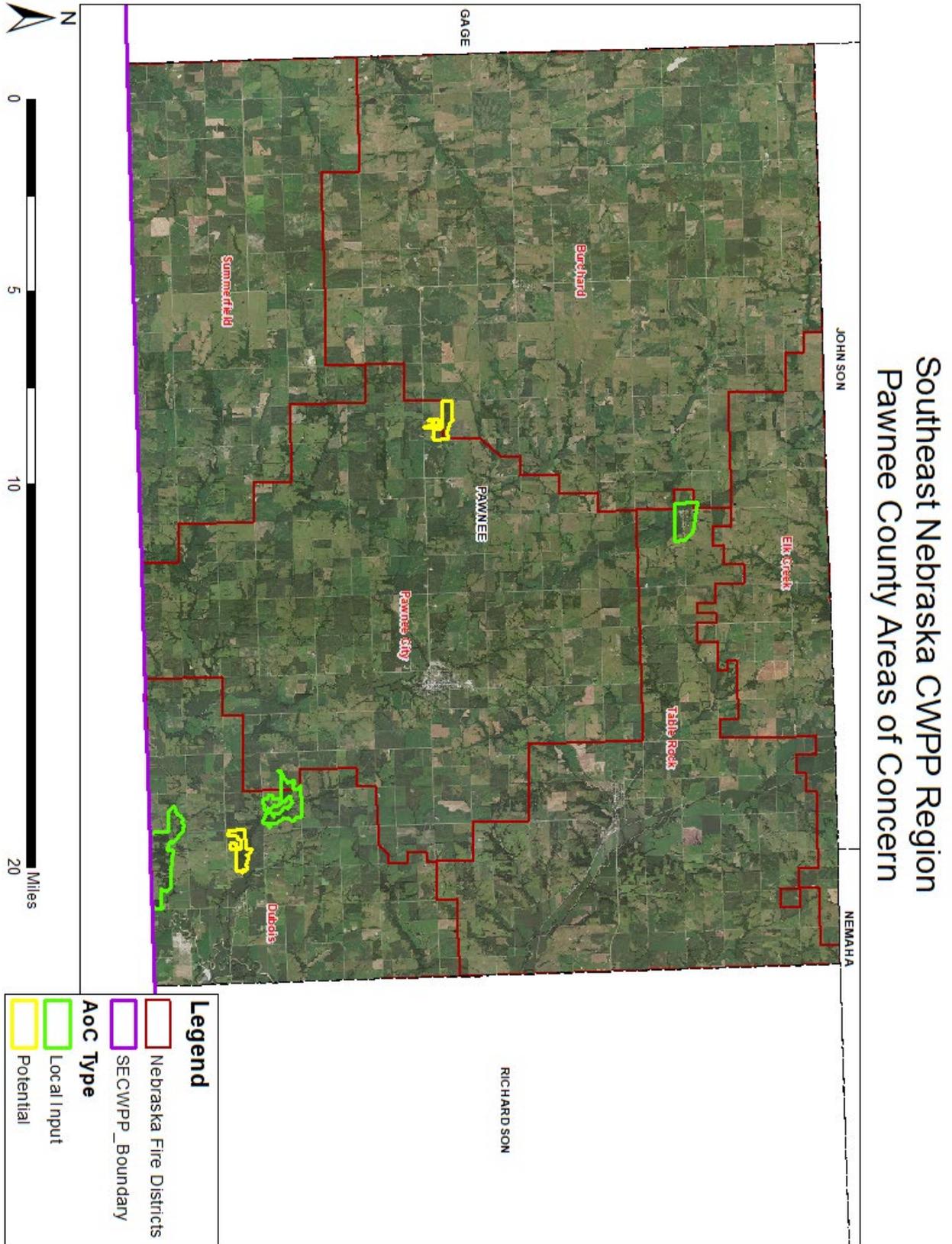
Map 4f: Nemaha County Areas of Concern



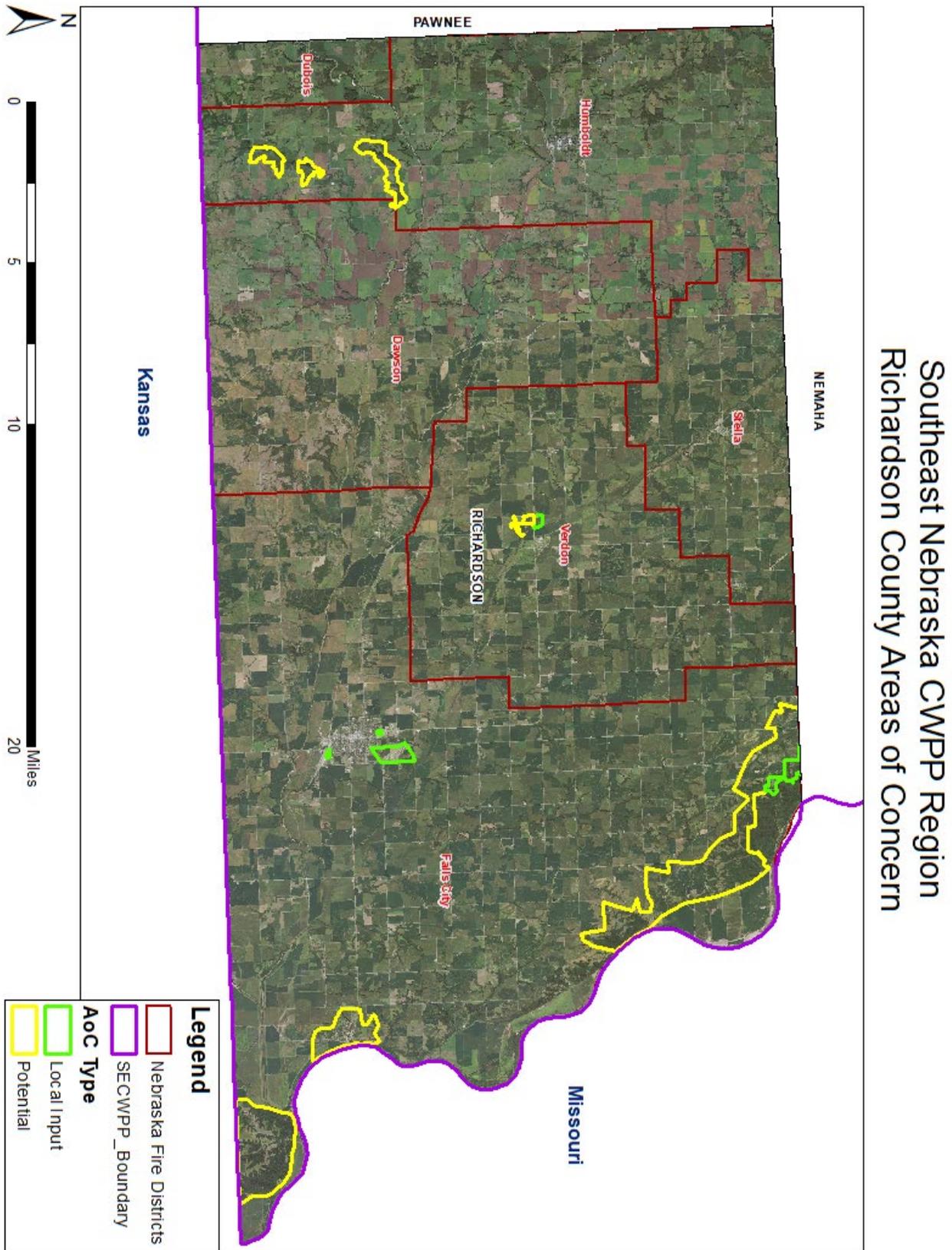
Map 4g: Otoe County Areas of Concern



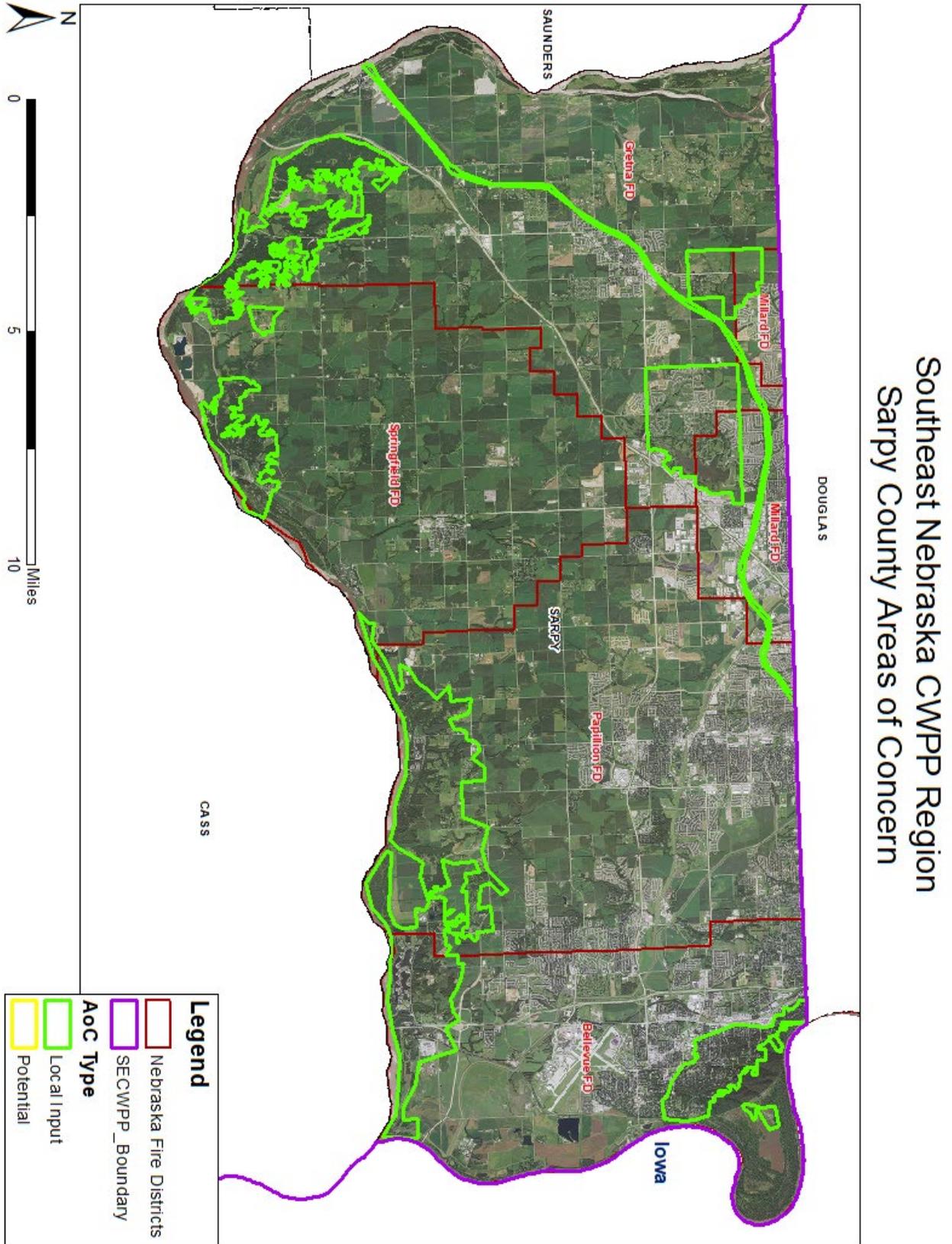
Map 4h: Pawnee County Areas of Concern



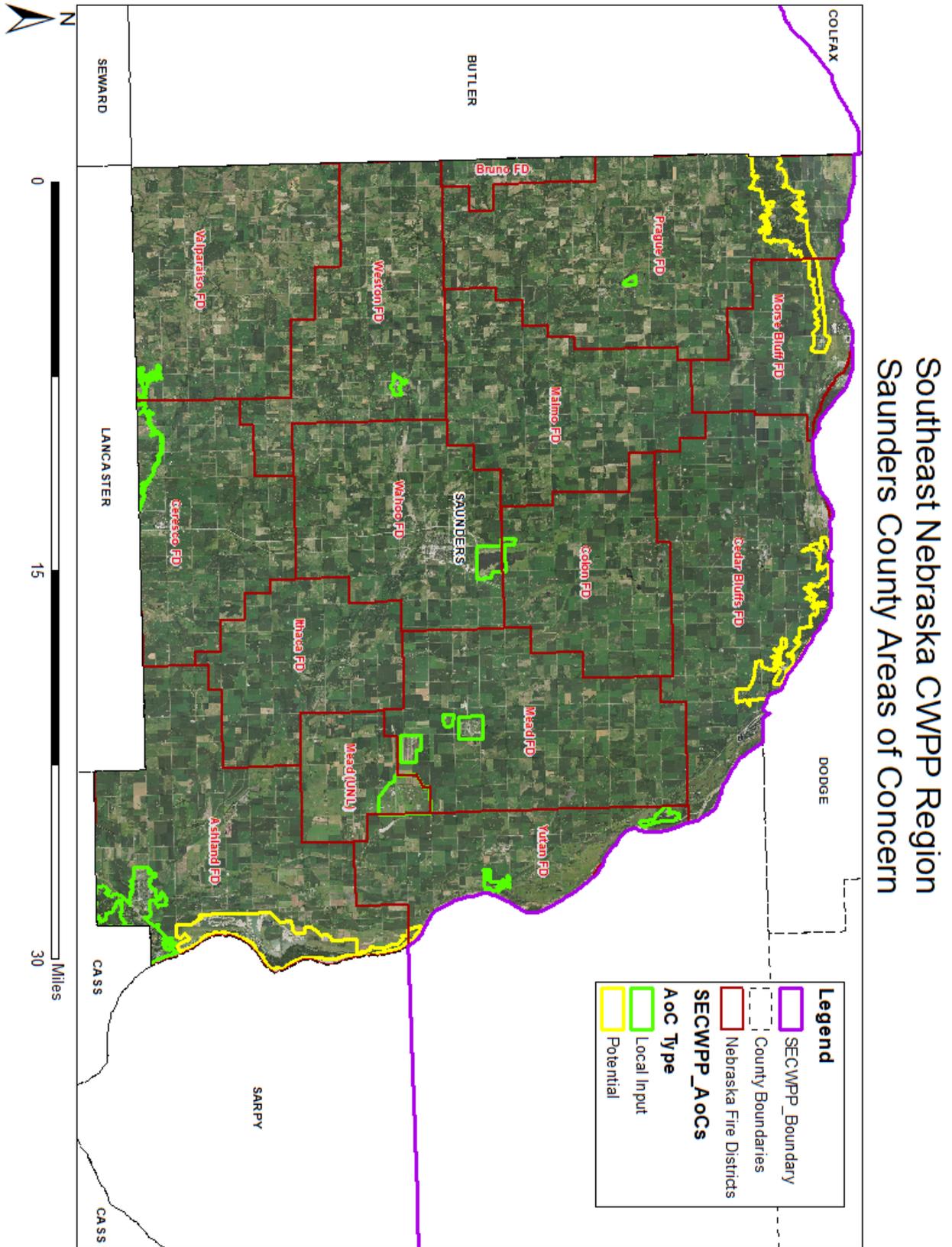
Map 4i: Richardson County Areas of Concern



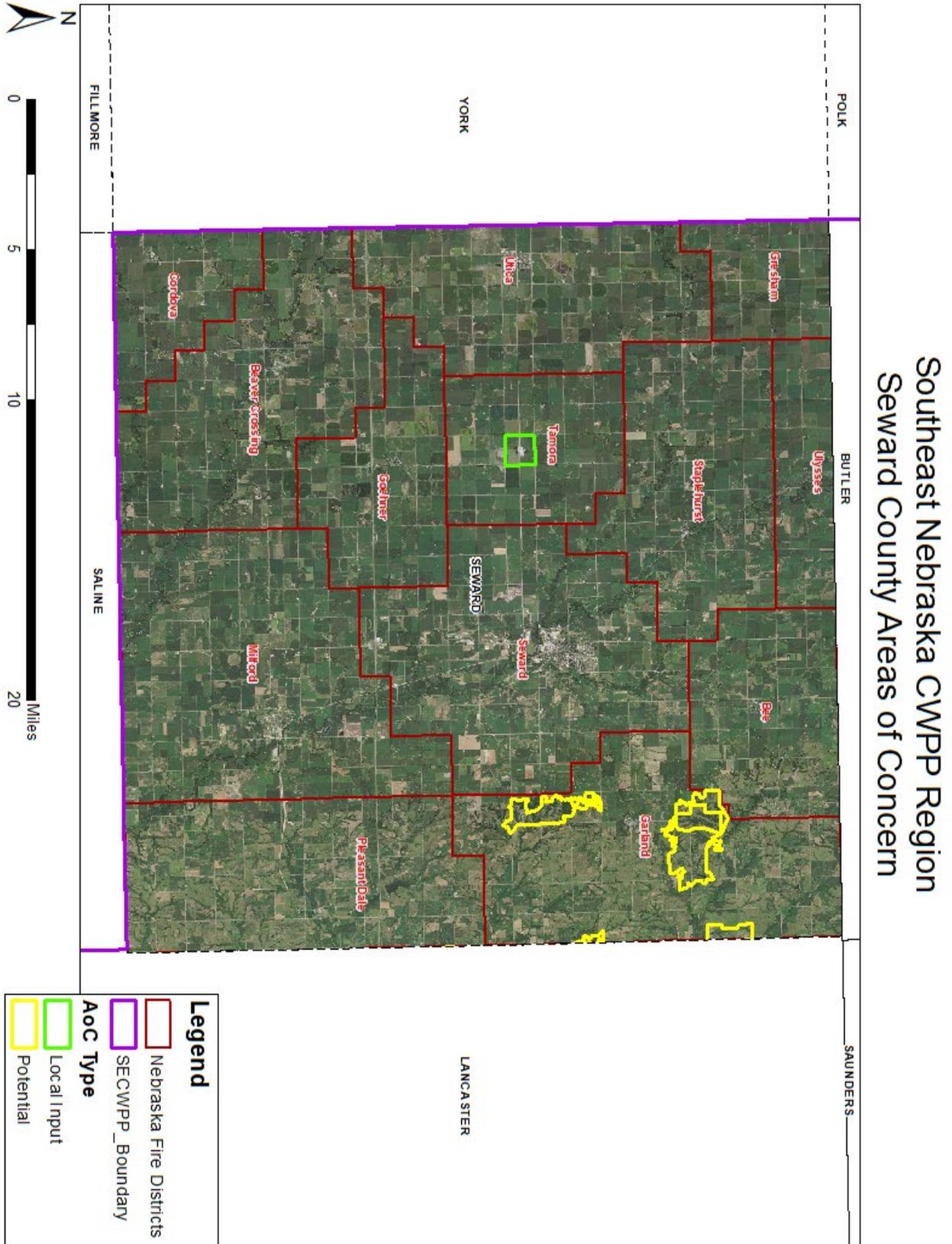
Map 4j: Sarpy County Areas of Concern



Map 4k: Saunders County Areas of Concern



Map 4I: Seward County Areas of Concern



Appendix B

Map of Biologically Unique Landscapes in Nebraska Nebraska Natural Legacy Project

The full document is available at:

<http://outdoornebraska.gov/wp-content/uploads/2015/09/NebraskaNaturalLegacyProject2ndEdition.pdf>



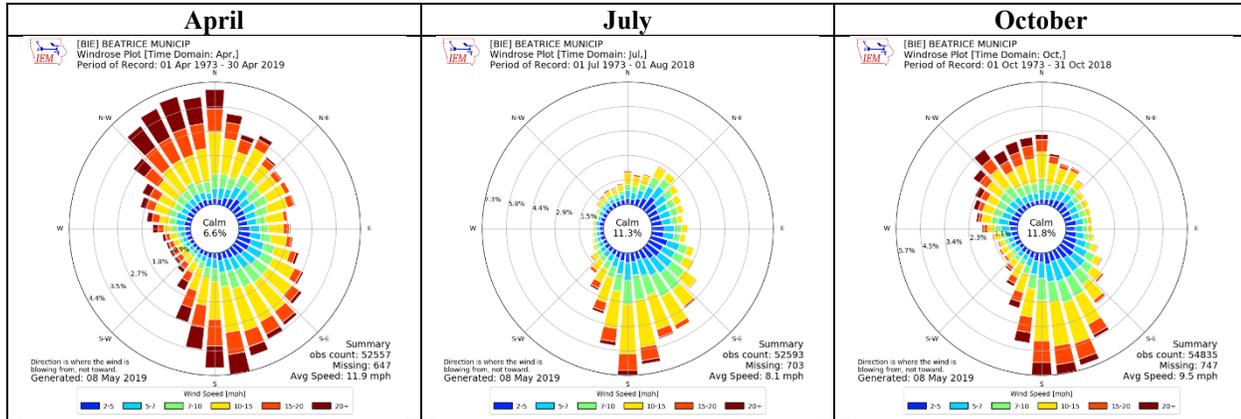
Appendix C

Wind Roses
For Selected Cities
in or near the Southeast Nebraska CWPP Region

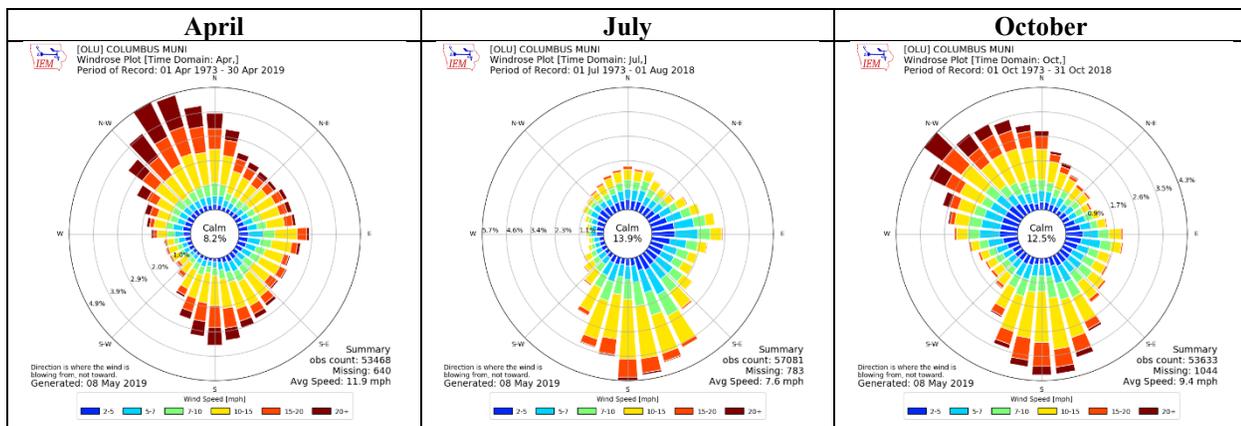
- a. Beatrice
- b. Columbus
- c. Falls City
- d. Fremont
- e. Lincoln
- f. Nebraska City
- g. Plattsmouth
- h. York

Southeast Nebraska Community Wildfire Protection Plan

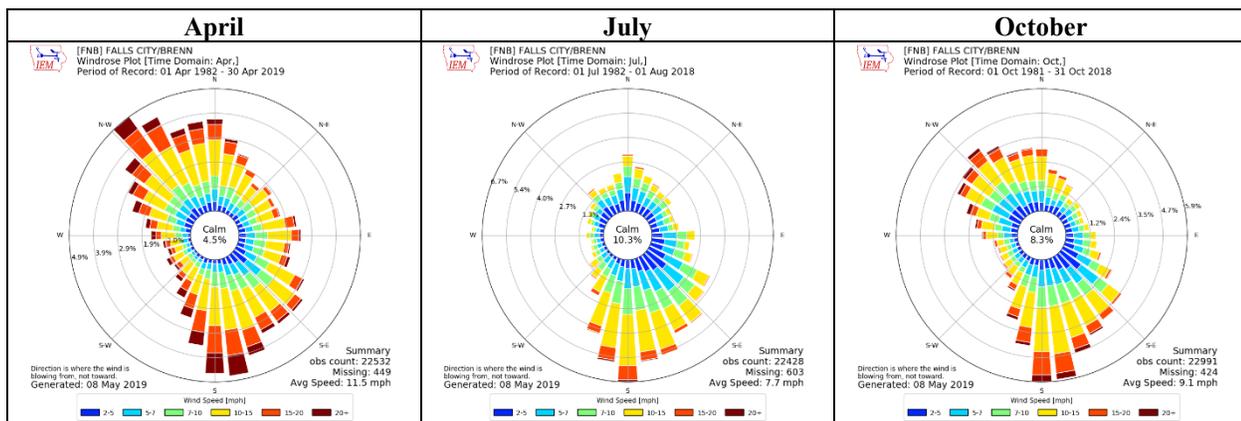
Beatrice, Nebraska Wind Direction and Speed 1973-2018



Columbus, Nebraska Wind Direction and Speed 1973-2018

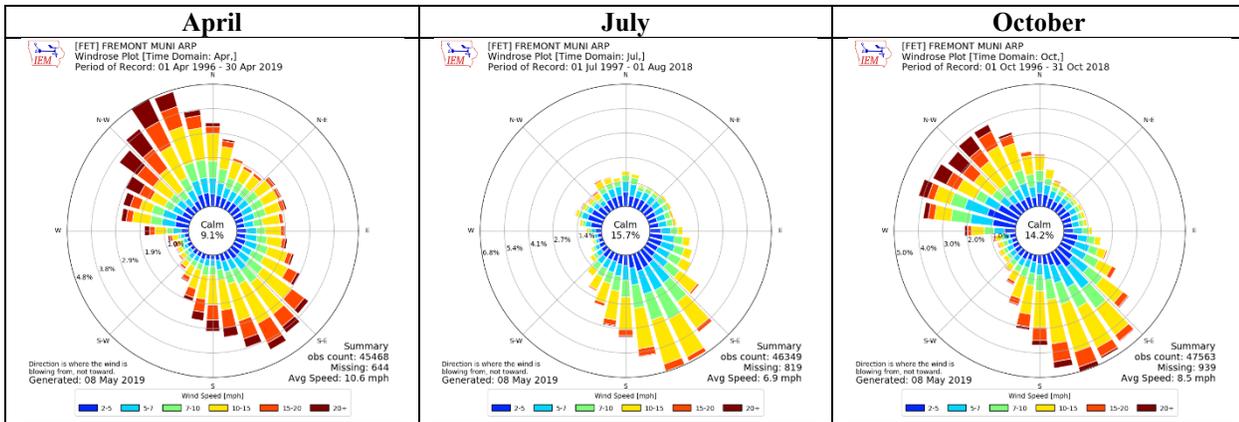


Falls City, Nebraska Wind Direction and Speed 1982-2018

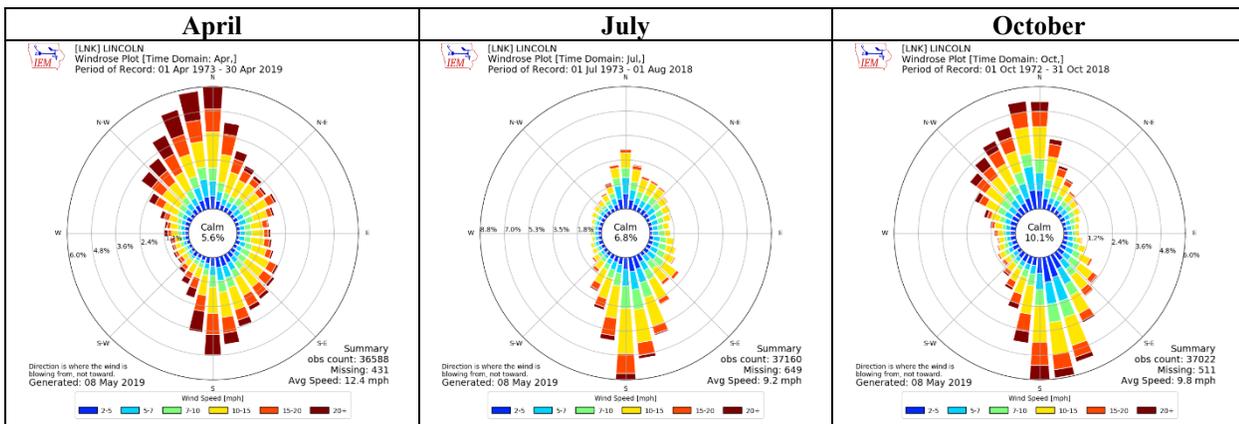


Southeast Nebraska Community Wildfire Protection Plan

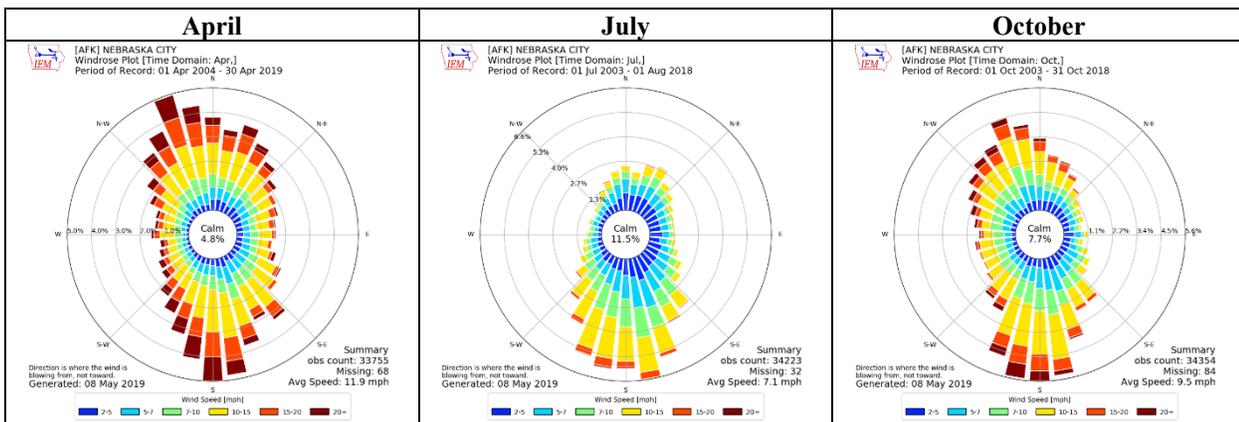
Fremont, Nebraska Wind Direction and Speed 1996-2018



Lincoln, Nebraska Wind Direction and Speed 1973-2018

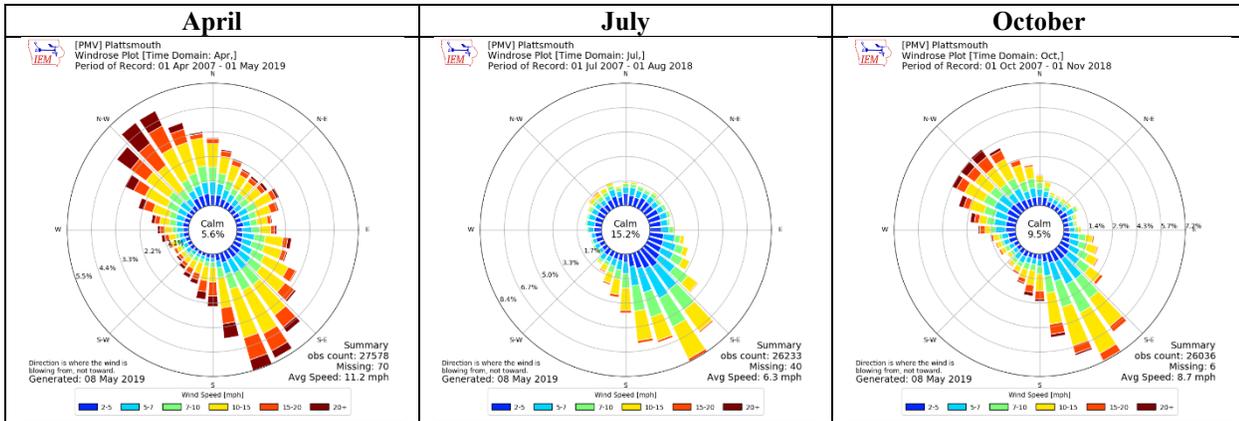


Nebraska City, Nebraska Wind Direction and Speed 2003-2018

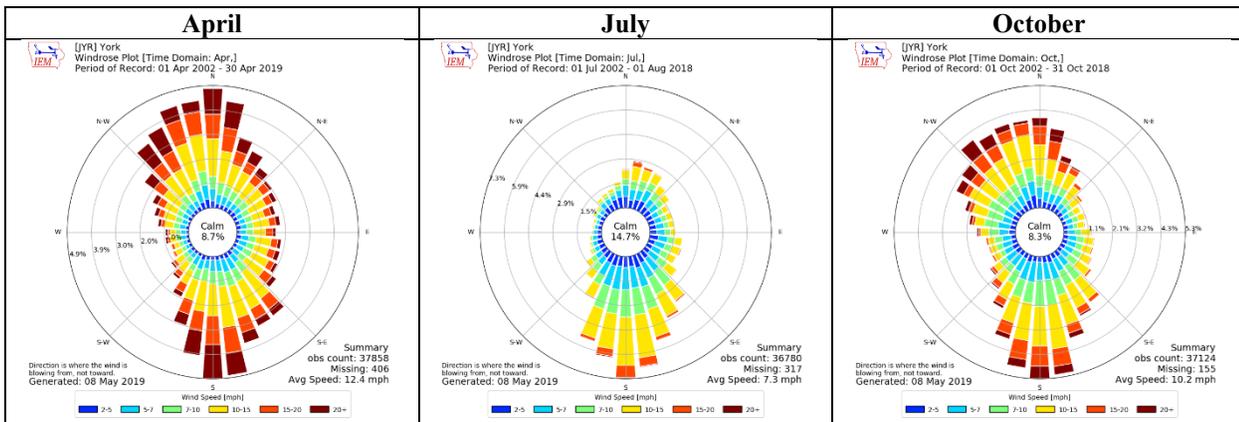


Southeast Nebraska Community Wildfire Protection Plan

Plattsmouth, Nebraska Wind Direction and Speed 2007-2018



York, Nebraska Wind Direction and Speed 2002-2018



Appendix D

The Multi-Jurisdictional Hazard Mitigation Plans covering the Southeast Nebraska CWPP counties can be viewed at the following online locations:

- a. **Lower Platte North NRD** (Includes Butler and Saunders Counties)
<https://lpnrd.org/wp-content/uploads/2018/07/Hazard-Mitigation-Plan.pdf>
- b. **Lower Platte South NRD** (Includes Cass and Lancaster Counties)
<https://lincoln.ne.gov/city/ltu/watershed/docs/hazard-mitigation/pdf/hazard-mitigation-plan.pdf>
- c. **Nemaha NRD** (Includes Johnson, Nemaha, Otoe, Pawnee, and Richardson Counties)
https://jeo.com/sites/default/files/inline-files/NNRD_FinalDraft2015_0605.pdf
- d. **Papio-Missouri NRD**
https://www.papionrd.org/wp-content/uploads/2016/10/1_PapioNRD-2016-HMP-Regional-Plan.pdf
Sarpy County Appendix:
https://www.papionrd.org/wp-content/uploads/2016/10/6_Sarpy-County-Appendix.pdf
- e. **Lower Big Blue NRD** (Includes Gage County)
<https://jeo.com/lbbnrdandlbnrdhmp>
Note: The city of Beatrice, in Gage County, has its own MJHMP:
https://jeo.com/sites/default/files/inline-files/Beatrice%20Hazard%20Mitigation%20Plan_Approved%20June%202019.pdf
- f. **Upper Big Blue NRD** (Includes Seward County)
<https://jeo.com/upper-big-blue-hazard-mitigation-plan>
Seward County participant sections:
https://jeo.com/sites/default/files/inline-files/3_Seward%20County%20Appendix.pdf

Appendix E

Nebraska Mutual Aid Districts

Southeast Nebraska Community Wildfire Protection Plan

Nebraska Mutual Aid Associations

Updated 1/11/2019

3 & 33 MA

Adams, Barneston, Beatrice, Beatrice RFD, Blue Springs, Clatonia, Cortland, Dewitt, Diller, Fairbury RFD, Filley, Jansen, Odell, Pickrell, Plymouth, Swanton, Wymore

40 - 12 MA

Bloomfield, Brunswick, Creighton, Crofton, Magnet, Neligh, Niobrara, Orchard, Osmond, Page, Pierce, Plainview, Santee, Verdigre, Wausa

Big 8 MA

Bellwood, Columbus, David City, Duncan, Osceola, Rising City, Shelby, Stromsburg

Big 9 MA

Belden, Carroll, Coleridge, Concord, Crofton, Dixon, Fordyce, Hartington, Laurel, Magnet, Newcastle, Randolph, Wynot, Wausa

Boyd/Holt Counties MA

Atkinson, Bartlett, Bristow, Butte, Chambers, Ewing, Lynch, Naper, O'Neill, Page, Spencer, Stuart

Buffalo County MA

Amherst, Elm Creek, Gibbon, Kearney, Miller, Pleasanton, Ravenna, Shelton, Buffalo Co. Sheriff's Dept., Kearney Police Dept., Buffalo County EM, Good Samaritan Hospital EMS

Burt County MA

Craig, Decatur, Lyons, Oakland, Tekamah

Butler Co. MA

Abie, Bellwood, Brainerd, Bruno, David City, Dwight, Linwood, Rising City, Ulysses

Cass Co. MA

Alvo, Ashland, Avoca, Cedar Creek, Eagle, Elmwood, Greenwood, Louisville, Murdock, Murray, Nehawka, Plattsmouth, Union, Weeping Water

Central Nebraska MA

Ansley, Eddyville, Mason City, Miller, Oconto, Sumner

Central Nebraska Volunteer Fire Association MA

Alma, Amherst, Arapahoe, Axtell, Bertrand, Elm Creek, Franklin, Funk, Gibbon, Hildreth, Holdrege, Kearney, Loomis, Miller, Minden, Naponee, Orleans, Overton, Oxford, Red Cloud, Republican City, Stamford, Upland, Wilcox

Central Panhandle MA

Alliance, Banner Co., Bayard, Bridgeport, Broadwater, Dalton, Gurley, Heart of the Hills, Lisco/Garden Co., Oshkosh/Garden Co., Rackett, USFWS NP Refuge

Cherry County MA

Ainsworth, Barley RFD, Cody, Colome SD, Kilgore, Merriman, Mid-Cherry RFD, Mission SD, Mullen, St. Francis SD, Thedford, US Fish and Wildlife, US Forest Service, Valentine, White River SD, Wood Lake

Colfax County MA

Clarkson, Howells, Leigh, Schuyler

Cuming County MA

Bancroft, Beemer, Pilger, West Point, Wisner

Custer County MA

Anselmo, Ansley, Arnold, Broken Bow, Callaway, Comstock, Mason City, Merna, Oconto, Sargent

Dodge County MA

Dodge, Fremont, Fremont Rural, Hooper, Nickerson, North Bend, Scribner, Snyder, Uehling

Southeast Nebraska Community Wildfire Protection Plan

Elkhorn Valley MA

Battle Creek, Carroll, Hadar, Hoskins, Madison, Meadow Grove, Norfolk, Pierce, Stanton, Wayne, Winside

Fillmore County MA

Bruning, Exeter, Fairmont, Geneva, Grafton, McCool Junction, Milligan, Ohioa, Shickley, Sutton

Frenchman Valley MA

Bartley, Beaver Valley (Danbury & Lebanon), Benkelman, Culbertson, Curtis, Haigler, Hayes Center, Imperial, Indianola, Lamar, Maywood/Wellfleet, McCook, Palisade, Red Willow Western, Stratton, Trenton, Wallace, Wauneta

Hamilton County MA

Aurora, Giltner, Hampton, Hordville, Marquette, Phillips, Hamilton County EMS

Hastings Area MA

Ayr (Hastings RFD), Bladen, Blue Hill, Campbell, Central Community College, Edgar, Fairfield, Glenville, Harvard, Hastings, Hastings CD, Holstein, Juniata, Kenesaw, Lawrence, Hruska MARC, Roseland, Trumbull

KBR&C MA

Ainsworth, Bassett, Calamus, Johnstown, Long Pine, Newport, Raven, Springview, Wood Lake

Lancaster County MA

Alvo, Ashland, Bennet, Ceresco, Clatonia, Cortland, Crete, Douglas, Eagle, Firth, Greenwood, Hallam, Hickman, Lincoln, Malcolm, NE Air Guard, Palmyra, Pleasant Dale, Raymond, Rural Metro, Southeast RFD, Southwest RFD, Valparaiso, Waverly

Loup Platte MA

Arcadia, Ashton, Litchfield, Loup City, Ravenna, Rockville

Loup Platte #2 MA

Central City, Chapman, Clarks, Fullerton, Hordville, Marquette, Osceola, Palmer, Polk, Shelby, Silver Creek, Stromsburg

Loup Valley MA

Arcadia, Bartlett, Burwell, Elba, Ericson, Greeley, North Loup, Ord, Primrose, Scotia, Spalding, Wolbach

Mid-Nebraska MA

Albion, Belgrade, Cedar Rapids, Columbus, Columbus RFD, Creston, Duncan, Fullerton, Genoa, Humphrey, Leigh, Lindsay, Madison, Monroe, Newman Grove, Platte Center, Silver Creek, St. Edward

Mid Plains MA

Arnold, Brady, Curtis, Hershey, Maywood, Maxwell, North Platte, Stapleton, Sutherland, Tyron, Wallace, Wellfleet

Nemaha County MA

Brock FD, Brownville FD / Rescue, Johnson FD, Julian FD, Nemaha FD / Rescue, Peru FD / Rescue, Nemaha County Emergency Management, Cooper Nuclear Station, Auburn Police Dept., Nemaha County Sheriff's Office

Northeast MA

Allen, Bancroft, Concord, Dakota City, Dixon, Emerson, Homer, Martinsburg, Newcastle, Pender, Ponca, Rosalie, South Sioux City, Thurston, Wakefield, Walthill, Wayne, Winnebago

Northeast Fireman's Association

Antelope Co., Burt Co., Butler Co., Cedar Co., Colfax Co., Cuming Co., Dakota Co., Dixon Co., Dodge Co., Douglas Co., Knox Co., Madison Co., Pierce Co., Platte Co., Stanton Co., Sarpy Co., Thurston Co., Washington Co., Wayne Co., Saunders Co.

Otoe County MA

Burr, Cook, Douglas, Dunbar, Nebraska City, Otoe, Palmyra, Syracuse, Talmage, Unadilla

Phelps County MA: Bertrand, Funk, Holdrege, Holdrege RFD, Loomis

Pine Ridge MA

Alliance, Ardmore SD, Chadron, Crawford, Gordon, Harrison, Hay Springs, Hemingford, Merriman, Rushville, US Forest Service

Platte Valley MA (was GI Area MA)

Alda, Cairo, Chapman, Doniphan, Grand Island, Grand Island SFD, Phillips, Wood River

Southeast Nebraska Community Wildfire Protection Plan

Quad Cities MA

Alma, Axtell, Bloomington, Campbell, Franklin, Hildreth, Minden, Naponee, Republican City, Riverton, Upland, Wilcox, Kearney County EMA

Richardson County MA

Dawson, Falls City, Falls City RFD, Humboldt, Rulo, Salem, Shubert, Stella, Verdon

Saline County MA

Crete, DeWitt, Dorchester, Friend, Swanton, Tobias, Western, Wilbur, Saline County Sheriff, Saline County Emergency Management

Sandhills MA

Anselmo, Arnold, Arthur, Brewster, Dunning, Halsey, Hyannis, Keystone-Lemoyne, McPherson Co., Mid-Cherry, Mullen, Purdum, Stapleton, Thedford, US Fish & Wildlife, US Forest Service

Saunders County MA

Ashland, Cedar Bluffs, Ceresco, Colon, Ithaca, Malmo, Mead, Morse Bluff, Prague, Valparaiso, Wahoo, Weston, Yutan

Scottsbluff County MA

Banner Co., Gering, Henry, Lyman, McGrew, Minatare-Melbeta, Mitchell, Morrill, Scottsbluff, Scottsbluff RFD, Scottsbluff Co. Airport, Torrington WY, US Fish & Wildlife Service

Seward County MA

Beaver Crossing, Bee, Cordova, Garland, Goehner, Milford, Pleasant Dale, Seward, Staplehurst, Tamora, Utica

South Central Nebraska MA

Brady, Cozad, Curtis, Elwood, Eustis, Farnam, Gothenburg, Johnson Lake EMS, Lexington, Overton

South Central #2 MA

Clay Center, Davenport, Edgar, Fairfield, Glenvil, Hardy, Lawrence, Nelson, Ong, Ruskin, Shickley, Superior, Sutton, Clay County EM

Southeast MA

Adams, Burchard, Cook, Du Bois, Elk Creek, Johnson, Pawnee City, Steinauer, Sterling, Summerfield (KS), Table Rock, Tecumseh

Southwest MA

Arthur, Big Springs, Blue Creek, Brule, Chappell, Elsie, Grant, Imperial, Keystone-Lemoyne, Lamar, Lisco, Madrid, Ogallala, Oshkosh, Paxton, Sutherland, Venango, Wallace

Stateline MA

Bladen, Blue Hill, Campbell, Guide Rock, Lawrence, Red Cloud, Riverton, Superior

Thayer County MA

Alexandria, Belvidere, Bruning, Byron, Carlton, Chester, Davenport, Deshler, Eustis, Gilead, Hebron, Hubbell

Tri-Mutual Aid

Arlington, Bellevue, Bennington, Blair, Boys Town, Carter Lake, Cedar Bluffs, Elkhorn, Eppley Airport, Fremont, Ft. Calhoun, Gretna, Irvington, Kennard, LaVista, Louisville, Millard, Offutt AFB, Omaha FD, Papillion, Plattsmouth, Ponca Hills, Ralston, Springfield, Valley, Waterloo, Yutan

Tri-Valley MA

Arapahoe, Bartley, Beaver City, Cambridge, Edison, Holbrook, Oxford, Stamford, Wilsonville

Twin Loups MA

Ashton, Boelus, Dannebrog, Elba, Farwell, Rockville, St. Libory, St. Paul

Washington County MA

Arlington, Blair, Ft. Calhoun, Herman, Kennard

York County MA

Benedict, Bradshaw, Gresham, Henderson, McCool Junction, Waco, York

Appendix F

Fire Department Equipment and Contact Information for the Southeast Nebraska CWPP Region

This section includes Annex F from county Local Emergency Operations Plans plus additional information from the departments that responded to the CWPP questionnaire

Southeast Nebraska Community Wildfire Protection Plan

Butler County

Information from Butler Co. LEOP, Annex F:

BUTLER COUNTY LEOP

ANNEX F

FIRE SERVICES

ABIE FIRE DEPARTMENT

BELLWOOD FIRE DEPARTMENT

DWIGHT FIRE DEPARTMENT

BRAINARD FIRE DEPARTMENT

LINWOOD FIRE DEPARTMENT

BRUNO FIRE DEPARTMENT

RISING CITY FIRE DEPARTMENT

DAVID CITY FIRE DEPARTMENT

ULYSSES FIRE DEPARTMENT

BUTLER COUNTY
MUTUAL
AID
ASSOCIATION

BIG 8
MUTUAL
AID
ASSOCIATION

STATE SUPPORT:
Emergency Support Functions
#4, 5, 10,
Fire Suppression,
Emergency Management,
Environmental Quality

Lead Agencies:
State Fire Marshal

Nebraska Emergency Management Agency,
Dept. of Environmental Quality

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2015

BUTLER COUNTY FIRE RESOURCES

| FIRE DEPARTMENT | PHONE | AERIAL | PUMPER | TANKER | PUMPER/ TANKER | GRASS-MEED TRUCK | UTILITY TRUCK | RESCUE UNITS | KINDSTYPES/ SPECIAL- TEAMS | KINDSTYPES SPECIAL EQUIPMENT | RADIO- EQUIP- MENT Yr / No |
|---------------------------------|----------|----------|-----------|-----------|-------------------|---------------------|------------------|-----------------|----------------------------------|--|-------------------------------------|
| Abie | 543-2254 | 0 | 1 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | Na |
| Bellwood | 538-2003 | 0 | 2 | 2 | 0 | 2 | 1 | 2 | 0 | Suburban | Na |
| Brainard | 545-2701 | 0 | 1 | 1 | 1 | 3 | 1 | 1 | 0 | Suburban | Na |
| Bruno | 543-2345 | 0 | 1 | 1 | 0 | 2 | 0 | 1 | 0 | Suburban | Na |
| David City | 387-3530 | 1 | 1 | 3 | 0 | 3 | 1 | 2 | 0 | Suburban, Decon and Air Trailer | Na |
| Ulysses | 549-2348 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | Na |
| Dwight | 566-4745 | 0 | 2 | 2 | 0 | 2 | 1 | 2 | 0 | Air Trailer | Na |
| Linwood | 666-5515 | 0 | 1 | 2 | 0 | 2 | 1 | 1 | 0 | 0 | Na |
| Rising City | 542-2430 | 0 | 1 | 2 | 0 | 2 | 0 | 2 | 0 | 0 | Na |
| Nearest HAZMAT Response Team | | | | | | | | | | | |
| Total | | 1 | 11 | 15 | 2 | 19 | 5 | 12 | 0 | | |

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2015

BUTLER COUNTY LEOP

ANNEX F
ATTACHMENT 1

Southeast Nebraska Community Wildfire Protection Plan

Survey Responses from Butler County Fire Departments:

Abie Volunteer Fire Department

Counties: Butler

Street Address: 305 Second St.

Mailing Address: 318 Maple St., Abie 68001

Dept. Phone: 402-720-5416; **Dept. Email:** mrsckbud@yahoo.com

Chief: Carroll Krivanek; 402-720-5416, 402-543-2413; mrsckbud@yahoo.com

Ass't. Chief: Dennis Polacek; 402-367-2397, 402-543-2281

Secretary: Randy Vavrina; 402-367-2397

Treasurer: Ron Prochaska; 402-367-2459

Personnel

24 **Vol.:**

MAD(s): Butler County MA

Equipment

Engines

1 Type 1 Structural: 1,000 GPM, 300 gal. capacity, four crew members

1 Type 5: Wildland: 50 GPM, 400 gal. capacity, two crew members

1 Type 6: Wildland: 50 GPM, 150 gal. capacity, two crew members

Tenders (Tactical Tenders: 4x4, 6x6, 8x8 all-wheel drive)

2 S-2 (support): 200 GPM pump, 2,500 gallon capacity, 1 crew member

1 S-3 (support): 200 GPM pump, 1,000 gallon capacity, 1 crew member

Equipment housed away from main barn? No

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby? Yes

Location: Did not specify.

Issues: "Heavy fuel load & limited access"

x Difficult access

x Rough terrain

x 1 way in/out

x Heavy fuels

Bridges that won't support equipment weight: No

GIS layer & contact info: No

Greatest concerns: Wind speed & direction

Rank:

1 **Housing**

2 **Infrastructure**

5 **Bridge limits**

4 **Hydrants**

3 **Other water sources**

Southeast Nebraska Community Wildfire Protection Plan

Rising City Fire Department

Counties: Butler

Street Address: 105 Main St. **Mailing Address:** PO Box 87, Rising City, NE 68658

Chief: Bob McLaughlin; 402-367-2281; bmclaughlin19@gmail.com

Ass't. Chief: Mark Doehling; 402-643-5539; surprisemd@windstream.net

Secretary: Will Kilgore

Treasurer: Ken Potter

Personnel

25 **Vol.:**

MAD(s): Butler Co., Big 8

Equipment

Engines

1 Type 1 Structural: 1,000 GPM, 300 gal. capacity, four crew members

1 Type 2 Structural: 500 GPM, 300 gal. capacity, three crew members

2 Type 6: Wildland: 50 GPM, 150 gal. capacity, two crew members

Tenders (Tactical Tenders: 4x4, 6x6, 8x8 all-wheel drive)

1 T-1 (tactical): 250 GPM pump, 2,000 gallon capacity, 2 crew members

1 S-3 (support): 200 GPM pump, 1,000 gallon capacity, 1 crew member

Other

1 Equipment trucks

1 Other (Describe): enclosed trailer

Equipment housed away from main barn?

Yes. One Type 2 engine and One Type 6 wildland housed in station located in Surprise.

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby? Yes

Location: T15N, R1E, Sec. 6 – Summit Township, Adamy Addition and all along the south bluffs of the Platte River Valley east of Adamy addition. Lat & Long: 41° 18' 08" N ; 97° 21' 56" W

Issues:

- x Multiple structures
- x Difficult access
- x Rough terrain
- x 1 way in/out
- x Heavy fuels
- x Lack of water within effective distance

Bridges that won't support equipment weight: No

GIS layer & contact info: No

Greatest concerns: Manpower, equipment, water and access

Rank:

4 **Housing**

3 **Infrastructure**

5 **Bridge limits**

2 **Hydrants**

1 **Other water sources**

Southeast Nebraska Community Wildfire Protection Plan

Ulysses Vol. Fire Department

Counties: Butler/Seward

Street Address: 280 F St.

Mailing Address: PO Box 156, Ulysses, NE 68669

Dept. Phone: 402-549-2348 **Dept. Email:** ulyssesfire@clarks.net

Chief: Joe Soukup; 402-646-0445; soukup_joe@yahoo.com

Ass't. Chief: Jon White; 402-641-3961; 12096ja@gmail.com

Secretary: Jim Klement; 402-641-1174; kelectric@clarks.net

Treasurer: Wendy Klement; 402-310-7338; wpetranek@yahoo.com

Personnel

23 **Vol.:**

MAD(s): Butler County MA

Equipment

Engines

1 Type 1 Structural: 1,000 GPM, 300 gal. capacity, ~~four~~ two crew members

1 Type 6: Wildland: 50 GPM, 150 gal. capacity, two crew members

Tenders (Tactical Tenders: 4x4, 6x6, 8x8 all-wheel drive)

1 T-1 (tactical): 250 GPM pump, 2,000 gallon capacity, 2 crew members

Equipment housed away from main barn? No

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby? No

Bridges that won't support equipment weight: No

GIS layer & contact info: No

Greatest concerns: Manpower is usually an issue

Rank:

3 **Housing**

4 **Infrastructure**

5 **Bridge limits**

2 **Hydrants**

1 **Other water sources**

Southeast Nebraska Community Wildfire Protection Plan

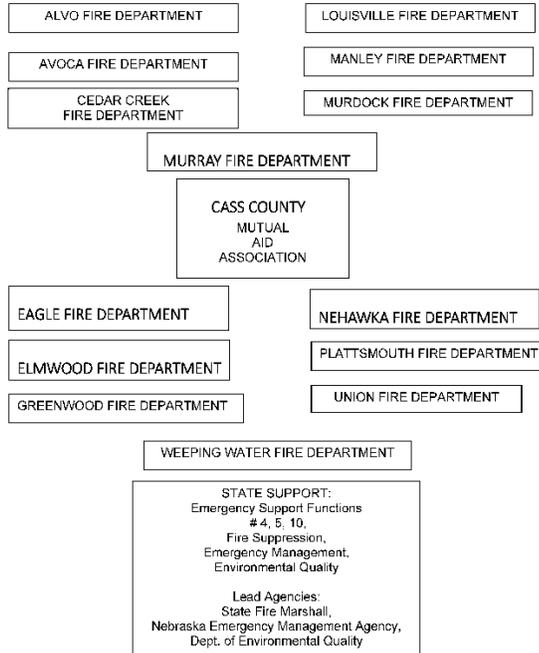
Cass County

Information from Cass Co. LEOP, Annex F:

CASS COUNTY LEOP

ANNEX F

FIRE SERVICES



F-1

2019

SUMMARY OF FIRE RESOURCES WITHIN CASS COUNTY

| Fire Department | Phone Number | Aerial | Pumpers | Tankers | Pumper/Tankers | Grass/Weed Trucks | Utility Truck | Air Cascade | Jaws | Rescue | HazMat Support Trailer | Mobile Command Post |
|-----------------|-------------------|--------|---------|---------|----------------|-------------------|---------------|-------------|------|--------|------------------------|---------------------|
| Alvo | 911 | | | 1 | | 1 | | | | 2 | | |
| Avoca | 911, 402-275-3345 | | 2 | 1 | | 1 | | X | | 1 | | |
| Cass County EMA | 911, 402-267-6765 | | | | | | | | | 3* | 1 | 1 |
| Cedar Creek | 911, 402-234-7856 | | 1 | 1 | | 1 | | | | | | |
| Eagle | 911, 402-781-2745 | | 1 | 1 | | 1 | 1 | | X | 2 | | |
| Elmwood | 911, 402-994-6705 | | 2 | 2 | | 1 | | | | 2 | | |
| Greenwood | 911, 402-789-3360 | | 1 | 1 | | 2 | 1 | X | X | 1 | | |
| Louisville | 911, 402-234-3295 | | 2 | 2 | | 1 | 1 | X | X | 2 | | |
| Manley (WWRFD) | 911, 402-234-5239 | | 1 | 1 | | | | | | | | |
| Murdock | 911, 402-867-2271 | | 2 | 2 | | 1 | 1 | X | | | | |
| Murray | 911, 402-235-2492 | | 2 | 1 | | 1 | | X | | 2 | | |
| Nehawka | 911 | | 1 | 2 | | | | | | 1 | | |
| Plattsmouth | 911, 402-296-6041 | 1 | 3 | 1 | | 1 | 1 | X | X | 3 | | |
| Union | 911, 402-263-3333 | | 2 | 3 | | 1 | | | | 2 | | |
| Weeping Water | 911, 402-287-7875 | | 2 | 1 | | 1 | 2 | | X | 2 | | |

* = Non-Transport Units

CASS COUNTY LEOP

ANNEX F
ATTACHMENT 1

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2019

Southeast Nebraska Community Wildfire Protection Plan

Survey Responses from Cass County Fire Departments:

Ashland Volunteer Fire Department

Counties: Saunders, Cass

Street/Mailing Address: 2402 Silver St., Ashland, NE 68003

Chief: Michael Meyer; 402-440-7384; hazmedic@yahoo.com

Ass't. Chief: Bradley Dill; 402-618-9820; bdill@gmail.com

Secretary: Julletta Meyer; 402-440-7384; lettabear@yahoo.com

Treasurer: City of Ashland; 402-944-3387

Personnel

30 **Vol.:**

MAD(s): Saunders, Cass, Sarpy

Equipment

Engines

1 Type 1 Structural: 1,000 GPM, 300 gal. capacity, four crew members

1 Other: Aerial Ladder 100'

Tenders (Tactical Tenders: 4x4, 6x6, 8x8 all-wheel drive)

1 T-1 (tactical): 250 GPM pump, 2,000 gallon capacity, 2 crew members

1 S-2 (support): 200 GPM pump, 2,500 gallon capacity, 1 crew member

Other

1 Equipment trucks: Special Operations (Water, confined, high/low angle, grain entrapment, heavy rescue)

3 Other (Describe): Brush rigs with 300 gal. tanks

Equipment housed away from main barn? No

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby? No, but cited these:

Location: Area lake communities with high home density, infrastructure or other resources at high risk, or populated areas with one way in/out

Issues:

x Multiple structures

x 1 way in/out

x Other

Bridges that won't support equipment weight: Yes, self-explanatory

Greatest concerns: Rapid advancement due to high winds

Rank:

1 **Housing**

3 **Infrastructure**

4 **Bridge limits**

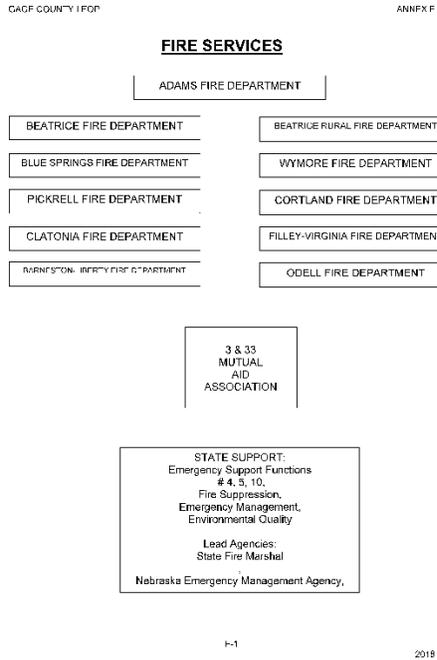
2 **Hydrants**

5 **Other water sources**

Southeast Nebraska Community Wildfire Protection Plan

Gage County

Information from Gage Co. LEOP, Annex F:



GAGE COUNTY FIRE RESOURCES (List numbers of equipment)

| FIRE DEPARTMENT | PHONE | AERIAL | PUMPER | TANKER | PUMPER/ TANKER | GRASS-WEEP TRUCK | UTILITY TRUCK | RESCUE UNITS | KINDS/TYPES/ SPECIAL- TEAMS | KINDS/TYPES SPECIAL EQUIPMENT | RADIO- LOGICAL EQUIPMENT Yes / No |
|-----------------------------|-----------------|--------|--------|--------|-------------------|---------------------|------------------|-----------------|-----------------------------------|-------------------------------------|--|
| BEATRICE BEATRICE HAZMAT | 911 223-4080 | 1 | 2 | | | | 1 | 5 | HAZMAT | 1 UTV | YES |
| BEATRICE RURAL | 911 223-4080 | | 1 | 1 | | 3 | | | | | YES |
| ADAMS RESCUE | 911 | | 1 | 2 | | 3 | | 1 | | UTV MED BED | YES |
| BARNESTON- LIBERTY | 911 | | 1 | 1 | | 3 | | | | | YES |
| BLUE SPRINGS | 911 645-3311 | | 1 | 1 | | 3 | | | | | YES |
| CLATONIA | 911 | | 1 | 2 | | 2 | | 2 | | | YES |
| CORTLAND | 911 | | 1 | 1 | | 2 | 1 | | GRAIN BIN RESCUE | LIGHT TRAILER | YES |
| FILLEY-VIRGINIA | 911 | | 1 | 1 | | 2 | | | | | YES |
| ODELL | 911 | | 2 | 1 | | 2 | | | | | YES |
| PICKRELL | 911 | | 1 | 1 | | 2 | 1 | | | | YES |
| WYMORE EMS | 911 645-3311 | | 2 | 1 | | 2 | 1 | 1 | GRAIN BIN RESCUE | | YES |

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2018

GAGE COUNTY LEOP

ANNEX F
ATTACHMENT 1

Southeast Nebraska Community Wildfire Protection Plan

Survey Responses from Gage County Fire Departments:

Beatrice Fire and Rescue (municipal department)

Counties: Gage

Street & Mailing Address: 310 Ella St., Beatrice 68310

Dept. Phone: 402-228-5246; **Dept. Email:** bdaake@beatrice.ne.gov

Chief: Brian Daake; 402-228-5244, 402-228-5246; bdaake@beatrice.ne.gov

Personnel

0 **Vol.:**

2 **PT:**

24 **FT:**

MAD(s): 3 & 33 MA

Equipment

Engines

2 Type 1 Structural: 1,000 GPM, 300 gal. capacity, four crew members

Other

Equipment trucks: 3 4x4 pickups, 2 command, 1 utility, Rescue truck, HazMat truck, air trailer

Other (Describe): 100' platform 2,000 gpm ladder truck, EMS/Fire UTV

Equipment housed away from main barn? No

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby?

Yes

Location: We have a lot of Wildland Urban Interface throughout the city and on the edges of town: Covered bridge area, Country Club Lane, Country Meadows, Flowing Springs area, Wildwood, Chester St., Montgomery St.

Issues:

x Multiple structures

x Difficult access

x Rough terrain

x Heavy fuels

Bridges that won't support equipment weight: No

GIS layer & contact info: Engineering Dept. is working on it. Doug Zulauf, dzulauf@beatrice.ne.gov

Greatest concerns: Life safety

Rank:

2 **Housing**

1 **Infrastructure**

3 **Bridge limits**

4 **Hydrants**

5 **Other water sources**

DeWitt Volunteer Fire Department

Counties: Saline, Gage, Jefferson

Street/Mailing Address: 408 E. Fillmore, DeWitt 68341

Chief: Shawn Weise, 402-223-7036, Shawn.Weise73@gmail.com

Ass't. Chief: Tim Garrison, 402-230-0749, tgarrison@plymouthelectric.com

Sec/Treas.: Lyle Fink, 402-239-2002, dewittfire@diodecom.net

Personnel

24 **Volunteer**

Southeast Nebraska Community Wildfire Protection Plan

MAD(s): Saline County MA; 3 & 33 MA

Equipment

Engines

1 Type 1 Structural: 1,000 GPM, 300 gal. capacity, four crew members

2 Type 6: Wildland: 50 GPM, 150 gal. capacity, two crew members

Tenders (Tactical Tenders: 4x4, 6x6, 8x8 all-wheel drive)

1 T-2 (tactical): 250 GPM pump, 1,000 gallon capacity, 2 crew members

1 S-3 (support): 200 GPM pump, 1,000 gallon capacity, 1 crew member

Equipment housed away from main barn? No

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby?

No, but provided locations below

Location: Turkey Creek and Big Blue River

Issues:

x Difficult access

Bridges that won't support equipment weight: No

GIS layer & contact info: No

Greatest concerns: Homes and personnel to fight fires.

Rank:

1 **Housing**

2 **Infrastructure**

4 **Bridge limits**

3 **Hydrants**

5 **Other water sources**

Hallam Volunteer Fire Department

Counties: Lancaster, Gage

Street Address: 4200 W. Hallam Rd.; **Mailing Address:** PO Box 62, Hallam, NE 68368

Chief: Duane Aksamit; 402-826-9423; deaksam@nppd.com

Ass't. Chief: Tim Bruder; 402-450-2328; trbrude@nppd.com

Secretary: Ryan Skilllett; 402-499-3416

Treasurer: Tyler Stenlik; 402-641-5066

Personnel

21 **Vol.:**

MAD(s): Crete, Southwest, Cortland, Clatonia, Wilber

Equipment

Engines

1 Type 2 Structural: 500 GPM, 300 gal. capacity, three crew members

Tenders (Tactical Tenders: 4x4, 6x6, 8x8 all-wheel drive)

2 T-1 (tactical): 250 GPM pump, 2,000 gallon capacity, 2 crew members

1 T-2 (tactical): 250 GPM pump, 1,000 gallon capacity, 2 crew members

Equipment housed away from main barn? No

Southeast Nebraska Community Wildfire Protection Plan

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby?

No

Bridges that won't support equipment weight: Yes. Many bridges in our district are shut down per the county engineer.

Greatest concerns: High winds and dry crops

Rank:

- 1 **Housing**
- 3 **Infrastructure**
- 4 **Bridge limits**
- 5 **Hydrants**
- 2 **Other water sources**

Odell Rural

Counties: Gage

Street Address: 410 Lincoln

Mailing Address: PO Box 149, Odell NE 68415

Chief: Brent Kostal

Ass't. Chief: Damion Andersen

Secretary: Brock Vitosh

Treasurer: Bruce Vitosh

Personnel

23 **Vol.:**

MAD(s): 3 & 33 MA

Equipment

Engines

- 1 Type 1 Structural: 1,000 GPM, 300 gal. capacity, four crew members
- 1 Type 2 Structural: 500 GPM, 300 gal. capacity, three crew members
- 3 Type 6: Wildland: 50 GPM, 150 gal. capacity, two crew members
- 1 Type 7: Wildland: 10 GPM, 50 gal. capacity, two crew members

Tenders (Tactical Tenders: 4x4, 6x6, 8x8 all-wheel drive)

- 1 T-1 (tactical): 250 GPM pump, 2,000 gallon capacity, 2 crew members

Other

- 1 Equipment trucks

Equipment housed away from main barn? No

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby?

No

Bridges that won't support equipment weight: Small wooden bridges

GIS layer & contact info: No

Rank:

- 3 **Housing**
- 4 **Infrastructure**
- 5 **Bridge limits**
- 2 **Hydrants**
- 1 **Other water sources**

Southeast Nebraska Community Wildfire Protection Plan

Homestead National Monument of America (NPS) – *This is a not a fire department; they provided partner information as a courtesy.*

Counties: Gage

Street/Mailing Address: 8523 W State Hwy. 4, Beatrice 68310

Dept. Phone: 402-223-3514 **Dept. Email:** HOME_information@nps.gov

Chief: Mark Engler, Park Superintendent; 402-223-3514, 402-230-9289; Mark_Engler@nps.gov

Ass't. Chief: Jesse Bolli, engine boss; 402-223-3514, 402-239-8407; Jesse_Bolli@nps.gov

Personnel

1 ENGB

1 FFT2

MA agreements with: Beatrice Rural and Beatrice City FD

Equipment

Engines

1 Type 6: Wildland: 50 GPM, 150 gal. capacity, two crew members

Other

1 Other (Describe): UTV with slip-in tank

Equipment housed away from main barn? No

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby?

No

Bridges that won't support equipment weight: No

GIS layer & contact info: Yes. Jesse Bolli; 402-223-3514; Jesse_Bolli@nps.gov

Greatest concerns: Visitor safety and protecting historical structures

Rank:

1 Housing

2 Infrastructure

5 Bridge limits

3 Hydrants

4 Other water sources

Southeast Nebraska Community Wildfire Protection Plan

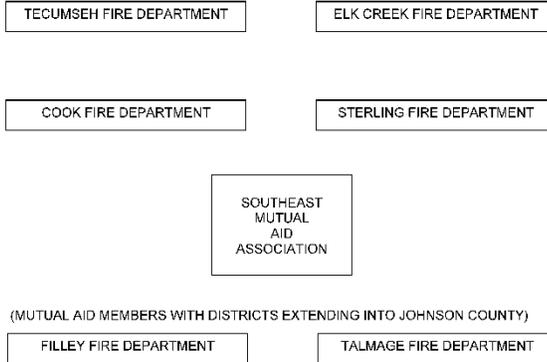
Johnson County

Information from Johnson Co. LEOP, Annex F:

JOHNSON COUNTY LEOP

ANNEX F

FIRE SERVICES



(MUTUAL AID MEMBERS WITH DISTRICTS EXTENDING INTO JOHNSON COUNTY)

STATE SUPPORT:
Emergency Support Functions
4, 5, 10,
Fire Suppression,
Emergency Management,
Environmental Quality

Lead Agencies:
State Fire Marshal
Nebraska Emergency Management Agency.

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2018

JOHNSON COUNTY FIRE RESOURCES

(List numbers of equipment)

| FIRE DEPARTMENT | PHONE | AERIAL | PUMPER | TANKER | PUMPER/TANKER | GRASS-MEED TRUCK | UTILITY TRUCK | RESCUE UNITS | KINDS/TYPES/SPECIAL-TEAMS | KINDS/TYPES/SPECIAL EQUIPMENT | RADIO EQUIPMENT Yes / No |
|---------------------------------|-------------------------|--------|--------|--------|---------------|------------------|---------------|--------------|---------------------------|-------------------------------|--------------------------|
| Cook | 911 335-3307 | | 1 | 1 | | 2 | 1 | | - | 1 CAFS Truck | Yes |
| Elk Creek | 911 335-3307 | | 1 | 1 | | 2 | 0 | | - | - | Yes |
| Sterling | 911 335-3307 | | 2 | 1 | | 3 | 1 | | - | - | Yes |
| Tecumseh | 911 335-3307 | | 3 | 2 | | 3 | 0 | | - | - | Yes |
| Filley | 911 335-3307 | | 1 | 1 | | 2 | | | - | - | Yes |
| Talmage | 911 335-3307 | | 2 | 2 | | 2 | | | - | - | Yes |
| Johnson County Sheriff's Office | 335-3307 | | | | | | | | | | Yes |
| Johnson County Hospital | 335-3361 | | | | | | | | | | Yes |
| Nearest HAZMAT Response Team | NSP or NEMA 471-7421 | | | | | | | | | | |
| Beatrice | 223-4080 | | | | | | | | | | |

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2018

JOHNSON COUNTY LEOP

ANNEX F
ATTACHMENT 1

Southeast Nebraska Community Wildfire Protection Plan

Survey Responses from Johnson County Fire Departments:

Cook Volunteer Fire Department

Counties: Johnson & Otoe

Street Address: 202 W Main St. **Mailing Address:** PO Box 295, Cook NE 68329

Dept. Phone: 402-864-7881

Chief: Adam Badberg; 402-873-0231; adbadberg@gmail.com

Ass't. Chief: Cory Panko; 402-335-7458

Secretary: Kyle Dieckgrafe; 402-335-7890

Treasurer: Andrew Pietzyk; 402-269-7242

Personnel

20 **Vol.:**

MAD(s): Southeast Nebraska MA

Other MA agreements: Syracuse, Talmage

Equipment

Engines

1 Type 1 Structural: 1,000 GPM, 300 gal. capacity, four crew members

1 Type 3 Wildland: 150 GPM, 500 gal. capacity, three crew members

3 Type 6: Wildland: 50 GPM, 150 gal. capacity, two crew members

Tenders (Tactical Tenders: 4x4, 6x6, 8x8 all-wheel drive)

1 S-2 (support): 200 GPM pump, 2,500 gallon capacity, 1 crew member

Other

1 Equipment trucks

Equipment housed away from main barn? No

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby? Yes

Location: Village of Cook

Issues:

x Multiple structures

Bridges that won't support equipment weight: Yes; bridge tonnage not high enough for larger trucks.

GIS layer & contact info: No

Greatest concerns: Weather and water supply

Rank:

4 **Housing**

5 **Infrastructure**

1 **Bridge limits**

3 **Hydrants**

2 **Other water sources**

Southeast Nebraska Community Wildfire Protection Plan

Elk Creek Volunteer Fire Department

Counties: Johnson, Pawnee, Nemaha

Street Address: 380 Elk **Mailing Address:** PO Box 92, Elk Creek, NE 68348

Chief: Kirk Bartels; 402-921-0774, 402-877-4410; kabartels@windstream.net

Ass't. Chief: Ben Robison; 402-852-6007; bjmrobison@gmail.com

Secretary: Charlie Pierce; 402-335-7949, 402-335-3850; cpierce@nemahanrd.org

Treasurer: Lloyd Pfister; 402-239-8145, 402-239-8165; ldpfister@gmail.com

Personnel

25 **Vol.:**

MAD(s): Southeast Nebraska MA

Equipment

Engines

1 Type 1 Structural: 1,000 GPM, 300 gal. capacity, four crew members

2 Type 6: Wildland: 50 GPM, 150 gal. capacity, two crew members

Tenders (Tactical Tenders: 4x4, 6x6, 8x8 all-wheel drive)

1 S-2 (support): 200 GPM pump, 2,500 gallon capacity, 1 crew member

Equipment housed away from main barn? No

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby? No

Bridges that won't support equipment weight: Yes

GIS layer & contact info: No

Greatest concerns: Water, manpower

Rank:

1 **Housing**

2 **Infrastructure**

5 **Bridge limits**

3 **Hydrants**

4 **Other water sources**

Sterling Fire

Counties: Johnson

Street/Mailing Address: 135 Main St., Sterling, NE 68443; **Dept. Phone:** 911

Chief: Steve Eickhoff; 402-239-5892

Ass't. Chief: Jason Ebberg

Secretary: Jake Bridges

Treasurer: Kevin Wentz

Personnel

x **Vol.:** (number of volunteers not provided)

MAD(s): (left blank)

Equipment

Engines

2 (Did not describe)

Equipment housed away from main barn? No

(The remainder of the survey was left blank)

Southeast Nebraska Community Wildfire Protection Plan

Talmage Rural Fire

Counties: Otoe, Johnson, Nemaha

Street Address: 203 Main St.

Mailing Address: PO Box 168, Talmage, NE 68448

Chief: Greg Conz; 402-613-7876; gonzo18acc@gmail.com

Ass't. Chief: Stephanie Degroot; 402-269-4109

Sec/Treas.: Mark Badberg; 402-335-7116

Personnel

19 **Vol.**

MAD(s): Otoe County MA

Equipment

Engines

1 Type 1 Structural: 1,000 GPM, 300 gal. capacity, four crew members

1 Type 2 Structural: 500 GPM, 300 gal. capacity, three crew members

2 Type 6: Wildland: 50 GPM, 150 gal. capacity, two crew members

Tenders (Tactical Tenders: 4x4, 6x6, 8x8 all-wheel drive)

2 Other (Describe): Tenders – 2,000 & 1,000

Equipment housed away from main barn? No

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby? Yes

Location: Getting into rural homes and in the village of Lorton we have several dead end streets. (Other specific locations were not identified)

Issues:

x Multiple structures

x Difficult access

x Rough terrain

x 1 way in/out

x Heavy fuels

x Lack of water within effective distance

Bridges that won't support equipment weight: Yes

GIS layer & contact info: No

Greatest concerns: Being able to get in and out of areas that are out in the rural farm areas with no water.

Rank:

5 **Housing**

4 **Infrastructure**

3 **Bridge limits**

1 **Hydrants**

2 **Other water sources**

Southeast Nebraska Community Wildfire Protection Plan

Tecumseh Volunteer Fire Department

Counties: Johnson

Street Address: 1110 Buffalo Dr. **Mailing Address:** PO Box 492, Tecumseh, NE 68450

Chief: Aaron Gartner; 402-450-9588, 402-335-3360

Ass't. Chief: Jared Schuster; 402-335-2882

Secretary: Kaleb Kuhmann; 402-335-7068

Treasurer: Colton Gartner; 402-450-9406

Personnel

28 **Vol.:**

MAD(s): Johnson/Pawnee

Equipment

Engines

3 Type 1 Structural: 1,000 GPM, 300 gal. capacity, four crew members

3 Type 6: Wildland: 50 GPM, 150 gal. capacity, two crew members

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby? No

Bridges that won't support equipment weight: Yes

GIS layer & contact info: No

Greatest concerns: Getting control & making the public aware for safety

Rank:

1 **Housing**

2 **Infrastructure**

5 **Bridge limits**

3 **Hydrants**

4 **Other water sources**

Southeast Nebraska Community Wildfire Protection Plan

Lancaster County

Information from Lancaster Co. LEOP, Annex F:

LANCASTER COUNTY LEOP

ANNEX F

FIRE SERVICES

LANCASTER COUNTY FIRE DEPARTMENTS
 BENNET, FIRTH, HALLAM, HICKMAN, LINCOLN FIRE & RESCUE, MALCOLM,
 NEBRASKA AIR NATIONAL GUARD, RAYMOND, SOUTHWEST RURAL,
 SOUTHEAST RURAL, WAVERLY

FIRE DEPARTMENTS SURROUNDING LANCASTER COUNTY
 ASHLAND, CERESCO, CLATONIA, CORTLAND, CRETE, DOUGLAS,
 GREENWOOD, PALMYRA, PLEASANT DALE.

ALL OF THE FIRE DEPARTMENTS
 & VOLUNTEER FIRE
 DEPARTMENTS ARE MEMBERS
 OF THE LANCASTER COUNTY
 MUTUAL
 AID
 ASSOCIATION

STATE SUPPORT:
 Emergency Support Functions
 # 4, 5, 10,
 Fire Suppression,
 Emergency Management,
 Environmental Quality

 Lead Agencies:
 State Fire Marshal

 Nebraska Emergency Management Agency.

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LANCASTER COUNTY FIRE RESOURCES

| FIRE DEPARTMENT | PHONE | AERIAL | PUMPER | TANKER | PUMPER/TANKER | GRASS-WEED TRUCK | UTILITY TRUCK | RESCUE UNITS | KINDS/TYPES/SPECIAL-TEAMS | KINDS/TYPES/SPECIAL EQUIPMENT | RADIO-LEAD-OUT EQUIPMENT Yes /No |
|------------------------------|----------|--------|--------|--------|---------------|------------------|---------------|--------------|---------------------------|-------------------------------|----------------------------------|
| Bennet | 441-6000 | 0 | 2 | 2 | 0 | 3 | 1 | 1 | HazMat | HazMat | Yes |
| Ceresco | 443-1000 | 0 | 1 | 3 | 0 | 2 | 1 | 2 | | Light Tower | Yes |
| Clatonia | 223-5221 | 0 | 1 | 2 | 0 | 2 | 0 | 2 | | | |
| Cortland | 223-5221 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | | | Yes |
| Crete | 826-4311 | 1 | 1 | 1 | 1 | 3 | 1 | 3 | | Ice Rescue | Yes |
| Douglas | 873-6891 | 0 | 1 | 1 | 0 | 2 | 0 | 2 | | Jaws Stabilization Kit | Yes |
| Firth | 441-6000 | 0 | 2 | 2 | 0 | 4 | 0 | 2 | | Jaws | Yes |
| Greenwood | 480-2033 | 0 | 1 | 1 | 0 | 2 | 1 | 1 | | Air Compressor | Yes |
| Hallam | 441-6000 | 0 | 1 | 1 | 0 | 3 | 0 | 1 | | Jaws | Yes |
| Hickman | 441-6000 | 0 | 1 | 1 | 0 | 3 | 0 | 1 | Ice Rescue | Ice Suits | Yes |
| Nearest HAZMAT Response Team | | | | | | | | | | | |

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LANCASTER COUNTY LEOP

ANNEX F
 ATTACHMENT 1

Southeast Nebraska Community Wildfire Protection Plan

LANCASTER COUNTY FIRE RESOURCES

| FIRE DEPARTMENT | PHONE | AERIAL | PUMPER | TANKER | PUMPER/TANKER | GRASS-WEED TRUCK | UTILITY TRUCK | RESCUE UNITS | KINDS/TYPES/SPECIAL-TEAMS | KINDS/TYPES SPECIAL EQUIPMENT | RADIO-LOGICAL EQUIPMENT Yes / No |
|---------------------|----------|--------|--------|--------|---------------|------------------|---------------|--------------|--------------------------------|---|----------------------------------|
| Lincoln | 441-6000 | 5 | 17 | 0 | 0 | 1 | 23 | 13 | Water/Heavy /Rope/USAR /Trench | Boat Jet Ski/USAR Tools/Trench Rescue Trailer | Yes |
| Malcolm | 441-6000 | 0 | 2 | 0 | 1 | 3 | 0 | 1 | | Cascade System/Light Trailer | Yes |
| N.E. National Guard | 458-1500 | 0 | 1 | 0 | 1 | 1 | 2 | 1 | USAR Team | Air Trailer/AFFF Trailer/USAR Trailer | Yes |
| Palmyra | 873-6691 | 0 | 1 | 2 | 0 | 1 | 0 | 1 | | Cascade | Yes |
| Pleasant Dale | 441-6000 | 0 | 0 | 1 | 2 | 2 | 0 | 1 | Quick Response | | |
| Raymond | 441-6000 | 0 | 2 | 2 | 0 | 3 | 0 | 2 | Dive Team/Ice Rescue | Decon Trailer/Triage Trailer | Yes |
| Southeast | 441-6000 | 0 | 2 | 3 | 1 | 3 | 1 | 2 | Heavy Rescue | | Yes |
| Southwest | 441-6000 | 0 | 3 | 2 | 0 | 4 | 1 | 2 | ALS/BLS | Heavy Rescue | Yes |
| Waverly | 441-6000 | 0 | 2 | 3 | 0 | 2 | 1 | 1 | BLS | Decon Trailer | Yes |
| Valparaiso | 441-6000 | 0 | 1 | 2 | 0 | 3 | 1 | 2 | | | Yes |

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LANCASTER COUNTY LEOP

ANNEX F
ATTACHMENT 1

Survey Responses from Lancaster County Fire Departments:

Ashland Volunteer Fire & Rescue – See listing in Cass County

Bennet Fire & Rescue

Counties: Lancaster, Otoe

Street Address: 480 Fir St.

Mailing Address: PO Box 218, Bennet 68317

Dept. Phone: 402-782-6195 **Dept. Email:** tim@homeandfarm.com

Chief: Tim Norris; 402-217-1724, 402-782-2100; tim@homeandfarm.com

Ass't. Chief: Shane King; 402-450-1015; sking521@hotmail.com

Secretary: Emily Bausch; 402-560-7429; emilybausch@yahoo.com

Treasurer: Scott Kinzie; 402-580-5431; s.kinzie@hotmail.com

Personnel

23 **Vol.:**
0 **PT:**
0 **FT:**

MAD(s): Lancaster MA

Other MA agreements: Lincoln Fire for EMS transportation

Southeast Nebraska Community Wildfire Protection Plan

Equipment

Engines

2 Type 1 Structural: 1,000 GPM, 300 gal. capacity, four crew members

3 Type 6: Wildland: ~~50~~ 250 GPM, 150 gal. capacity, two crew members

Tenders (Tactical Tenders: 4x4, 6x6, 8x8 all-wheel drive)

1 T-1 (tactical): ~~250~~ 1000 GPM pump, 2,000 gallon capacity, 2 crew members

1 S-1 (support): 300 GPM pump, ~~4,000~~ 3,500 gallon capacity, 1 crew member

Other

1 Other (Describe): Rescue Truck

Equipment housed away from main barn? Yes

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby? Yes

Location: Acreage subdivisions. Most developments only has one way in/out. Also one subdivision in Bennet only has one way in and out.

Issues:

x Multiple structures

x 1 way in/out

Bridges that won't support equipment weight: Yes. Some of the bridges on gravel roads. Several bridges have been closed.

GIS layer & contact info: No

Greatest concerns: The speed that a fire might spread; structures in the path.

Rank:

1 **Housing**

5 **Infrastructure**

4 **Bridge limits**

2 **Hydrants**

3 **Other water sources**

Crete VFD

Counties: Saline, Seward, Lancaster

Street/Mailing Address: 210 East 14th St., Crete, NE 68333

Dept. Phone: 402-826-3473 **Dept. Email:** tod.allen@crete.ne.gov

Chief: Tod Allen; 402-560-6240; 402-826-3473; tod.allen@crete.ne.gov

Ass't. Chief: James Yost; 402-418-1854, 402-826-3473; james.yost@crete.ne.gov

Secretary: Amber Madigan; 402-719-339-8182, 402-826-3473; amber.madigan@crete.ne.gov

Treasurer: Courtney Marcelino; 402-430-3327; 402-826-3473; Courtney.marcelino@crete.ne.gov

Personnel

40 **Vol.:**

MAD(s): All of Saline County, Seward County, all of Lancaster County except the city of Lincoln

Other MA agreements: Gage County

Southeast Nebraska Community Wildfire Protection Plan

Equipment

Engines

- 1 Type 1 Structural: 1,000 GPM, 300 gal. capacity, four crew members
- 2 Type 2 Structural: 500 GPM, 300 gal. capacity, three crew members
- 2 Type 6: Wildland: 50 GPM, 150 gal. capacity, two crew members

Tenders (Tactical Tenders: 4x4, 6x6, 8x8 all-wheel drive)

- 2 T-1 (tactical): 250 GPM pump, 2,000 gallon capacity, 2 crew members

Other

- 0 Road Dept. Equip. (describe):

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby? Yes

Location: (will be sending map)

Issues:

We have a lot of homes moving out from Lincoln into our area and MA areas. We are working on maps right now. I assume you are not worried about cities? We have a lot of subdivision moving out from Lincoln. Many have only one-way in or out and have wildland conditions within 20 feet of structures.

Bridges that won't support equipment weight: Yes. This is an unclear question. We have bridges that will support brush rigs but not a 3,000 gal. tanker. We are submitting a map.

GIS layer & contact info: No. We are looking to partner with the local university to see if we can get this generated via a class project.

Greatest concerns: We are mapping potential fire paths at this time. These are paths that would allow a wildfire to travel more than 2 miles. Beyond that, the wildland urban interface is our biggest problem.

Rank:

- 1 **Housing**
- 5 **Infrastructure**
- 2 **Bridge limits**
- 3 **Hydrants**
- 4 **Other water sources**

Hallam VFD – See listing in Gage County

Hickman Fire and Rescue

Counties: Lancaster

Street Address: 630 Chestnut St.

Mailing Address: 630 Chestnut St., Hickman 68372

Chief: Justin Schack 402-450-8006; jdschack86@gmail.com

Ass't. Chief: John Brady; 402-890-3472; jbrady2137@gmail.com

Sec.: Phil Goering

Treas.: Rhonda Baumfalk

Personnel

24 **Vol.:**

MAD(s): Lancaster County MA

Southeast Nebraska Community Wildfire Protection Plan

Equipment

Engines

- 1 Type 2 Structural: 500 GPM, 300 gal. capacity, three crew members
- 1 Type 3 Wildland: 150 GPM, 500 gal. capacity, three crew members

- 2 Type 6: Wildland: 50 GPM, 150 gal. capacity, two crew members
- 1 Type 7: Wildland: 10 GPM, 50 gal. capacity, two crew members

Tenders (Tactical Tenders: 4x4, 6x6, 8x8 all-wheel drive)

- 1 S-2 (support): 200 GPM pump, 2,500 gallon capacity, 1 crew member

Other

- 1 Equipment truck
- 1 Other (Describe): Rapid response 4x4 Expedition w/EMS equipment
- 1 Road Dept. Equip. (describe): Road grader/Maintainer

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby? Yes

Location1: Meadowlark Hills Addition, Blocks 1 & 2
Whitetail Ridge Addition

Issues:

Wildland/Urban Interface between CRP grassland and acreage developments. CRP surrounded by cropland and wooded drainageways vulnerable to harvest season ignition.

Location2: Poe Estates, Blocks 1 & 2
Cedar Woods Estates Addition

Issues:

Rural acreages bordering wooded state recreation areas.

Other Locations: Suburban subdivisions which directly abut cropland susceptible to harvest season ignitions.

Greatest concerns:

Adequate numbers of personnel properly trained in wildland fire suppression.

Bridges that won't support equipment weight: No

GIS layer & contact info: No

Rank:

- 1 **Housing**
- 3 **Infrastructure**
- 5 **Bridge limits**
- 2 **Hydrants**
- 4 **Other water sources**

Southeast Nebraska Community Wildfire Protection Plan

Lincoln Fire and Rescue (municipal department)

Counties: Lancaster

Street/Mailing Address: 1801 Q St., Lincoln NE 68508

Dept. Phone: 402-441-8345 **Dept. Email:** ejones@lincoln.ne.gov

Chief: Michael DeSpain; 402-441-8350, 402-441-8345; mdespain@lincoln.ne.gov

Ass't. Chief: Pat Borer; 402-441-8351, 402-937-5978

Personnel

280 FT:

MAD(s): Lancaster Co. MA

Other MA agreements: LFR provides ALS transport to numerous fire districts within Lancaster County. Thus, several automatic aid agreements for this purpose are in place.

Equipment

Engines

17 Type 1 Structural: 1,000 GPM, 300 gal. capacity, four crew members

Other

5 Ladder trucks
1 HazMat truck
12 Ambulances
1 Grass truck
1 Trench rescue
1 Dive rescue
1 Light tower
1 Air unit
1 Heavy Decon

Equipment housed away from main barn? Yes. LFR equipment is distributed across the city at 15 fire stations, the logistics facility, and training facilities.

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby? Not formally

Location:

Issues: LFR is experiencing an increasing problem with urban/wildland interface due to "common areas" in new neighborhoods. We have experienced structural damage due to fire originating in these vegetation areas. LFR lacks wildland equipment and PPE for wildland firefighting. LFR must mutual aid these resources from mutual aid departments. This delay increases risk.

- x Multiple structures
- x Difficult access
- x Rough terrain
- x 1 way in/out
- x Heavy fuels
- x Lack of water within effective distance
- x Other: LFR equipment is not capable of wildland firefighting

Bridges that won't support equipment weight: Yes, numerous

GIS layer & contact info: Battalion Chief Eric Jones; 402-441-8354; ejones@lincoln.ne.gov

Southeast Nebraska Community Wildfire Protection Plan

Greatest concerns: Lack of specialized equipment, lack of training, reliance on mutual aid

Rank:

- 2 **Housing**
- 3 **Infrastructure**
- 5 **Bridge limits**
- 4 **Hydrants**
- 1 **Other water sources**

Southwest Rural Fire Protection District

Counties: Lancaster

Street/Mailing Address: 705 W Burnham, Lincoln, NE 68522

Dept. Phone: 402-423-0230 **Dept. Email:** philnalley@windstream.net

Chief: Phillip Nalley; 402-304-4296; philnalley@windstream.net

Ass't. Chief: Adam Powers; 402-499-0105; powers814@gmail.com

Personnel

27 **Vol.:**

MAD(s): Lancaster County MA

Equipment

Engines

3 Type 1 Structural: 1,000 GPM, ~~300~~ 750-1,000 gal. capacity, four crew members

2 Type 5: Wildland: 50 GPM, ~~400~~ 250 gal. capacity, two crew members

2 Type 6: Wildland: 50 GPM, 150 gal. capacity, two crew members

Tenders (*Tactical Tenders: 4x4, 6x6, 8x8 all-wheel drive*)

2 S-1 (support): 300 GPM pump, ~~4,000~~ 3,000 gallon capacity, ± 2 crew members

Other

1 Equipment trucks: Cribbing, high & low pressure air bags, Jaws with cutters & Cylinders air supply, back boards, stoke basket. On-board generator, ajax tools, extra backboard, command supplies

Equipment housed away from main barn? No

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby? Yes

Location: Wilderness Park, west edge of Lincoln

Issues:

- x Multiple structures
- x Difficult access
- x Rough terrain
- xx 1 way in/out
- x Heavy fuels

Rank:

- 5 **Housing**
- 4 **Infrastructure**
- 2 **Bridge limits**
- 1 **Hydrants**
- 3 **Other water sources**

Southeast Nebraska Community Wildfire Protection Plan

US Army Corps of Engineers, Missouri River Project Office – *This is a not a fire department; they provided partner information as a courtesy.*

Counties: *(Info in this section is for USACE properties in Nebraska counties that abut the Missouri River – for this CWPP it includes Lancaster, Sarpy, and Seward Counties.)*

Street/Mailing Address: 9901 John J. Pershing Dr., Omaha, NE 68122

Dept. Phone: 402-996-3766

Contact1: Dave Sobczyk, Operation Project Manager; 402-996-3745, 402-949-0416;
david.f.sobczyk@usace.army.mil

Contact2: Kelsey Jolley, Natural Resource Specialist; 402-996-3752; kelsey.c.jolley@ usace.army.mil

(USACE owns several lakes that are managed via local natural resources agencies. USACE has no fire personnel or equipment. They have provided contact information and some comments concerning wildfire issues. The local agency lessees have responsibility for wildfire management on these lands.)

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby? Yes

Location: Holmes Lake in Lincoln is surrounded by dense urban housing. It has better access than the Omaha Lakes but still has a high risk.

Greatest concerns: Threats to our neighbors' properties and homes

Rank:

- 1 **Housing**
- 2 **Infrastructure**
- 4 **Bridge limits**
- 3 **Hydrants**
- 5 **Other water sources**

Southeast Nebraska Community Wildfire Protection Plan

Nemaha County

Information from Nemaha Co. LEOP, Annex F:

NEMAHA COUNTY LEOP

ANNEX F

FIRE SERVICES

AUBURN FIRE DEPARTMENT

BROCK FIRE DEPARTMENT

BROWNVILLE FIRE DEPARTMENT

JOHNSON FIRE DEPARTMENT

JULIAN FIRE DEPARTMENT

NEMAHA FIRE DEPARTMENT

PERU FIRE DEPARTMENT

Nemaha Valley
MUTUAL
AID
ASSOCIATION

STATE SUPPORT:
Emergency Support Functions
4, 5, 10,
Fire Suppression,
Emergency Management,
Environmental Quality

Lead Agencies:
State Fire Marshal

Nebraska Emergency Management Agency,
Dept. of Environmental Quality

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NEMAHA COUNTY FIRE RESOURCES

(List numbers of equipment)

| FIRE DEPARTMENT | PHONE | AERIAL | PUMPER | TANKER | PUMPER/TANKER | GRASS-WEED TRUCK | UTILITY TRUCK | RESCUE UNITS | KINDS/TYPES/SPECIAL-TEAMS | KINDS/TYPES/SPECIAL EQUIPMENT | RADIO-LOGICAL EQUIPMENT Yes/No |
|---|-------|--------|--------|--------|---------------|------------------|---------------|--------------|---------------------------|-------------------------------|--------------------------------|
| Auburn | 911 | 1 | | 2 | 3 | 1 | 1 | 2 | | | YES |
| Brock/Julian | 911 | | 2 | 2 | | 1 | | | | | NO |
| Brownville | 911 | | | 2 | 1 | 1 | | | | | NO |
| Johnson | 911 | | | 2 | 2 | 2 | 1 | 1 | | | NO |
| Nemaha | 911 | | 1 | 3 | 1 | 2 | | 1 | | | NO |
| Peru | 911 | | 2 | 1 | 1 | 2 | | 2 | | | NO |
| Nearest HAZMAT Response Team Lincoln Fire Dept | | | | | | | | | | | |
| Other Response Teams: Beatrice Fire Dept | | | | | | | | | | | |
| Starcare | | | | | | | | | | | |
| NE Dept of Roads/ Traffic Control | | | | | | | | | | | |

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NEMAHA COUNTY LEOP

ANNEX F
ATTACHMENT 1

Southeast Nebraska Community Wildfire Protection Plan

Survey Responses from Nemaha County Fire Departments:

Elk Creek VFD – See listing in Johnson County

Peru VFD

Counties: Nemaha

Street Address: 518 5th St.; **Mailing Address:** PO Box 63, Peru 68421

Dept. Phone: 402-872-4265; **Dept. Email:** peruvfd@gmail.com

Chief: Brent Lottman, 402-274-8220, 402-872-6115; ncso9442@hotmail.com

Ass't. Chief: Luke Winkelman, 402-297-1006; lukewinkelman1225@gmail.com

Secretary: Sara Granfors; **Treasurer:** Barb Decker; 402-297-1975; bdsemt@msn.com

Personnel

23 **Vol.:**

MAD(s): Nemaha Co. MA

Equipment

Engines

3 Type 1 Structural: 1,000 GPM, 300 gal. capacity, four crew members

1 Type 5: Wildland: 50 GPM, 400 gal. capacity, two crew members

1 Type 6: Wildland: 50 GPM, 150 gal. capacity, two crew members

Tenders (Tactical Tenders: 4x4, 6x6, 8x8 all-wheel drive)

1 S-2 (support): 200 GPM pump, 2,500 gallon capacity, 1 crew member

Other

1 Other (Describe): ATV w/50 gpm pump & 70-gal. cap.

0 Road Dept. Equip. (describe):

Equipment housed away from main barn? No

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby? Yes

Location1: Along east edge of District – Missouri River bluffs

Issues:

Difficult access

Rough terrain

Lack of water within effective distance

Location2: T5N R15W Section 11 – Multiple houses with single road/driveway immediately by wooded area.

Issues:

Multiple structures

1 way in/out

Bridges that won't support equipment weight: Yes. There is a bridge just west of Peru on Bluff Drive that will not allow trucks according to weight limit.

GIS layer & contact info: No

Greatest concerns: Typically not a problem, but dry conditions, wind, and limited access/rough terrain could be problematic.

Rank: (only one ranking was indicated)

1 **Bridge limits**

Talmage Rural Fire – See listing in Johnson County

Southeast Nebraska Community Wildfire Protection Plan

Otoe County

Information from Otoe Co. LEOP, Annex F:

OTOE COUNTY LEOP

ANNEX F

FIRE SERVICES

| | |
|-------------------------|----------------------------------|
| BURR FIRE DEPARTMENT | DUGLASS FIRE DEPARTMENT |
| DUNBAR FIRE DEPARTMENT | NEBRASKA CITY FIRE DEPARTMENT |
| PALMYRA FIRE DEPARTMENT | SYRACUSE FIRE DEPARTMENT |
| TALMAGE FIRE DEPARTMENT | UNADILLA FIRE DEPARTMENT |

OTOE CO.
MUTUAL
AID
ASSOCIATION

STATE SUPPORT:
Emergency Support Functions
4, 5, 10,
Fire Suppression,
Emergency Management,
Environmental Quality

Lead Agencies:
State Fire Marshal
Nebraska Emergency Management Agency.

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OTOE COUNTY FIRE RESOURCES (List numbers of equipment)

| FIRE DEPARTMENT | PHONE | AERIAL | PUMPER | TANKER | PUMPER/ TANKER | GRASS-WEED TRUCK | UTILITY TRUCK | RESCUE UNITS | KINDS/TYPES/SPECIAL-TEAMS | KINDS/TYPES/SPECIAL EQUIPMENT | RADIO-LOGICAL EQUIPMENT Yes/No |
|------------------------------|--------------|--------|--------|--------|-------------------|------------------|---------------|--------------|---------------------------|-------------------------------|--------------------------------|
| Burr | | 0 | 0 | 2 | 0 | 0 | 0 | 02 | | 0 | NO |
| Douglas | 402-799-2800 | 0 | 1 | 1 | 0 | 2 | 0 | 1 | | | NO |
| Dunbar | | 0 | 1 | 2 | 0 | 1 | 1 | 0 | | | NO |
| Nebraska City | 402-873-3579 | 1 | 3 | 2 | 0 | 2 | 2 | 3 | | | YES |
| Palmyra | | 0 | 1 | 2 | 0 | 1 | 0 | 1 | | | NO |
| Syracuse | 402-269-2455 | 0 | 3 | 3 | 0 | 2 | 3 | 2 | | | YES |
| Talmage | | 0 | 1 | 1 | 0 | 1 | 1 | 2 | | | NO |
| Unadilla | 402-828-4085 | 0 | 1 | 1 | 0 | 1 | 1 | 2 | | | YES |
| Otoe County | 402-873-9588 | | | | | | | | Decon | Haz-Mat MCI | YES |
| Nearest HAZMAT Response Team | | | | | | | | | | | |
| | | | | | | | | | | | |

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2018

OTOE COUNTY LEOP

ANNEX F
ATTACHMENT 1

Southeast Nebraska Community Wildfire Protection Plan

Survey Responses from Otoe County Fire Departments:

Bennet Fire and Rescue – See listing in Lancaster County

Cook VFD – See listing in Johnson County

Douglas Volunteer Fire Department

Counties: Otoe

Street Address: 111 Main St.; **Mailing Address:** PO Box 155, Douglas, NE 68344

Dept. Phone: 402-799-2800 **Dept. Email:** dvfd201@aol.com

Chief: Raymond “Joe” Moeller; 402-890-0779; dvfd201@aol.com

Ass’t. Chief: Russ Case; 402-269-5878

Sec/Treas.: Alan Boldt; 402-326-7516

Personnel

19 **Vol.:**

MAD(s): Otoe County MA; Lancaster County MA

Equipment

Engines

1 Type 1 Structural: 1,000 GPM, 300 gal. capacity, four crew members

2 Type 6: Wildland: 50 GPM, 150 gal. capacity, two crew members

1 Type 7: Wildland: 10 GPM, 50 gal. capacity, two crew members

Tenders (Tactical Tenders: 4x4, 6x6, 8x8 all-wheel drive)

1 T-1 (tactical): 250 GPM pump, 2,000 gallon capacity, 2 crew members

Equipment housed away from main barn? No

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby? Yes

Location: Sections 17, 18, 19, & 20 – Approx. 2 miles south and 3 west of Douglas

Issues:

- x Difficult access
- x Rough terrain
- x 1 way in/out
- x Heavy fuels
- x Lack of water within effective distance

Bridges that won’t support equipment weight: Yes. We have three 3-ton bridges in our jurisdiction, and the only other access is minimum maintenance roads.

GIS layer & contact info: No

Greatest concerns: Lack of personnel and distance to water sources.

Rank:

- 4 **Housing**
- 5 **Infrastructure**
- 1 **Bridge limits**
- 2 **Hydrants**
- 3 **Other water sources**

Nebraska City Volunteer Fire and Rescue

Counties: Otoe

Street/Mailing Address: 1409 Central Ave., Nebraska City, NE 68410

Dept. Phone: 402-873-3579; **Dept. Email:** ncvfd@nebraskacity.com

Chief: Robert J. Schreiner; 402-873-2170, 402-873-3579; rschreiner@gmail.com

Ass’t. Chief: Dennis Marshall; 402-873-2187; marshallfuneral@gmail.com

Ass’t. Chief: Brian Ehmke; 402-269-5300; behmke1@hotmail.com

Secretary: Jeff Kohrs; 402-317-9542, 402-873-3353; jeffkohrs@ncunecity.com

Treasurer: Steven Recker; 402-873-2348, 402-873-3579; slrecker24@gmail.com

Southeast Nebraska Community Wildfire Protection Plan

Personnel

40 Vol.:
29 PT: (plus chief)
9 FT: 3 engineers; 4 medics; 2 EMTs

MAD(s): Otoe County

Other MA agreements: Fremont County, Iowa

Equipment

Engines

1 Type 1 Structural: 1,000 GPM, 300 gal. capacity, four crew members
2 Type 6: Wildland: 50 GPM, 150 gal. capacity, two crew members

Tenders (Tactical Tenders: 4x4, 6x6, 8x8 all-wheel drive)

1 T-1 (tactical): 250 GPM pump, 2,000 gallon capacity, 2 crew members

1 Other: T-1, 4x2, 2,000 gallon capacity

Other

1 Equipment trucks: utility

1 Other (Describe): 4x4 ½ ton utility

Equipment housed away from main barn? No

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby? No

Bridges that won't support equipment weight: Yes: concern about possible outdated bridges

GIS layer & contact info: No

Greatest concerns: water tenders

Rank:

5 **Housing**
4 **Infrastructure**
2 **Bridge limits**
3 **Hydrants**
1 **Other water sources**

Sterling Fire – See listing in Johnson County

Syracuse Fire Department

Counties: Otoe

Street Address: 578 Mohawk St. **Mailing Address:** PO Box 178, Syracuse, NE 68446

Dept. Phone: 402-269-2455; Dept. **Email:** svfd@syracusene.com

Chief: Bruce Neemann; 402-297-3470, 402-269-2677; bwneemann@gmail.com

Ass't. Chief: Eric Fass; 402-269-0000; fassfarms@gmail.com

Secretary: Thomas Neemann; 402-269-5304; tneemann@gmail.com

Treasurer: Chris Lutjemeyer; 402-269-7193; chris@stutheitimpl.com

Personnel

31 Vol.:

MAD(s): Otoe County MA

Equipment

Engines

2 Type 1 Structural: 1,000 GPM, 300 gal. capacity, four crew members

1 Type 2 Structural: 500 GPM, 300 gal. capacity, three crew members

2 Type 6: Wildland: 50 GPM, 150 gal. capacity, two crew members

Tenders (Tactical Tenders: 4x4, 6x6, 8x8 all-wheel drive)

2 T-2 (tactical): 250 GPM pump, 1,000 gallon capacity, 2 crew members

1 S-3 (support): 200 GPM pump, 1,000 gallon capacity, 1 crew member

Other

2 Equipment trucks

Southeast Nebraska Community Wildfire Protection Plan

Equipment housed away from main barn? Yes: One Type 2 engine, one type S-3 tender, and one Type 6 engine are housed at our 2nd station in the village of Otoe.

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby? No

Bridges that won't support equipment weight: Yes. Numerous bridges on county roads have limited weight requirements that will not support our engines and tenders.

GIS layer & contact info: No

Greatest concerns: We have very few acres of grassland or timberland in our district. Most of the district is used for crops.

Rank:

- 4 **Housing**
- 2 **Infrastructure**
- 1 **Bridge limits**
- 3 **Hydrants**
- 5 **Other water sources**

Talmage Rural Fire – See listing in Johnson County

Unadilla Fire and Rescue

Counties: Otoe

Street Address: 502 Main St. **Mailing Address:** PO Box 15, Unadilla, NE 68454

Dept. Phone: 402-828-4085; **Dept. Email:** unadillafire@windstream.net

Chief: Steve Vodicka, 402-450-3411, unadillafire@windstream.net

Ass't. Chief: Jonathan Vodicka, 402-430-5710, unadillafire@windstream.net

Sec/Treas.: Tom Block, unadillafire@windstream.net

Personnel

23 **Vol.:**

MAD(s): Otoe Co. MA

Other MA agreements: Lincoln Fire & Rescue for medical

Equipment

Engines

1 Other: Structural: 750 GPM, 1,000 gal. capacity, four crew members

Tenders (*Tactical Tenders: 4x4, 6x6, 8x8 all-wheel drive*)

1 Other: (tactical): 750 GPM pump, 2,000 gallon capacity, 2 crew members

Other

1 Equipment trucks: 2006 Chevy, 3500 weed truck, 300 gpm, 300 gal. capacity

1 Other (Describe): 2003 Suburban, various utility equipment

Equipment housed away from main barn? Yes, hoses, utility vehicle

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby? "No" was checked, but the following issue was checked:

Issues:

x Lack of water within effective distance

Bridges that won't support equipment weight: Yes, no details provided

GIS layer & contact info: No

Greatest concerns: Containment

Rank:

- 1 **Bridge limits**

Southeast Nebraska Community Wildfire Protection Plan

Pawnee County

Information from Pawnee Co. LEOP, Annex F:

PAWNEE COUNTY LEOP

ANNEX F

FIRE SERVICES

PAWNEE CITY FIRE DEPARTMENT

BURCHARD FIRE DEPARTMENT

TABLE ROCK FIRE DEPARTMENT

DuBOIS FIRE DEPARTMENT

STEINAUER FIRE DEPARTMENT

SOUTHEAST
MUTUAL
AID
ASSOCIATION

STATE SUPPORT:
Emergency Support Functions
4, 5, 10,
Fire Suppression,
Emergency Management,
Environmental Quality

Lead Agencies:
State Fire Marshal
Nebraska Emergency Management Agency,

F-

2020

PAWNEE COUNTY FIRE RESOURCES

| FIRE DEPARTMENT | PHONE | AERIAL | PUMPER | TANKER | PUMPER/ TANKER | GRASS-WEED TRUCK | UTILITY TRUCK | AMBULANCE UNITS | KINDS/TYPES/ SPECIAL- TEAMS | KINDS/TYPES SPECIAL EQUIPMENT | RADIO- LOGICAL EQUIPMENT Yes / No |
|---|-------|--------|--------|--------|-------------------|---------------------|------------------|--------------------|-----------------------------------|-------------------------------------|--|
| Pawnee City | 911 | | 2 | 2 | | 3 | | 1 | | | yes |
| Burchard | 911 | | 1 | 1 | | 1 | | 1 | | | yes |
| Table Rock | 911 | | 1 | 1 | | 2 | | 1 | | | yes |
| DuBois | 911 | | 2 | 2 | | 1 | 1 | 1 | | | yes |
| Steinauer | 911 | | 1 | 1 | | 1 | | 1 | | | yes |
| Pawnee County Ambulance Service is separate from the Fire Depts., although the units are housed in the various Fire Halls | | | | | | | | | | | |
| Nearest HAZMAT Response Team | | | | | | | | | | | |
| Beatrice Fire | | | | | | | | | | | |

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2019

PAWNEE COUNTY LEOP

ANNEX F
ATTACHMENT 1

Southeast Nebraska Community Wildfire Protection Plan

Survey Responses from Pawnee County Fire Departments:

Dubois Volunteer Fire Department

Counties: Pawnee, Richardson

Street Address: Locust & Miner

Chief: Scott Farwell; 402-335-0122; Highway50Fertilizer@gmail.com

Ass't. Chief: Chet Korster; 402-335-0485

Personnel

23 **Vol.:**

MAD(s): Southeast Nebraska, Nemaha Co. KS

Equipment

Engines

2 Type 1 Structural: 1,000 GPM, 300 gal. capacity, four crew members

2 Type 5: Wildland: 50 GPM, 400 gal. capacity, two crew members

1 Type 6: Wildland: 50 GPM, 150 gal. capacity, two crew members

Tenders (Tactical Tenders: 4x4, 6x6, 8x8 all-wheel drive)

1 S-2 (support): 200 GPM pump, 2,500 gallon capacity, 1 crew member

1 S-3 (support): 200 GPM pump, 1,000 gallon capacity, 1 crew member

Equipment housed away from main barn? No

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby?

Location1: Iron Horse Lake

Issues:

x Difficult access

x 1 way in/out

x Lack of water within effective distance

Location2: Rural area in northern Nemaha County, Kansas

Issues:

x Difficult access

x Rough terrain

x Lack of water within effective distance

Bridges that won't support equipment weight: Yes

GIS layer & contact info: No

Greatest concerns: Water sources and manpower

Rank:

2 **Housing**

4 **Infrastructure**

3 **Bridge limits**

5 **Hydrants**

1 **Other water sources**

Elk Creek Volunteer Fire Department – See listing in Johnson County

Summerfield VFD

Counties: Marshall County (KS) and Pawnee County (NE)

Street Address: 211 Main St.

Mailing Address: PO Box 122, Summerfield, KS 66541

Chief: Josh Jones; 785-713-2122, 785-713-1993; summerfieldfd@bluevalley.net

Ass't. Chief: Keith Burge; 785-927-9044

Secretary: Mike Osterhaus; 785-713-1993

Treasurer: Mike Mathewson; 785-799-7666

Personnel

20 **Vol.:**

MAD(s): Liberty, Pawnee City, and Burchard – all in Nebraska

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Southeast Nebraska Community Wildfire Protection Plan

Equipment – Full equipment list available from department

Engines

2 Other: 140 GPM, 250 gal. capacity

1 Other: 140 GPM, 750 gal. capacity

1 Other: 750 GPM, 1,800 gal. capacity

Tenders (Tactical Tenders: 4x4, 6x6, 8x8 all-wheel drive)

1 Other: 100 GPM pump, 2,000 gallon capacity

Equipment housed away from main barn? No

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby? No

Bridges that won't support equipment weight: Multiple

GIS layer & contact info: No

Rank:

2 **Housing**

4 **Infrastructure**

1 **Bridge limits**

3 **Hydrants**

5 **Other water sources**

Table Rock VFD

Counties: Pawnee

Street Address: 201 Luzerne, Table Rock, NE 68447

Chief: Dennis Schardt; 402-239-6700; denscountrymeats@yahoo.com

Ass't. Chief: Dan Cumro; 402-852-2468

Secretary: Kyle Rauner; 402-560-9217

Treasurer: Matt Schardt; 402-335-7082

Personnel

25 **Vol.:**

MAD(s): Southeast Nebraska MA

Equipment

"Pumper, tanker, grass rig, grass rig, utility & grass"

Engines

Type 1 Structural: 1,000 GPM, ~~300~~ 1800 gal. capacity, ~~four~~ two crew members

Type 3 Wildland: ~~150~~ 250 GPM, ~~500~~ 200 gal. capacity, three crew members

Type 4: Wildland: ~~50~~ 250 GPM, ~~750~~ 250 gal. capacity, two crew members

Other

1 Equipment trucks: 750/300 gal. & equipment

1 Other (Describe): Generator EMT diesel with "overload hts"??

Equipment housed away from main barn? No

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby?

Location: Steinauer

Issues:

x Multiple structures

Bridges that won't support equipment weight: Yes; posted weight limits

GIS layer & contact info: No

Rank:

1 **Housing**

2 **Infrastructure**

2 **Bridge limits**

1 **Hydrants**

Southeast Nebraska Community Wildfire Protection Plan

Richardson County

Information from Richardson Co. LEOP, Annex F:

RICHARDSON COUNTY LEOP

ANNEX F

FIRE SERVICES

CITY FIRE DEPARTMENTS

Falls City Fire
 Rulo City Fire
 Salem City Fire
 Shubert City Fire
 Humboldt City Fire

DISTRICT FIRE DEPARTMENTS

Falls City Rural Fire
 Verdon Rural Fire
 Stella Rural Fire
 Humboldt Rural Fire
 Dawson Rural Fire
 Iowa Tribe Fire

RICHARDSON
 COUNTY
 MUTUAL
 AID
 ASSOCIATION

STATE SUPPORT:
 Emergency Support Functions
 # 4, 5, 10,
 Fire Suppression,
 Emergency Management,
 Environmental Quality

 Lead Agencies:
 State Fire Marshal

 Nebraska Emergency Management Agency,
 Dept. of Environmental Quality

F

2015

2015

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| FIRE DEPARTMENT | PHONE | AERIAL | PUMPER | TANKER | TANKER/PUMPER | GRASS-WEED TRUCK | UTILITY TRUCK | RESCUE UNITS | SPECIAL-TEAMS | KINDS/TYPES/SPECIAL EQUIPMENT | RADIO-EQUIPMENT |
|------------------------------|--------------|--------|--------|--------|---------------|------------------|---------------|--------------|---------------|-------------------------------|-----------------|
| Dawson | | | 2 | 1 | | 3 | | | | | No |
| Falls City | 402-245-3555 | | 2 | | | | | | | | No |
| Falls City Rural | | | 1 | 2 | | 3 | 1 | | | Portable Generator | No |
| Humboldt | | | 1 | 2 | | 1 | | 1 | | | No |
| Iowa Tribe | | | 1 | 1 | | 1 | | | | Frame Capabilities | No |
| Rulo | | | 1 | 1 | | | | | | Frame Capabilities | No |
| Salem | | | 1 | | | | 1 | | | Frame Capabilities | No |
| Shubert | | | 1 | | | | | | | Frame Capabilities | No |
| Stella | | | 1 | 1 | | 2 | | | | Frame Capabilities | No |
| Verdon | 402-883-2833 | | 1 | 1 | | 2 | | | | | No |
| Nearest HAZMAT Response Team | Beatrice, NE | | | | | | | | | | Yes |

RICHARDSON COUNTY FIRE RESOURCES
 (List numbers of equipment)

ANNEX F
 ATTACHMENT 1

RICHARDSON COUNTY LEOP

Southeast Nebraska Community Wildfire Protection Plan

Survey Responses from Richardson County Fire Departments:

Dubois Volunteer Fire Department – See listing in Pawnee County

Falls City Municipal Fire

Counties: Richardson

Street Address: 1820 Towle St.

Mailing Address: 2307 Barada St., Falls City 68355

Dept. Phone: 402-245-3555 **Dept. Email:** fcd@sentco.net

Chief: Matt Beer; 402-245-0090

Ass't. Chief: Vernon Wisdom; 402-801-0748

Secretary: Trevor Wisdom; 402-801-1316

Treasurer: Jim Hall; 402-245-1961

Personnel

19 **Vol.:**

0 **PT:**

0 **FT:**

MAD(s): Richardson County MA

Equipment

Engines

2 Structural: 1,250 GPM, 800 gal. capacity, two crew members

Other

1 Other (Describe): '65 platform aerial 1,000 gpm, 0 gal. tank, 2 crew members

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby?

Yes

Location1: Industrial tract between 2 major railroads and no hydrant; Herzog Rail Service, 300 Fulton St.

Issues:

x Multiple structures

x Rough terrain

x 1 way in/out

x Lack of water within effective distance

x Other: Approx. 2,000' to nearest hydrant west or cross over tracks to north, 1,000'

Location2: Brenner Airport Field, 3301 Business Parkway

Issues:

x Multiple structures

x 1 way in/out

x Lack of water within effective distance – No hydrant

Location3: Burbank Apts., 2708 Chase St.

Issues:

3 Multi-floor apartment complex units

Bridges that won't support equipment weight: No

GIS layer & contact info: No

Greatest concerns: Lack of manpower depending on time of year and, of course, wind.

Rank:

2 **Housing**

Southeast Nebraska Community Wildfire Protection Plan

- 3 **Infrastructure**
- 4 **Bridge limits**
- 1 **Hydrants**
- 5 **Other water sources**

Verdon Rural VFD

Counties: Richardson

Street Address: 301 Main St., Verdon 68457

Dept. Phone: 402-883-2833

Chief: Philip Hitchcock; 402-883-0399

Ass't. Chief: Howard Griffiths; 402-883-2288

Secretary: Brody Weinmann; 402-801-2288

Treasurer: Patrick Pagnano; 402-990-2872

Personnel

29 **Vol.:**

MAD(s): Richardson Co. MA

Equipment

Engines

1 Type 2 Structural: 750 GPM, 750 gal. capacity, three crew members

Other

2 4x4 pickups, 250 gpm: 1-300 gal., 1-200 gal.

1 Other (Describe): 3,000 gal. tanker, 400 gpm

Equipment housed away from main barn? No

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby?

No

Bridges that won't support equipment weight: Yes, a lot of older bridges

GIS layer & contact info: RCEMA has started a limited map.

Greatest concerns: Water supply & daytime manpower

Rank:

- 1 **Housing**
- 2 **Infrastructure**
- 4 **Bridge limits**
- 3 **Hydrants**
- 5 **Other water sources**

Southeast Nebraska Community Wildfire Protection Plan

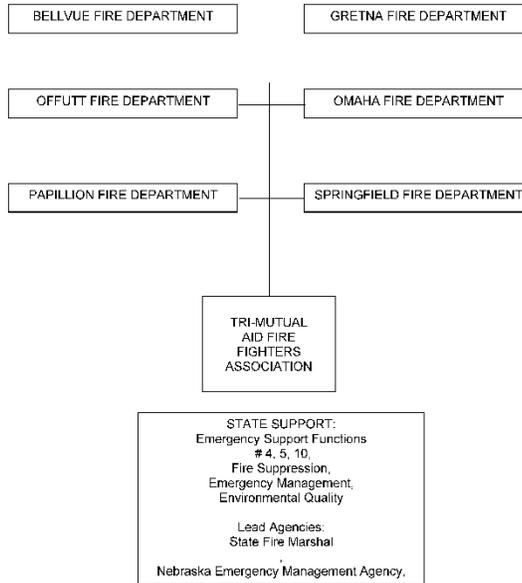
Sarpy County

Information from Sarpy Co. LEOP, Annex F:

SARPY COUNTY LEOP

ANNEX F

FIRE SERVICES



F-1

2016

| FIRE DEPARTMENT | PHONE | AERIAL | PUMPER | TANKER | PUMPER/TANKER | GRASS-WEED TRUCK | UTILITY TRUCK | RESCUE UNITS | KINDS/TYPES/SPECIAL-TEAMS | KINDS/TYPES SPECIAL EQUIPMENT | RADIO-LOGICAL EQUIPMENT Yes / No |
|------------------------------|--------------|--------|--------|--------|---------------|------------------|---------------|--------------|---------------------------|---|----------------------------------|
| Bellevue | 402-293-3153 | 3 | 4 | 0 | 2 | 4 | 3 | 6 | HazMat | Mass Casualty, UAV Drone, Vehicle Stabilization | Yes |
| Gretna | 402-332-3336 | 0 | 0 | 1 | 5 | 3 | 0 | 4 | 0 | 0 | Yes |
| Offutt | | | | | | | | | | | |
| Omaha | | | | | | | | | | | |
| Papillion | 402-339-8617 | 2 | 4 | 0 | 1 | 2 | | 1 | 1 | Confined Space, Trench, Ice, Rope, Grain Bin Rescue | Yes |
| Springfield | 402-253-2600 | 0 | 2 | 2 | 0 | 1 | 0 | 2 | 0 | Grain bin, Ice rescue | Yes |
| Nearest HAZMAT Response Team | | | | | | | | | | | |
| Bellevue | | | | | | | | | | | |
| Omaha | | | | | | | | | | | |

SARPY COUNTY FIRE RESOURCES
(List numbers of equipment)

SARPY COUNTY LEOP

Southeast Nebraska Community Wildfire Protection Plan

Survey Responses from Sarpy County Fire Departments:

Gretna Fire Department

Counties: Sarpy

Street Address: 11175 S 204th St. **Mailing Address:** PO Box 185, Gretna, NE 68028

Dept. Phone: 402-332-4828 **Dept. Email:** firechief@gretnafire.com

Chief: Rod Buethe; 402-332-3336 Ext.1352; 402-332-4828; firechief@gretnafire.com

Personnel

60 **Vol.:**

MAD(s): Tri MA

Equipment

Engines

4 Type 1 Structural: 1,000 GPM, 300 gal. capacity, four crew members

1 Type 2 Structural: 500 GPM, 300 gal. capacity, three crew members

3 Type 6: Wildland: 50 GPM, 150 gal. capacity, two crew members

Tenders (Tactical Tenders: 4x4, 6x6, 8x8 all-wheel drive)

1 T-1 (tactical): 250 GPM pump, 2,000 gallon capacity, 2 crew members

Equipment housed away from main barn? No

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby?

Yes

Location: Section of land east of I-80 and west of Hwy. 31 between Ruff Rd. and Fishery Rd. in Gretna.

Issues:

x Multiple structures

x Difficult access

x Rough terrain

x Heavy fuels

x Lack of water within effective distance

Bridges that won't support equipment weight: Yes, multiple bridges on county roads

GIS layer & contact info: No

Greatest concerns: Evacuation and containment

Rank:

1 **Housing**

5 **Infrastructure**

2 **Bridge limits**

3 **Hydrants**

4 **Other water sources**

Millard Suburban Fire District #1

Counties: Sarpy and Douglas

Street/Mailing Address: 7010 S. 142nd St., Omaha, NE 68138

Dept. Phone: 402-444-3500 **Dept. Email:** None

Chief: Kevin W. Edwards; 402-444-3500; 402-679-5452; kevinedwards@prfd.omhcoxmail.com

(See Comments Section)

Personnel (See Comments Section)

MAD(s): Tri Mutual Aid (Douglas/Washington/Sarpy Counties)

Southeast Nebraska Community Wildfire Protection Plan

Equipment (See Comments Section)

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby?

Location1: 204th & Giles, NW of intersection

Issues:

- x Difficult access
- x Rough terrain
- x 1 way in/out
- x Lack of water within effective distance

Location2: Chalco Recreation Area, roughly 154th & Giles to 168th & Cornhusker; NRD damsite

Issues:

- x Difficult access
- x Rough terrain
- x Heavy fuels
- x Lack of water within effective distance

Bridges that won't support equipment weight: Yes: 180th & Giles, to the west

GIS layer & contact info: No

Greatest concerns: Getting personnel, apparatus, water to the area

Rank:

- 1 **Housing**
- 4 **Infrastructure**
- 3 **Bridge limits**
- 2 **Hydrants**
- 5 **Other water sources**

Comments: The district is situated in both Douglas and Sarpy Counties. Fire protection here is provided through a comprehensive interlocal agreement with the City of Omaha; thus the Millard personnel and apparatus are included with the Omaha Fire inventories and are entered as zeroes in this survey to avoid duplication. (*Ed. note: Omaha and Douglas County are included in the Missouri River East CWPP Region.*)

The Millard District serves an area of approximately 17 square miles and a population of about 32,000. We are serviced primarily from Omaha Fire Stations 65, 63, 56, 77, and 78. Each location includes pumper/tenders with 1,000 gallon water tanks and 2,500 gpm pumps. There are also three weed trucks with 250 gallon tanks and 300 gpm pumps. All apparatus is owned by Omaha Fire and staffed with Omaha firefighters.

The areas noted above with wildland concerns are all first alarm responses from Omaha Fire and should be included in their areas of concern as well. If a large wildland fire were to occur in our jurisdiction it would be responded to first by Omaha. They would then use mutual aid from the Tri MA District as needed to combat the fire. We have had several large wildland fires on the NRD Damsite at 154th and Giles Rd., and have been able to put them out using Omaha Fire and Gretna Fire.

Papillion Fire

Counties: Sarpy

Street/Mailing Address: 10727 Chandler Rd., La Vista, NE 68128

Dept. Phone: 402-339-8611

Chief: Bill Bowes; 402-339-8611; bbowes@papillion.org

Ass't. Chief: Jeff Jones; 402-829-1395; jjones@papillion.org

Secretary: Diane Carlson; 402-339-8617; dcarlson@papillion.org

Personnel

61 FT

Southeast Nebraska Community Wildfire Protection Plan

MAD(s): Tri MA

Other MA agreements: Bellevue FD

Equipment

Engines

- 2 Type 1 Structural: 1,000 GPM, 300 gal. capacity, four crew members
- 1 Type 2 Structural: 500 GPM, 300 gal. capacity, three crew members
- 1 Type 6: Wildland: 50 GPM, 150 gal. capacity, two crew members

Equipment housed away from main barn? No

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby?

No

Bridges that won't support equipment weight: Yes. Several private bridges over creeks and drainageways.

GIS layer & contact info: Yes. Eric Herbert; 402-593-2274; eric@sarpy.com

Greatest concerns: Lack of off-road resources; water supply

Rank:

- 4 **Housing**
- 5 **Infrastructure**
- 3 **Bridge limits**
- 1 **Hydrants**
- 2 **Other water sources**

Springfield Fire Department

Counties: Sarpy

Street Address: 505 S. 1st St. **Mailing Address:** PO Box 306, Springfield, NE 68059

Dept. Phone: 402-253-2600 **Dept. Email:** svfdne911@gmail.com

Chief: Bob Engberg; 402-616-6506; bobengberg@yahoo.com

Ass't. Chief: Chad Zimmerman; 402-306-0331; chad.zimmerman@safety-kleen.com

Secretary: Susie Engberg; 402-490-4975; susanmarie911@yahoo.com

Treasurer: Chris Noda; 402-216-8963; nodapt@hotmail.com

Personnel

28 **Vol.:**

MAD(s): Tri-Mutual Aid Association

Equipment

Engines

- 3 Type 1 Structural: 1,000 GPM, 300 gal. capacity, four crew members

Tenders (Tactical Tenders: 4x4, 6x6, 8x8 all-wheel drive)

- 2 T-1 (tactical): 250 GPM pump, 2,000 gallon capacity, 2 crew members

Equipment housed away from main barn? No

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby?

Yes

Location1: Meadow Oaks subdivision

Issues:

- x Multiple structures

Southeast Nebraska Community Wildfire Protection Plan

- x Rough terrain
- x Heavy fuels

Location2: Little Prairie subdivision, 192nd and Cornish Rd. in Sarpy County

Issues:

- x Multiple structures
- x Difficult access
- x 1 way in/out
- x Heavy fuels
- x Lack of water within effective distance

Bridges that won't support equipment weight: No

GIS layer & contact info: Yes, John Prince, 402-593-4374, jprince@sarpy.com

Greatest concerns: The number of rural acreages and high valuation homes with limited access and subdivisions with no water supply.

Rank:

- 1 **Housing**
- 4 **Infrastructure**
- 5 **Bridge limits**
- 2 **Hydrants**

US Army Corps of Engineers, Missouri River Project Office – *This is a not a fire department; they provided partner information as a courtesy. See listing under Lancaster County.*

Southeast Nebraska Community Wildfire Protection Plan

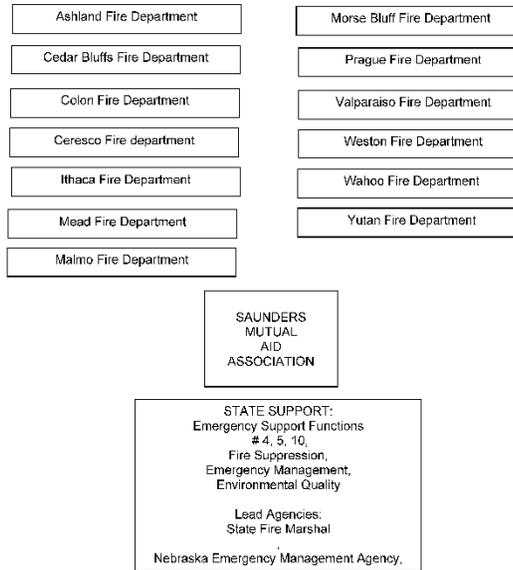
Saunders County

Information from Saunders Co. LEOP, Annex F:

SAUNDERS COUNTY LEOP

ANNEX F

FIRE SERVICES



F-1

2019

SAUNDERS COUNTY FIRE RESOURCES

| FIRE DEPARTMENT | DEPT. PHONE | AERIAL | PUMPER | TANKER | GRASS-WEED TRUCK | UTILITY TRUCK | RESCUE UNITS | KINDS/TYPES SPECIAL TEAMS | KINDS/TYPES SPECIAL EQUIPMENT | RADIO LOGICAL EQUIPMENT Yes/No |
|-----------------|-------------|----------|-----------------------|------------------------|------------------|---------------|--------------|---------------------------|-------------------------------|--------------------------------|
| Ashland | 944-7004 | | 1 Type I 1 Type II | 1 Type I | 3 Type III | 1 | 3 Type III | | Decontamination Trailer | Yes |
| Cedar Bluffs | 628-5495 | 1 Type I | 2 Type II | 1 Type I 1 Type II | 2 Type III | 1 | 2 Type III | | Polaris ATV | Yes |
| Ceresco | 665-2227 | | 1 Type II | 1 Type I 2 Type II | 2 Type III | 1 | 1 Type III | | | Yes |
| Colon | 647-4455 | | 1 Type II | 1 Type I 2 Type II | | 1 | | | | Yes |
| Ithaca | 623-4494 | | 1 Type II | 1 Type II | 2 Type III | | | | | Yes |
| Malmo | 642-5271 | | 1 Type I 1 Type II | 2 Type II | 1 Type III | 1 | | | | Yes |
| Mead | 624-3610 | | 1 Type I | 3 Type II 1 Type II | 1 Type III | | 1 Type III | | Trailer mounted generator | Yes |
| Morse Bluff | 666-5583 | | 1 Type II | 1 Type II | 1 Type III | 1 | | | | Yes |
| Prague | 663-4844 | | 1 Type I | 2 Type II | 1 Type III | 1 | 1 Type III | | | Yes |
| Valparaiso | 441-7253 | | 1 Type II | 3 Type II | 2 Type III | 1 | 1 Type III | | | Yes |
| Wahoo | 443-1520 | 1 Type I | 1 Type I 2 Type II | 2 Type II | 2 Type III | 1 | 3 Type III | Dive Team | | Yes |
| Weston | 642-5359 | | 1 Type II | 1 Type I | | 1 | | | | Yes |
| Yutan | 625-2273 | | 1 Type I | 1 Type I | 1 Type III | | 2 Type III | Dive Team/Trailer | | |

SAUNDERS COUNTY LEOP

Southeast Nebraska Community Wildfire Protection Plan

Survey Responses from Saunders County Fire Departments:

Ashland Volunteer Fire Department – See listing in Cass County

Mead VFD

Counties: Saunders

Street Address: 220 E. 4th St. **Mailing Address:** PO Box 52, Mead, NE 68041

Dept. Phone: 402-624-3610

Chief: Nick Raver; 402-443-9688; nraver@live.com

Ass't. Chief: Lee Daniels; 402-650-3616, 402-238-6461; leedaniels@nmccat.com

Secretary: Adam Miller; 402-480-4532; adam@milrr.com

Treasurer: George Robertson; 402-277-6494; georob@windstream.net

Personnel

30 Vol.

MAD(s): Southeast

Other MA agreements: Automatic mutual aid with Yutan Fire Department on any wrecks or fire calls.

Equipment

Engines

1 Type 1 Structural: 1,000 GPM, 300 gal. capacity, four crew members

1 Type 5: Wildland: 50 GPM, 400 gal. capacity, two crew members

Tenders (Tactical Tenders: 4x4, 6x6, 8x8 all-wheel drive)

1 T-1 (tactical): 250 GPM pump, 2,000 gallon capacity, 2 crew members

Other

2 Equipment trucks: HEMTT – 8WD – 3,000 gal.; Tactical – 250 gpm, 2c

Equipment housed away from main barn? No

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby?

Yes

Location1: Village of Mead, CR 10 & Hwy. 92, Saunders Co.

Issues:

x Multiple structures

x Other: 600 residents

Location2: National Guard training facility, CR J & CR 8, Mead, NE

Issues:

x Multiple structures

x Difficult access

x Other: Many occupants

Location3: Joyce Circle, Village of Mead

Location4: Ethanol plant south of Mead

Bridges that won't support equipment weight: Yes

GIS layer & contact info: No

Greatest concerns: People safety and structures

Rank:

1 Housing

2 Infrastructure

3 Bridge limits

4 Hydrants

5 Other water sources

Southeast Nebraska Community Wildfire Protection Plan

Weston Fire

Counties: Saunders

Street Address: 255 N. Elm **Mailing Address:** PO Box 14, Weston 68070

Chief: Bruce Arp; 402-432-9813, 402-642-1160; barp@westonfire.com

Ass't. Chief: Ryan Pokorny; 402-277-0200; ryanpokorny77@gmail.com

Sec/Treas.: Rich Virgil; 402-480-3071; ogleman73@gmail.com

Personnel

32 **Vol.:**

MAD(s): Saunders County MA

Equipment

Engines

1 Type 1 Structural: 1,000 GPM, 300 gal. capacity, four crew members

1 Type 6: Wildland: 50 GPM, 150 gal. capacity, two crew members

Tenders (Tactical Tenders: 4x4, 6x6, 8x8 all-wheel drive)

1 T-1 (tactical): 250 GPM pump, 2,000 gallon capacity, 2 crew members

1 S-3 (support): 200 GPM pump, 1,000 gallon capacity, 1 crew member

Other

1 Equipment trucks

Equipment housed away from main barn? No

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby?

No; identified the village of Weston as at-risk due to multiple structures, high home density, and infrastructure

Location: Village of Weston

Issues:

Multiple structures

Other: High home density; infrastructure

Bridges that won't support equipment weight: Unsure

GIS layer & contact info: No

Greatest concerns: Lack of personnel and equipment availability depending on time of day

Rank:

1 **Housing**

2 **Infrastructure**

3 **Bridge limits**

5 **Hydrants**

4 **Other water sources**

Yutan Fire Department

Counties: Saunders

Street Address: 401 1st St.

Mailing Address: PO Box 129, Yutan 68073

Dept. Phone: 402-625-2273 **Dept. Email:** chief@yutanvfd.org

Chief: Donald Dooley; 402-625-2273. 402-676-0329; chief@yutanvfd.org

Ass't. Chief: Matt Thompson; assistantchief@yutanvfd.org

Secretary: Brian Lastovica; secretary@yutanvfd.org

Treasurer: Bill Lastovica; treasurer@yutanvfd.org

Personnel

29 **Vol.**

MAD(s): Saunders Co. MA, Tri MA

Southeast Nebraska Community Wildfire Protection Plan

Equipment

Engines

2 Type 1 Structural: 1,000 GPM, 300 gal. capacity, four crew members

1 Type 5: Wildland: 50 GPM, 400 gal. capacity, two crew members

1 Type 6: Wildland: 50 GPM, 150 gal. capacity, two crew members

Tenders (Tactical Tenders: 4x4, 6x6, 8x8 all-wheel drive)

1 S-3 (support): 200 GPM pump, 1,000 gallon capacity, 1 crew member

Other

1 Equipment trucks: Heavy rescue/dive

Other (Describe): 2 Medic units, 1 command vehicle, 1 boat

Equipment housed away from main barn? No

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby?

Yes

Location1: Wind chimes/Uphill Rd.: Hwy 92/Platte River north side (Shamrock Blvd.); Co. Rd. N & Co. Rd. 4, south side.

Issues:

Multiple structures

Difficult access

Rough terrain

1 way in/out

Heavy fuels

Lack of water within effective distance

Location2: County Road T, east of County Road 7

Issues:

Multiple structures

Difficult access

1 way in/out

Heavy fuels

Lack of water within effective distance

Location3: There are several developments with a single road in and out

Issues:

1 way in/out

Bridges that won't support equipment weight: Yes. There are multiple bridges in the county and in our jurisdiction.

GIS layer & contact info: No

Greatest concerns: Protecting structures & lives

Rank:

5 **Housing**

2 **Infrastructure**

4 **Bridge limits**

3 **Hydrants**

1 **Other water sources**

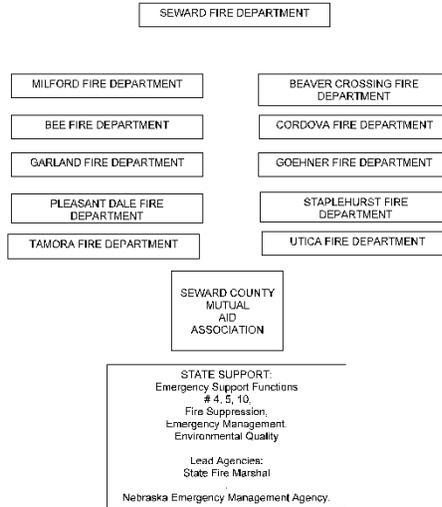
Southeast Nebraska Community Wildfire Protection Plan

Seward County

Information from Seward Co. LEOP, Annex F:

SEWARD COUNTY LEOP ANNEX F

FIRE SERVICES



F-1 2019

SEWARD COUNTY FIRE RESOURCES

| FIRE DEPARTMENT | PHONE | AERIAL | PUMPER | TANKER | PUMPER/TANKER | GRASS-WEED TRUCK | UTILITY TRUCK | RESCUE UNITS | SPECIAL-TEAMS | KINDS/TYP | KINDS/TYPES SPECIAL EQUIPMENT | RADIO-LOGICAL EQUIPMENT Yes / No |
|------------------------------|----------|--------|------------------|------------------|------------------|------------------|---------------|--------------|---|-----------|--|----------------------------------|
| BEAVER CROSSING | 641-1476 | | 1:1250 | 1:3000 1:1800 | | 1:300 | | | | | JAWS | YES |
| BEE | 643-9777 | | 1:1200 | 1:2800 | | | | | | | Thermal Camera Airbags | YES |
| CORDOVA | 576-3801 | | 1:750 2:1000 | 1:4000 1:1500 | | 2:250 | 1 | | | | | YES |
| GARLAND | 588-2650 | | 2:1250 | | 1:2600 | 2:300 | | | ROPE/RESCUE TEAM | | Mobile Air Cascade Jaws Light tower | YES |
| GOEHNER | | | 1:1000 | 1:2000 | | 1:250 | | | | | JAWS | YES |
| MILFORD | 761-2876 | 1@50' | 1:750 1:1250 | 1:2000 | 1:3000 | 1:250 1:500 | 1 | 2 | | | Jaws, Air Bag, Thermal Camera, Bin Rescue | YES |
| PLEASANT DALE | | | 1 | 1:2000 1:3000 | | 3 | | 1 | | | | YES |
| SEWARD | 643-3811 | 1@75' | 2:1000 1:3000 | 1:1500 | 1:750 | 2:250 | | 2 | | | Gator, Jaws, Cascade Compressor | YES |
| STAPLEHURST | | | 1:1500 | 1:2000 | 1:2000 | 1:200 1:800 | | | | | TIC | YES |
| TAMORA | 641-0703 | | 1:1500 | 1:2200 | 1:2200 1:1800 | 1:250 | | 1 | Ice Rescue Grain Rescue, Intervention | | Mobile Cascade, Jaws, Thermal Camera | YES |
| UTICA | 534-2222 | | 1:1250 1:750 | 1:2500 1:1500 | | 1:300 | | 2 | | | 1.CAFS Jaws | YES |
| Nearest HAZMAT Response Team | | | | | | | | | | | | YES |

SEWARD COUNTY LEOP

| | | | | | | | | | | | | |
|----------------------|----------|--|--|--|--|--|--|--|--|--|---|-----|
| EMERGENCY MANAGEMENT | 643-5761 | | | | | | | | | | Mobile Command Center, Respite trailer, JD Gator, MC Trailer, (2) light trailer/generator | YES |
|----------------------|----------|--|--|--|--|--|--|--|--|--|---|-----|

(List numbers of equipment)

Southeast Nebraska Community Wildfire Protection Plan

Survey Responses from Seward County Fire Departments:

Cordova Vol. Fire Department

Counties: Seward, York

Street Address: 300 Hector St. **Mailing Address:** PO Box 163, Cordova, NE 68330

Chief: Travis Due, 402-641-7756

Ass't. Chief: Paul Jurgensen; 402-641-7120; pauljurg@icloud.com

Sec/Treas.: Lance Larsen; 402-641-1348; lance@larsensauctions.com

Personnel

30 **Vol.:**

MAD(s): Seward Co. MA

Other MA agreements: Friend Fire Dept., Exeter Fire Dept.

Equipment

Engines

3 Type 1 Structural: 1,000 GPM, 300 gal. capacity, four crew members

Tenders (Tactical Tenders: 4x4, 6x6, 8x8 all-wheel drive)

1 T-2 (tactical): 250 GPM pump, 1,000 gallon capacity, 2 crew members

1 S-1 (support): 300 GPM pump, 4,000 gallon capacity, 1 crew member

Equipment housed away from main barn? No

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby? No

Bridges that won't support equipment weight: Yes. In our district there are some bridges that we cannot cross with all of our equipment.

GIS layer & contact info: No

Greatest concerns: Loss of life, loss of structures

Rank:

5 **Housing**

4 **Infrastructure**

3 **Bridge limits**

1 **Hydrants**

2 **Other water sources**

Tamora Volunteer Fire Department

Counties: Seward

Street Address: 420 Chapman Ave., Seward, NE 68434

Mailing Address: 1710 Plainview Ave., Seward, NE 68434

Chief: Robert Viger; 402-643-5263; 402-646-8951; bfire Rescue@yahoo.com

Ass't. Chief: Chad King; 402-641-8559; sil882500@hotmail.com

Secretary: Kristin Meredith; 402-803-2780, 402-310-9339; meredithkristinr@gmail.com

Treasurer: Tim Classen; 402-920-2780, 402-803-8531; classenfire@yahoo.com

Southeast Nebraska Community Wildfire Protection Plan

Personnel

24 Vol.:

MAD(s): Seward Co. MA

Equipment

Engines

1 Type 1 Structural: 1,000 GPM, 300 gal. capacity, four crew members

1 Type 6: Wildland: 50 GPM, 150 gal. capacity, two crew members

Tenders (Tactical Tenders: 4x4, 6x6, 8x8 all-wheel drive)

1 T-1 (tactical): 250 GPM pump, 2,000 gallon capacity, 2 crew members

1 S-2 (support): ??? GPM pump, 2,500 gallon capacity, 1 crew member

Other

1 Equipment trucks

Equipment housed away from main barn? No

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby? Yes

Location: Village of Tamora. South side of village is adjacent to 140 acres of grassland. A fire with a south wind would push it into town, threatening structures.

Issues:

x Multiple structures

x Heavy fuels

x Lack of water within effective distance

Bridges that won't support equipment weight: Yes, numerous light tonnage bridges

GIS layer & contact info: No

Rank:

3 **Housing**

5 **Infrastructure**

4 **Bridge limits**

1 **Hydrants** – have none

2 **Other water sources**

Ulysses Vol. Fire Department – See listing in Butler County

US Army Corps of Engineers, Missouri River Project Office – *This is not a fire department; they provided partner information as a courtesy. See listing under Lancaster County.*

Appendix G

Fire Department Survey and Distribution List

Southeast Nebraska Community Wildfire Protection Plan

Fire Department Survey

Distributed to all departments in the CWPP Region 10/18/2019

Nebraska Fire Department Survey

Contact Information:

| | |
|-----------------------|-----------------|
| Department Name | County(s) |
| Street Address | Mailing Address |
| Dept. Phone | Dept. Email |
| Chief Name: | Best Phone |
| Email: | Alt. Phone |
| Assistant Chief Name: | Best Phone |
| Email: | Alt. Phone |
| Secretary Name: | Best Phone |
| Email: | Alt. Phone |
| Treasurer Name: | Best Phone |
| Email: | Alt. Phone |

Personnel:

| | |
|--------|-----------|
| Number | Type |
| | Volunteer |
| | Part-time |
| | Full-time |

What Mutual Aid District(s) is your department in? _____

If you have mutual aid agreements outside of formal MA districts please name the departments:

Southeast Nebraska Community Wildfire Protection Plan

Equipment:

Engines (Fill in number of each type of equipment below)

| Number | Type | Description |
|--------|--------|---|
| | Type 1 | Structural: 1,000 GPM, 300 gal. capacity, four crew members |
| | Type 2 | Structural: 500 GPM, 300 gal. capacity, three crew members |
| | Type 3 | Wildland: 150 GPM, 500 gal. capacity, three crew members |
| | Type 4 | Wildland: 50 GPM, 750 gal. capacity, two crew members |
| | Type 5 | Wildland: 50 GPM, 400 gal. capacity, two crew members |
| | Type 6 | Wildland: 50 GPM, 150 gal. capacity, two crew members |
| | Type 7 | Wildland: 10 GPM, 50 gal. capacity, two crew members |

Tenders (see below) Definition: Tactical Tenders: 4x4, 6x6, 8x8 all-wheel drive

| Number | Type | Description |
|--------|----------------|---|
| | T-1 (tactical) | 250 GPM pump, 2,000 gallon capacity, 2 crew members |
| | T-2 (tactical) | 250 GPM pump, 1,000 gallon capacity, 2 crew members |
| | S-1 (support) | 300 GPM pump, 4,000 gallon capacity, 1 crew member |
| | S-2 (support) | 200 GPM pump, 2,500 gallon capacity, 1 crew member |
| | S-3 (support) | 200 GPM pump, 1,000 gallon capacity, 1 crew member |

Other

| Number | Type |
|--------|---------------------------------|
| | Equipment trucks |
| | Other (Describe): |
| | Road Dept. Equipment (describe) |

| Yes/No (Circle) | Is any equipment housed away from the main fire barn? | Describe: |
|-----------------|---|-----------|
| | | |

Southeast Nebraska Community Wildfire Protection Plan

Have you identified any areas in your district that you are more concerned about than others if a wildfire starts nearby? Yes No

If yes, please describe where and why:

Township _____ Range _____ Section _____ Local Name: _____

Location Description:

Issues (check all that apply):

- Multiple Structures
- Difficult Access
- Rough Terrain
- One way in and out
- Heavy fuels
- Lack of water within effective distance
- Other (specify): _____

Additional areas:

Township _____ Range _____ Section _____ Local Name: _____

Location Description:

Issues (check all that apply):

- Multiple Structures
- Difficult Access
- Rough Terrain
- One way in and out
- Heavy fuels
- Lack of water within effective distance
- Other (specify): _____

Southeast Nebraska Community Wildfire Protection Plan

Are there bridges in your jurisdiction that won't support equipment weight? Yes No

If yes, please describe:

Are there other areas in your jurisdiction with high home density, infrastructure or other resources at high risk, or populated areas with one way in/out? Yes No

If yes, please describe:

What are your greatest concerns if a wildfire were to start in or enter your jurisdiction?

Does your jurisdiction have GIS layer(s) that show housing, infrastructure, bridge limits, hydrants and other water sources (other than the county assessor's GIS information)? Yes No

If yes, please provide contact information:

Name: _____

Phone: _____

Email: _____

Which of these is of greatest concern in your jurisdiction?
(Please rank 1 to 5 with 1 being most important)

_____ Housing

_____ Infrastructure

_____ Bridge limits

_____ Hydrants

_____ Other water sources

Is there anything else you think we should know? _____

Thank you for providing this information.

Please email a scan of the completed form to sbenson4@unl.edu or mail a hard copy to:

Nebraska Forest Service (Attn: Sandy Benson)
PO Box 0815
Lincoln, NE 68583-0815

Southeast Nebraska Community Wildfire Protection Plan

Fire Department Survey Distribution List

| | | |
|-----------------|----------------------|---------------|
| Abie | Eagle-Alvo | Peru |
| Adams | Elk Creek | Pickrell |
| Ashland | Elmwood | Plattsmouth |
| Auburn | Falls City Rural | Pleasant Dale |
| Avoca | Falls City Municipal | Prague |
| Barneston | Filley | Raymond |
| Beatrice Rural | Firth | Rising City |
| Beatrice City | Garland | Seward |
| Beaver Crossing | Goehner | Shubert |
| Bee | Greenwood | Southeast |
| Bellevue | Gresham | Southwest |
| Bellwood | Gretna | Springfield |
| Bennet | Hallam | Staplehurst |
| Blue Springs | Hickman | Steinauer |
| Brainard | Humboldt | Stella |
| Brock-Julian | Ithaca | Sterling |
| Bruno | Johnson | Summerfield |
| Burchard | Lincoln | Syracuse |
| Burr | Linwood | Table Rock |
| Cedar Bluffs | Louisville | Talmage |
| Ceresco | Malcolm | Tamora |
| Clatonia | Malmo | Tecumseh |
| Colon | Mead | Ulysses |
| Cook | Milford | Unadilla |
| Cordova | Millard | Union |
| Cortland | Morse Bluff | Utica |
| Crete | Murdock | Valparaiso |
| David City | Murray | Verdon |
| Dawson | Nebraska City | Wahoo |
| DeWitt | Nehawka | Waverly |
| Diller | Nemaha | Weeping Water |
| Douglas | Odell | Weston |
| Dubois | Palmyra | Wymore |
| Dunbar | Papillion/La Vista | Yutan |
| Dwight | Pawnee City | |

Appendix H

Public Engagement

*This section includes outreach documents,
media releases, and stakeholders list*

Southeast Nebraska Community Wildfire Protection Plan

Outreach Documents

County Boards

(sent via e-mail 9/30/2019)

To: County Boards
cc: Emergency Managers
From: Sandy Benson, Nebraska Forest Service
Subject line: Community Wildfire Protection Plan Steering Committee Designation - Please respond!
Attachments (3): Background Info for County Boards; Statewide CWPP Map; SECWPP Overview

*(Note to County Clerks: Please include this as an agenda item for your next county board meeting. Please print this email and the attached background document and maps for board members. **Please let me know via reply to this email the date of the meeting that will include this agenda item.** Thank you!)*

County Boards:

My name is Sandy Benson, and I am a fuels management specialist with the Nebraska Forest Service (NFS). I work with communities and landowners in wildfire preparation efforts throughout the state. The NFS is developing Community Wildfire Protection Plans (CWPPs) statewide to help obtain funding for wildfire mitigation, maximize safety, bolster communications between local and state resources, and help communities understand the evolving role fire plays in Nebraska's landscape. Landowners in counties that have a CWPP in place are eligible to apply for a fuels reduction cost-share program that helps defray the costs of protecting structures and emergency access routes from wildfire.

Your county is in the Southeast Nebraska regional planning area, and **we invite you to designate an individual to participate on the steering committee to help identify local issues important to your citizens.** Some counties have designated emergency management staff. Others have selected fire department personnel or others with expertise in wildfire response. Due to the large size of the planning area and everyone's busy schedules, no travel will be required, and we estimate a maximum of four hours of committee members' time will be needed over the course of the entire planning process, which should take a year or less. Committee work is designed to occur via teleconference and email.

The attached document explains the details of this process. County boards will be invited to review and provide feedback on the draft plan. When it is finalized, county boards will have an opportunity to adopt it.

It is important that local officials are aware of the planning process and we welcome your county's participation. Most county boards are pleased to learn that there is no cost associated with CWPP preparation. The primary reasons for having a CWPP are:

- Create a wildfire-specific resource that coordinates with the local emergency plan and neighboring plans
- Lands within CWPP regions are eligible for cost-share funding

If you have questions, please contact me at 402-684-2290 or sbenson4@unl.edu. If you would like to speak to me by phone during your board meeting, please let me know the date and time so I can be available.

Thank you!

Attachment:

Community Wildfire Protection Plans

The Nebraska Forest Service (NFS) is in the early stages of preparing a **Community Wildfire Protection Plan (CWPP)** for southeast Nebraska, which includes your county. This plan is a wildfire-specific resource that coordinates with local emergency plans and allows local landowners and others to apply for federal and state cost-share funds for vegetative fuels reduction and other hazard mitigation efforts within the CWPP region. There is no cost to counties.

Southeast Nebraska Community Wildfire Protection Plan

What is a CWPP?

A CWPP is one of the most successful tools for addressing the challenges and responsibilities that arise from living in a wildfire-prone environment. CWPPs specifically define wildfire risk areas within and adjacent to communities, the measures necessary to mitigate those risks, and a plan of action to implement these measures.

The collaborative CWPP process is effective in maximizing coordination and communication between emergency response agencies and the community. Developing a CWPP helps clarify priorities to protect life, property, infrastructure, and valued resources. Protecting communities and resources from wildfire is a team effort that cannot be accomplished by any one person or entity.

The CWPP works in conjunction with your local emergency operations plan. It specifically addresses wildfire concerns including risk assessment, critical infrastructure, and preparedness. It also recommends an action plan to increase the overall safety and effectiveness of wildfire protection planning within your community. Local officials collaborate with planners to establish a steering committee to guide the process.

Some background

After the large wildfires in 2012, the state legislature passed the Wildfire Control Act of 2013, which provided funding for single-engine air tanker bases, cost share for hazardous fuels reduction, and expansion of programs to provide volunteer fire districts with more fire suppression equipment. As these programs were implemented, the Nebraska Forest Service realized there were very few Community Wildfire Protection Plans in place across the state. CWPPs are needed for an area to qualify for many wildfire-related grants and cost-share programs.

The NFS prepared CWPPs for the Pine Ridge, North Central, Loess Canyons, Wildcat Hills, and Missouri River Northeast. Now we are preparing CWPPs for the Southeast Nebraska, Western Sandhills, Central Sandhills, Southwest, and Central Platte areas.

Why should we have a CWPP?

- Past wildfires throughout Nebraska have presented many challenges and issues
- A CWPP is a mitigation and preparedness plan to reduce wildfire risk
- It establishes a collaborative relationship among entities BEFORE a fire occurs
- It develops a pre-attack plan to maximize firefighter readiness and safety
- It increases grant application success by documenting wildfire planning and projects
- Fuels reduction grant funds are only available for areas that have a CWPP in place

Community benefits

- Define planning boundaries that address local concerns
- Identify and prioritize areas for hazardous fuel reduction treatments
- Recommend treatment methods
- Strengthen local efforts to reduce structural ignitability
- Enhance emergency management and communication
- Foster public education/action to reduce wildfire risk

How much does it cost?

The Nebraska Forest Service is covering the costs associated with preparing the CWPP. Counties will not be asked for monetary contributions.

How does it work?

The first step is to put together a steering committee to guide the process and ensure that local issues are front and center in developing the plan. Because of the geographic distances involved, the steering committee will meet via conference call, and only as needed. It would be helpful if your county would recommend a local representative to serve on the committee. The committee will define the priority areas, specify topics and issues important to local emergency responders, and provide general guidance as the plan is prepared.

Southeast Nebraska Community Wildfire Protection Plan

Once we have gathered the information, we will prepare a draft plan for review, incorporate edits and changes, then finalize the plan and make it available to all. This process usually takes a year or less. Counties are invited to sign the plans, which will be updated as needed.

It is important that local officials participate in this planning effort to ensure it addresses unique local considerations. Please share this memo with your emergency planning staff, sheriff, and others who may wish to participate. We will also invite fire departments to participate.

Please recommend individuals who may be willing to serve on the CWPP steering committee. Participation does not require a hefty time commitment, and it ensures local input and guidance for the planning process.

Please email steering committee recommendations to sbenson4@unl.edu or call Sandy Benson at 402-684-2290.

Fire Departments

(This was sent via e-mail 10/18/2019 along with the survey in Appendix G)

To: Fire Departments

cc: Emergency Managers

From: Sandy Benson, Nebraska Forest Service

Subject line: Fire Dept. Info - Community Wildfire Protection Plan - Please respond!

Attachments: VFD Survey, Background Info for VFDs, Map of NFS CWPP areas

My name is Sandy Benson, and I am a fuels management specialist with the Nebraska Forest Service (NFS). I work with communities and landowners in wildfire preparation efforts throughout the state. The NFS is developing Community Wildfire Protection Plans (CWPPs) statewide to help obtain funding for wildfire mitigation, maximize safety, bolster communications between local and state resources, and help communities understand the evolving role fire plays in Nebraska's landscape. Landowners in counties that have a CWPP in place are eligible to apply for a fuels reduction cost-share program that helps defray the costs of protecting structures and emergency access routes from wildfire.

The attached background information provides details about the function of Community Wildfire Protection Plans. The primary reasons for having a CWPP are:

- Create a wildfire-specific resource that coordinates with the local emergency plan and neighboring plans
- CWPP regions are eligible for wildfire mitigation cost-share funding

Your fire district is all or partially within the Southeast Nebraska regional planning area – see attached map. Your participation will help identify local issues important to your fire department and help guide the planning efforts.

Please fill out and return the attached questionnaire as soon as possible, to ensure that the CWPP will contain the most current information available. Completed questionnaires can be scanned and sent to me via a reply to this email, or returned by regular mail to the address shown on the last page of the form. Feel free to email sbenson4@unl.edu or call me with any questions at 402-684-2290.

Thank you!

Cities and Villages

Villages and cities were emailed outreach flyers on October 29, 2019.

Other Stakeholders

NRDs, state and federal natural resources agencies, NGOs, tribes, state and federal legislators, were emailed outreach flyers in October, 2019 during the steering committee outreach process. Some municipal agencies were contacted during data collection. In addition to news releases, state agricultural organizations, local co-ops/grain storage, homeowners associations, and sanitary improvement districts were notified by email (where email addresses were available) when the draft was available for public review and comment.

Southeast Nebraska Community Wildfire Protection Plan

Media Releases

Print Media and Radio

An invitation to participate was published in all of the local newspapers and put on the radio stations on December 6, 2019:

Local input needed for community wildfire protection plan

Local counties are working with the Nebraska Forest Service to create a Community Wildfire Protection Plan (CWPP) to enhance collaboration and communication among the various agencies and organizations who manage fire in southeast Nebraska, and to help them effectively prepare for and respond to wildfire. Everyone who works with land management, fire, and community preparedness has an opportunity to provide input.

The CWPP area includes Butler, Cass, Gage, Johnson, Lancaster, Nemaha, Otoe, Pawnee, Richardson, Sarpy, Saunders, and Seward Counties. Landowners in counties that adopt the plan will be eligible to apply for federal and state cost-share funds for vegetative fuels reduction and other hazard mitigation efforts in at-risk areas within the CWPP boundary. The plan may also provide increased opportunities for counties, municipalities, and rural fire districts to seek grant funding for activities related to fire protection.

The plan, part of a statewide network of Community Wildfire Protection Plans, provides information useful to local emergency responders and those from outside the area who provide mutual aid. The CWPP consolidates and relays critical information needed for responders in unfamiliar terrain. Each county can include details vital to protecting its first responders, residents, and property.

A CWPP is a tool for fire departments, agencies, emergency managers, public officials, and land managers to use when addressing wildfire concerns. It contains a fire mitigation plan for each county that includes:

- Community profile (area description, roads, land use, location of at-risk areas)
- Wildfire risk assessment (fire history, fire hazard, protection capabilities, infrastructure)
- Structure analysis (fire risk rating and ignitability)
- Hazardous fuels reduction recommendations
- Emergency operations (responsibilities, capabilities, partners, mutual aid agreements)
- Recommendations for improving community preparedness
- Contact information and equipment lists for rural fire departments

Feedback from local residents may include topics such as identification of ingress/egress routes and safe zones for citizens, structures and critical infrastructure (highways, cell towers, bridges, schools, etc.), areas with homes or developments in high-risk areas, and high-risk ignition sources.

People may have additional concerns or suggestions. All ideas are welcome. For further information or to provide comments, call 402-684-2290 or email sbenson4@unl.edu

* * *

Follow-up News Releases

Media releases for draft review and publication of final plan were distributed in 2020.

Southeast Nebraska Community Wildfire Protection Plan

Flyers Posted

On December 6, 2019 this flyer was distributed to county and municipal offices and sent to the steering committee for general distribution:

Land managers, emergency responders,
anyone interested in community
preparedness: Your input is needed!

Local counties are collaborating to create a . . .

Community Wildfire Protection Plan

. . . to prepare for and manage wildfire and improve
communication among agencies that respond to wildfire.

The plan, part of a statewide network of Community Wildfire Protection Plans, provides readily-accessible information to emergency responders from outside the area. It consolidates and relays critical information needed for responders in unfamiliar terrain. It is tailored by each county to include details vital to protecting first responders, residents, and property.

Feedback from county residents may include topics such as:

- Ingress / egress routes and safe zones for citizens
- Structures and critical infrastructure (highways, cell towers, bridges, schools, etc.)
- Wildland urban interface areas such as homes or developments in high-risk areas
- Natural resources
- Identify high-risk ignition sources and safety guidelines

People may have concerns or suggestions in addition to these typical CWPP priorities. All ideas are welcome. For further information or to provide comments, call 402-684-2290 or email sbenson4@unl.edu



Nebraska Forest Service

402-684-2290
sbenson4@unl.edu



Southeast Nebraska Community Wildfire Protection Plan

Online Outreach

Information about the Southeast Nebraska CWPP planning process was included on the Nebraska Forest Service website page <https://nfs.unl.edu/community-wildfire-protection-plan> that was established November 26, 2018. During the planning process periodic updates were posted on the page, as were the draft and final documents.

A Nebraska CWPP Facebook page was created: <https://www.facebook.com/groups/451134565293952/> on November 15, 2018. Southeast Nebraska CWPP milestones were posted to this page.

Stakeholders List

County Boards and Emergency Management

Butler, Cass, Gage, Johnson, Lancaster, Nemaha, Otoe, Pawnee, Richardson, Sarpy, Saunders, Seward

Fire Departments

See Appendix G

Natural Resources Districts

Lower Big Blue, Lower Platte North, Lower Platte South, Nemaha, Papio-Missouri, Upper Big Blue

State Agencies

Nebraska Forest Service, Nebraska Game and Parks Commission, Nebraska State Fire Marshal's Office, Board of Educational Lands and Funds, Nebraska Emergency Management Agency, UNL County Extension, Educational Service Units

Federal Agencies

Bureau of Indian Affairs, National Park Service, Natural Resources Conservation Service, US Army Corps of Engineers, US Fish and Wildlife Service

Non-Government Conservation Organizations

NGOs with lands in the counties of Butler, Cass, Gage, Johnson, Lancaster, Nemaha, Otoe, Pawnee, Richardson, Sarpy, Saunders, Seward – includes Ducks Unlimited, The Nature Conservancy, Audubon, Pheasants Forever, Fontenelle Forest

Municipalities

In the counties of Butler, Cass, Gage, Johnson, Lancaster, Nemaha, Otoe, Pawnee, Richardson, Sarpy, Saunders, Seward

Prescribed Fire Associations

Bohemian Alps PBA, Tri-County PBA

Homeowner Associations and Sanitary Improvement Districts

In the counties of Butler, Cass, Gage, Johnson, Lancaster, Nemaha, Otoe, Pawnee, Richardson, Sarpy, Saunders, Seward

State Legislators

Districts 1, 2, 3, 5, 14, 21, 23, 24, 25, 27, 28, 29, 30, 39, 45, 46

Federal Legislators

Senators Deb Fischer and Ben Sasse; Reps. Jeff Fortenberry, Don Bacon, Adrian Smith

Interested Individuals

Appendix I

- Wildland Urban Interface Mitigation Strategies
- Structural Ignitability Reduction Practices
- Firewise® Landscaping
- Nebraska Fire-Resistant Plant List

Southeast Nebraska Community Wildfire Protection Plan

Wildland Urban Interface Mitigation Strategies and Structural Ignitability Reduction Practices

- 1) Develop a program to increase awareness of Firewise® standards for community defensibility and designate, for firefighter safety, which homes and/or parts of communities are not defensible
- 2) Introduce and expand the understanding of the “Home Ignition Zone” and emphasize how survivability depends on maintenance necessary to reduce and manage home ignition potential
- 3) Create guidelines for developers and property owners who intend to construct roads, driveways and dwellings to provide the following:
 - a. Name, address, and GPS location for each road, driveway, and building site
 - b. Fuel treatment standards for the areas between building sites
 - c. Evidence that Firewise® building standards and defensible space information has been provided to every lot and homebuyer or develop Firewise® based requirements for new building construction standards
 - d. Road construction and maintenance standards that accommodate emergency equipment
 - e. Require at least two access routes for developed areas and subdivisions
 - f. Designate locations for maintained safety zones and water facilities
- 4) Subdivision residents can work together to improve defensibility of their whole subdivision; this could include connecting home site defensible space areas and/or fuel hazard reduction and thinning 150 to 200 feet from buildings
- 5) Develop accurate maps for subdivisions and access roads
- 6) Treat fuels along strategic roads
- 7) Long driveways in wooded areas should be graveled and provided with terminus turnaround that has at least a 45-foot radius or a pull-in and pull-out facility
- 8) Mark driveways without turnaround or with steep slopes with a sign indicating limitations
- 9) Mark safety zones and helispots where fuel continuity is dense and zones are not obvious
- 10) Develop and implement a standard for signing roads and addressing and marking homes for more efficient emergency access

Web Sources: Wildfire Preparedness

FEMA: Local Mitigation Planning: <https://www.fema.gov/local-mitigation-planning-resources>

Fire-Adapted Communities®: <http://www.fireadapted.org/>

Firewise® Communities: <http://www.firewise.org/>

Firewise Guide to Landscaping and Construction: <https://www.nfpa.org/-/media/Files/Firewise/Brochures-and-Guides/FirewiseGuideToLandscapeandConstruction.ashx>

I Am Responding (Emergency responder supplemental dispatch notification system): <https://iamresponding.com/v3/Pages/Default.aspx>

Nebraska Forest Service Wildland Fire Protection Program: <https://nfs.unl.edu/fires-nebraska>

Ready, Set, Go! <http://www.wildlandfirersg.org/>

Wildfire Risk to Communities interactive website: <https://wildfirerisk.org/>

Southeast Nebraska Community Wildfire Protection Plan

Firewise® Landscaping and Nebraska Fire-Resistant Plant List

Firewise® Landscapes

Homeowners value landscapes for the natural beauty, privacy, shade and recreation they offer and frequently select properties that include or are near woodlands or other natural areas to visually expand the landscape. One of the risks of properties adjoined to natural areas, however, is that they can be more vulnerable to wildfires.

Creating Defensible Space

In fire-prone areas, property owners can take measures to minimize the risk of wildfire damage by creating a “defensible space” around the home or other buildings. Some of the ways to create more Firewise® landscapes include:

- Planting lower-growing plants or groundcovers near the home to form low, dense mats with strong root systems
- Avoiding the use of tall grasses close to buildings since they can ignite easily and burn rapidly
- Mulching with rocks, gravel or other hardscaping around the foundation instead of bark, pine needles or other flammable mulches
- Paving patio areas and creating raised beds to create firebreaks
- Planting low-growing succulent shrubs rather than taller, resinous evergreen shrubs
- Spacing trees so that tree crowns are 10 feet from each other
- Pruning dead limbs
- Removing dried annuals or perennials
- Raking leaves and litter as they build up
- Placing screens beneath decks to keep leaves or woody debris from collecting underneath
- Keeping wood piles at least 30 feet away from the house
- Providing open access for firefighting equipment that is not limited by fences, trees, or other obstructions
- Keeping propane tanks a good distance from buildings, and taking care when refueling garden equipment
- Using non-flammable outdoor furniture

Selecting Firewise Plant Materials

No plant species is entirely fireproof. Virtually any vegetation can fuel a fire, but some species are more resistant than others. The following information can help property owners select more fire-resistant plant materials, but where they are planted and how they are cared for can be just as important as the plants themselves.

- Planting a variety of sizes and species of plants in small, irregular clusters creates a better barrier than large masses of a single species
- Groundcovers or other plants that grow close to the ground offer less fuel
- Conifers or other plants are high in very flammable resin, so it’s best to keep them thinned and pruned—especially close to the ground
- Conifers with thick bark and long needles are more able to withstand fire
- Salt-tolerant plants tend to be somewhat more fire-resistant
- Deciduous plants have higher moisture content, are less flammable and, when dormant, offer less fuel
- Drought-tolerant plants tend to be more fire-resistant as they are likely to contain lots of moisture (succulents) or to shed leaves or needles during extreme drought
- Plants with open, loose branches and minimal vegetation (such as currant and mountain mahogany) are less of a hazard, as are plants that grow slowly and need little pruning
- Plants, like aspen, that can resprout following a fire will more quickly rejuvenate a landscape

Using Native Prairie Plants

In Nebraska it is often the case that a “Firewise” landscape should also be a “waterwise” landscape where drought-tolerant plants are an important part of the mix. Obviously our native plants have evolved to grow under natural moisture conditions and many of them are suitable for both a “waterwise” and a “Firewise” landscape. Just a little water here and there can go a long way to keeping such plants green and viable. Another important aspect of using native plants is that they play a vitally important role in supporting biodiversity and all the benefits derived from it. We strongly recommend that native plants be utilized within any landscape, including the Firewise landscape. The trick is to use them appropriately, especially near the home.

Southeast Nebraska Community Wildfire Protection Plan

Although native prairie grasses and forbs make a lot of sense in a “water-wise” landscape, they can also be highly combustible when they are brown and dry. For a Firewise landscape, prairie plants, especially taller grasses, should be used sparingly and judiciously within the 30 foot “Lean, Clean and Green Zone” nearest the home. A few scattered here and there for ornamental affect are fine, but they should not be massed tightly close to the home. A prairie meadow or thick border planting should be reserved for those areas farther away from important structures.

Lawn and Groundcover

One of the best ways to defend a structure against wildfire is to maintain a closely-cropped green zone near the home. This typically means the maintenance of a green lawn, but turf grass is not the only choice. Cool-season lawn grasses such as Kentucky bluegrass and tall fescue are good choices, although they can require significant amounts of supplemental irrigation to keep green in dry weather. For sunny areas, a good alternative is buffalo grass, which requires much less moisture than other lawn grasses. Our native blue grama can also be used as a turf alternative, however it will need to be mowed higher – at 8-10” while green and then mowed short when dormant. Recent years has brought the advent of many sedge species as lawn alternatives especially for more shady zones.

Groundcovers don’t need to be grasses or grass-like plants requiring mowing. There are several species of “Firewise” groundcover perennials that make sense including such things as vinca, bergenia, hosta, bugleweed, geranium, sedum, primrose, pussytoes, snow in summer, Virginia creeper, wild strawberry and yarrow.

Introduced Perennials and Ornamental Grasses

As with native plants, there are many great non-native species that can be used in a “Firewise” landscape that is also “waterwise.” The trick is to place them appropriately and cut them back (clean them up) when they die back late in the season. Some of our favorites include sedum, geranium, coral bells, daylily, lambs ear, feather reed grass, Korean reed grass, and fountain grass.

Trees and Shrubs

Although nearly any tree or shrub could burn in a severe fire, it is the highly volatile evergreen species including pine, spruce, fir, juniper, and cedar that pose the most risk when growing near homes or other structures. Within the area nearest the home (30-foot interior zone) it is advisable to exclude volatile evergreens entirely. However, because deciduous trees are so important at casting shade and cooling the home and its surroundings, and because they are not nearly as prone to burning, they can be utilized relatively close to the home. Keep in mind that any branches directly overhanging the roof should be removed. Some of the best deciduous trees for planting near homes include our tough native species including hackberry, bur oak, coffeetree, and honeylocust.

Most deciduous shrubs are acceptable for use in a Firewise landscape. Nearest the home, the shrubs should be kept lower than 30 inches and they should not be massed in tight groupings. Beyond the 30-foot interior zone, the shrubs can be taller and more tightly spaced, however grouping should still be kept relatively small until at least 50 feet from the home. Native species will do the most for biodiversity. Species to consider include mountain mahogany, rabbit brush, sumac, serviceberry, currant, snowberry, gooseberry, plum, and chokecherry.

Southeast Nebraska Community Wildfire Protection Plan

Firewise Plants for Nebraska

Perennials & Groundcovers

Artemisia
Bergenia
Blanket flower, *Gaillardia*
Bugleweed, *Ajuga*
Candytuft, *Iberis*
Catmint, *Nepeta*
Coneflowers, *Rudbeckia*
Columbine, *Aquilegia*
Coral bells, *Heuchera*
Coreopsis
Daylily, *Hemerocallis*
Flax, *Linum*
Geranium
Hens and chicks, *Sempervivum*
Iris
Lambs ear, *Stachys*
Penstemon
Pinks, *Dianthus*
Primrose, *Oenothera*
Pussytoes, *Antennaria*
Sage, *Salvia*
Sedum
Snow-in-summer, *Cerastium*
Violets, *Viola*
Virginia creeper, *Parthenocissus*
Wild ginger, *Asarum*
Wild strawberry, *Fragaria*
Yarrow, *Achillea*

Shrubs

Buffaloberry, *Shepherdia*
Cherry and plum, *Prunus*
Cinquefoil, *Potentilla*
Coralberry, snowberry, *Symphoricarpos*
Cotoneaster
Currant and gooseberry, *Ribes*
Dogwood, *Cornus*
Lilac, *Syringa*
Mahonia
Mock orange, *Philadelphus*
Mountain mahogany, *Cercocarpus*
Ninebark, *Physocarpus*
Rose, *Rosa*
Sumac, *Rhus*

Trees

Aspen, cottonwood and poplar, *Populus*
Birch, *Betula*
Black cherry, *Prunus*
Boxelder, *Acer*
Bur, Gambel, Chinkapin oak, *Quercus*
Hackberry, *Celtis*
Maple and boxelder, *Acer*
Ohio buckeye, *Aesculus*
Willow, *Salix*

Appendix J

Link to the Nebraska Forest Service “Yellow Book”
Emergency Assistance for Wildfire Control

<https://nfs.unl.edu/documents/Yellowbook.pdf>

This reference is a “must have” for Nebraska’s emergency responders. It contains:

- Contact information for state, federal and private agencies that have emergency suppression resources or can provide technical expertise in the suppression of wildfires
- Aerial Applicator and Foam Retardant Directory
- Deployment procedures and forms needed to order a Single Engine Air Tanker (SEAT)
- Map of cooperating aerial applicators and SEAT base locations