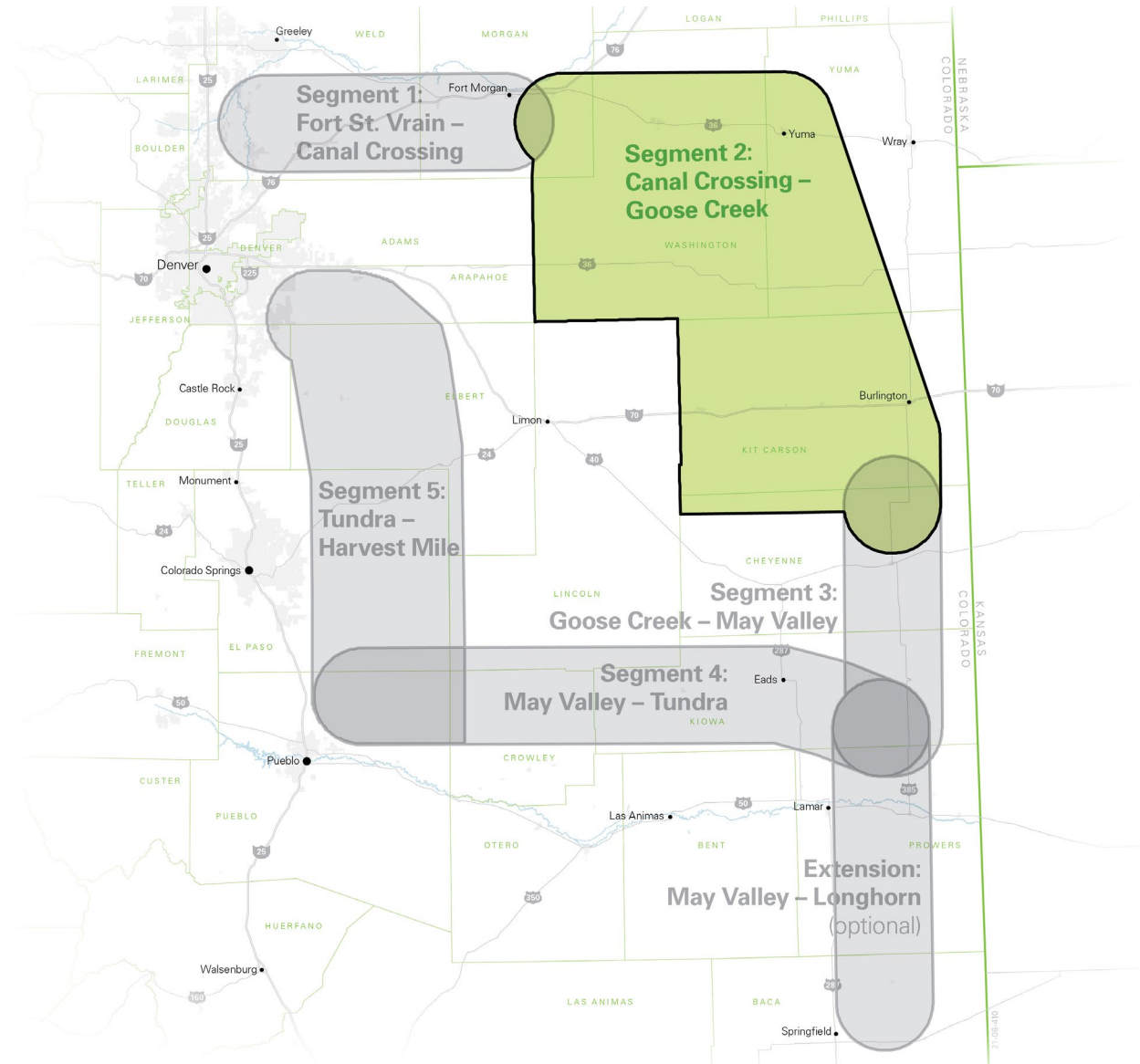




Colorado's Power Pathway

Routing and Siting Study

Segment 2: Canal Crossing—Goose Creek



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APPENDICES

Appendix A: Resource Maps
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ACRONYMS/ABBREVIATIONS

Acronyms/Abbreviations	Definition
CHAT	Crucial Habitat Assessment Tool
CO	Colorado State Highway
CPCN	Certificate of Public Convenience and Necessity
CPUC	Colorado Public Utilities Commission
CR	County Road
I-70	Interstate 70
kV	Kilovolt
LPC	Lesser Prairie-chicken
Pathway	Colorado's Power Pathway
PTC	Production Tax Credit
Q&A	Question and Answer
US	U.S. Highway

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1.0 Introduction

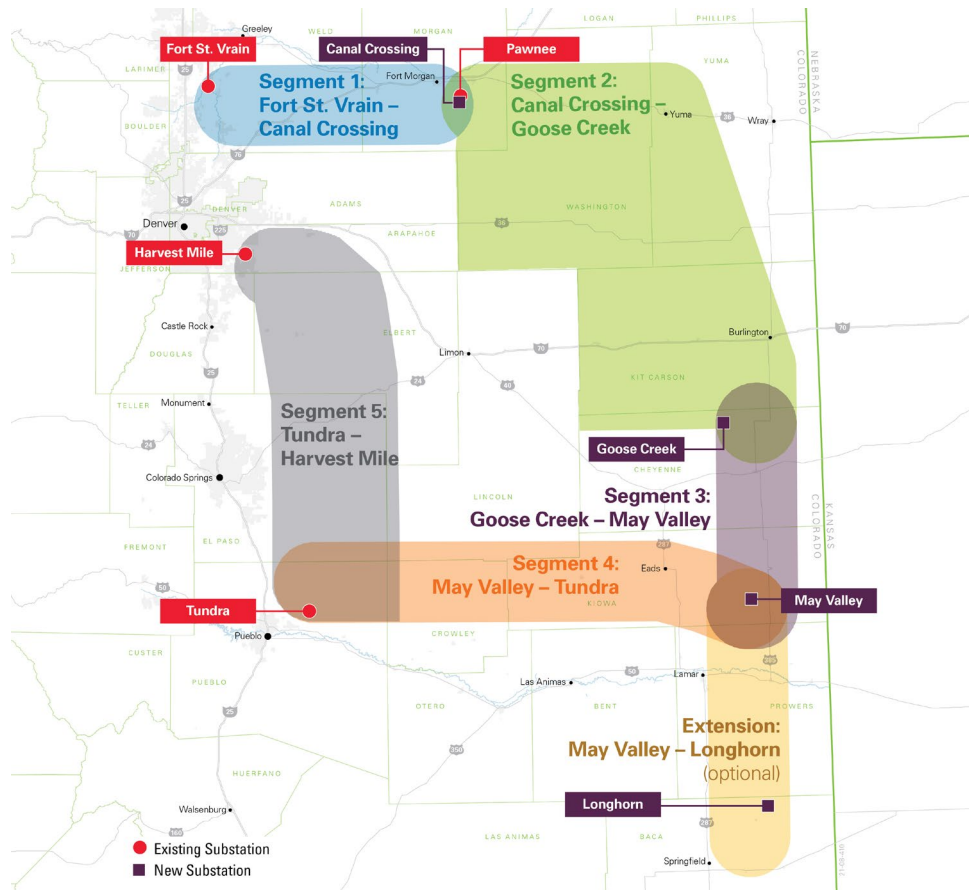
1.1 Colorado's Power Pathway

Public Service Company of Colorado, a Colorado corporation doing business as Xcel Energy (Xcel Energy), proposes to construct, maintain and operate Colorado's Power Pathway (Pathway) in eastern Colorado. Pathway is a \$1.7 to \$2 billion investment proposed by Xcel Energy to improve the state's electric grid and enable future renewable energy development around the state. Pathway will ensure safe, reliable and economical electric service to the public, boost the regional economy, and create jobs during its construction. Pathway includes:

- Installation of approximately 560 to 650 miles of new 345-kilovolt (kV) double-circuit transmission line in 13 to 14 counties (depending on final route selection)
- Construction of four new electric substations (Canal Crossing, Goose Creek, May Valley, and Longhorn)
- Expansion of, or equipment additions at, four existing electric substations (Fort St. Vrain, Pawnee, Harvest Mile, and Tundra)

Pathway will be constructed in five segments, with an optional sixth segment (Extension), with each new or expanded electric substation serving as endpoints for the transmission line segments.

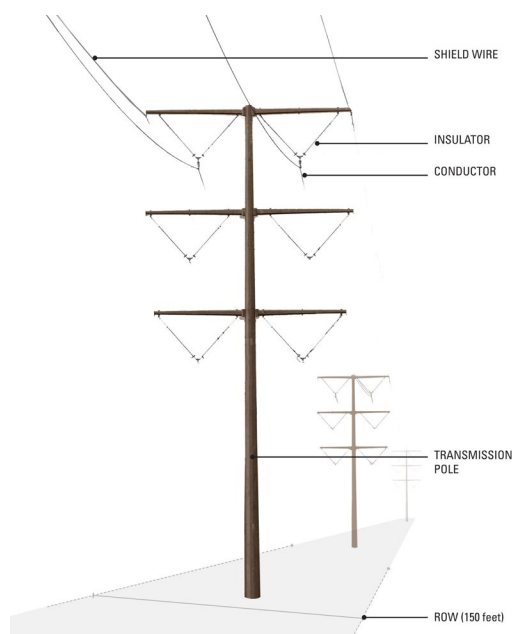
The transmission line segment Study Areas, existing substation locations and approximate locations of new electric substations are shown in the following graphic. These are discussed in more detail in Section 3 of this document.



Colorado's Power Pathway Overview

A fifth new substation (Sandstone Substation) may be constructed near the western end of Segment 4 and southern end of Segment 5 if an additional substation is determined to be necessary in this area to provide a location for future generation interconnections. A decision regarding the need for this substation will likely be made in early 2023.

The new 345-kV double circuit transmission line will be constructed using steel poles. A single pole will be used at most locations; however, two poles will be required for certain high loading locations, such as at angles where the line changes direction. Each pole will be placed on a concrete foundation except for certain poles located in sandy soils in the northern portion of Segment 2; these may be placed using vibratory caissons. Voltage, conductor sag, pole type, terrain, length of span between transmission poles, and minimum clearances of existing buildings influence the necessary height of transmission poles. The transmission poles will be weathering steel and a brown or rust color. A representative transmission line is shown in the following graphic.



Representative Transmission Line

The typical transmission line characteristics are provided in Table 1.

Table 1: Typical 345-kV Double Circuit Transmission Line Characteristics

Characteristic	Anticipated Design
Typical height	105–140 feet
Right-of-way	150 feet total, 75 feet on either side of the centerline
Span length	Typically, 950 feet between transmission poles
Material/color	Weathering steel, brown or rust color
Clearance	Maintain all clearances as required by National Electric Safety Code

Transmission substations are essential components of the electric transmission grid and are connection points for two or more transmission lines and for generation interconnections for wind, solar, natural gas, and other energy sources. Transmission substations include electrical equipment located inside a fenced area. Pathway involves expansion of, or equipment additions, at four existing electric substations (Fort St. Vrain, Pawnee, Tundra, and Harvest Mile) and construction of new electric substations (Canal Crossing, Goose Creek, May Valley, and Longhorn). Each new electric substation will be constructed on a parcel of land owned in fee by Public Service Company of Colorado.

The existing electric substations (Fort St. Vrain, Pawnee, Tundra, and Harvest Mile) will be expanded or equipment added within the existing fence line to accommodate the new transmission lines and the associated equipment needed to operate the lines. The four new electric substations (Canal Crossing, Goose Creek, May Valley, and Longhorn) will be 345-kV switching stations. A switching station is a type

of electric substation that operates at a single voltage level and, therefore, does not have transformers that change or “transform” voltage from one voltage level to another.

1.2 Purpose and Need

The Eastern Plains region of Colorado is one of the nation's best areas for wind and solar energy generation but it does not currently have a network transmission system that can integrate new generation resources into the state's interconnected grid system which is needed to meet Colorado's clean energy goals. Pathway will support Xcel Energy's Clean Energy Plan (Xcel Energy 2021) that is estimated to deliver as much as an 85 percent reduction in carbon dioxide emissions by 2030 and add approximately 5,000 megawatts of new wind, solar, and other resources. Pathway will help meet the state's growing electricity needs, improve reliability, safety and affordability, and enable the transition to clean energy (Xcel Energy 2021). Pathway will allow developers of new energy generation projects to interconnect energy resources located in the areas of the state that are underserved by backbone transmission infrastructure and also allow Xcel Energy to deliver that energy to electric customers.

Transmission line Segment 2 and Segment 3 and associated new electric substations and substation expansions will be completed in 2025, assuming required approvals are obtained. These segments will provide interconnection locations for qualified renewable energy resources that become commercially operational by the end of 2025 to take advantage of the Federal Production Tax Credit (PTC) program. The PTC is currently set to expire at the end of 2025. Taking advantage of the PTC will lower the cost of installing new renewable generation facilities, thereby benefiting all Colorado electric customers. With these new projects come jobs, lease revenue, and increased tax revenue for rural communities.

In March 2021, Xcel Energy filed a Certificate of Public Convenience and Necessity (CPCN) application with the Colorado Public Utilities Commission (CPUC) describing the purpose, need and public benefits of constructing Pathway. In February 2022, the CPUC provided verbal approval, and in June 2022, CPUC provided written approval of the CPCN for Segments 1–5, and conditional approval for the Extension, based on a determination that Pathway is in the public interest. While the CPUC determines a public need for Pathway, it does not approve the location of specific project facilities. The location and land use approvals will be made through easement negotiations with landowners and the land use approval process in the applicable jurisdictions where the Pathway facilities will be located.

1.3 Schedule

Many variables factor into the schedule for projects of this magnitude. The construction schedule is contingent on acquiring all necessary land rights and permits.

Pathway will be constructed and brought in-service in phases. The estimated construction timeline for each segment and substation and anticipated in-service dates are shown in Table 2.

Table 2: Pathway Schedule

Segment & Substation	Construction	In-Service
Segment 1 & Fort St. Vrain Substation expansion	Spring 2024–Spring 2026	Spring 2026
Segment 2 & New Canal Crossing & Goose Creek substations & Pawnee Substation equipment additions	Summer 2023–Fall 2025	Fall 2025
Segment 3 & New May Valley Substation	Summer 2023–Fall 2025	Fall 2025
Segment 4 & Tundra Substation expansion	Spring 2025–Spring 2027	Spring 2027
Segment 5 & Harvest Mile Substation expansion	Spring 2025–Spring 2027	Spring 2027
Extension & New Longhorn Substation	To be determined	To be determined

2.0 Overview

Pathway routing and siting analysis is divided by segment and documented in a series of six Routing and Siting studies. Each Routing and Siting Study is interrelated because of the overlap in segment Study Areas and shared electric substation endpoints. Each Routing and Siting Study documents the process used to review and consider reasonable routing and siting alternatives for the new major electrical facilities (pursuant to Colorado Revised Statute 29-20-108 (4) (a) and (b)). The Routing and Siting studies do not identify specific construction-related components, such as laydown/staging yards, access routes and haul routes. The Routing and Siting studies also do not assess the siting of the substation expansions and equipment additions as the substations are existing and, in these cases, new substations are not needed from system planning and cost perspectives. Table 3 outlines Pathway components discussed in each Routing and Siting Study. This Routing and Siting Study documents the process used to identify the preferred transmission line route for Segment 2 and the locations of the new Canal Crossing and Goose Creek substations.

Table 3: Routing and Siting Study Index

Routing and Siting Study	Components ¹	Counties Crossed
Segment 1	Segment 1 Transmission routing	Weld County Morgan County
Segment 2	Segment 2 Transmission Line routing New Canal Crossing Substation siting New Goose Creek Substation siting	Morgan County Washington County Kit Carson County Cheyenne County Yuma County
Segment 3	Segment 3 Transmission Line routing New May Valley Substation siting	Kit Carson County Cheyenne County Kiowa County Prowers County

Routing and Siting Study	Components ¹	Counties Crossed
Segment 4	Segment 4 Transmission Line routing	Kiowa County Prowers County Lincoln County Crowley County El Paso County Pueblo County
Segment 5	Segment 5 Transmission Line routing	Pueblo County El Paso County Lincoln County Elbert County Arapahoe County
Extension	Extension Transmission Line routing New Longhorn Substation siting	Kiowa County Prowers County Baca County

¹ Expansions and equipment additions at existing substations are not covered in the Routing and Siting studies as the work locations are predetermined.

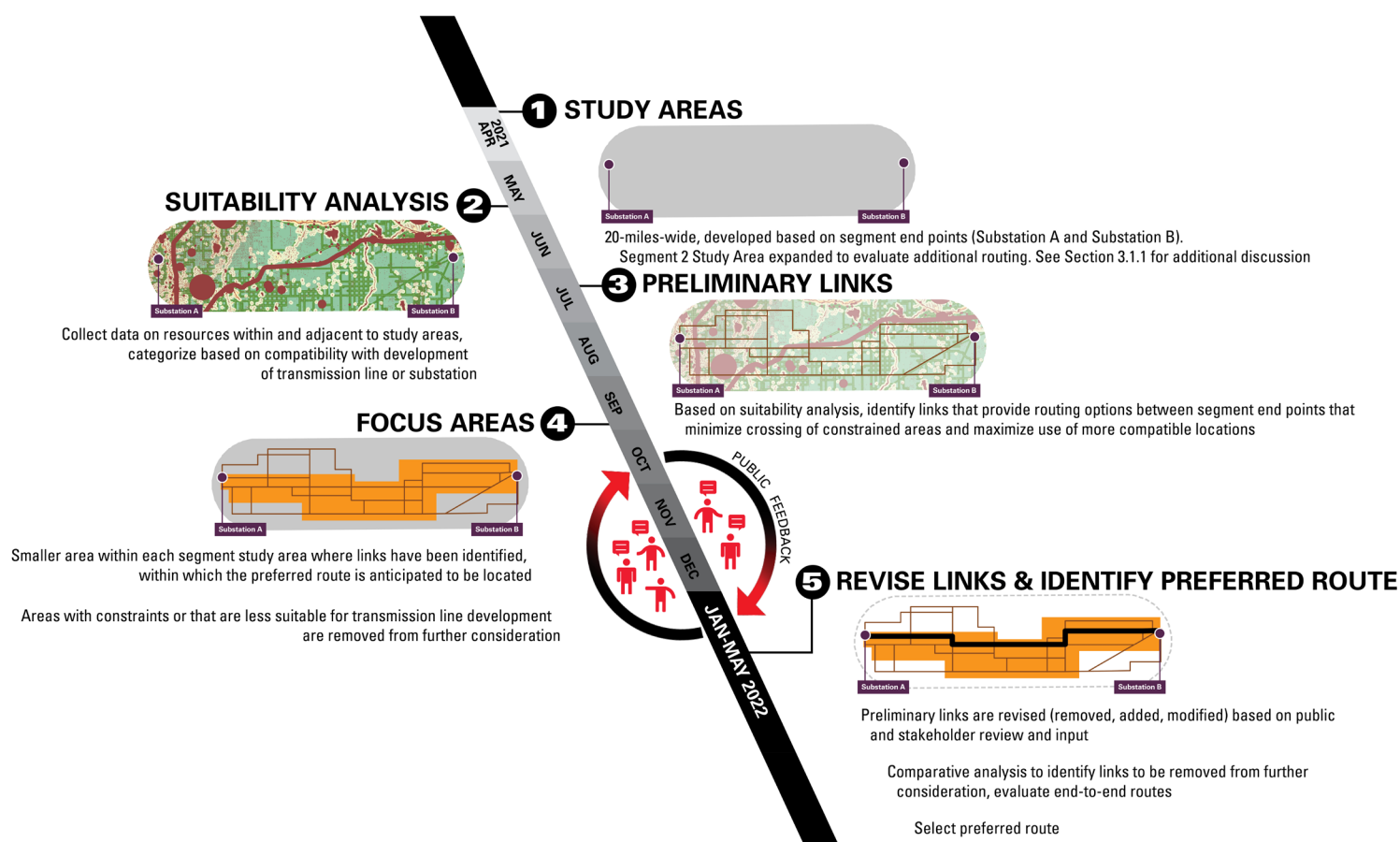
2.1 Segment 2 Description

Segment 2 involves construction of approximately 145 miles of new 345-kV double circuit transmission line from the new Canal Crossing Substation to the new Goose Creek Substation. The Segment 2 Study Area (discussed in Section 3.1.1) spans five counties in eastern Colorado: Morgan, Washington, Yuma County, Kit Carson, and Cheyenne. The new Canal Crossing Substation will serve as the northern Segment 2 endpoint and accommodate new 345-kV line terminations and equipment. The new Goose Creek Substation will serve as the southern Segment 2 endpoint, be located near the existing Cheyenne Ridge–Shortgrass transmission line to connect that line into the existing transmission system, and will accommodate new 345-kV transmission line terminations and equipment.

Construction of the Segment 2 transmission line, May Valley Substation, and Goose Creek Substation are anticipated to begin in 2023 and be complete in 2025.

3.0 Routing and Siting

Routing a transmission line and siting a substation requires a comprehensive review of factors including electric system planning, project costs, environmental and cultural resources, public involvement, regulatory compliance, existing and planned land use, land rights, and system engineering. As shown in the following graphic, the five-step routing and siting process assesses constraints and opportunities between segment endpoints to ultimately identify the preferred route location for the transmission line and the preferred substation sites. Each step is further discussed in Sections 3.1 through 3.5.



Routing and Siting Process

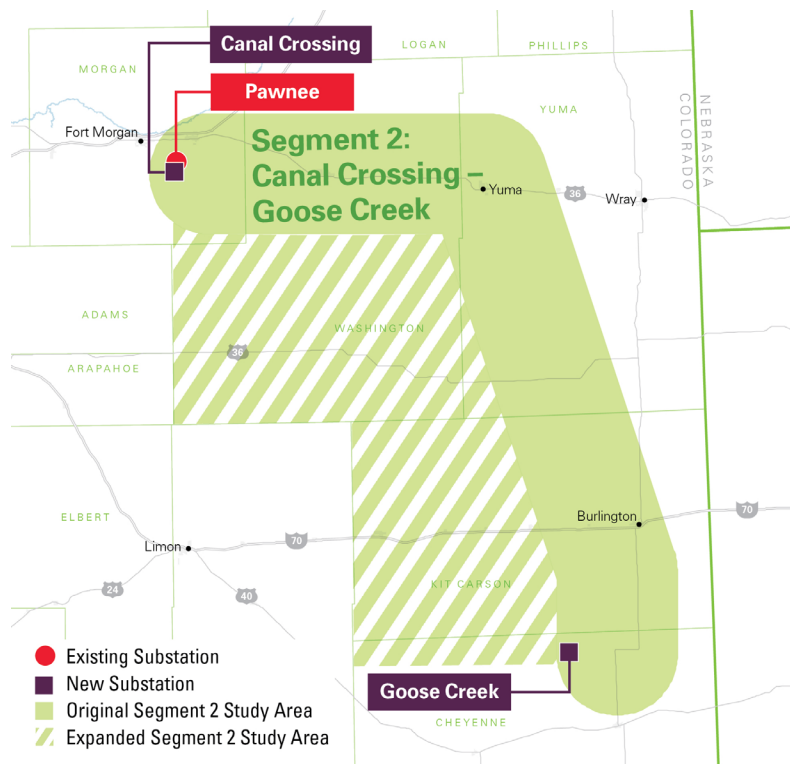
3.1 Step 1: Study and Siting Study Areas

Study Areas are broad corridors used to assess the constraints and opportunities between segment endpoints and to ultimately identify the locations of alternative and preferred transmission line links. The Study Areas initially identified for each segment were generally 20 miles wide and were developed based on the location of the substation endpoints. Substation Siting Study Areas are located at the junction of adjacent segments where new substations will serve as interconnection points.

The Study Area for Segment 2, the Goose Creek Substation Siting Study Area, and the Canal Crossing Substation Siting Area are shown in Figure 1, and discussed in Sections 3.1.1, 3.1.2, and 3.4.2, respectively.

3.1.1 Transmission Line Study Area

The area between the new Canal Crossing Substation and the new Goose Creek Substation is located within Morgan, Washington, Yuma, Kit Carson, and Cheyenne counties. The original 20-mile-wide Segment 2 Study Area considered routing in an easterly and then southerly direction. In June 2021, the Study Area was expanded to evaluate additional transmission line routing along a more direct path so that opportunities, technical considerations, and operational constraints that may occur with longer lines could be addressed. The following graphic shows the original and expanded Segment 2 Study Area.



Original and Expanded Segment 2 Study Area

The Study Area extends east and west to allow for the consideration of diagonal and stair-step routing. The expanded Study Area is generally bounded by U.S. Highway (US) 34 to the north, US 385 to the east, Colorado State Highway (CO) 71 and US 287 to the west, and US 40 to the south. The Study Area for Segment 2 is shown on Figure 1.

3.1.2 Substation Siting Study Areas

Originally, the Canal Crossing Substation was planned to be sited adjacent to the existing Pawnee Substation, so a Canal Crossing Substation Siting Study Area was not analyzed during this stage.

The Goose Creek Substation Siting Study Area was determined based on the area of overlap between the Segment 2 and 3 Study Areas. The new Goose Creek Substation will be constructed on land to be acquired near the existing Cheyenne Ridge Wind Project. The new substation will accommodate new 345-kV line terminations and equipment and will network the existing radial Cheyenne Ridge–Shortgrass transmission line into the electric system. The Goose Creek Substation Siting Study Area, shown in Figure 1, is generally bounded by County Road (CR) G to the north, CR 54 to the east, CR 34 to the west, and US 40 to the south. The Goose Creek Siting Study Area is bisected by US 385, running north/south.

3.1.3 Public Outreach—Virtual Introductory Meetings

Three virtual introductory meetings were held in June 2021 to provide a platform to inform the public and key stakeholders about Pathway, gather feedback, and address questions and concerns. These meetings were held virtually due to restrictions on large gatherings due to COVID-19. Prior to the virtual introductory meetings, a website, email address, and telephone hotline were developed to share information about Pathway and to provide multiple ways for the public and stakeholders to communicate with representatives. A total of 62,770 postcards were sent to all mailing addresses within the segment Study Areas ahead of the meetings to provide information on meeting dates, times, and connection information. Fourteen newspaper ads, two social media postings (one Facebook, one Twitter), and hotline, email, and website updates also announced the meetings to the interested public. Attendance at the three virtual introductory meetings is shown in Table 4.

Table 4: Virtual Introductory Meeting Attendance

Meeting	Attendance
June 22, 9 a.m.	104 attendees
June 29, noon	72 attendees
June 29, 6 p.m.	35 attendees

A PowerPoint presentation was provided during each meeting to introduce the Pathway team, Xcel Energy as a company, and provide information on the need, community and electric system benefits, regulatory review, routing and siting process, and schedule. A Question and Answer (Q&A) session was held after the presentation to discuss topics including cost, design and engineering, siting and land rights, vegetation management, and construction. Over the three meetings, a total of 113 questions were asked by meeting attendees and covered the following topics:

- Project benefits
- Routing and Siting
- Health and safety
- Resource planning and renewables
- Landowner compensation and property values
- Vegetation management and wildfire mitigation
- Access to presentation and maps
- Project timeline and communication channels
- Project cost and funding

3.2 Step 2: Suitability Analysis

The comprehensive Suitability Analysis involved gathering and mapping resource, land use, and infrastructure data for the Study Area and Siting Study Areas; determining routing and siting criteria based on compatibility with the proposed electric infrastructure; and visiting the Study and Siting Study Areas to verify mapped data and to meet with local jurisdictions and key stakeholders to gather feedback. Upon review of the data generated from these activities, level of suitability was mapped across the Study and Siting Study Areas. The stages and results of the Suitability Analysis for Segment 2 are further described in Sections 3.2.1 through 3.2.4.

3.2.1 Data Collection

Publicly available resource data, including existing transmission corridors, land use, oil and gas infrastructure, surface water, critical habitat, jurisdiction and formally designated lands, and conservation easements were mapped to aid in the review of the Study and Siting Study Areas. The resource data identified major constraints and opportunities along Segment 2 that served as an indicator of routing and permitting complexity.

The resource data were mapped to determine the presence of compatible and incompatible resources and understand the area's physical characteristics. Resource maps are included in Appendix A. Resources within the Study and Siting Study Areas are described in Table 5.

Table 5: Resource Data Presence in Study and Siting Study Areas ¹

Resource Map Page Number	Data Collected	Data Source(s)	Location in Study and Siting Study Areas
1	2021 Aerial	National Agriculture Imagery Program Imagery (2021)	Higher density of pivot irrigation in the northern and eastern portions of Study Area. Denser development near population centers, including Fort Morgan, Akron, and Burlington.
2	Jurisdiction	Colorado Ownership, Management, and Protection (2019)	Northern Study Area within Morgan, Washington, and Yuma counties. Southern Study Area within Kit Carson and Cheyenne counties. Goose Creek Siting Study Area within Cheyenne and Kit Carson counties. State land parcels checkered throughout Study and Siting Study Areas. Bureau of Land Management, Colorado State Stewardship and Wildlife areas east of the town of Joes.
3	NLCD Land Cover	National Land Cover Database (2019)	Dominated by cultivated crops, shrub/scrub, and hay/pasture
4	Zoning	Morgan County (2021)	Digital data only publicly available for Morgan County. Agriculture zoning encompasses most of northern Study Area with areas of Commercial, Agriculture/Agri-Business, and Light Industrial near the city of Brush.
5	State Wildlife Action Plan	Colorado Parks and Wildlife (2015)	Crucial Habitat Assessment Tool (CHAT) categories 3, 4, and 5 found throughout the Study and Siting Study Areas, particularly on the southern and eastern regions of the Study Area.
6	Public Institutions	Homeland Infrastructure Foundation-Level Data (2021)	Police departments, hospitals, nursing homes, and public schools occur along the Interstate 70 (I-70) corridor, and near the municipalities of Burlington, Brush, Akron, and Yuma. Additional public schools are located along US 36.
7	Historic Places	National Register of Historic Places (2020)	Nationally listed historic places are found around the municipalities of Brush, Akron, Yuma, Last Chance, Flagler, Vona, and Burlington.
8	Avian Species Habitat	Colorado Parks and Wildlife (2021)	The overall range of the Greater Prairie-chicken extends to the northeast region of the Study Area. Lesser Prairie-chicken-occupied range and priority habitat are in the southern region of the Study Area and Goose Creek Siting Study Area. An active bald eagle nest is located west of the existing Pawnee Substation.

Resource Map Page Number	Data Collected	Data Source(s)	Location in Study and Siting Study Areas
9	Ground Transportation	Colorado Department of Transportation (2021) Bureau of Transportation Statistics (2020)	Major east/west roadways throughout the Study and Siting Study Areas include US 34, US 36, US 24, and I-70. North/south roadways throughout the Study and Siting Study Areas include CO-71, CO-63, CO-69 and US 385. An Amtrak route parallels US 34 in the northern region of the Study Area. Notable Features Limited transportation features that can be paralleled directly between endpoints.
10	Air Transportation	Federal Aviation Administration (2021)	Public and private airports are found within the Study Area near Brush, Akron, Yuma, Flagler, and Burlington. Existing and proposed wind turbines and associated transmission poles occupy the southern region of the Study Area. These wind facilities are associated with the following existing wind projects: Kit Carson Windpower, Rush Creek Wind II, Bronco Plains Wind, Crossing Trails, and Cheyenne Ridge. Notable Features Several municipal airports. Cheyenne Ridge Wind Project infrastructure occupies the eastern and central portions of the Goose Creek Siting Study Area.
11	Water Resources	National Hydrography Dataset (2020) Federal Emergency Management Agency (2021) National Wetland Inventory (2020) Playa Lakes Joint Venture (2019)	Intermittent and perennial streams are found throughout the northwest, central and southern regions of the Study Area. A Federal Emergency Management Agency 100-year floodplain is located east of the existing Pawnee Substation in Morgan County. Wetlands associated with the Arikaree River are located northeast of the town of Joes. Notable Features Large waterways, including South Fork Republican River, Landmans Creek, and Arikaree River, and the associated sensitive resources run east-west through the Study Area.
12	Water Wells	Colorado Division of Water Resources (2021)	Active water wells occur in large numbers throughout the Study and Siting Study Areas, especially near water resources and the population centers along US 34, US 36, and I-70.
13	Oil and Gas Facilities	Colorado Oil and Gas Conservation Commission (2021) Ventyx (2021)	Notable Features High density of oil and gas wells in northern portion of Study Area. Multiple natural gas and oil pipelines traverse the Study Area, several cutting southeast/northwest.

Resource Map Page Number	Data Collected	Data Source(s)	Location in Study and Siting Study Areas
14	Extractive Industries and Landfills	Homeland Infrastructure Foundation-Level Data (2021) Colorado Division of Reclamation Mining and Safety (2021)	Several sand and gravel operation locations are found throughout the Study Area. Four landfills are located along the I-70 corridor.
15	Topography	U.S. Geological Survey (2020)	The Study and Siting Study Areas are flat with little variation in topography.
16	Slope	U.S. Geological Survey (2020)	Slopes throughout the Study and Siting Study Areas fall largely within the range of 0–5% with few areas above 15%.
17	Existing Electric Infrastructure	Public Service Company of Colorado (2020) Federal Aviation Administration (2021) Homeland Infrastructure Foundation-Level Data (2021)	An existing 230-kV transmission lines runs east-west through the northern region of the Study Area to the Brush Generation Facility and existing Pawnee Substation. Additional existing transmission infrastructure runs northeast-southwest from Pawnee Substation. Several existing transmission lines run east-west near US 34, US 36, I-70 and through the Goose Creek Siting Study Area. Notable Features Limited existing transmission that can be paralleled directly between endpoints. Several existing wind projects including Crossing Trails and Cheyenne Ridge Wind Project.
18	Communication Facilities	Homeland Infrastructure Foundation-Level Data (2021)	Several land mobile private transmission facilities are found throughout the Study and Siting Study Areas. Microwave service towers and cellular towers are found throughout the Study Area, largely near population centers.
19	Agricultural Areas	U.S. Department of Agriculture (2020) U.S. Environmental Protection Agency (2021)	Irrigated lands are found throughout the Goose Creek Siting Study Area and Study Area, especially in the southern, western, and northeastern areas and adjacent to water resources. Several Concentrated Animal Feeding Operations are found north of the Goose Creek Siting Study Area and along US 34.
20	Parcels	Morgan County (2021) Washington County (2021) Yuma County (2021) Kit Carson County (2021) Cheyenne County (2021)	For informational purposes only.

Resource Map Page Number	Data Collected	Data Source(s)	Location in Study and Siting Study Areas
21	Residential and Other Structures	Microsoft (2021) Homeland Infrastructure Foundation-Level Data (2021)	Homes are scattered across the more rural parts of the Study Area. Dense residential areas are found within and around the population centers along US 34, US 36, and I-70.
22	Public Land Survey	Bureau of Land Management (2020)	For informational purposes only.
23	Prime Farmland	Natural Resources Conservation Service (2020)	Farmland of statewide importance is found largely within the northern and northeastern portions of the Study Area. Prime farmland, if irrigated, and areas not designated as prime farmland dominate the remainder of the Study and Siting Study Areas.
24	U.S. Environmental Protection Agency (EPA)-Registered Facilities	U.S. Environmental Protection Agency (2021)	Facilities registered by the U.S. Environmental Protection Agency are concentrated at the population centers within the Study Area and existing Pawnee Substation. Several registered facilities occur throughout the northern rural portion of the Study Area but are sparse in the southern rural region.
25	Karst	U.S. Geological Survey (2017)	Evaporate Basin areas are found in the southern and northern portions of the Study Area and entirely throughout the Goose Creek Siting Study Area. Piping pseudokarst and carbonate rocks can be found east of the town of Joes, near the eastern edge of the Study Area.
26	Wildlife Species Habitat	Colorado Parks and Wildlife (2021)	Mule deer concentration areas are located throughout the southern region of the Study Area, within the Goose Creek Siting Study Area, and around Pawnee Substation. Pronghorn concentration areas are limited to the southwestern, western, and southeastern regions of the Study Area. The overall range for the swift fox extends through the southern and western regions of the Study Area. Notable Features Brush Prairie Ponds State Wildlife Area
27	Soil Erodibility	Natural Resources Conservation Service Soil Survey Geographic Database (2020)	Generally, soils in the northwest region of the Study Area have the highest erodibility, soils to the south are moderately erodible, and soils to the east-central region have lower erodibility. The Goose Creek Siting Study Area is largely composed of highly erodible soils, while the area near the existing Pawnee Substation features low erodible soils.
28	Important Bird Areas	Audubon Society (2020)	Important bird areas are found northeast of the town of Joes and east of the existing Pawnee Substation.

1 Resource maps and data evaluation are based on the best available data. The accuracy of the data may vary.

3.2.2 Routing and Siting Criteria

Resource data were categorized as suitable, sensitive or exclusion areas based on assessed compatibility with development of electric infrastructure. After categorizing each of the resources described in Table 5 and applying the criteria included in Appendices B and C, suitable areas were identified as areas that are less likely to be negatively impacted by construction and/or operation of transmission lines and substations and features compatible adjacent land uses and a lack of sensitive resources. Suitable areas included land proximate to existing roads; existing land owned by Public Service Company of Colorado; areas of lesser sensitive species habitat value; undeveloped areas; and state, federal, and privately owned land with compatible uses. Sensitive areas were those where environmental impacts and/or land use conflicts may occur with the construction and/or operation of transmission lines and substations. Impacts in these areas can often be mitigated. Exclusion areas were locations with the highest level of sensitivity and the greatest potential environmental, social, and economic impacts; permitting requirements; or prohibition by state or federal regulations. While it is not possible to avoid all impacts, classification of resources in this manner helps maximize the utilization of compatible areas and minimize the impacts to exclusion areas. Resource maps depicting the location of the data that influenced these criteria are included in Appendix A. For each of the resources described in Table 5, the suitable, sensitive, and exclusion criteria are shown in Appendix B for transmission line routing and Appendix C for substation siting.

3.2.3 Mobilization and Coordination

Throughout the Routing and Siting Study process, the Pathway team repeatedly visited the Study and Siting Study Areas to ground-truth map data and understand current land uses. During the ongoing review of the area, the team also met with Morgan, Washington, Kit Carson, Cheyenne and Yuma county staff to introduce Pathway, discuss local resources and concerns to consider during routing, gather feedback, and confirm expected permitting requirements.

The Pathway team also met with agency representatives from Colorado Parks and Wildlife, U.S. Fish and Wildlife Service and the State Land Board to discuss unique agency concerns to consider during the Routing and Siting Study Process. Table 6 shows the key topics discussed during these county and agency meetings.

Table 6: Agency Meeting Topics

Meeting	Key Topics Discussed
County Meetings	Local concerns about radio interference Locations of meteorological tower installations Newly permitted solar facilities Planned development
Colorado Parks and Wildlife	Ephemeral and dry drainages South Republican River impacts Greater and Lesser Prairie-chicken (LPC) lek locations Raptor nest locations Wildlife areas near the existing Pawnee Substation

Meeting	Key Topics Discussed
U.S. Fish and Wildlife Service	Locations of LPC 60% connectivity areas LPC anticipated listing and potential surveys and mitigation Notable species presence proximate to Arkansas River Provision of Pathway shapefiles to better assess preferred route Follow up meeting to discuss more detailed comments from the U.S. Fish and Wildlife Service
State Land Board	Right-of-way through Stewardship Trust Land Minimizing diagonal routing Solar leases on State Land Board land Wind and solar planning areas

3.2.4 Transmission Line Study Area and Substation Siting Study Area Analyses

The Study and Siting Study Areas are primarily characterized by agriculture uses, oil and gas development, transportation infrastructure, scattered residential, and small- to medium-sized population centers, including Akron, Yuma, and Burlington. Areas that were more suitable and less suitable for transmission line routing and substation siting were identified based on the mapped resource data and the Routing and Siting criteria. These areas served as an indicator of routing and siting complexity. The presence of more areas less suitable for routing could potentially result in an increase in transmission line miles when compared to the direct, straight-line distance between the segment endpoints. Table 7 provides the results of the Suitability Analysis and identifies key resources that influenced suitability within the Study Area and Goose Creek Siting Study Area. Maps depicting the suitability of the Study Area and Goose Creek Substation Siting Study Area are included as Figures 2 and 3, respectively.

Table 7. Resources Impacting Suitability in Study and Siting Study Areas

	Resources Present
Segment 2 Study Area	<ul style="list-style-type: none"> US 34, US 36, US 385, I-70 Limited linear infrastructure such as existing transportation features and transmission that can be paralleled directly between segment endpoints Two existing wind projects (Carousel Wind Farm and Cheyenne Ridge Wind Project) Several municipal airports Brush Prairie Ponds State Wildlife Area Large waterways including South Fork Republican River, Landmans Creek, and Arikaree River; associated sensitive resources High density of oil and gas wells in northern portion of Study Area Multiple natural gas pipelines High-density of pivot irrigation in the northern and eastern portions of Study Area
Goose Creek Siting Study Area	<ul style="list-style-type: none"> US 385 Oil and gas development, including an oil pipeline running northwest/southeast Kit Carson County and Cheyenne County line Cheyenne Ridge Wind Project Existing electric infrastructure

3.3 Step 3: Preliminary Transmission Line Links

Based on the Suitability Analysis and mapping, field reconnaissance, and routing objectives, possible transmission line links were identified throughout the Study Area. Link locations generally minimized crossing less suitable and exclusion areas and maximized the use of areas ranked as more suitable.

Within the Study Area, 106 links were identified that when pieced together created complete route options (Figure 4). In total, these 106 links created 647 miles of route options throughout the Study Area. Given the location of the substation endpoints, the new transmission line must cross US 36, I-70, US 24, the South Fork Republican River, and several state highways. Crossing locations were identified based on the Suitability Analysis and mapping and field reconnaissance. Preference was given to crossing locations with an existing disturbance and areas where development is sparse on either side. Additional factors that helped identify river crossing locations included areas where the river and associated habitat narrows, allowing for a shorter crossing and fewer subsequent impacts.

Links exiting from the north, east, and south of the area around the existing Pawnee Substation were identified to accommodate possible substation site locations. The northern option, Link 201, is partially located on land owned by Public Service Company of Colorado; as it continues east, Link 201 follows section lines where possible, avoids crossing the State Wildlife Area east of Pawnee Substation, and is collocated with CR P at the crossing of nearby floodplains. The central option, Link 2104, largely follows section lines and crosses an existing 345-kV and three 230-kV transmission lines. As it continues east, Link 2104 crosses an existing 115-kV transmission line perpendicularly, avoids several homes and water wells along CR L, and crosses nearby floodplains at a fairly narrow section. The southernmost option, Link 2103, crosses one existing transmission line and follows section lines. As it continues southeast through a largely undeveloped area, Link 2103 weaves through active oil and gas wells, crosses CR K, and where possible avoids homes and water wells at the floodplain crossing.

From there, link options move southeast through the Study Area, minimizing where possible exclusion and sensitivity areas including homes and structures, pivot irrigation, State Land, and oil and gas development and utilizing more suitable areas including existing transmission lines, section lines, and existing linear transportation. Several diagonal links were identified, and while they resulted in the division of section lines, they allowed for the analysis of more direct routing between endpoints to minimize transmission line miles and overall cost.

Options for crossing US 24, I-70 and the railroad were identified at Links 269, 272, 273, and 274. All options avoid the nearby statutory towns of Seibert and Vona. Link 272, approximately 1.5 miles east of Seibert, follows CR 17 south to US 24, passes by one home along CR 17, then creates new US 24 and I-70 crossings. Link 273, approximately 3.5 miles east of Seibert, follows an existing 115-kV transmission line south along CR 20. It continues to follow the existing 115-kV transmission line along section lines and across US 24 and I-70. Link 274, approximately 0.75 mile west of Vona, follows section lines south then creates new railroad, US 24, and I-70 crossings. Link 274, approximately 1.25 miles east of Vona, bisects sections as it runs south, and creates new railroad, US 24, and I-70 crossings. It also bisects a State Land Board parcel north of US 24.

All series of link options that approach the Goose Creek Siting Study Area enter from the northwest and remain on the western side as they move south, largely due to the presence of US 385 and the existing Cheyenne Ridge Wind Project on the eastern and central portions of the Study Area. Staying west of the wind facility avoids the complexity of weaving through the turbines while maintaining local setback regulations and reduces the number of angle and corner transmission poles and associated visual impacts and costs. By not crossing US 385, a new crossing impact to the highway and the need to permit additional highway crossings are avoided.

3.4 Step 4: Focus Areas

Ongoing discussions with jurisdictions, feedback from the public during open houses, additional field review, and continued preliminary transmission line link evaluation resulted in areas and links with multiple constraints and areas less suitable for transmission line development being removed from further consideration. The location of the remaining links defined the location of the Focus Area, a smaller area within the segment Study Area and within which the preferred route is anticipated to be located.

3.4.1 Transmission Line

The Focus Area for Segment 2 is generally located in the central and western portions of the Study Area in Morgan, Washington, Kit Carson, and Cheyenne counties. The Focus Area is broader in the north and narrower at I-70 due to limited options to cross the Interstate Highway. The western portion of the Study Area continued to prove favorable over the eastern portion because the routing could be more direct. Routing east, then south, resulted in additional transmission line miles and associated costs. The Segment 2 Focus Area is shown in Figure 5.

3.4.2 Substation Sites

As the preliminary transmission line links were narrowed down, suitable substation sites were identified in the vicinity of where the remaining transmission line links were aligning, narrowing the Substation Siting Study Areas to Substation Siting Areas. The substation site options were identified in locations that were more suitable and compatible with substation construction and operation. Transmission line accessibility also factored into substation siting due to the need for interconnection.

The Goose Creek Siting Area is approximately 4.5 miles square and located on the western side of the Siting Study Area (Figure 5). The existing Cheyenne Ridge Wind Project and the setbacks required by the local jurisdictions limited the available area for substation siting and transmission line routing in this area.

3.4.3 Public Outreach—September 2021 Virtual Public Meetings

Two virtual routing and siting public meetings were held on September 23, 2021, for stakeholders to learn about the progress made on Pathway, including the development of Focus Areas for identification of transmission line routes and substation sites. These meetings were held virtually due to restrictions on large gatherings due to COVID-19. A total of 63,982 postcards were sent to all mailing addresses within the segment Study Areas announcing the meeting dates, times, and connection information. Thirty-six newspaper ads, a social media post on Facebook, an e-newsletter, and the hotline, email, and website also informed the interested public of the meetings. Attendance during the two meetings is shown in Table 8.

Table 8: Routing and Siting Public Meeting Attendance

Meeting	Attendance
September 23, noon	184 attendees
September 23, 6 pm	81 attendees

A PowerPoint presentation provided information about need and benefits, routing and siting process updates, and upcoming in-person public open houses. A Q&A session was held after the presentation to answer questions. In total, 65 questions were asked and covered the following topics:

- Health and safety
- Project cost and funding
- Landowner compensation and property values
- Resource planning and renewables
- Access to presentation and maps

3.4.4 Public Outreach—Fall 2021 Public Open Houses

Fifteen public open houses were held in October and November 2021 to provide an update on identifying preliminary transmission line links and substation site options and to solicit feedback from stakeholders. The preliminary transmission line links and Focus Areas that were shared with the public and agencies for comment are shown in Figure 4 and Figure 5, respectively. Three of these public open houses were held within the Segment 2 Study Area. In total, 4,462 direct mail postcards were sent to mailing addresses within the Focus Areas. 36 newspaper ads, a social media post on Facebook, an e-newsletter, and hotline, website, and email updates announced the open houses to the interested public. Attendance at the open houses within Segment 2 Study Area is summarized in Table 9.

Table 9: Fall 2021 Public Open House Attendance 1

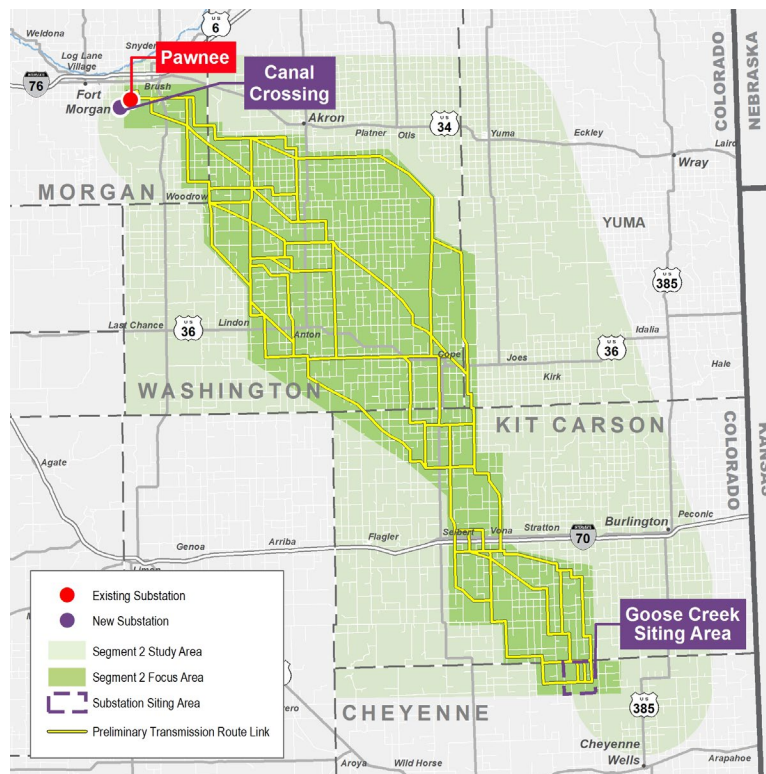
Date	Location	Public Attendance
Monday, October 11	Washington County Event Center, Akron	22 attendees
Tuesday, October 12	Grassroots Community Center, Joes	3 attendees
Tuesday, October 12	Burlington Community Center, Burlington	2 attendees

¹ Meetings were held in additional locations outside of the Segment 2 Study Area and the Goose Creek Siting Study Area. Invitees were encouraged to attend any of the meetings.

The Focus Areas, preliminary transmission line routes, and the Goose Creek Substation Siting Area were shown on large-scale 60-inch-by-38-inch color sheet maps. Attendees were asked to note any factors that should be considered in a particular area directly on the maps using a Sharpie. A formal public comment period ran from October 5 to November 24 in conjunction with the open houses. A paper comment form was distributed at the open houses and was available for download on the Pathway website. An electronic version of the comment form was also available on the website and included a copy of the interactive project map so users could drop a pin to comment on a specific location. A total of 367 comment forms were submitted during the formal comment period, 19 comments pertained to Segment 2. Common topics included:

- Health and safety
- Link and substation site locations
- Landowner compensation and property values
- Resource planning and renewables
- Project support or opposition
- Representatives from Colorado Parks and Wildlife were in attendance and noted the state wildlife area east of Fort Morgan and concern over construction timing and designated walk-in hunting areas

Generally, the public were not receptive to diagonal routing, and noted that grasslands may be less sensitive to this type of routing compared to farmland given the equipment tracks and aerial applicator (crop dusting) paths located within the agricultural fields in the area. Link-specific feedback provided at the open house and resulting modifications from that feedback is included in Appendix E. The following graphic shows all of the preliminary transmission line links shown at the Fall 2021 open houses.



Fall 2021 Preliminary Transmission Line Links

3.5 Step 5: Revise Links, Identify Preferred Route and Substation Sites

The resource data collected in the early stages of the Comparative Analysis were used along with information gathered during field reviews, conversations with jurisdictions, and public feedback to generate a comparative data matrix. The matrix was used as a tool to compare the preliminary transmission line links, or series of links, to each other. This comparison was based on numerical results

of criteria such as engineering factors, jurisdiction/land use factors, presence of homes and other buildings, natural resources, and cultural resources. The complete comparative route matrix utilized for this analysis is provided in Appendix E. Preliminary transmission line links were also revised (removed, added, or modified) based on continued link evaluations and public and key stakeholder review and input; record of the revisions is provided in Appendix D. Key decisions resulting from the comparative matrix analysis and public feedback are discussed in the following sections.

Identifying the location of the preferred route for Segment 2 was accomplished through a process that included engaging the public, landowners, and other stakeholders. Cultural and historic resources, technical and engineering requirements, environmental constraints, existing and planned land use, and other factors that stakeholders have told Xcel Energy are important to consider are evaluated and compared for transmission line route options. These factors are further described in the following graphic. The preferred route selected balanced all these factors.

	CRITERIA	CONSIDERATION
	Acquisition of Land Rights	Existing easements and fee-owned property Jurisdiction and land ownership Formally designated areas with restrictions that prohibit development of transmission lines Existing and planned developments (residential, commercial, other) that may not have enough space for easements
	Substation Engineering	Vacant developable land Available for purchase 60-acre site Accessibility for construction and operation – located adjacent to maintained public roads
	Transmission Engineering	Topography/slope Proximity to buildings (homes, businesses) Transportation infrastructure (Roads, Railroads, and Airports) Military and other special use airspace Oil & gas infrastructure such as wells and pipelines
	Electric System Planning	Adjacency to existing transmission lines – reliability and redundancy Electric system interconnections (substations) Line length
	Economics	Overall route length Construction, operation, and maintenance needs such as access Structure types required for straight sections for turns/angles
	Environmental and Cultural Resources	Land use/land cover Proximity to residences and structures Designated scenic areas Special status and protected species habitat, critical habitat Wetlands and waterways Cultural and historic sites
	Public Involvement	Landowner feedback Stakeholder discussions Comments received during public open houses and through Project website, email, and hotline Proximity to homes Noise EMF Wildlife impacts Agricultural operations Traffic Visual impacts Landowner interest
	Renewable and Other Generation Resources	Existing and planned utility-scale wind and solar facilities Renewable generation zones Future electric system interconnections
	Regulatory Compliance	Local land use permitting requirements such as zoning and setbacks Coordination with Colorado Parks & Wildlife and U.S. Fish & Wildlife Service Federal Aviation Administration and Department of Defense and/or other military airspace requirements Army Corps of Engineers for wetlands/waterways

Routing and Siting Considerations

As routing progressed it was determined that locating the Canal Crossing Substation further south of the existing Pawnee Substation provided additional routing and future interconnect feasibility, avoided routing up and around Pawnee Substation, and avoided wrapping around the Brush Prairie Ponds State Wildlife Area. The Canal Crossing Siting Area was generated to explore siting in this area. The Canal Crossing Siting Area is 2 miles wide bounded by the Pawnee Substation to the north and extends approximately 6 miles south. A map depicting the Canal Crossing Siting Area and Suitability Analysis results is included as Figure 6.

3.5.1 Transmission Line

Based on landowner feedback during the public meetings, the diagonal preliminary transmission line links were generally unfavorable because they cut through section lines, disrupting existing land use and/or future land use and limiting the amount of potential renewable development. In response, many diagonal links were either removed or modified to “stair step” down to connecting links and follow section lines, roads, field lines, or parcel boundaries. The longer easterly Links 213, 251, 252, and 253 either featured diagonal routing or greater line length that resulted in their removal from consideration, further narrowing the Focus Area. As a result, links that connected these eliminated links to others under consideration were removed. Several shorter diagonal links were removed due to landowner requests and those that paralleled existing gas pipelines for longer lengths were removed due to potential induced voltage or cathodic protection requirements.

The size of the Focus Area and number of preliminary transmission line links resulted in numerous end-to-end link combinations. Instead of comparing all possible end-to-end combinations against each other, series of links that served the same purpose of moving through a particular region of the Focus Area were compared against each other. Looking at these series of links at a local level enabled a more granular analysis of impacts and links that not only minimized, but balanced impacts across resources were chosen as the preferred. Alternative options to some preferred transmission line links were also identified. Other additional links were eliminated from consideration, and the Focus Area was revised. As preferred links were successively identified at a local level, the overall preferred route was pieced together. The preferred end-to-end route was then compared to the end-to-end alternative routes. The revised Focus Area and preliminary preferred and alternative routes are shown on Figure 7.

3.5.2 Public Outreach—Winter 2022 Public Open Houses

Fifteen public open houses were held in January and February 2022 to share up-to-date preliminary transmission line links, Focus Areas, and routing decisions with the public, and gather feedback. Three of these open houses were held within the Segment 2 Study Area. A total of 14,825 direct mail postcards were sent to all property owners within the Focus Areas. 36 newspaper ads, 12 radio ads, a social media post on Facebook, an e-newsletter, and hotline, website, and email updates announced the open houses to the interested public. Attendance at the open houses within Segment 2 Study Area is listed in Table 10.

Table 10: Winter 2022 Public Open House Attendance ¹

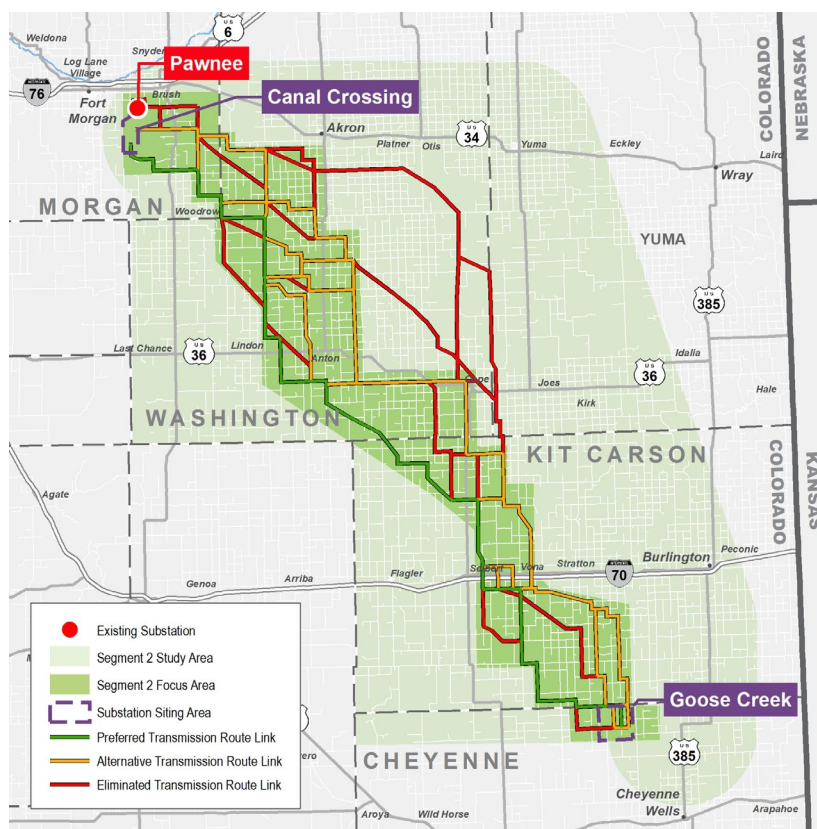
Date	Location	Public Attendance
Wednesday, January 26	Washington County Event Center, Akron	25 attendees
Thursday, January 27	Grassroots Community Center, Joes	31 attendees
Thursday, January 27	Seibert Community Center, Seibert	30 attendees

¹ Meetings were held in additional locations outside of the Segment 2 Study Area and the Canal Crossing and Goose Creek Siting Study Areas. Invitees were encouraged to attend any of the meetings.

The preferred Segment 2 transmission line route and Substation Siting Areas were displayed on large-scale 60-inch-by-38-inch color sheet maps. Attendees were asked to note any factors that should be considered in a particular area directly on the maps using a Sharpie and to submit comment forms. A formal public comment period ran from January 21 to March 17, 2022, in conjunction with the open houses. A paper comment form was distributed at the open houses and was available for download on the Pathway website. An electronic version of the comment form was also available on the website and included a copy of the interactive Pathway map so users could drop a pin to comment on a specific location. A total of 498 comment forms were submitted during the formal comment period; 16 comments pertained to Segment 2. Common topics included:

- Health and safety
- General project support and opposition
- Link and substation site locations
- Wildlife and environmental impacts
- Resource planning and renewables
- Landowner compensation and property values

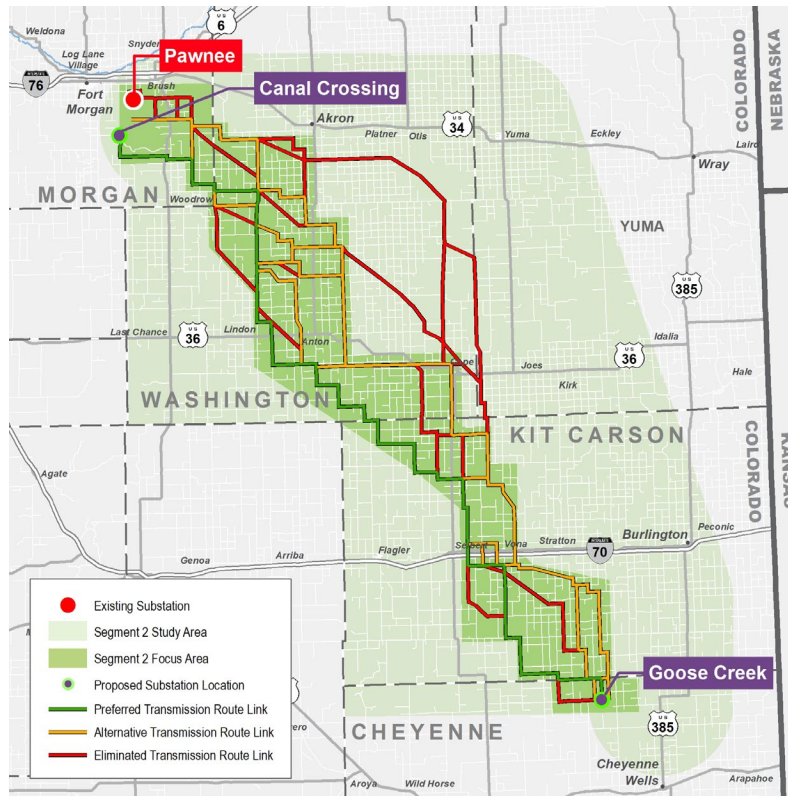
Several landowners suggested modifications to follow section or field lines to avoid bisecting parcels and impacts to crop dusting operations. The Farm Service Agency District Representative for Washington County and the District Director attended the meeting in Akron to discuss Conservation Reserve Program lands. Link-specific feedback provided at the open house and resulting modifications from that feedback is included in Appendix D. The following graphic depicts the links shown at the Winter 2022 open houses.



Winter 2022 Transmission Line Links

3.5.3 Revised Preferred Route

Based on public and landowner feedback received during and following the Winter 2022 Open Houses, the preferred route was revised and additional modifications were made to the alternative and eliminated links. The revised preferred and alternative routes are shown on Figure 8 and the following graphic. The complete comparative route matrix is provided in Appendix E.



Revised Preferred Route Links

Total transmission line length was a major factor in identifying the preferred and alternative routes. The preferred route hugs the western edge of the Focus Area as it provides a more direct route to the Goose Creek Substation Siting Area. The preferred route also avoids LPC habitat and minimizes wetland impacts at the South Fork Republican River crossing. Additional statistics on the preferred route and example alternative routes are provided in Table 11. The preferred and alternative transmission line links are shown in Figure 8.

Table 11: Segment 2 Preferred and Alternative Route Statistics

Metric	Preferred Route	Example Alternative Route 1	Example Alternative Route 2
Overall Length	145 miles	142 miles	143.5 miles
Length in Morgan County	20.9 miles	12.2 miles	21.3 miles
Length in Washington County	53.2 miles	73 miles	63.3 miles
Length in Yuma County	–	–	–
Length in Kit Carson County	61.8 miles	52 miles	54.9 miles
Length in Cheyenne County	9 miles	5 miles	4 miles
Counties traversed	4 counties	4 counties	4 counties
Number of transmission line crossings	9 crossings	11 crossings	11 crossings
Length adjacent to existing transmission line (within 200ft)	0.6 miles	4.3 miles	4.3 miles
Length adjacent to all roads	55.1 miles (38% of overall length)	51.6 miles (36% of overall length)	58 miles (41% of overall length)
Parcels Crossed	229 parcels	236 parcels	241 parcels
Landowners Crossed	172 landowners	204 landowners	203 landowners
Total homes within 0.25-mile	7 homes	9 homes	9 homes
Number of diagonal preliminary transmission line links	1 link	2 links	4 links

Note: Green highlighting indicates the route with the least amount of impact.

3.5.4 Substation Site Selection

Identification of the preferred substation sites was largely driven by routing as it was a more constrained factor. Based on the location of the preferred transmission line route and the substation suitability analyses, preferred substation sites were chosen. These sites meet the substation siting criteria, are most suitable and compatible with substation construction and operation, and are accessible via the preferred transmission line route. The preferred sites are also owned by landowners who show an interest in substation development on their property. The preferred Canal Crossing and Goose Creek substation sites are shown in Figure 8.

4.0 Next Steps

4.1 Ongoing Local Government, Key Stakeholder, and Public Outreach

The Pathway website, email address, and hotline will continue to be updated with the latest information on routing decisions, opportunities for public involvement, permitting, and construction. These resources will continue to serve as ways for the public and stakeholders to stay informed about progress and communicate with representatives. Information presented during the virtual and in person open houses is provided on the Pathway website for ongoing reference.

No additional open houses are planned within Segment 2 at this time since the preferred transmission line route and substation sites have been chosen. Any open houses and/or public hearings required by Segment 2 permitting entities will be conducted as Pathway progresses through the permitting phase.

4.2 Final Design, Permitting, Construction, and In Service

4.2.1 Final Design, Landowner Outreach, and Micrositing

Transmission poles vary in height depending on voltage (size of line), terrain, length of span between transmission poles, sag of the conductor, pole type, and minimum electrical clearance prescribed by the National Electric Safety Code. Anticipated design of the transmission poles constructed for Pathway is discussed in Section 1. Final design and location of the transmission poles is still ongoing and will be finalized prior to material order placement and construction.

Final route refinement will occur at the local level as easements are secured with landowners and Pathway proceeds to the permitting phase. Landowner preferences, jurisdictional input, and locations of sensitive resources may influence the exact locations of the transmission poles, pole design, and the ultimate location of the transmission line and substations.

4.2.2 Permitting

Federal, state, and local permits/approvals may be required prior to construction. Any necessary construction-related authorizations, which are typically administrative in nature, will be obtained between the time local land use permits are approved and when construction begins. State approvals may include, for example, permits for road, bridge, and highway crossings or road occupancy permits from the Colorado Department of Transportation; and stormwater discharge permits and Air Pollution Emissions Notice from the Colorado Department of Public Health and Environment. Federal permits may be required for construction related impacts to wetland or waterbodies from the U.S. Army Corps of Engineers.

Jurisdictional outreach was conducted with each county anticipated to be crossed by the transmission line route or where endpoint substations are located to solicit feedback and discuss potential land use permits that may be required for the transmission line and each substation. It is anticipated that land use permitting with jurisdictions crossed by the preferred transmission line route and substation sites will be triggered. These authorizations may include, for example, Special Use Permits, Conditional Use Permits, or House Bill 1041 Areas and Activities of State Interest Permits. The anticipated local land use permits for Segment 2 preferred transmission line route and substation sites were identified based on a review of

local land use code and early coordination with county representatives; these permits are listed in Table 12. Permits for temporary construction laydown and staging areas from local jurisdictions may also be required. All necessary land use and construction-related permits will be acquired from the appropriate county and municipal authorities.

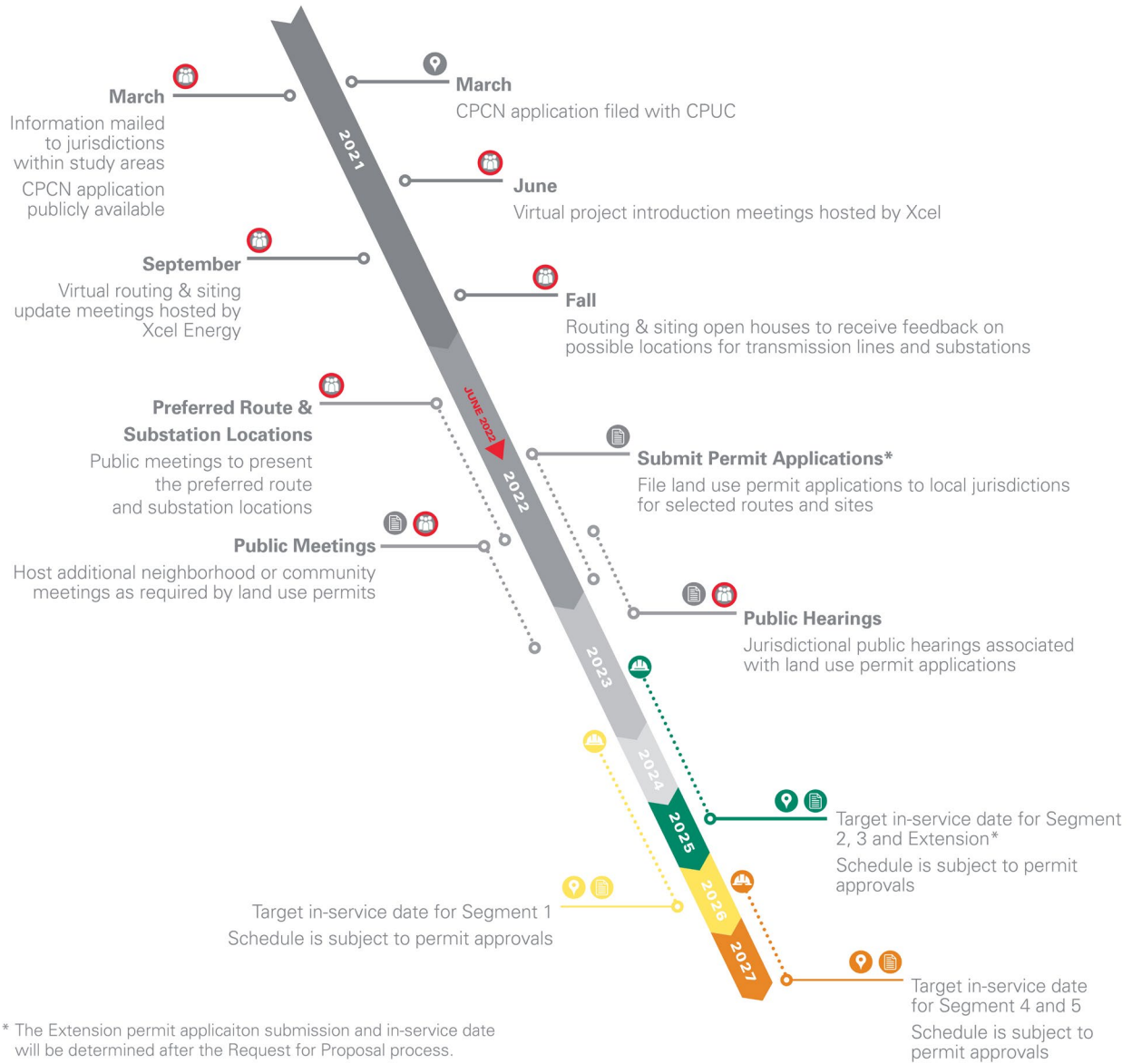
Table 12: Anticipated Segment 2 Land Use Permits

County	Data Source(s)	Permit
Morgan	Morgan County (2021)	Areas and Activities of State Interest (1041)
Washington	Washington County (2022)	Use by Special Review Permit and 1041 Permit
Kit Carson	Kit Carson County (2021)	Land Use Change Permit
Cheyenne	Cheyenne County (2022)	Conditional Use Permit and 1041 Permit

4.2.3 Construction and In-service

Construction of the Segment 2 transmission line, Canal Crossing Substation, and Goose Creek Substation is anticipated to start in 2023 and has an estimated 2-year construction duration through 2025. The estimated in-service date for these facilities is 2025.

The estimated schedule for Pathway is displayed in the following graphic. There are many variables that factor into the construction schedule for projects of this magnitude. One key variable that may impact the construction schedule is the timing of approval for final siting and routing for each segment of transmission line and substation and acquiring all necessary land rights and permits. Other construction timing variables include engineering design or scope changes that may occur over the course of Pathway development and the timing of equipment procurement.



Pathway Estimated Schedule

5.0 References

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FIGURES

Figure 1: Segment 2 Study Area

Figure 2: Segment 2 Study Area Suitability

Figure 3: Goose Creek Substation Siting Study Area Suitability

Figure 4: Segment 2 Preliminary Links

Figure 5: Segment 2 Focus Area and Goose Creek Substation Siting Study Area

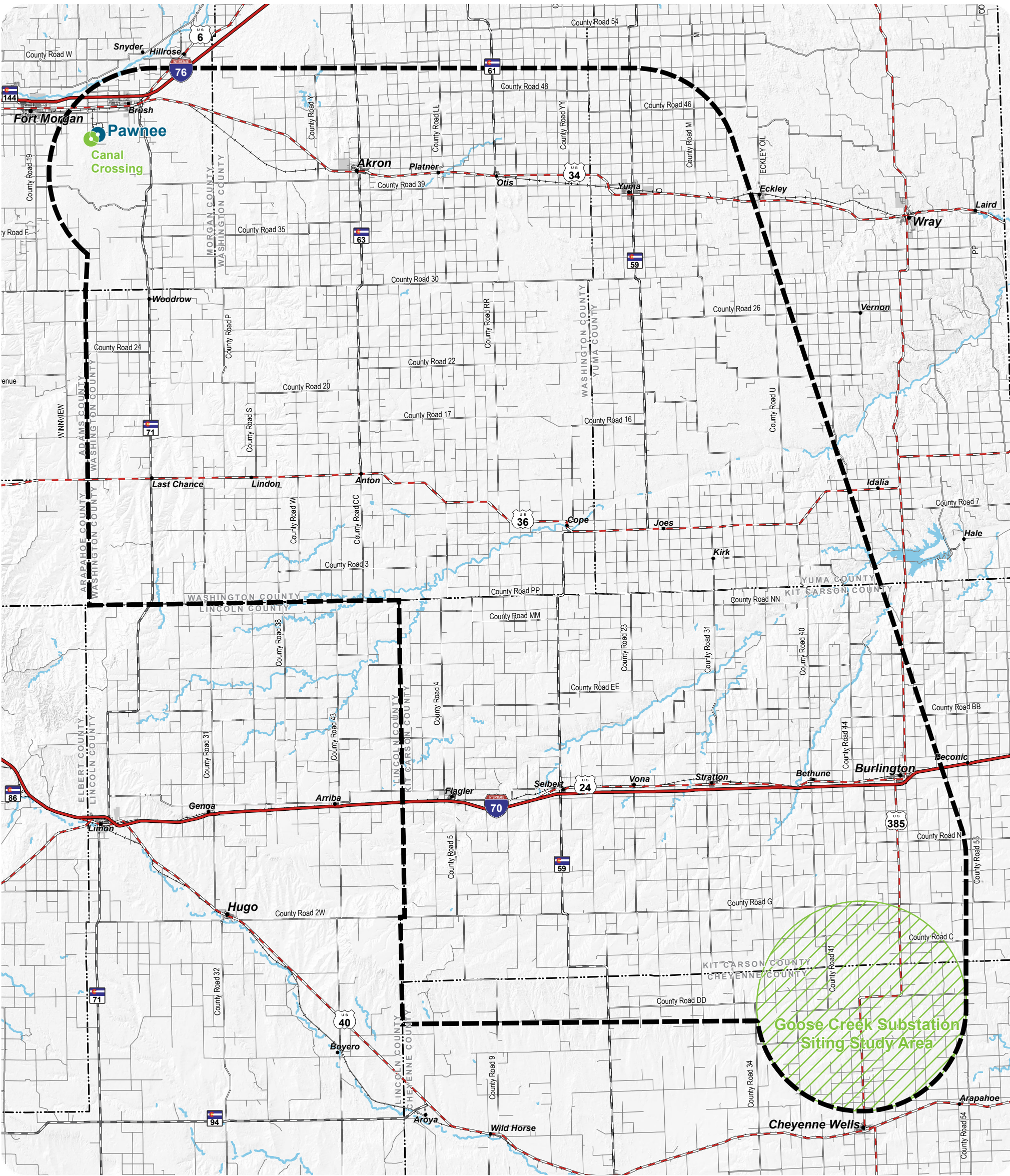
Figure 6: Canal Crossing Substation Siting Area and Suitability

Figure 7: Segment 2 Winter 2022 Preferred Route, Revised Focus Area and Substation Siting Areas

Figure 8: Segment 2 Revised Preferred Route and Substation Sites

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COLORADO'S POWER PATHWAY



Legend

- Existing Substation
- New 345kV Substation
- Study Area
- New 345kV Substation Siting Study Area

Transportation
(CDOT 2021, BTS 2020)

- Interstate
- U.S. Highway
- State Highway
- Local Road
- Railroad

Hydrology
(NHD 2020)

- Waterbody

Boundary
(CDOT 2021, DOLA 2021)

- Municipal Boundary
- County

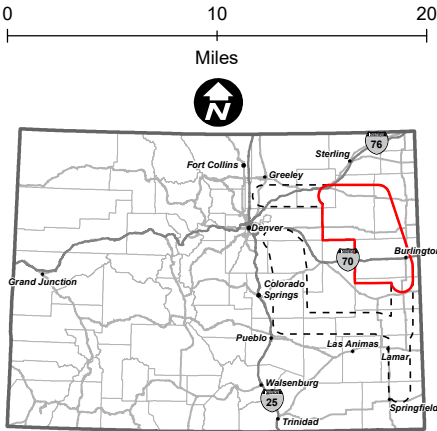
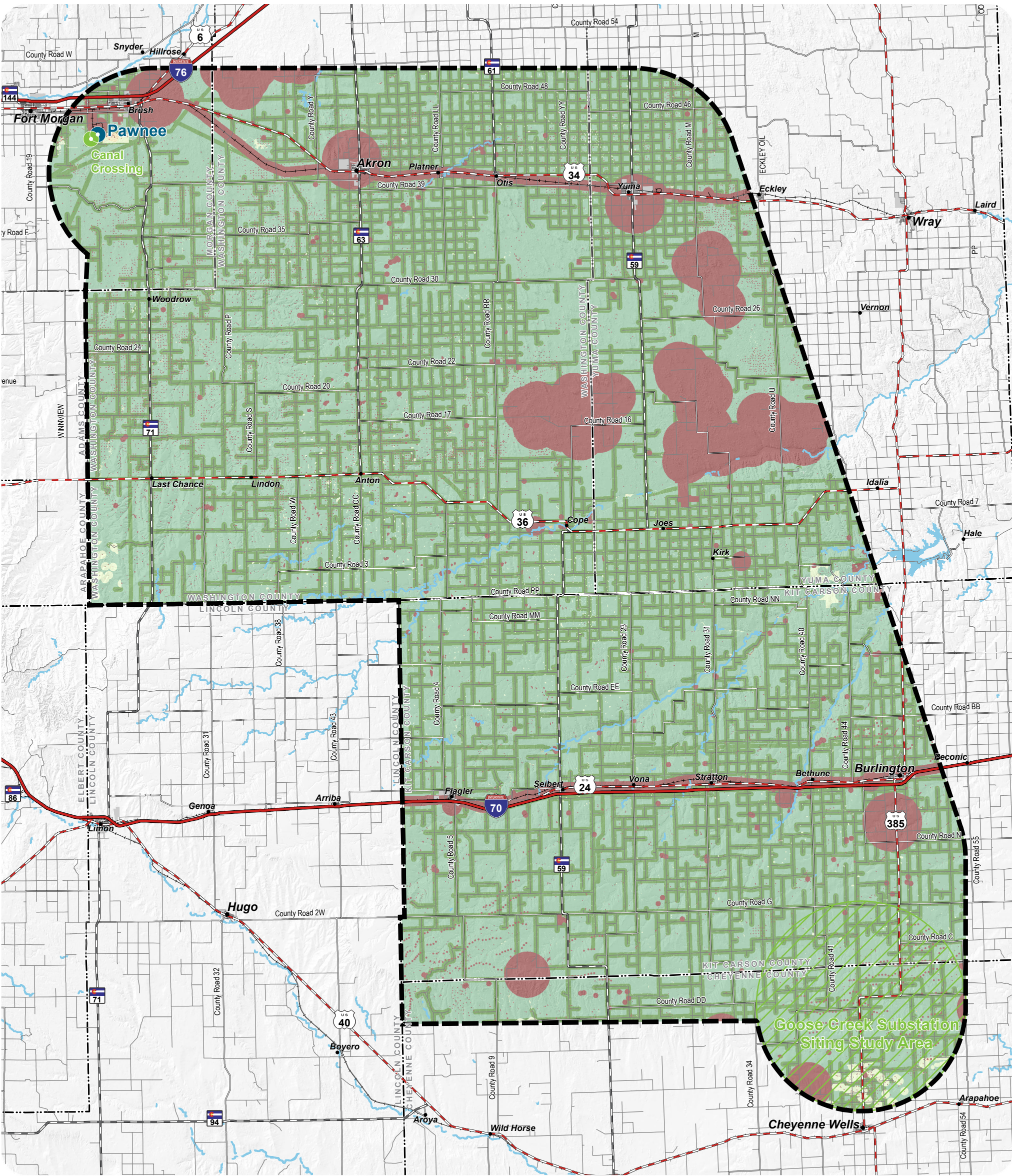


Figure 1: Segment 2 Study Area

COLORADO'S POWER PATHWAY



Legend

- Existing Substation
 - New 345kV Substation
 - Study Area
 - New 345kV Substation Siting Study Area
- Transportation**
(CDOT 2021, BTS 2020)
- Interstate
 - U.S. Highway
 - State Highway
 - Local Road
 - Railroad

- Hydrology**
(NHD 2020)
- Waterbody
- Boundary**
(CDOT 2021, DOLA 2021)
- Municipal Boundary
 - County

- Suitability**
(August 18th, 2021)
- Most Suitable
 - Less Suitable
 - Least Suitable
 - Exclusion Area

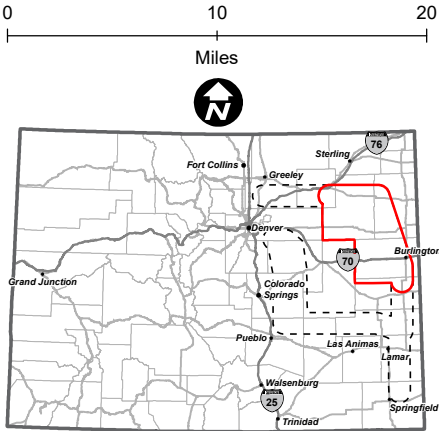


Figure 2: Segment 2 Study Area Suitability

COLORADO'S POWER PATHWAY

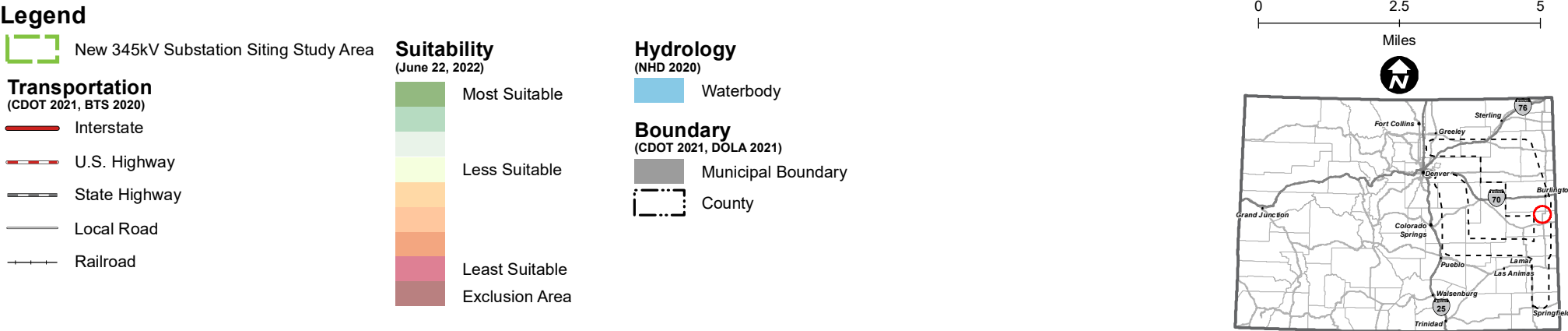
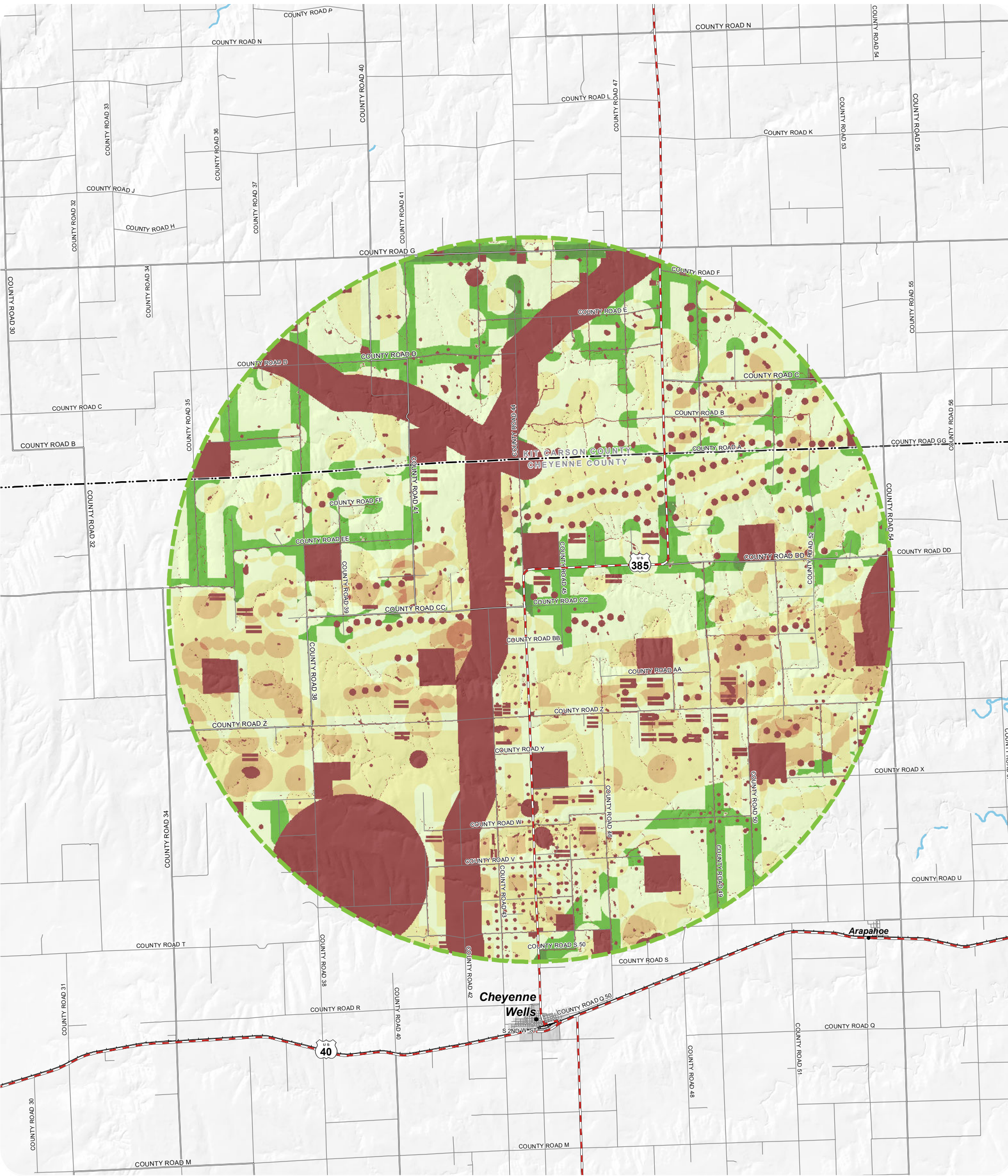
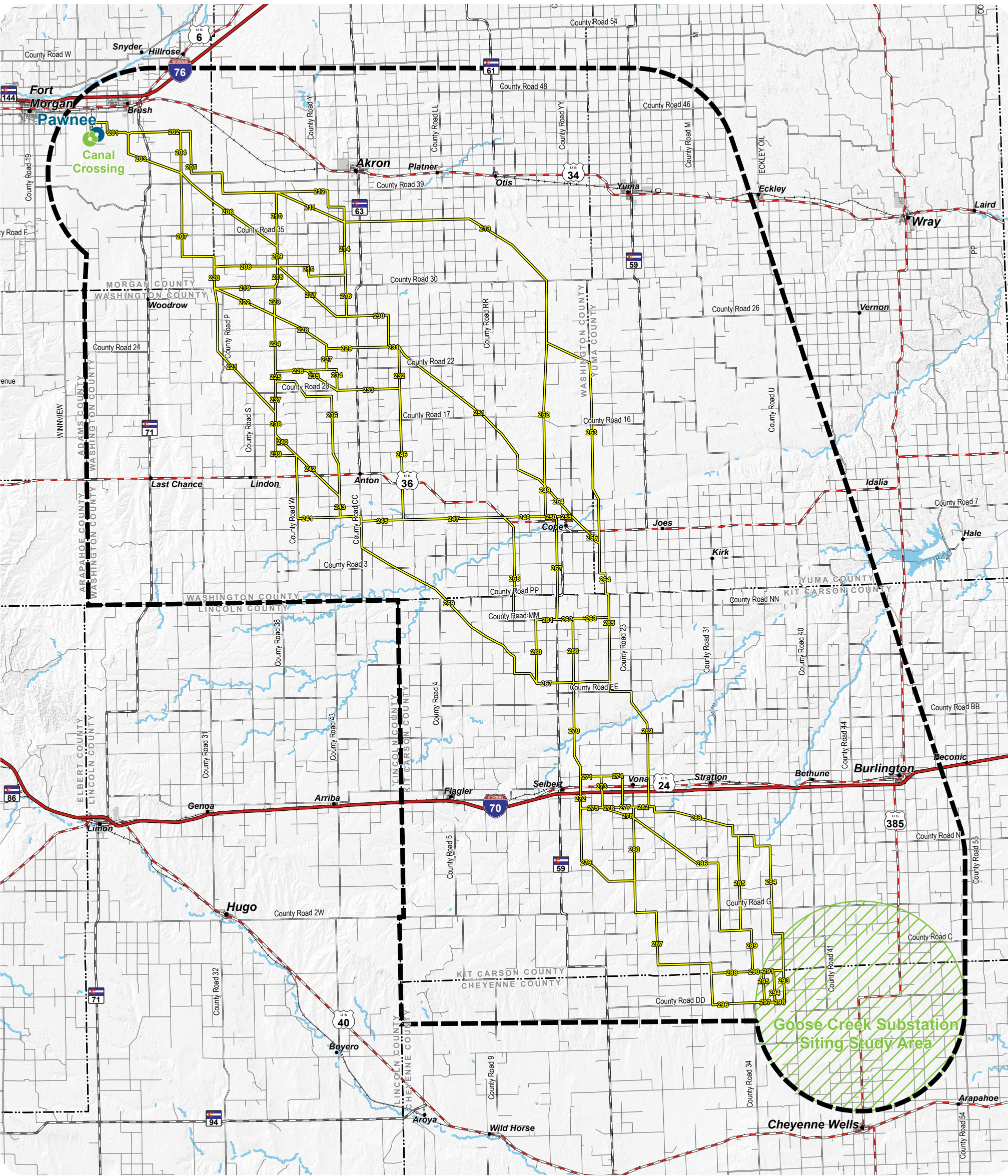


Figure 3: Goose Creek Substation Siting Study Area Suitability

COLORADO'S POWER PATHWAY



Legend

- Existing Substation
- New 345kV Substation
- Study Area
- Preliminary Transmission Route Link
- New 345kV Substation Siting Study Area

Transportation
(CDOT 2021, BTS 2020)

- Interstate
- U.S. Highway
- State Highway
- Local Road
- Railroad

Hydrology
(NHD 2020)

- Waterbody

Boundary
(CDOT 2021, DOLA 2021)

- Municipal Boundary
- County

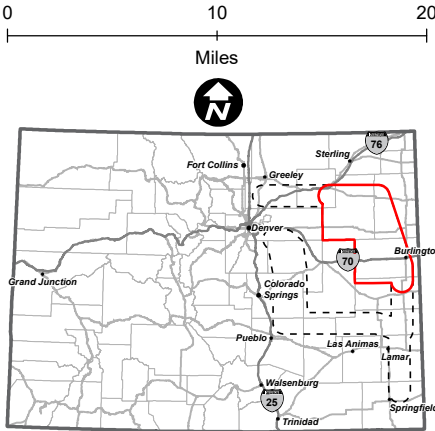
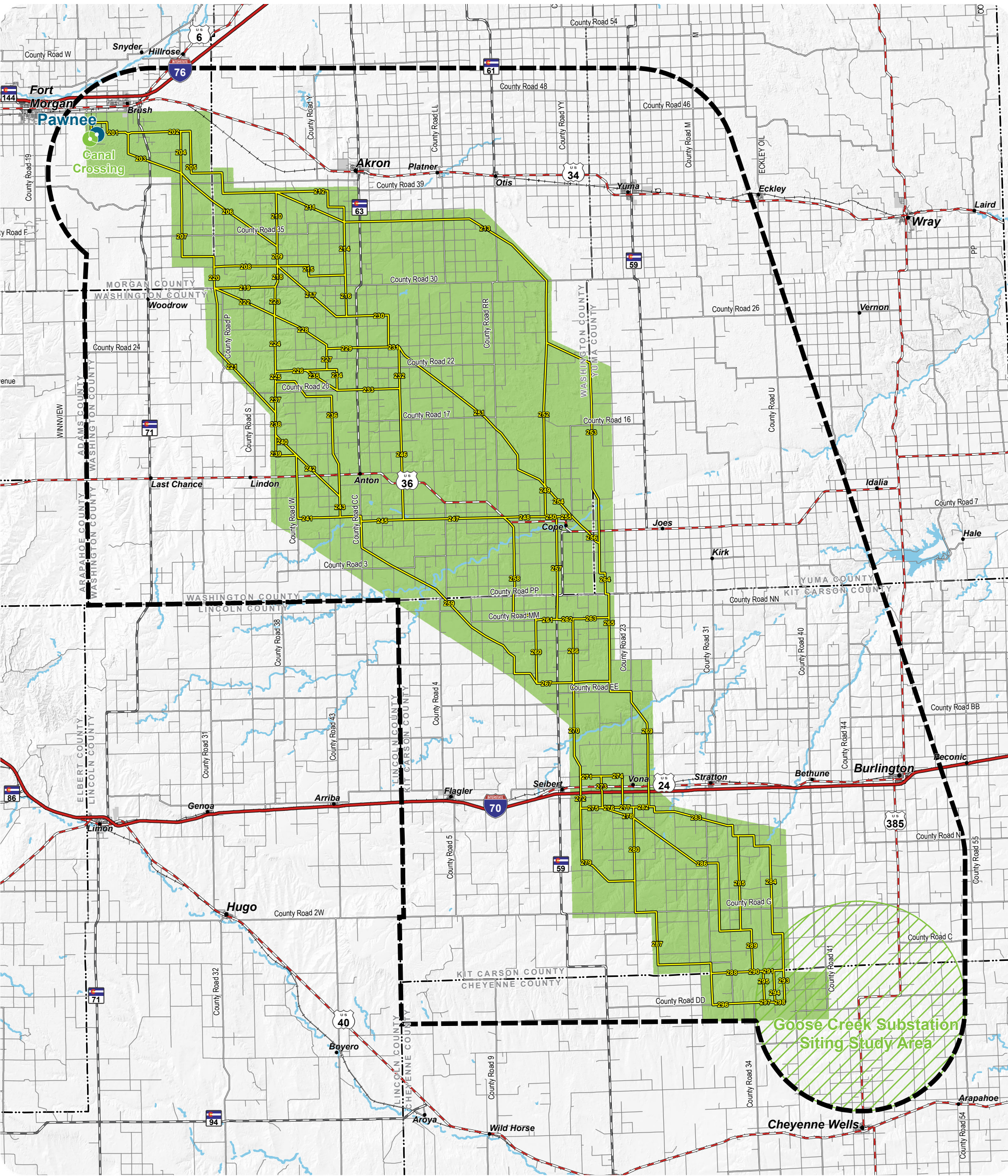


Figure 4: Segment 2 Preliminary Links

COLORADO'S POWER PATHWAY



Legend

- Existing Substation
- New 345kV Substation
- Study Area
- Preliminary Transmission Route Link
- New 345kV Substation Siting Study Area
- Focus Area

Hydrology
(NHD 2020)

- Waterbody

Boundary
(CDOT 2021, DOLA 2021)

- Municipal Boundary
- County

Transportation
(CDOT 2021, BTS 2020)

- Interstate
- U.S. Highway
- State Highway
- Local Road
- Railroad

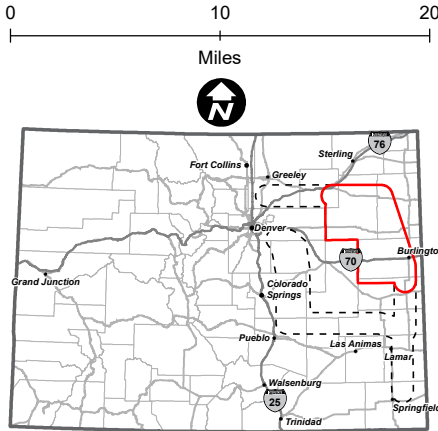


Figure 5: Segment 2 Focus Area and Goose Creek Substation Siting Study Area

COLORADO'S POWER PATHWAY

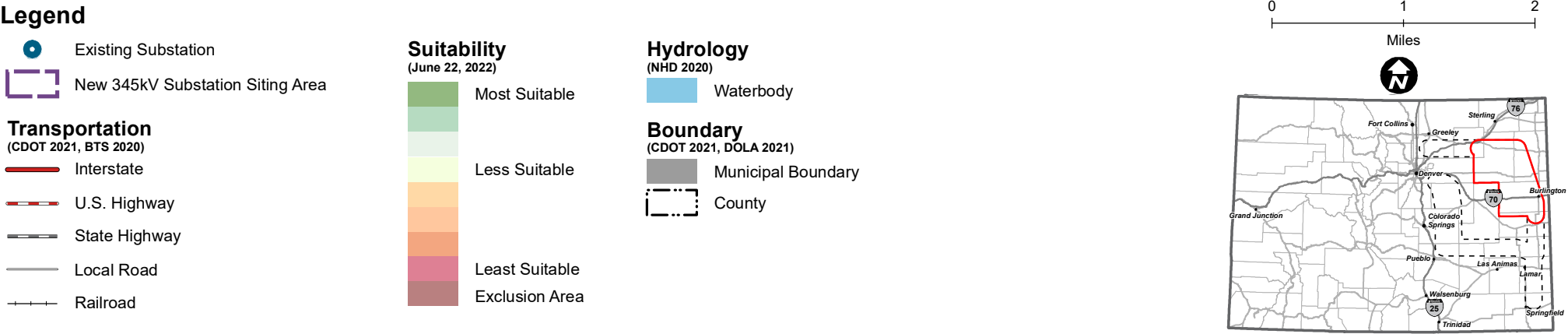
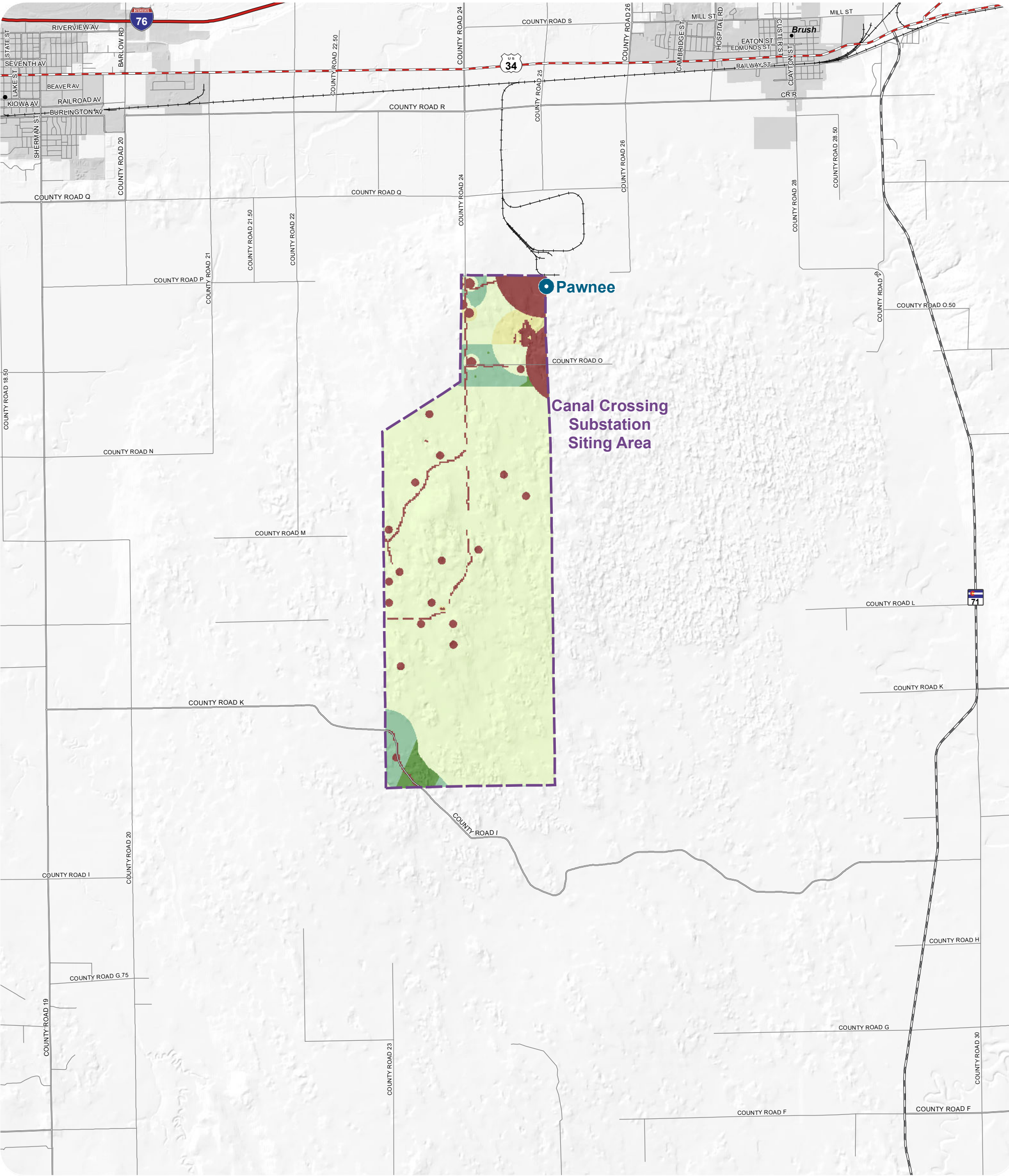
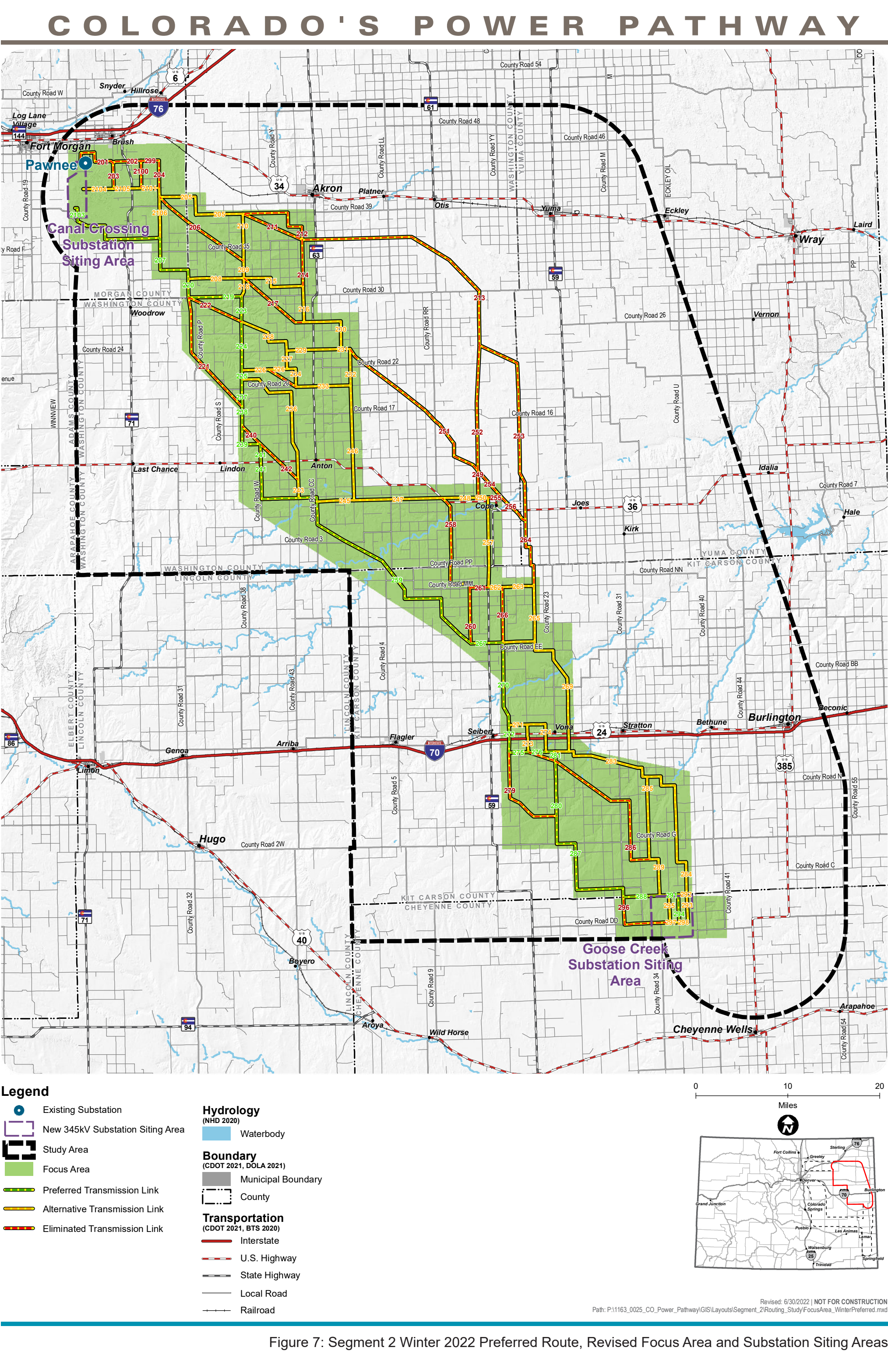


Figure 6: Canal Crossing Substation Siting Area and Suitability



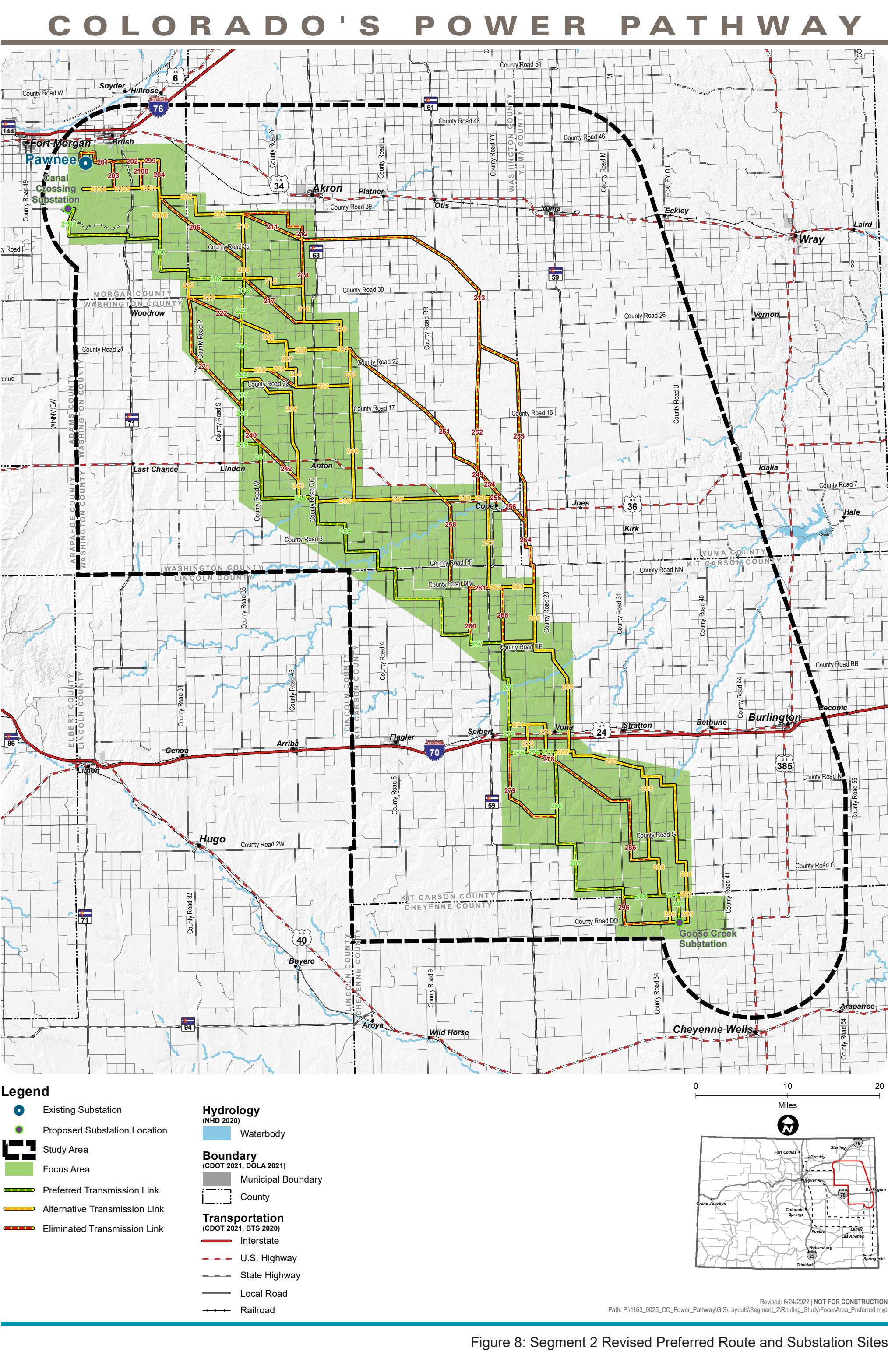
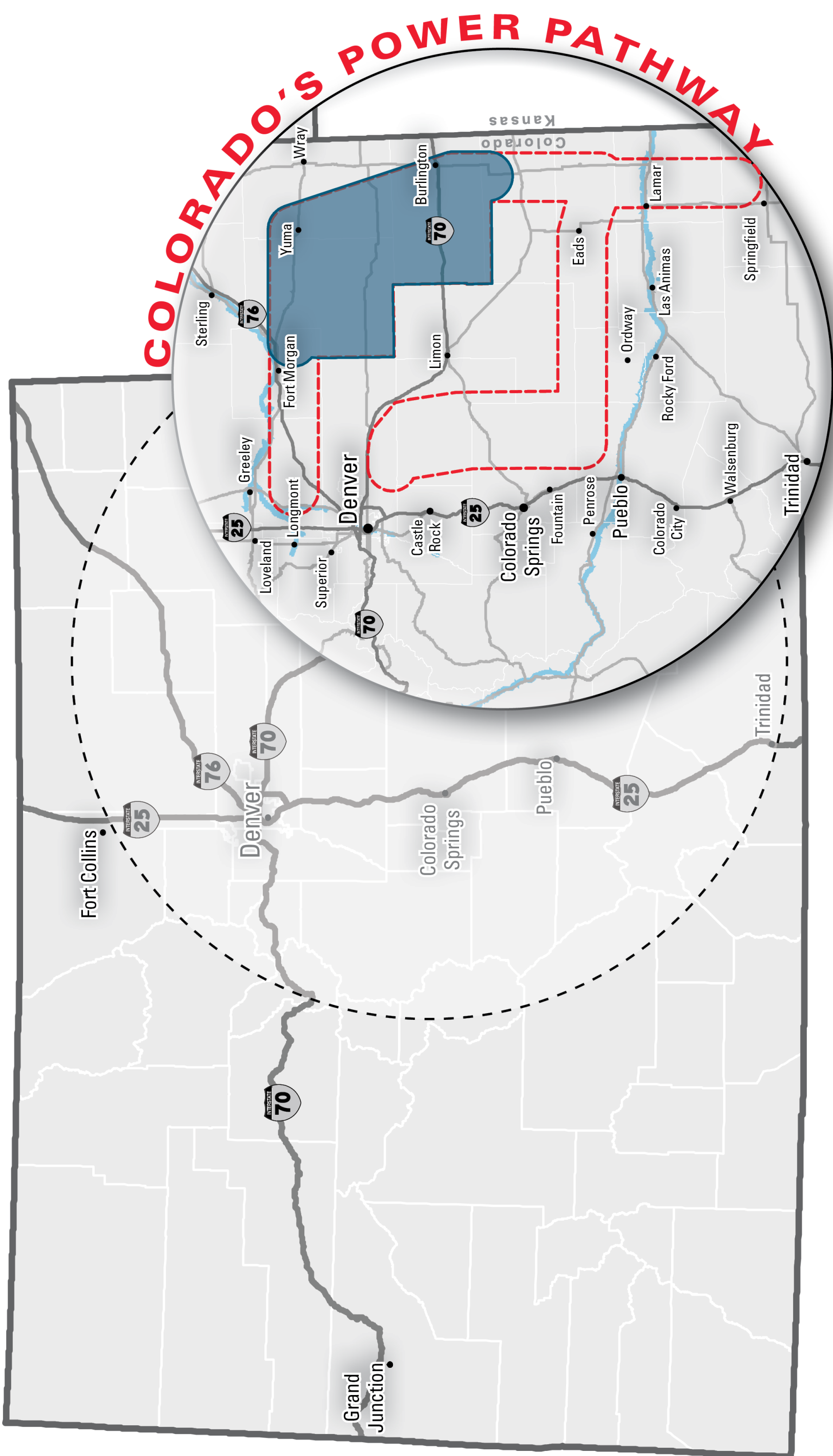


Figure 8: Segment 2 Revised Preferred Route and Substation Sites

Appendix A: Resource Maps

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CONTENTS: RESOURCE MAP LIST

2021 Aerial [1]

Jurisdiction [2]

Land Cover [3]

Zoning [4]

State Wildlife Action Plan [5]

Public Institutions [6]

Historic Places [7]

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Parcels [20]

Structures [21]

Public Land Survey [22]

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EPA Registered Facilities [24]

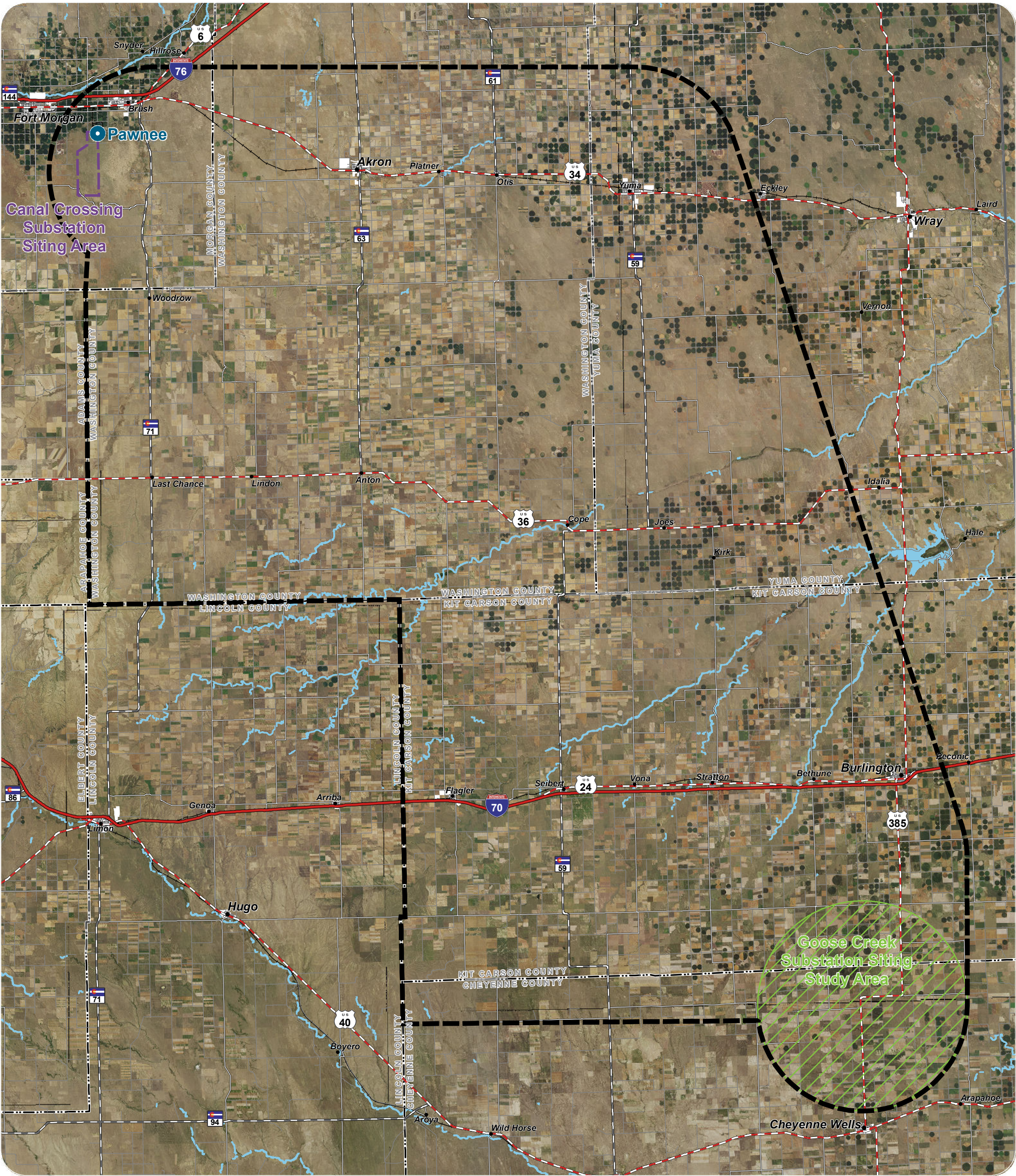
Karst Areas [25]

Wildlife Species Habitat [26]

Soil Erodibility [27]

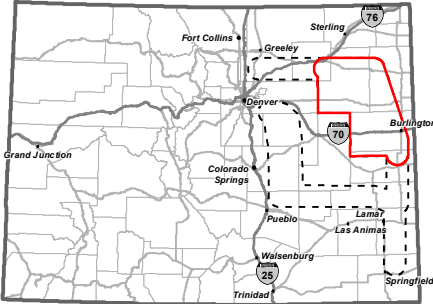
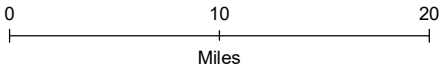
Important Bird Areas [28]

COLORADO'S POWER PATHWAY



Legend

- Existing Substation
- Study Area
- New 345kV Substation Siting Study Area
- New 345kV Substation Siting Area
- Transportation**
(CDOT 2021, BTS 2020)
- Interstate
- U.S. Highway
- State Highway
- Local Road
- Railroad
- Boundary**
(CDOT 2021, DOLA 2021)
- Municipal Boundary
- County
- Hydrology**
(NHD 2020)
- Waterbody
- *Aerial - 2021 NAIP Imagery**



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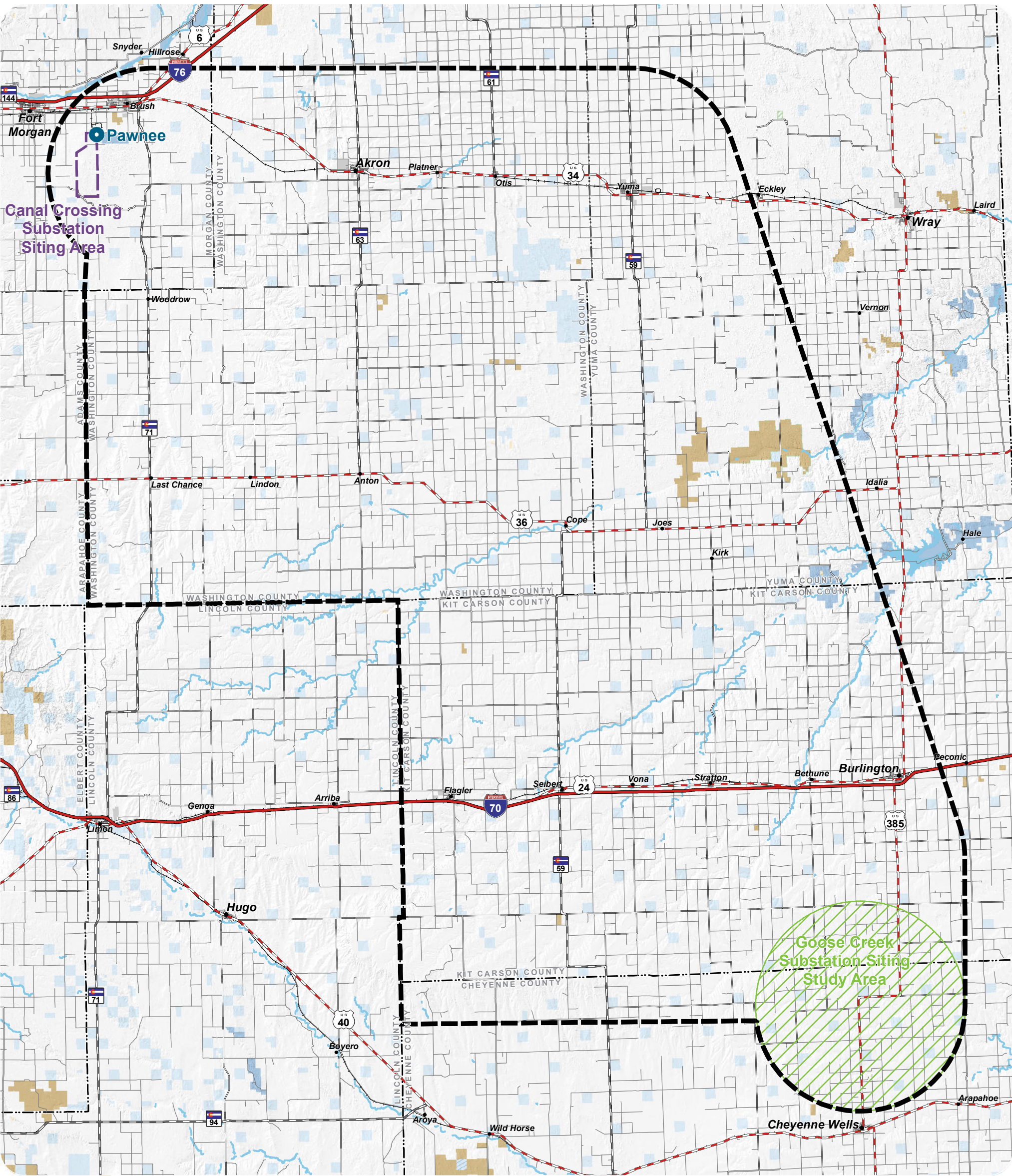
Revised: 6/24/2022 | NOT FOR CONSTRUCTION

Path: (194fs1) P:\1163_0025_CO_Power_Pathway\GIS\Layouts\Segment_2\Resource_Maps\Aerial.mxd

Segment 2 - Canal Crossing to Goose Creek

Aerial

COLORADO'S POWER PATHWAY

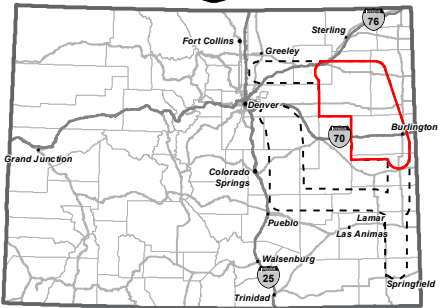
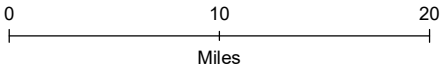


Legend

- Existing Substation
 - Study Area
 - New 345kV Substation Siting Study Area
 - New 345kV Substation Siting Area
- Transportation**
(CDOT 2021, BTS 2020)
- Interstate
 - U.S. Highway
 - State Highway
 - Local Road
 - Railroad

- Jurisdiction**
(COMap 2019)
- Bureau of Land Management
 - CO State Stewardship
 - State
 - State Wildlife Area
 - Conservation Easement
 - Local Park
- Boundary**
(CDOT 2021, DOLA 2021)
- Municipal Boundary
 - County

- Hydrology**
(NHD 2020)
- Waterbody



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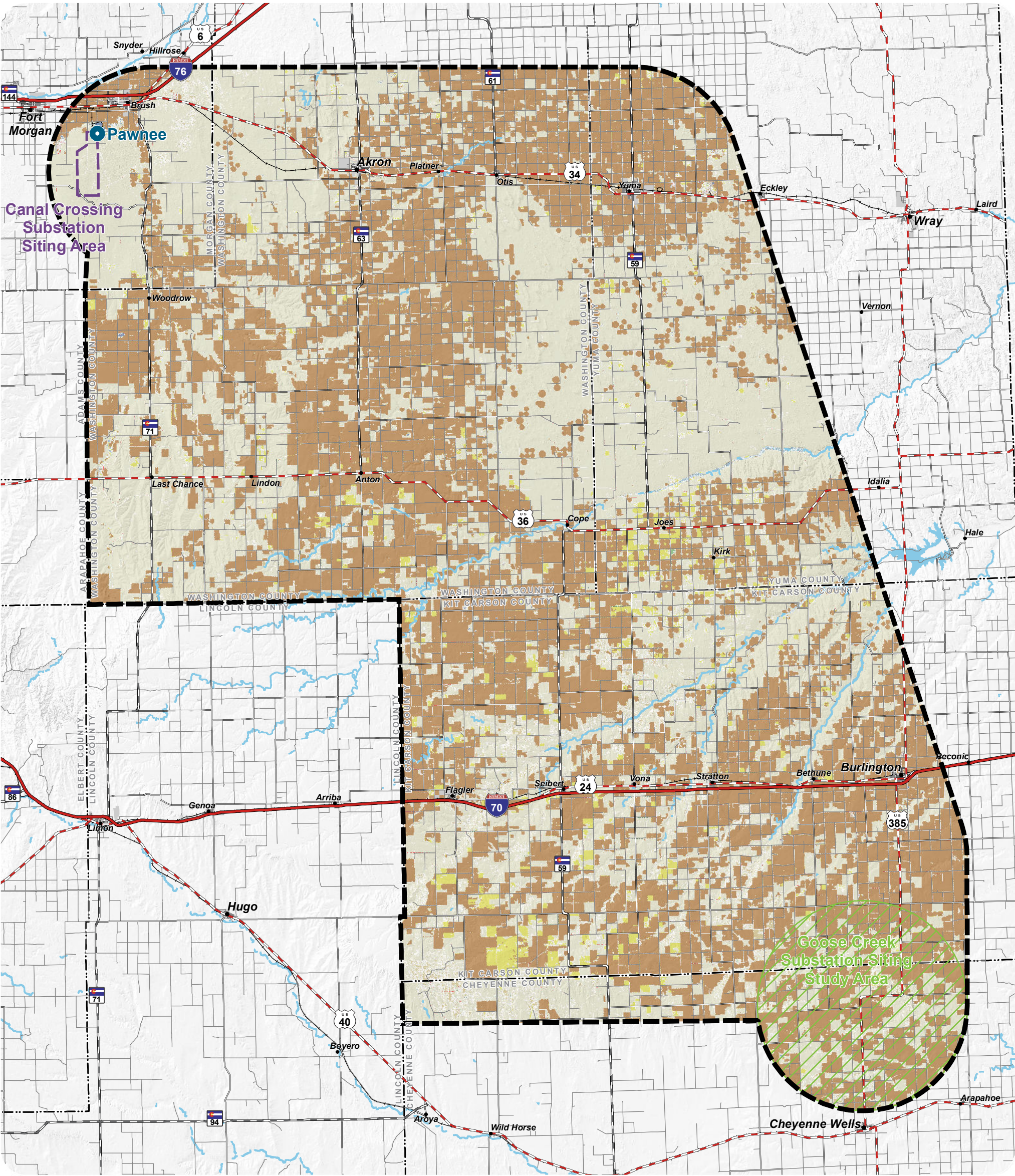
Revised: 6/24/2022 | NOT FOR CONSTRUCTION

Path: P:\1163_0025_CO_Power_Pathway\GIS\Layouts\Segment_2\Resource_Maps\Jurisdiction.mxd

Segment 2 - Canal Crossing to Goose Creek

Jurisdiction

COLORADO'S POWER PATHWAY



Legend

- Existing Substation
- Study Area
- New 345kV Substation Siting Study Area
- New 345kV Substation Siting Area

Hydrology (NHD 2020)

- Waterbody

Boundary (CDOT 2021, DOLA 2021)

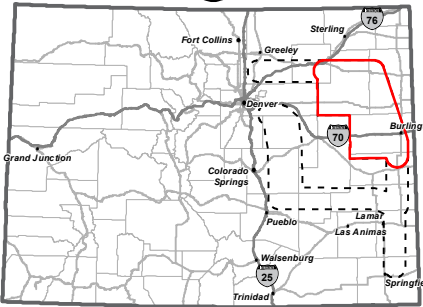
- Municipal Boundary
- County

NLCD Land Cover (NLCD, 2019)

- | | |
|-----------------------------|------------------------------|
| Open Water | Herbaceous |
| Developed, Open Space | Hay/Pasture |
| Developed, Low Intensity | Cultivated Crops |
| Developed, Medium Intensity | Woody Wetlands |
| Developed, High Intensity | Emergent Herbaceous Wetlands |
| Barren Land | |
| Mixed Forest | |
| Deciduous Forest | |
| Evergreen Forest | |
| Shrub/Scrub | |

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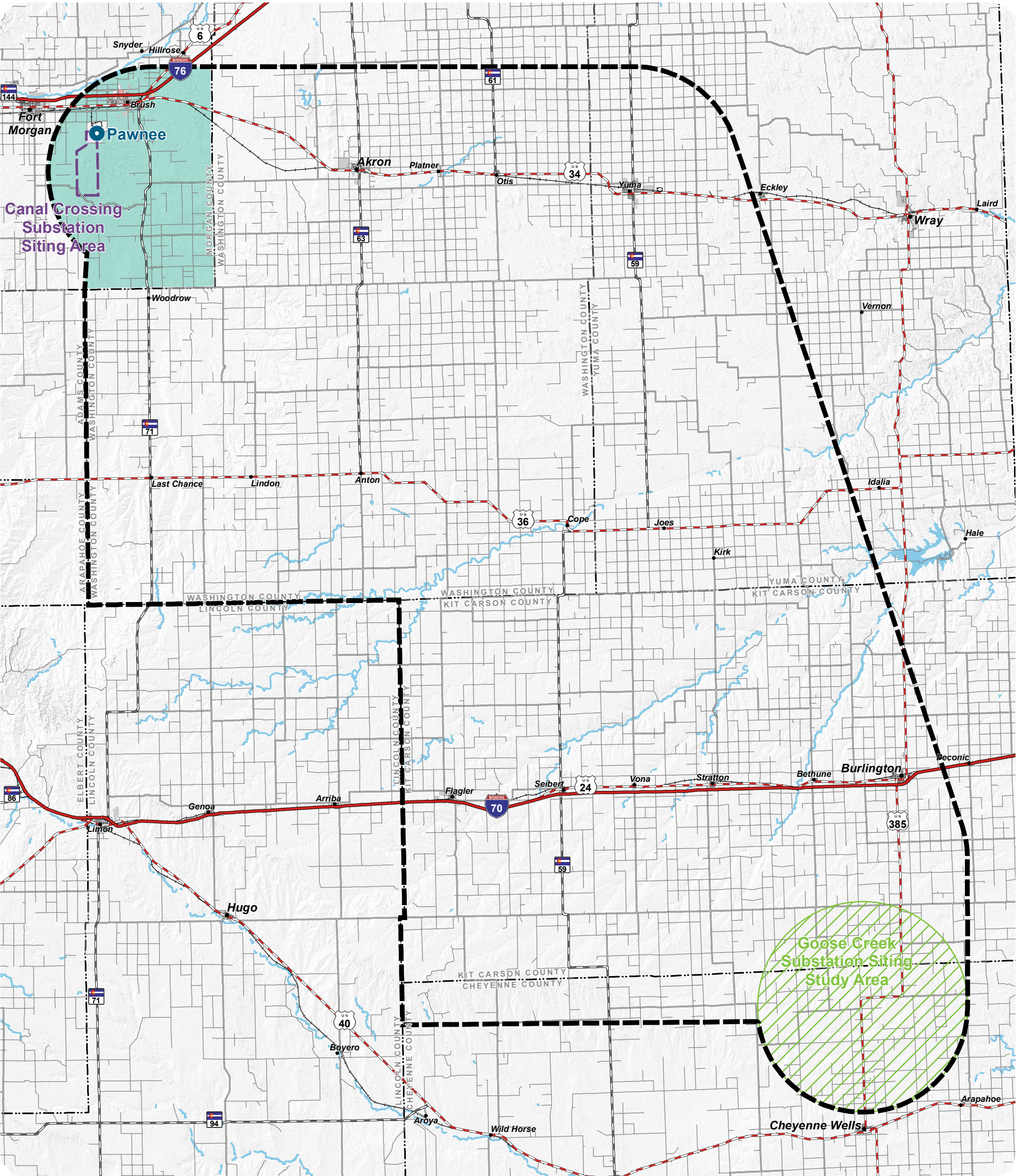
Revised: 6/24/2022 | NOT FOR CONSTRUCTION

Path: P:\1163_0025_CO_Power_Pathway\GIS\Layouts\Segment_2\Resource_Maps\NLCD.mxd

Segment 2 - Canal Crossing to Goose Creek

NLCD Land Cover

COLORADO'S POWER PATHWAY



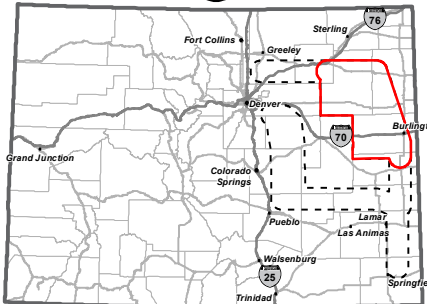
Legend

- Existing Substation
- Study Area
- New 345kV Substation Siting Study Area
- New 345kV Substation Siting Area
- Transportation**
(CDOT 2021, BTS 2020)
 - Interstate
 - U.S. Highway
 - State Highway
 - Local Road
 - Railroad
- Hydrology**
(NHD 2020)
 - Waterbody
- Boundary**
(CDOT 2021, DOLA 2021)
 - Municipal Boundary
 - County

- Zoning**
(Morgan County 2021)
 - Agriculture Zone (A)
 - Agriculture/Agri-Business (A/B)
 - Commercial Zone (C)
 - Planned Development Zone (PD)
 - Estate Residential Zone (ER)
 - Heavy Industrial Zone (HI)
 - Light Industrial Zone (LI)
 - Mobile Home Zone (MH)
 - Rural Residential Zone (RR)

- SZ
- N/A
- No digital data available for Washington, Yuma, Cheyenne and Kit Carson Counties

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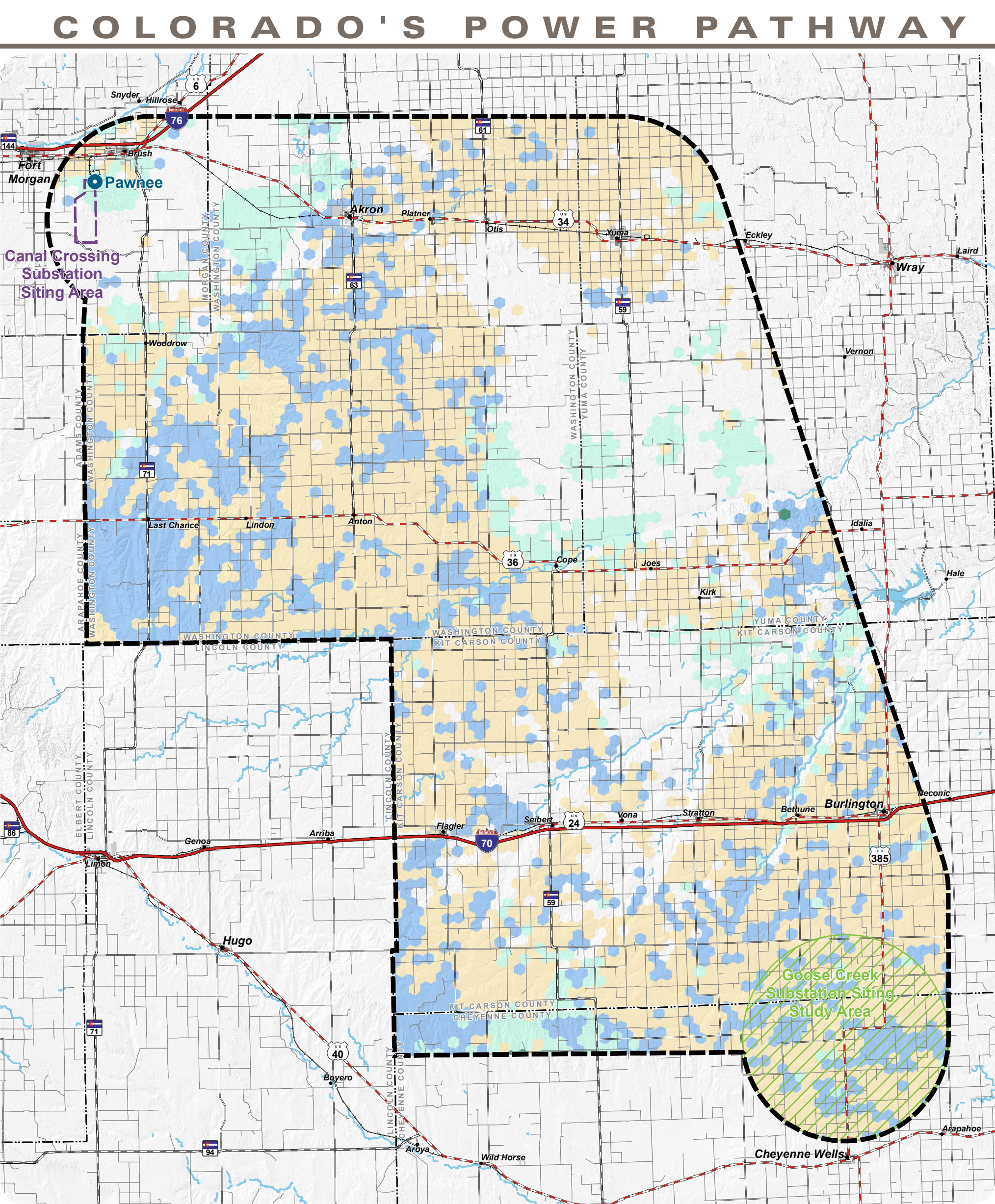


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Path: P:\1163_0025_CO_Power_Pathway\GIS\Layouts\Segment_2\Resource_Maps\Zoning.mxd

Segment 2 - Canal Crossing to Goose Creek

Zoning

[Back to TOC](#)



Legend

- Existing Substation to be Expanded
- Study Area
- New 345kV Substation Siting Study Area
- New 345kV Substation Siting Area

Transportation

(CDOT 2021, BTS 2020)

- Interstate
- U.S. Highway
- State Highway
- Local Road
- Railroad

Habitat Priority

(CPW 2015)

- Category 2
- Category 3
- Category 4
- Category 5
- Category 6 (No Data)

See Descriptions at:
cpw.state.co.us/Documents/WildlifeSpecies/SWAP/CO_SWAP_FULLVERSION.pdf

Boundary

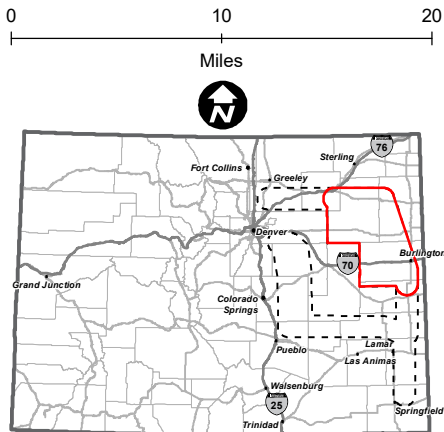
(CDOT 2021, DOLA 2021)

- Municipal Boundary
- County

Hydrology

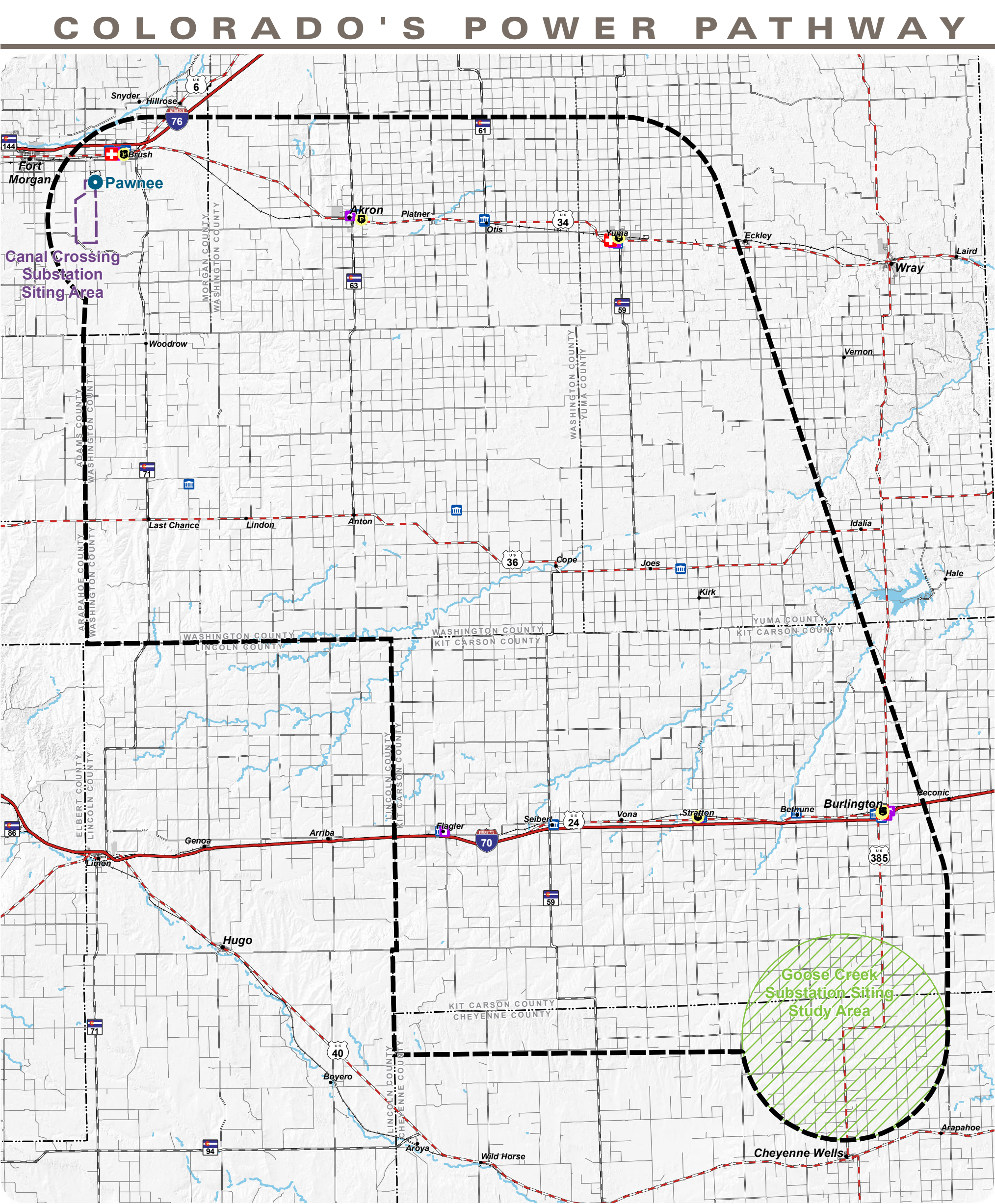
(NHD 2020)

- Waterbody



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Path: P:\1163_0025_CO_Power_Pathway\GIS\Layouts\Segment_2\Resource_Maps\CO_SWAP.mxd



Legend

- Existing Substation
- Study Area
- New 345kV Substation Siting Study Area
- New 345kV Substation Siting Area

Transportation

(CDOT 2021, BTS 2020)

- Interstate
- U.S. Highway
- State Highway
- Local Road
- Railroad

Public Institutions

(HIFLD, 2021)

- Police Department
- Hospital
- Nursing Home
- Public School

Hydrology

(NHD 2020)

- Waterbody

Boundary

(CDOT 2021, DOLA 2021)

- Municipal Boundary
- County

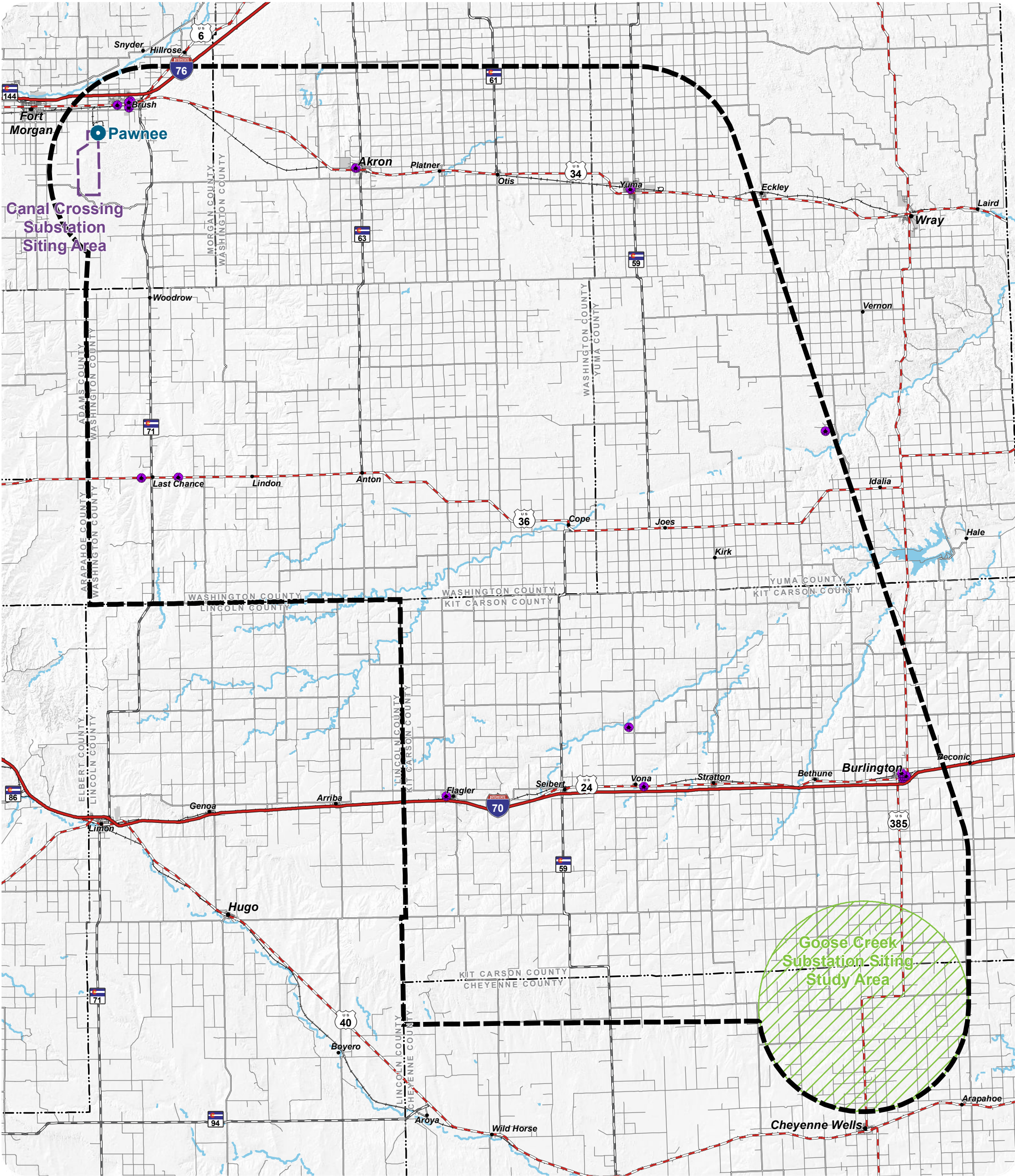
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Path: P:\1163_0025_CO_Power_Pathway\GIS\Layouts\Segment_2\Resource_Maps\Public_Institutions.mxd

COLORADO'S POWER PATHWAY



Legend

Existing Substation

Study Area

New 345kV Substation Siting Study Area

New 345kV Substation Siting Area

Transportation
(CDOT 2021, BTS 2020)

Interstate

U.S. Highway

State Highway

Local Road

Railroad

Historic Places
(NRHP 2020)

Historic Place

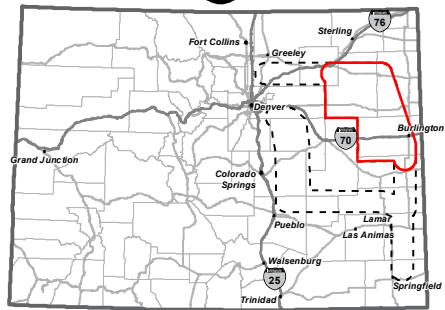
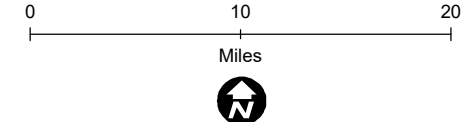
Boundary
(CDOT 2021, DOLA 2021)

Municipal Boundary

County

Hydrology
(NHD 2020)

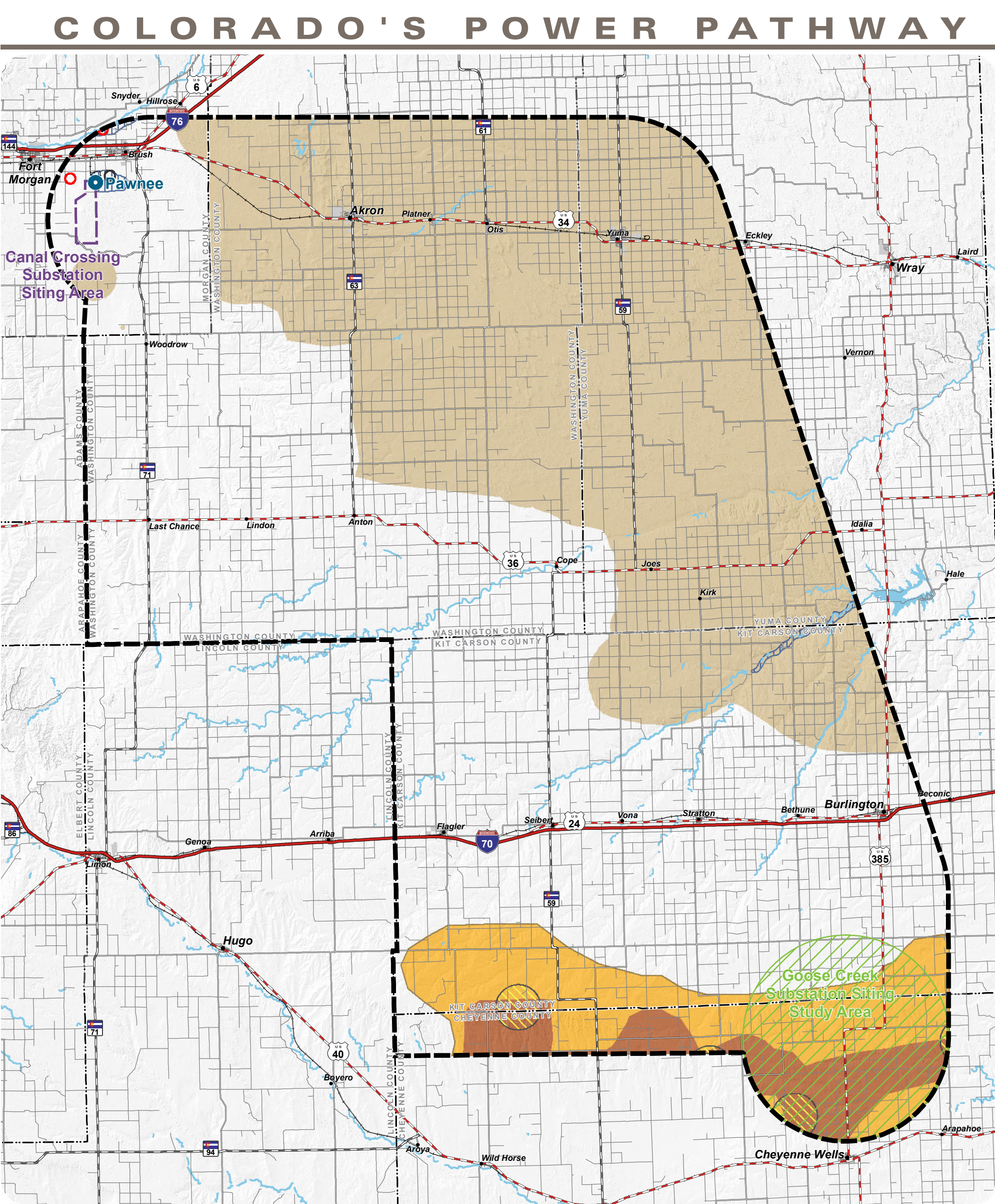
Waterbody



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Path: P:\1163_0025_CO_Power_Pathway\GIS\Layouts\Segment_2\Resource_Maps\Historic.mxd



Legend

- Existing Substation
- Study Area
- New 345kV Substation Siting Study Area
- New 345kV Substation Siting Area

Transportation

(CDOT 2021, BTS 2020)

- Interstate
- U.S. Highway
- State Highway
- Local Road
- Railroad

Species Habitat

(CPW 2021)

Bald Eagle

- Active Nest
- Destroyed Nest
- Winter Concentration

Lesser Prairie-Chicken

- Production Area
- Priority Habitat Area
- Estimated Occupied Range

Greater Prairie-Chicken

- Overall Range

Hydrology

(NHD 2020)

- Waterbody

Boundary

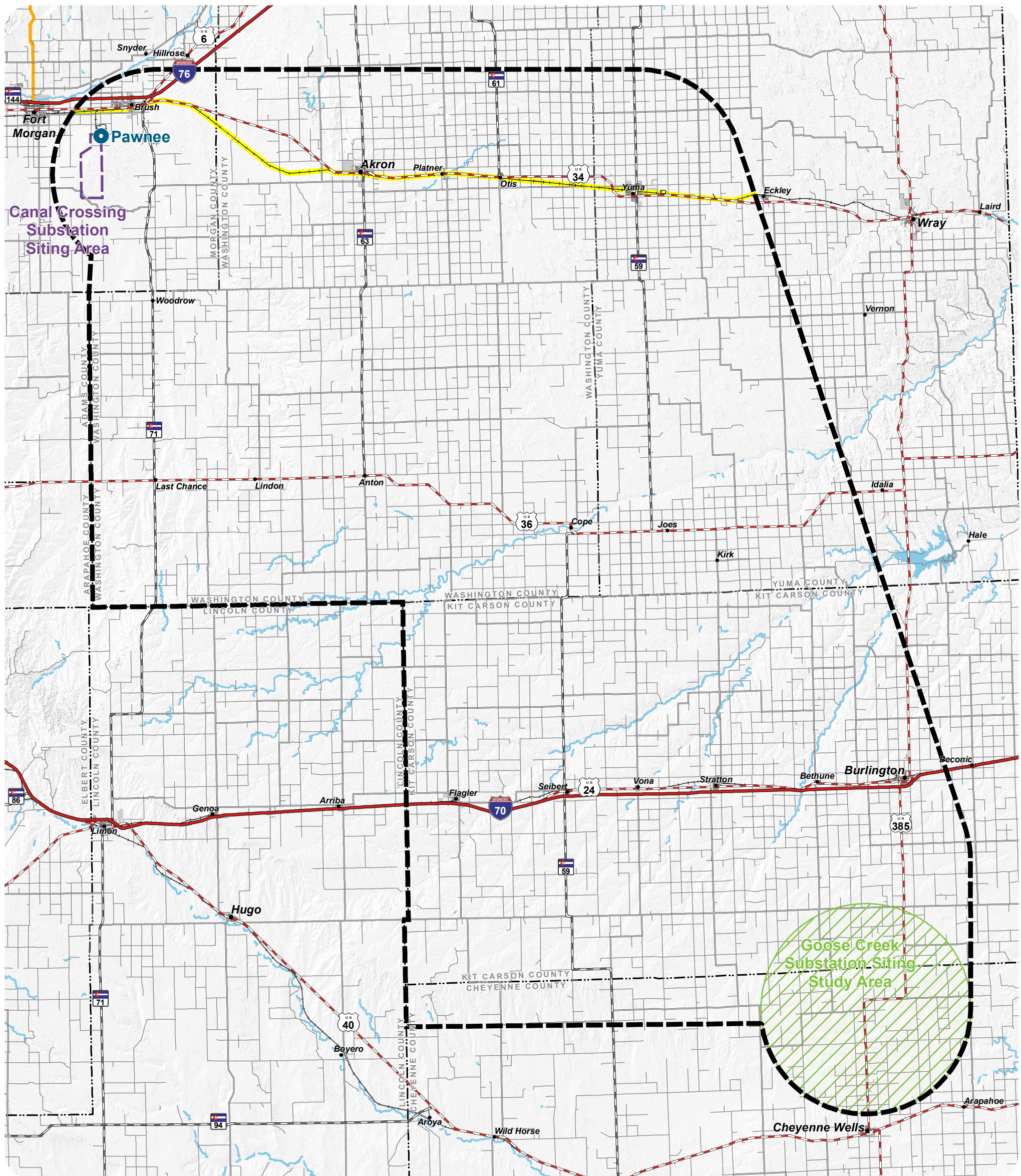
(CDOT 2021, DOLA 2021)

- Municipal Boundary
- County

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Path: P:\1163_0025_CO_Power_Pathway\GIS\Layouts\Segment_2\Resource_Maps\Avian_Species_Habitat.mxd

COLORADO'S POWER PATHWAY



Legend

- Existing Substation**

Study Area

New 345kV Substation Siting Study Area

New 345kV Substation Siting Area

Boundary
(CDOT 2021, DOLA 2021)

Municipal Boundary

County

Hydrology
(NHD 2020)

Waterbody

Transportation
(CDOT 2021, BTS 2020)

Interstate

U.S. Highway

State Highway

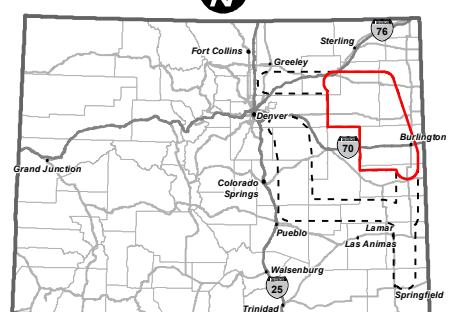
Local Road

Railroad

Amtrak Route

Scenic Byway

A horizontal number line with tick marks at 0, 10, and 20. The word "Miles" is written below the line.



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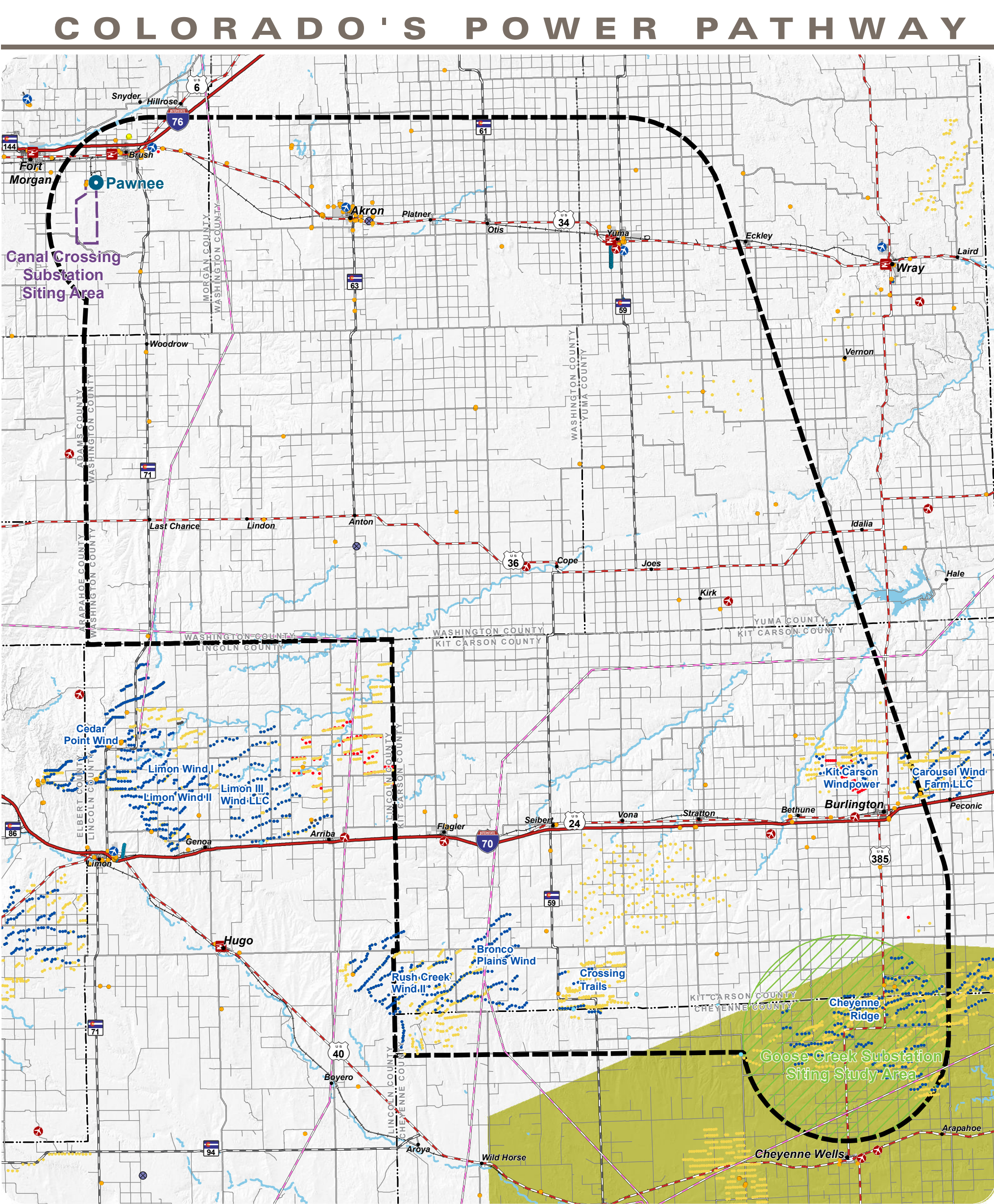
reliance on this information.

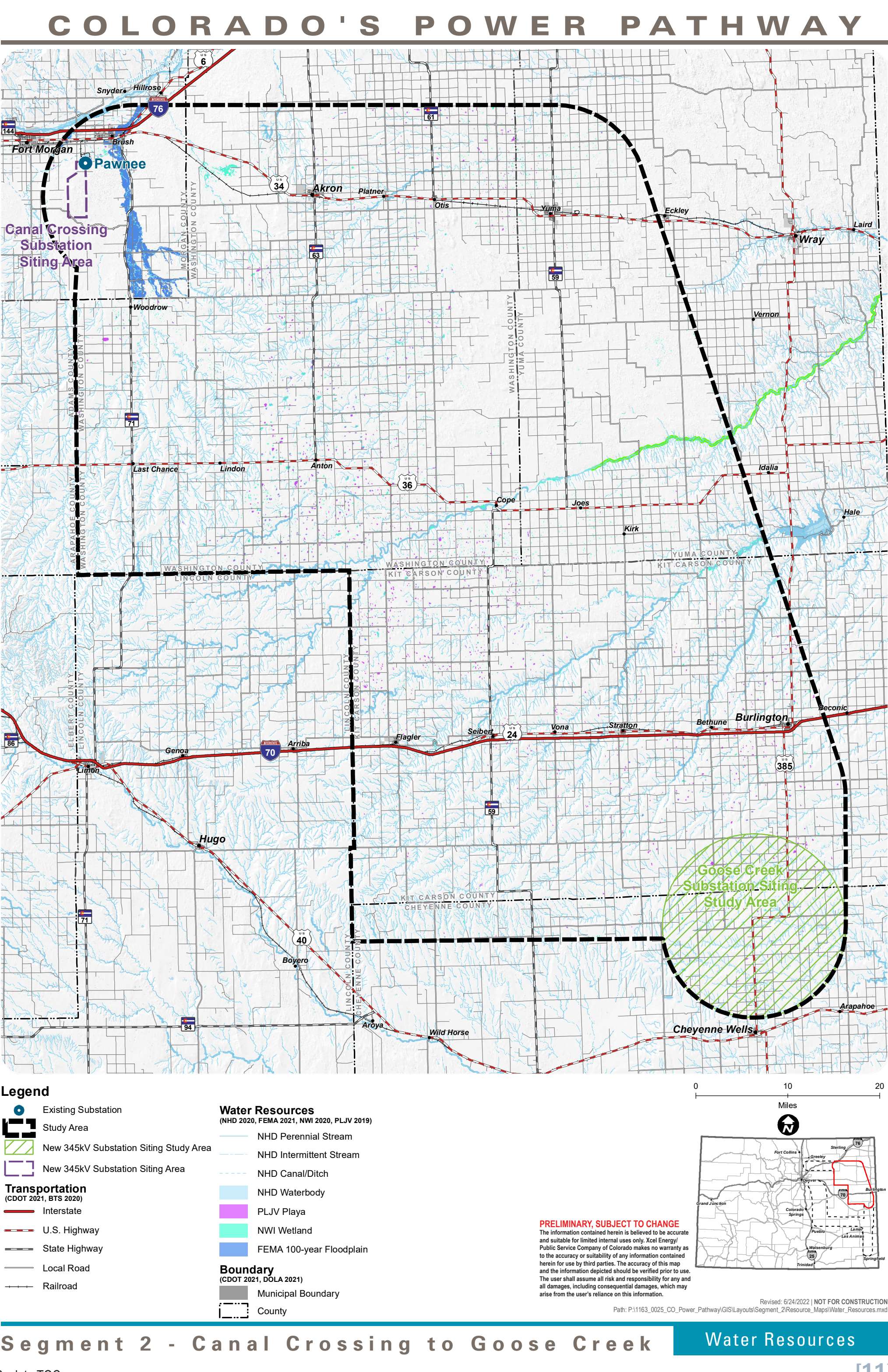
Revised: 6/24/2022 | **NOT FOR CONSTRUCTION**

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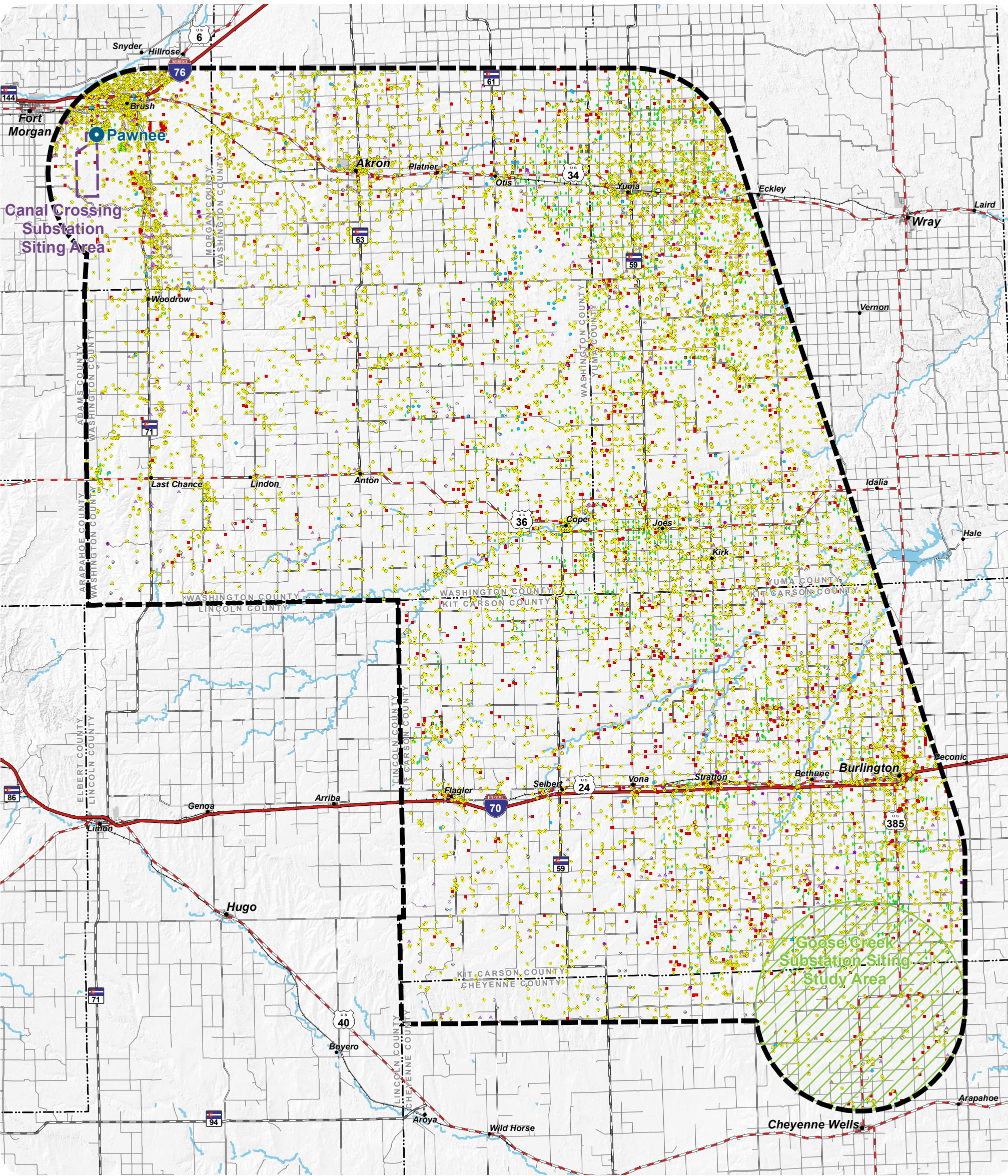
Segment 2 - Canal Crossing to Goose Creek

Ground Transportation





COLORADO'S POWER PATHWAY



Legend

- Existing Substation
 - Study Area
 - New 345kV Substation Siting Study Area
 - New 345kV Substation Siting Area
- ### Transportation

(CDOT 2021, BTS 2020)

 - Interstate
 - U.S. Highway
 - State Highway
 - Local Road
 - Railroad
- ### Water Wells

(CODWR, 2021)

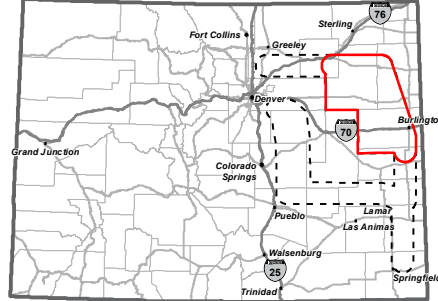
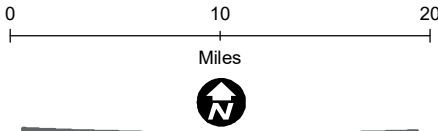
 - Well Replaced
 - Application Received
 - Application Denied, Unacceptable, or Withdrawn
 - Permit Canceled or Expired
 - Permit Issued or Extended
 - Well Abandoned
 - Well Constructed
 - Unknown
- ### Hydrology

(NHD 2020)

 - Waterbody
- ### Boundary

(CDOT 2021, DOLA 2021)

 - Municipal Boundary
 - County



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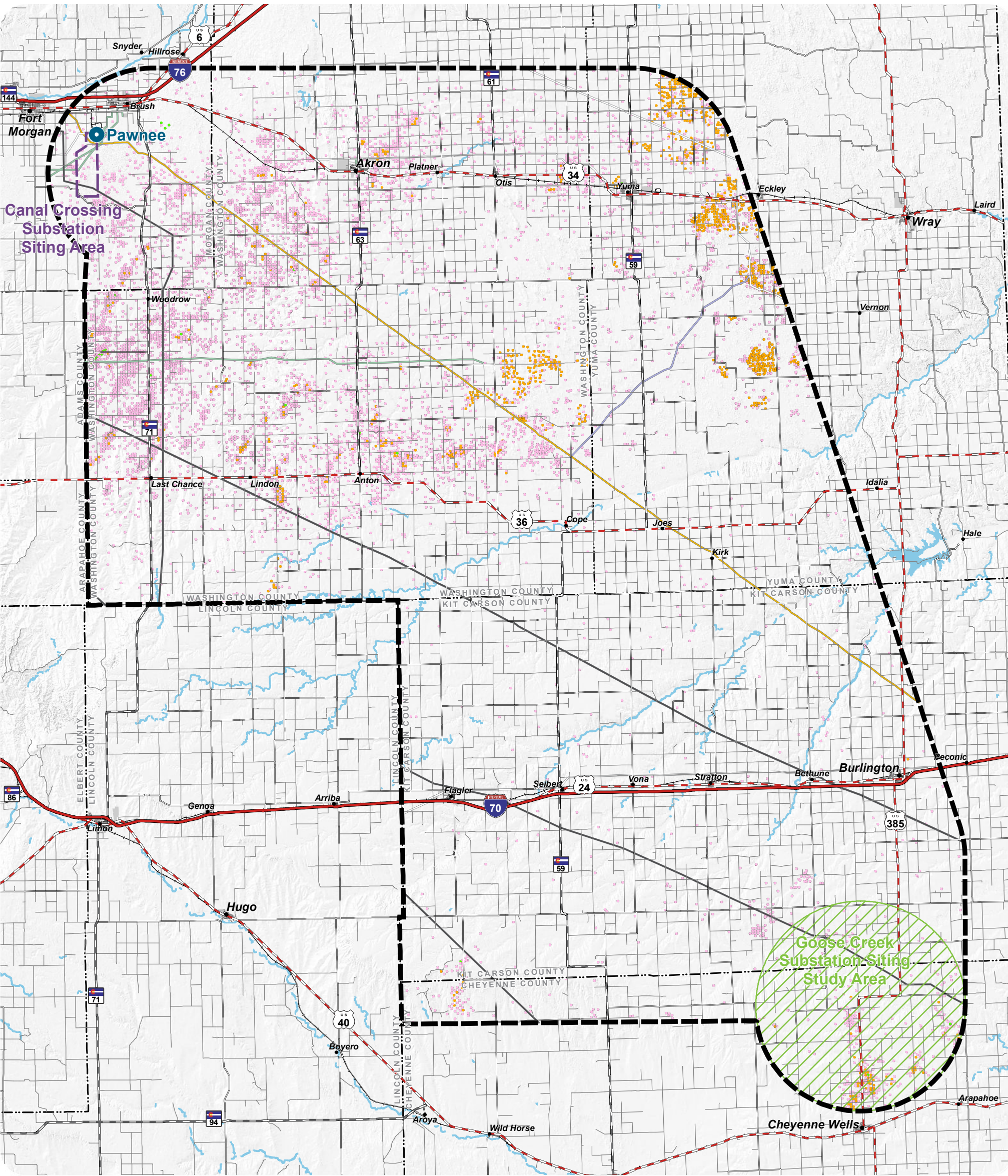
Revised: 6/24/2022 | NOT FOR CONSTRUCTION

Path: P:\1163_0025_CO_Power_Pathway\GIS\Layouts\Segment_2\Resource_Maps\Water_Wells.mxd

Segment 2 - Canal Crossing to Goose Creek

Water Wells

COLORADO'S POWER PATHWAY



Legend

- Existing Substation
 - Study Area
 - New 345kV Substation Siting Study Area
 - New 345kV Substation Siting Area
- ### Transportation

(CDOT 2021, BTS 2020)

 - Interstate
 - U.S. Highway
 - State Highway
 - Local Road
 - Railroad
- ### Oil and Gas Facilities

(COGCC 2021, Ventyx 2021)

 - Active Well
 - Abandoned Location
 - Temporarily Abandoned
 - Unknown

Natural Gas Pipelines

 - 1-10" Diameter
 - 11-20" Diameter
 - 31-40" Diameter
 - Size Unknown

Oil

 - Major Oil Pipeline
- ### Hydrology

(NHD 2020)

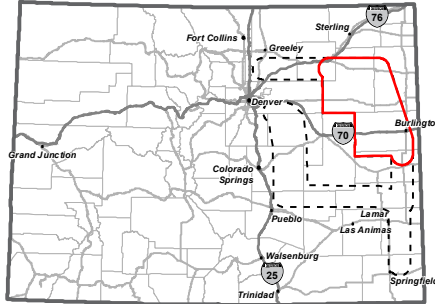
 - Waterbody

Boundary

(CDOT 2021, DOLA 2021)

 - Municipal Boundary
 - County

0 10 20
Miles



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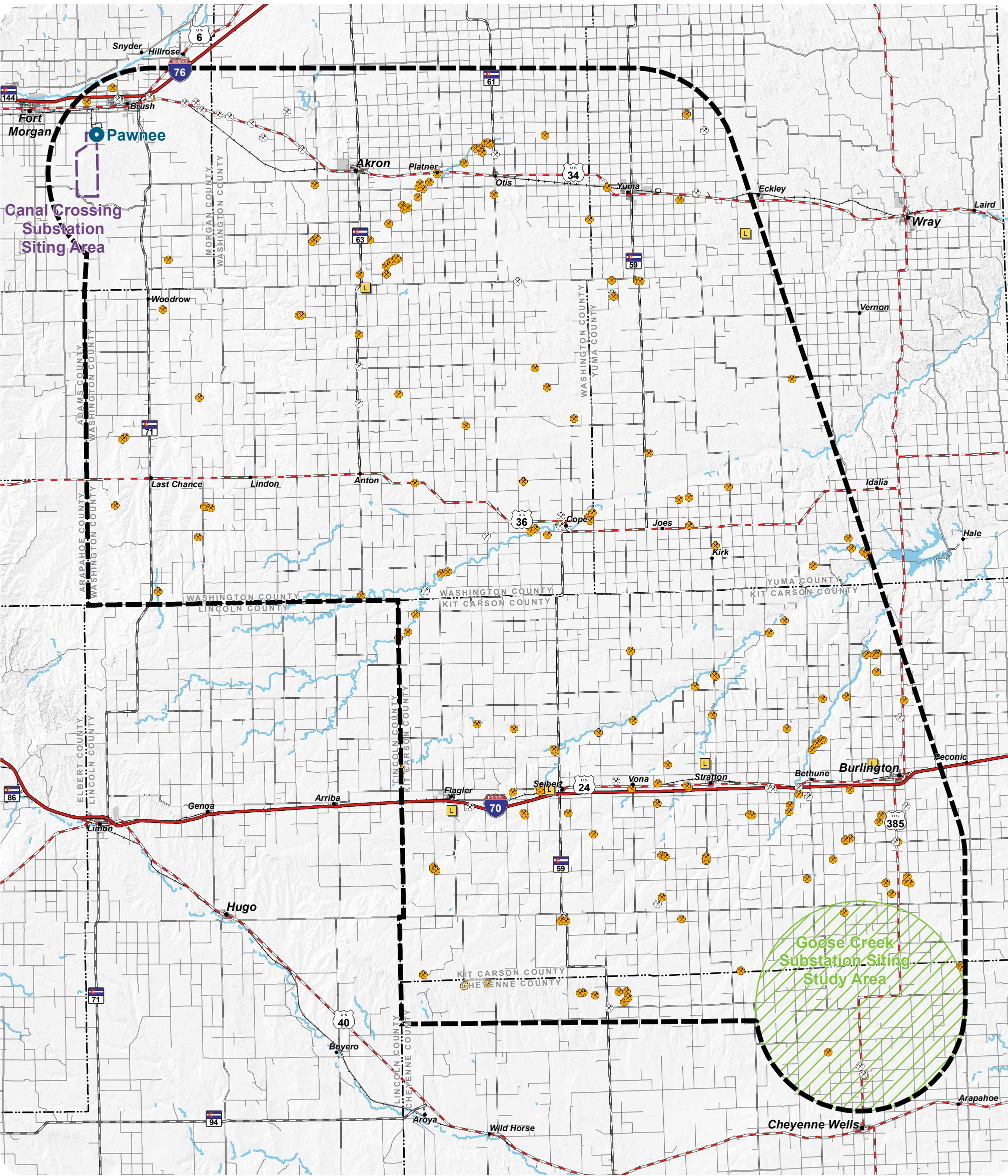
Path: P:\1163_0025_CO_Power_Pathway\GIS\Layouts\Segment_2\Resource_Maps\Oil_Gas.mxd

Segment 2 - Canal Crossing to Goose Creek

Oil and Gas Facilities

[Back to TOC](#)

COLORADO'S POWER PATHWAY



Legend

- Existing Substation
- Study Area
- New 345kV Substation Siting Study Area
- New 345kV Substation Siting Area

Transportation
(CDOT 2021, BTS 2020)

- Interstate
- U.S. Highway
- State Highway
- Local Road
- Railroad

Extractive Industries and Landfills
(HIFLD 2021, CO DRMS 2021)

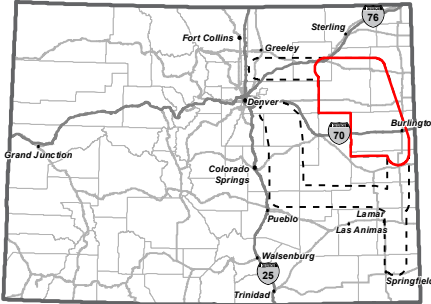
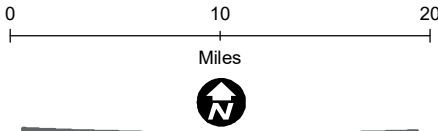
- Sand and Gravel Operation
- Other Extractive Operation
- Landfill

Boundary
(CDOT 2021, DOLA 2021)

- Municipal Boundary
- County

Hydrology
(NHD 2020)

- Waterbody



PRELIMINARY, SUBJECT TO CHANGE

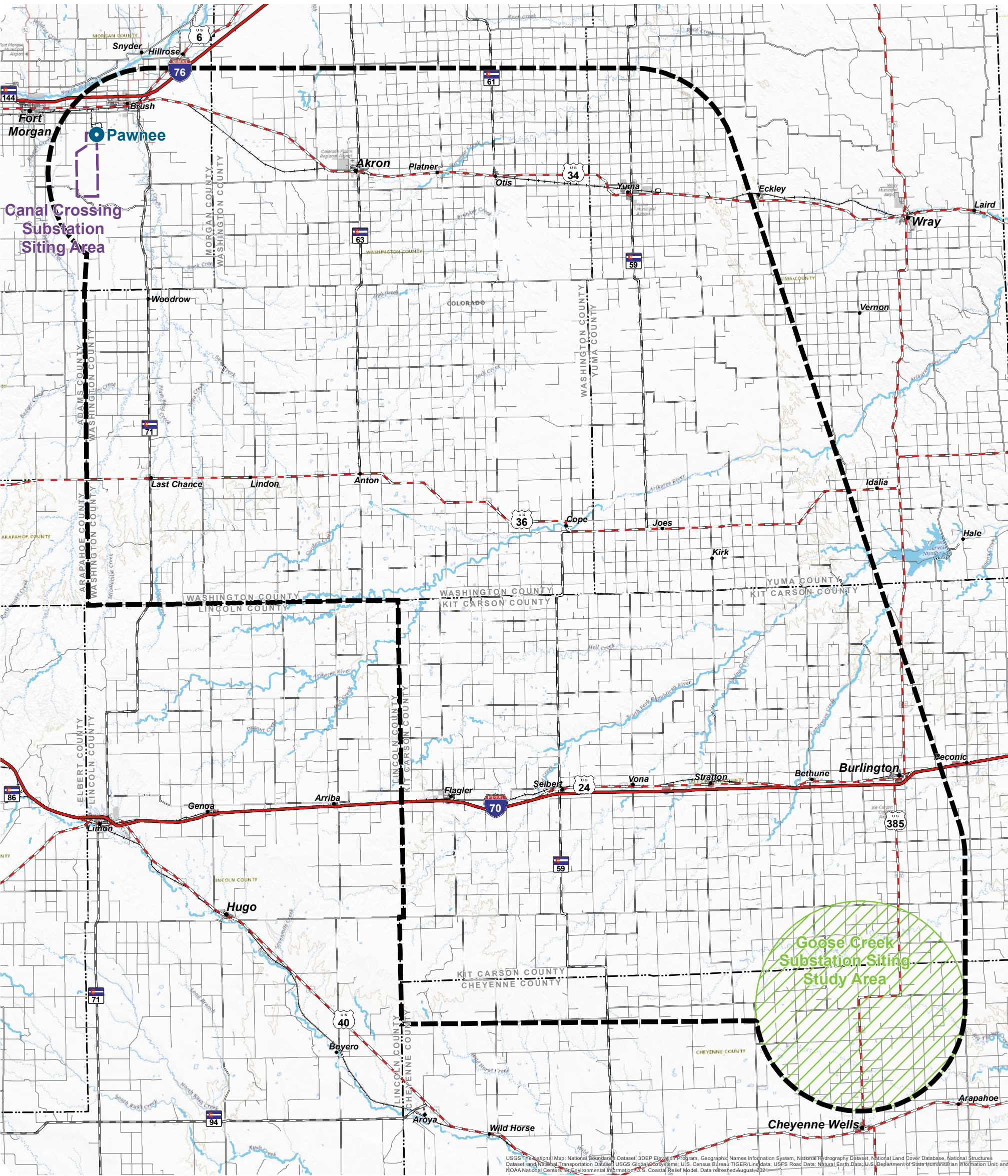
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Path: P:\1163_0025_CO_Power_Pathway\GIS\Layouts\Segment_2\Resource_Maps\Extractive_Industries_Landfills.mxd

Segment 2 - Canal Crossing to Goose Creek

Extractive Industries and Landfills

COLORADO'S POWER PATHWAY



Legend

Existing Substation

Study Area

New 345kV Substation Siting Study Area

New 345kV Substation Siting Area

Transportation
(CDOT 2021, BTS 2020)

Interstate

U.S. Highway

State Highway

Local Road

Railroad

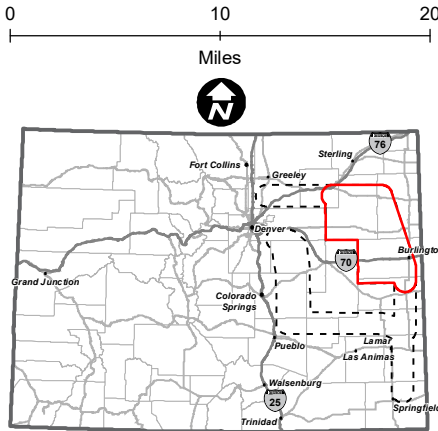
Hydrology
(NHD 2020)

Waterbody

Boundary
(CDOT 2021, DOLA 2021)

Municipal Boundary

County



PRELIMINARY, SUBJECT TO CHANGE

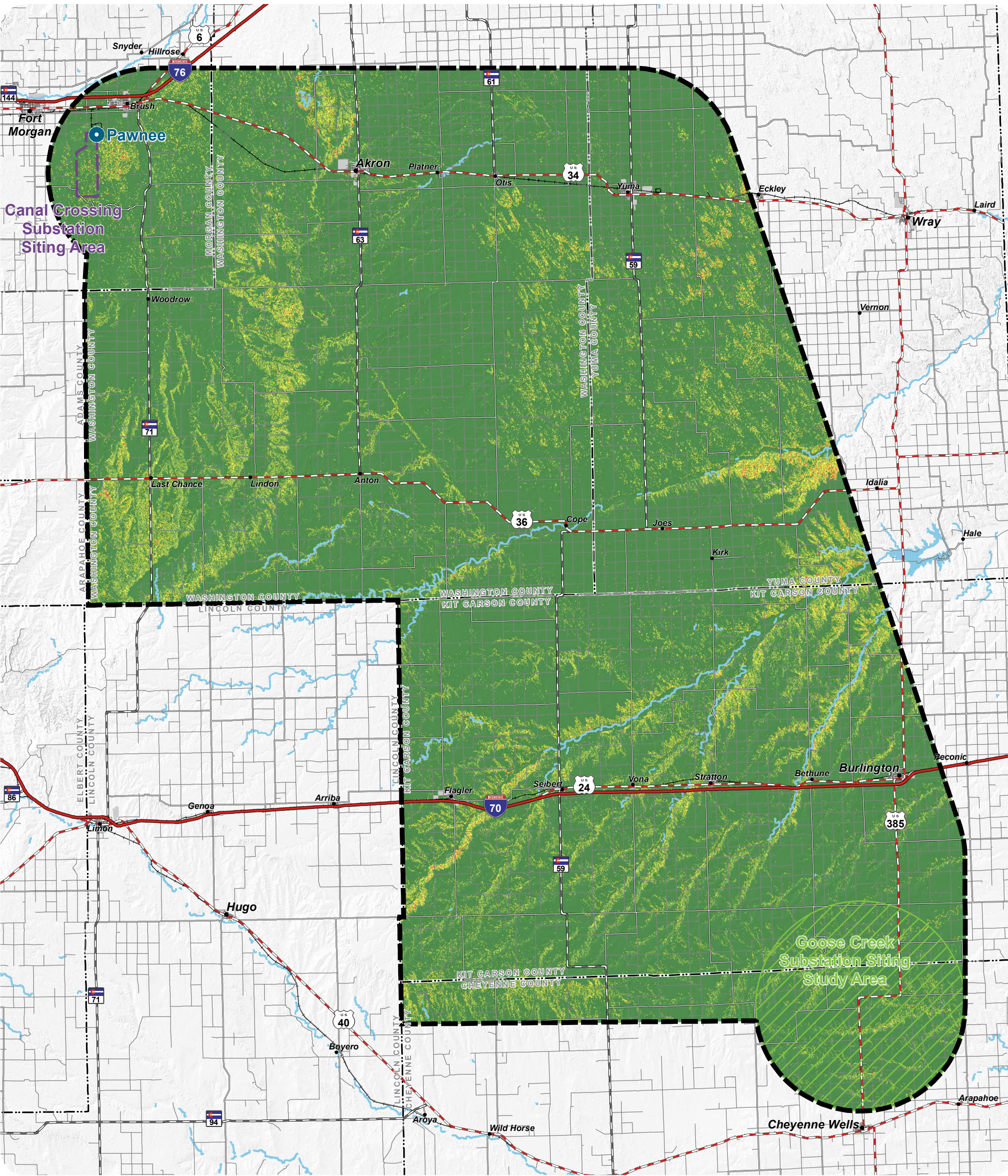
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Path: P:\1163_0025_CO_Power_Pathway\GIS\Layouts\Segment_2\Resource_Maps\Topo.mxd

Segment 2 - Canal Crossing to Goose Creek

Topographic Map

COLORADO'S POWER PATHWAY



Legend

- Existing Substation
- Study Area
- New 345kV Substation Siting Study Area
- New 345kV Substation Siting Area

Transportation
(CDOT 2021, BTS 2020)

- Interstate
- U.S. Highway
- State Highway
- Local Road
- Railroad

Slope
(USGS 2020)
(Derived from USGS 10-meter DEM)

- 0 - 5%
- 5 - 10%
- 10 - 15%
- 15 - 20%
- > 20%

Boundary
(CDOT 2021, DOLA 2021)

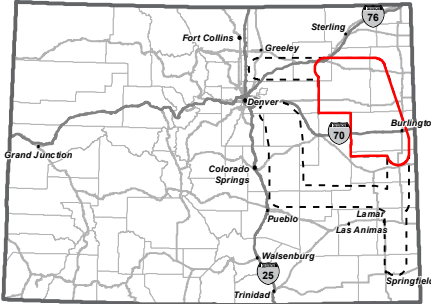
- Municipal Boundary
- County

Hydrology
(NHD 2020)

- Waterbody

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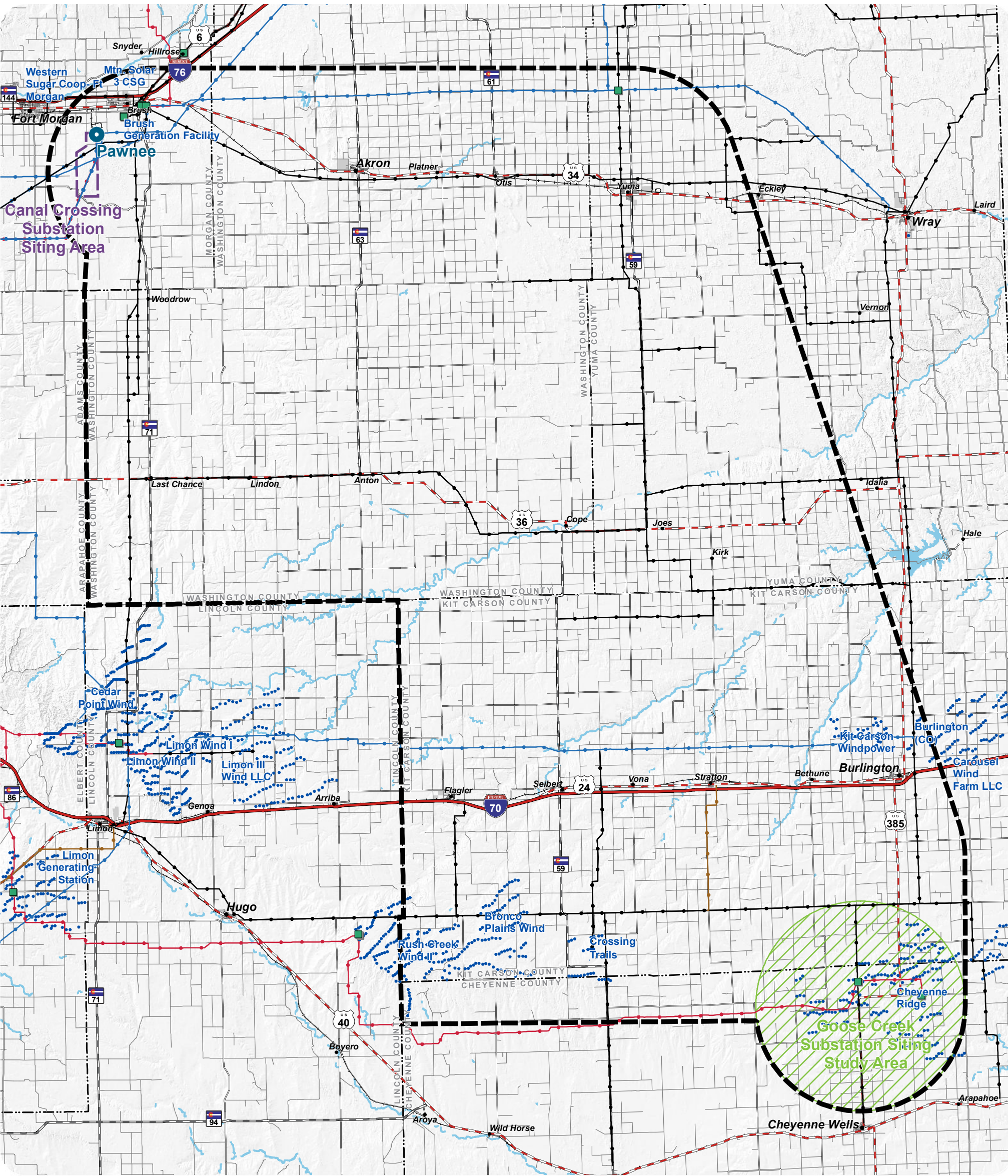
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Segment 2 - Canal Crossing to Goose Creek

Slope

[Back to TOC](#)

COLORADO'S POWER PATHWAY



Legend

- Existing Substation
 - Study Area
 - New 345kV Substation Siting Study Area
 - New 345kV Substation Siting Area
- Transportation**
(CDOT 2021, BTS 2020)
- Interstate
 - U.S. Highway
 - State Highway
 - Local Road
 - Railroad
- Existing Electric Infrastructure**
(HIFLD 2021, PSCo 2020, FAA 2021)
- Power Plant
 - Substation
 - Operational Wind Generation Facility
 - 69kV Transmission Line
 - 115kV Transmission Line
 - 138kV Transmission Line
 - 230kV Transmission Line
 - 345kV Transmission Line

Hydrology

(NHD 2020)

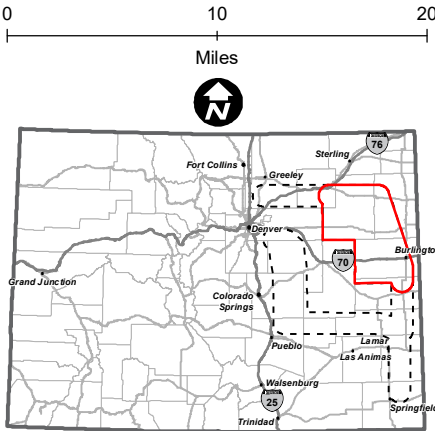
- Waterbody

Boundary

- (CDOT 2021, DOLA 2021)
- Municipal Boundary
 - County

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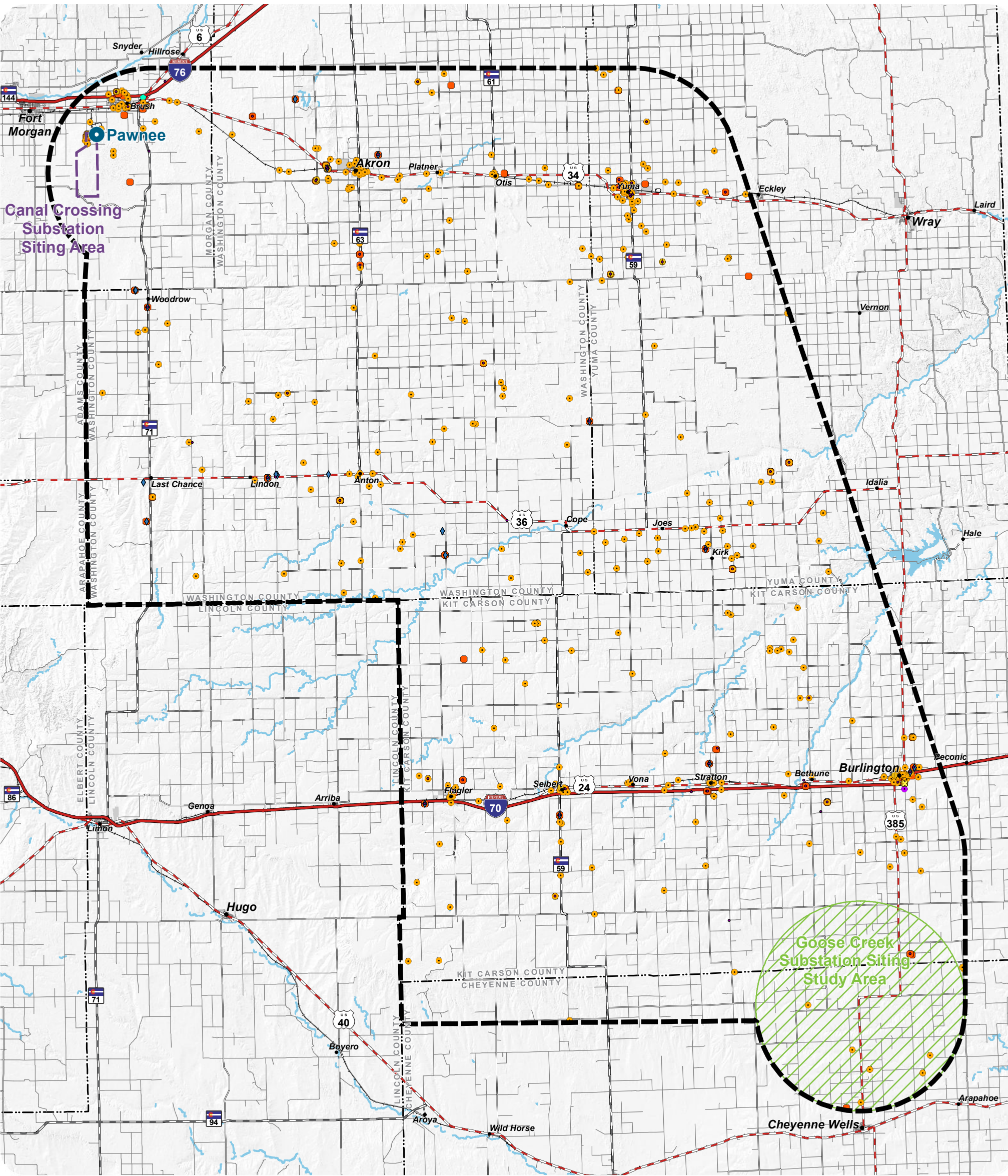
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Segment 2 - Canal Crossing to Goose Creek

Existing Electric Infrastructure

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COLORADO'S POWER PATHWAY



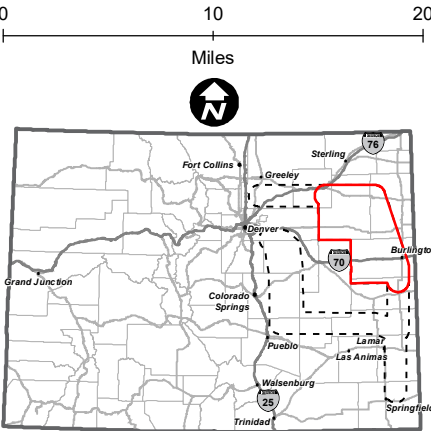
Legend

- Existing Substation
 - Study Area
 - New 345kV Substation Siting Study Area
 - New 345kV Substation Siting Area
- ### Transportation
- (CDOT 2021, BTS 2020)
- Interstate
 - U.S. Highway
 - State Highway
 - Local Road
 - Railroad
- ### Communication Facilities
- (HIFLD 2021)
- AM Transmission Tower
 - Antenna Structure
 - Cellular Tower
 - FM Transmission Tower
 - Land Mobile Private Transmission
 - Land Mobile Broadcast Tower
 - Land Mobile Commercial Transmission Tower
 - Microwave Service Tower
 - Paging Transmission Tower

- ### Boundary
- (CDOT 2021, DOLA 2021)
- Municipal Boundary
 - County

- ### Hydrology
- (NHD 2020)
- Waterbody

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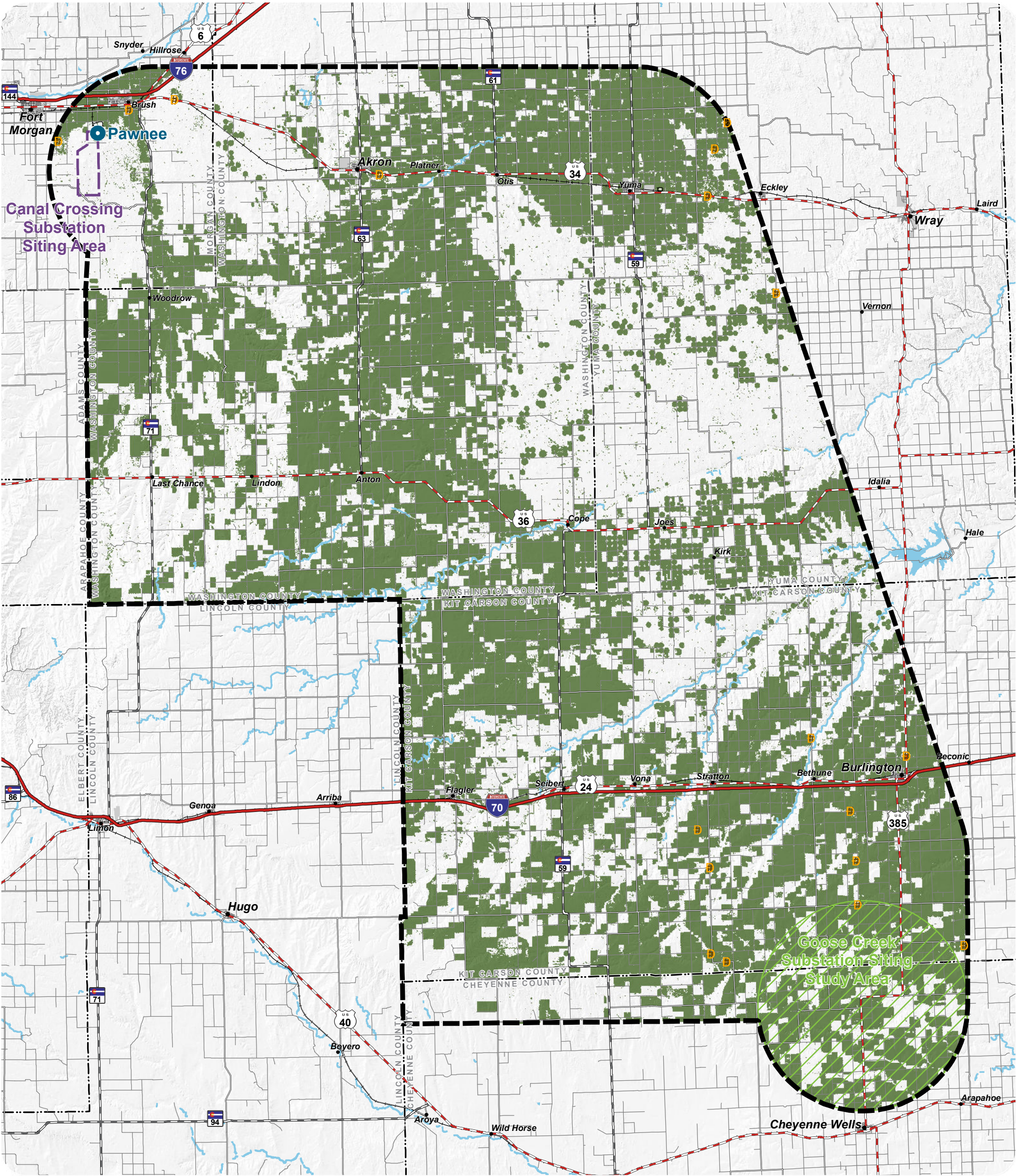
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Segment 2 - Canal Crossing to Goose Creek

Communication Facilities

[Back to TOC](#)

COLORADO'S POWER PATHWAY

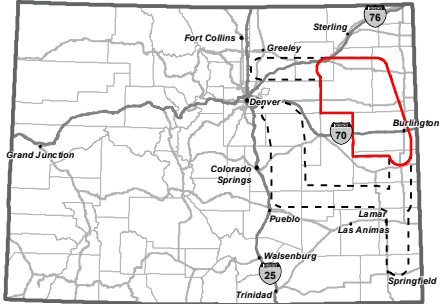


- Legend**
- Existing Substation
 - Study Area
 - New 345kV Substation Siting Study Area
 - New 345kV Substation Siting Area
- Transportation**
(CDOT 2021, BTS 2020)
- Interstate
 - U.S. Highway
 - State Highway
 - Local Road
 - Railroad

- Agricultural Areas**
(USDA, 2020, EPA 2021)
- Concentrated Animal Feeding Operation
 - Irrigated Land
- Boundary**
(CDOT 2021, DOLA 2021)
- Municipal Boundary
 - County
- Hydrology**
(NHD 2020)
- Waterbody

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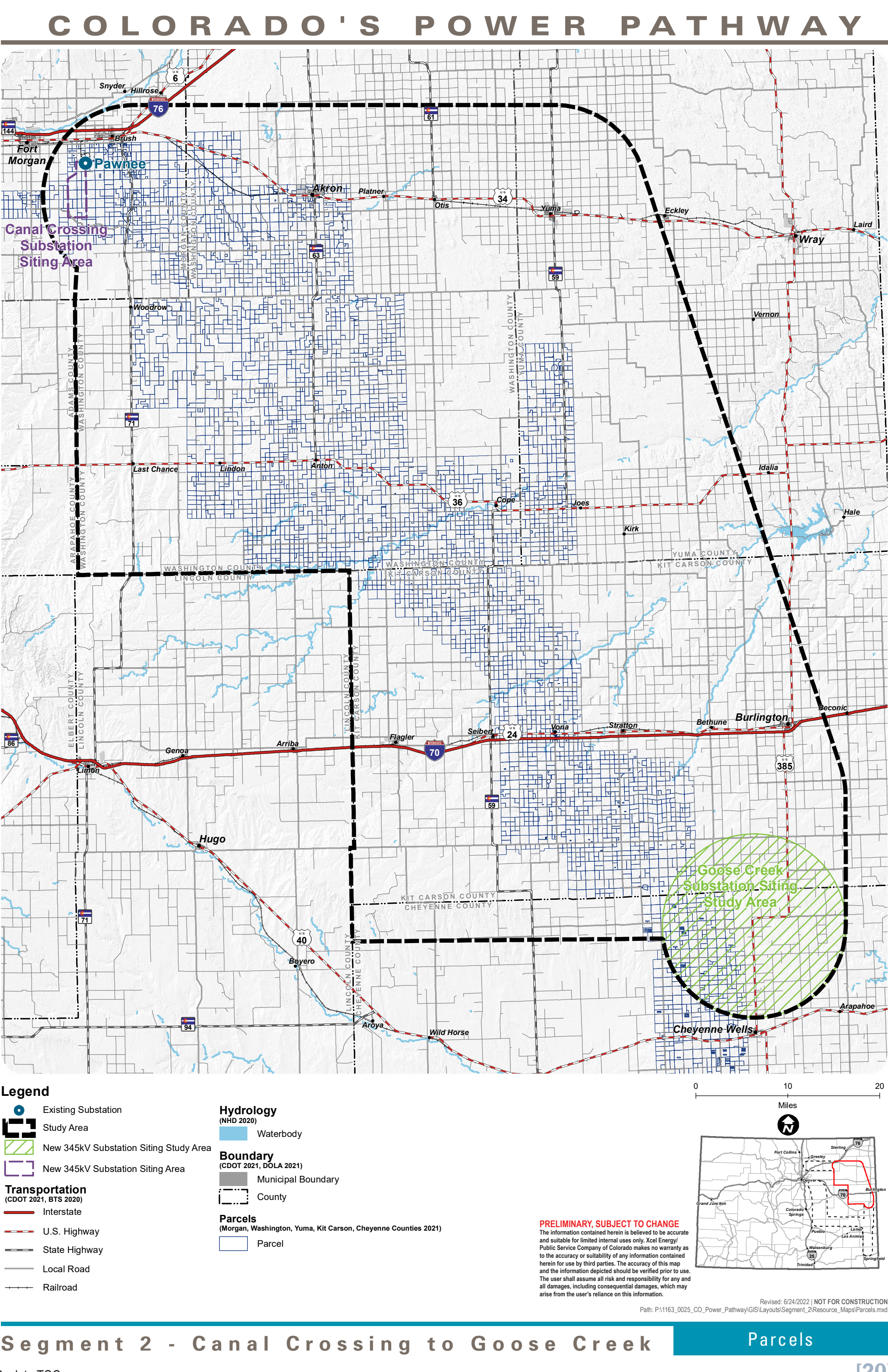


Revised: 6/24/2022 | NOT FOR CONSTRUCTION

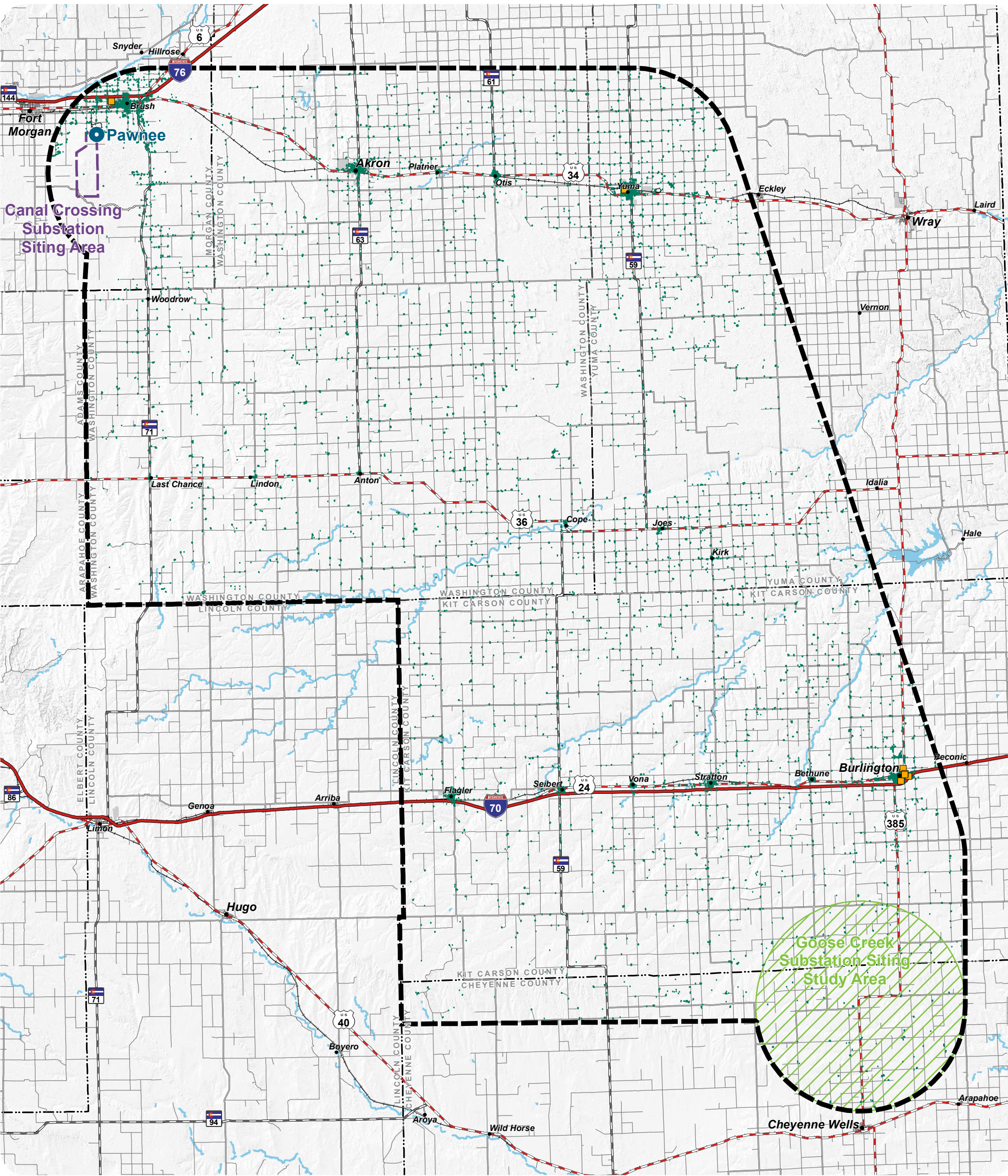
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Segment 2 - Canal Crossing to Goose Creek

Agricultural Areas



COLORADO'S POWER PATHWAY



Legend

- Existing Substation
- Study Area
- New 345kV Substation Siting Study Area
- New 345kV Substation Siting Area

Transportation
(CDOT 2021, BTS 2020)

- Interstate
- U.S. Highway
- State Highway
- Local Road
- Railroad

Structures
(Microsoft 2021, HIFLD 2021)

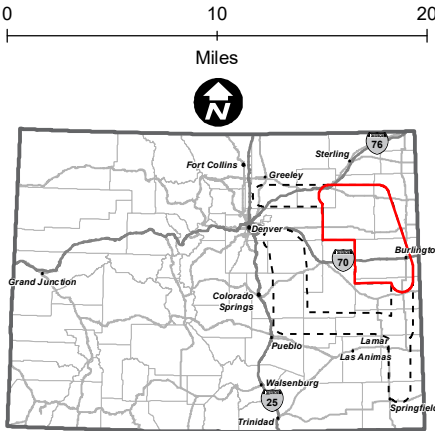
- Mobile Home Park
- Residential or Other Structure

Hydrology
(NHD 2020)

- Waterbody

Boundary
(CDOT 2021, DOLA 2021)

- Municipal Boundary
- County



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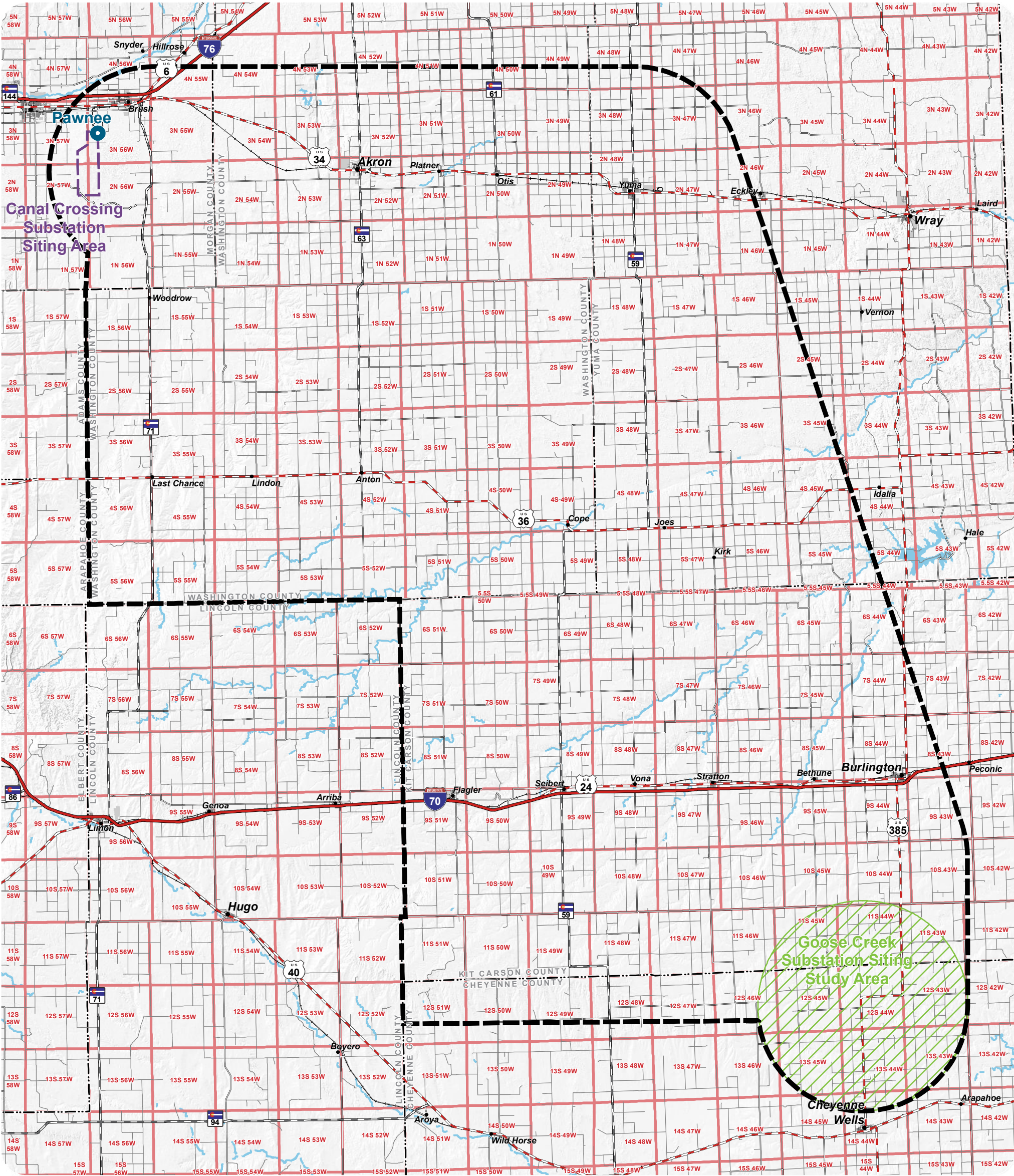
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 Path: P:\1163_0025_CO_Power_Pathway\GIS\Layouts\Segment_2\Resource_Maps\Structures.mxd

Segment 2 - Canal Crossing to Goose Creek

Residential and Other Structures

COLORADO'S POWER PATHWAY



Legend

Existing Substation

Study Area

New 345kV Substation Siting Study Area

New 345kV Substation Siting Area

Transportation
(CDOT 2021, BTS 2020)

Interstate

U.S. Highway

State Highway

Local Road

Railroad

Hydrology
(NHD 2020)

Waterbody

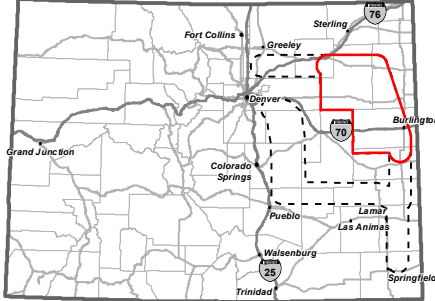
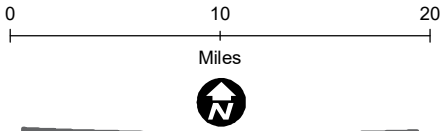
Boundary
(CDOT 2021, DOLA 2021)

Municipal Boundary

County

PLSS
(BLM 2020)

Township



PRELIMINARY, SUBJECT TO CHANGE

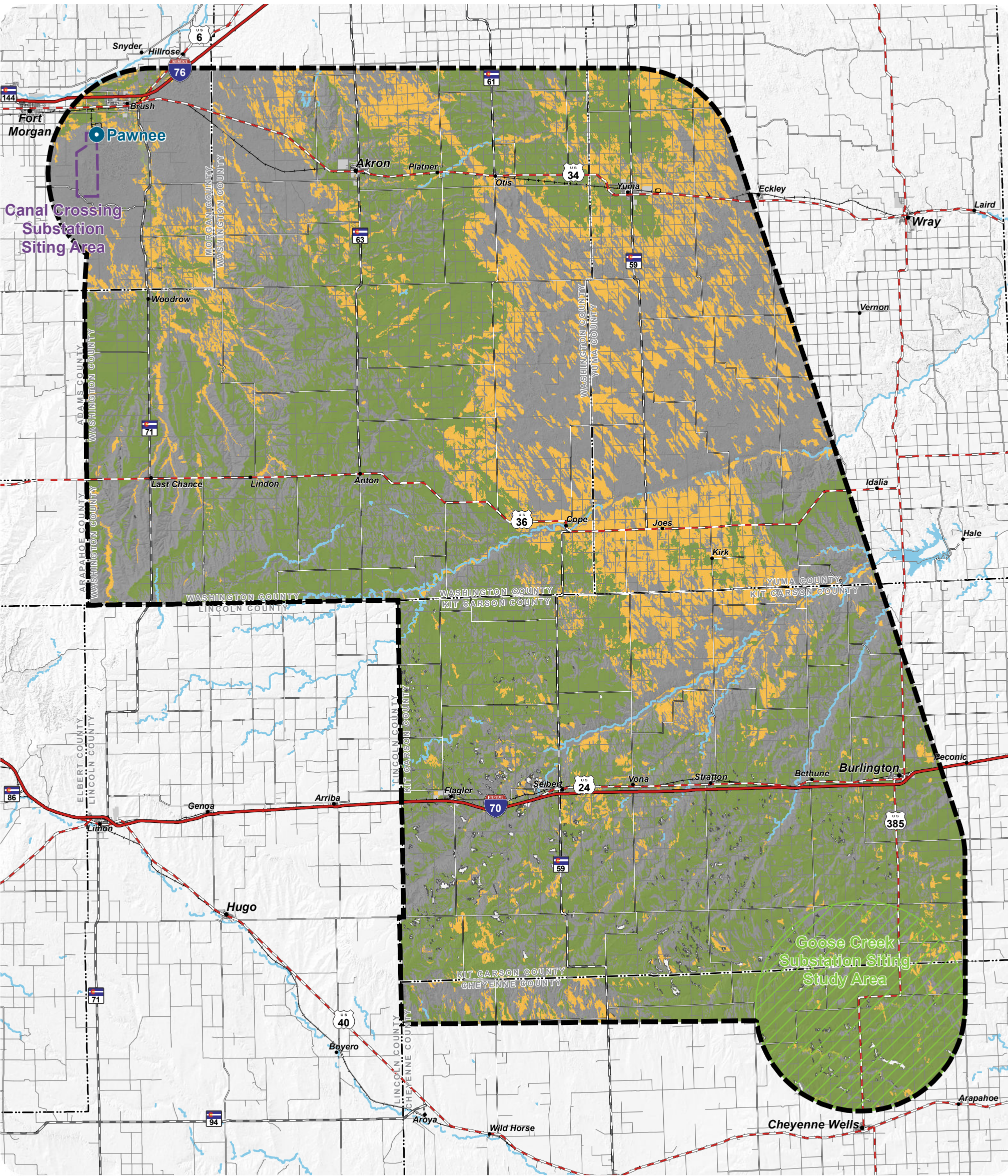
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Path: P:\1163_0025_CO_Power_Pathway\GIS\Layouts\Segment_2\Resource_Maps\PLSS.mxd

Segment 2 - Canal Crossing to Goose Creek

Public Land Survey

COLORADO'S POWER PATHWAY



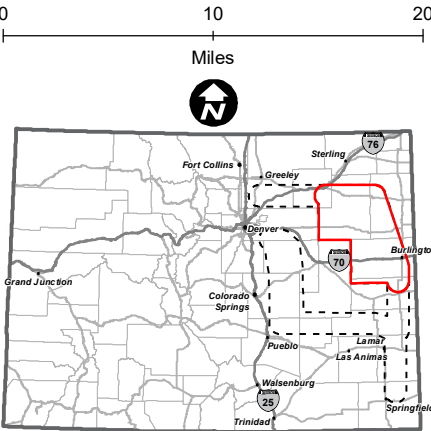
Legend

- Existing Substation
- Study Area
- New 345kV Substation Siting Study Area
- New 345kV Substation Siting Area
- Transportation**
(CDOT 2021, BTS 2020)
- Interstate
- U.S. Highway
- State Highway
- Local Road
- Railroad

- Prime Farmland**
(NRCS 2020)
- Prime farmland if irrigated
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Farmland of statewide importance
- Not prime farmland
- No Data

- Hydrology**
(NHD 2020)
- Waterbody
- Boundary**
(CDOT 2021, DOLA 2021)
- Municipal Boundary
- County

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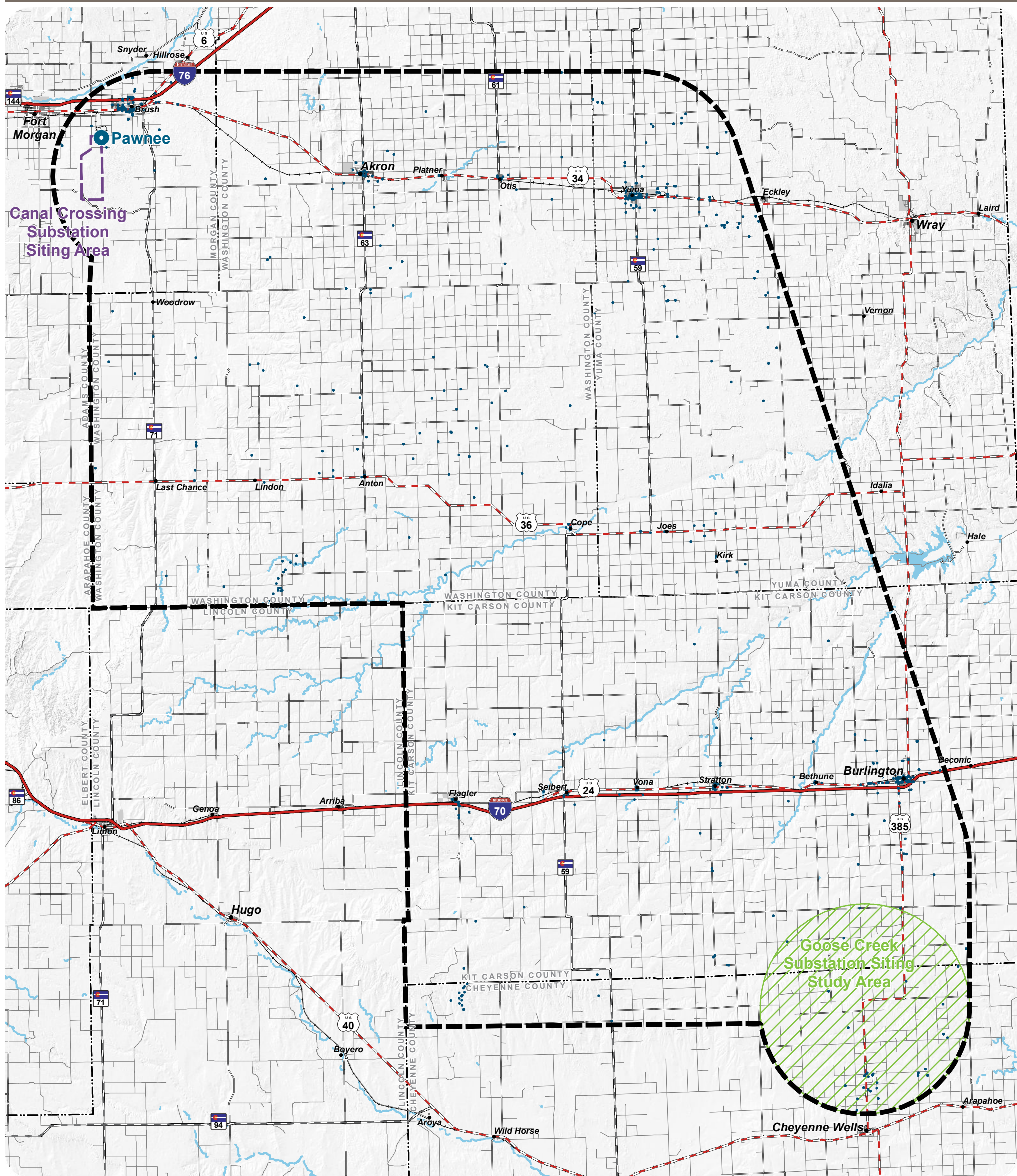
Revised: 6/24/2022 | NOT FOR CONSTRUCTION

Path: P:\1163_0025_CO_Power_Pathway\GIS\Layouts\Segment_2\Resource_Maps\Prime_Farmland.mxd


Segment 2 - Canal Crossing to Goose Creek


Prime Farmland


COLORADO'S POWER PATHWAY




Legend


- Existing Substation**
 Existing Substation


Study Area
 Study Area


New 345kV Substation Siting Study Area
 New 345kV Substation Siting Study Area


New 345kV Substation Siting Area
 New 345kV Substation Siting Area


Transportation
 (CDOT 2021, BTS 2020)

 Interstate


 U.S. Highway

 State Highway


 Local Road


 Railroad

Hydrology
 (NHD 2020)


 Waterbody

Boundary
 (CDOT 2021, DOLA 2021)

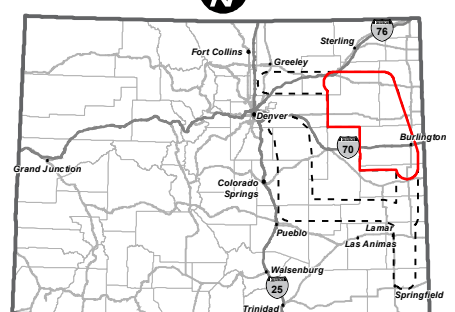
 Municipal Boundary

 County

EPA Registered Facilities
 (EPA 2021)

 Registered Facility

A horizontal number line with tick marks at 0, 10, and 20. The word "Miles" is written below the line.



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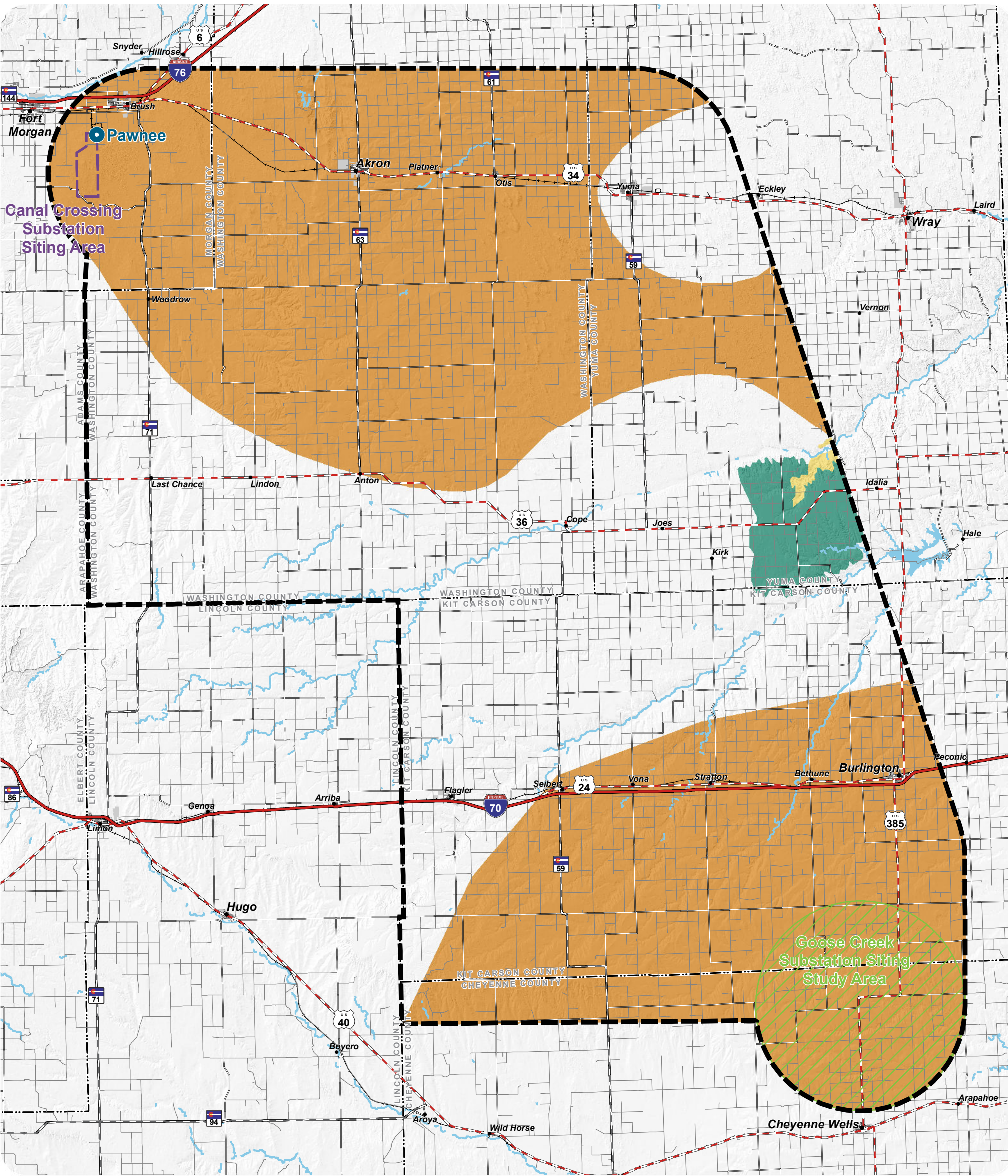
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Path: P:\1163_0025_CO_Power_Pathway\GIS\Layouts\Segment_2\Resource_Maps\EPA.mxd

Segment 2 - Canal Crossing to Goose Creek

EPA Registered Facilities

COLORADO'S POWER PATHWAY



Legend

- Existing Substation
- Study Area
- New 345kV Substation Siting Study Area
- New 345kV Substation Siting Area

Transportation
 (CDOT 2021, BTS 2020)

- Interstate
- U.S. Highway
- State Highway
- Local Road
- Railroad

Karst Areas
 (USGS 2017)

- Carbonate rocks at or near the land surface in a dry climate
- Evaporite Basin
- Piping Pseudokarst

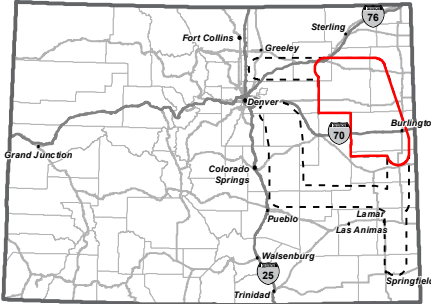
Boundary
 (CDOT 2021, DOLA 2021)

- Municipal Boundary
- County

Hydrology
 (NHD 2020)

- Waterbody

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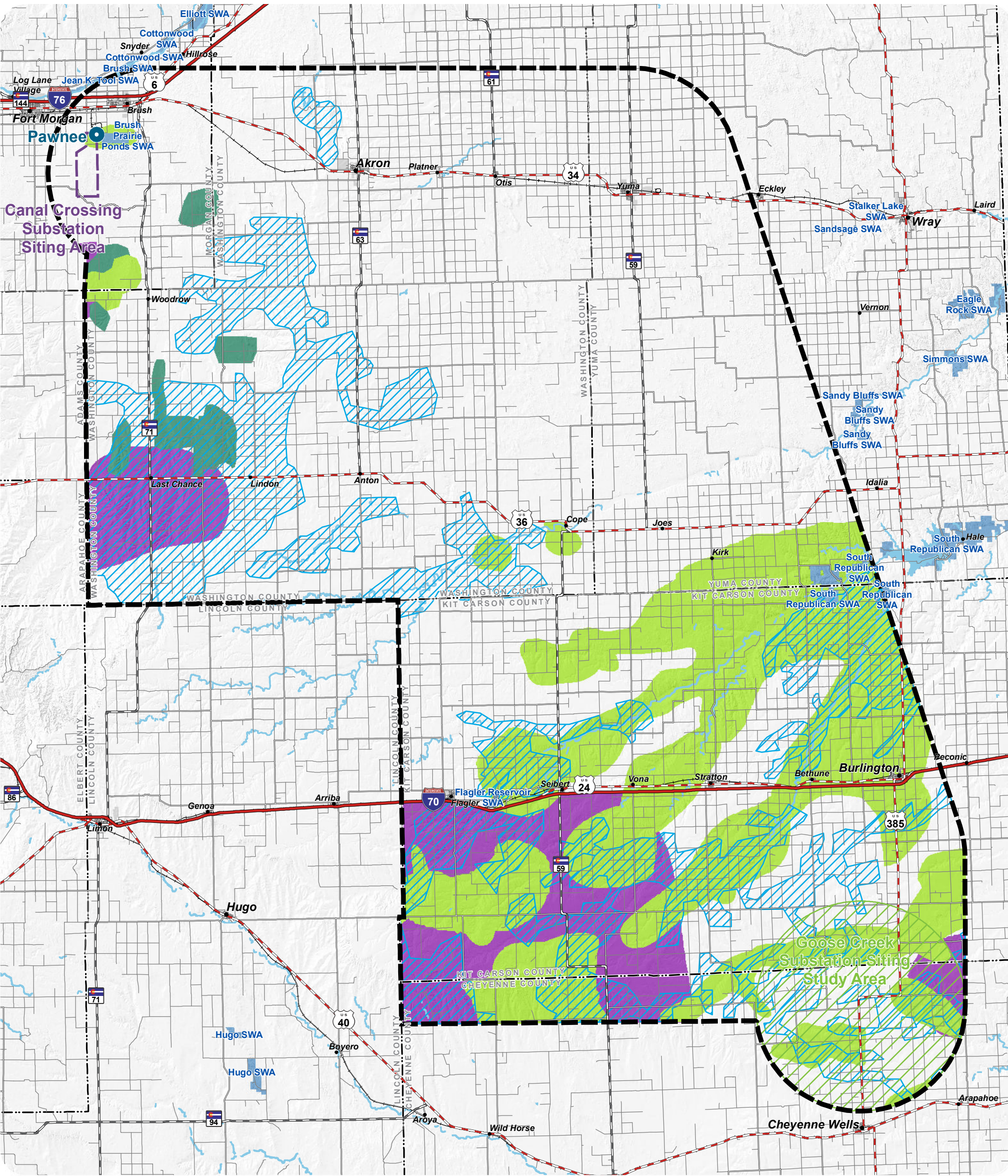


Revised: 6/24/2022 | NOT FOR CONSTRUCTION
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Segment 2 - Canal Crossing to Goose Creek

Karst

COLORADO'S POWER PATHWAY



Existing Substation

Study Area

New 345kV Substation Siting Study Area

New 345kV Substation Siting Area

Transportation

(CDOT 2021, BTS 2020)

Interstate

U.S. Highway

State Highway

Local Road

Railroad

Wildlife Species Habitat

(CPW 2021)

Mule Deer

Concentration Area

Winter Concentration Area

Pronghorn

Concentration Area

River Otter

Overall Range

Swift Fox

Overall Range

Hydrology

(NHD 2020)

Waterbody

Boundary

(CDOT 2021, DOLA 2021, CPW 2022)

Municipal Boundary

County

State Wildlife Area

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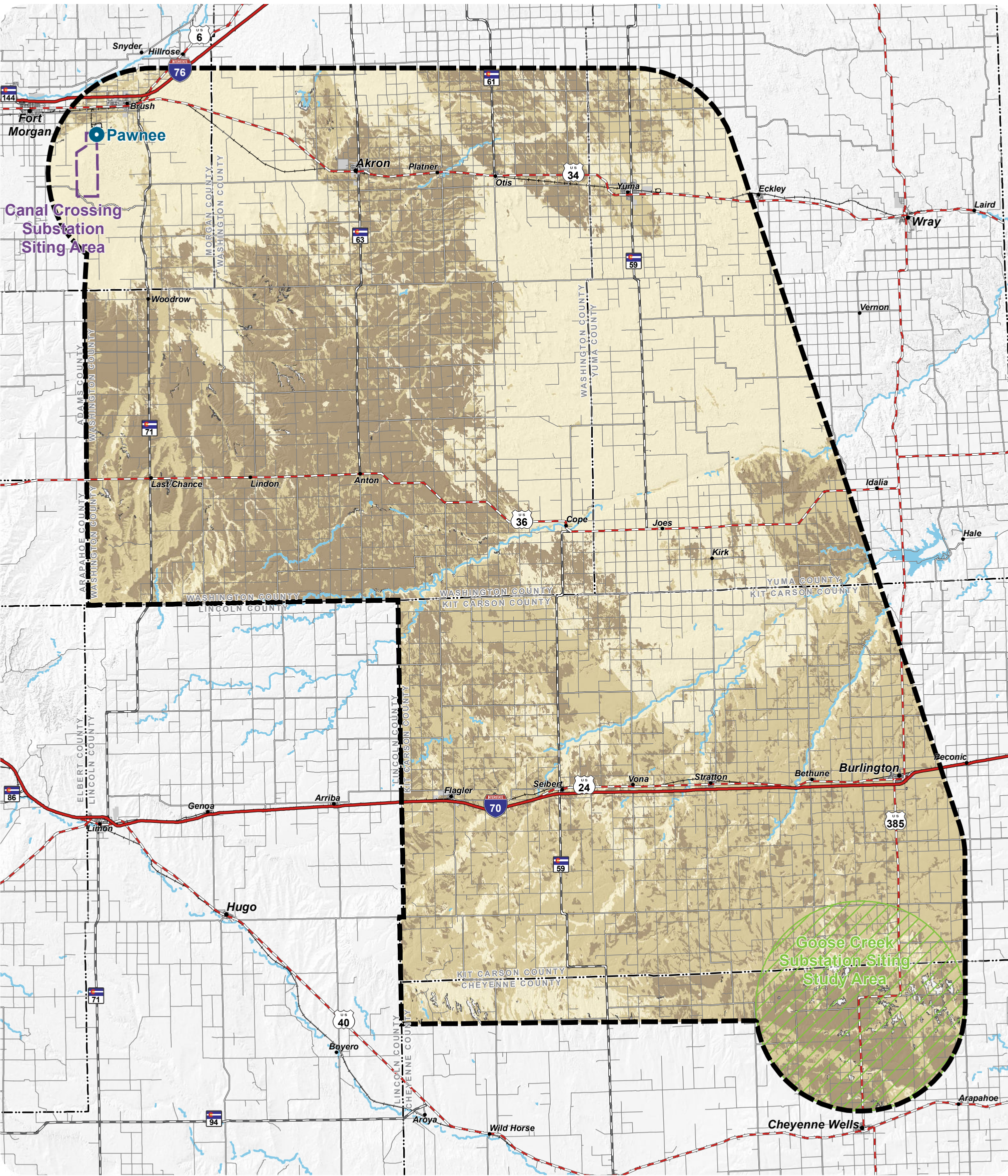
Segment 2 - Canal Crossing to Goose Creek

Wildlife Species Habitat

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COLORADO'S POWER PATHWAY



Legend

- Existing Substation
- Study Area
- New 345kV Substation Siting Study Area
- New 345kV Substation Siting Area

Transportation
(CDOT 2021, BTS 2020)

- Interstate
- U.S. Highway
- State Highway
- Local Road
- Railroad

Soil Erodibility (Water Erosion)
(NRCS SSURGO, 2020)

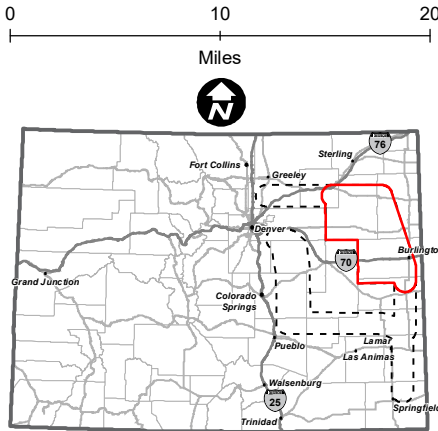
- Low
- Moderate
- High
- No Data

Hydrology
(NHD 2020)

- Waterbody

Boundary
(CDOT 2021, DOLA 2021)

- Municipal Boundary
- County



PRELIMINARY, SUBJECT TO CHANGE

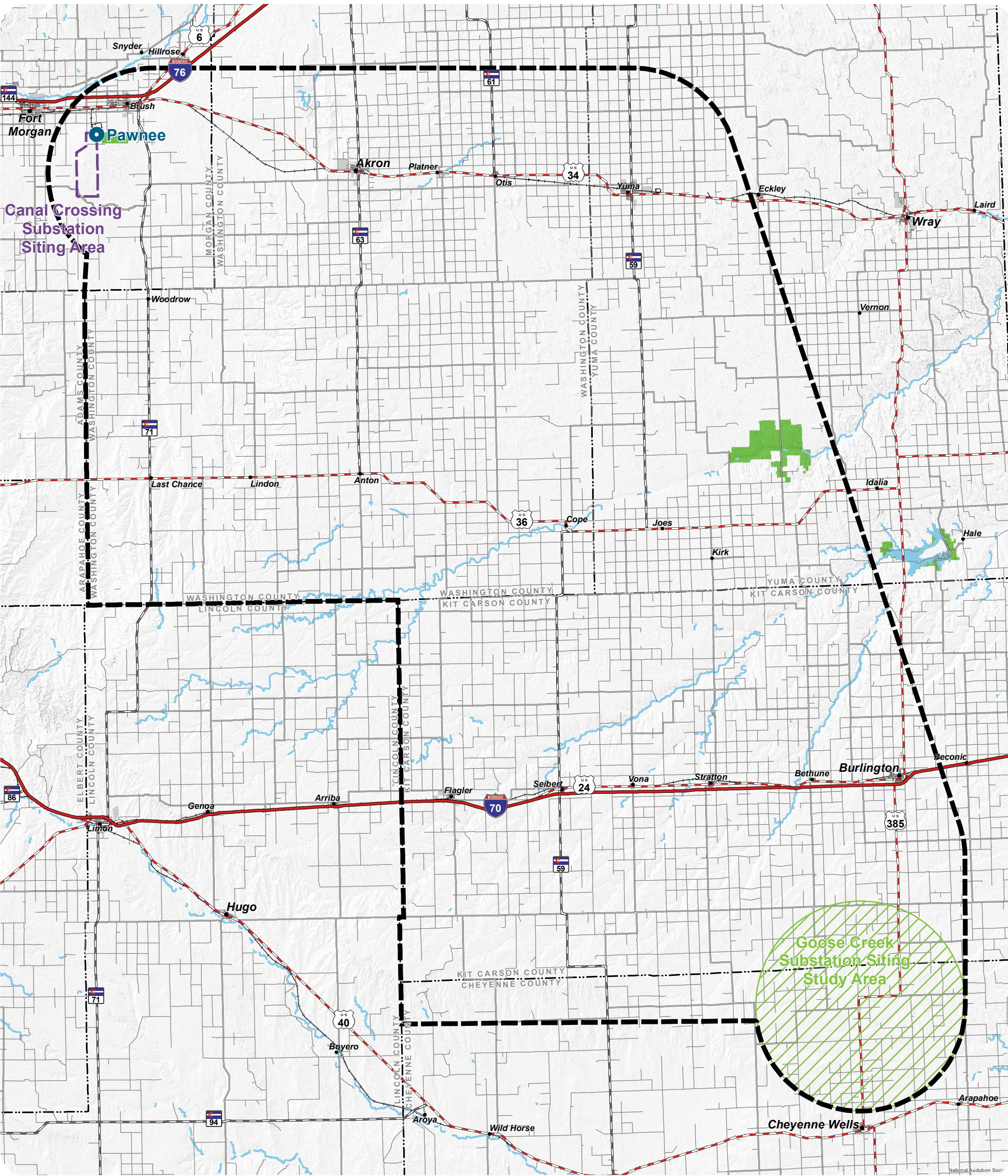
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 Path: P:\1163_0025_CO_Power_Pathway\GIS\Layouts\Segment_2\Resource_Maps\Soil_Erodibility.mxd

Segment 2 - Canal Crossing to Goose Creek

Soil Erodibility

COLORADO'S POWER PATHWAY



Legend

Existing Substation

Study Area

New 345kV Substation Siting Study Area

New 345kV Substation Siting Area

Transportation
(CDOT 2021, BTS 2020)

Interstate

U.S. Highway

State Highway

Local Road

Railroad

Hydrology
(NHD 2020)

Waterbody

Boundary
(CDOT 2021, DOLA 2021)

Municipal Boundary

County

Important Bird Areas
(Audubon 2020)

State

01020

Miles

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Path: P:\1163_0025_CO_Power_Pathway\GIS\Layouts\Segment_2\Resource_Maps\IBA.mxd

Segment 2 - Canal Crossing to Goose Creek

Important Bird Areas

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Appendix B: Transmission Line Routing Criteria

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Transmission Line Routing Criteria

Categorize resource data based on regulatory requirements and the influence of a resource on the construction and operation of a transmission line.

- **Suitable Area (optimize use):**
 - Less likely to be negatively impacted by transmission line construction and/or operation
 - Includes compatible land uses and lack of sensitive resources
- **Sensitive Area (minimize use):**
 - May incur environmental impacts or result in land use conflicts
 - Preferable to avoid if more suitable areas are available elsewhere
 - If a sensitive area cannot be avoided, impacts can often be mitigated
- **Exclusion Area (when possible, do not use):**
 - Locations with the highest level of sensitivity, including
 - Areas with regulatory or legislative designations
 - Extreme physical constraints not compatible with transmission line construction and/or operation
 - Could result in increased environmental and land use impacts, significantly higher costs or is not feasible from an engineering or constructability perspective

Resource Name	Data Source(s)	Suitable Area (Optimize)	Sensitivity (Minimize)	Exclusion (Exclude When Possible)	Additional Information
2021 Aerial	National Agriculture Imagery Program Imagery (2021)				Informational Purposes only – will be used for route identification/routing
Jurisdiction	Colorado Ownership, Management, and Protection (2019)	Within compatible use portions of the following lands: <ul style="list-style-type: none">• Bureau of Land Management (BLM)• U.S. Forest Service (USFS)• U. S. Fish & Wildlife Service• Department of Defense• Bureau of Reclamation• Bureau of Indian Affairs• National Park Service (NPS)• Private land• State land	Within boundary of the following formally designated federal lands: <ul style="list-style-type: none">• Areas of Critical Environmental Concern (ACEC)• National Wildlife Refuges• National Conservation Areas• National Land Trust Within boundary of formally designated state lands: <ul style="list-style-type: none">• State Land Board Stewardship Trust land• State Wildlife Areas• State Parks or Recreation areas• State Habitat Areas Within boundary of formally designated private property: <ul style="list-style-type: none">• Local parks or recreation areas	Within boundary of formally designated federal lands (except those areas listed under “sensitivity” column): <ul style="list-style-type: none">• Wilderness areas, wilderness study areas• Inventoried Roadless Areas• Research Natural Areas on NPS and USFS land• National Landmarks• National Monuments• National Recreation Areas• National Historic Sites• Military Reservation/Base Within boundary of Conservation Easements (including Wetland Reserve Program)	<p>Suitable lands are identified as such because there is no legislation precluding utility development on federally managed and privately owned lands with uses compatible to utility development. These lands do not have special designation or management objectives that preclude development of a transmission line.</p> <p>Sensitive areas have unique natural resource or recreation qualities, but legislation does not necessarily preclude use of these lands for utility development. Development of transmission lines within these lands are on a case-by-case basis and are subject to management prescriptions developed by agencies (if the land is held by the state or federal government) or is subject to landowner permissions (if the land is privately held).</p> <p>Excluded land types are typically incompatible with utility development based on formal designation and management objectives for specific goals such as resource protection, conservation, recreation, etc. In general, legislation and formal designation prohibits utility development on these lands.</p> <p>No ACECs in study areas.</p>

Resource Name	Data Source(s)	Suitable Area (Optimize)	Sensitivity (Minimize)	Exclusion (Exclude When Possible)	Additional Information
NLCD Land Cover	National Land Cover Database (2019)	Grassland/herbaceous Shrub/scrub Pasture/hay/cultivated crops Barren land	Developed land Forested areas (evergreen, deciduous, mixed) Wetlands/riparian areas (woody, emergent herbaceous)	Open water	Land Cover data are indicative of certain types of land use in areas that may be more or less compatible with transmission line construction and operation. For example, developed land typically has more intense land uses and a higher concentration of structures.
Zoning	<i>*Source(s) dependent on segment</i>	To be determined for each county on a segment-by-segment basis based on local code requirements			Spreadsheet being developed to identify and specific county considerations to inform these criteria.
State Wildlife Action Plan	Colorado Parks and Wildlife (2015)	Category 3, 4 & 5, No Data	Categories 2	Category 1	Category 1: Habitats, including wildlife corridors, that are rare or fragile and are essential to achieving and/or maintaining wildlife species viability or exceptional diversity. This habitat is considered irreplaceable. Category 2: Habitat, including wildlife corridors, which is limiting to a fish or wildlife community, population, or metapopulation. Loss of any of this habitat or corridor could result in a significant local or population-level decline in species distribution, abundance, or productivity. Category 3: Habitat, including wildlife corridors, that contributes significantly to the maintenance of fish or wildlife communities, populations, or metapopulations. [This category covers broad areas that would not be possible to avoid.] Category 4: Common habitat. Category 5: Habitat significance unknown. Colorado Parks & Wildlife - State Wildlife Action Plan
Public Institutions	Homeland Infrastructure Foundation-Level Data (2021)		150' of facility location	Area within 75' of facility location	Buildings are generally considered incompatible with transmission lines, as buildings cannot be built in the transmission line right-of-way (ROW). Smaller buildings can usually be avoided with minor adjustments to the location of transmission infrastructure. Public institutions are generally sited near other high-density land uses, such as residential developments.
Historic Places	National Register of Historic Places (2020)		Within 150' feet of NRHP sites or districts	Area within 75' of NRHP site or district	Avoid direct impact by not placing ROW over sites, consider potential visual impact to sites listed due to their visual character.
Avian Species Habitat	Colorado Parks and Wildlife (2021)		Within roosting/communal roosting habitat, lesser prairie chicken priority habitat, Foraging Areas, 1-mile of known raptor nest locations	Within avian production areas	Avian species may be impacted if route is sited near nest locations. CPW buffers and construction timing restrictions may be triggered.
Ground Transportation	Colorado Department of Transportation (2021) Bureau of Transportation Statistics (2020)	Within 0.25 mile of: <ul style="list-style-type: none"> Interstates U.S. highways State highways Major and local roads Greater than 0.5 mile away from existing rail line	Within 0.25 mile of scenic byway	Within 0.5 mile of existing rail line (paralleling)	Roads are existing linear corridors that often provide access for construction and maintenance subject to department of transportation (DOT) approvals and adherence to the DOT's standards and regulations. Federal Highway Administration (FHWA) Scenic Byways Policy: FR May 18, 1995 Volume 60, Number 96. A scenic byway is a public road with special scenic, historic, recreational, cultural, archaeological, and/or natural qualities that have been recognized as such through legislation or some other official declaration. Scenic byways may have associated scenic easements along the ROW that prohibit construction of utility structures or structures that degrade the scenic quality of the road. https://www.fhwa.dot.gov/hep/scenic_byways/index.cfm CDOT typically does not allow transmission lines to be located within interstate highway ROW, but some exceptions are allowed on a case-by-case basis. Construction and maintenance are difficult in or adjacent to interstate, U.S. or state highway ROW due to traffic, safety, and access. Paralleling rail lines at close distances for long lengths can raise concern regarding induced voltage on the rail line.

Resource Name	Data Source(s)	Suitable Area (Optimize)	Sensitivity (Minimize)	Exclusion (Exclude When Possible)	Additional Information
Air Transportation	Federal Aviation Administration (2021)			Within 50,000 feet of military airport Within 15,000 feet of public airport Within 5,000 feet of private airport Within 4,000 feet of heliport, balloon port, glider port	49 CFR Part 77, "Safe, Efficient Use and Preservation of the Navigable Airspace" provides Federal Aviation Administration (FAA) regulations for navigable airspace associated with airports. Federal Regulation Title 14 Part 77 establishes standards and notification requirements for objects affecting navigable airspace.
Water Resources	National Hydrography Dataset (2020) Federal Emergency Management Agency (2021) National Wetland Inventory (2020) Playa Lakes Joint Venture (2019)		Within wetland area Within 2,000' of lakes and perennial streams Within 0.25 mile of Natural River Inventory waterway	Within 100 feet of lakes and perennial streams Waterway (or 100' if not a polygon in water resources data)	Wetlands may be associated with "Waters of the United States" and are regulated under Section 404 of the Clean Water Act. http://water.epa.gov/lawsregs/guidance/wetlands/sec404.cfm Nationwide Rivers Inventory is a listing of free-flowing river segments in the U.S. that are believed to possess one or more "outstanding remarkable" values. Nationwide Rivers Inventory - Rivers (U.S. National Park Service) (nps.gov)
Water Wells	Colorado Division of Water Resources (2021)		Within 75' of water wells		
Oil and Gas Facilities	Colorado Oil and Gas Conservation Commission (2021) Ventyx (2021)			Within 0.5 mile of pipeline (paralleling) Within 250' of facility (well location, tank battery, pigging facilities)	Setback consideration for drilling of wells versus existing/operating wells may be different.
Extractive Industries and Landfills	Homeland Infrastructure Foundation-Level Data (2021) Colorado Division of Reclamation Mining and Safety (2021)			Within 0.25 mile of facility	Expansion plans not always known – follow up with owners/operators of specific facilities if routing nearby.
Topography	U.S. Geological Survey (2020)				Informational Purposes - gentle topography and slopes are desirable for transmission line corridors since steep slopes can present engineering challenges for construction and maintenance.
Slope	U.S. Geological Survey (2020)				Informational Purposes
Existing Electric Infrastructure	PSCo (2020) Federal Aviation Administration (2021) Homeland Infrastructure Foundation-Level Data (2021)	Within 0.25 mile of existing transmission line infrastructure	1,000' of FAA filed, not yet built turbine	Area within solar facility boundary. Area within distance 1.1 times the height of built wind turbine (turbine height assumed to be 500')	These resources provide linear corridors that are already developed and have existing access for construction and maintenance. Consider areas where collocating transmission lines is not preferred due to reliability concerns. Distribution lines are not mapped – aerial and field review to determine if any are routing factors.
Communication Facilities	Homeland Infrastructure Foundation-Level Data (2021)		Area within 300-500' of facility location	Area within 300' of facility location	Communication towers may have large guyed area and/or avoidance around areas the facility.
Agricultural Areas	U.S. Department of Agriculture (2020) U.S. Environmental Protection Agency (2021)			Concentrated Animal Feeding Operation (CAFO) (or within 500' if size not provided in data set)	CAFOs are dense operations that may not have space for transmission ROW, environmental concerns.
Parcels	<i>*Source(s) dependent on segment</i>				For Informational Purposes
Residential and Other Structures	Microsoft (2021) Homeland Infrastructure Foundation-Level Data (2021)		Area within 75-150' of structure	Area within 75' of structure	Assumes 150' ROW (75' either side of centerline) plus additional for structure/property size.
Public Land Survey	Bureau of Land Management (2020)				30' either side of center line held in reserve for future road expansion – For Informational Purposes

Resource Name	Data Source(s)	Suitable Area (Optimize)	Sensitivity (Minimize)	Exclusion (Exclude When Possible)	Additional Information
Prime Farmland	Natural Resources Conservation Service (2020)				For Informational Purposes – transmission line siting on farmland does prohibit agricultural use of the land. Consider impacts to irrigation ditches and canals that are used for flood irrigation. County/local designations may be a factor if data is identified or during conversations with jurisdictions.
EPA Registered Facilities	U.S. Environmental Protection Agency (2021)		Avoid area within 100' of registered facility		The Facility Registry Services (FRS) is a centrally managed database that identifies facilities, sites, or places subject to environmental regulations or of environmental interest.
Karst	U.S. Geological Survey (2017)				For Informational Purposes – covers too broad of an area to avoid. If known sinkhole locations are identified, they will be avoided.
Wildlife Species Habitat	Colorado Parks and Wildlife (2021)		Within production areas, severe winter range, or similar		
Recreation	Colorado Parks and Wildlife (2020)		Directly above trail, park, or path (assume width of 25' for trails or paths)		Trails/bike paths are not incompatible with electrical infrastructure development when they are located adjacent to such infrastructure. However, it would be preferable to avoid developing substations and transmission lines directly over these uses to limit the impact.
Soil Erodibility	Natural Resources Conservation Service Soil Survey Geographic Database (2020)				Data is not granular enough to support routing decisions – For Informational Purposes
Important Bird Areas	Audubon Society (2020)		Within area		
Critical Habitat	USFWS - None in study areas as of 5/3/21	No Critical Habitat within study areas.			
Wild & Scenic Rivers	None within study areas or nearby as of 5/14/21	No Wild & Scenic Rivers within study areas.			
Existing PSCo Land Rights	Xcel Energy	Utilize existing land rights where possible for all or a portion of the new ROW	n/a	n/a	Xcel provided data
Other Utilities Future Projects	Projects mapped as information became known – used for route identification/refinement as applicable.				
Irrigated Lands	Pivots and other irrigation devices considered during route refinement stage				

Appendix C: Substation Siting Criteria

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Substation Siting Criteria

Categorize resource data based on regulatory requirements and the influence of a resource on the construction and operation of a substation.

- **Suitable Area (optimize use):**
 - Less likely to be negatively impacted by substation construction and/or operation
 - Includes compatible land uses and lack of sensitive resources
- **Sensitive Area (minimize use):**
 - May incur environmental impacts or result in land use conflicts
 - Preferable to avoid if more suitable areas are available elsewhere
 - If a sensitive area cannot be avoided, impacts can often be mitigated
- **Exclusion Area (when possible, do not use):**
 - Locations with the highest level of sensitivity, including
 - Areas with regulatory or legislative designations
 - Extreme physical constraints not compatible with substation construction and/or operation
 - Could result in increased environmental and land use impacts, significantly higher costs or is not feasible from an engineering or constructability perspective

Resource Name	Data Source(s)	Suitable Area (Optimize)	Sensitivity (Minimize)	Exclusion (Exclude When Possible)	Additional Information
Parcel Location & Size		Parcels must be located within the Substation Siting Area defined for each substation and of suitable size (60 acres for Goose Creek, May Valley, and Longhorn).		Parcel less than 60 acres	Substations will require minimum acreages to accommodate all required equipment, meet setback requirements, and address any necessary screening or landscaping needs.
Presence of Building(s)		Vacant parcels / no existing buildings			Substations will require vacant parcels, i.e., no existing buildings. Parcels with existing buildings, or other development, typically will not provide enough remaining acreage if the building development were to remain or if it would require demolition.
2021 Aerial	National Agriculture Imagery Program Imagery (2021)				Informational Purposes – used for substation parcel identification
Jurisdiction	Colorado Ownership, Management, and Protection (2019)	<ul style="list-style-type: none">• Private land		Parcels within boundary of formally designated federal lands: <ul style="list-style-type: none">• Bureau of Land Management (BLM)• U.S. Forest Service (USFS)• U. S. Fish & Wildlife Service• Department of Defense• Bureau of Reclamation• Bureau of Indian Affairs• National Park Service (NPS)• Wilderness areas, wilderness study areas• Inventoried Roadless Areas• Research Natural Areas on NPS and USFS land• National Landmarks• National Monuments• National Recreation Areas	Substation sites should be located on private land which can be purchased in fee. Lease, ROW grants, or land exchanges are not desirable. Some federal and state land designations prohibit infrastructure development.

Resource Name	Data Source(s)	Suitable Area (Optimize)	Sensitivity (Minimize)	Exclusion (Exclude When Possible)	Additional Information
				<ul style="list-style-type: none"> • Areas of Critical Environmental Concern (ACEC) • National Wildlife Refuges • National Conservation Areas • National Land Trust Parcels within boundary of Conservation Easements (including Wetland Reserve Program) Within boundary of formally designated state lands: <ul style="list-style-type: none"> • State Land Board Stewardship Trust land • State Wildlife Areas • State Parks or Recreation areas • State Habitat Areas Parcels within boundary of formally designated private property: <ul style="list-style-type: none"> • Local parks or recreation areas 	
NLCD Land Cover	National Land Cover Database (2019)	Parcels located within: Grassland/herbaceous Shrub/scrub Pasture/hay/cultivated crops Barren land		Parcels located within: Developed land Forested areas (evergreen, deciduous, mixed) Open water Wetlands/riparian areas (woody, emergent herbaceous)	Land Cover data are indicative of certain types of land use in areas that may be more or less compatible with substation construction and operation. For example, developed land typically has more intense land uses and a higher concentration of structures.
Zoning	<i>*Source(s) dependent on segment</i>	To be determined for each county on a substation-by-substation basis based on local code requirements			For informational purposes
State Wildlife Action Plan	Colorado Parks and Wildlife (2015)	Parcels in Category 3, 4 & 5, No Data	Parcels in Categories 2	Parcels in Category 1	Category 1: Habitats, including wildlife corridors, that are rare or fragile and are essential to achieving and/or maintaining wildlife species viability or exceptional diversity. This habitat is considered irreplaceable. Category 2: Habitat, including wildlife corridors, which is limiting to a fish or wildlife community, population, or metapopulation. Loss of any of this habitat or corridor could result in a significant local or population-level decline in species distribution, abundance, or productivity. Category 3: Habitat, including wildlife corridors, that contributes significantly to the maintenance of fish or wildlife communities, populations, or metapopulations. [This category covers broad areas that would not be possible to avoid.] Category 4: Common habitat. Category 5: Habitat significance unknown. Colorado Parks & Wildlife - State Wildlife Action Plan
Public Institutions	Homeland Infrastructure Foundation-Level Data (2021)		Parcels within 150' of facility location	Parcels within 75' of facility location	Parcels with schools, libraries, churches, hospitals are excluded by vacant parcel/building criteria. Public institutions are generally sited near other high-density land uses, such as residential developments, which may be less compatible with substations.
Historic Places	National Register of Historic Places (2020)		Parcels 150' feet of NRHP sites or districts	Parcels within 75' of NRHP site or district	Avoid direct impact by not placing substation near sites, consider potential visual impact to sites listed due to their visual character.

Resource Name	Data Source(s)	Suitable Area (Optimize)	Sensitivity (Minimize)	Exclusion (Exclude When Possible)	Additional Information
Avian Species Habitat	Colorado Parks and Wildlife (2021)		Parcels within roosting/communal roosting habitat, lesser prairie chicken priority habitat, Foraging Areas, 1-mile of known raptor nest locations	Parcels within avian production areas	Avian species may be impacted if substation is sited near nest locations. CPW buffers and construction timing restrictions may be triggered.
Ground Transportation	Colorado Department of Transportation (2021) Bureau of Transportation Statistics (2020)	Parcels within 0.25 mile of: <ul style="list-style-type: none"> Interstates U.S. highways State highways Major and local roads Parcels greater than 0.5 mile away from existing rail line	Parcels within 0.25 mile of scenic byway Parcels greater than 0.25 mile of: <ul style="list-style-type: none"> Interstates U.S. highways State highways Major and local roads 	Parcels within 0.5 mile of existing rail line	Roads are existing linear corridors that often provide access for construction and maintenance subject to department of transportation (DOT) approvals and adherence to the DOT's standards and regulations. Federal Highway Administration (FHWA) Scenic Byways Policy: FR May 18, 1995 Volume 60, Number 96. A scenic byway is a public road with special scenic, historic, recreational, cultural, archaeological, and/or natural qualities that have been recognized as such through legislation or some other official declaration. Scenic byways may have associated scenic easements along the ROW that prohibit construction of utility structures or structures that degrade the scenic quality of the road. https://www.fhwa.dot.gov/hep/scenic_byways/index.cfm Siting substations near rail lines can raise concern regarding induced voltage on the rail line. Adjacency to existing roads required for all new substations
Air Transportation	Federal Aviation Administration (2021)			Parcels within: Within 50,000 feet of military airport Within 15,000 feet of public airport Within 5,000 feet of private airport Within 4,000 feet of heliport, balloon port, glider port	49 CFR Part 77, "Safe, Efficient Use and Preservation of the Navigable Airspace" provides Federal Aviation Administration (FAA) regulations for navigable airspace associated with airports. Federal Regulation Title 14 Part 77 establishes standards and notification requirements for objects affecting navigable airspace.
Water Resources	National Hydrography Dataset (2020) Federal Emergency Management Agency (2021) National Wetland Inventory (2020) Playa Lakes Joint Venture (2019)	Parcels without significant areas occupied by water resources (water bodies, wetlands, floodplains, etc.)	Parcels within 2,000' of lakes and perennial streams Within 0.25 mile of Natural River Inventory waterway Within 100 feet of lakes and perennial streams	Parcels with waterway present (or 100' if not a polygon in water resources data) Within wetland area	Wetlands may be associated with "Waters of the United States" and are regulated under Section 404 of the Clean Water Act. http://water.epa.gov/lawsregs/guidance/wetlands/sec404.cfm Nationwide Rivers Inventory is a listing of free-flowing river segments in the U.S. that are believed to possess one or more "outstanding remarkable" values. Nationwide Rivers Inventory - Rivers (U.S. National Park Service) (nps.gov) Surface water resources are incompatible with electric substations due to operations/maintenance issues, environmental impacts, and permitting requirements. However, electric substations may be constructed on parcels crossed by water resources in upland areas to avoid impacts.
Water Wells	Colorado Division of Water Resources (2021)	Parcel Within 75' of water wells			Due to need for water during substation construction, water wells could present an opportunity for an onsite/nearby water source.
Oil and Gas Facilities	Colorado Oil and Gas Conservation Commission (2021) Ventyx (2021)			Parcels within 0.5 mile of pipeline Within 250' of facility (well location, tank battery, pigging facilities)	Setback consideration for drilling of wells versus existing/operating wells may be different.
Extractive Industries and Landfills	Homeland Infrastructure Foundation-Level Data (2021)			Parcels within 0.25 mile of facility	Expansion plans not always known – follow up with owners/operators of specific facilities if siting nearby.

Resource Name	Data Source(s)	Suitable Area (Optimize)	Sensitivity (Minimize)	Exclusion (Exclude When Possible)	Additional Information
	Colorado Division of Reclamation Mining and Safety (2021)				
Topography	U.S. Geological Survey (2020)				Informational Purposes Only- flat topography and slopes are desirable for substation siting since steep slopes can present engineering challenges for construction.
Slope	U.S. Geological Survey (2020)				Informational Purposes Only
Existing Electric Infrastructure	PSCo (2020) Federal Aviation Administration (2021) Homeland Infrastructure Foundation-Level Data (2021)	Parcels within 0.25 mile of existing transmission line infrastructure Within 2 miles of distribution infrastructure for station service Goose Creek: Within 2 miles of an existing renewable energy generation source gen-tie line	Parcel within 1,000' of FAA filed, not yet built turbine	Parcel within solar facility boundary. Parcel within distance 1.1 times the height of built wind turbine (turbine height assumed to be 500')	These resources provide linear corridors that are already developed and have existing access for construction and maintenance. Distribution lines are not mapped – aerial and field review to determine if any are siting factors. Distribution proximity required for all new substations (Canal Crossing, Goose Creek, May Valley, Longhorn)
Communication Facilities	Homeland Infrastructure Foundation-Level Data (2021)		Area within 300-500' of facility location	Area within 300' of facility location	Communication towers may have large guyed area and/or avoidance around areas the facility.
Agricultural Areas	U.S. Department of Agriculture (2020) U.S. Environmental Protection Agency (2021)			Concentrated Animal Feeding Operation (CAFO) (or within 500' if size not provided in data set)	CAFOs are dense operations that may present environmental concerns.
Residential and Other Structures	Microsoft (2021) Homeland Infrastructure Foundation-Level Data (2021)		Parcel within 75-150' of structure	Parcel within 75' of structure	
Public Land Survey	Bureau of Land Management (2020)				30' either side of center line held in reserve for future road expansion – For Informational Purposes
Prime Farmland	Natural Resources Conservation Service (2020)				For Informational Purposes – substation siting on farmland does prohibit agricultural use of the land. Consider impacts to irrigation ditches and canals that are used for flood irrigation. County/local designations may be a factor if data is identified or during conversations with jurisdictions.
EPA Registered Facilities	U.S. Environmental Protection Agency (2021)		Parcels within 100' of registered facility		The Facility Registry Services (FRS) is a centrally managed database that identifies facilities, sites, or places subject to environmental regulations or of environmental interest.
Karst	U.S. Geological Survey (2017)			Known sinkhole locations	
Wildlife Species Habitat	Colorado Parks and Wildlife (2021)		Parcels within production areas, severe winter range, or similar		
Recreation	Colorado Parks and Wildlife (2020)		Parcels containing trail, park, or path (assume width of 25' for trails or paths)		Trails/bike paths are not incompatible with electrical infrastructure development when they are located adjacent to such infrastructure.
Soil Erodibility	Natural Resources Conservation Service Soil Survey Geographic Database (2020)				Data is not granular enough to support siting decisions – For Informational Purposes
Important Bird Areas	Audubon Society (2020)		Parcels within area		
Critical Habitat	USFWS - None in study area as of 5/3/21	No Critical Habitat within study areas.			

Resource Name	Data Source(s)	Suitable Area (Optimize)	Sensitivity (Minimize)	Exclusion (Exclude When Possible)	Additional Information
Wild & Scenic Rivers	None within our study areas or nearby as of 5/14/21	No Wild & Scenic Rivers within study areas.			
Existing PSCo Land Rights	Xcel Energy	Existing PSCo land rights	n/a	n/a	Xcel provided data
Other Utilities Future Projects	Projects mapped as information became known – used for site identification/refinement as applicable.				
Irrigated Lands	Pivots and other irrigation devices considered during site refinement stage				

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Appendix D: Link Modification Tracker

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Link Modification Tracker

Link	No Change	Eliminated	Modified	Added	Comments
201		•			Eliminated due to identification of magnetometer along and east of Link 201; eliminated after refining the Canal Crossing Substation Siting Area CPW advised to route along south side of SWA, east of Pawnee
202		•			Small connector link eliminated due to elimination of Links 204 and 2100
203		•	•		Modified to remove diagonal, split to include 2101 and 2105, then eliminated Fall 2021 Public Feedback: fewer residential and irrigated farmlands when compared to similar links
204		•			Connector link eliminated after elimination of Link 201
205	•		•		Modified to connect directly to Link 206 Alternative link
206		•			Eliminated due to diagonal and length paralleling pipeline and required protective measures Fall 2021 Public Feedback: lack of support for diagonal routing
207			•		Modified to connect to new Link 2103 Preferred link
208	•				Formerly alternative, but chosen as preferred due to public feedback Preferred link
209	•				Alternative link
210	•				Alternative link
211		•			Eliminated due to diagonal
212		•			Eliminated
213		•			Eliminated due to added distance and diagonals
214		•			Eliminated
215	•				Alternative link
216	•				Alternative link
217		•			Eliminated due to diagonal
218	•				Formerly alternative, but chosen as preferred due to public feedback Preferred link
219	•				Formerly preferred, but chosen as alternative due to public feedback Alternative link Winter 2022 Public Feedback: Preference for Links 208 and 218 over Links 219 and 220. Links 208 and 218 avoid a nearby home.

220	•				Formerly preferred, but chosen as alternative due to public feedback Alternative link
221		•			Eliminated due to diagonal
222		•			Eliminated due to diagonal
223	•				Preferred link
224	•				Preferred link
225	•				Preferred link
226	•				Alternative link
227	•				Alternative link
228	•		•		Modified to remove portion of diagonal
229	•				Alternative link
230	•				Alternative link
231	•				Alternative link
232	•				Alternative link
233	•				Alternative link
234	•				Alternative link
235		•			Eliminated due to diagonal
236	•				Alternative link
237	•				Preferred link
238	•				Preferred link
239	•				Preferred link
240		•			Removed due to diagonal
241	•				Preferred link
242		•			Eliminated due to diagonal
243	•				Alternative link
244	•				Preferred link
245	•				Alternative link
246	•				Alternative link
247	•				Alternative link
248	•				Alternative link
249		•			Small connector link removed due to distance and removal of Links 251 and 252
250	•				Alternative link

251		•			Eliminated due to diagonal and length paralleling pipeline and required protective measures
252		•			Eliminated due to distance and removal of Link 213
253		•			Eliminated due to distance
254		•			Eliminated due to diagonal
255		•			Eliminated due to links 249, 252, 254, and 256 being removed
256		•			Eliminated due to diagonal
257	•				Alternative link Winter 2022 Public Feedback: Link 257 divides a farm. Follow section lines.
258		•			Eliminated
259			•		Preferred link Modified to remove diagonal and follow field lines to avoid potential impacts to crop dusting operations if fields are bisected Winter 2022 Public Feedback: Follow section lines and roads
260		•			Eliminated
261		•			Small connector link removed due to removal of Links 258 and 260
262	•				Alternative link
263	•				Alternative link
264		•			Removed due to distance and removal Links 251, 252, 253, 254, and 256
265	•				Alternative link
266		•			Eliminated
267	•				Modified due to modification of Link 259 and to follow field lines Preferred link
268	•				Alternative link
269	•				Alternative link
270			•		Preferred link Modified to remove diagonals and follow section lines Winter 2022 Public Feedback: Follow field lines to avoid a nearby home
271	•				Alternative link
272	•				Preferred link
273	•				Alternative link
274	•				Alternative link
275	•				Preferred link
276	•				Preferred link

277	•				Preferred link
278		•			Eliminated due to diagonal
279		•			Eliminated due to diagonal
280	•				Preferred link
281	•				Preferred link
282	•				Alternative link
283	•				Alternative link
284	•				Alternative link
285	•				Alternative link
286		•			Eliminated due to diagonal Fall 2021 Public Feedback: lack of support for diagonal routing
287	•				Preferred link
288	•				Preferred link
289	•				Alternative link
290	•				Preferred link
291	•				Preferred link
292	•				Alternative link
293	•				Alternative link
294	•				Preferred link
295	•				Alternative link
296		•			Eliminated
297	•				Alternative link
298	•				Alternative link
299		•		•	Added when Link 2100 was added and split Link 202 Small connector link eliminated due to elimination of Link 204
2100		•		•	Fall 2021 Public Feedback: consider routing west of Link 204 Added based on feedback received in Fall 2021 Eliminated
2101				•	Alternative link Added due to modification of Link 203 and addition of Link 2104
2102				•	Alternative link Added when Link 204 split to accommodate addition of Link 2101 Winter 2022 Public Feedback: potential nearby solar development

2103			•	•	Preferred link Added to accommodate Canal Crossing Substation Siting Area Modified to follow section lines Winter 2022 Public Feedback: follow section lines
2104				•	Alternative link Added to accommodate Canal Crossing Substation Siting Area
2105			•	•	Alternative link Added due to modification of Link 203 and addition of Link 2104
2106			•	•	Alternative link Added when Link 207 split to accommodate addition of Link 2103

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Appendix E: Comparative Matrix

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	Link Number	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218
Engineering Factors																			
Overall length (miles)		5.87	3.07	2.90	3.01	10.94	11.55	7.58	6.06	1.88	5.17	7.08	9.40	27.36	5.04	7.45	3.94	8.37	2.04
Existing Electric Infrastructure																			
Number of Existing Transmission line crossings		1	4	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Length adjacent to Existing Transmission line (within 200ft) (miles)		1.97	3.07	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00
Length along existing PSCo Fee Owned ROW (feet)		4.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Percent within existing PSCo Fee Owned ROW		82%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Roads																			
Number of road crossings (Major and Local)		1	1	0	1	4	7	4	5	1	2	4	5	18	4	6	7	9	1
Length adjacent to roads (within 200ft) (miles)		2.54	0.75	0.00	0.08	1.24	0.74	3.80	6.06	1.88	1.27	0.42	2.00	9.66	0.30	3.21	3.02	1.72	1.64
Number of State Highway crossings		0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Length adjacent to State Highway (within 200ft) (miles)		0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00
Number of US Highway crossings		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Length adjacent to U.S. Highway (within 200ft) (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Number of Interstate crossings		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Length adjacent to Interstate (within 200ft) (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length adjacent to roads (all roads) (within 200ft) (miles)		2.54	0.83	0.00	0.08	1.24	0.74	3.80	6.06	1.88	1.27	0.42	2.00	9.66	0.30	3.21	3.02	1.72	1.64
Percent adjacent to roads (all roads)		43.3%	27.2%	0.0%	2.5%	11.3%	6.5%	50.1%	100.0%	100.0%	24.5%	5.9%	21.2%	35.3%	6.0%	43.0%	76.5%	20.6%	80.5%
Scenic Byway's with 200ft		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rail																			
Number of railroad crossings		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Length adjacent to railroad (within 75ft) (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landowners and Parcels																			
Number of parcels crossed		7	9	5	5	22	24	15	10	5	11	12	15	8	10	10	5	14	5
Length adjacent to parcel lines (within 75ft) (miles)		1.56	2.85	0.00	0.19	3.57	10.71	5.15	5.75	0.14	1.15	6.59	3.68	2.23	2.64	6.95	1.86	7.86	1.90
Number of landowners crossed		4	7	2	3	15	20	10	9	5	10	7	10	8	9	10	5	13	4
Other Infrastructure																			
Oil and Gas wells within 50ft		0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0
Number of gas pipelines crossed		0	0	1	0	0	3	0	0	0	1	0	0	0	0	3	1	0	0
Length adjacent to gas pipeline (within 200ft) (miles)		0.00	0.00	0.12	0.00	0.00	4.13	0.00	0.00	0.04	0.05	0.00	0.00	0.00	0.00	0.35	0.10	0.00	0.00
Water wells within 75ft		5	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	1	0
Communication Facility within 300ft		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NEXRAD towers within 300ft		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NAVAID towers within 300ft		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Public Institutions within 150ft		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Air Transportation																			
Nearest Airport (military, public, private, heliport, balloon port, glider port) (miles)		1.70	3.04	3.04	4.01	7.52	7.52	11.84	12.34	10.87	7.79	5.72	3.72	5.94	5.99	10.89	11.01	12.34	12.34
Number of Military Training Routes Crossed		0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0
Number of Training Areas Crossed		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Length Crossing Training Area (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length Crossing Special Use Airspace/MOA (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jurisdiction/Land Use Factors																			
Counties																			
Length in Morgan County (miles)		5.87	3.07	2.90	3.01	2.93	4.03	7.58	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length in Washington County (miles)		0.00	0.00	0.00	0.00	8.02	7.51	0.00	6.04	1.88	5.17	7.08	9.40	27.36	5.04	7.45	3.94	8.37	2.04
Length in Yuma County (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length in Kit Carson County (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length in Cheyenne County (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jurisdiction																			
Length crossing Bureau of Land Management (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing State Land (miles)		0.00	0.00	0.00	0.00	2.40	0.00	0.69	0.00	0.00	0.00	1.10	0.00	6.38	0.00	1.00	0.00	0.00	0.52
Length crossing Stewardship Trust Land (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing State Wildlife Area (miles)		0.28	0.00	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Conservation Easement (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Department of Defense (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land Use (NLCD Land Cover)																			
Length crossing Open Water (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Developed, Open Space (miles)		1.05	0.04	0.00	0.00	0.37	0.28	1.68	1.32	1.13	0.53	0.06	0.55	2.86	0.11	4.32	0.81	0.90	0.16
Length Crossing Developed, Low Intensity (miles)		0.18	0.02	0.00	0.00	0.00	0.00	0.09	0.12	0.11	0.07	0.00	0.00	0.06	0.00	0.02	0.00	0.04	0.02
Length crossing Developed, Medium Intensity (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Developed, High Intensity (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Barren Land (Rock/Sand/Clay) (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Deciduous Forest (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Evergreen Forest (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Mixed Forest (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Shrub/Scrub (miles)		0.00	0.00	0.00	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Grassland/Herbaceous (miles)		3.19	2.11	2.79	2.58	10.57	9.16	2.16	0.45	0.00	4.15	5.35	7.32	16.25	0.39	1.14	1.04	1.11	0.53
Length crossing Pasture/Hay (miles)		0.24	0.00	0.00	0.00	0.00	1.05	0.33	0.00	0.00	0.06	0.00	0.00	0.36	0.00	0.02	0.35	0.00	0.00
Length crossing Cultivated Crops (miles)		1.00	0.87	0.03	0.00	0.00	1.06	3.29	4.17	0.64	0.33	1.67	1.45	7.83	4.54	1.94	1.75	6.33	1.33
Length crossing Woody Wetlands (miles)		0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Emergent Herbaceous Wetlands (miles)		0.14	0.03	0.08	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	Link Number	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218
Residences and Other Buildings																			
Residences																			
Residences within 75ft		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Residences within 75ft - 150ft		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total residences within 150ft		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total residences within 500ft		3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
Total residences within 0.25-mile		9	4	0	0	0	2	0	0	0	0	0	0	1	0	0	1	1	0
Other Structures																			
Other Structures/non-residential buildings within 75ft		0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Other Structures/non-residential buildings within 75 -150ft		1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Other Structures/non-residential buildings within 150ft		1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Total Other Structures/non-residential buildings within 500ft		18	6	1	0	0	0	1	0	0	5	1	1	2	1	0	0	1	0
Total Other Structures/non-residential buildings within-mile		90	14	7	0	0	0	1	1	0	6	1	1	4	1	0	0	3	0
Subdivisions																			
Number of Subdivisions within 0.25-mile		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Natural Resources																			
Length crossing wetlands (feet)		165.66	79.83	256.99	0.00	37.10	96.63	47.96	446.35	22.91	327.99	25.63	99.70	342.94	169.06	171.93	131.56	881.75	45.38
Length crossing Waterbody (feet)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	511.78	0.00	0.00	0.00	55.40
Number of perennial waterway crossings		0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Number of intermittent waterway crossings		0	2	0	0	1	1	1	3	1	2	1	1	10	3	5	5	2	1
Number of canal/ditch waterway crossings		2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Length crossing 100-year floodplains (miles)		0.00	0.78	0.00	0.00	0.00	0.00	0.30	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length Crossing Playa Lakes Joint Venture Playas (feet)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	583.14	0.00	0.00	0.00	0.00	0.00	0.00	752.85	0.00
Wildlife																			
Raptor Nests within 0.5-mile		1	1	0	0	1	0	1	0	0	0	0	1	1	0	0	0	0	0
Length Crossing White Pelican Foraging Area (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lesser Prairie-chicken																			
Number of Southern Great Plains Lek's crossed		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Length Crossing Southern Great Plains Lek (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Southern Great Plains Critical Habitat Assessment Too 1		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Southern Great Plains Critical Habitat Assessment Tool 2		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Southern Great Plains Critical Habitat Assessment Tool 3		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Southern Great Plains Critical Habitat Assessment Too 4		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Colorado Parks and Wildlife Lesser Prairie Chicken Priority Habitat		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Number of Colorado Parks and Wildlife Lesser Prairie Chicken Production area/Lek crossed		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Length Crossing Colorado Parks and Wildlife Lesser Prairie Chicken Production area/Lek (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length Crossing U.S. Fish and Wildlife Service 60%		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cultural Resources																			
Number of National Register of Historic Properties, state register and local landmark sites within 75ft		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Historic Trails Crossed		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Cemeteries with in 0.25 miles		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Link Number	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241
Engineering Factors																								
Overall length (miles)		5.78	1.98	14.08	6.31	2.74	5.31	1.01	4.90	1.99	7.13	5.90	7.01	0.98	3.98	5.96	2.94	3.55	15.78	2.93	2.15	3.95	2.75	10.04
Existing Electric Infrastructure																								
Number of Existing Transmission line crossings		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Length adjacent to Existing Transmission line (within 200ft) (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.06
Length along existing PSCo Fee Owned ROW (feet)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Percent within existing PSCo Fee Owned ROW		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Roads																								
Number of road crossings (Major and Local)		2	0	9	6	1	2	0	1	1	4	3	6	2	2	6	0	2	9	1	2	1	1	5
Length adjacent to roads (within 200ft) (miles)		5.78	1.98	0.85	0.54	0.05	0.15	0.00	0.08	0.08	2.12	4.01	3.72	0.98	3.98	5.96	0.03	0.23	3.77	0.08	0.14	0.12	0.16	6.24
Number of State Highway crossings		0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0
Length adjacent to State Highway (within 200ft) (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.08	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Number of US Highway crossings		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Length adjacent to U.S. Highway (within 200ft) (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.08
Number of Interstate crossings		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Length adjacent to Interstate (within 200ft) (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length adjacent to roads (all roads) (within 200ft) (miles)		5.78	1.98	0.85	0.54	0.05	0.15	0.00	0.08	0.08	2.12	4.01	3.72	0.98	3.98	5.96	0.03	0.23	3.77	0.08	0.14	0.12	0.16	6.24
Percent adjacent to roads (all roads)		100.0%	100.0%	6.0%	8.6%	1.7%	2.9%	0.0%	1.5%	3.8%	29.8%	67.9%	53.1%	100.0%	100.0%	100.0%	0.9%	6.4%	23.9%	2.6%	6.5%	3.0%	5.9%	62.2%
Scenic Byway's with 200ft		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rail																								
Number of railroad crossings		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Length adjacent to railroad (within 75ft) (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landowners and Parcels																								
Number of parcels crossed		10	3	22	12	6	6	1	8	4	8	11	10	2	6	10	5	7	24	4	3	4	4	18
Length adjacent to parcel lines (within 75ft) (miles)		0.00	1.92	13.27	5.87	0.15	0.00	0.46	2.46	0.30	4.08	3.29	5.26	0.95	1.94	1.74	0.25	3.32	10.14	1.76	1.94	3.74	2.64	5.13
Number of landowners crossed		9	2	16	11	5	5	1	8	4	6	10	10	2	6	10	5	6	24	4	2	4	4	13
Other Infrastructure																								
Oil and Gas wells within 50ft		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
Number of gas pipelines crossed		0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
Length adjacent to gas pipeline (within 200ft) (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25
Water wells within 75ft		0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Communication Facility within 300ft		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NEXRAD towers within 300ft		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NAVAID towers within 300ft		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Public Institutions within 150ft		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Air Transportation																								
Nearest Airport (military, public, private, heliport, balloon port, glider port) (miles)		14.13	16.63	15.22	16.56	14.13	16.56	19.83	19.98	18.17	16.53	17.93	14.92	18.21	18.35	18.35	20.04	20.54	18.79	19.62	19.63	19.78	19.78	18.55
Number of Military Training Routes Crossed		1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Training Areas Crossed		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Length Crossing Training Area (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length Crossing Special Use Airspace/MOA (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jurisdiction/Land Use Factors																								
Counties																								
Length in Morgan County (miles)		0.01	1.98	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length in Washington County (miles)		5.77	0.00	14.05	6.29	2.74	5.31	1.01	4.90	1.99	7.13	5.90	7.01	0.98	3.98	5.96	2.94	3.55	15.78	2.93	2.15	3.95	2.75	10.04
Length in Yuma County (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length in Kit Carson County (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length in Cheyenne County (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jurisdiction																								
Length crossing Bureau of Land Management (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing State Land (miles)		0.02	1.00	2.07	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.00	0.00	1.19	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Length crossing Stewardship Trust Land (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing State Wildlife Area (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Conservation Easement (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Department of Defense (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land Use (NLCD Land Cover)																								
Length crossing Open Water (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Developed, Open Space (miles)		3.35	0.72	0.20	0.15	0.02	0.04	0.00	0.02	0.04	0.04	1.66	3.25	0.05	1.23	2.56	0.00	0.05	2.38	0.02	0.04	0.67	0.01	2.45
Length Crossing Developed, Low Intensity (miles)		0.30	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.17	0.25	0.00	0.00	0.06	0.00	0.00	0.28	0.00	0.00	0.02	0.00	0.06
Length crossing Developed, Medium Intensity (miles)		0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.04	0.00	0.00	0.02	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
Length crossing Developed, High Intensity (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Barren Land (Rock/Sand/Clay) (miles)		0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Deciduous Forest (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Evergreen Forest (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Mixed Forest (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Shrub/Scrub (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Grassland/Herbaceous (miles)		1.26	1.26	6.71	2.29	2.43	2.73	0.83	1.96	0.74	5.04	0.80	2.20	0.00	1.09	0.08	0.98	0.00	1.67	1.89	2.11	2.98	1.40	2.95
Length crossing Pasture/Hay (miles)		0.00	0.00	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.21
Length crossing Cultivated Crops (miles)		0.86	0.00	6.71	3.83	0.29	2.55	0.18	2.92	1.20	2.													

	Link Number	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241
Residences and Other Buildings																								
Residences																								
Residences within 75ft	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Residences within 75ft - 150ft	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total residences within 150ft	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total residences within 500ft	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Total residences within 0.25-mile	1	2	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Other Structures																								
Other Structures/non-residential buildings within 75ft	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Structures/non-residential buildings within 75 -150ft	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Other Structures/non-residential buildings within 150ft	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Total Other Structures/non-residential buildings within 500ft	1	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0
Total Other Structures/non-residential buildings within-mile	3	2	0	0	0	0	0	0	0	0	1	0	1	1	3	0	0	0	0	0	0	0	0	1
Subdivisions																								
Number of Subdivisions within 0.25-mile	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Natural Resources																								
Length crossing wetlands (feet)	268.41	52.50	1290.10	296.63	127.15	183.03	0.00	898.10	119.73	404.91	113.19	244.58	21.08	0.00	52.96	41.98	1020.84	1193.43	370.86	124.63	81.31	24.92	1761.16	
Length crossing Waterbody (feet)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.34	0.00	53.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	953.99	
Number of perennial waterway crossings	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
Number of intermittent waterway crossings	12	2	4	3	5	7	0	4	2	9	5	10	1	0	2	2	3	4	3	5	3	1	0	
Number of canal/ditch waterway crossings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Length crossing 100-year floodplains (miles)	0.00	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Length Crossing Playa Lakes Joint Venture Playas (feet)	0.00	0.00	650.69	0.00	0.00	0.00	0.00	284.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	624.07	138.48	0.00	0.00	0.00	0.00	1427.28	
Wildlife																								
Raptor Nests within 0.5-mile	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Length Crossing White Pelican Foraging Area (miles)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Lesser Prairie-chicken																								
Number of Southern Great Plains Lek's crossed	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Length Crossing Southern Great Plains Lek (miles)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Southern Great Plains Critical Habitat Assessment Too 1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Southern Great Plains Critical Habitat Assessment Tool 2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Southern Great Plains Critical Habitat Assessment Tool 3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Southern Great Plains Critical Habitat Assessment Too 4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Colorado Parks and Wildlife Lesser Prairie Chicken Priority Habitat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Number of Colorado Parks and Wildlife Lesser Prairie Chicken Production area/Lek crossed	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Length Crossing Colorado Parks and Wildlife Lesser Prairie Chicken Production area/Lek (miles)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Length Crossing U.S. Fish and Wildlife Service 60%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Cultural Resources																								
Number of National Register of Historic Properties, state register and local landmark sites within 75ft	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Number of Historic Trails Crossed	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Number of Cemeteries with in 0.25 miles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

	Link Number	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263
Engineering Factors																							
Overall length (miles)		5.68	1.97	2.48	4.03	12.51	9.56	3.98	2.95	1.04	19.88	13.65	21.84	3.91	1.49	3.64	9.78	12.40	31.25	5.03	2.02	1.53	3.45
Existing Electric Infrastructure																							
Number of Existing Transmission line crossings		1	0	0	0	1	1	0	0	0	0	0	1	0	0	1	1	1	0	0	0	0	0
Length adjacent to Existing Transmission line (within 200ft) (miles)		0.08	0.00	0.00	0.00	0.06	0.06	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.09	0.06	0.06	0.00	0.00	0.00	0.57	3.20
Length along existing PSCo Fee Owned ROW (feet)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Percent within existing PSCo Fee Owned ROW		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Roads																							
Number of road crossings (Major and Local)		5	1	1	3	9	6	3	0	0	18	5	7	2	1	2	6	9	12	3	2	0	2
Length adjacent to roads (within 200ft) (miles)		0.39	1.97	0.56	0.24	2.91	0.47	0.23	0.00	0.00	2.55	0.40	6.27	0.27	0.11	0.19	0.42	0.72	15.88	3.06	2.02	1.53	3.45
Number of State Highway crossings		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
Length adjacent to State Highway (within 200ft) (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.00	0.00	0.00	0.05	0.03	0.00
Number of US Highway crossings		1	0	0	0	1	0	1	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0
Length adjacent to U.S. Highway (within 200ft) (miles)		0.11	0.00	0.00	0.00	0.08	0.02	0.09	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.11	0.08	0.71	0.00	0.00	0.00	0.00	0.00
Number of Interstate crossings		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Length adjacent to Interstate (within 200ft) (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length adjacent to roads (all roads) (within 200ft) (miles)		0.42	1.97	0.56	0.24	2.98	0.50	0.31	0.00	0.00	2.55	0.40	6.34	0.27	0.11	0.31	1.23	1.35	15.88	3.06	2.02	1.53	3.45
Percent adjacent to roads (all roads)		7.3%	100.0%	22.6%	5.9%	23.8%	5.2%	7.9%	0.0%	0.0%	12.8%	2.9%	29.0%	7.0%	7.6%	8.4%	12.5%	10.9%	50.8%	60.8%	100.0%	100.0%	100.0%
Scenic Byway's with 200ft		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rail																							
Number of railroad crossings		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Length adjacent to railroad (within 75ft) (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landowners and Parcels																							
Number of parcels crossed		15	5	4	7	18	13	7	4	2	15	1	0	7	3	5	18	24	56	10	5	3	5
Length adjacent to parcel lines (within 75ft) (miles)		5.21	1.86	1.38	3.86	6.09	8.28	3.12	1.85	1.01	10.42	1.59	0.00	3.68	1.44	2.75	8.83	8.49	11.19	0.48	0.00	0.00	0.00
Number of landowners crossed		13	5	4	5	17	13	7	4	2	14	1	0	7	3	5	14	22	44	7	5	3	4
Other Infrastructure																							
Oil and Gas wells within 50ft		1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Number of gas pipelines crossed		0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	7	1	0	0	0
Length adjacent to gas pipeline (within 200ft) (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.10	0.00	0.00	0.00	0.00	0.00	0.85	0.09	0.00	0.00	0.00
Water wells within 75ft		0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	4	0	0	0	0
Communication Facility within 300ft		1	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
NEXRAD towers within 300ft		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NAVAID towers within 300ft		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Public Institutions within 150ft		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Air Transportation																							
Nearest Airport (military, public, private, heliport, balloon port, glider port) (miles)		18.79	18.55	16.53	12.51	12.51	3.05	0.86	1.35	1.35	3.93	3.93	6.13	3.26	2.25	3.67	2.09	2.01	10.55	8.99	8.94	9.16	9.59
Number of Military Training Routes Crossed		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Training Areas Crossed		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Length Crossing Training Area (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length Crossing Special Use Airspace/MOA (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jurisdiction/Land Use Factors																							
Counties																							
Length in Morgan County (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length in Washington County (miles)		5.68	1.97	2.48	4.03	12.51	9.56	3.98	2.95	1.04	19.88	13.65	4.53	3.91	1.49	2.96	7.45	7.87	14.55	0.00	0.00	0.00	0.00
Length in Yuma County (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.31	0.00	0.00	0.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length in Kit Carson County (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.33	4.53	16.70	5.03	2.02	1.53	3.45
Length in Cheyenne County (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jurisdiction																							
Length crossing Bureau of Land Management (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing State Land (miles)		0.00	0.00	0.00	0.00	2.01	0.00	0.00	0.00	0.00	2.91	0.00	0.00	1.06	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Stewardship Trust Land (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing State Wildlife Area (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Conservation Easement (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Department of Defense (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land Use (NLCD Land Cover)																							
Length crossing Open Water (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Developed, Open Space (miles)		0.08	0.94	0.13	0.04	2.06	0.09	0.08	0.00	0.00	1.47	0.07	4.19	0.06	0.04	0.13	0.26	0.73	6.44	1.41	1.47	1.09	2.70
Length Crossing Developed, Low Intensity (miles)		0.00	0.06	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.02	0.00	0.13	0.01	0.02	0.00	0.07
Length crossing Developed, Medium Intensity (miles)		0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.02	0.00	0.00	0.00
Length crossing Developed, High Intensity (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Barren Land (Rock/Sand/Clay) (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Deciduous Forest (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Evergreen Forest (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Mixed Forest (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Shrub/Scrub (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.02	0.00	0.00	0.04	0.18	0.41	0.00	0.00	0.00	0.00
Length crossing Grassland/Herbaceous (miles)		0.75	0.06	1.00	0.33	4.01	2.79	1.54	2.95	1.04	9.42	13.24	16.07	3.82	1.45	1.65	3.08	4.16	6.30	1.61	0.00	0.28	0.21
Length crossing Pasture/Hay (miles)		0.00	0.19	0.00	0.76	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.54	0.27	0.00	0.00	0.00	0.00
Length crossing Cultivated Crops (miles)		4.85	0.71	1.34	2.90	6.10	6.68	2.36	0.00	0.00	8.91	0.34	1.53	0.00	0.00	1.79	6.33	7.33	17.31	1.72	0.53	0.16	0.46
Length crossing Woody Wetlands (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Emergent Herbaceous Wetlands (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.												

	Link Number	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283
Engineering Factors																					
Overall length (miles)		7.95	6.07	6.07	4.48	3.51	14.47	9.53	1.97	3.02	3.02	5.04	2.07	1.94	1.02	3.12	10.74	6.00	1.00	1.47	10.15
Existing Electric Infrastructure																					
Number of Existing Transmission line crossings		1	0	0	0	0	1	1	1	0	0	0	1	0	0	0	1	0	0	0	1
Length adjacent to Existing Transmission line (within 200ft) (miles)		0.06	0.00	0.01	0.00	0.00	0.06	0.06	0.06	0.00	1.69	0.00	0.06	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.06
Length along existing PSCo Fee Owned ROW (feet)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Percent within existing PSCo Fee Owned ROW		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Roads																					
Number of road crossings (Major and Local)		6	5	3	2	2	7	5	1	1	0	1	1	1	1	3	5	3	1	2	8
Length adjacent to roads (within 200ft) (miles)		3.00	4.18	0.26	0.13	1.18	3.53	2.43	1.97	1.10	1.05	2.12	0.08	0.08	0.06	0.25	3.28	1.63	1.00	1.47	2.03
Number of State Highway crossings		0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Length adjacent to State Highway (within 200ft) (miles)		0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Number of US Highway crossings		0	0	0	0	0	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0
Length adjacent to U.S. Highway (within 200ft) (miles)		0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.08	0.08	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Number of Interstate crossings		0	0	0	0	0	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0
Length adjacent to Interstate (within 200ft) (miles)		0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.08	0.08	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length adjacent to roads (all roads) (within 200ft) (miles)		3.00	4.18	0.26	0.20	1.18	3.68	2.43	1.97	1.18	1.13	2.27	0.08	0.08	0.06	0.25	3.28	1.63	1.00	1.47	2.03
Percent Adjacent to roads (all roads)		37.8%	68.9%	4.3%	4.5%	33.6%	25.4%	25.5%	100.0%	39.0%	37.4%	45.1%	3.7%	3.9%	5.5%	8.0%	30.5%	27.3%	100.0%	100.0%	20.0%
Scenic Byway's with 200ft		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rail																					
Number of railroad crossings		0	0	0	0	0	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0
Length adjacent to railroad (within 75ft) (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landowners and Parcels																					
Number of parcels crossed		3	8	10	8	5	24	15	4	6	7	8	4	3	4	6	17	8	3	2	21
Length adjacent to parcel lines (within 75ft) (miles)		0.62	0.00	2.94	2.49	0.29	7.02	7.55	0.00	0.00	1.67	0.00	1.88	0.11	0.77	2.87	3.32	2.95	0.00	0.00	4.69
Number of landowners crossed		3	7	6	5	4	20	8	3	4	5	7	3	3	4	5	11	4	3	2	18
Other Infrastructure																					
Oil and Gas wells within 50ft		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of gas pipelines crossed		0	1	2	1	1	3	0	0	0	0	0	0	0	0	0	1	1	0	0	0
Length adjacent to gas pipeline (within 200ft) (miles)		0.00	0.09	0.16	0.08	0.23	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.08	0.00	0.00	0.00
Water wells within 75ft		0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Communication Facility within 300ft		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NEXRAD towers within 300ft		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NAVAID towers within 300ft		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Public Institutions within 150ft		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Air Transportation																					
Nearest Airport (military, public, private, heliport, balloon port, glider port) (miles)		6.38	11.26	9.59	14.02	15.38	12.90	12.60	12.60	12.32	14.38	14.54	12.32	14.39	14.39	14.39	12.32	14.47	14.39	12.91	5.55
Number of Military Training Routes Crossed		0	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Training Areas Crossed		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Length Crossing Training Area (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length Crossing Special Use Airspace/MOA (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jurisdiction/Land Use Factors																					
Counties																					
Length in Morgan County (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length in Washington County (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length in Yuma County (miles)		5.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length in Kit Carson County (miles)		2.31	6.07	6.07	4.48	3.51	14.47	9.53	1.97	3.02	3.02	5.04	2.07	1.94	1.02	3.12	10.74	6.00	1.00	1.47	10.15
Length in Cheyenne County (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Jurisdiction																					
Length crossing Bureau of Land Management (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing State Land (miles)		0.00	0.00	0.00	0.00	0.00	2.12	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	1.06	1.98	0.00	0.00	0.00	1.04
Length crossing Stewardship Trust Land (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing State Wildlife Area (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Conservation Easement (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Department of Defense (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Land Use (NLCD Land Cover)																					
Length crossing Open Water (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Developed, Open Space (miles)		2.70	2.44	0.06	0.04	1.08	1.31	0.26	1.28	0.47	0.59	0.94	0.02	0.02	0.02	0.07	2.53	0.09	0.33	0.94	0.91
Length Crossing Developed, Low Intensity (miles)		0.17	0.02	0.00	0.00	0.00	0.04	0.00	0.00	0.04	0.04	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Length crossing Developed, Medium Intensity (miles)		0.04	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Developed, High Intensity (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Length crossing Barren Land (Rock/Sand/Clay) (miles)		0.00	0.00	0.00	0.00	0.00	0.00														

[illegible]

	Link Number	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	2100	2101	2102	2103	2104	2105	2106
Engineering Factors																								
Overall length (miles)		16.86	9.00	17.96	16.11	3.95	5.00	1.01	1.01	0.93	3.05	2.99	2.95	7.93	1.00	0.94	1.96	2.98	1.96	0.95	13.34	3.32	2.99	4.48
Existing Electric Infrastructure																								
Number of Existing Transmission line crossings		1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	4	1	0
Length adjacent to Existing Transmission line (within 200ft) (miles)		0.06	0.06	0.12	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.02	0.00	0.00	0.31	0.08	0.06	0.00
Length along existing PSCo Fee Owned ROW (feet)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Percent within existing PSCo Fee Owned ROW		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Roads																								
Number of road crossings (Major and Local)		15	5	11	8	1	3	0	1	0	1	1	1	3	1	0	0	1	0	0	3	0	0	1
Length adjacent to roads (within 200ft) (miles)		10.93	6.28	2.98	10.32	0.08	1.11	0.04	0.51	0.00	0.08	2.02	2.95	4.97	1.00	0.03	0.00	0.08	1.00	0.00	0.74	0.00	0.00	3.50
Number of State Highway crossings		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
Length adjacent to State Highway (within 200ft) (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.08	0.00	
Number of US Highway crossings		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Length adjacent to U.S. Highway (within 200ft) (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Number of Interstate crossings		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Length adjacent to Interstate (within 200ft) (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Length adjacent to roads (all roads) (within 200ft) (miles)		10.93	6.28	2.98	10.32	0.08	1.11	0.04	0.51	0.00	0.08	2.02	2.95	4.97	1.00	0.03	0.00	0.08	1.00	0.00	0.74	0.00	0.08	3.50
Percent adjacent to roads (all roads)		64.8%	69.8%	16.6%	64.1%	1.9%	22.3%	3.7%	50.7%	0.0%	2.5%	67.6%	100.0%	62.6%	100.0%	2.9%	0.0%	2.5%	51.1%	0.1%	5.5%	0.0%	2.5%	78.2%
Scenic Byway's with 200ft		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rail																								
Number of railroad crossings		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Length adjacent to railroad (within 75ft) (miles)		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landowners and Parcels																								
Number of parcels crossed		22	14	33	20	2	8	1	2	3	8	4	4	4	3	2	3	4	5	1	17	5	5	11
Length adjacent to parcel lines (within 75ft) (miles)		3.27	0.00	7.78	7.59	0.00	0.03	0.02	0.13	0.00	0.00	0.00	0.00	0.00	0.01	0.60	0.17	1.96	0.00	0.21	7.02	3.21	1.01	0.13
Number of landowners crossed		19	11	21	15	2	7	1	2	2	6	4	4	3	3	1	3	4	4	1	9	2	3	10
Other Infrastructure																								
Oil and Gas wells within 50ft		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of gas pipelines crossed		3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
Length adjacent to gas pipeline (within 200ft) (miles)		0.29	0.08	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.13	0.00	0.00	0.00	0.00	0.09
Water wells within 75ft		4	0	5	4	0	0	1	1	0	0	0	2	0	0	0	0	0	0	0	5	0	2	0
Communication Facility within 300ft		0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NEXRAD towers within 300ft		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NAVAID towers within 300ft		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Public Institutions within 150ft		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Air Transportation																								
Nearest Airport (military, public, private, heliport, balloon port, glider port) (miles)		4.57	5.65	8.82	16.25	16.79	12.91	16.60	16.48	16.37	14.92	15.47	16.12	16.12	15.47	14.92	3.19	3.19	6.15	6.63	8.45	5.57	5.77	7.52
Number of Military Training Routes Crossed		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of Training Areas Crossed		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

[illegible]