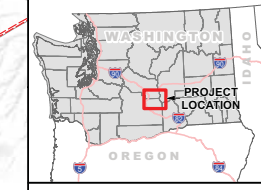
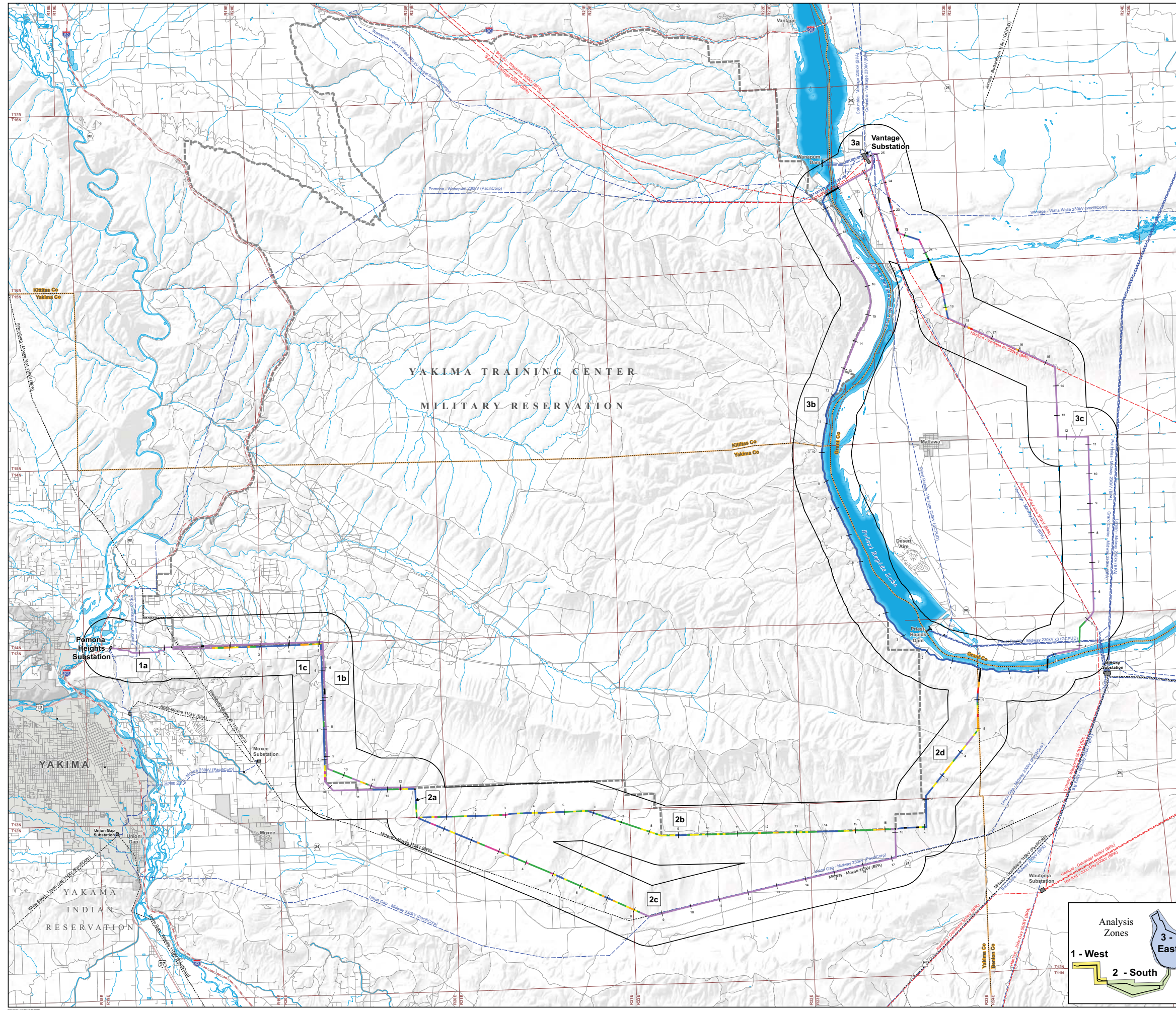


APPENDIX A PROJECT MAPS

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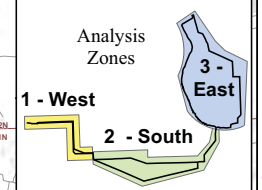
Construction Access Levels

- Route Features
- Route Node
 - Study Corridor (2 miles)
- Construction Access Levels
- 0- No Road Construction (Agriculture/Slope/Water Crossing)
 - 1- Overland Access (in flat terrain)
 - 2- Use Existing Roads
 - 3- Improve Existing Roads
 - 4- Construct New Access, Flat to Rolling Terrain (0-8% slope)
 - 5- Construct New Access, Rolling Terrain (8-15% slope)
 - 6- Construct New Access, Steep Terrain (15-30% slope)
 - 7- Construct New Access, Mountainous Terrain (>30% slope)
- Existing Transmission Facilities
- 500kV Transmission Line
 - 230kV Transmission Line
 - 115kV Transmission Line
- Substation
- Boundaries
- County
 - Township
 - City Boundary
 - Yakima Training Center
- Transportation
- Interstate Highway
 - US Highway
 - State Route
 - Local Access Road
- Water Features
- River or Perennial Stream
 - Open Water

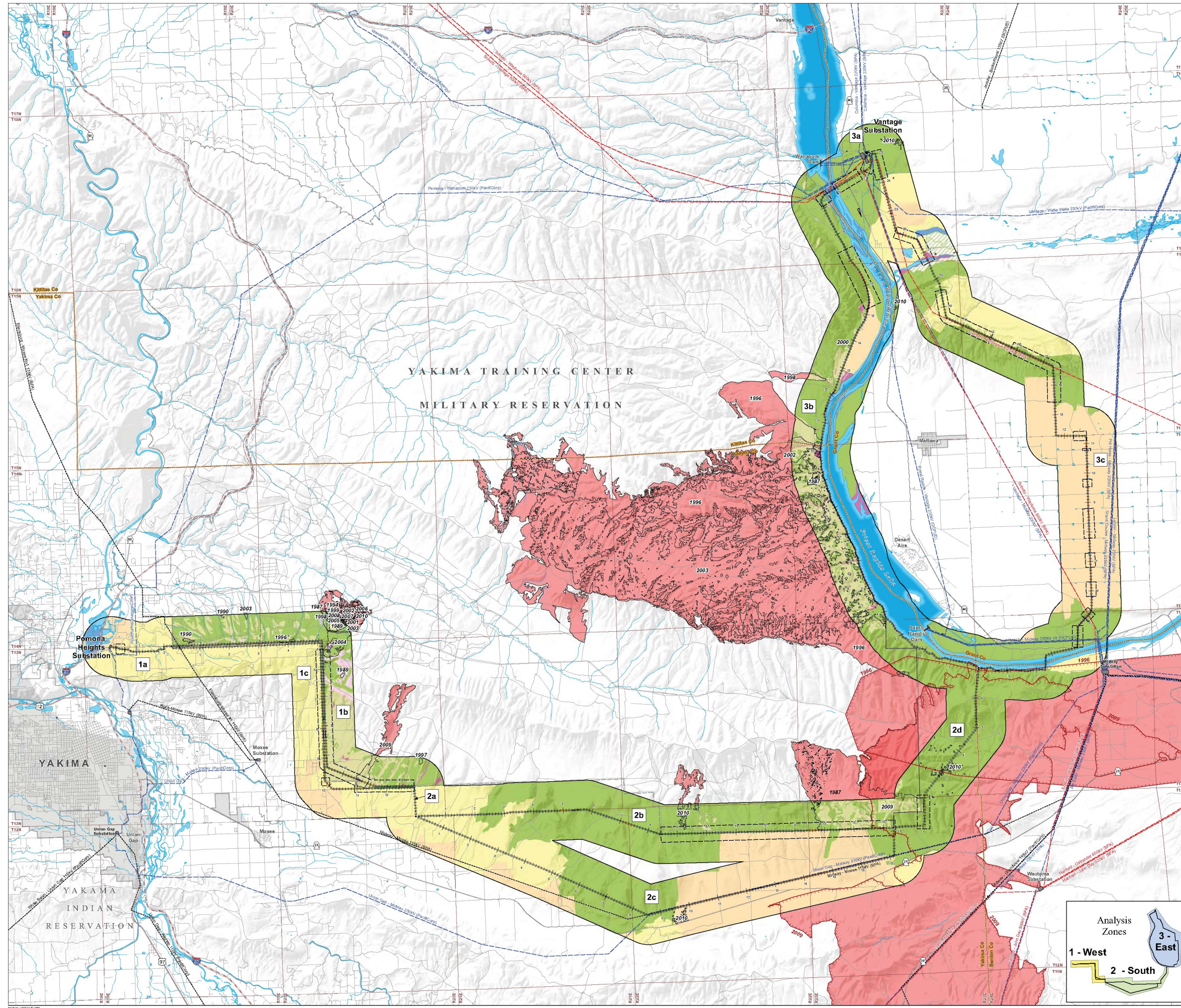


Data are projected in UTM Zone 18N, NAD83

0 0.5 1 2 3 Miles



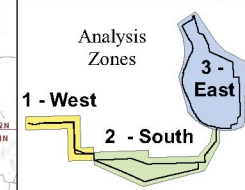
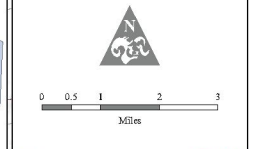
Vegetation & Fire History



- Legend**
- Route Features**
- Route Node
 - Alternative Route
 - Study Corridor (2 miles)
- Vegetation**
- GAP Analysis**
- Agriculture
 - Annual Grassland
 - Riparian
 - Sagebrush - Perennial Grassland
 - Sagebrush - Annual Grassland
 - Water
- YTC Vegetation**
- Disturbed
 - Forb
 - Perennial Grassland
 - Riparian
 - Sagebrush - Perennial Grassland
- POWER Vegetation:** Integrated within 160 feet corridor from field work and aerial photography
- General location of botanical right-of-way survey completed on federal lands
 - Agriculture
 - Annual Grassland
 - Basalt Cliffs or Rock
 - Disturbed or Developed
 - Intermittent Stream or gully
 - Perennial Grassland
 - Rabbitbrush - Annual Grassland
 - Riparian
 - Sagebrush - Annual Grassland
 - Sagebrush - Perennial Grassland
 - Trees
 - Water
- Fire History 1987-2010 (data shown for study corridor only)**
- BLM Fire Data
 - YTC Fire Data
- Existing Transmission Facilities**
- 500kV Transmission Line
 - 230kV Transmission Line
 - 115kV Transmission Line
 - Substation
- Boundaries**
- County
 - Township
 - City Boundary
 - Yakima Training Center
- Transportation**
- Interstate Highway
 - US Highway
 - State Route
 - Local Access Road
- Water Features**
- River or Perennial Stream
 - Open Water



Data are projected in UTM Zone 18N, NAD83



Sensitive Wildlife Species

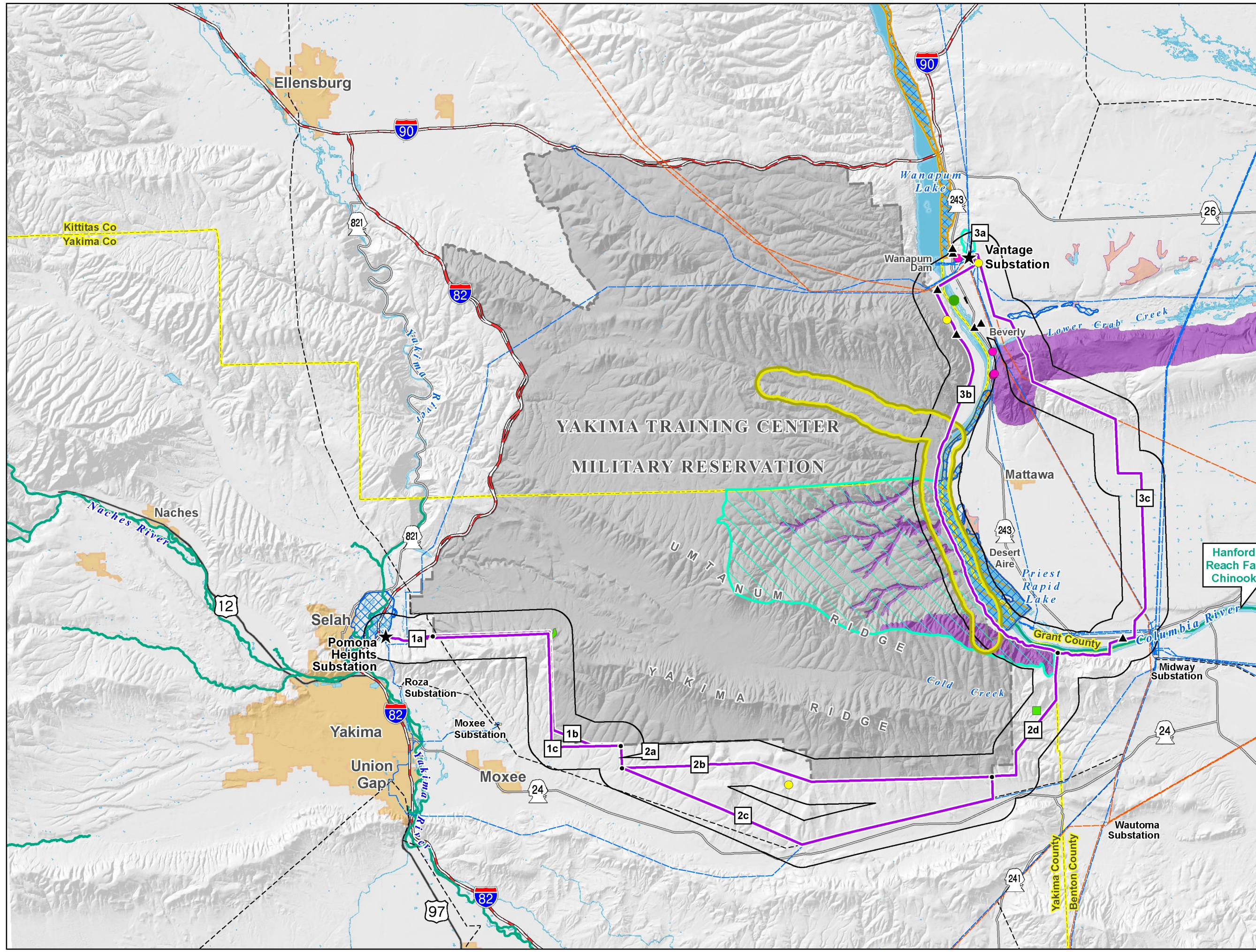
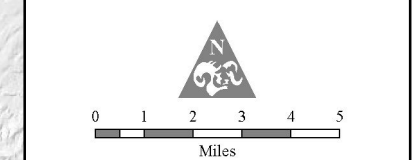
Legend

- Alternative Route
- Route Segment Name
- Route Segment Node
- Project Substation
- Existing Transmission**
- 500kV
- 230kV
- 115kV
- Substation
- PHS Species Data**
- PHS Species Points**
- Black-tailed jackrabbit
- Loggerhead shrike
- Night snake
- Sagebrush lizard
- PHS Species Location Polygons**
- American white pelican, Caspian tern, & Forster's tern
- Priority Species Regional Location Area**
- Common Loon
- Loggerhead Shrike
- Mule Deer
- Waterfowl Concentrations
- Ring-necked Pheasant
- Chukar
- WA Department of Fish and Wildlife**
- Salmonid Stock Inventory
- Yakima Training Center**
- Bald Eagle Protection Area
- Roads**
- Interstate Highway
- US Highway
- State Highway
- Base Features**
- County Boundary
- Municipality
- Yakima Training Center



Due to the sensitive nature of the wildlife location data, some species or types of locations are not shown. All data shown is at 1:250,000.

Data are projected in UTM Zone 10N, NAD83



Kittitas Co
Yakima Co

Ellensburg

YAKIMA TRAINING CENTER
MILITARY RESERVATION

Naches

Selah

Pomona Heights Substation

Yakima

Union Gap

Moxee

Wanapum Dam

Vantage Substation

Beverly

Mattawa

Desert Aire

Midway Substation

Wautoma Substation

Hanford Reach Fall Chinook

Yakima County
Benton County

U M T A N U M
R I D G E

Y A K I M A
R I D G E

Grant County

Columbia River

Cold Creek

Priest Rapid Lake

Lower Crab Creek

Wanapum Lake

Yakima River

Naches River

12

821

821

82

82

97

24

24

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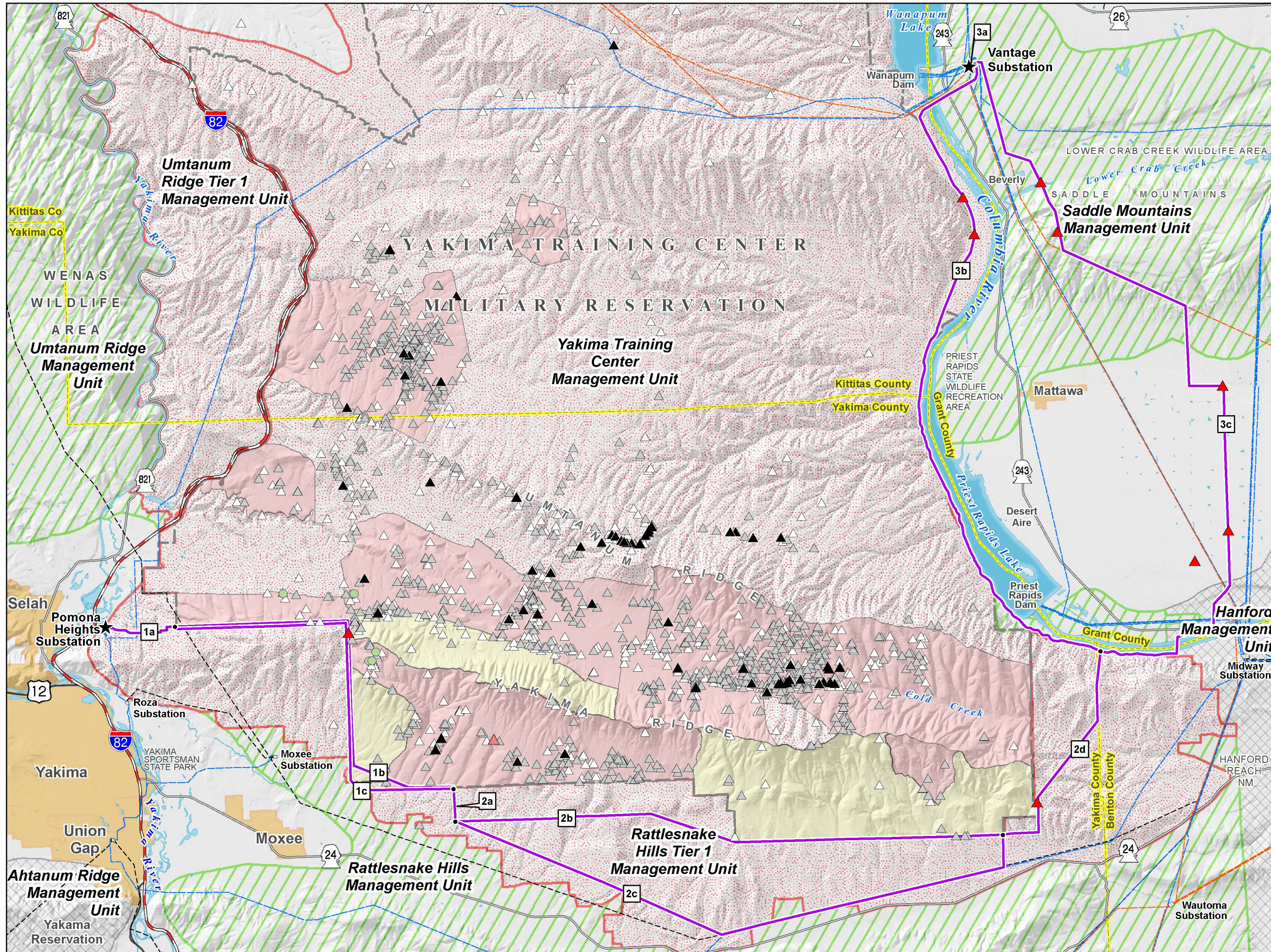
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Sage-Grouse Occurrence & Management Zones



Legend

Routes

- Alternative Route
- 1a Route Segment Name
- Route Segment Node
- Project Substation

Existing Transmission

- 500kV
- 230kV
- 115kV
- Substation

Sage-Grouse Occurrence Data

- POWER 2011 Incidental Sighting
- POWER 2010 Survey Sighting
- YTC Incidental Sighting 2010-2011
- YTC Observation 2001-2010
- YTC Observation 1988-2000
- PHS Species Location

WA Sage-Grouse Management Units

- Tier 1: Regularly Occupied Habitat
- Tier 3: Occasionally Occupied Habitat
- Tier 4: Expansion Habitat

YTC Sage-Grouse Protection Areas 2010

- Primary
- Secondary

Roads

- Interstate Highway
- US Highway
- State Highway

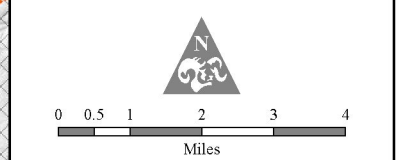
Base Features

- County Boundary
- Municipality
- Yakima Training Center



Due to the sensitive nature of the wildlife location data, lek location data is not shown. All data shown is at 1:250,000.

Data are projected in UTM Zone 10N, NAD83

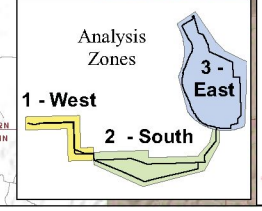
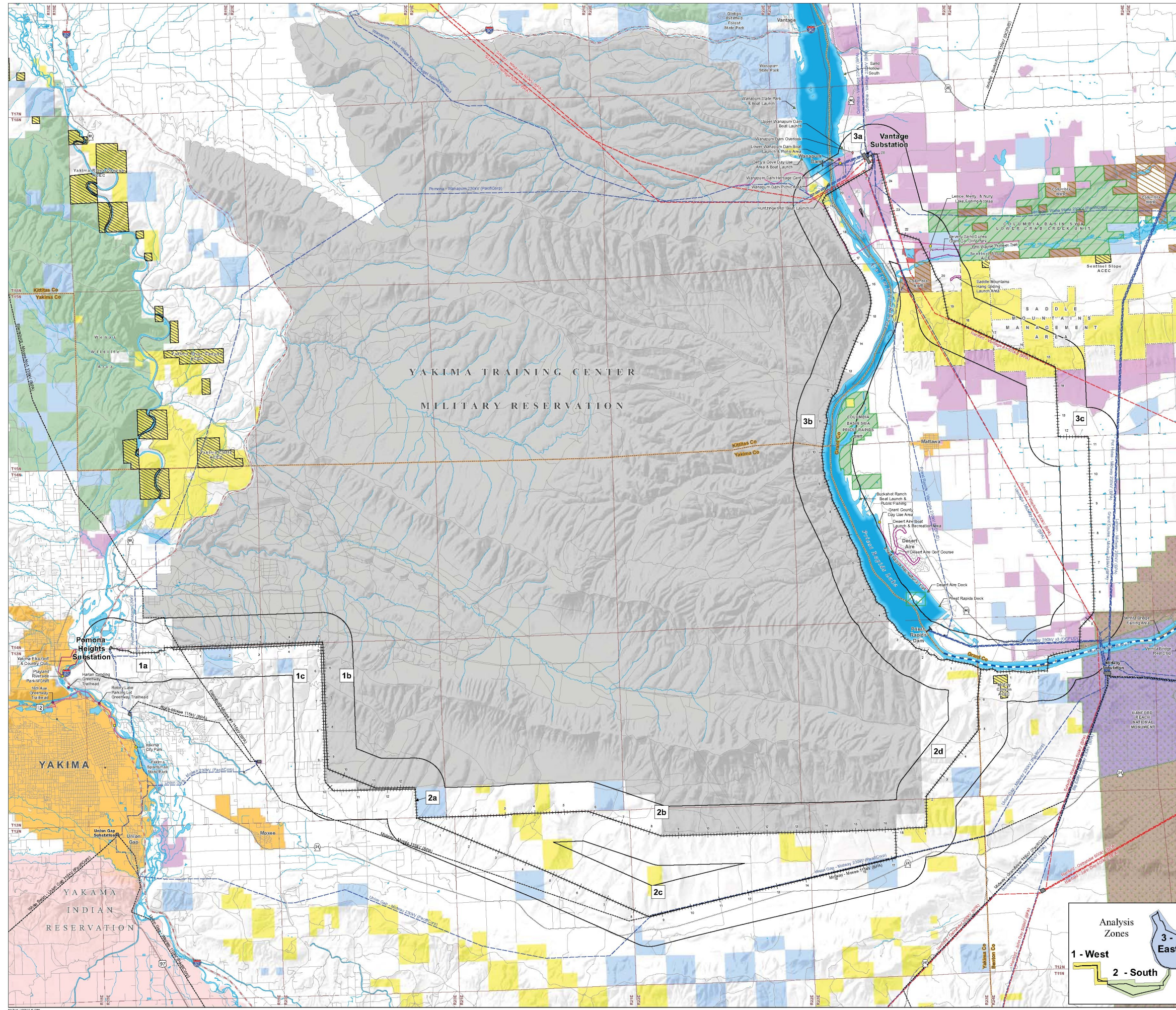
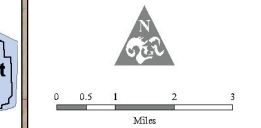


Jurisdiction, Recreation, and Special Management Areas

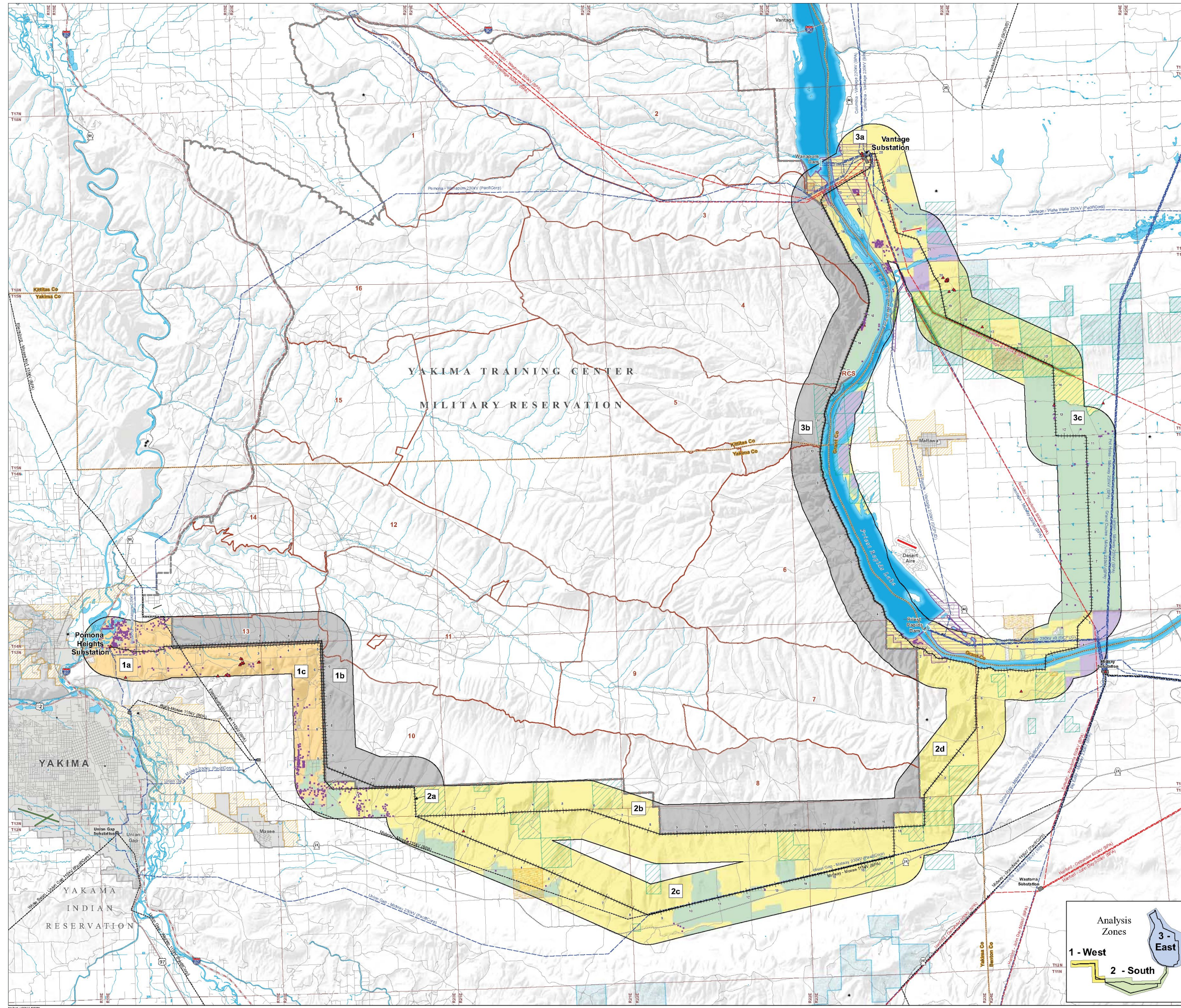
- Legend**
- Route Features**
 - Route Node
 - Alternative Route
 - Study Corridor (2 miles)
 - Boundaries**
 - County
 - Township
 - City Boundary
 - Existing Transmission Facilities**
 - 500kV Transmission Line
 - 230kV Transmission Line
 - 115kV Transmission Line
 - Substation
 - Transportation**
 - Interstate Highway
 - US Highway
 - State Highway
 - Local Access Road
 - Water Features**
 - River or Perennial Stream
 - Open Water
 - Recreation and Special Management Areas**
 - Dock, Boat Launch, or Fishing Access
 - Park, Picnic Area, or Rest Area
 - Recreation Location
 - Scenic Overlook or Viewpoint
 - Scenic Road
 - Trail
 - County**
 - Burkett Lake Recreation Area / Crab Creek Corridor
 - State**
 - Columbia Basin State Wildlife Area
 - Federal**
 - Eligible Wild and Scenic River
 - Area of Critical Environmental Concern (ACEC)
 - National Monument
 - National Wildlife Refuge
 - Saddle Mountains OHV road restricted area
 - Saddle Mountains open OHV area
 - Jurisdiction**
 - Private Individual or Company
 - Bureau of Indian Affairs
 - Bureau of Land Management
 - Bureau of Reclamation
 - Washington Department of Fish and Wildlife
 - State of Washington
 - Yakima Training Center (DOD)
 - U.S. Fish and Wildlife Service
 - Department of Energy



Data are presented in UTM Zone 18N, NAD83



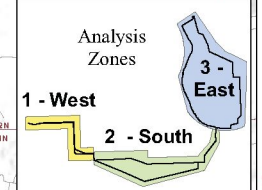
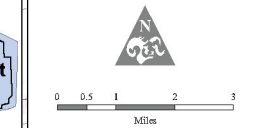
Land Use



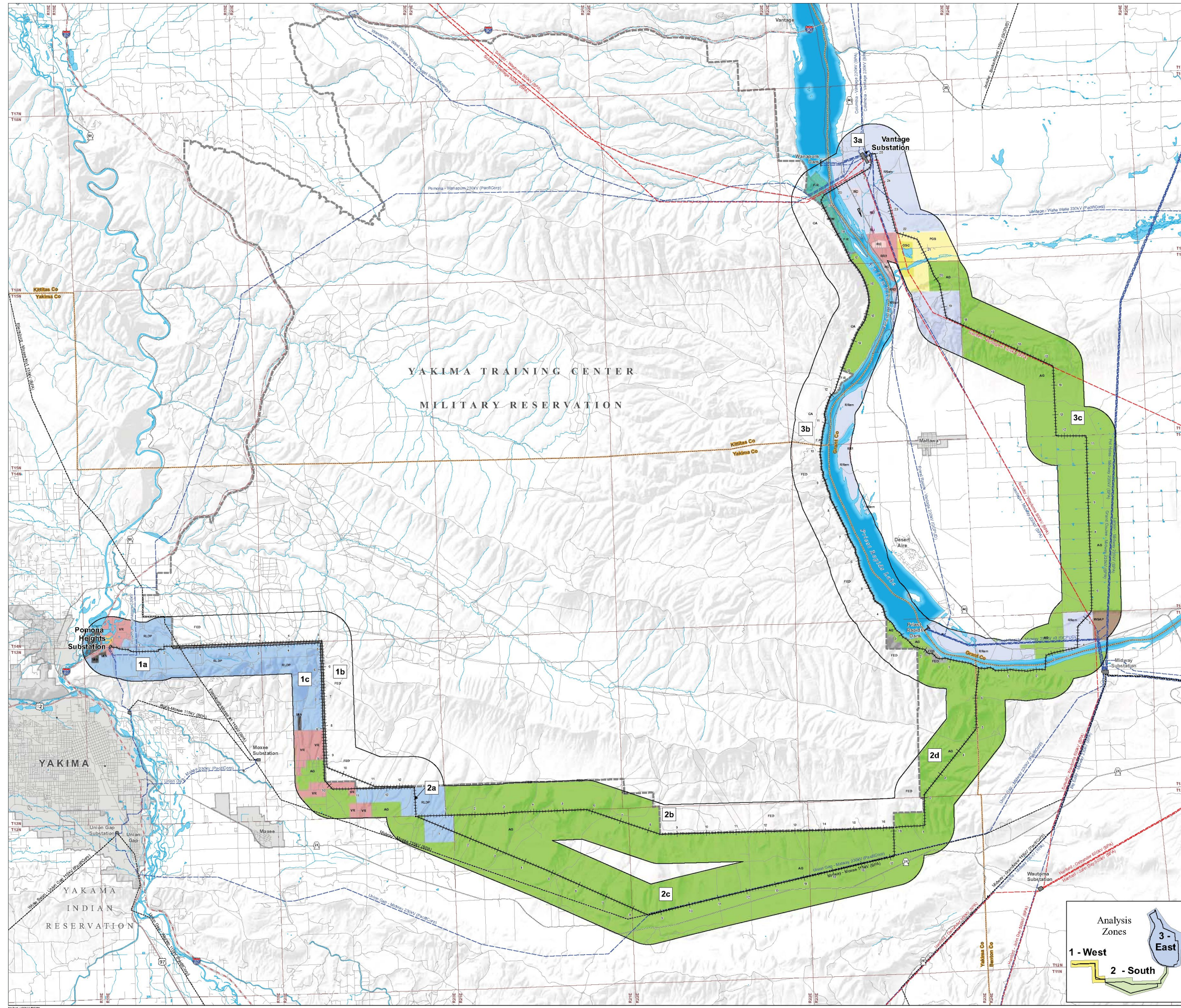
- Legend**
- Route Features**
 - Route Node
 - Alternative Route
 - Study Corridor (2 miles)
 - Land Use Features**
 - Oil or Gas Well
 - FCC Communication Tower
 - Grant County PUD Land Designation: Project Facility
 - Urban Growth Area
 - Residences**
 - Residence
 - Leases**
 - BLM or State Grazing
 - BLM Oil & Gas
 - BLM Wind Energy Facility
 - State Irrigated Agriculture
 - Existing Land Use**
 - Residential
 - Irrigated Cropland
 - Undeveloped/Grazing/Vacant
 - Recreation/Conservation
 - Yakima Training Center
 - BLM Designated Utility Corridor (200 ft minimum width)
 - Existing Transmission Facilities**
 - 500kV Transmission Line
 - 230kV Transmission Line
 - 115kV Transmission Line
 - Substation
 - Dam
 - Boundaries**
 - County
 - Township
 - City Boundary
 - Yakima Training Center (YTC)
 - YTC Training Area
 - Transportation**
 - Interstate Highway
 - US Highway
 - State Route
 - Local Access Road
 - Public Airport
 - Private Airstrip
 - Water Features**
 - River or Perennial Stream
 - Open Water



Data are provided in UTM Zone 18N, NAD83



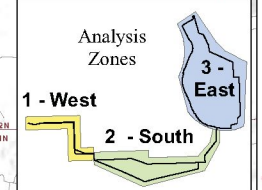
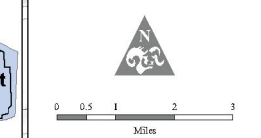
Zoning

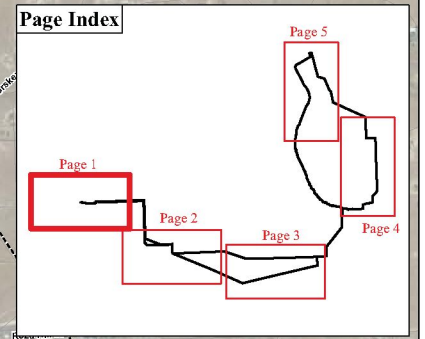
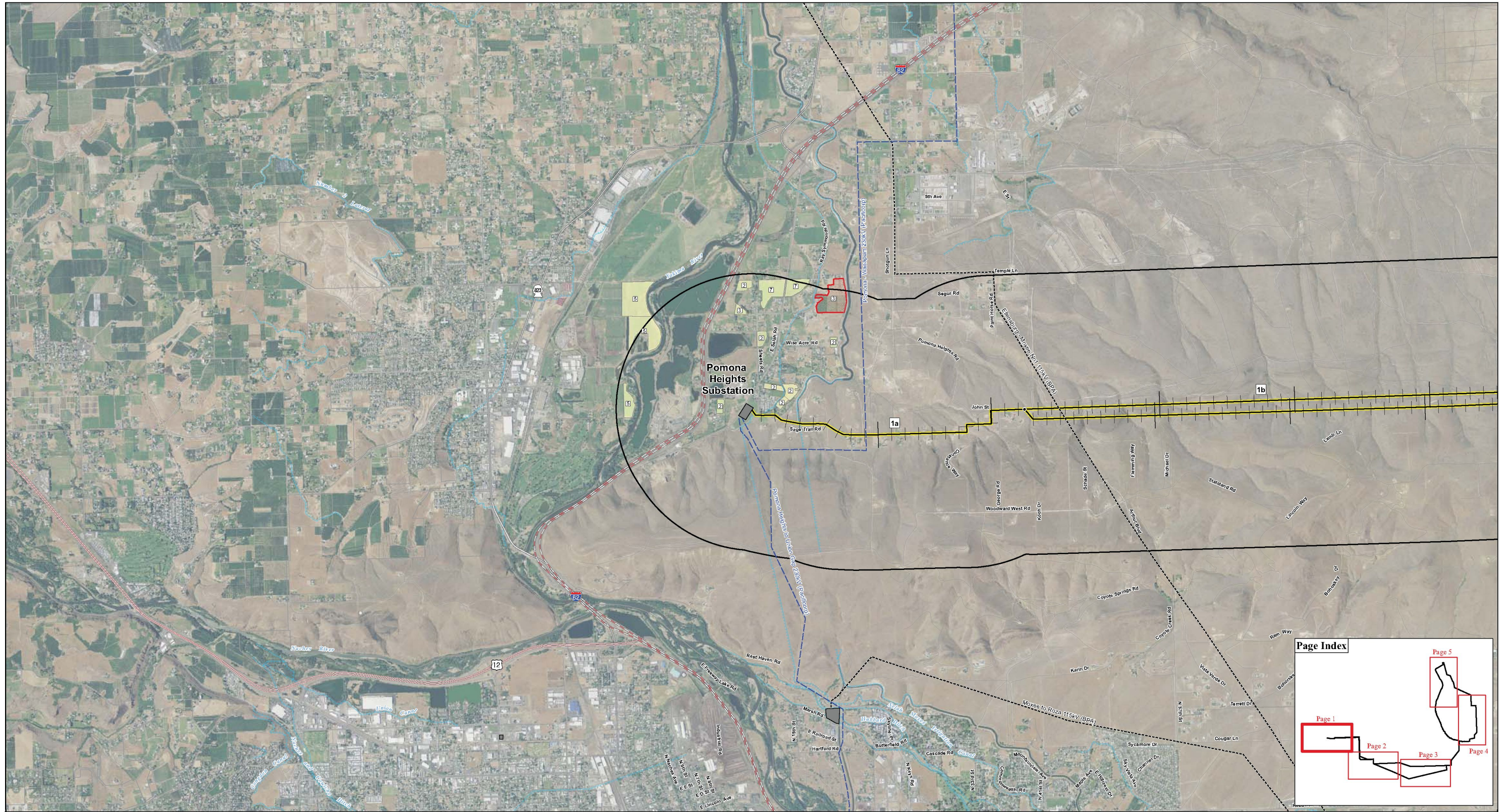


- Legend**
- Route Features**
 - Route Node
 - Alternative Route
 - Study Corridor (2 miles)
 - Zoning by County**
 - Benton County Zoning**
 - Growth Management Act Agricultural District (GMAD)
 - Grant County**
 - Zones**
 - Agriculture (AG)
 - Open Space Conservation (OSC)
 - Public Open Space (POS)
 - Rural Community (RC)
 - Rural Light Industrial (RLI)
 - Rural Remote (RRem)
 - Rural Residential 1 (RR1)
 - Rural Residential 3 (RR3)
 - Other**
 - Wahluke SubArea Plan (WSAP)
 - Kittitas County**
 - Zones**
 - Commercial Agriculture CA)
 - Forest & Range (F-R)
 - Other**
 - Right of Way (ROW)
 - Yakima County Zoning**
 - Zones**
 - Agriculture (AG)
 - Industrial (I)
 - Mining (MIN)
 - Remote/Extremely Limited Development Potential (RLDP)
 - Valley Rural (VR)
 - Federal (FED)
 - Existing Transmission Facilities**
 - 500kV Transmission Line
 - 230kV Transmission Line
 - 115kV Transmission Line
 - Substation
 - Boundaries**
 - County
 - Township
 - City Boundary
 - Yakima Training Center
 - Transportation**
 - Interstate Highway
 - US Highway
 - State Route
 - Local Access Road
 - Water Features**
 - River or Perennial Stream
 - Open Water



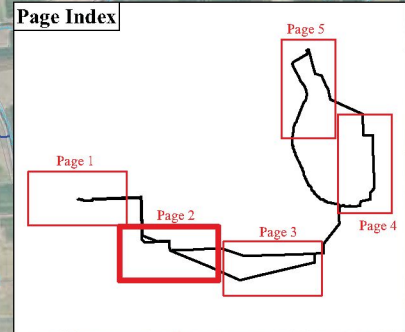
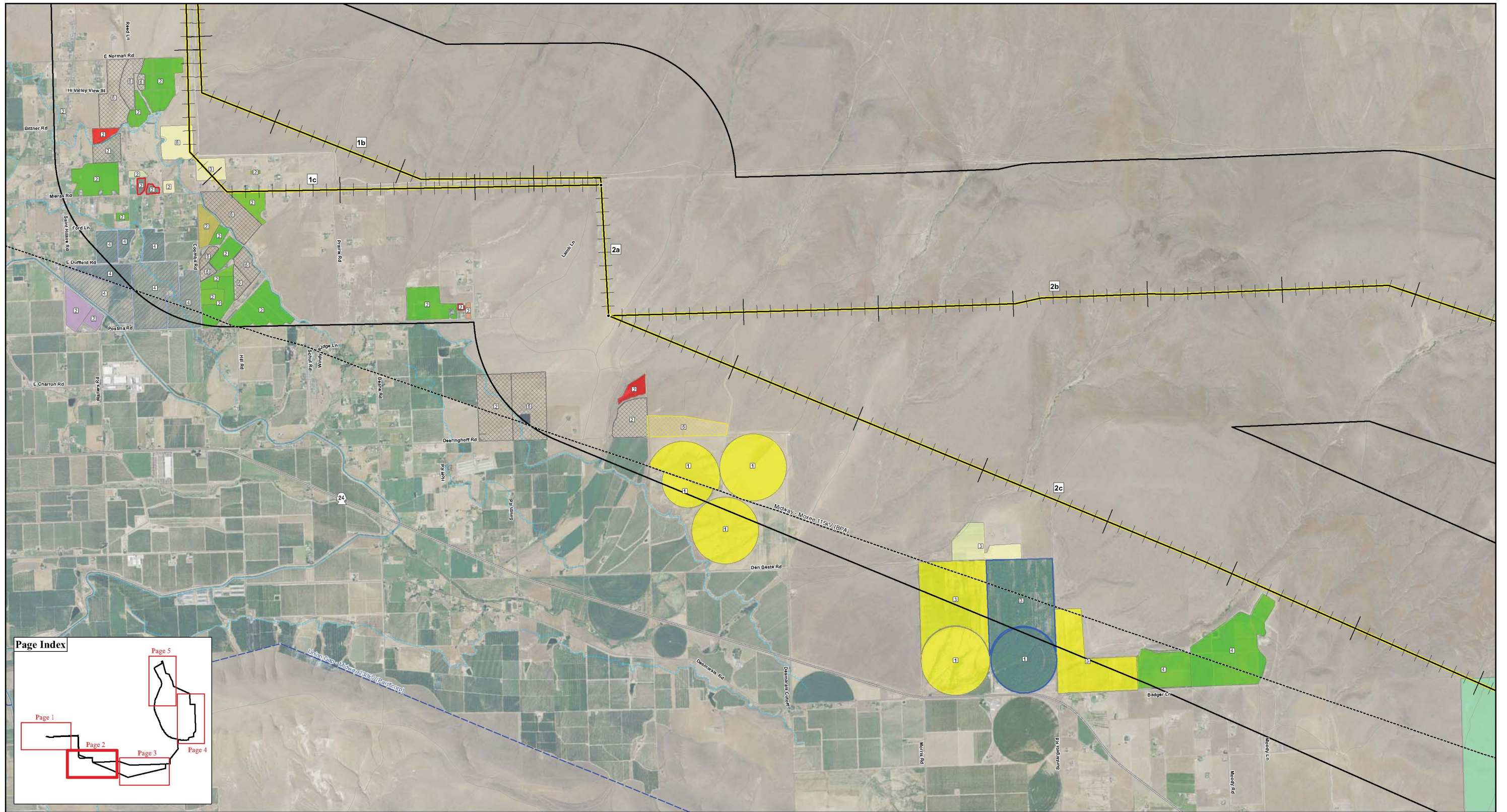
Data are projected in UTM Zone 18N, NAD83





<p>Legend</p> <p>Route Features</p> <ul style="list-style-type: none"> Alternative Route Route Node Study Corridor (2 miles) <p>Agriculture Types</p> <ul style="list-style-type: none"> Grass Hay Pasture 	<p>Irrigation Method</p> <ul style="list-style-type: none"> Center Pivot Hand-Movable Sprinkler Wheel Line Drip Big Gun Dryland 	<p>Irrigation Infrastructure</p> <ul style="list-style-type: none"> Flood Unknown Pump Station Buried Drain Manhole Buried Drain Waterway Line 	<ul style="list-style-type: none"> Lateral Line Wasteway Line Open Drain Line Open Water Pond Canal ROW Area 	<p>Existing Transmission Facilities</p> <ul style="list-style-type: none"> 500kV Transmission Line 230kV Transmission Line 115kV Transmission Line <p>Boundaries</p> <ul style="list-style-type: none"> County 	<p>Transportation</p> <ul style="list-style-type: none"> Interstate Highway US Highway State Highway Local Access Road 	<p>Data are projected in UTM Zone 10N, NAD83</p> <p>PACIFIC POWER & LIGHT POWER ENGINEERS</p>	<p>WASHINGTON OREGON</p> <p>PROJECT LOCATION</p>	<p>Vantage - Pomona Heights 230 kV Transmission Line Project</p> <p>Agriculture & Irrigation</p> <p>Page 1 of 5</p>
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Legend

Route Features

- Alternative Route
- Route Node
- Study Corridor (2 miles)

Agriculture Types

- Apple
- Grass Hay
- Hops

- Cherry
- Alfalfa Hay
- Concord Grape
- Wheat
- Fallow - Wheat
- Nectarine/Peach
- Pasture
- Pear

Irrigation Method

- Center Pivot
- Hand-Movable Sprinkler
- Wheel Line
- Drip
- Big Gun
- Dryland

Irrigation Infrastructure

- Flood
- Unknown
- Pump Station
- Buried Drain Manhole
- Buried Drain
- Waterway Line

- Lateral Line
- Wasteway Line
- Open Drain Line
- Open Water Pond
- Canal ROW Area

Existing Transmission Facilities

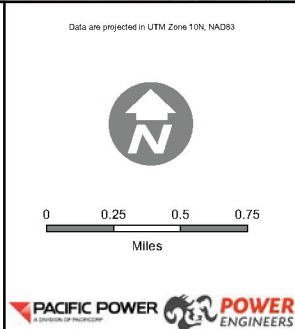
- 500kV Transmission Line
- 230kV Transmission Line
- 115kV Transmission Line

Boundaries

- County

Transportation

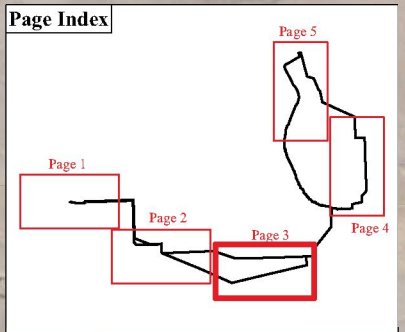
- Interstate Highway
- US Highway
- State Highway
- Local Access Road



Vantage - Pomona Heights
230 kV Transmission Line Project

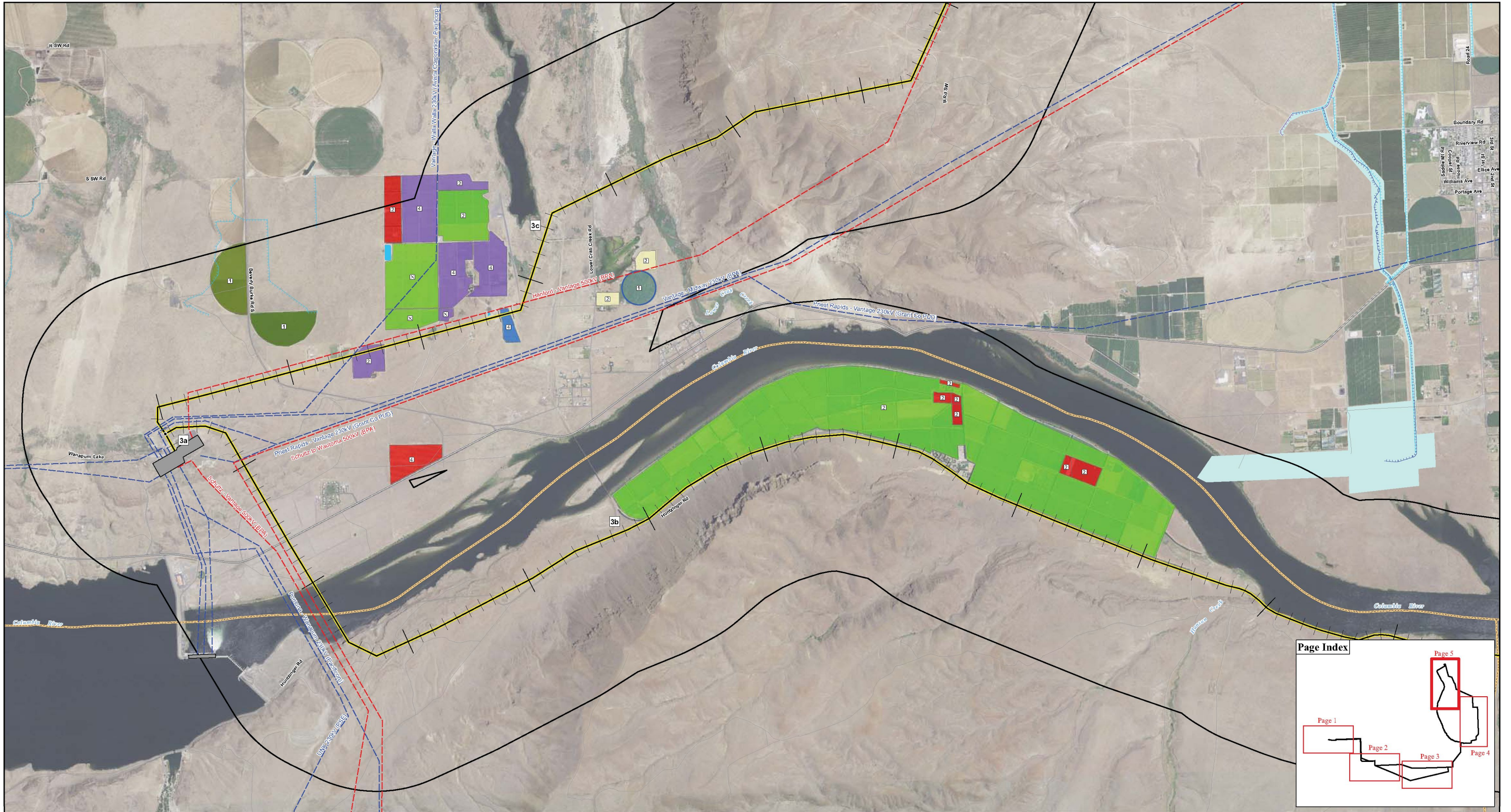
Agriculture & Irrigation
Page 2 of 5

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<p>Legend</p> <ul style="list-style-type: none"> Alternative Route Route Node Study Corridor (2 miles) <p>Agriculture Types</p> <ul style="list-style-type: none"> Apple Alfalfa Hay Green Manure Timothy Hay 	<ul style="list-style-type: none"> Wheat Fallow - Unknown Fallow - Wheat Field Corn Wildlife Feed CRP Identified Acres CRP Acres (unknown location within section) 	<p>Irrigation Method</p> <ul style="list-style-type: none"> Center Pivot Hand-Movable Sprinkler Wheel Line Drip Big Gun Dryland 	<ul style="list-style-type: none"> Flood Unknown <p>Irrigation Infrastructure</p> <ul style="list-style-type: none"> Pump Station Buried Drain Manhole Buried Drain Waterway Line 	<ul style="list-style-type: none"> Lateral Line Wasteway Line Open Drain Line Open Water Pond Canal ROW Area 	<p>Existing Transmission Facilities</p> <ul style="list-style-type: none"> 500kV Transmission Line 230kV Transmission Line 115kV Transmission Line <p>Boundaries</p> <ul style="list-style-type: none"> County 	<p>Transportation</p> <ul style="list-style-type: none"> Interstate Highway US Highway State Highway Local Access Road 	<p>Data are projected in UTM Zone 10N, NAD83</p> <p>0 0.25 0.5 0.75 Miles</p> <p>PACIFIC POWER & LIGHTS POWER ENGINEERS</p>	<p>WASHINGTON OREGON</p> <p>PROJECT LOCATION</p>	<p>Vantage - Pomona Heights 230 kV Transmission Line Project</p> <h2>Agriculture & Irrigation</h2> <p>Page 3 of 5</p>
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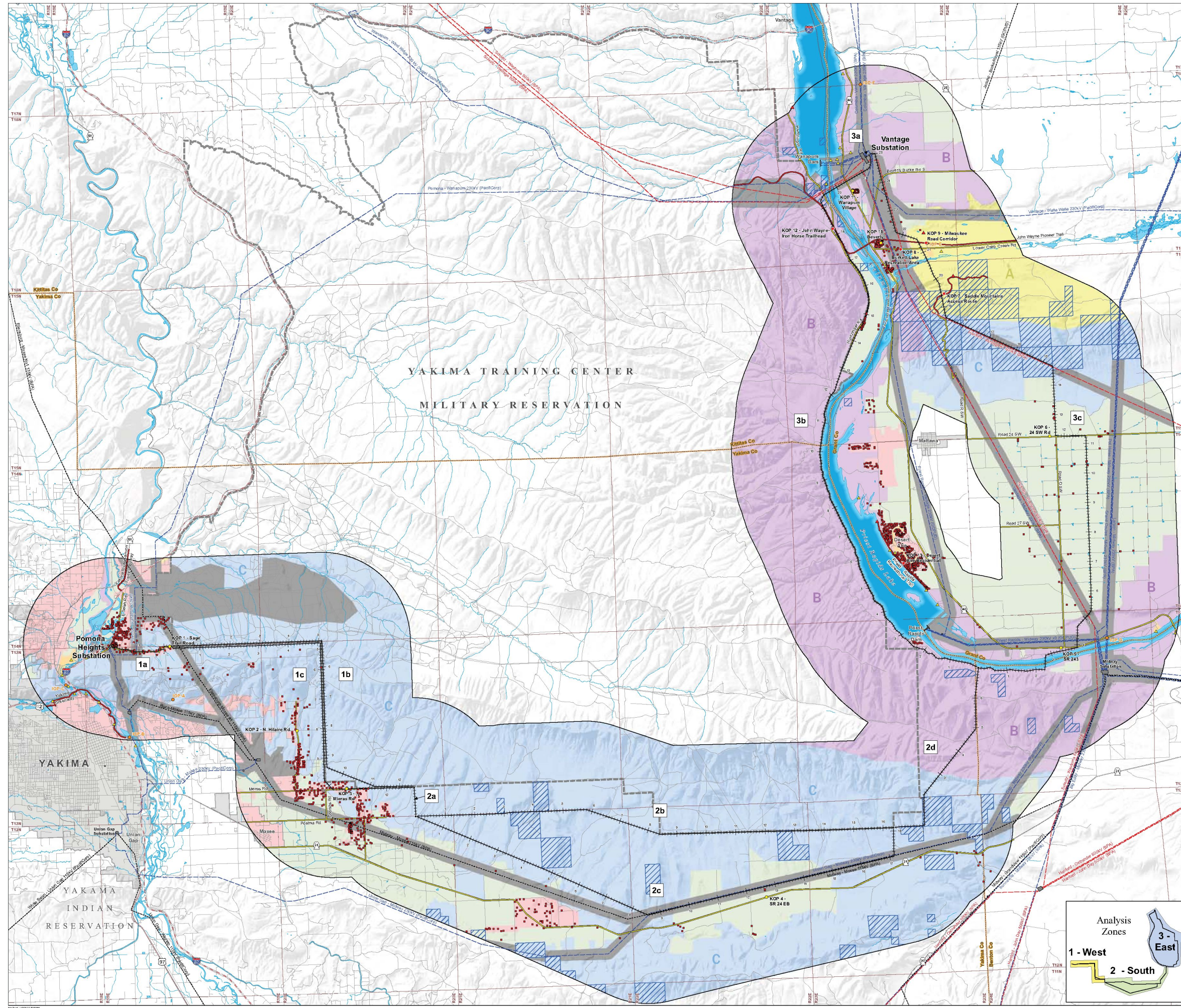
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Legend Alternative Route Route Node Study Corridor (2 miles) Agriculture Types Apple Cherry		Irrigation Method Center Pivot Hand-Movable Sprinkler Wheel Line Drip Big Gun Dryland		Irrigation Infrastructure Flood Unknown Pump Station Buried Drain Manhole Buried Drain Waterway Line		Existing Transmission Facilities 500kV Transmission Line 230kV Transmission Line 115kV Transmission Line Boundaries County		Transportation Interstate Highway US Highway State Highway Local Access Road		Data are projected in UTM Zone 10N, NAD83 0 0.25 0.5 0.75 Miles 		 PROJECT LOCATION WASHINGTON OREGON		Vantage - Pomona Heights 230 kV Transmission Line Project Agriculture & Irrigation Page 5 of 5	
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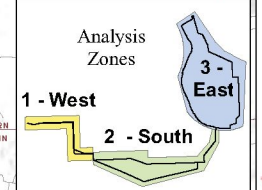
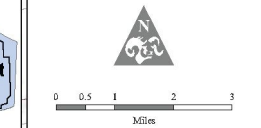
Visual Resources



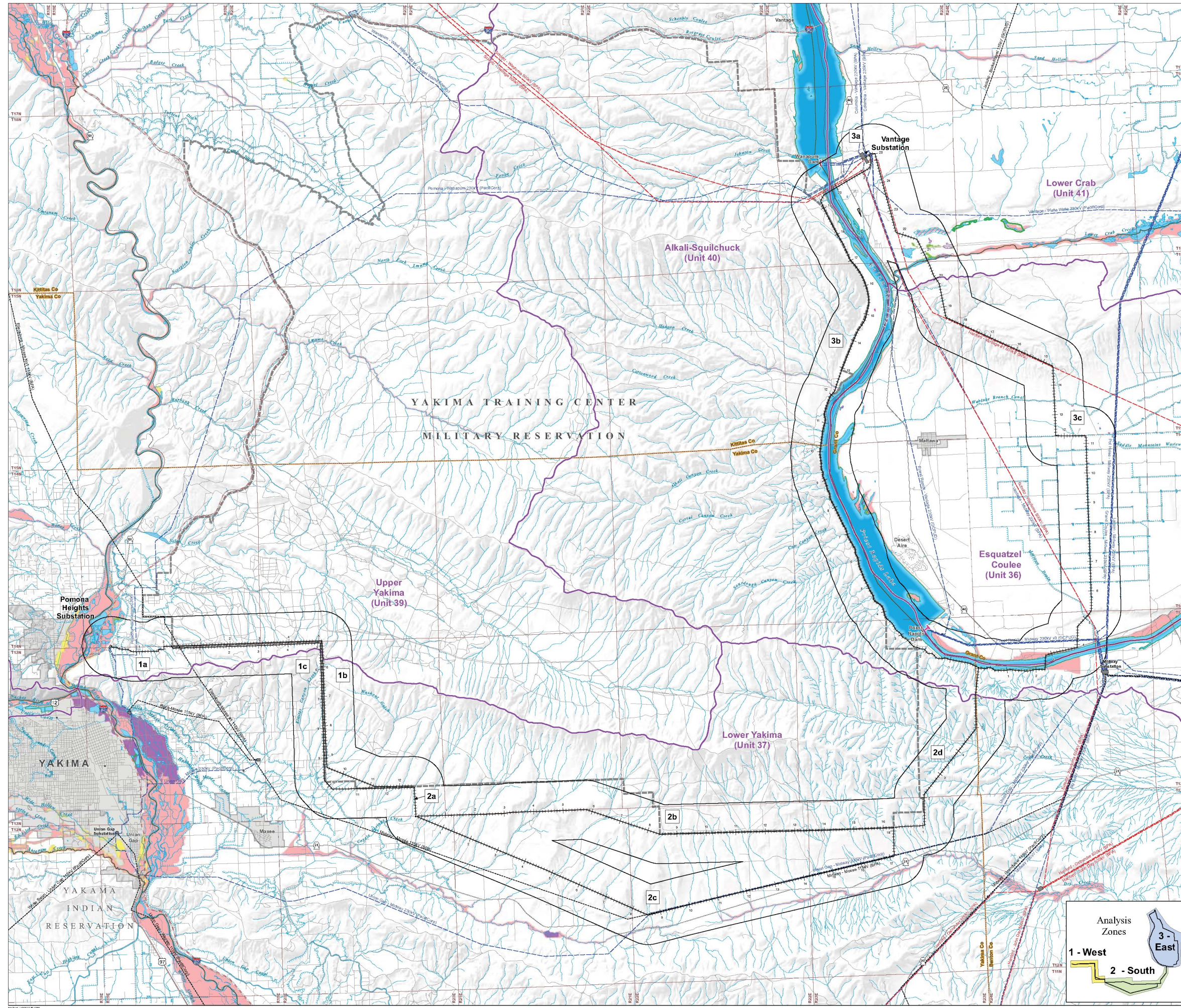
- Legend**
- Route Features**
- Route Node
 - Alternative Route
 - Study Corridor (6 miles)
- Visual Resources**
- Sensitive Flavors**
- High Sensitivity - Residence
 - High Sensitivity
 - Moderate Sensitivity
- Key Observation Points (KOP) and Inventory KOPs**
- High Sensitivity
 - Moderate Sensitivity
 - Inventory Observation Point (IOP)
- Scenic Quality**
- A
 - B
 - C
- Development Character Areas**
- Industrial/Utility
 - Developed Parkland
 - Agriculture
 - Residential
- Existing Transmission Facilities**
- 500kV Transmission Line
 - 230kV Transmission Line
 - 115kV Transmission Line
 - Substation
- Boundaries**
- County
 - Township
 - City Boundary
 - Yakima Training Center
- Transportation**
- Interstate Highway
 - US Highway
 - State Highway
 - Local Access Road
- Water Features**
- River or Perennial Stream
 - Open Water



Data are projected in UTM Zone 18N, NAD83



Water Resources and Wetlands



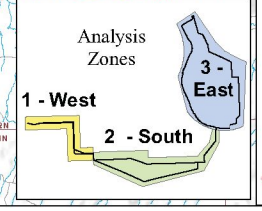
- Legend**
- Route Features**
 - Route Node
 - Alternative Route
 - Study Corridor (2 miles)
 - National Wetland Inventory**
 - Freshwater Emergent Wetland
 - Freshwater Forested or Shrub Wetland
 - Freshwater Pond
 - Lake
 - Riverine
 - National Hydrography Dataset**
 - Intermittent Stream
 - Perennial Stream or River
 - Canal or Ditch
 - Pipeline
 - State Hydrological Boundaries**
 - Water Resource Inventory Area
 - Adopted Shoreline Boundary
 - Dun
 - FEMA Flood Data**
 - 100 year Floodplain
 - 500 year Floodplain
 - Area protected by levee
 - Existing Transmission Facilities**
 - 500kV Transmission Line
 - 230kV Transmission Line
 - 11.5kV Transmission Line
 - Substation
 - Boundaries**
 - County
 - Township
 - City Boundary
 - Yakima Training Center
 - Transportation**
 - Interstate Highway
 - US Highway
 - State Route
 - Local Access Road



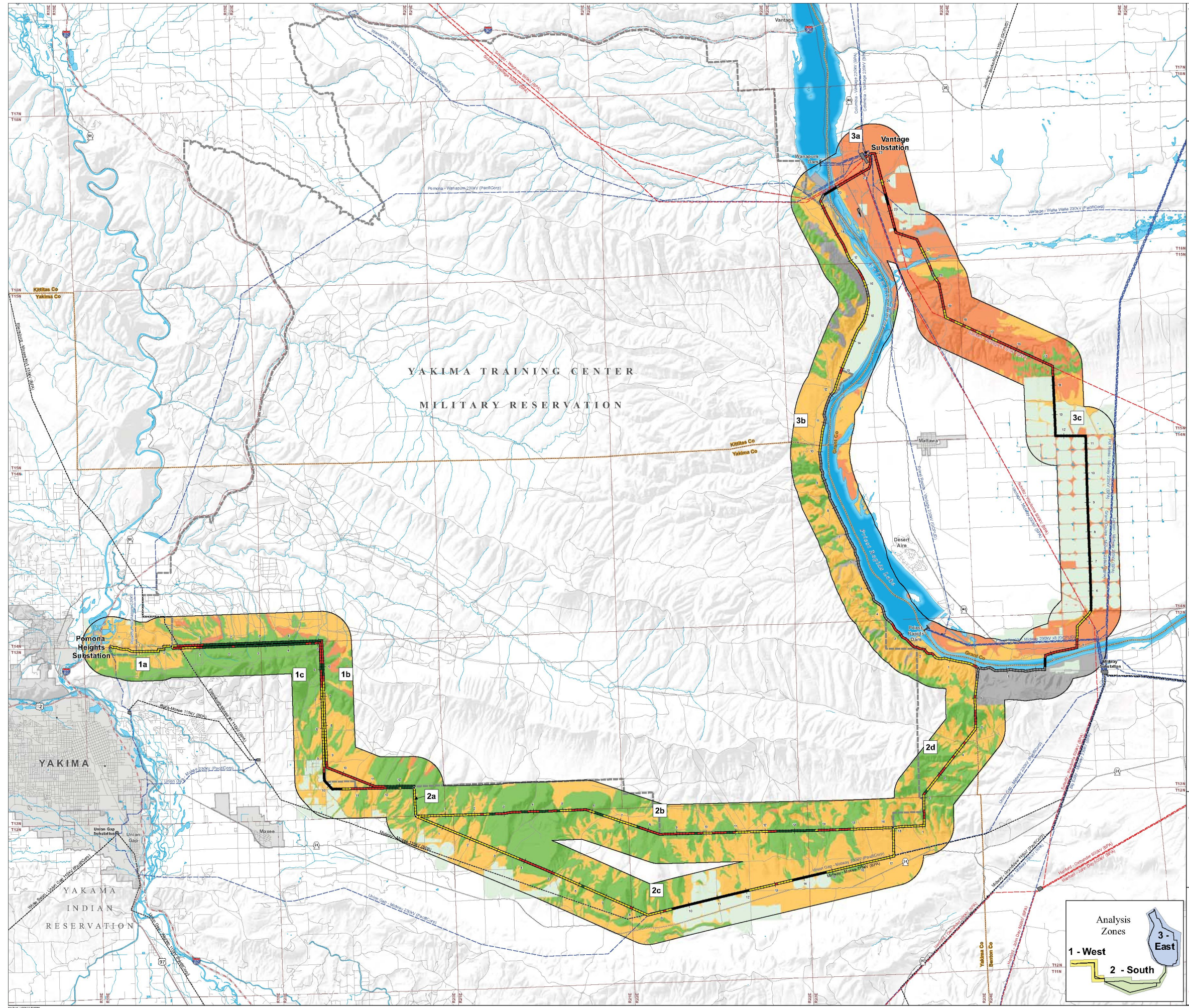
Data are projected in UTM Zone 18N, NAD83

Analysis Zones

- 1 - West
- 2 - South
- 3 - East



Soil Erosion Potential by Wind



Legend

Route Features

- Route Node
- Alternative Route
- Study Corridor (2 miles)

Soil Restoration Potential

- High Potential
- Moderate Potential
- Low Potential
- Not Rated
- Not Applicable

Soil Erosion Potential by Wind

- Low Risk Factor
- Moderate Risk Factor
- High Risk Factor
- Not rated or Not Available

Existing Transmission Facilities

- 500kV Transmission Line
- 230kV Transmission Line
- 115kV Transmission Line
- Substation

Boundaries

- County
- Township
- City Boundary
- Yakima Training Center

Transportation

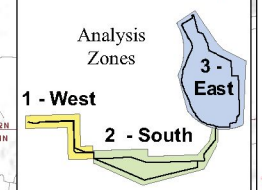
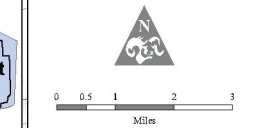
- Interstate Highway
- US Highway
- State Route
- Local Access Road

Water Features

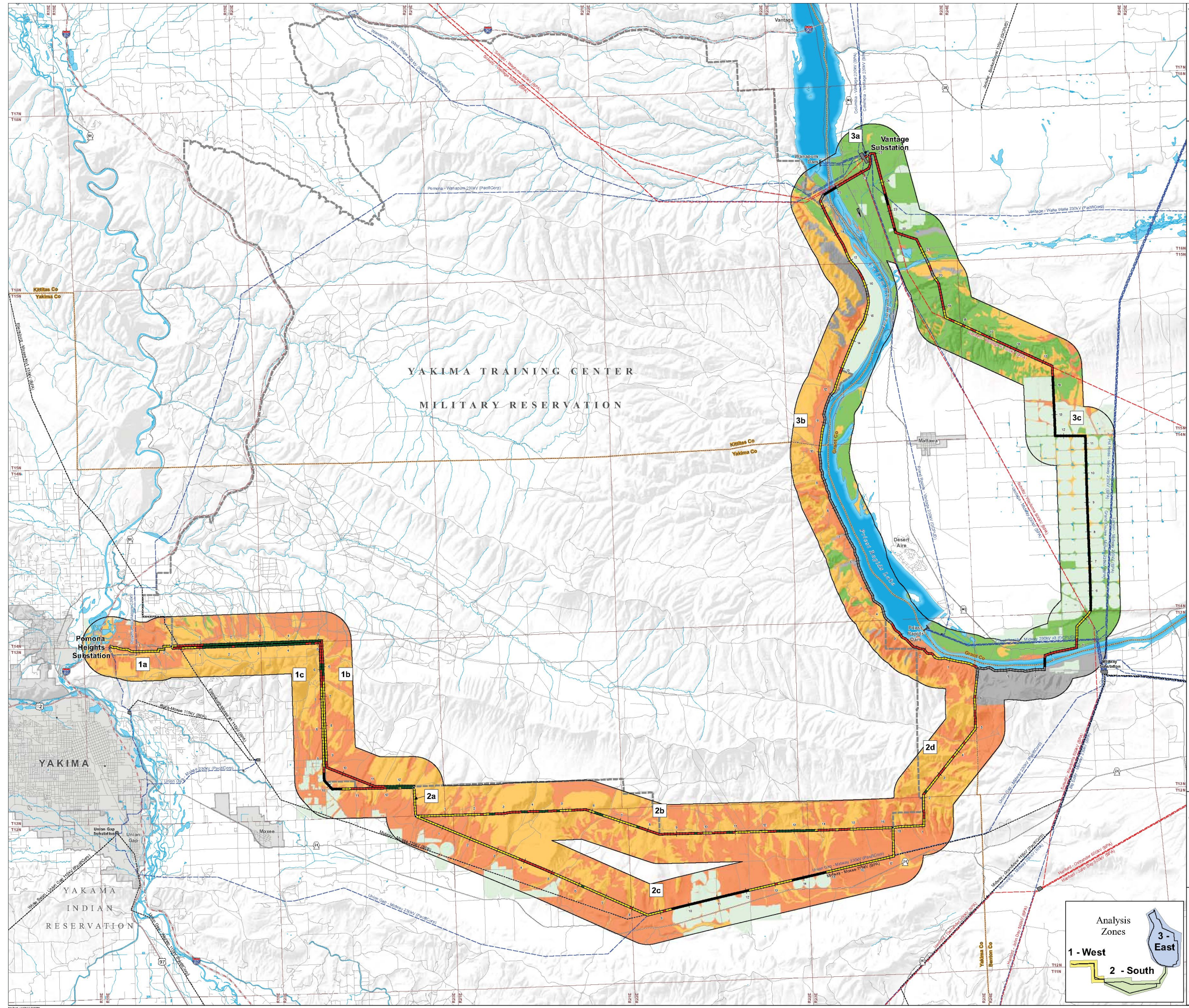
- River or Perennial Stream
- Open Water



Data are presented in UTM Zone 18N, NAD83



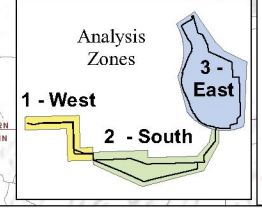
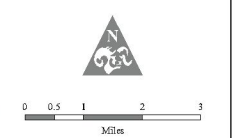
Soil Erosion Potential by Water



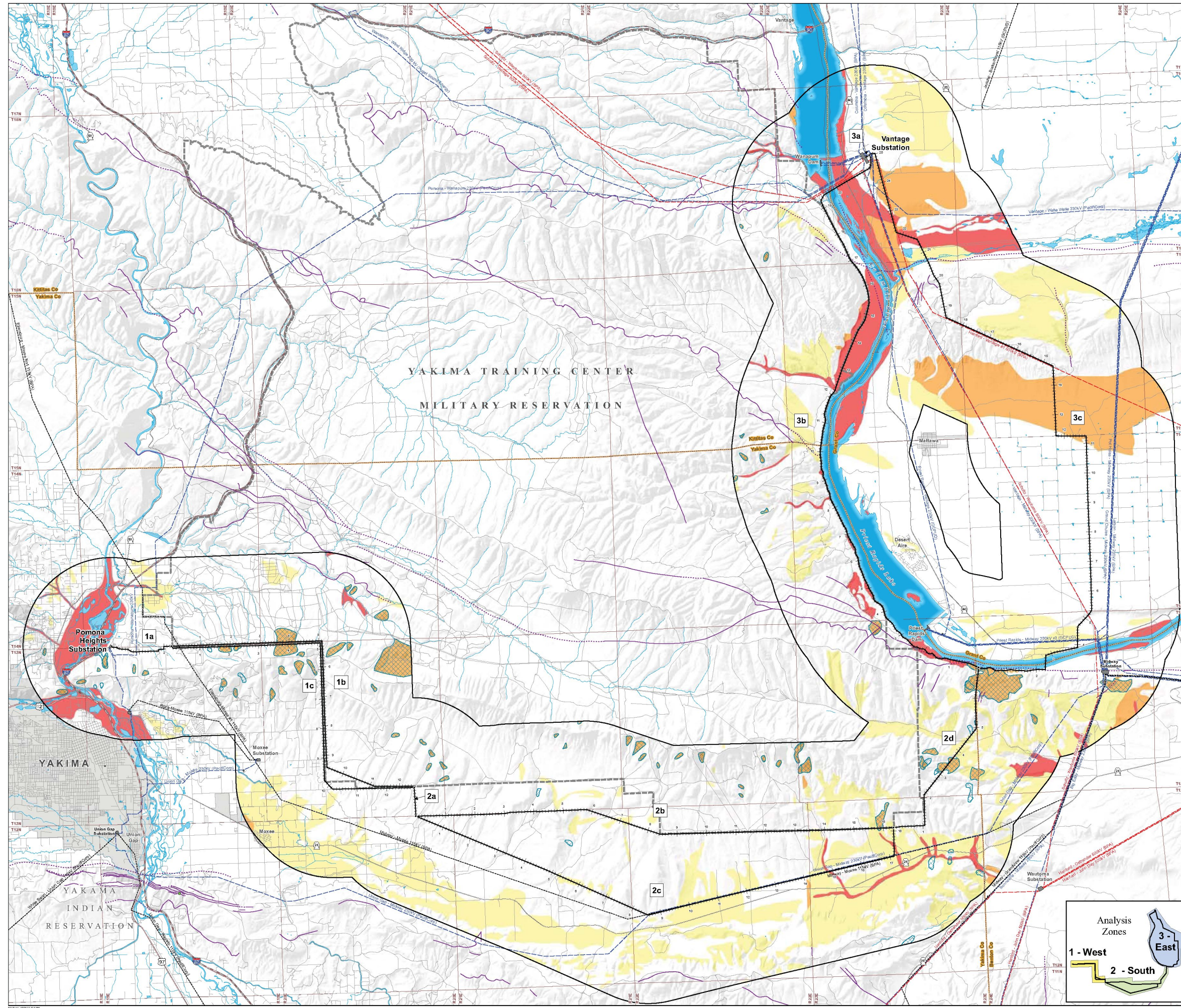
- Legend**
- Route Features**
 - Route Node
 - Alternative Route
 - Study Corridor (2 miles)
 - Soil Restoration Potential**
 - High Potential
 - Moderate Potential
 - Low Potential
 - Not Rated
 - Not Applicable
 - Soil Erosion Potential by Water**
 - Low Risk Factor
 - Moderate Risk Factor
 - High Risk Factor
 - Not rated or Not Available
 - Agricultural Area
 - Existing Transmission Facilities**
 - 500kV Transmission Line
 - 230kV Transmission Line
 - 115kV Transmission Line
 - Substation
 - Boundaries**
 - County
 - Township
 - City Boundary
 - Yakima Training Center
 - Transportation**
 - Interstate Highway
 - US Highway
 - State Route
 - Local Access Road
 - Water Features**
 - River or Perennial Stream
 - Open Water



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Geohazards



Legend

Route Features

- Route Node
- Alternative Route
- Study Corridor (6 miles)

Active Faults

- ◊ Fault Trench
- Visible fault trace
- - - Inferred fault trace
- ⋯ Concealed fault trace

Landslides

- ▨ Mapped Landslide

Liquefaction Susceptibility

- Low
- Low to Moderate
- Moderate to High

Existing Transmission Facilities

- 500kV Transmission Line
- 230kV Transmission Line
- 115kV Transmission Line
- Substation

Boundaries

- County
- Township
- City Boundary
- Yakima Training Center

Transportation

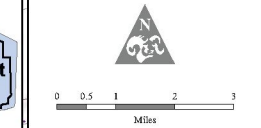
- Interstate Highway
- US Highway
- State Route
- Local Access Road

Water Features

- River or Perennial Stream
- Open Water



Data are projected in UTM Zone 18N, NAD83



Important Farmland Soils

- Legend**
- Route Features**
- Route Node
 - Alternative Route
 - Study Corridor (2 miles)
- Important Farmland Soils**
- Farmland of Statewide Importance
 - Unique Farmland
 - Prime Farmland (if drained)
 - Prime Farmland (if irrigated)
- Existing Transmission Facilities**
- 500kV Transmission Line
 - 230kV Transmission Line
 - 115kV Transmission Line
 - Substation
- Boundaries**
- County
 - Township
 - City Boundary
 - Yakima Training Center
- Transportation**
- Interstate Highway
 - US Highway
 - State Route
 - Local Access Road
- Water Features**
- River or Perennial Stream
 - Open Water



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