

Plain & Lake Wenatchee Planning & Outreach

Transmission
June 2019



CHELAN COUNTY

What We Will Cover Today: Plain & Lake Wenatchee Reliability Improvements

- Background/History
- HDR Report: Fire Risk Assessment
- Current Transmission Line Options
- Public Outreach/Assess Community Sentiment

No Board Action Requested



Background

- Mid 1990s District plans to construct a second 115kV line from Fox Rd to vicinity of Plain
- District ultimately cancels project due to opposition from Plain residents
- 2006 Wind storm results in extended outages (Deadhorse)
- 2012 Ice storm in the Plain/Lake Wenatchee area causes extended outages, ~10 days (off and on)
- Informal comments from Plain residents inquiring about the previous plan to construct a 115kV line
- 2017 District assesses wildfire risk to transmission infrastructure
- Identifies sections of Anderson Canyon, Coles Corner & Plain Tap at high risk
- 2019 Consideration of District outreach to Plain/Lake Wenatchee residents



HDR: Fire Risk Assessment

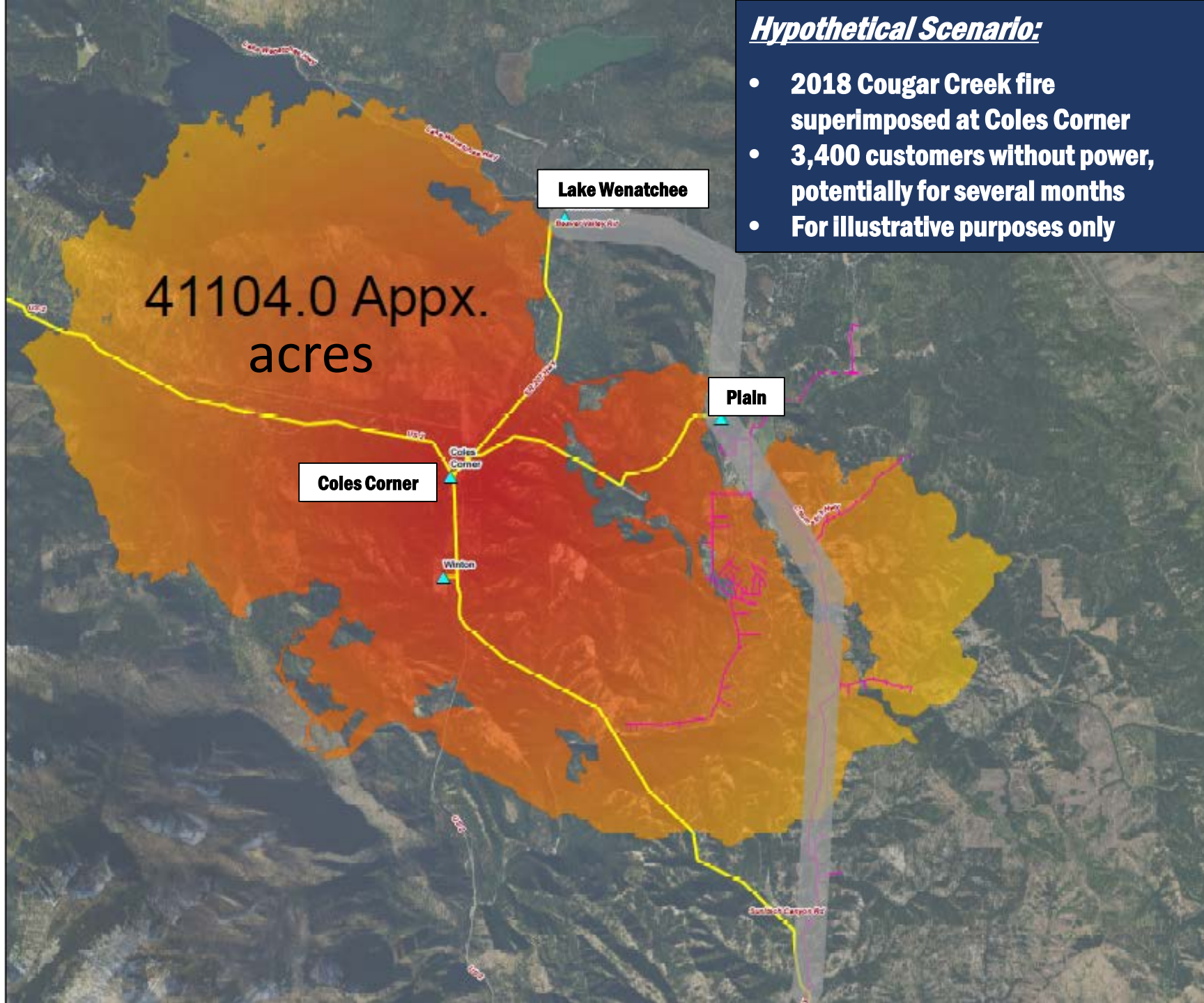
- Identified Plain/Lake Wenatchee area in top 3 highest risk areas of county.
- District has desire to improve system resilience to wildfire and weather events.



Figure 14. Map showing the structure-by-structure final risk score associated with the northwestern portion of the district's serv

Hypothetical Scenario:

- 2018 Cougar Creek fire superimposed at Coles Corner
- 3,400 customers without power, potentially for several months
- For illustrative purposes only



Other Project Drivers

- Public Safety
- Aging Infrastructure
- Area of the forest that hasn't burned in recent history
- Number of Customers: 3,413 (323 CCN, 1710 PLN, 1380 LKW)
- Section in Sunitsch/Deadhorse
 - Difficult access in summer
 - Require railroad assistance to access in winter
 - Narrow ROW, trees taller than the line



Transmission Improvement Options – Alt 1

- Rebuild existing line from Anderson Canyon, to Chumstick Hwy. to provide a hardened connection to the power source.
- Build new line along Chumstick, from North Road to Plain, for fire hardening and improved reliability
- Build new line between Plain and Lake Wenatchee Substations, creating a loop for improved reliability
- Estimated Cost \$40M - \$60M



Transmission Improvement Options – Alt 2

- Rebuild existing line from Anderson Canyon, to Chumstick Hwy. to provide a hardened connection to the power source.
- Rebuild the existing line through Sunitsch/Deadhorse
- Doesn't resolve access issues
- Rebuild the existing Plain Tap
- Build a ring-bus at Coles Corner
- Estimated Cost \$40M - \$60M



Transmission Improvement Options – Alt 3

- Maintain status quo – Do Nothing
- Does not address risk of aging infrastructure
- Does not address risk of extended outages due to fire or weather



Transmission Alternatives: Pros/Cons

Alternative 1*

Pros:

- Easy access to structures
- Looped service to substations
- Supports 2015-2019 Strategic Plan
- Provides greatest sectionalizing capabilities of all options

Cons:

- Requires new easements/permits
- More visible to customer owners
- Longer time to construct and energize, 8 – 10+ years

Estimated Cost: \$40-\$60M

Alternative 2*

Pros:

- Easements already in place
- Shorter time to begin construction
- Supports 2015-2019 Strategic Plan

Cons:

- Difficult access remains to Sunitsch and Deadhorse canyons.
- Does not provided “looped” service to Plain or Lake Wenatchee
- Longer repair times due to access

Estimated Cost: \$40-\$60M

Do-Nothing Alternative

Pros:

- Delays costs of upgrading to a future year

Cons:

- Risk of extended power outages due to wildfire and weather
- Risk of aging infrastructure

****These proposed resilience projects are not a revenue source***

Outreach Objectives

Engage with Key Stakeholders in Plain & Lake Wenatchee: June/July

- Share results of fire risk assessment and customer impacts
- Begin the discussion about community interests in both improved and new transmission lines

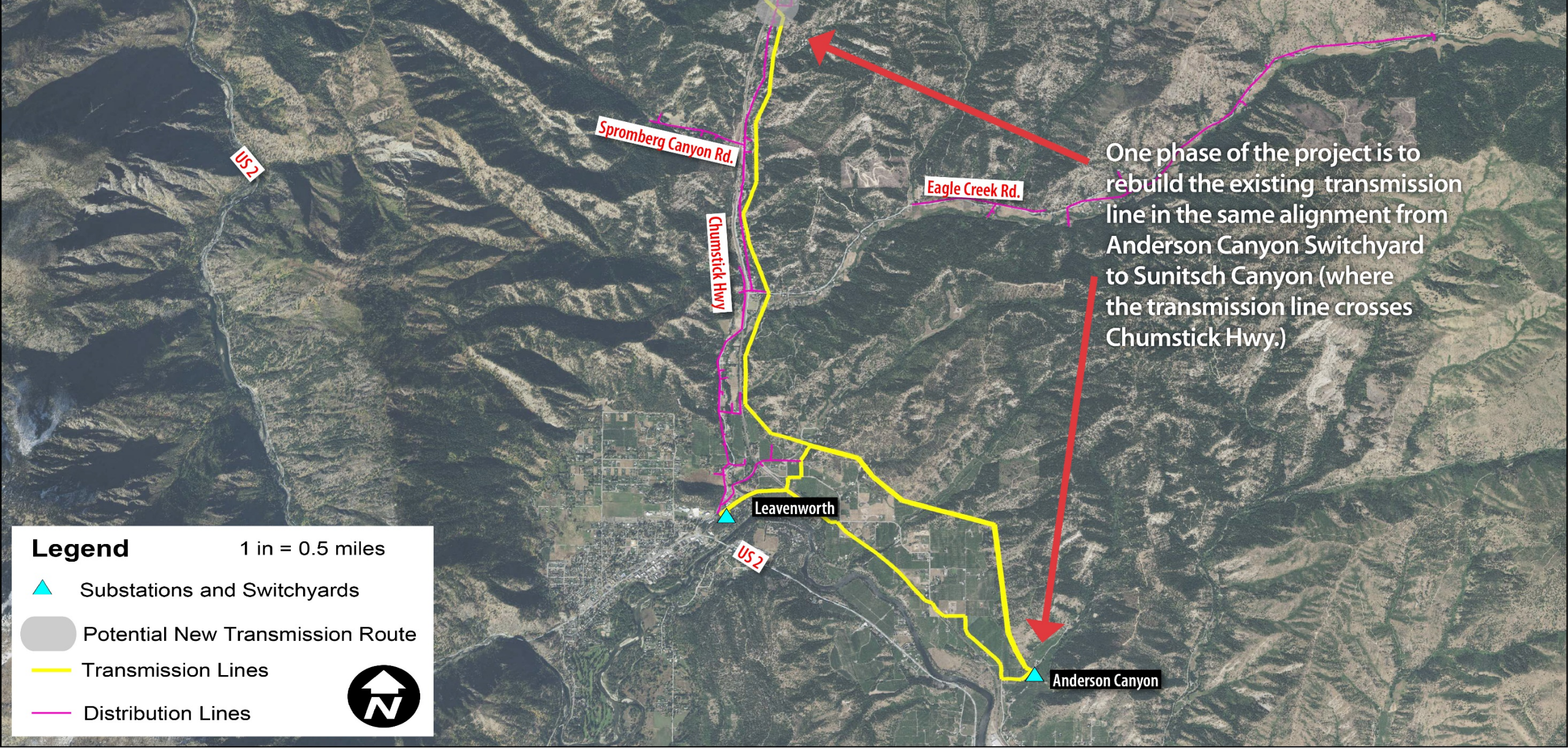
Broader Community Outreach: Summer/Fall

- Open Houses
- Mailers
- Online/Written Surveys
- Community Updates/E-newsletters
- Determine Timeline and Decision Milestones

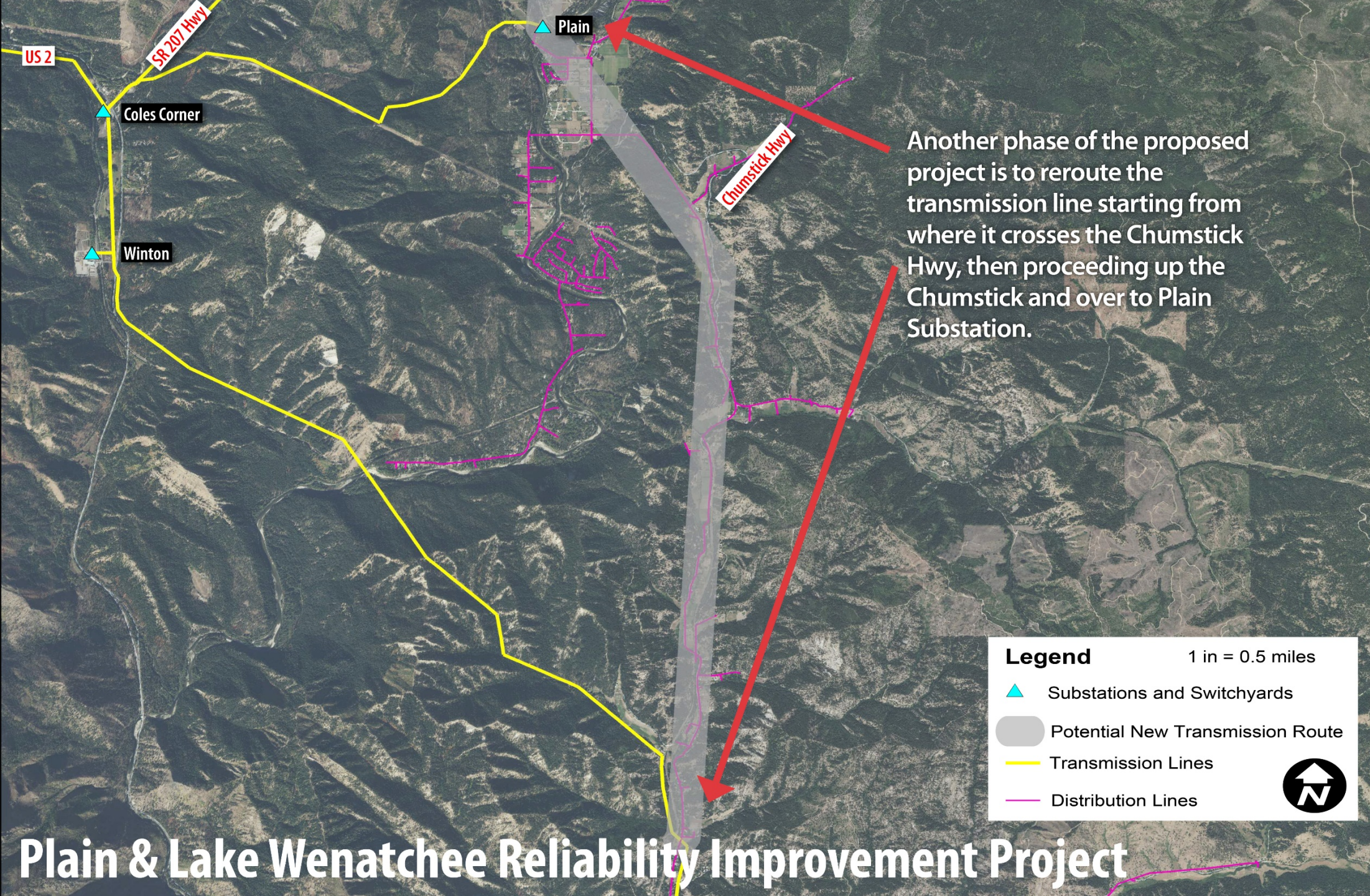


Questions?






Plain & Lake Wenatchee Reliability Improvement Project



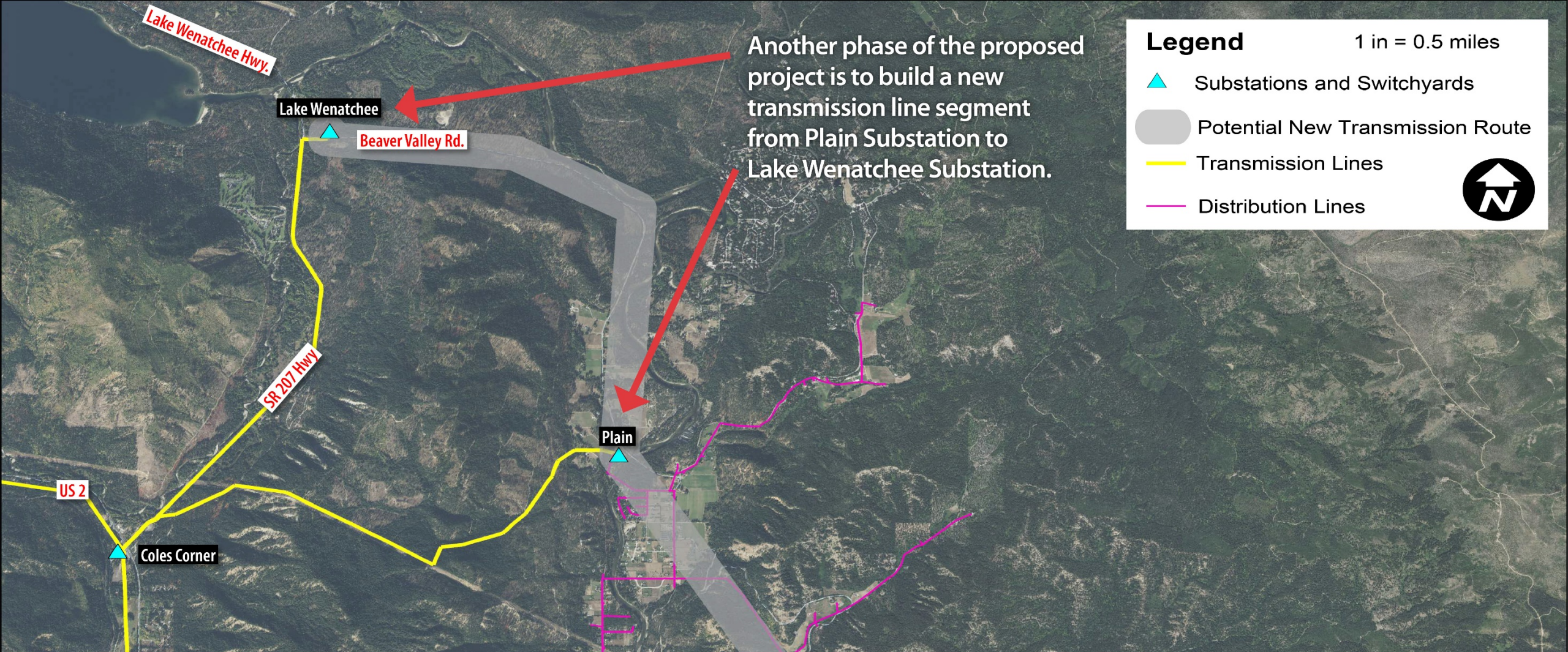
Another phase of the proposed project is to reroute the transmission line starting from where it crosses the Chumstick Hwy, then proceeding up the Chumstick and over to Plain Substation.

Legend 1 in = 0.5 miles

- ▲ Substations and Switchyards
- Potential New Transmission Route
- Transmission Lines
- Distribution Lines




Plain & Lake Wenatchee Reliability Improvement Project



Another phase of the proposed project is to build a new transmission line segment from Plain Substation to Lake Wenatchee Substation.

Legend 1 in = 0.5 miles

- ▲ Substations and Switchyards
- Potential New Transmission Route
- Transmission Lines
- Distribution Lines



Plain & Lake Wenatchee Reliability Improvement Project