

APS Oak Creek to McGuireville 69kV Line Siting Study

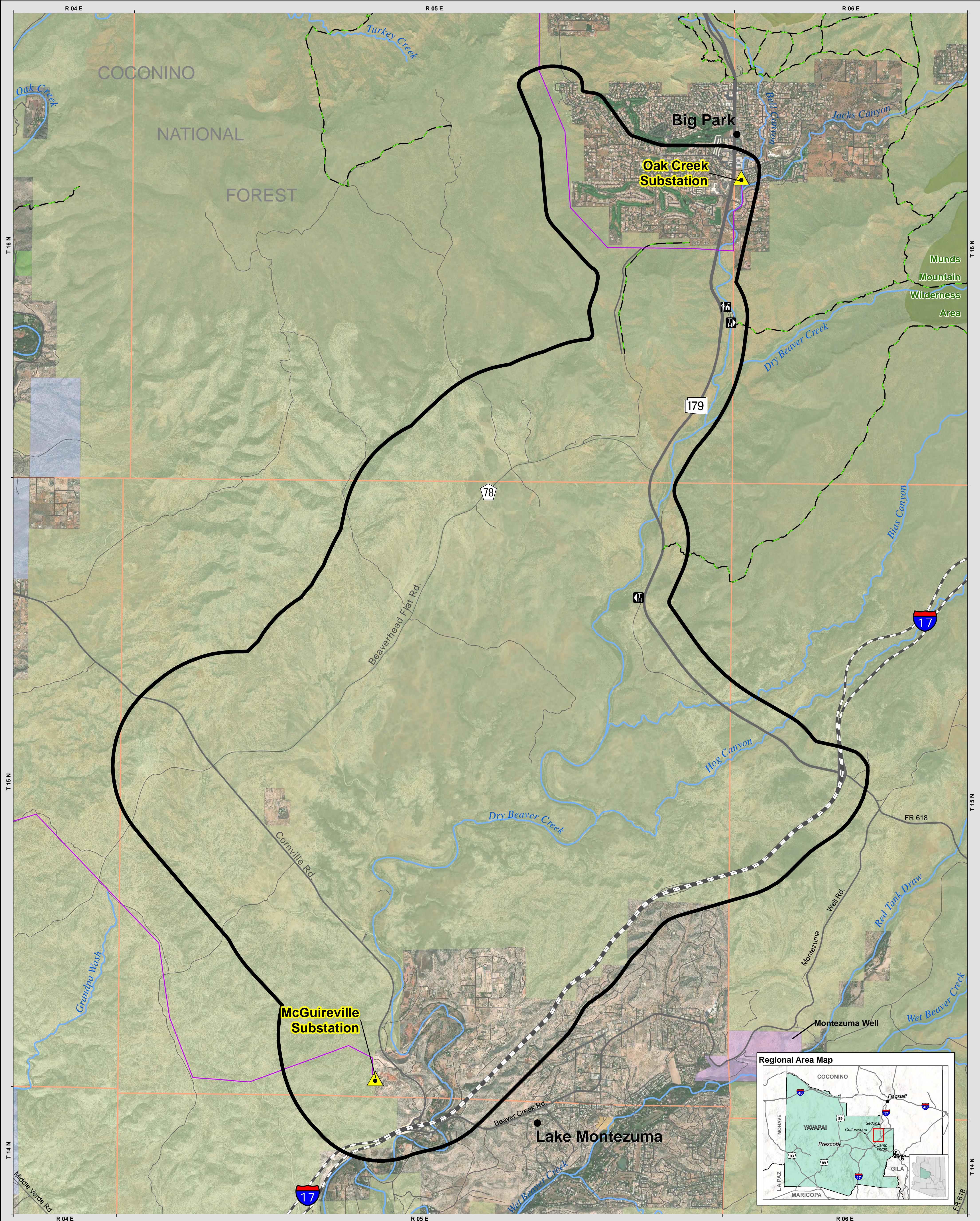
Open House

WELCOME!
Please Sign In



Project Overview

- 69kV powerline from the existing Oak Creek Substation, near Highway 179 and Jacks Canyon Road within the community of Big Park, to the existing McGuireville Substation located near Cornville Road and Restoration Loop within the community of Lake Montezuma
- Portions of the proposed Project that follow existing 69kV powerlines would be constructed as “double-circuit”, meaning both powerlines (three wires each) would be consolidated onto one transmission structure alignment
- APS is in the early stages of the planning process and is conducting a public siting study and public and agency outreach prior to identifying preferred powerline routes
- Once identified, the preferred powerline routes will be analyzed under a National Environmental Policy Act (NEPA) process led by the Coconino National Forest



Project Features

- Study Area

Land Ownership

- U.S. Forest Service
- U.S. Forest Service Wilderness Area
- Arizona State Trust
- Yavapai Apache Nation
- National Park Service
- State Wildlife Area
- Private

Transmission Facilities

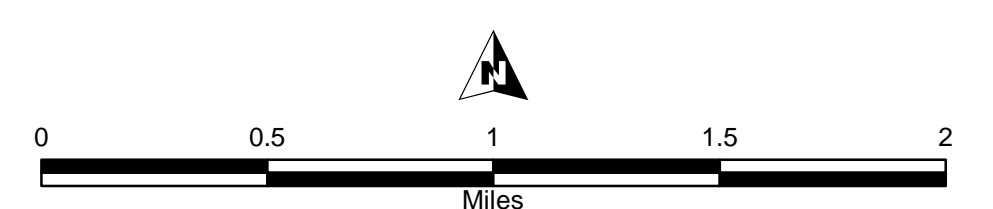
- Existing Substation
- Existing 69kV Transmission Line

Reference Features

- Census-Designated Place
- Interstate
- Highways
- Major Roads
- Streets
- Trails
- Trailhead
- Ranger Station/ Visitor Center

Oak Creek to McGuireville 69kV Line Siting Study

Land Ownership / Jurisdiction



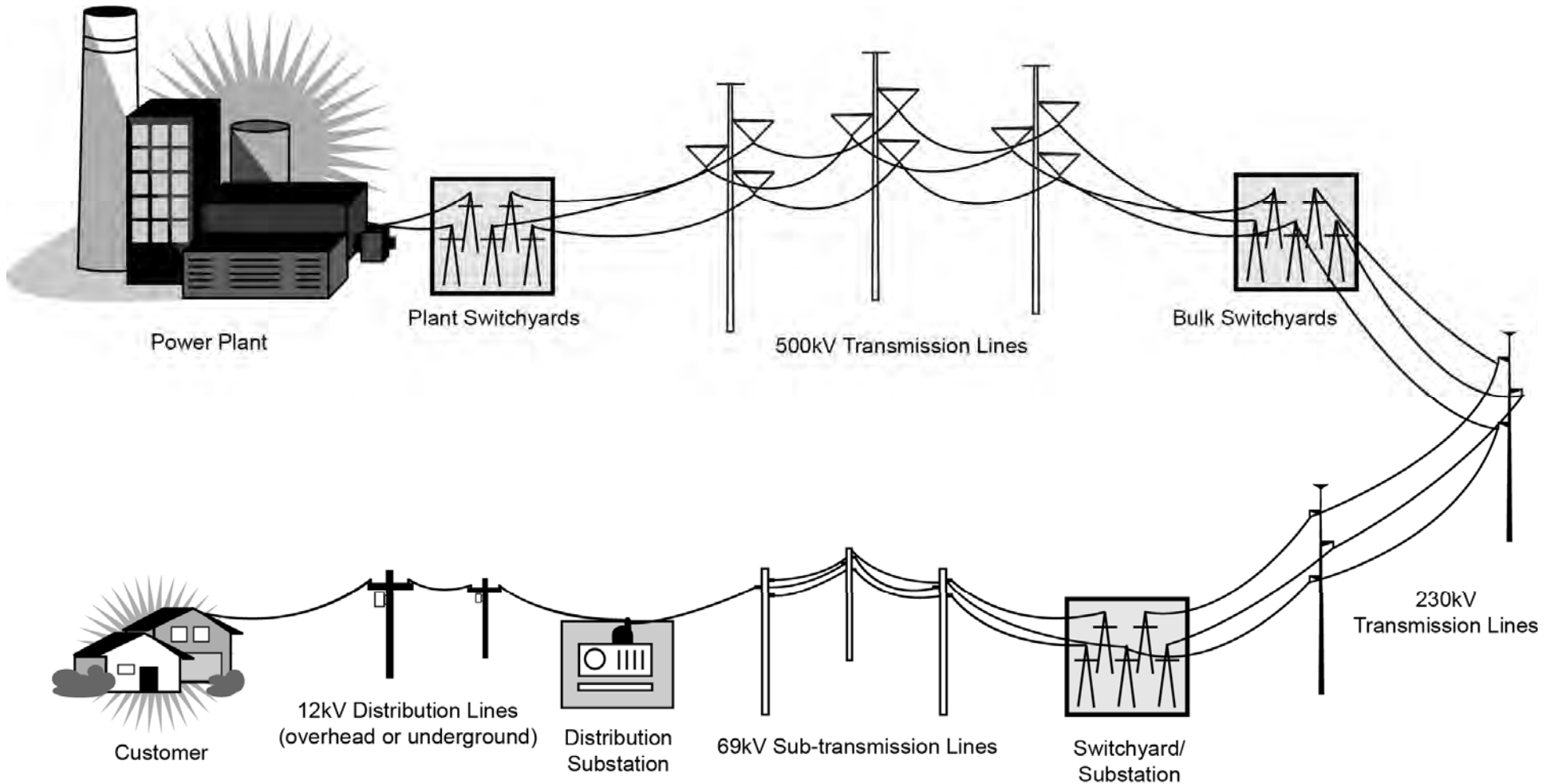
May 2019



Project Need

- Improve reliability in the area by helping to prevent potential outages that result from the loss of other 69kV powerlines that serve the area
- Provide operating flexibility by creating a new loop and source into the area
- Provide an additional, separate, 69kV power source, allowing the system to serve increased electricity use within existing developments and new development

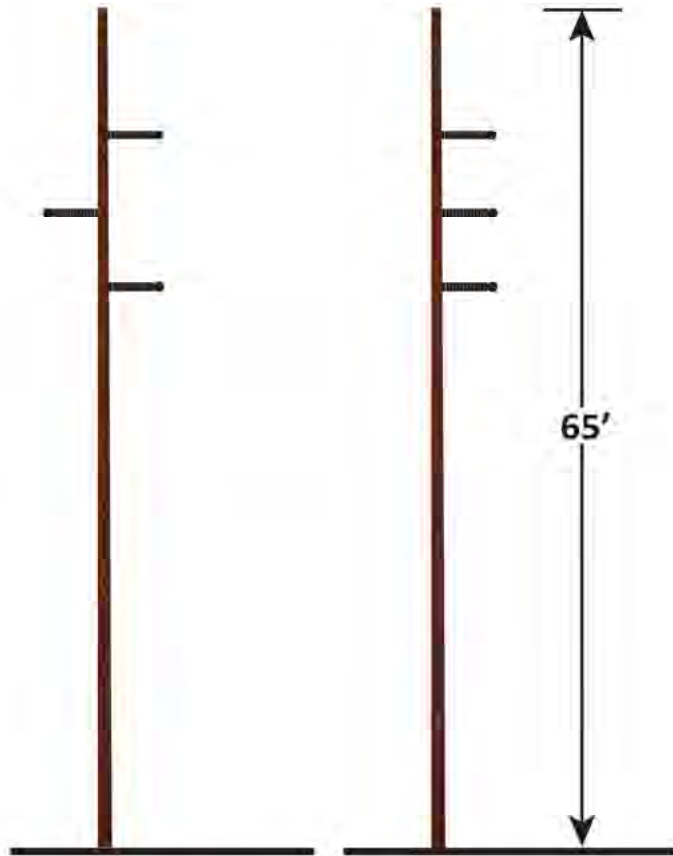
Electricity From the Power Plant to the Customer



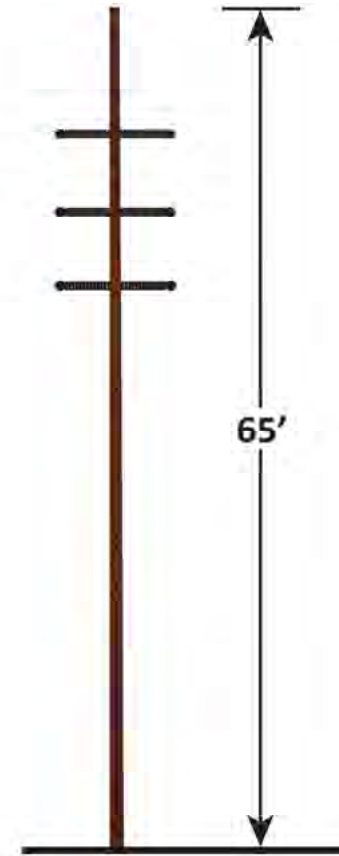
Project Description

- 69kV powerline, up to approximately 15 miles in length, from the existing Oak Creek Substation to the existing McGuireville Substation
- In-service date summer 2024
- A new line route will require right-of-way or easement up to 40 feet wide
- Will require construction of new steel monopoles approximately 65 feet tall
 - Portions of the proposed Project that follow existing 69kV powerlines would be consolidated onto one transmission structure alignment

Typical Structures



Single-circuit 69kV Structures



Double-circuit 69kV Structure

Heights may vary according to terrain

Typical 69kV Structures



Next Steps in Planning Process

- Collect, respond, and document public and agency comments
- Route Group Alternatives refinement – summer 2019
- Initiate National Environmental Policy Act (NEPA) analysis of Route Groups with Coconino National Forest, which will include opportunities for public review and comment – late summer 2019
- Release detailed NEPA impact assessment in partnership with the Coconino National Forest – late 2019
- Release Final Route decision signed by the Coconino National Forest – mid 2020
- Potential implementation – mid-late 2020

Environmental Studies Overview

- Biology – identification of sensitive species habitat (riparian areas, highly-erodible soils, sensitive plant species)
- Cultural – identification of known cultural/archaeological sensitive sites, final route will be surveyed and designed to minimize impacts
- Land Use – identification of existing/future land uses and planning guidelines of jurisdictions and land managing agencies
- Visual – identification of visually sensitive areas (scenic roads, scenic overlooks, residences) and compliance with Coconino National Forest-managed “Scenic Integrity Objectives”

Opportunities and Constraints Analysis

- Identify opportunities and constraints through evaluation of environmental resources within the project study area
- Conduct an analysis of environmental resource sensitivities to the construction, operation, and maintenance of a 69kV powerline

Factors Considered in Route Identification

- Maximize use of siting opportunities
 - Parallel existing linear features, including roads, powerlines, distribution lines, and pipelines
- Minimize impact to sensitive resource areas
 - Biology – avoidance of sensitive species habitat (riparian areas, highly-erodible soils, sensitive plant species)
 - Cultural/Archaeological – avoidance of known cultural/archaeological sensitive sites
 - Land Use – compliance with existing/future land uses and planning guidelines of jurisdictions and land managing agencies
 - Visual – avoidance of visually sensitive areas (scenic roads, scenic overlooks, residences) and compliance with Coconino National Forest-managed “Scenic Integrity Objectives”

Preliminary Facility Siting Criteria

Biological Constraints/Sensitivities	
Constraints	Sensitivity Level
Perennial Riparian Area, ESA-Listed Species Habitat	High
Perennial Riparian Area, no ESA-Listed Species Habitat	Moderate-High
Perennial Riparian Area, ESA-Listed Species Habitat, 0.5-mile buffer	Moderate
Perennial Riparian Area, no ESA-Listed Species Habitat, 300' buffer	Moderate
Perennial Riparian Area, ESA-Listed Species Habitat, 0.5-1.0-mile buffer	Moderate-Low
Non-Perennial Riparian Area – ESA-Listed Species Habitat	Moderate-High
Non-Perennial Riparian Area	Moderate-Low
Sensitive Plant generalized locations	Moderate-High
Sensitive Plant generalized locations, 300' buffer	Moderate
<i>ESA-Endangered Species Act</i>	

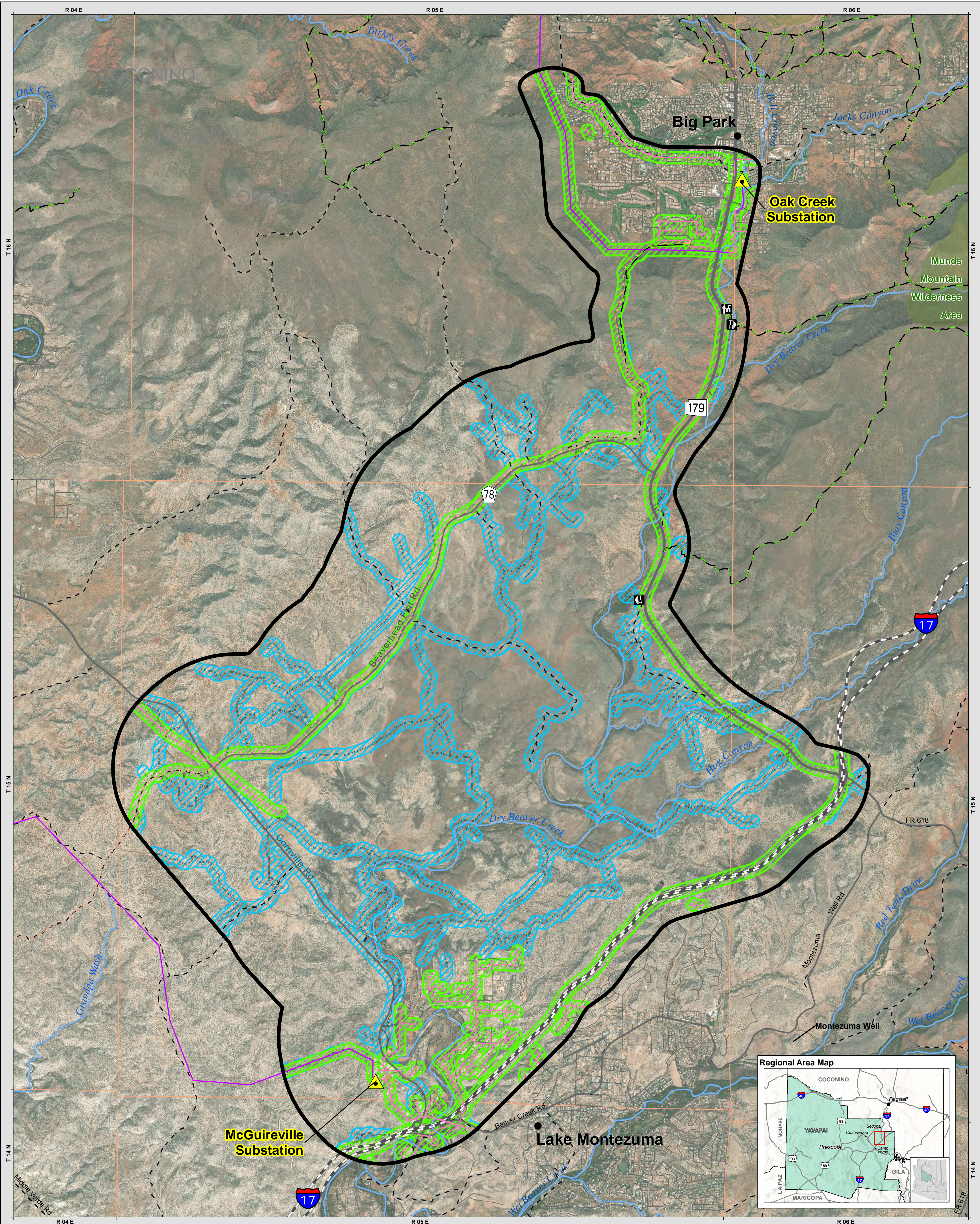
Cultural/Archaeological Constraints/Sensitivities	
Constraints	Sensitivity Level
Prehistoric settlement (pueblo, cliff dwelling, pithouse complex), rock art	High
Prehistoric features and artifacts (field house, rock shelter), historic structures (homestead, ranger station)	Moderate-High
Simple artifact scatters, historic features	Moderate
Surveyed, and no archaeological or historical site present	Low

Visual Resource Constraints/Sensitivities	
Constraints	Sensitivity Level
CNF – High SIO	High
Residence	High
Scenic Overlook	High
SR 179 Scenic Byway – Red Rock All-American Road	High
Trailhead	High
Transportation (Interstate, Highway other than SR179, Major Roads, Forest Roads within High SIO)	Moderate-High
CNF– Moderate SIO	Moderate
<i>CNF – Coconino National Forest; SIO – Scenic Integrity Objectives</i>	

Existing Land Use Constraints/Sensitivities	
Constraints	Sensitivity Level
Residential	High
Schools/Educational Facilities	High
Commercial	Moderate
Public/Quasi-public	Moderate
Recreation	Moderate
Transportation (Roadways)	Moderate
United States Forest Service	Moderate
Agriculture/Corral/Stocktank	Low
Industrial	Low
Utility Facility (transmission/power line, substation, pump station, etc.)	Low

Planned Land Use Constraints/Sensitivities	
Constraints	Sensitivity Level
Residential (Planned Area Development) – Final Plat	High
Recreation – General Plan	Moderate
Residential – General Plan	Moderate
Schools/Education Facilities – General Plan	Moderate
United States Forest Service	Moderate
Commercial – General Plan	Low
Industrial – General Plan	Low
Public/Quasi-public – General Plan	Low
Transportation (Roadways) – General Plan	Low
Utility Facility (transmission/power line, substation, pump station, etc.)	Low

Siting Opportunities	
Opportunities	Opportunity Level
Overhead Transmission Line Corridors	High
Overhead 12kV Distribution Line (suitable for co-location)	High
Highways	High
Buried Pipelines	High
Arterial/Major Roadways	Moderate
Forest/Social Roads	Moderate
Utility Facilities (substations, pump stations, etc.)	Moderate



Siting Opportunities

Opportunity Levels

- High
- Moderate

Utility Facilities

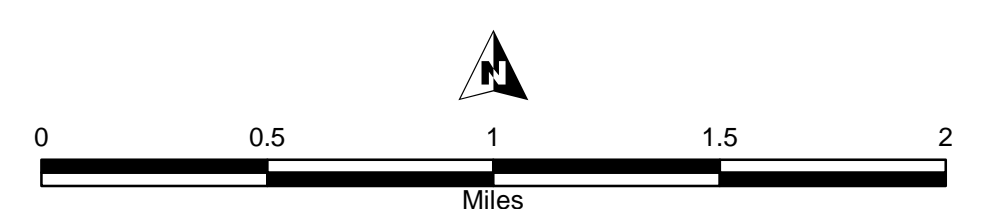
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- Existing 12kV Distribution Line
- Existing Gas Pipeline

Reference Features

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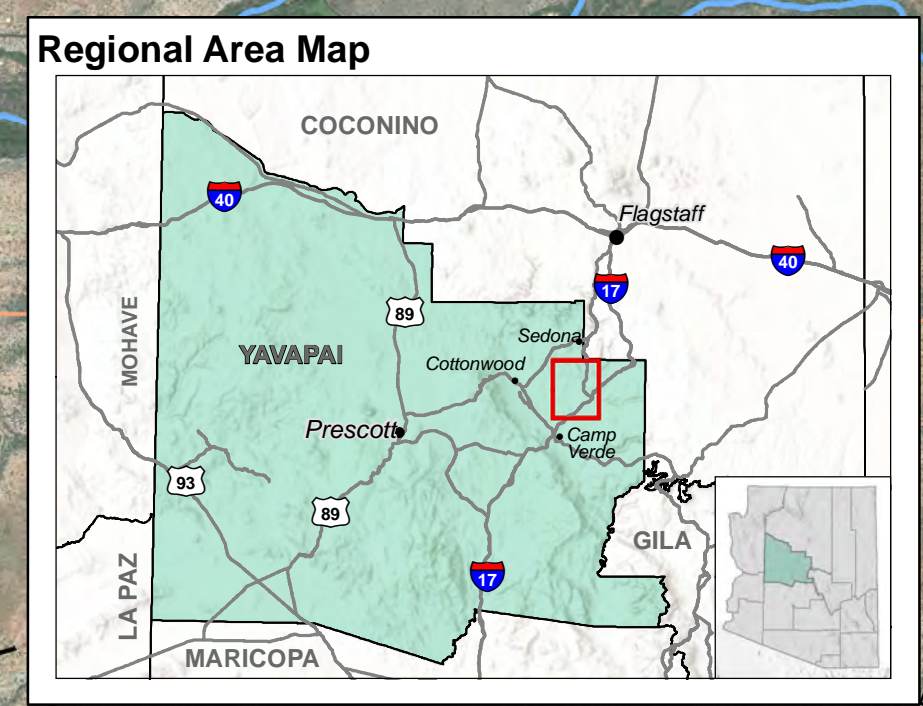
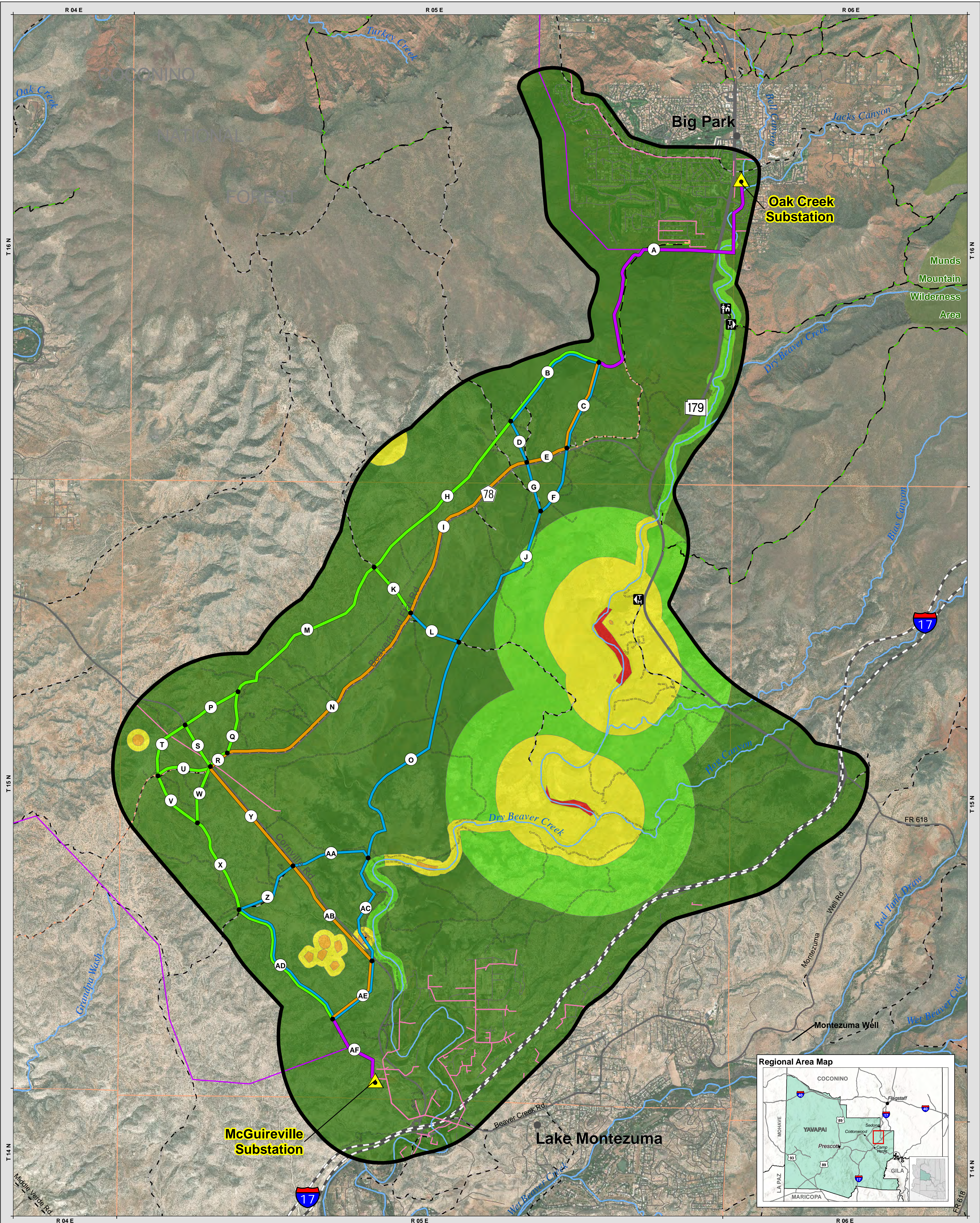
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Siting Opportunity



June 2019





Biological Sensitivities

- Sensitivity Levels**
- High
 - Moderate-High
 - Moderate
 - Low-Moderate
 - Low

Potential Routes

- Common to all Route Groups
- West Route Group
- Roadway Route Group
- Central Route Group

Utility Facilities

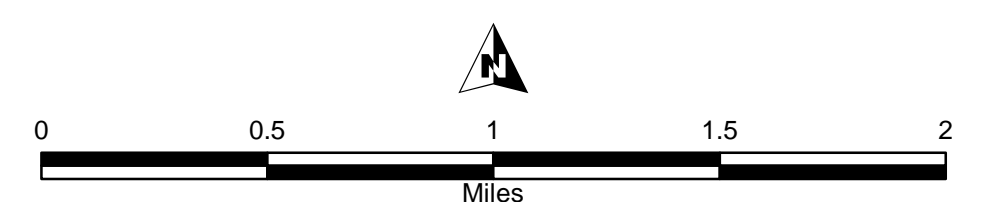
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- Study Area
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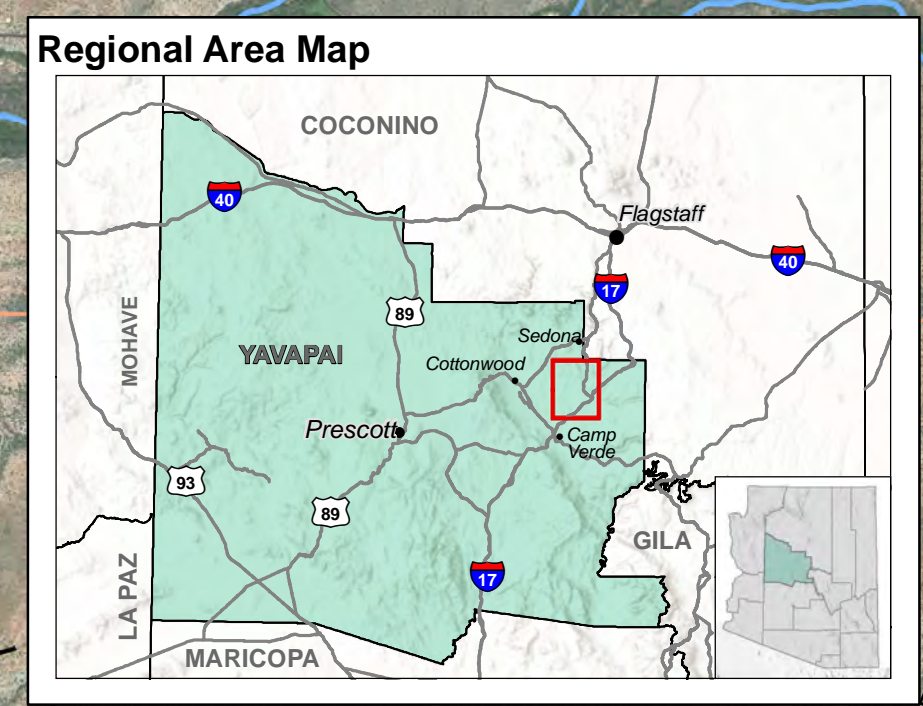
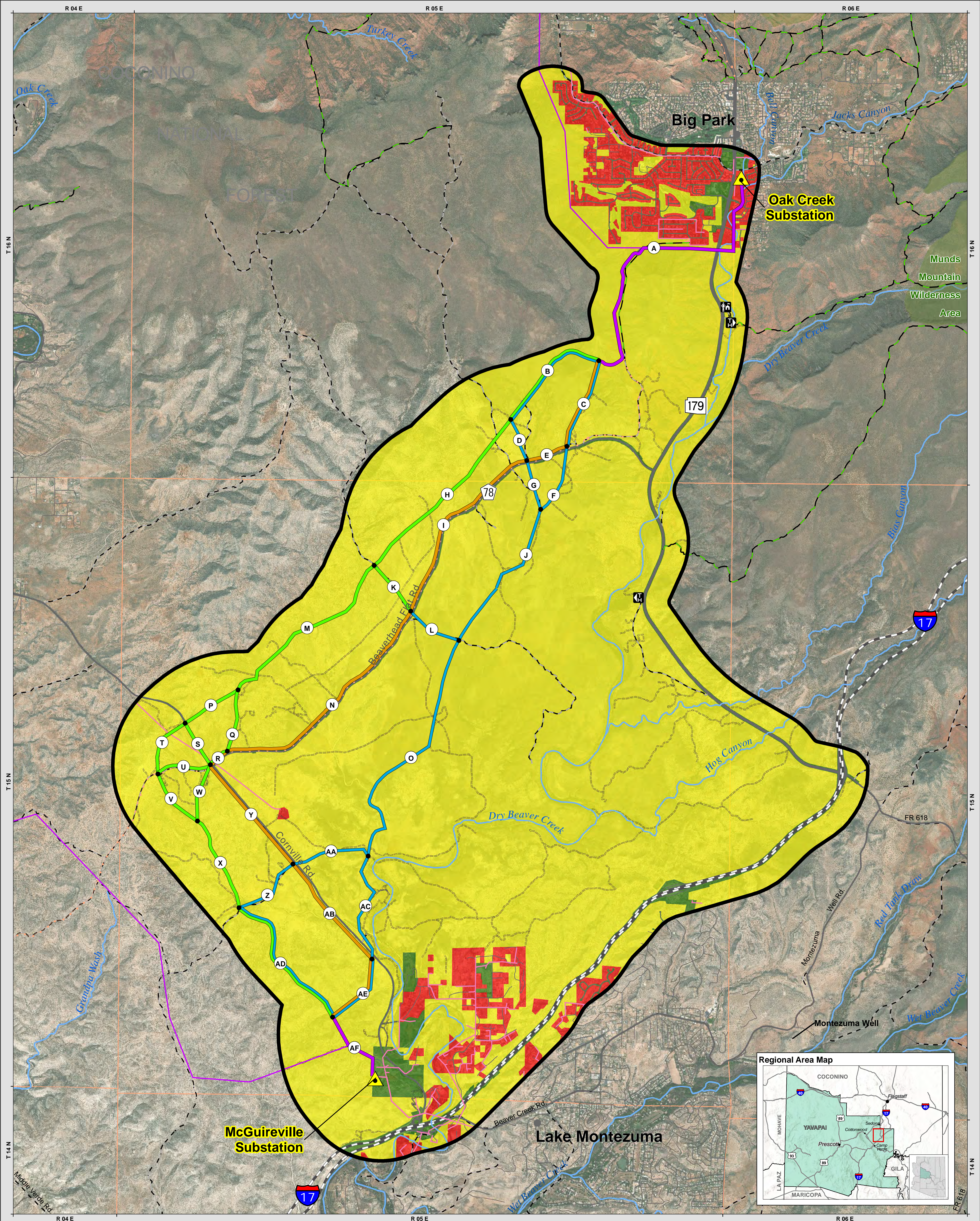
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Biological Sensitivity



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Land Use Sensitivities

- Sensitivity Levels**
- High
 - Moderate-High
 - Moderate
 - Low-Moderate
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- Common to all Route Groups
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- Central Route Group

Utility Facilities

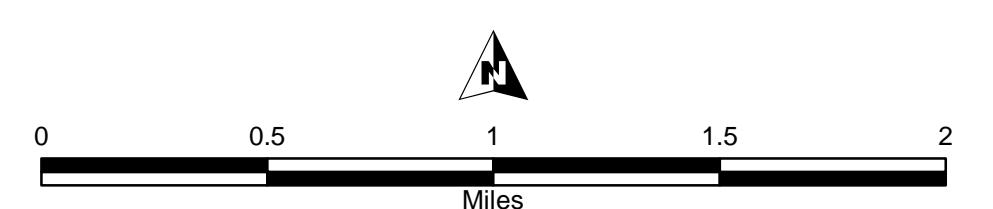
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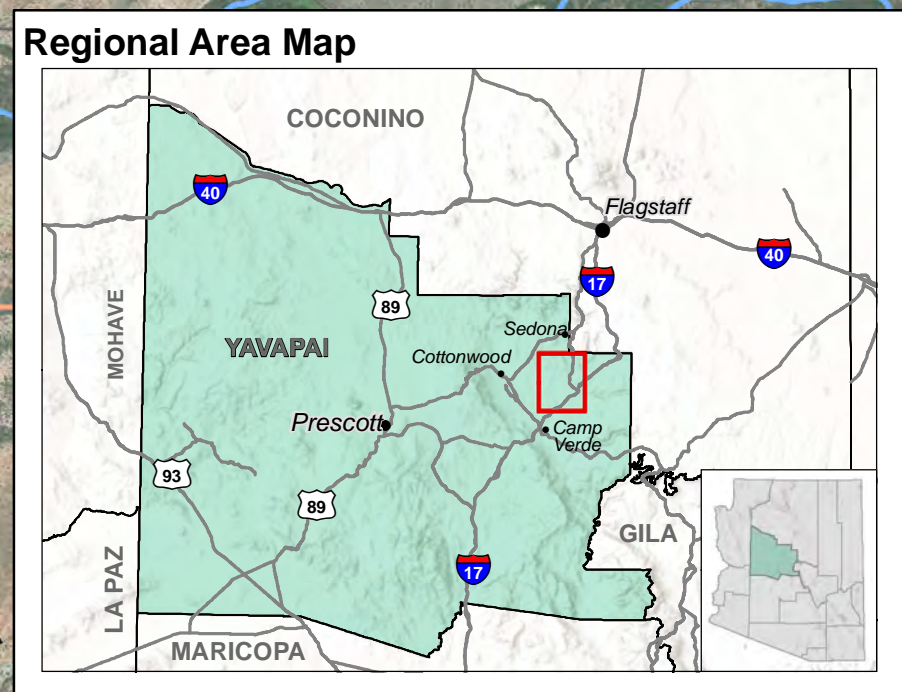
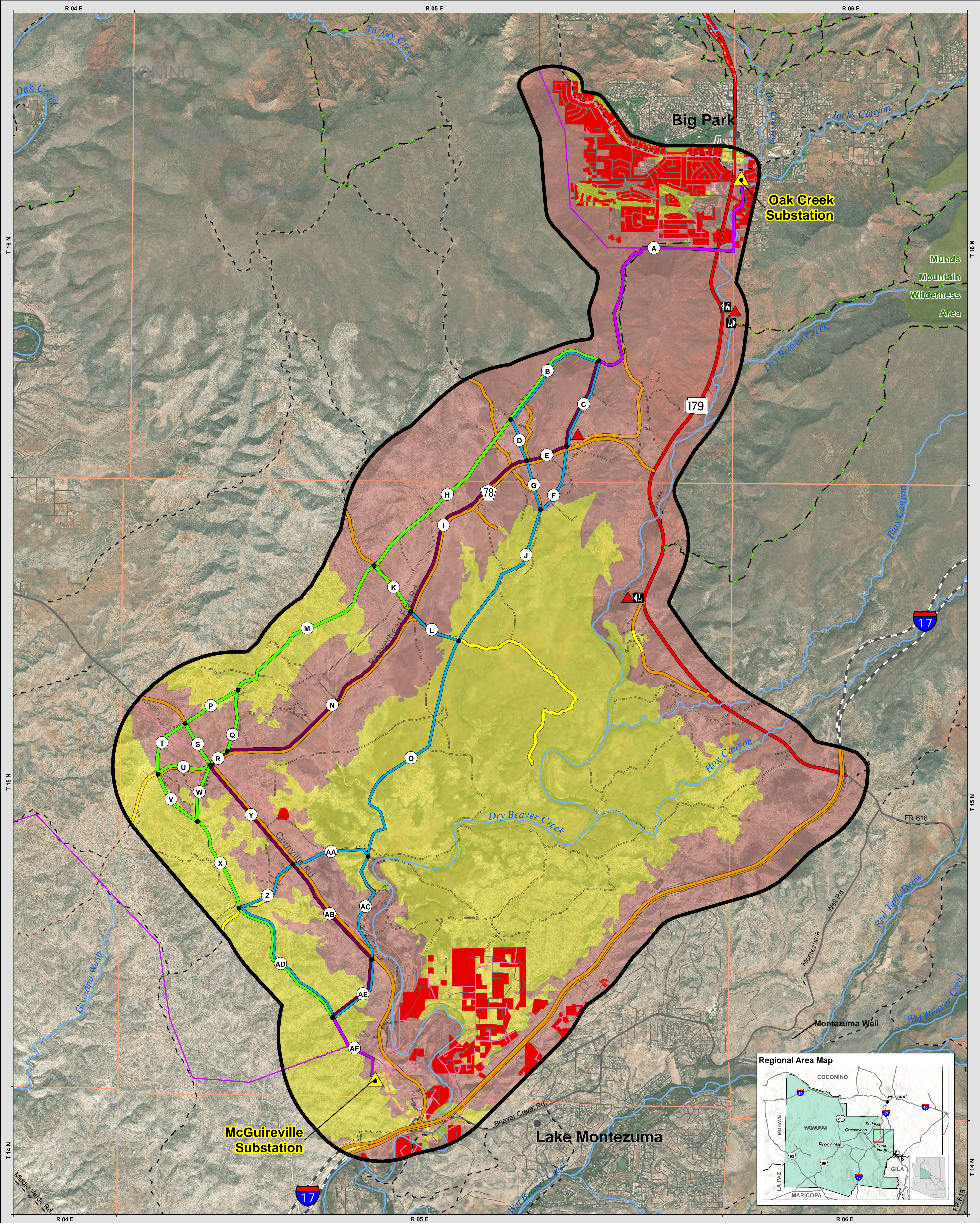
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Land Use Sensitivity



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Visual Sensitivities

- USFS Scenic Integrity Objectives
- High
 - Moderate

Viewing Location Sensitivity Levels

- High
- Moderate-High
- Moderate

Potential Routes

- Common to all Route Groups
- West Route Group
- Roadway Route Group
- Central Route Group

Utility Facilities

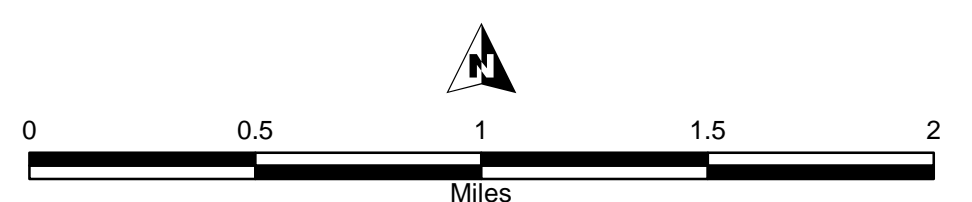
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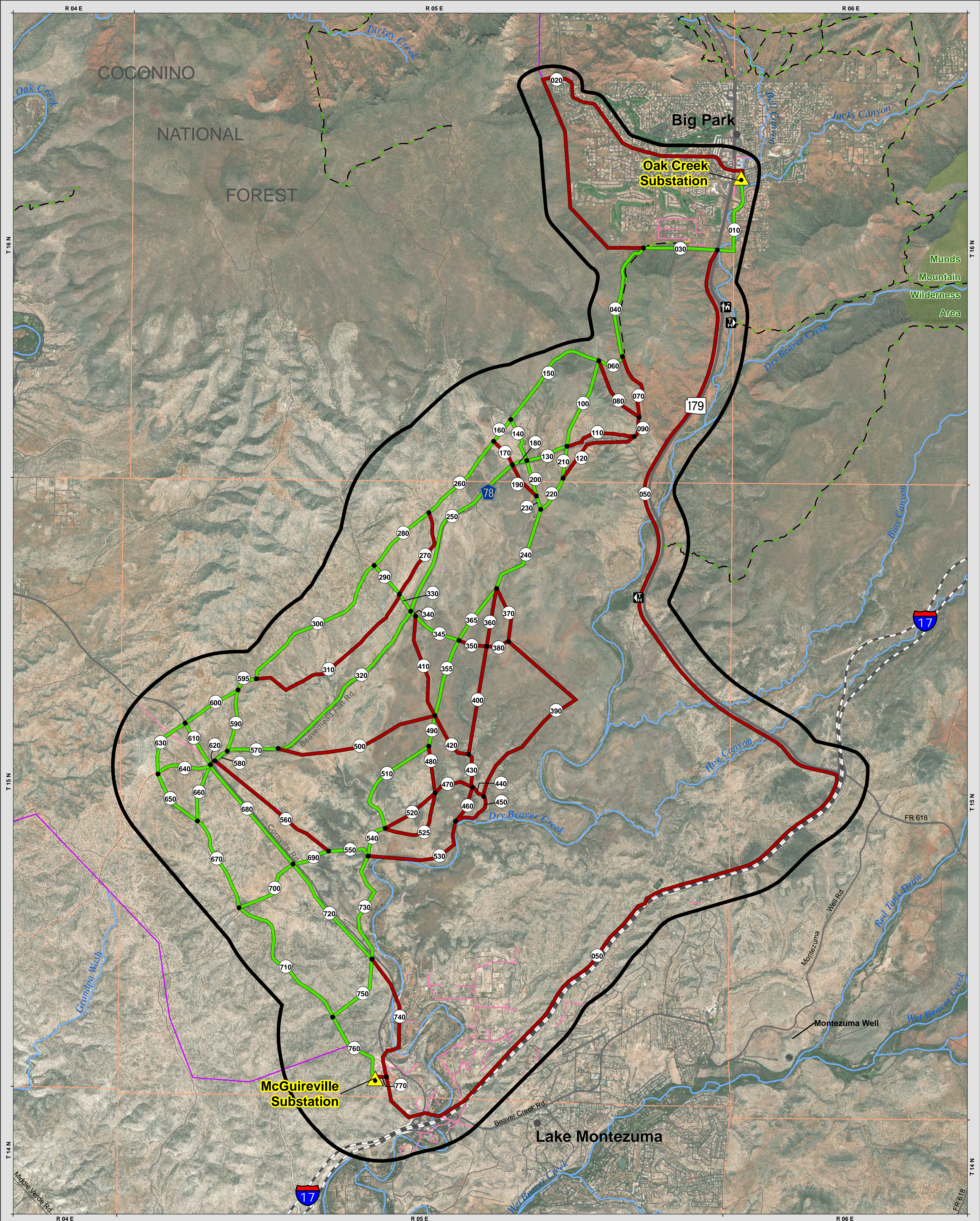
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Visual Sensitivity



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Project Features

- Preliminary Links Under Consideration
- Preliminary Links Considered and Eliminated

Utility Facilities

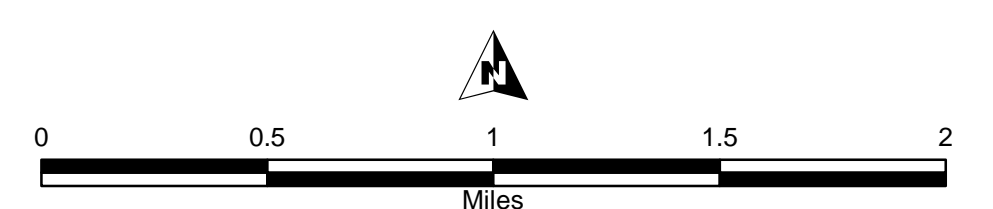
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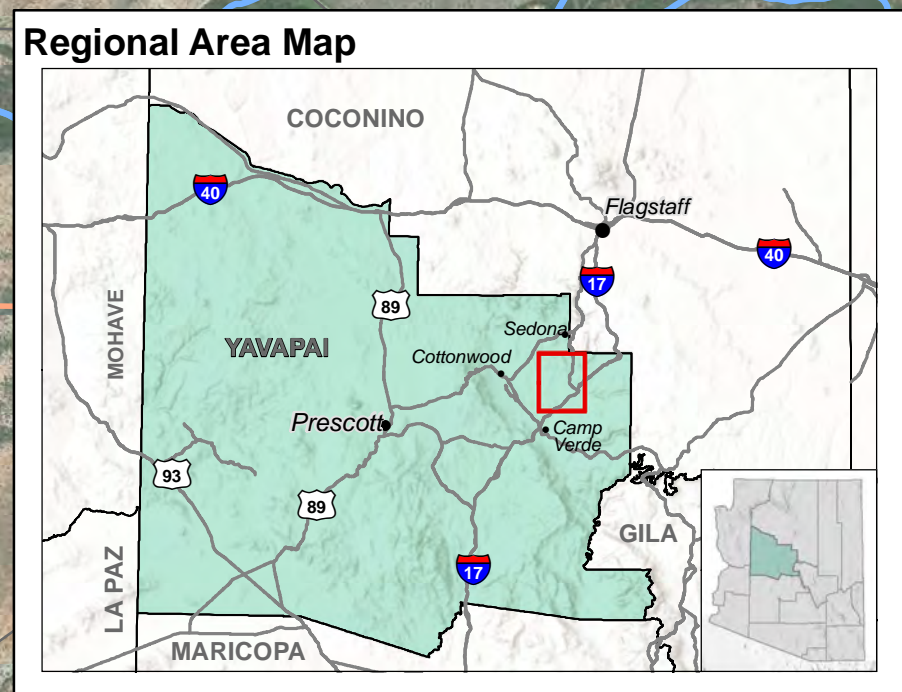
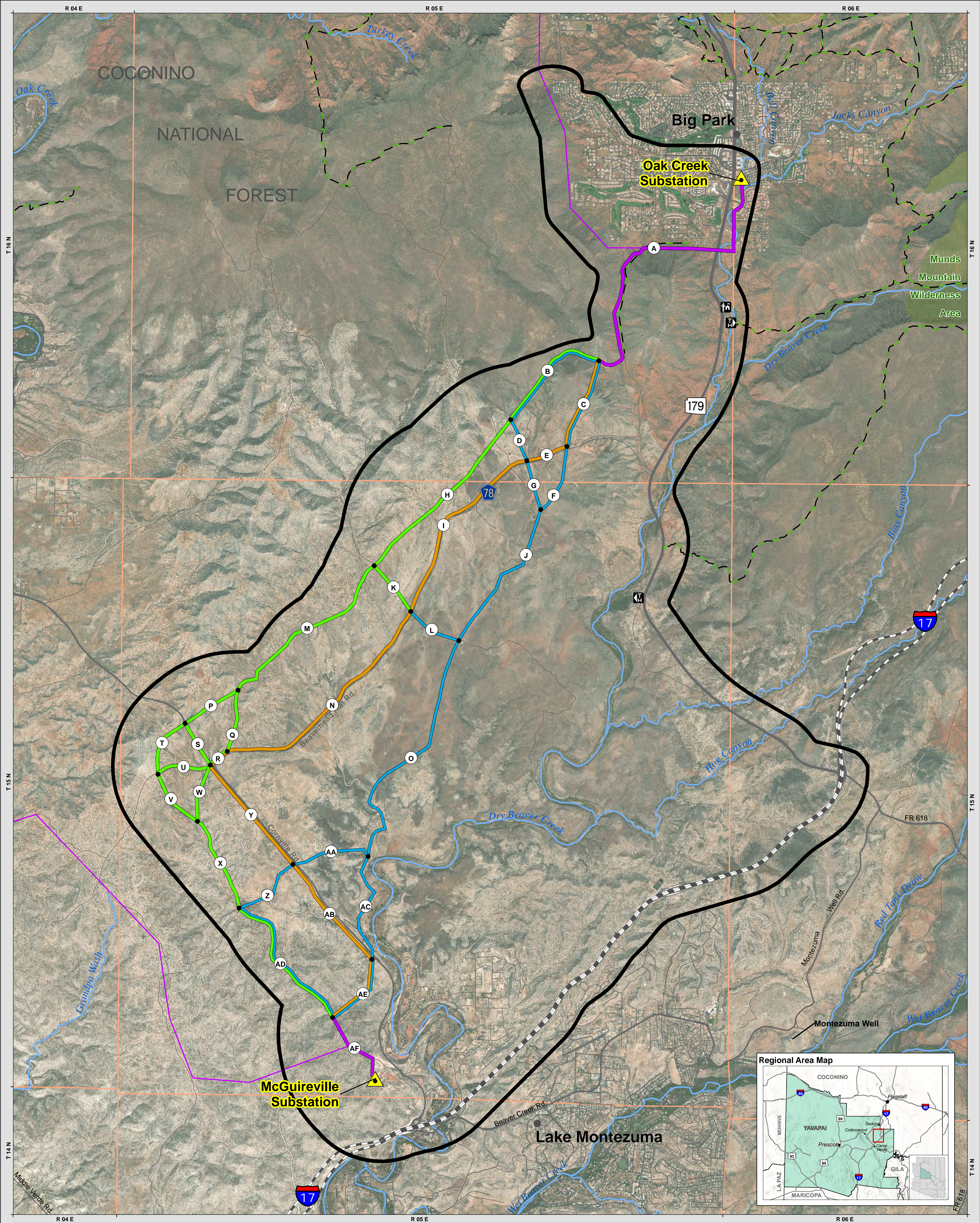
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Preliminary Links



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Potential Routes

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- West Route Group
- Roadway Route Group
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Utility Facilities

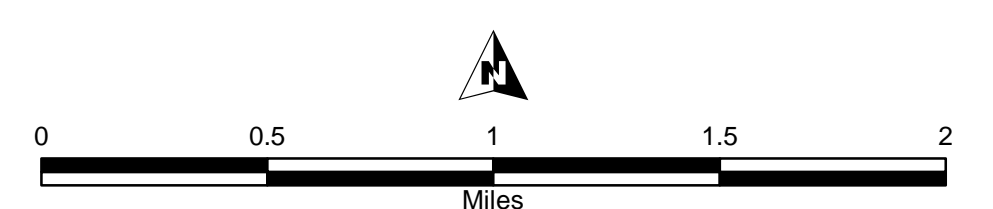
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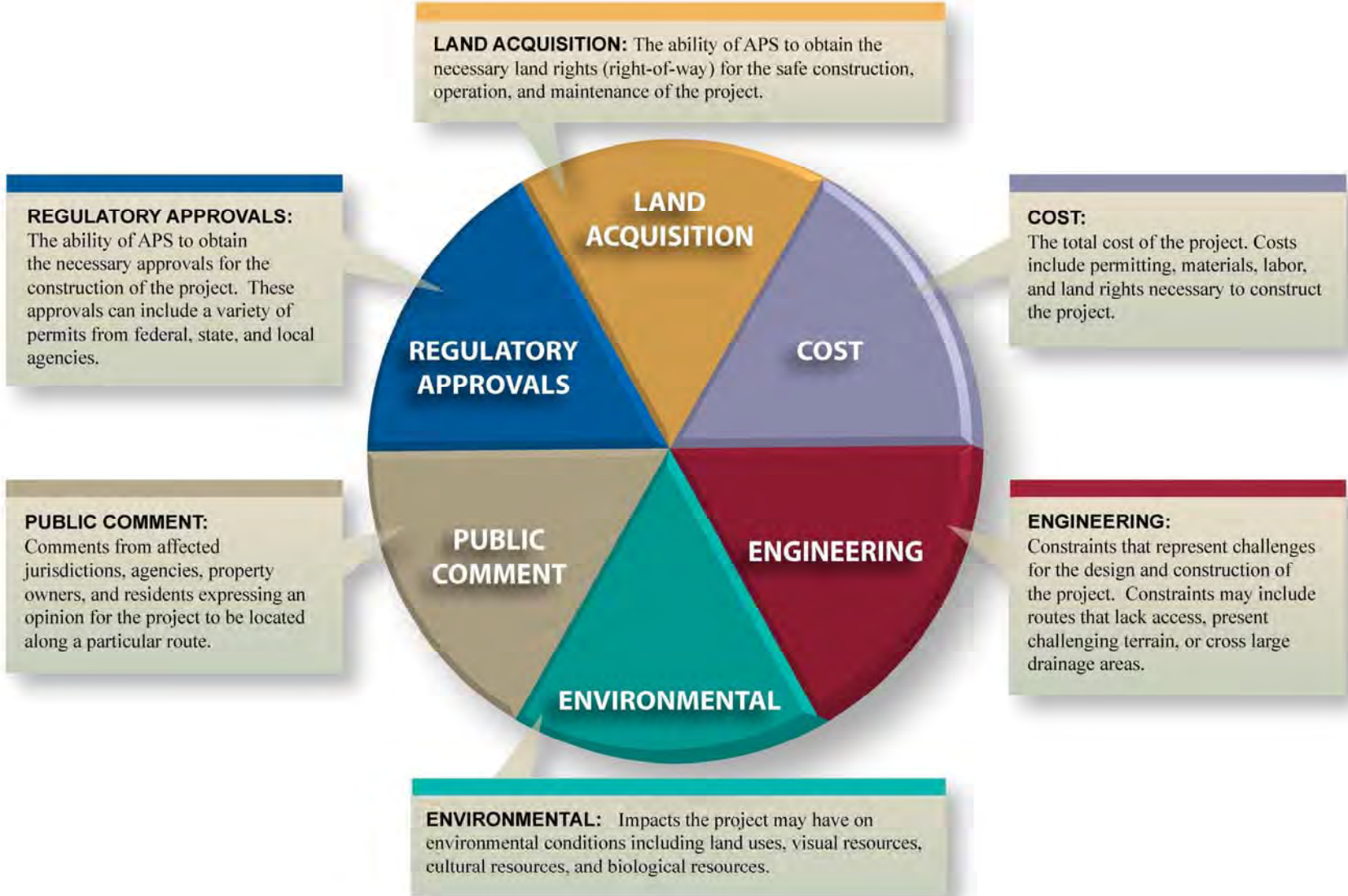
Preliminary Route Groups



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Transmission Line Siting Considerations



Public and Agency Outreach

- Coconino National Forest (July 2018, ongoing)
- Beaver Creek Community Association (August 2018, ongoing)
- Big Park Regional Coordinating Council (August 2018, November 2018, ongoing)
- Yavapai County (August 2018, ongoing)
- Keep Sedona Beautiful (November 2018, ongoing)
- Project area residents and businesses, via Project newsletter (May 2019, more newsletters to follow)

Outreach is ongoing throughout the process.

Opportunities for Public Information and Comment

- Fill out and return a comment form tonight
- Future project newsletters will have updated information and opportunities for comment
- Electronic comment forms and project updates available at: **www.aps.com/siting** (see Oak Creek to McGuireville 69kV Line Siting Study under “Current Siting Projects”)
- Comments can also be sent to Kevin Duncan, APS Senior Siting Consultant, at: **oakcreekmcguireville@apsc.com**, or by phone at **1-888-352-4365**
- Media briefings (APS)
- Project NEPA analysis, led by Coconino National Forest, will include opportunities for public review and comment