

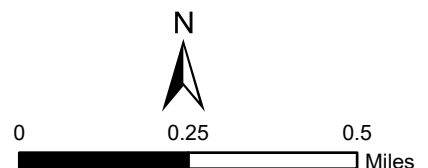
APPENDIX E: HAZARD MAPS

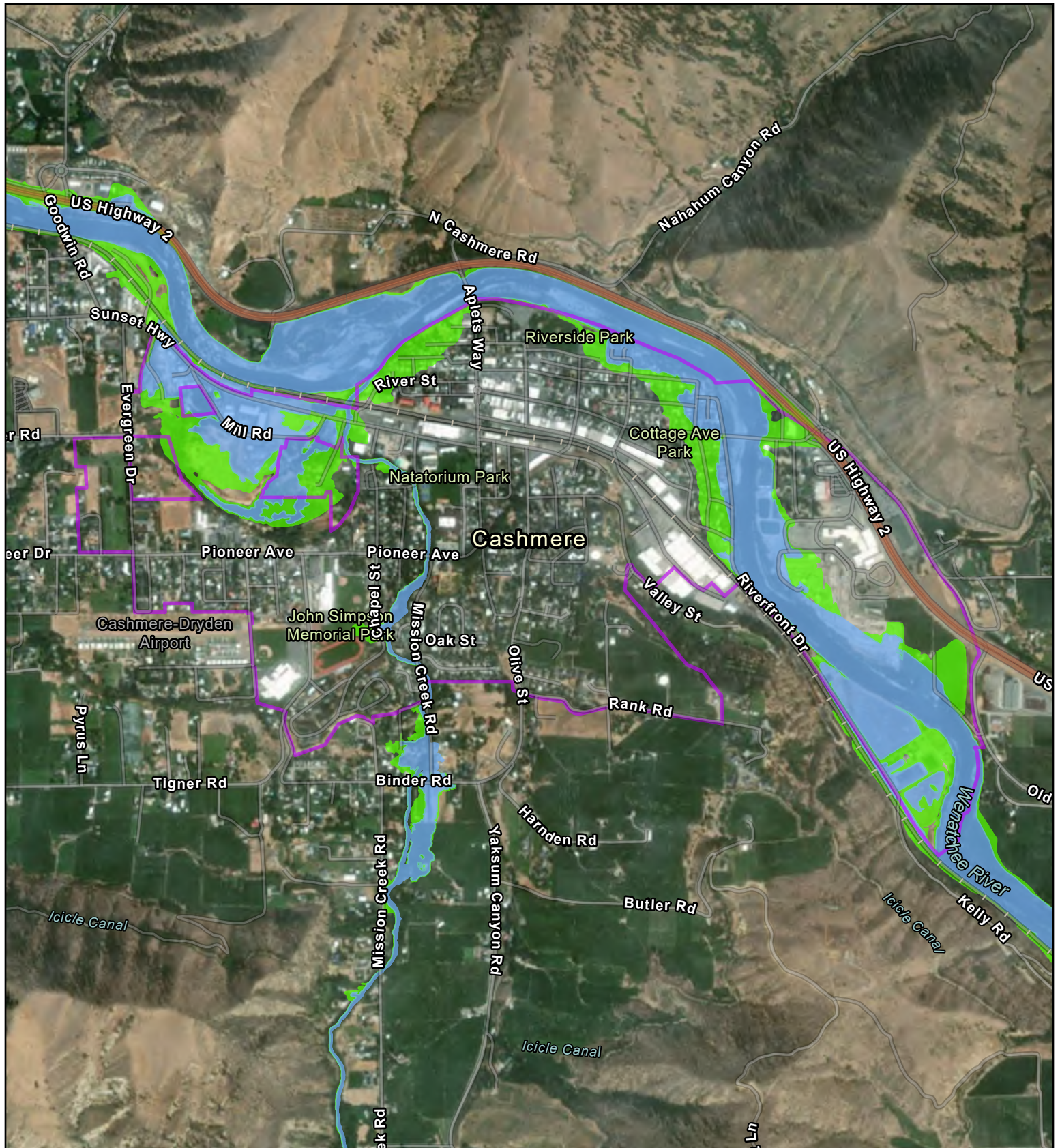


City of Cashmere: Critical Facilities

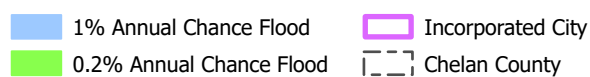
- | | |
|---|---|
| ● Hazardous Materials | ● Safety and Security |
| ● Food, Hydration, Shelter | Incorporated City |
| ● Health and Medical | Chelan County |

Sources: Chelan Co., City of Chelan, Hazus v6.1, HIFLD, WA DOH, WSDOT, EPA
 Base Map Source: Esri Community Maps Contributors, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS, Maxar



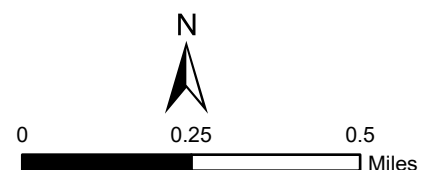


City of Cashmere: FEMA Flood Zones



Sources: Chelan Co., FEMA

Base Map Source: Esri Community Maps Contributors, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS, Maxar

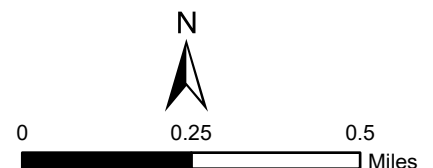


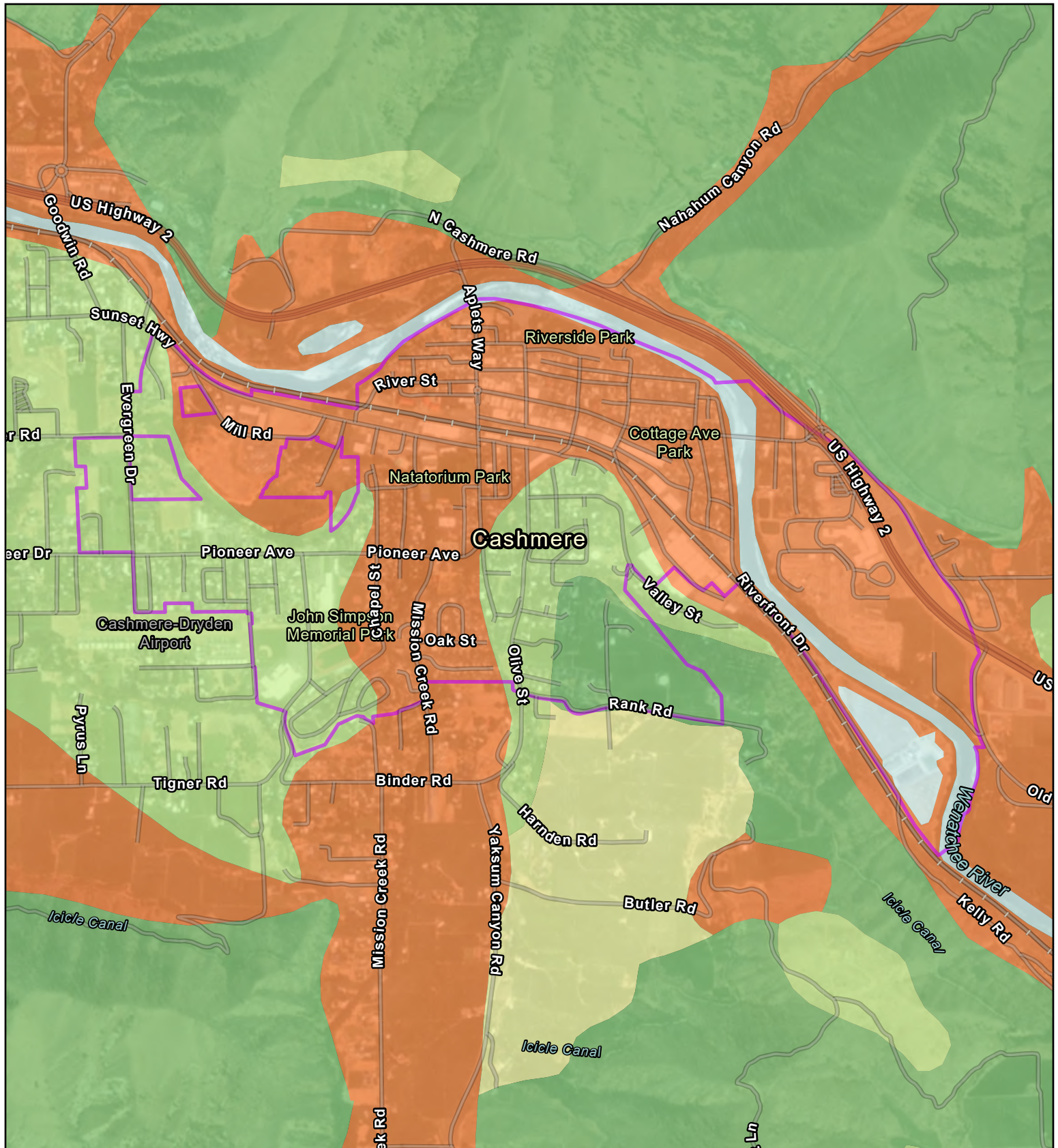


City of Cashmere: Landslide Areas

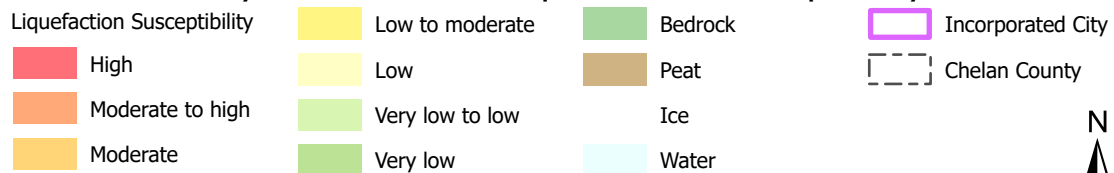
- Landslide Area
- Incorporated City
- Chelan County

Sources: Chelan Co., WA DNR
 Base Map Source: Esri Community Maps Contributors, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS, Maxar



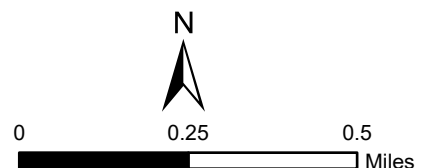


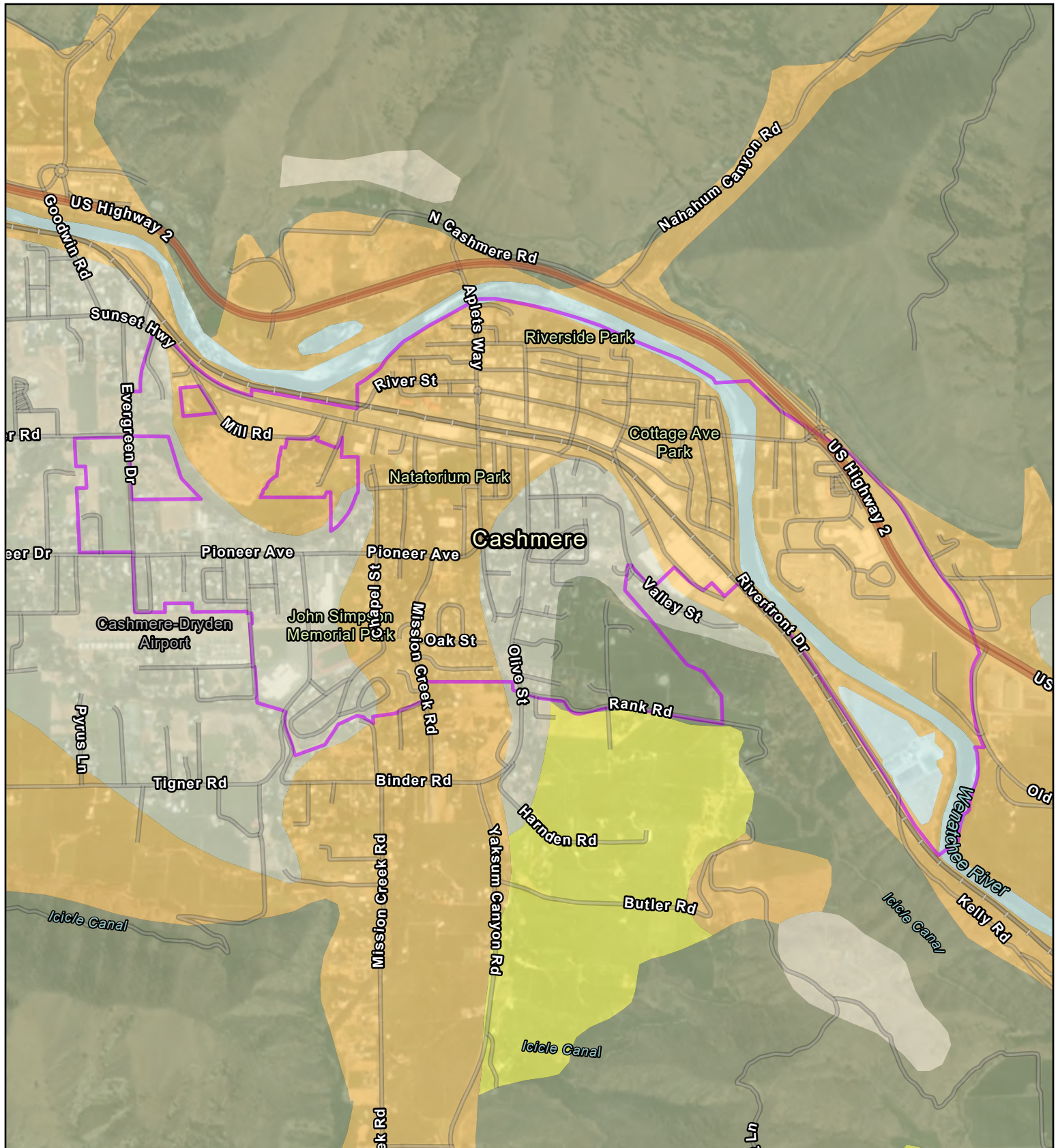
City of Cashmere: Liquefaction Susceptibility



Sources: Chelan Co., WA DNR

Base Map Source: Esri Community Maps Contributors, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS, Maxar



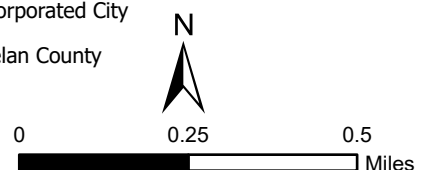


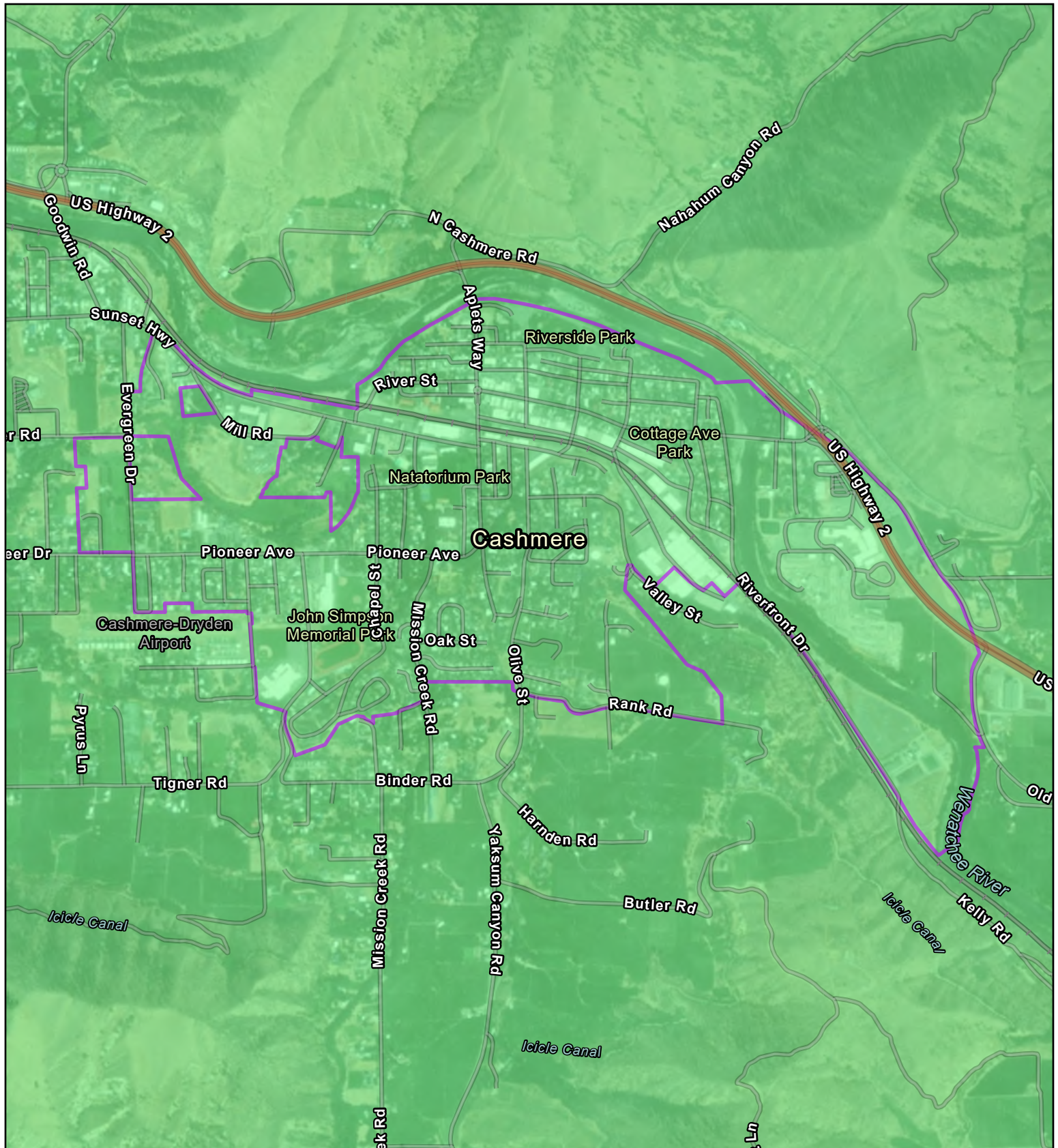
City of Cashmere: NEHRP Seismic Site Class



Sources: Chelan Co., WA DNR

Base Map Source: Esri Community Maps Contributors, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS, Maxar





City of Cashmere: Cascadia Megathrust M9.34 Scenario

Mercalli Intensity Scale

IV (Light/None)

V (Moderate/Very Light)

Intensity scale described as: (Perceived Shaking/Potential Damage)

VI (Strong/Light)

VII (Very Strong/Moderate)

VIII (Severe/Moderate-Heavy)

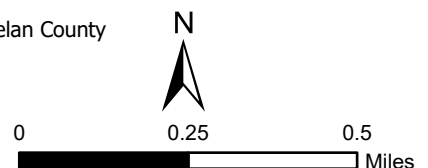
IX (Violent/Heavy)

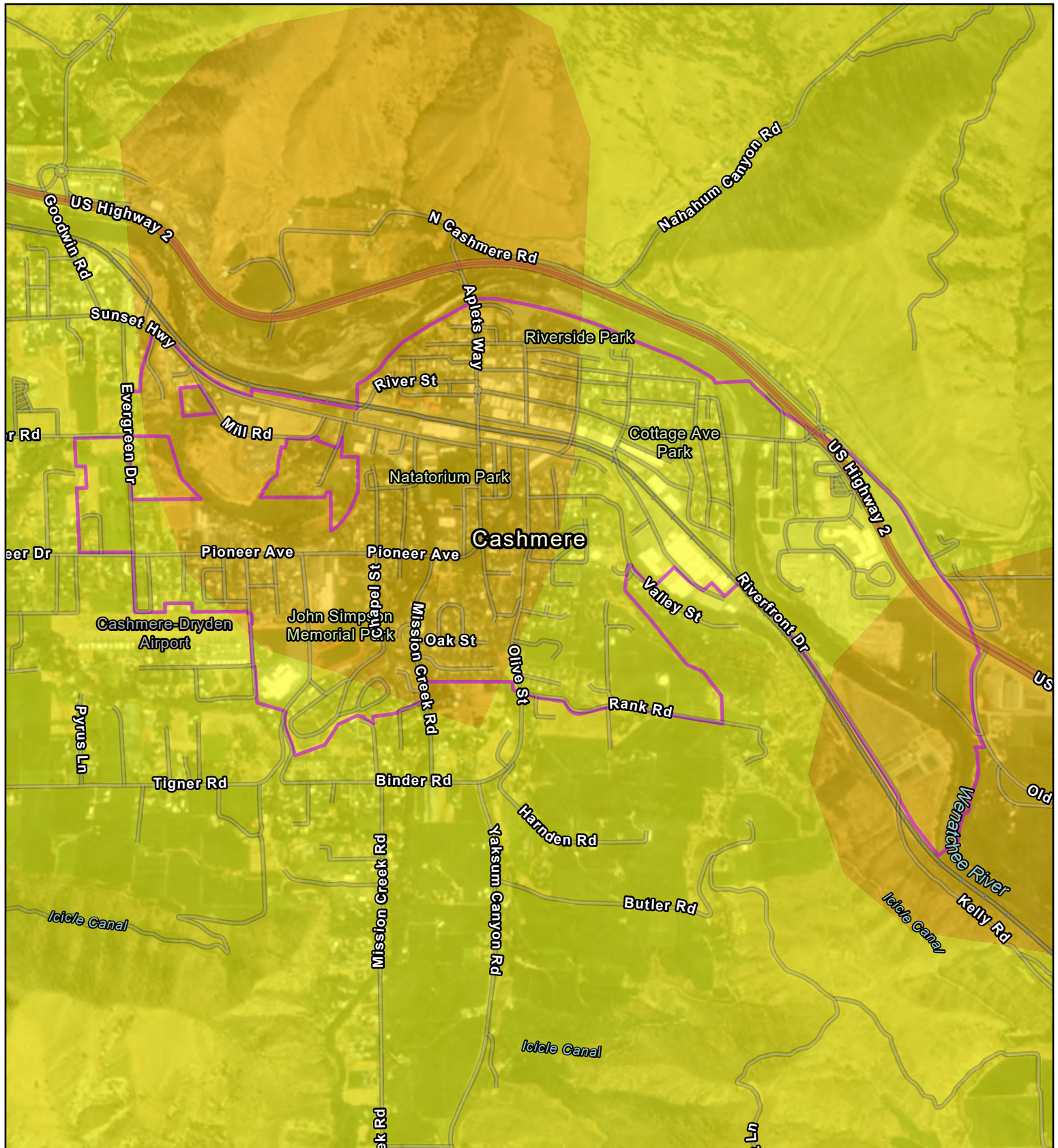
Incorporated City

Chelan County

Sources: Chelan Co., USGS

Base Map Source: Esri Community Maps Contributors, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS, Maxar





City of Cashmere: Chelan M7.2 Scenario

Mercalli Intensity Scale

IV (Light/None)

V (Moderate/Very Light)

Intensity scale described as: (Perceived Shaking/Potential Damage)

VI (Strong/Light)

VII (Very Strong/Moderate)

VIII (Severe/Moderate-Heavy)

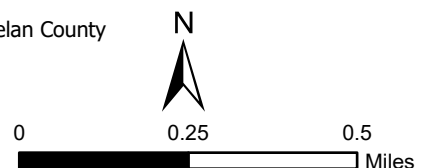
IX (Violent/Heavy)

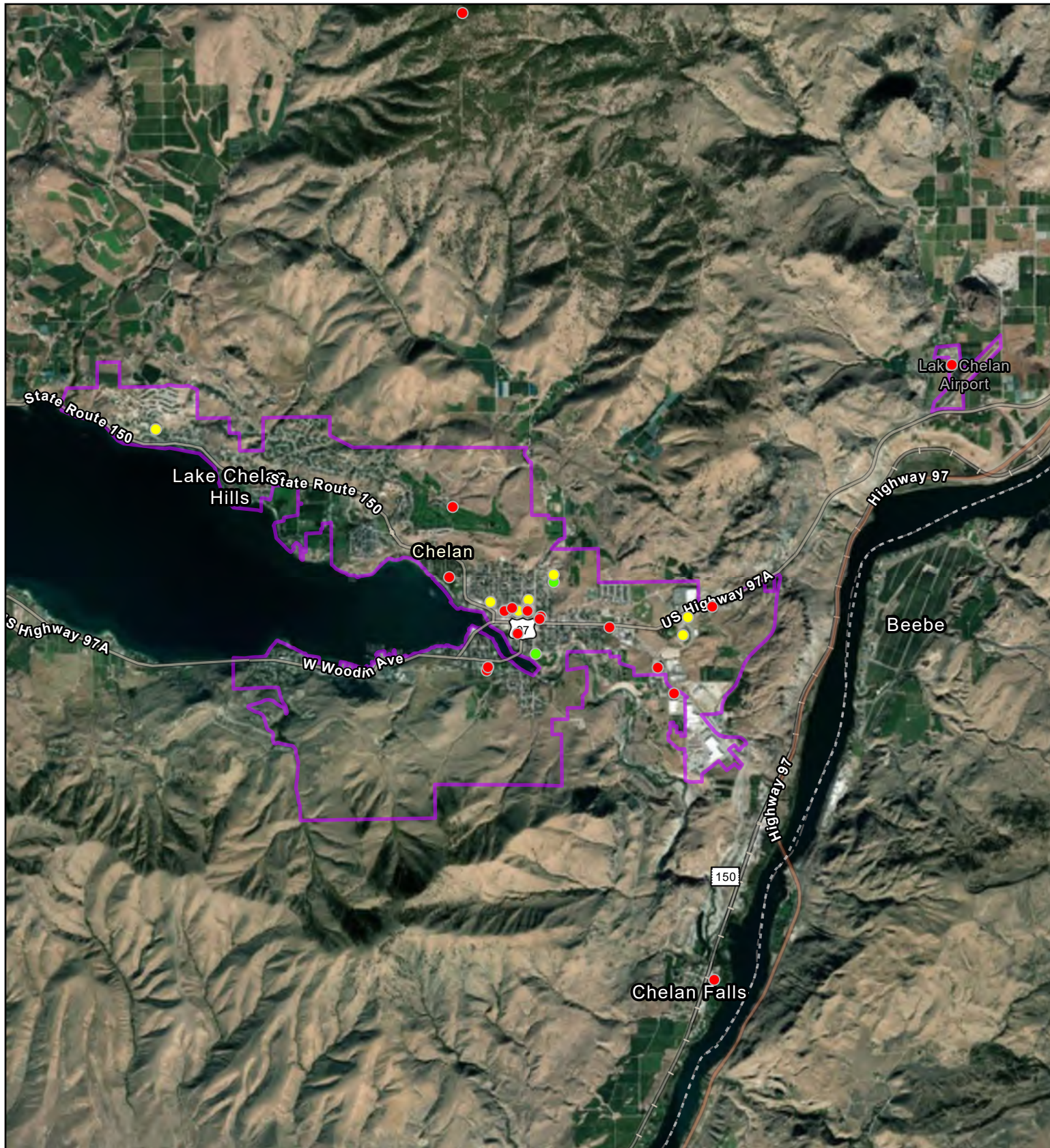
Incorporated City

Chelan County

Sources: Chelan Co., USGS

Base Map Source: Esri Community Maps Contributors, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS, Maxar

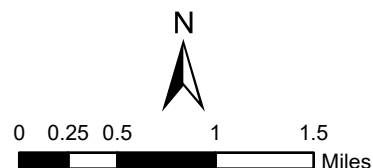


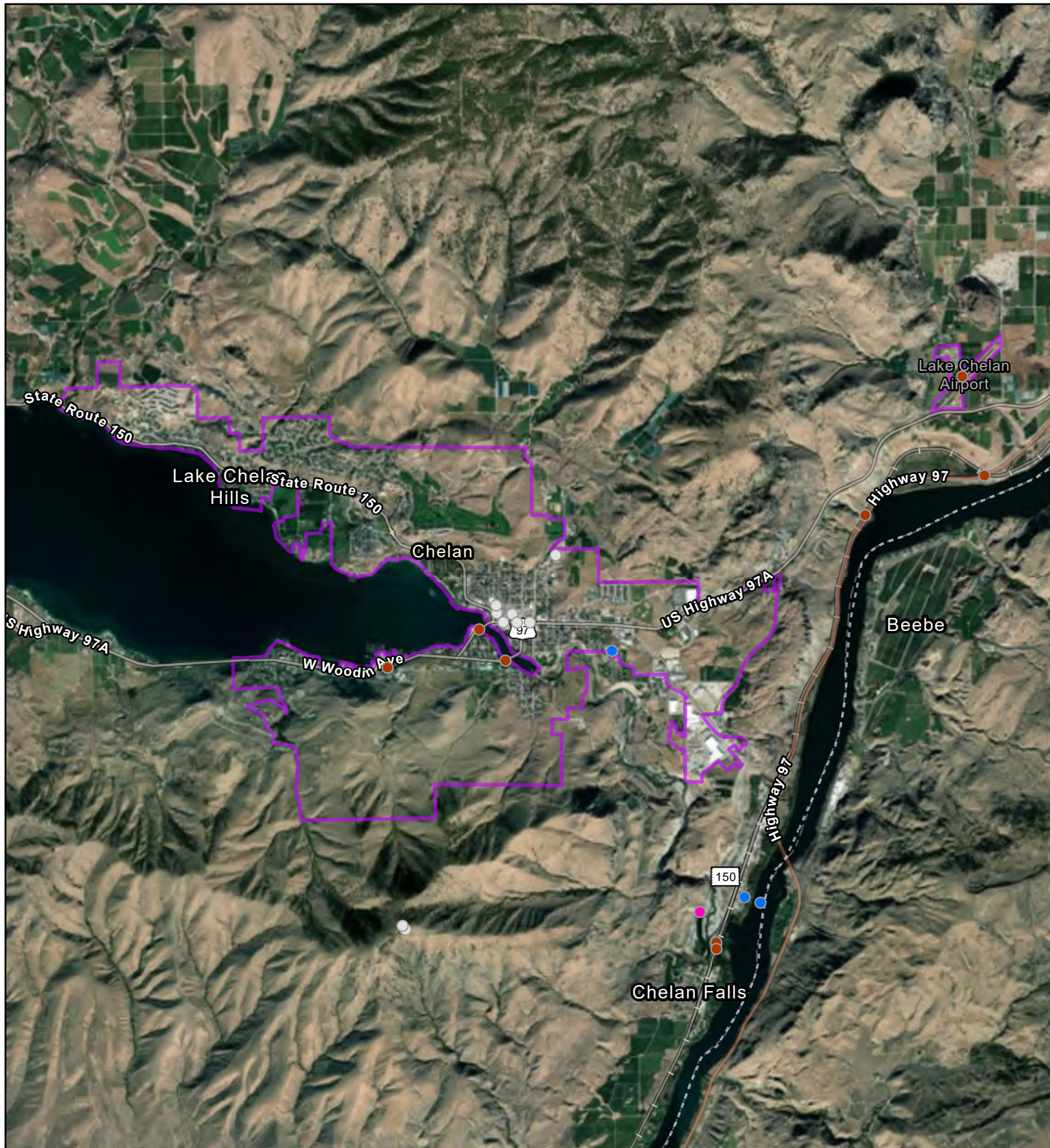


City of Chelan: Critical Facilities (Map 1 of 2)

- | | |
|---|---|
| ● Hazardous Materials | ● Safety and Security |
| ● Food, Hydration, Shelter | Incorporated City |
| ● Health and Medical | Chelan County |

Sources: Chelan Co., City of Chelan, Hazus v6.1, HIFLD, WA DOH, WSDOT, EPA
 Base Map Source: Earthstar Geographics, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph,
 GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS

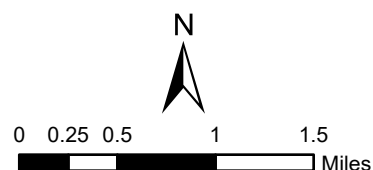


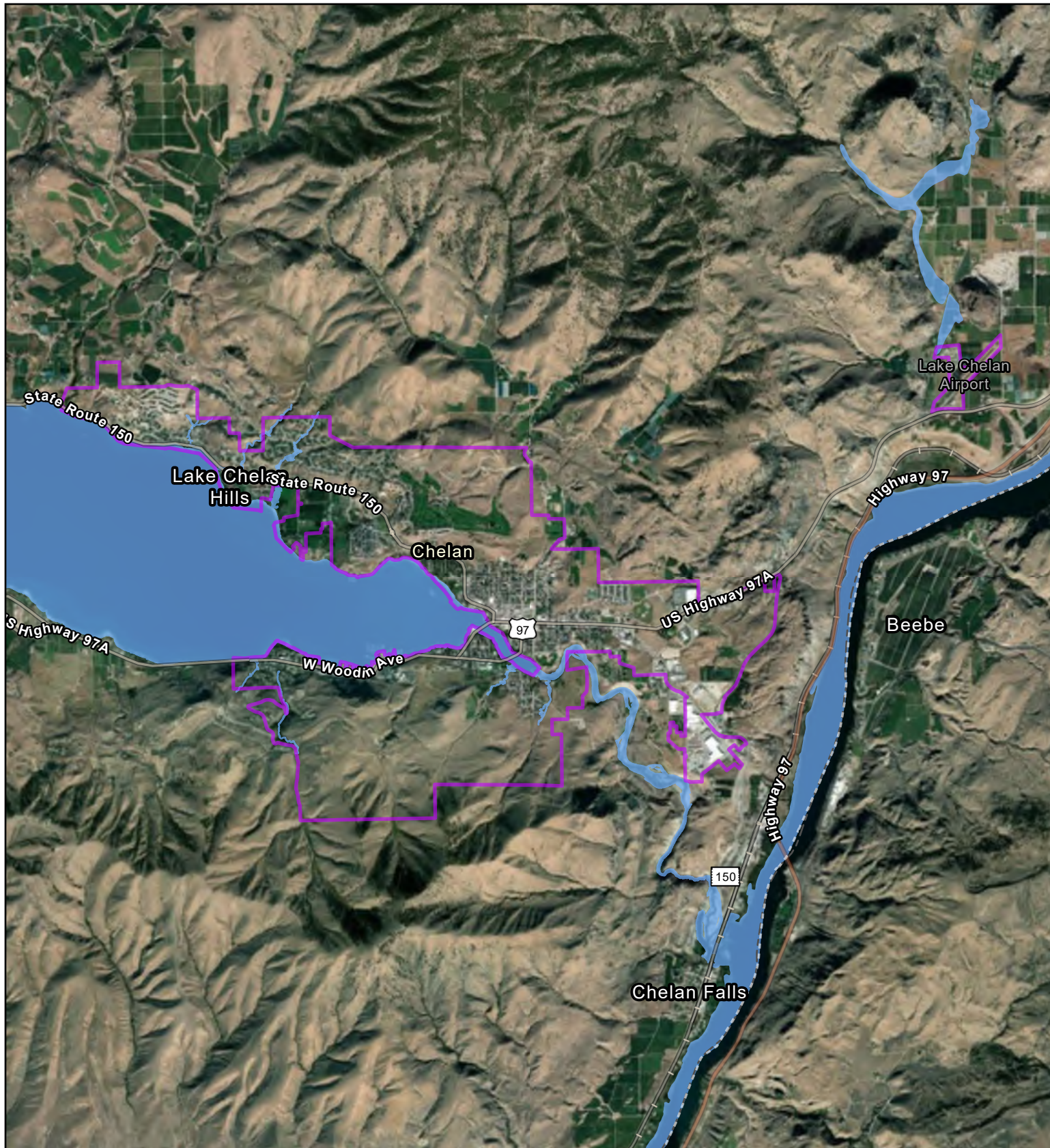


City of Chelan: Critical Facilities (Map 2 of 2)

- | | |
|---|---|
| ● Water Systems | ● Transportation |
| ● Energy (Power & Fuel) | Incorporated City |
| ● Communications | Chelan County |

Sources: Chelan Co., City of Chelan, Hazus v6.1, HIFLD, WA DOH, WSDOT, EPA
 Base Map Source: Earthstar Geographics, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph,
 GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS



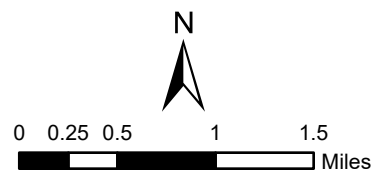


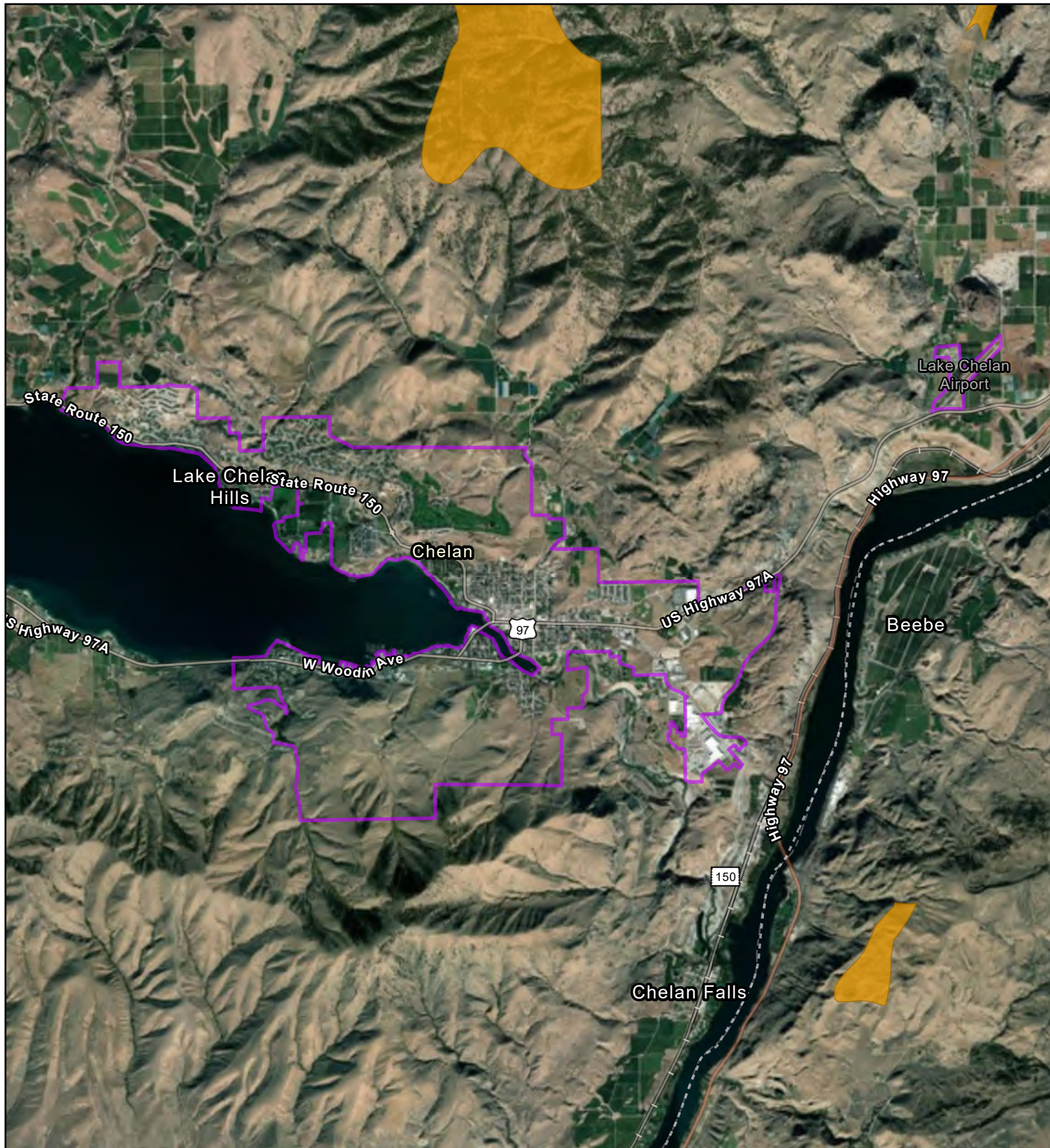
City of Chelan: FEMA Flood Zones

- | | |
|---|--|
| ■ 1% Annual Chance Flood | ■ Incorporated City |
| ■ 0.2% Annual Chance Flood | ■ Chelan County |

Sources: Chelan Co., FEMA

Base Map Source: Earthstar Geographics, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS



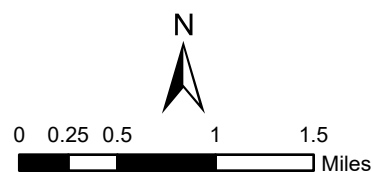


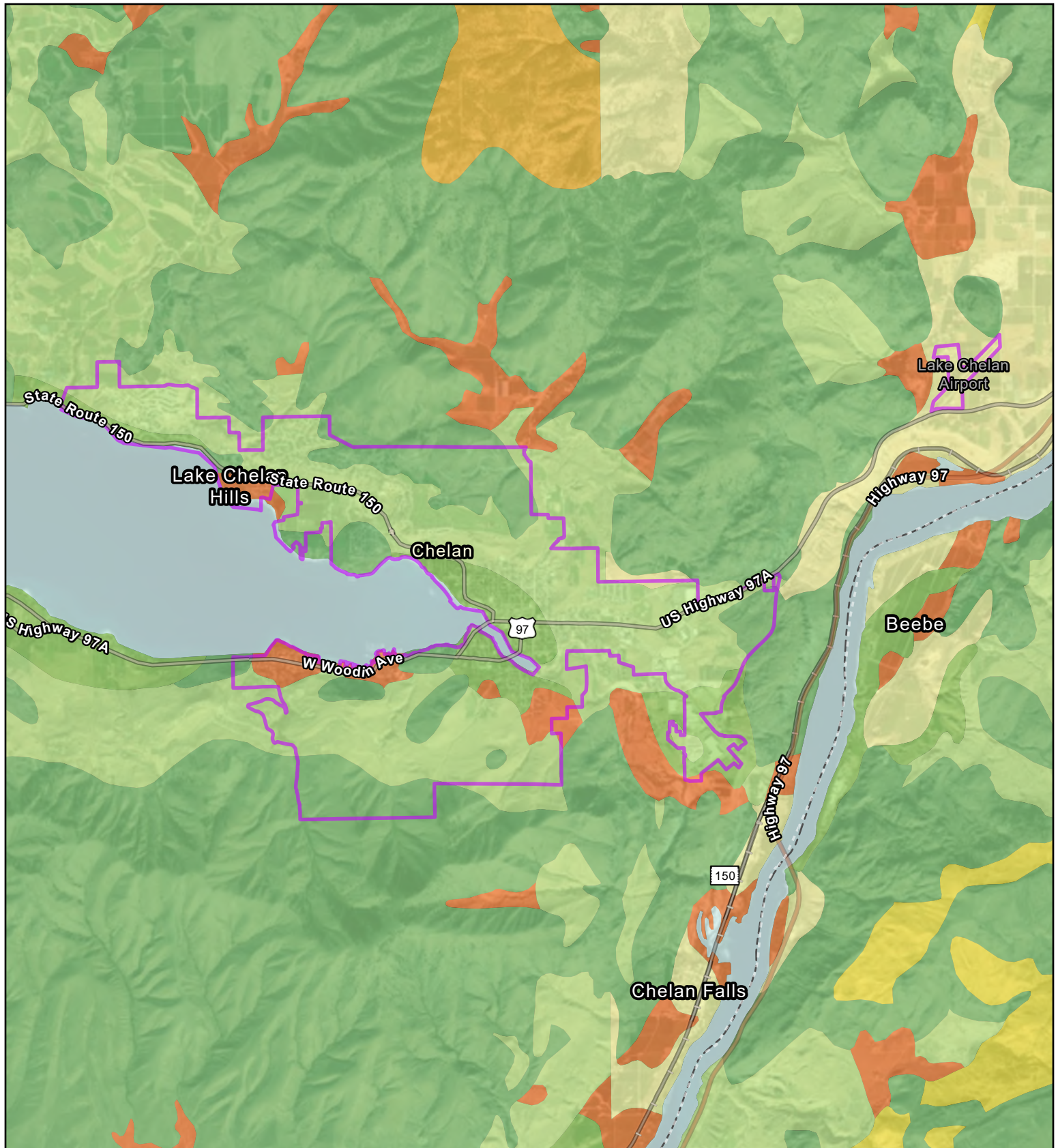
City of Chelan: Landslide Areas

- Landslide Area
- Incorporated City
- Chelan County

Sources: Chelan Co., WA DNR

Base Map Source: Earthstar Geographics, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS





City of Chelan: Liquefaction Susceptibility

Liquefaction Susceptibility

- High
- Moderate to high
- Moderate

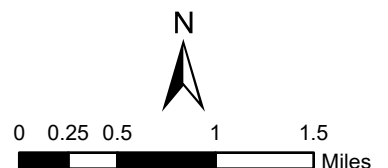
- Low to moderate
- Low
- Very low to low
- Very low

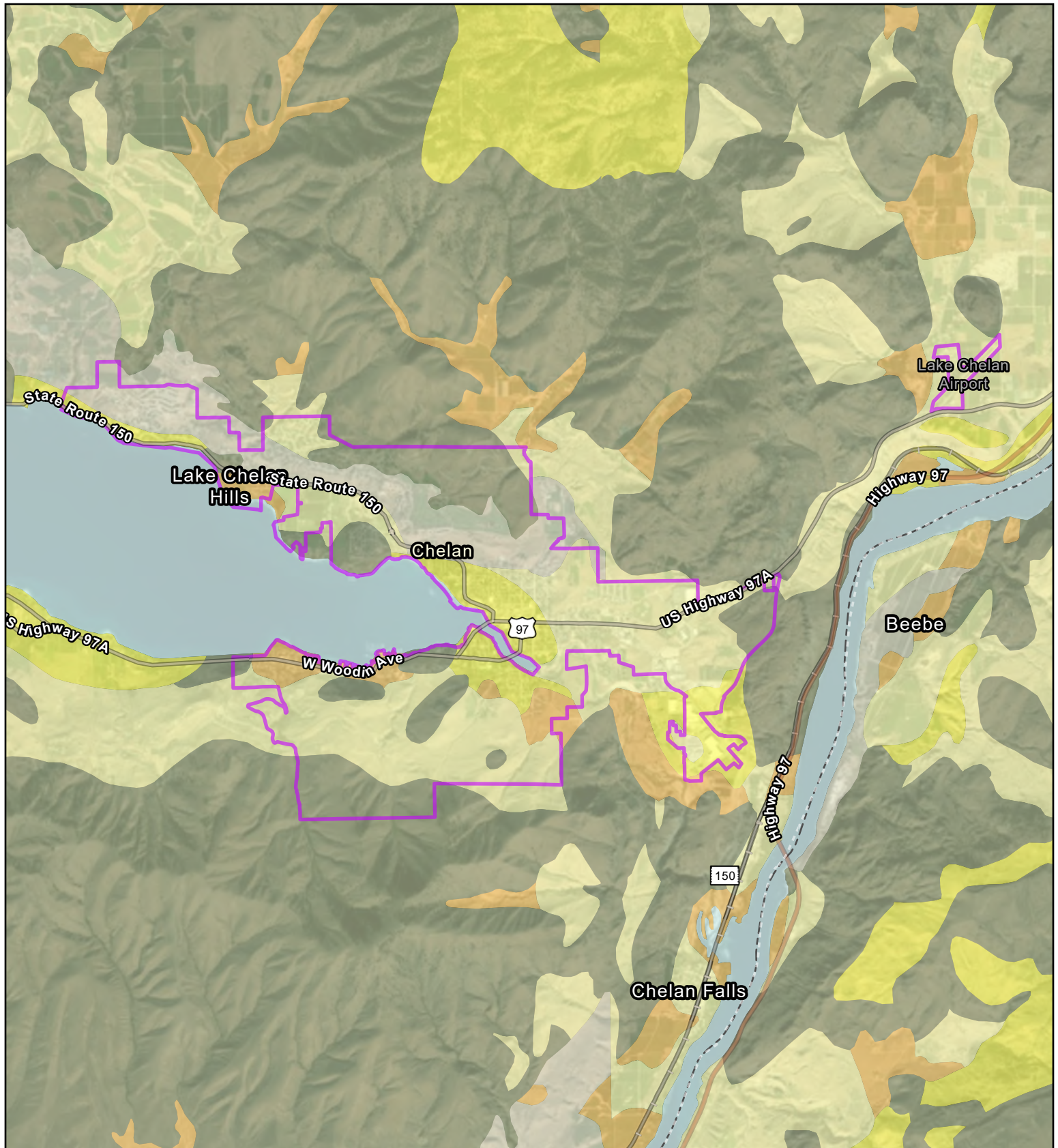
- Bedrock
- Peat
- Ice
- Water

- Incorporated City
- Chelan County

Sources: Chelan Co., WA DNR

Base Map Source: Earthstar Geographics, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS

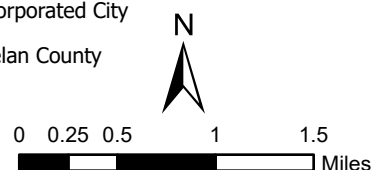


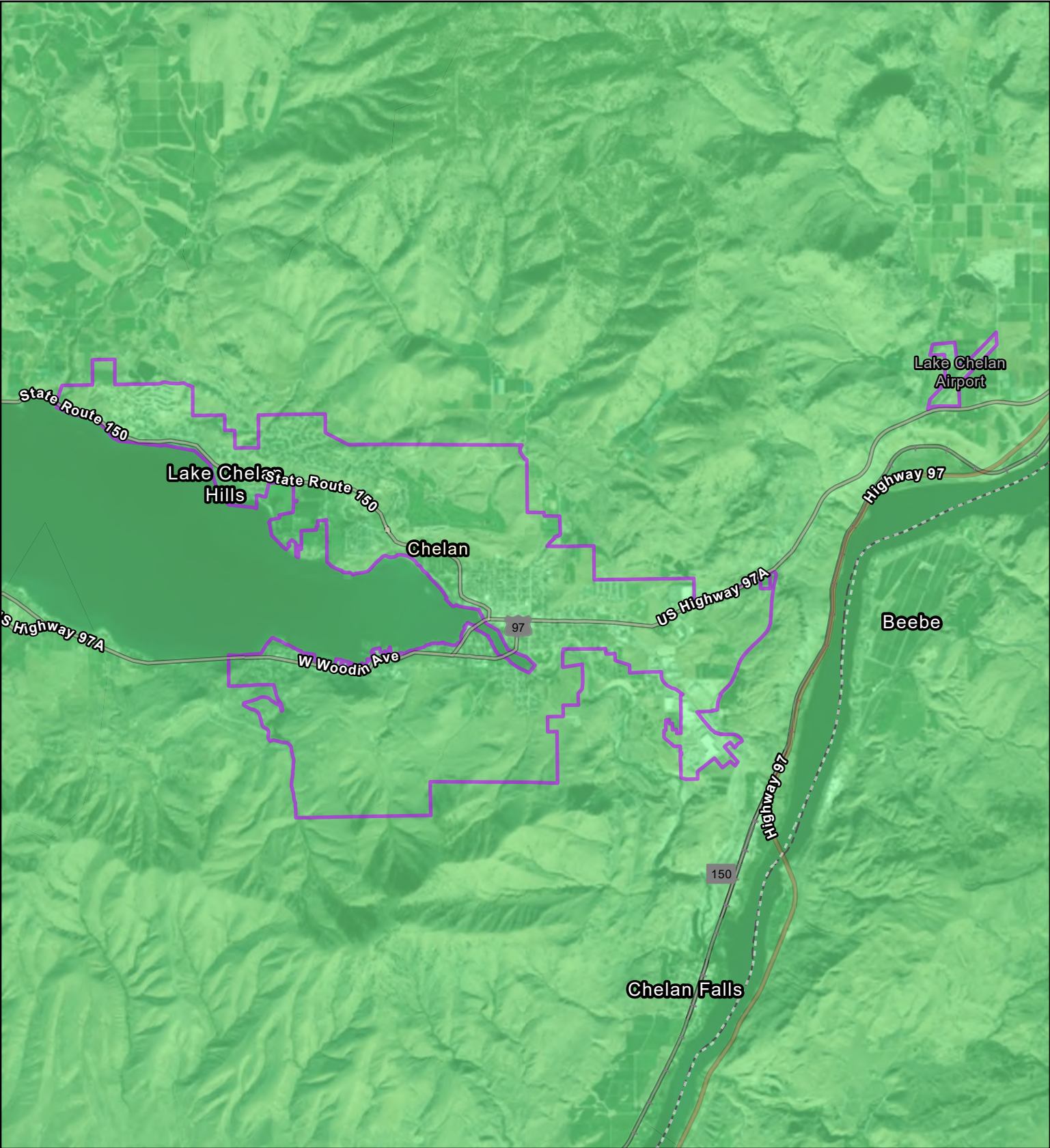


City of Chelan: NEHRP Seismic Site Class

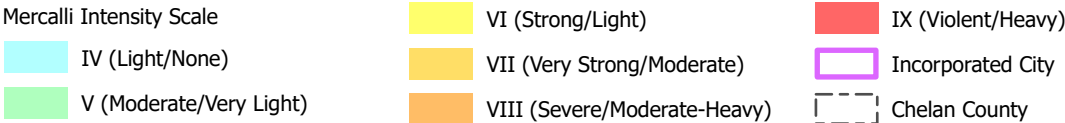


Sources: Chelan Co., WA DNR
 Base Map Source: Earthstar Geographics, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS



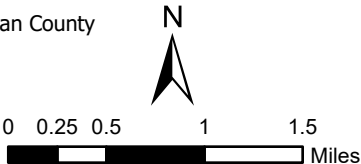


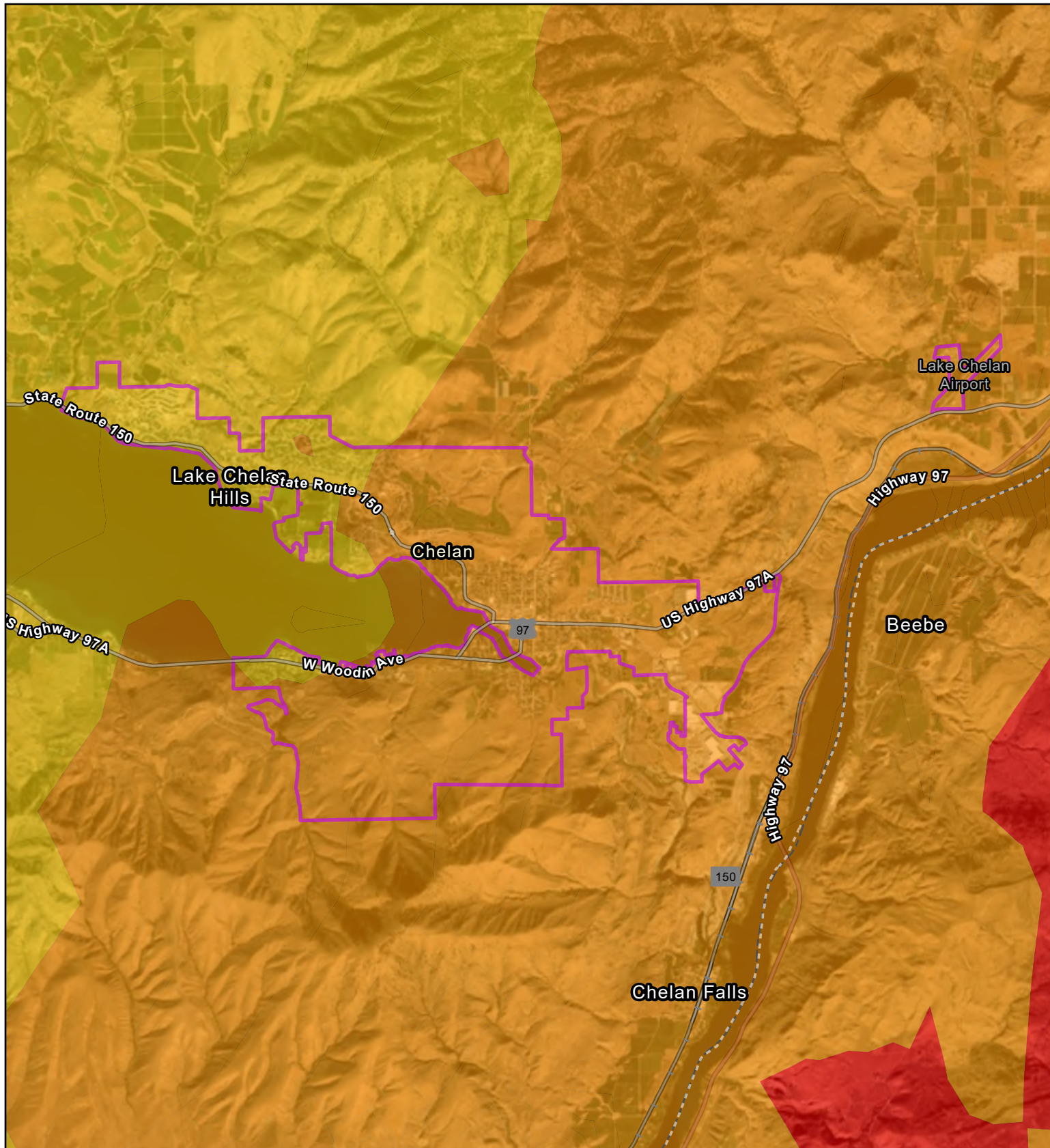
City of Chelan: Cascadia Megathrust M9.34 Scenario



Intensity scale described as: (Perceived Shaking/Potential Damage)

Sources: Chelan Co., USGS
Base Map Source: Earthstar Geographics, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS





City of Chelan: Chelan M7.2 Scenario

Mercalli Intensity Scale

IV (Light/None)

V (Moderate/Very Light)

Intensity scale described as: (Perceived Shaking/Potential Damage)

VI (Strong/Light)

VII (Very Strong/Moderate)

VIII (Severe/Moderate-Heavy)

IX (Violent/Heavy)

Incorporated City

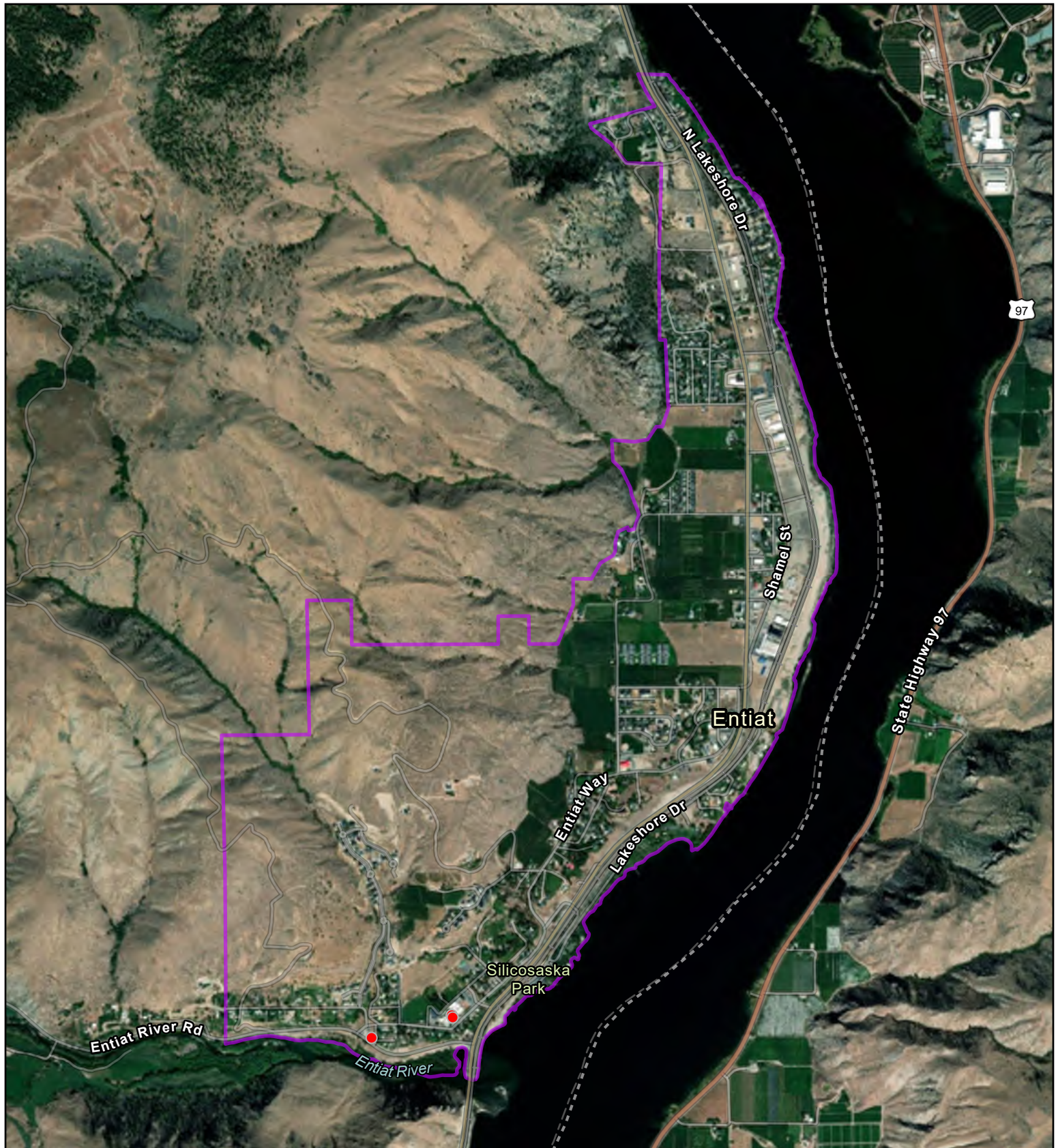
Chelan County

Sources: Chelan Co., USGS

Base Map Source: Earthstar Geographics, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS



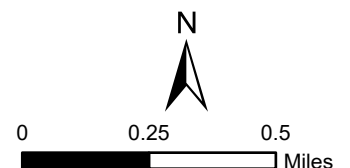
0 0.25 0.5 1 1.5
Miles

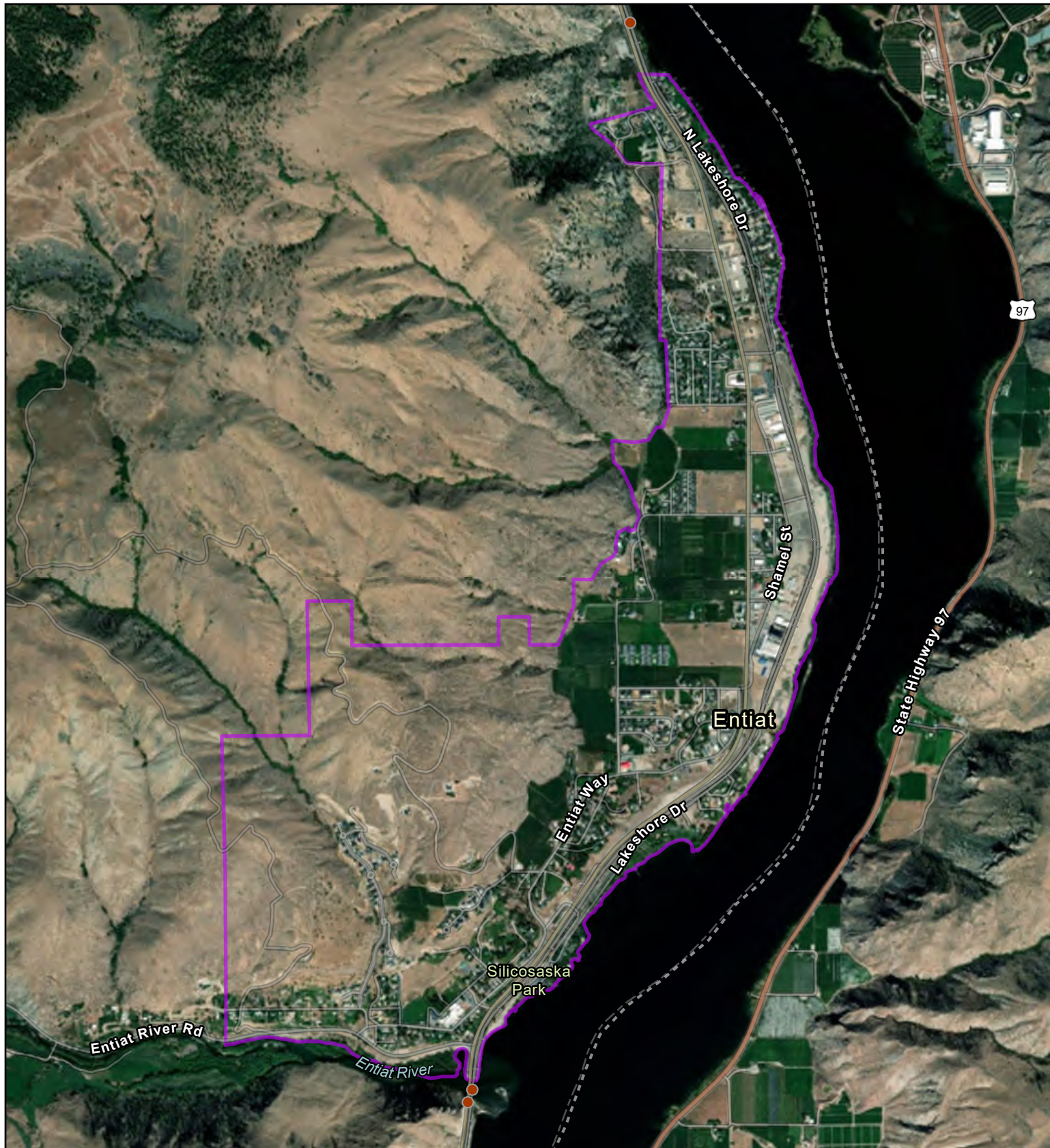


City of Entiat: Critical Facilities (Map 1 of 2)

- | | |
|---|---|
| ● Hazardous Materials | ● Safety and Security |
| ● Food, Hydration, Shelter | Incorporated City |
| ● Health and Medical | Chelan County |

Sources: Chelan Co., City of Chelan, Hazus v6.1, HIFLD, WA DOH, WSDOT, EPA
 Base Map Source: Earthstar Geographics, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph,
 GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau,
 USDA, USFWS

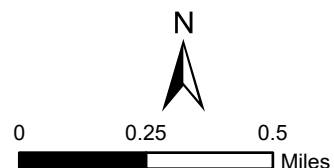


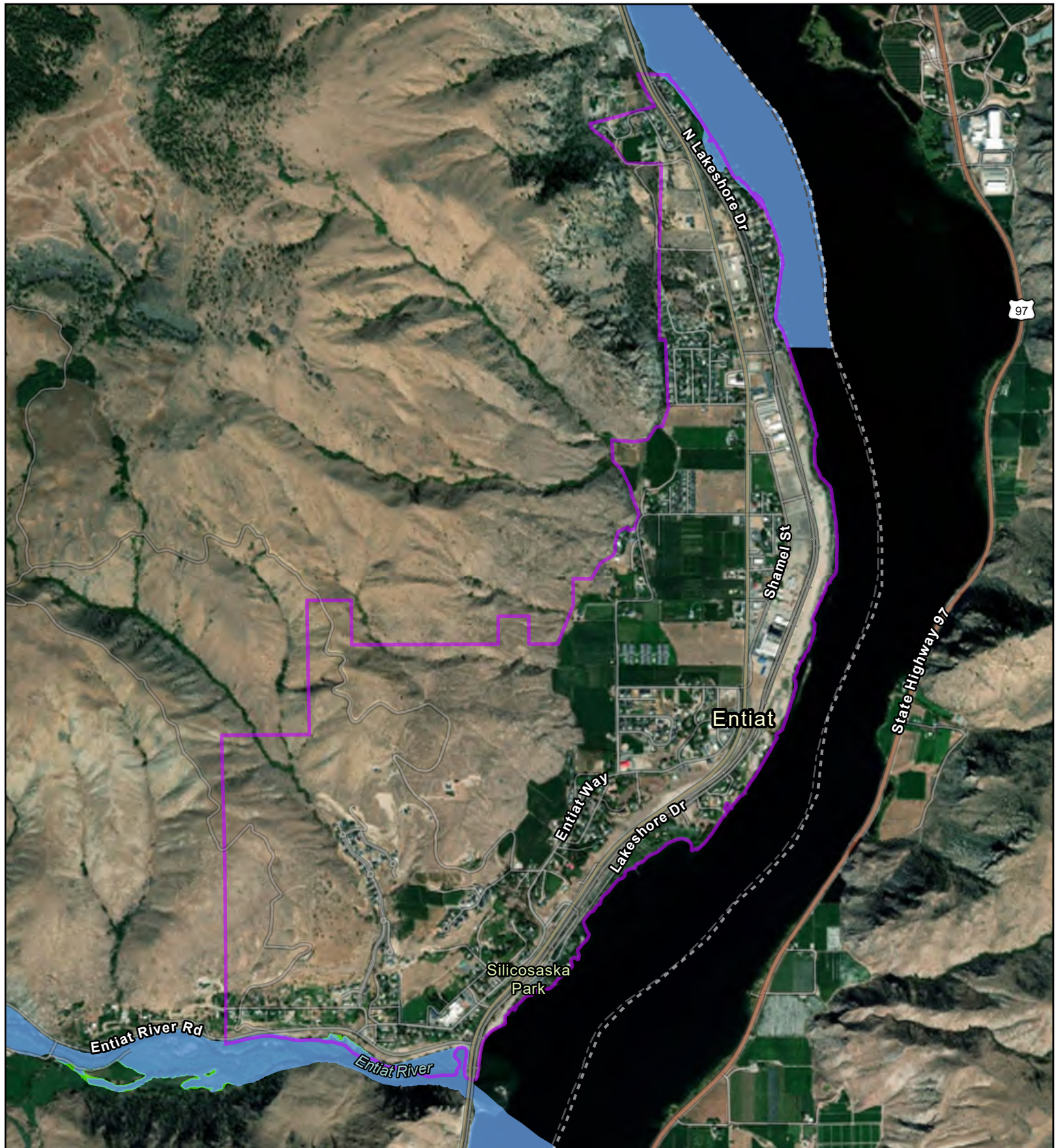


City of Entiat: Critical Facilities (Map 2 of 2)

- | | |
|--|--|
| ● Water Systems | ● Transportation |
| ● Energy (Power & Fuel) | Incorporated City |
| ● Communications | Chelan County |

Sources: Chelan Co., City of Chelan, Hazus v6.1, HIFLD, WA DOH, WSDOT, EPA
 Base Map Source: Maxar, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS

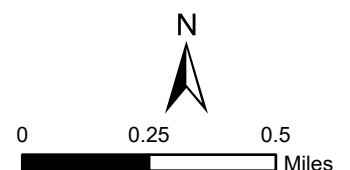


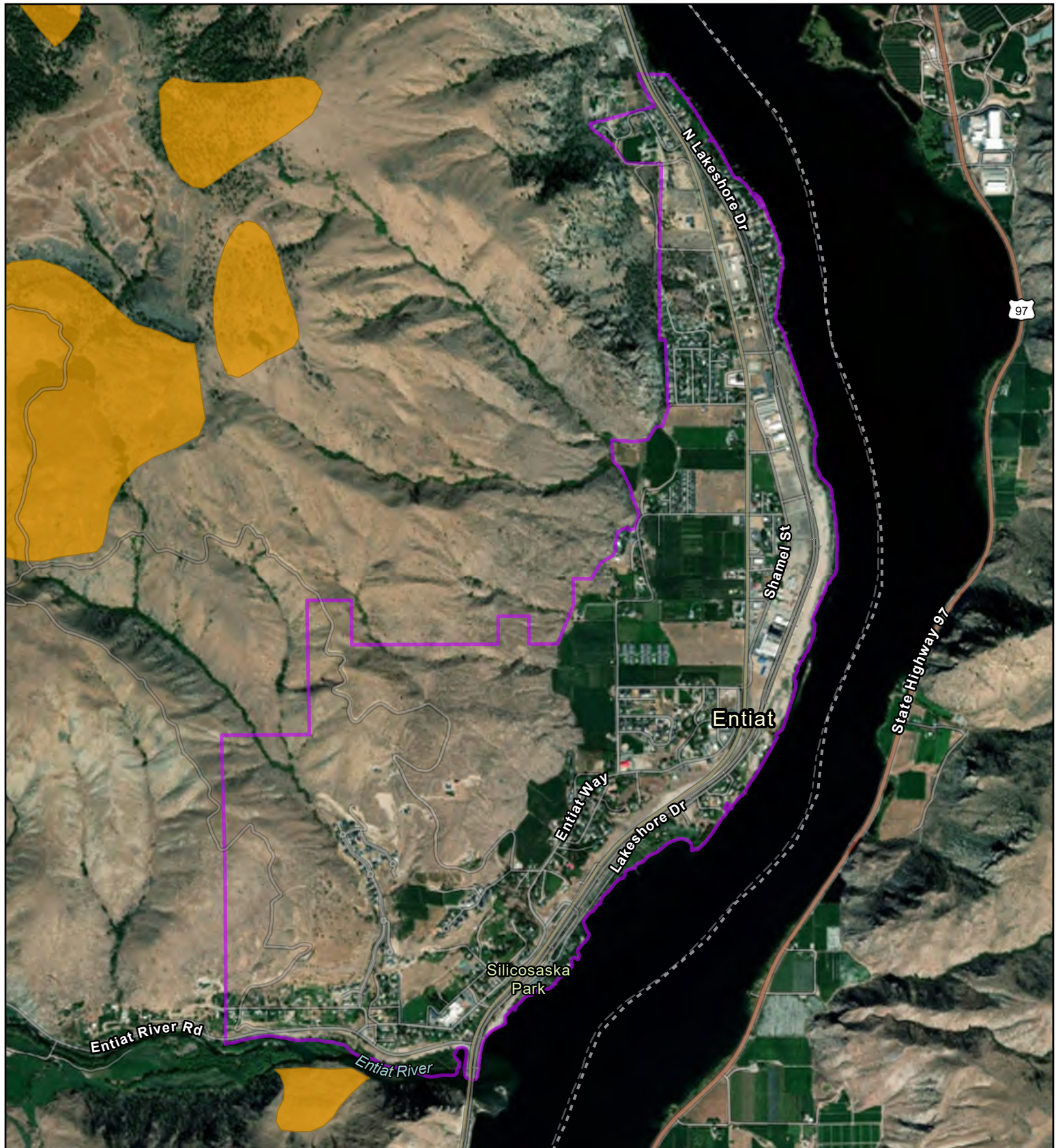


City of Entiat: FEMA Flood Zones

- | | |
|--|---|
|  1% Annual Chance Flood |  Incorporated City |
|  0.2% Annual Chance Flood |  Chelan County |

Sources: Chelan Co., FEMA
 Base Map Source: Earthstar Geographics, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS

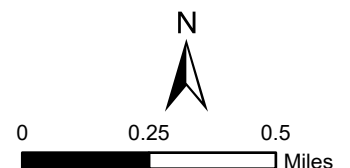


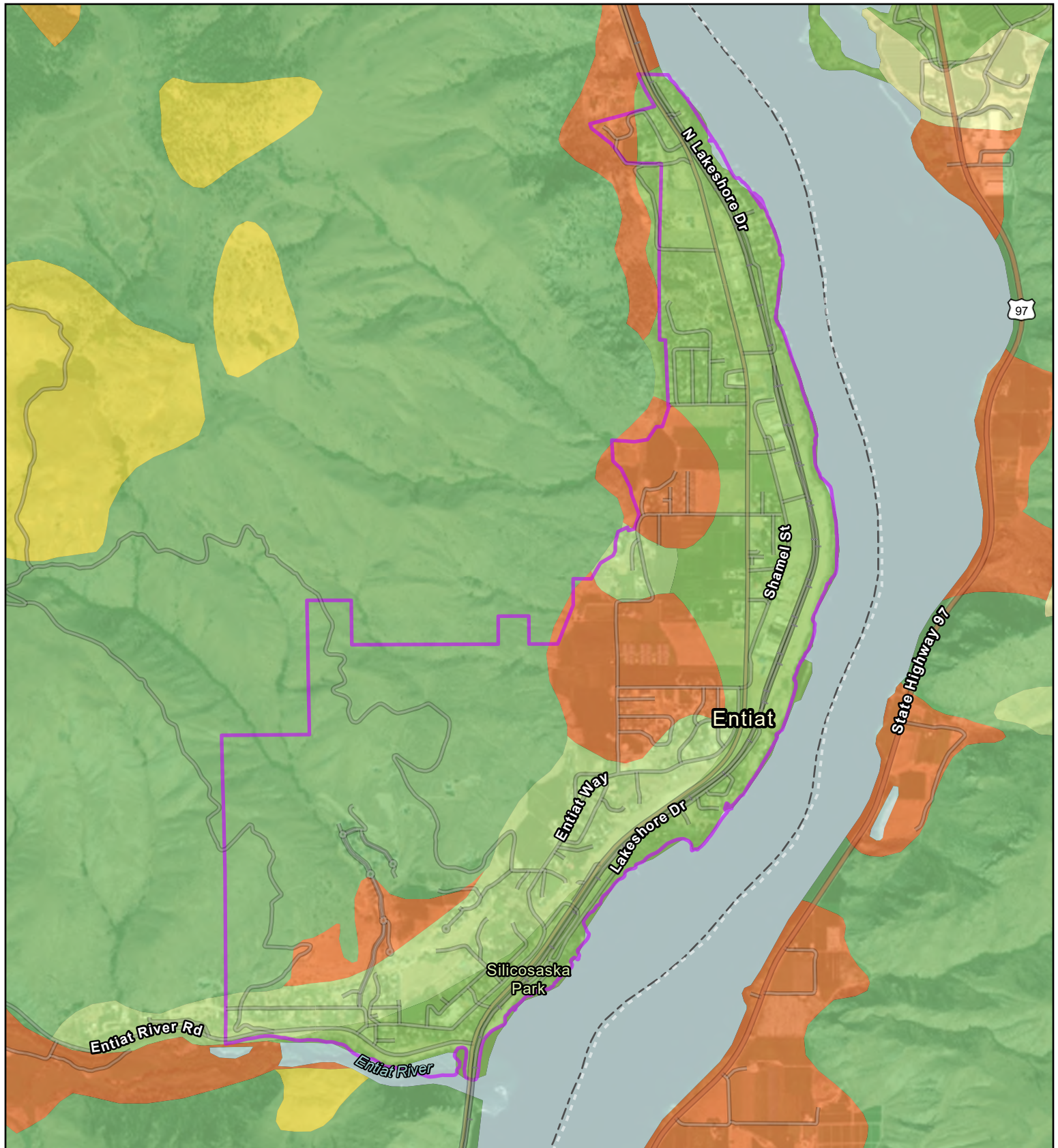


City of Entiat: Landslide Areas

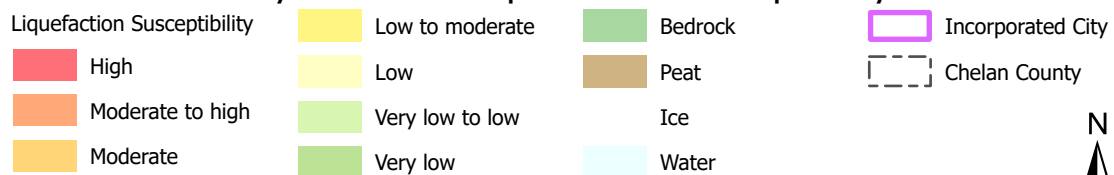
- Landslide Area
- Incorporated City
- Chelan County

Sources: Chelan Co., WA DNR
 Base Map Source: Maxar, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS



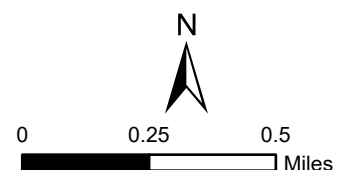


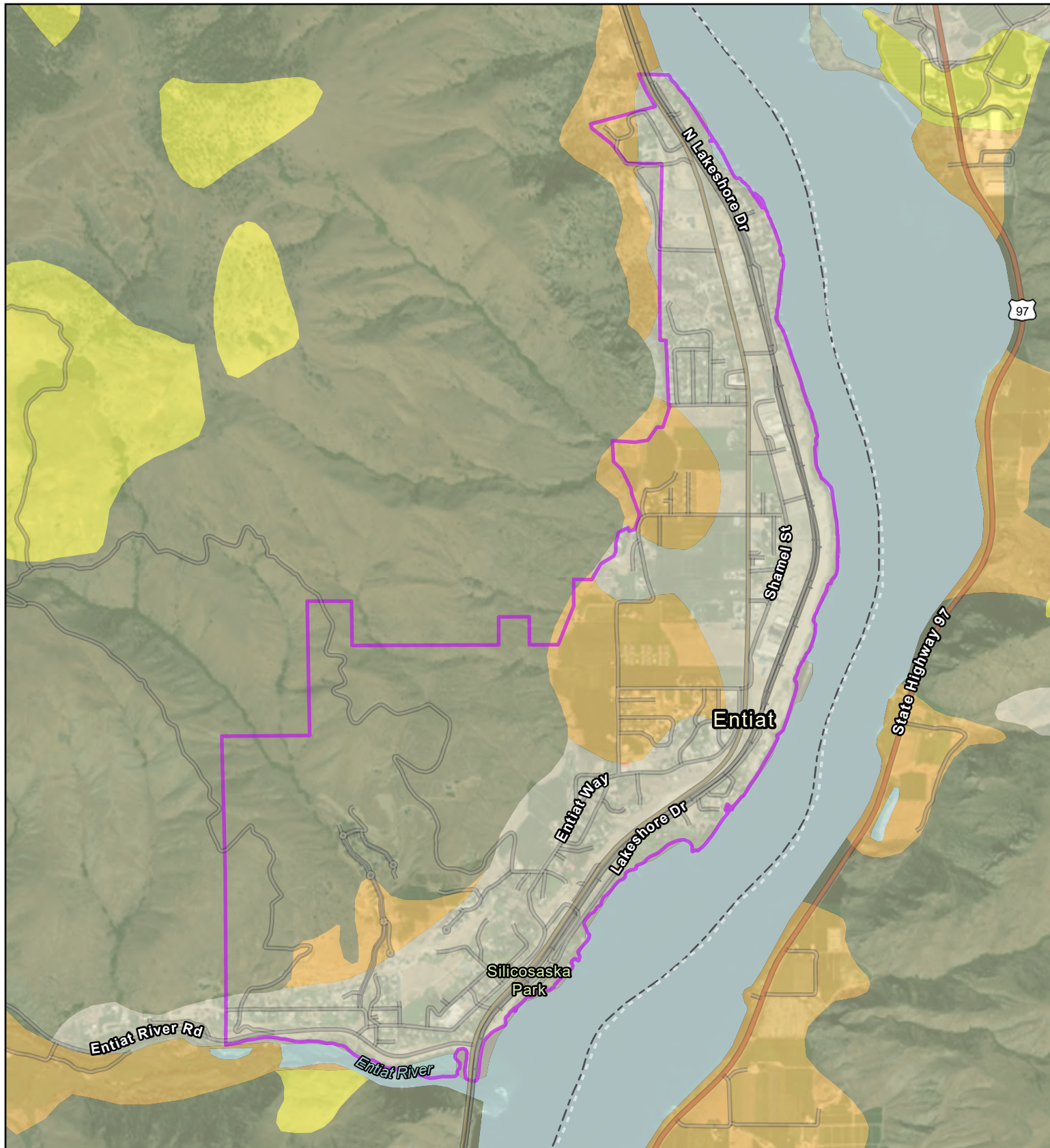
City of Entiat: Liquefaction Susceptibility



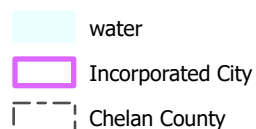
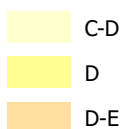
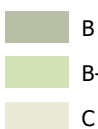
Sources: Chelan Co., WA DNR

Base Map Source: Earthstar Geographics, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS

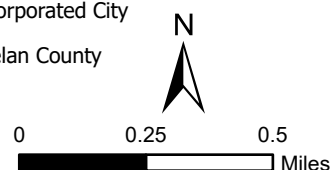


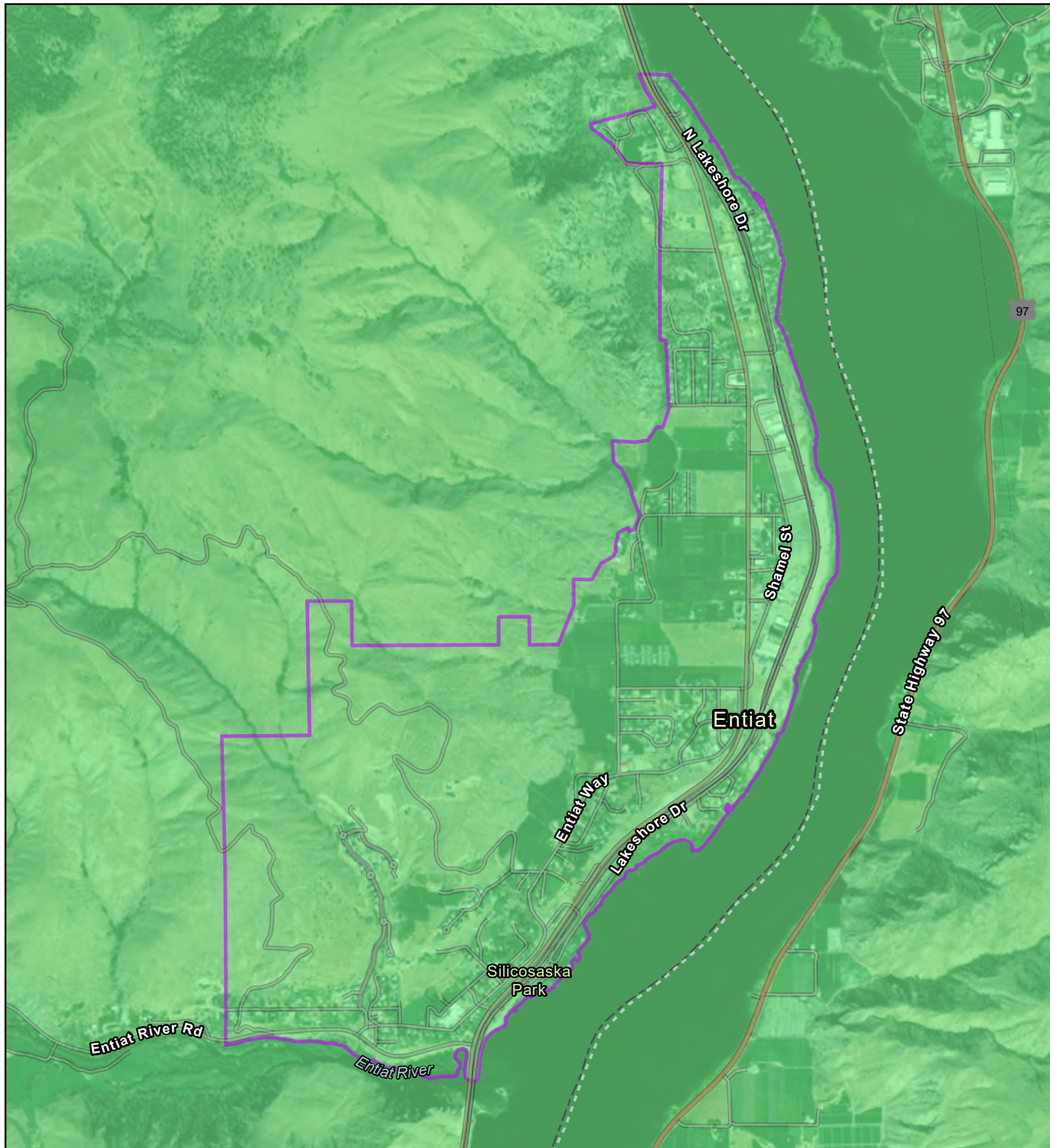


City of Entiat: NEHRP Seismic Site Class



Sources: Chelan Co., WA DNR
 Base Map Source: Maxar, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph,
 GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA,
 NPS, US Census Bureau, USDA, USFWS





City of Entiat: Cascadia Megathrust M9.34 Scenario

Mercalli Intensity Scale

IV (Light/None)

V (Moderate/Very Light)

Intensity scale described as: (Perceived Shaking/Potential Damage)

VI (Strong/Light)

VII (Very Strong/Moderate)

VIII (Severe/Moderate-Heavy)

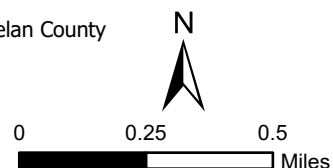
IX (Violent/Heavy)

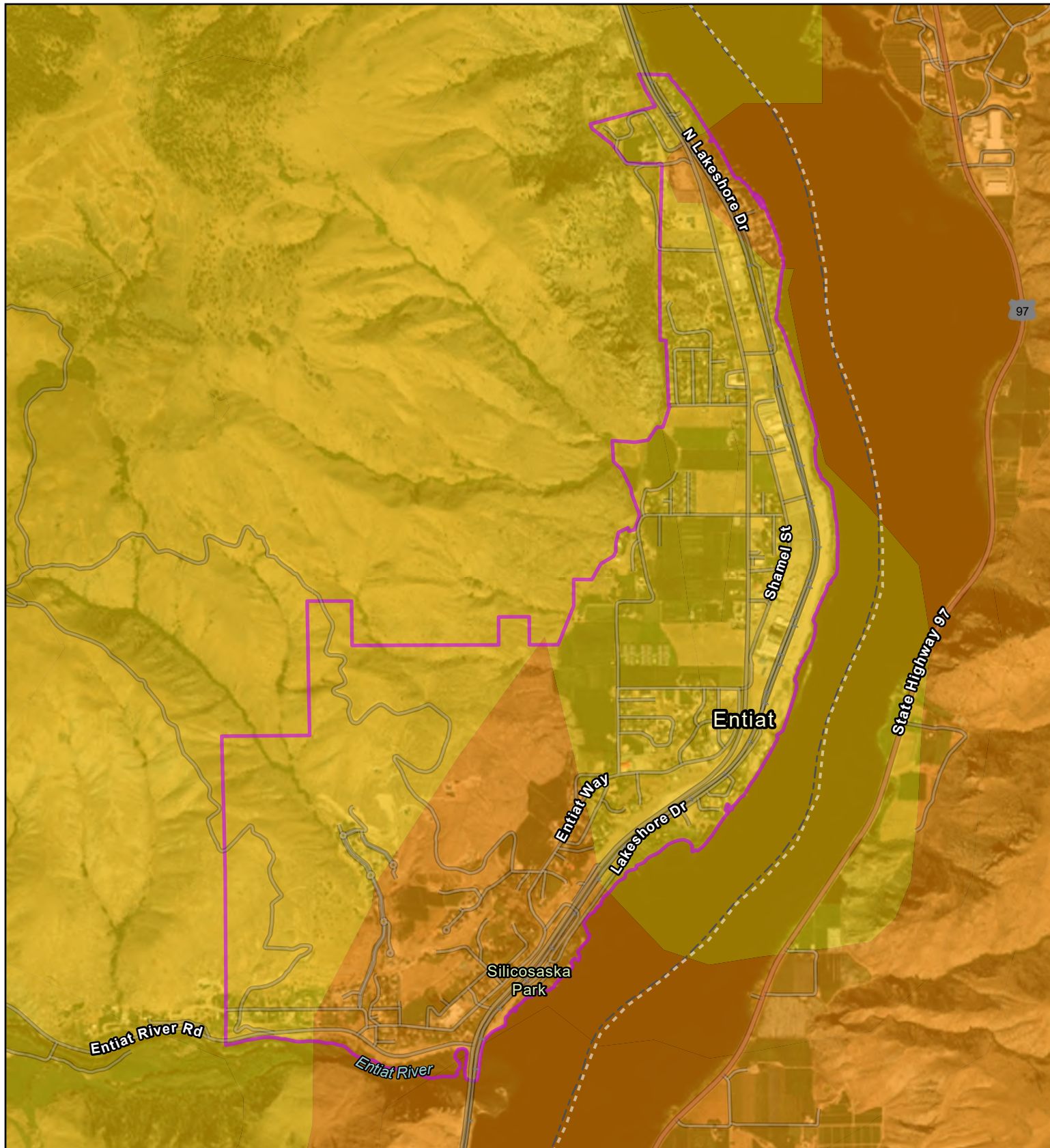
Incorporated City

Chelan County

Sources: Chelan Co., USGS

Base Map Source: Maxar, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS





City of Entiat: Chelan M7.2 Scenario

Mercalli Intensity Scale

IV (Light/None)

V (Moderate/Very Light)

Intensity scale described as: (Perceived Shaking/Potential Damage)

VI (Strong/Light)

VII (Very Strong/Moderate)

VIII (Severe/Moderate-Heavy)

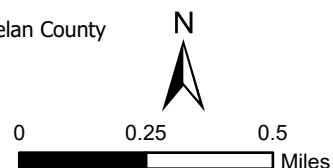
IX (Violent/Heavy)

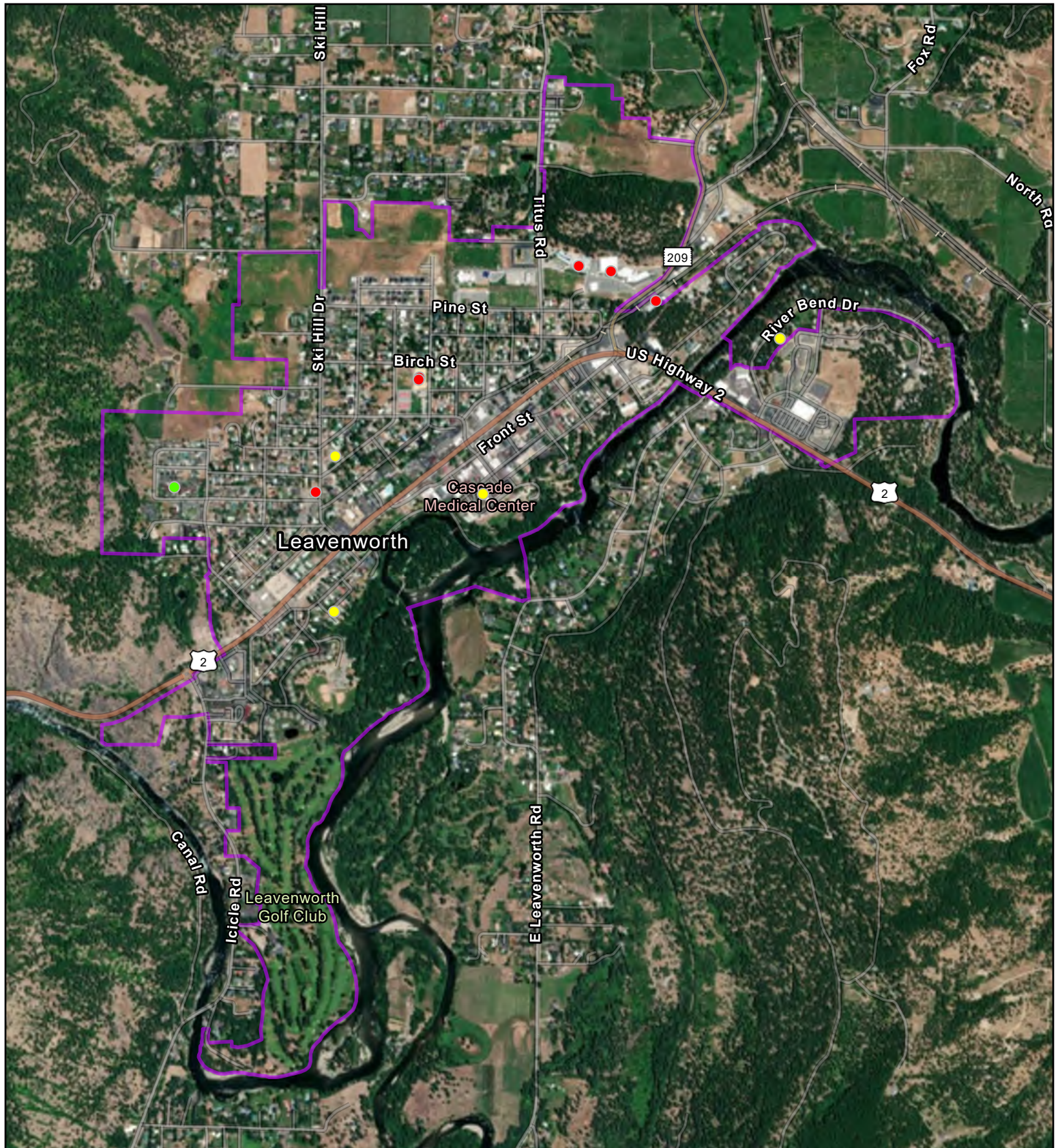
Incorporated City

Chelan County

Sources: Chelan Co., USGS

Base Map Source: Earthstar Geographics, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS

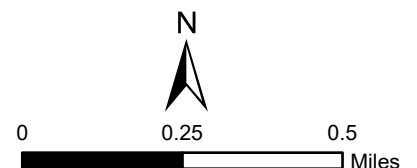


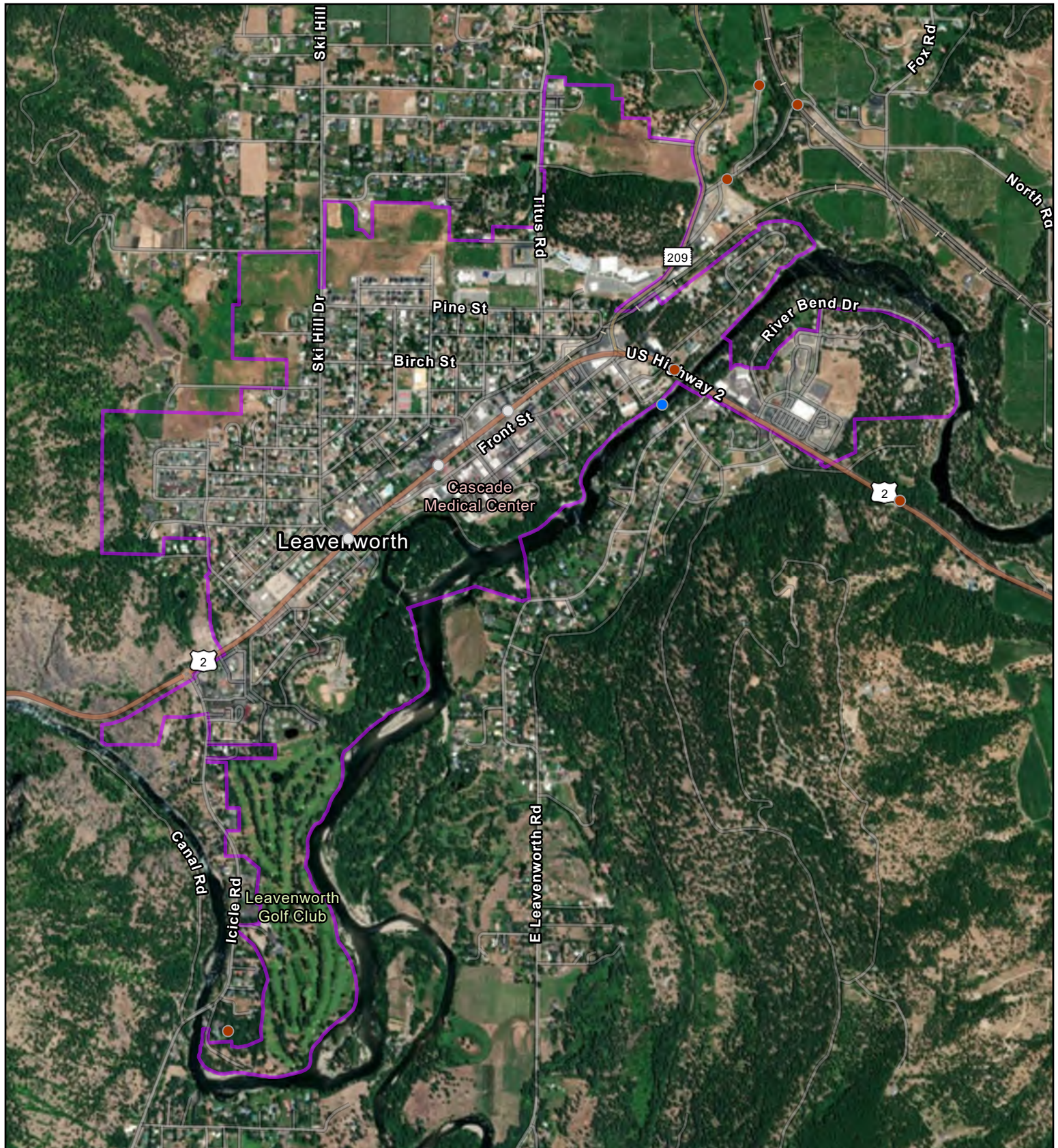


City of Leavenworth: Critical Facilities (Map 1 of 2)

- | | |
|---|---|
| ● Hazardous Materials | ● Safety and Security |
| ● Food, Hydration, Shelter | Incorporated City |
| ● Health and Medical | Chelan County |

Sources: Chelan Co., City of Chelan, Hazus v6.1, HIFLD, WA DOH, WSDOT, EPA
 Base Map Source: Earthstar Geographics, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph,
 GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau,
 USDA, USFWS

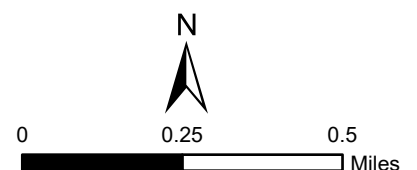


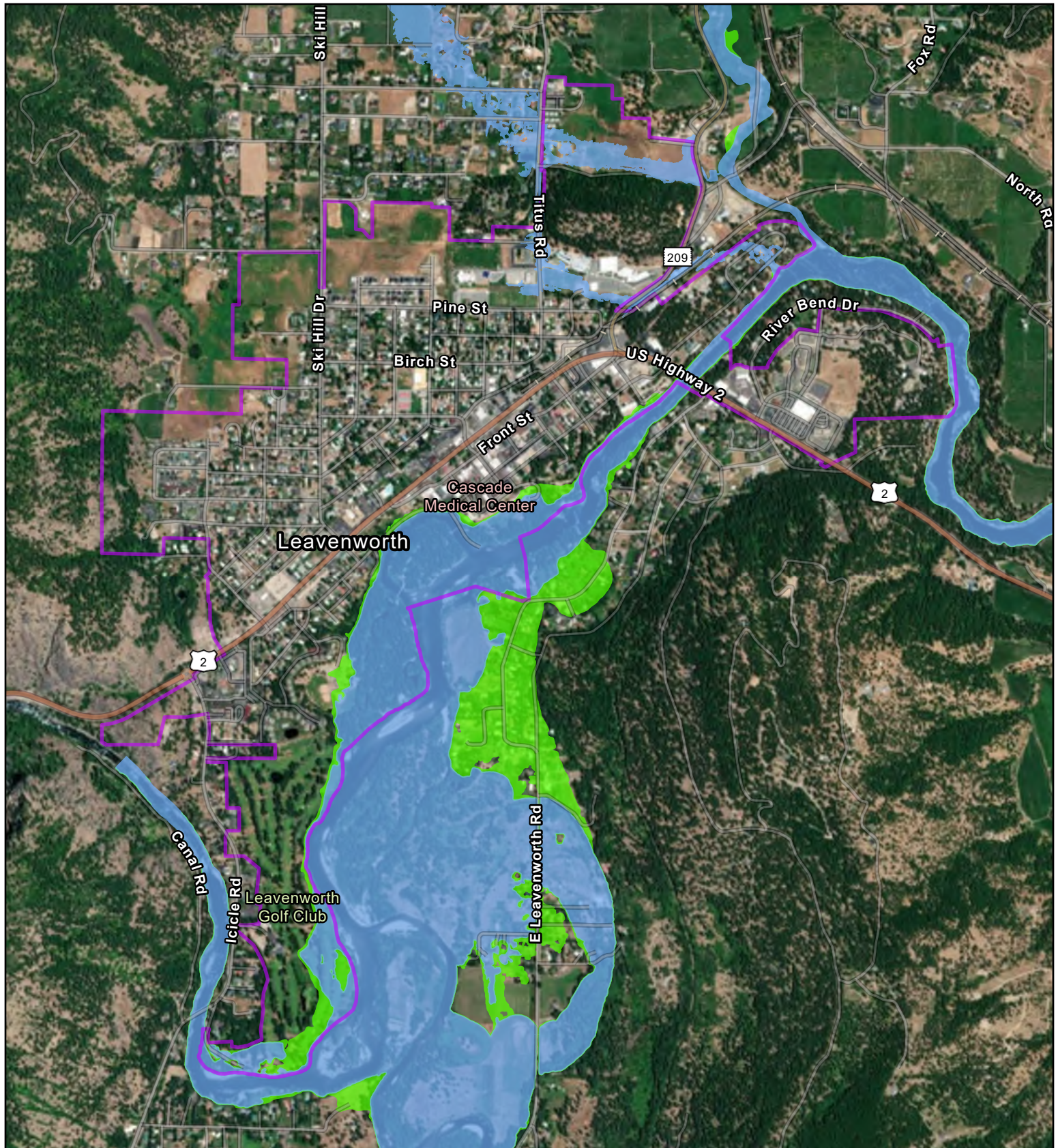


City of Leavenworth: Critical Facilities (Map 2 of 2)

- | | |
|---|---|
| ● Water Systems | ● Transportation |
| ● Energy (Power & Fuel) | Incorporated City |
| ● Communications | Chelan County |

Sources: Chelan Co., City of Chelan, Hazus v6.1, HIFLD, WA DOH, WSDOT, EPA
 Base Map Source: Earthstar Geographics, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS



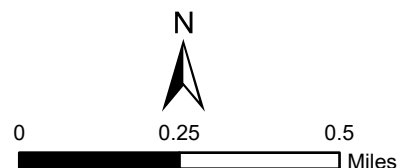


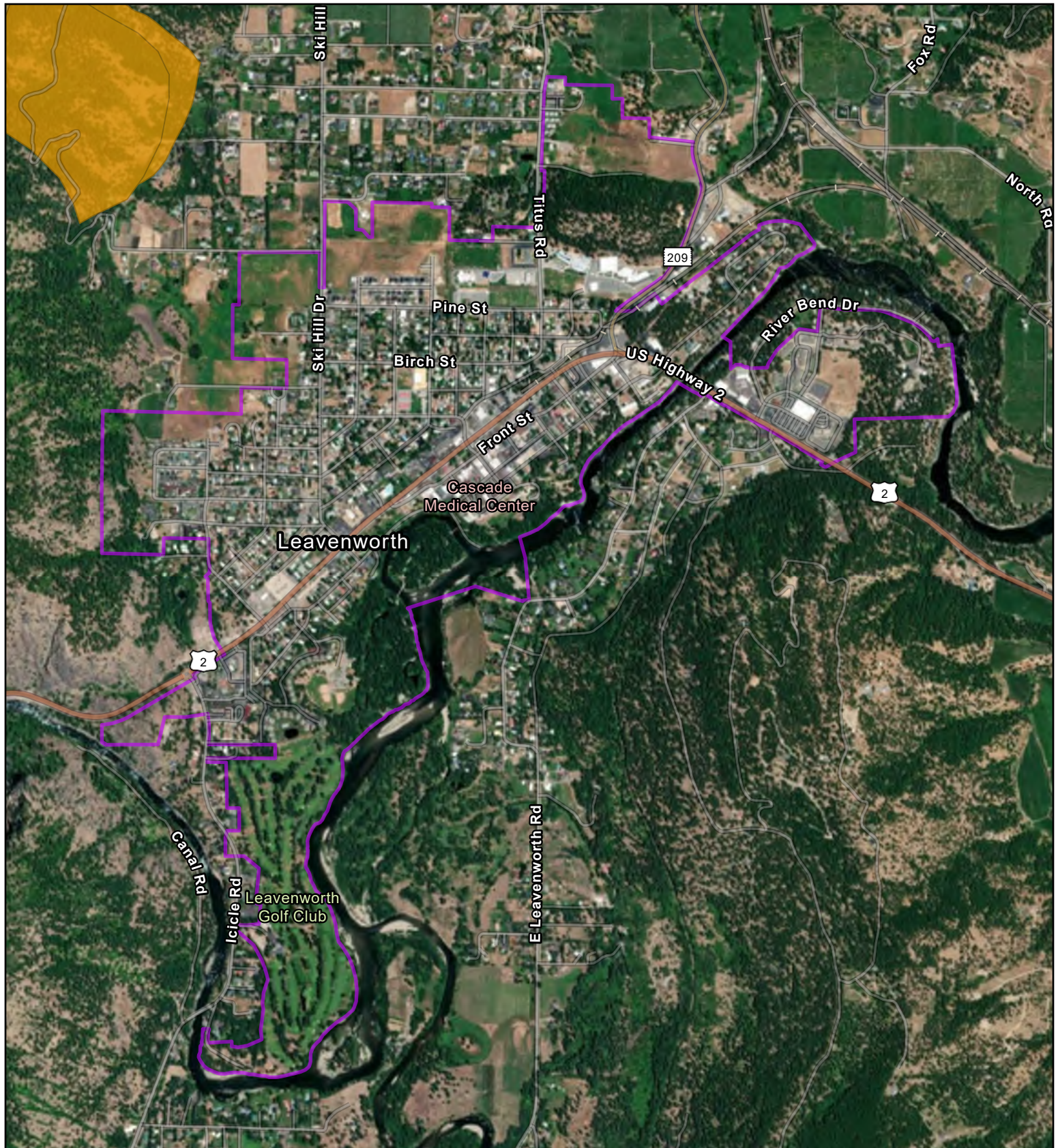
City of Leavenworth: FEMA Flood Zones

- 1% Annual Chance Flood
- 0.2% Annual Chance Flood
- Incorporated City
- Chelan County

Sources: Chelan Co., FEMA

Base Map Source: Maxar, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS

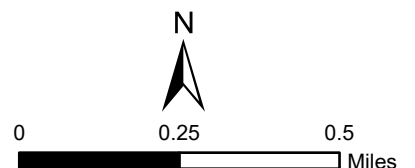


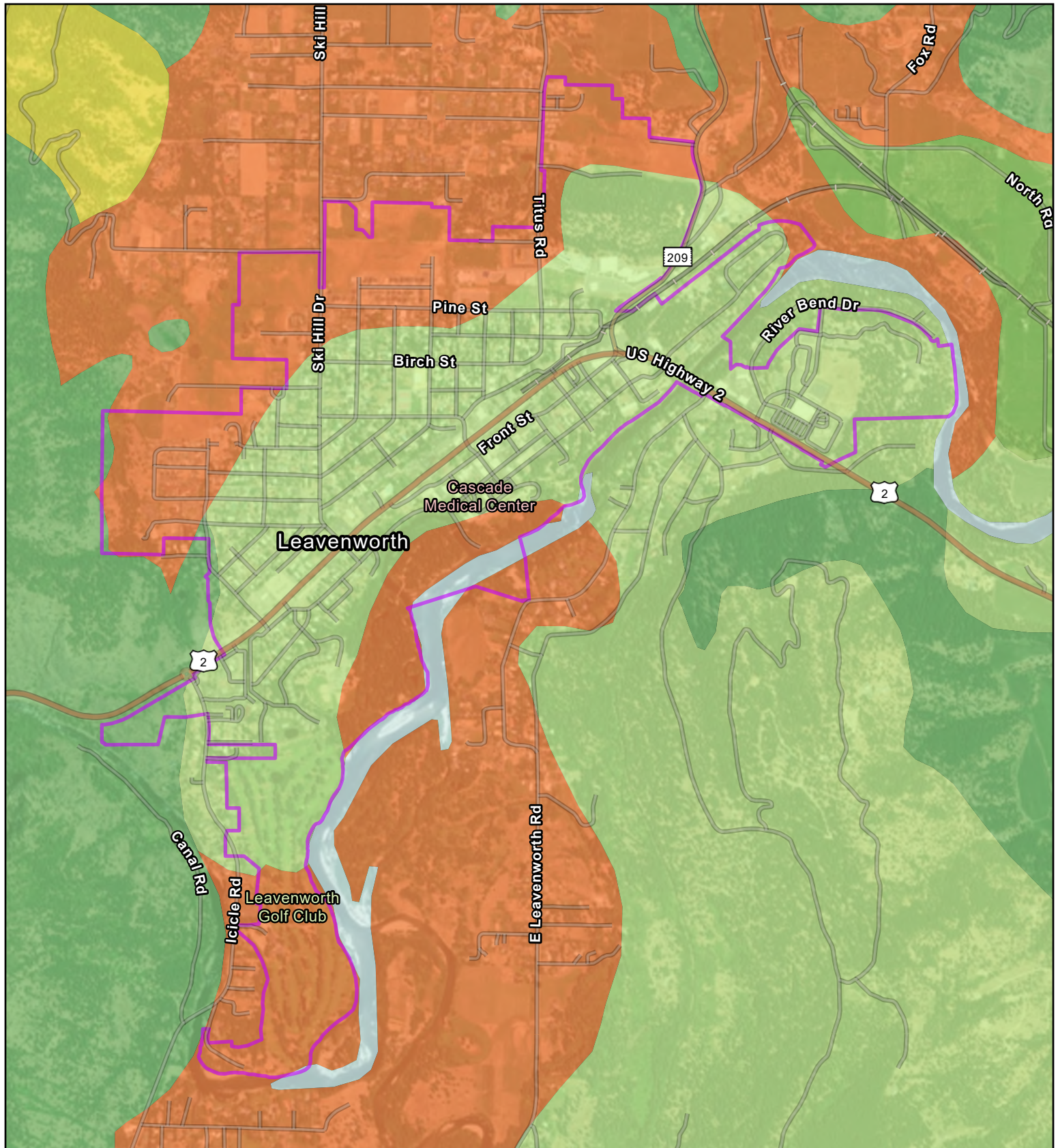


City of Leavenworth: Landslide Areas

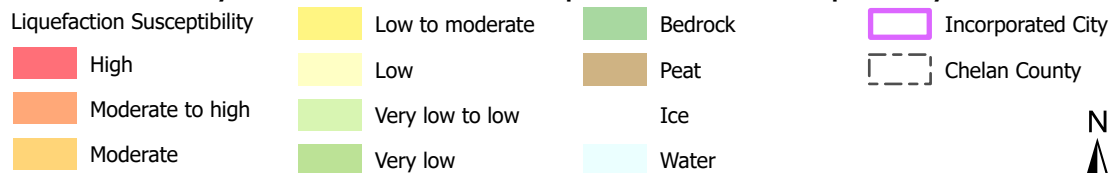
- Landslide Area
- Incorporated City
- Chelan County

Sources: Chelan Co., WA DNR
 Base Map Source: Earthstar Geographics, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS



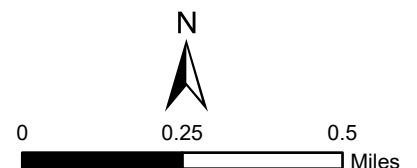


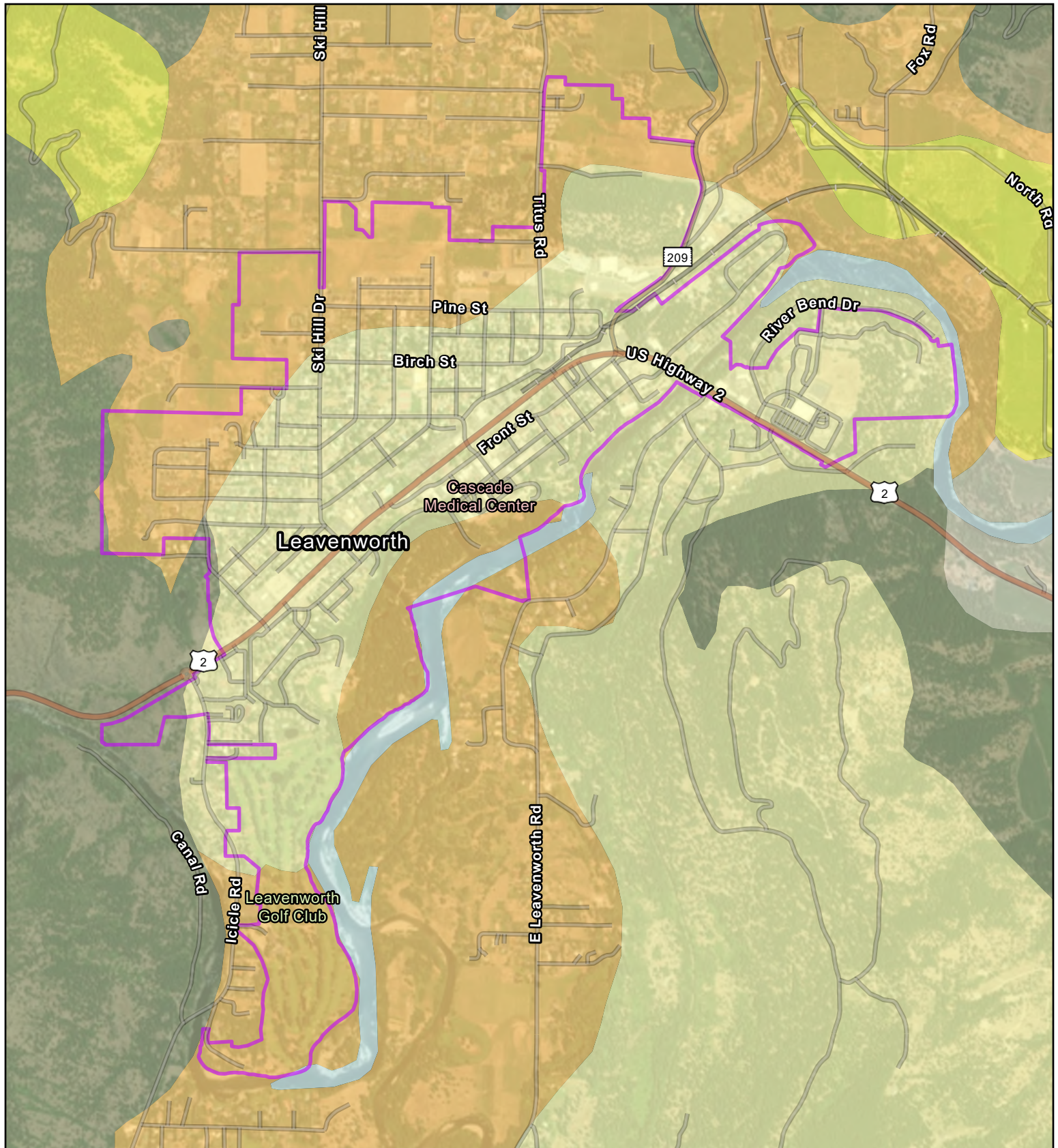
City of Leavenworth: Liquefaction Susceptibility



Sources: Chelan Co., WA DNR

Base Map Source: Earthstar Geographics, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS





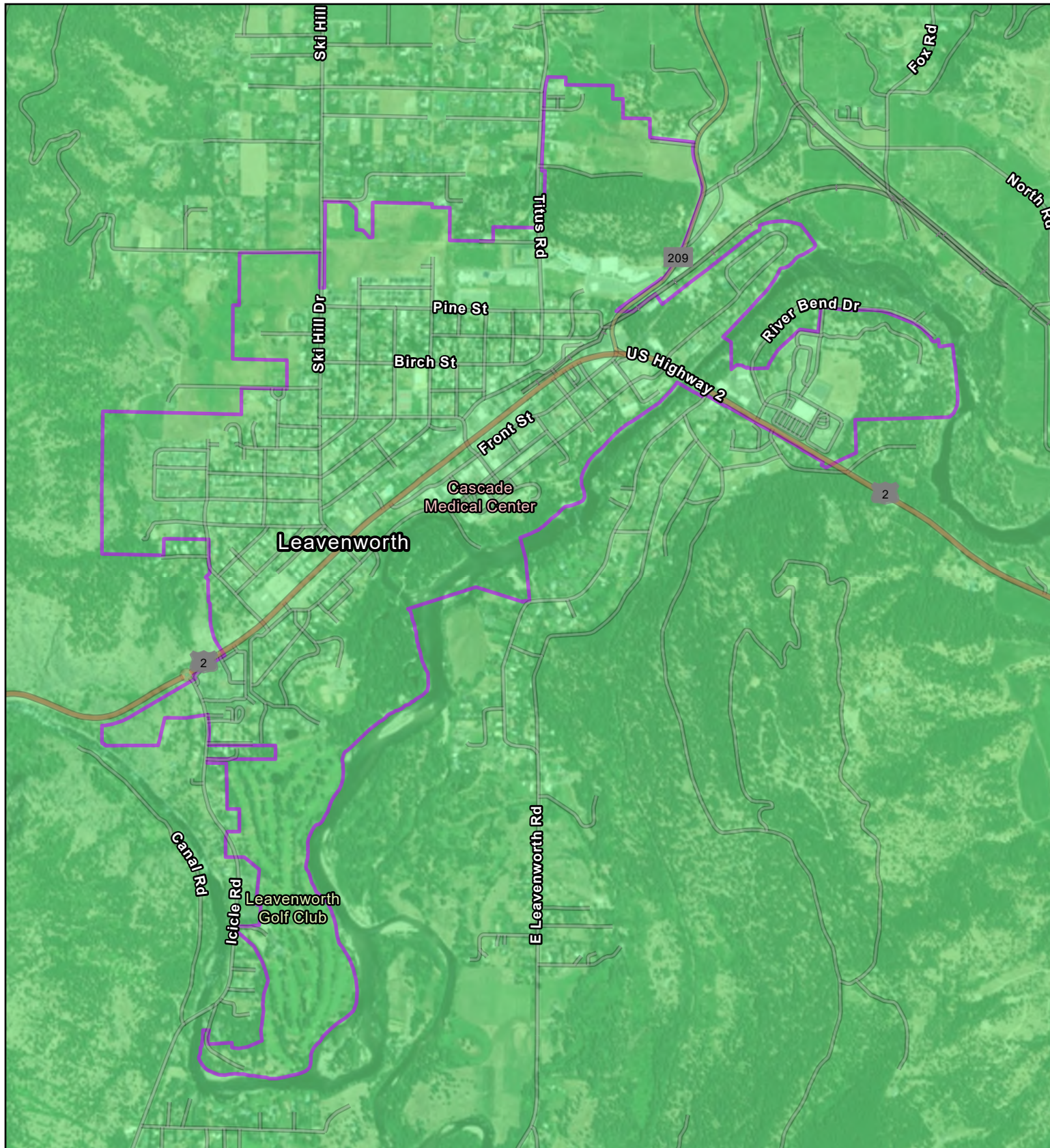
City of Leavenworth: NEHRP Seismic Site Class



Sources: Chelan Co., WA DNR

Base Map Source: Earthstar Geographics, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS





City of Leavenworth: Cascadia Megathrust M9.34 Scenario

Mercalli Intensity Scale

IV (Light/None)

V (Moderate/Very Light)

Intensity scale described as: (Perceived Shaking/Potential Damage)

VI (Strong/Light)

VII (Very Strong/Moderate)

VIII (Severe/Moderate-Heavy)

IX (Violent/Heavy)

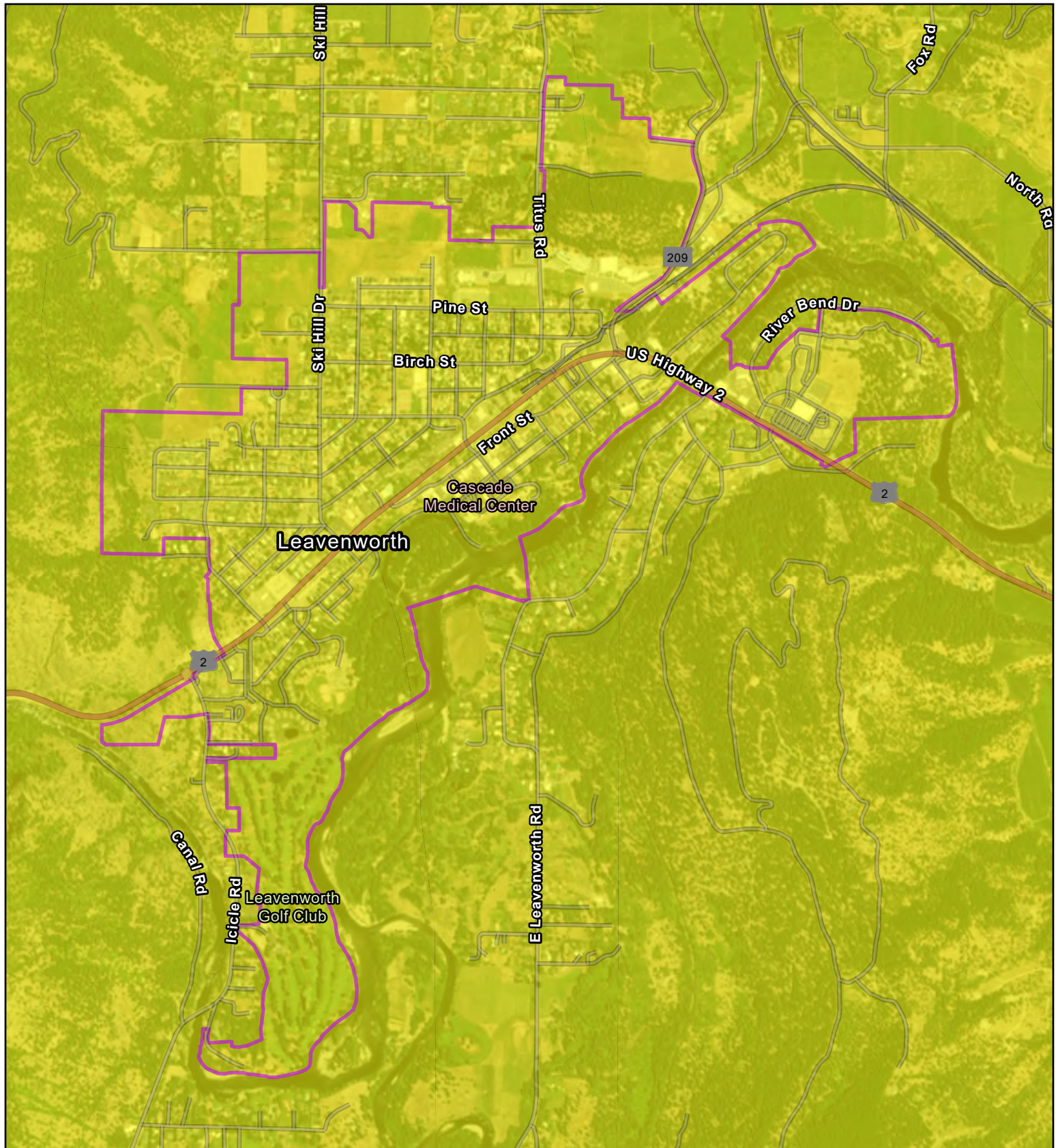
Incorporated City

Chelan County

Sources: Chelan Co., USGS

Base Map Source: Earthstar Geographics, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS





City of Leavenworth: Chelan M7.2 Scenario

Mercalli Intensity Scale

IV (Light/None)

V (Moderate/Very Light)

Intensity scale described as: (Perceived Shaking/Potential Damage)

VI (Strong/Light)

VII (Very Strong/Moderate)

VIII (Severe/Moderate-Heavy)

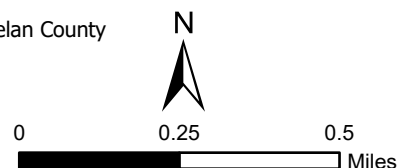
IX (Violent/Heavy)

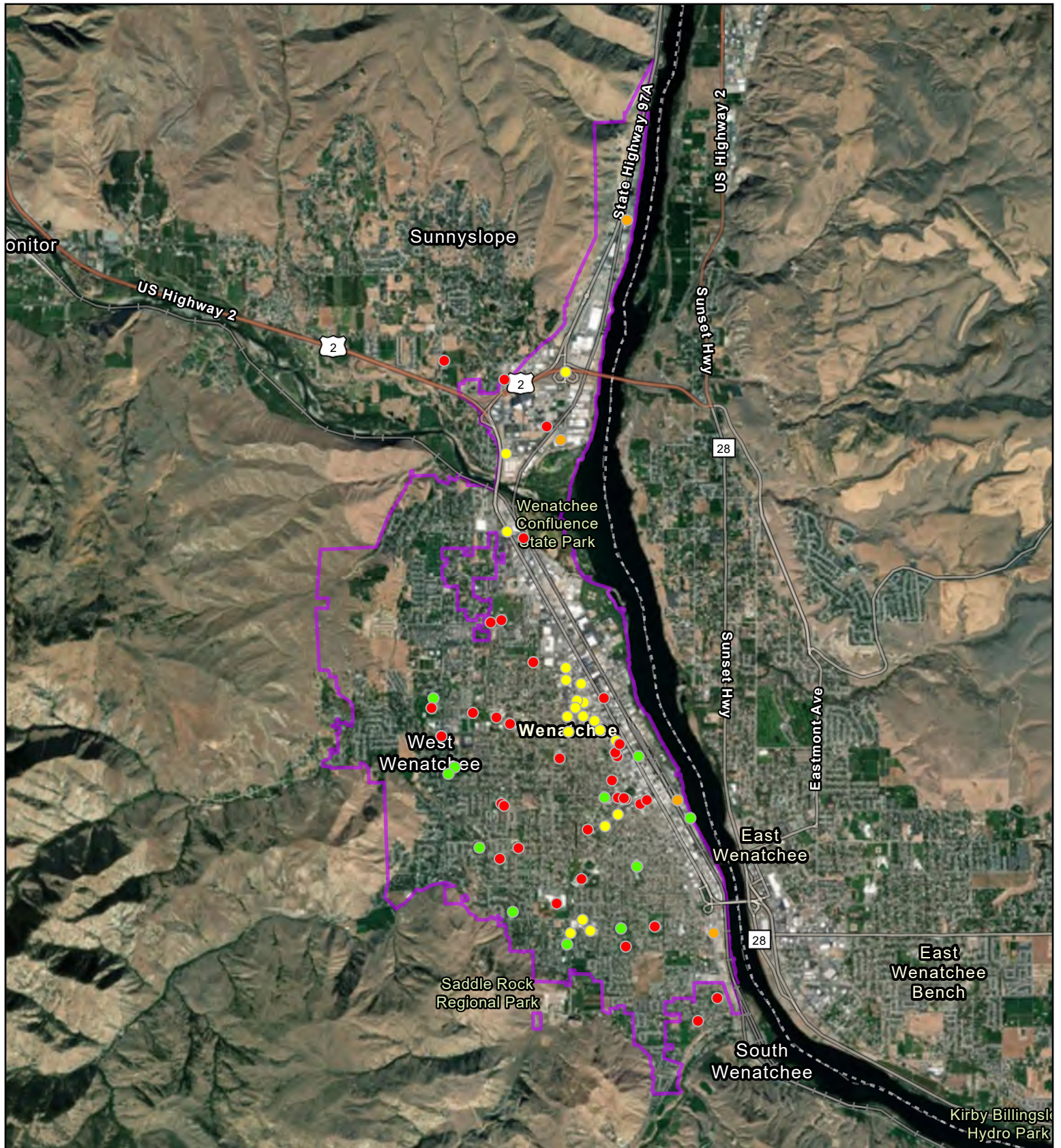
Incorporated City

Chelan County

Sources: Chelan Co., USGS

Base Map Source: Earthstar Geographics, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS

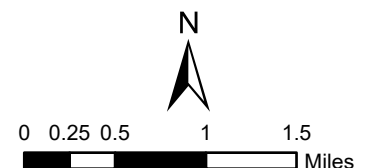


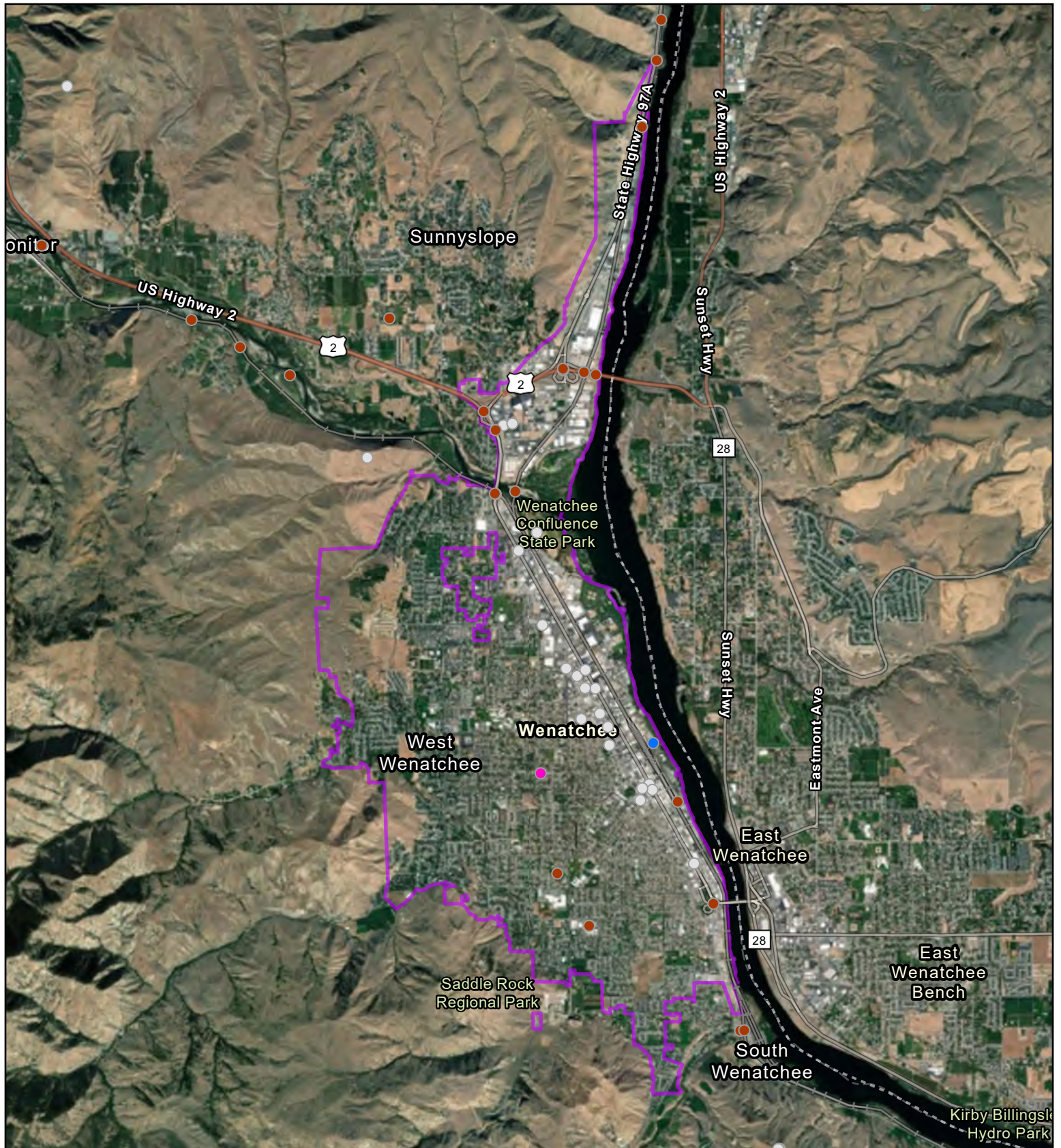


City of Wenatchee: Critical Facilities (Map 1 of 2)

- | | |
|---|---|
| ● Hazardous Materials | ● Safety and Security |
| ● Food, Hydration, Shelter | Incorporated City |
| ● Health and Medical | Chelan County |

Sources: Chelan Co., City of Chelan, Hazus v6.1, HIFLD, WA DOH, WSDOT, EPA
 Base Map Source: Earthstar Geographics, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS

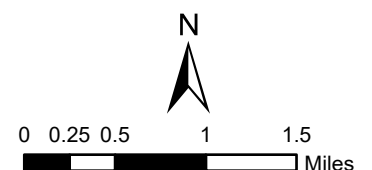


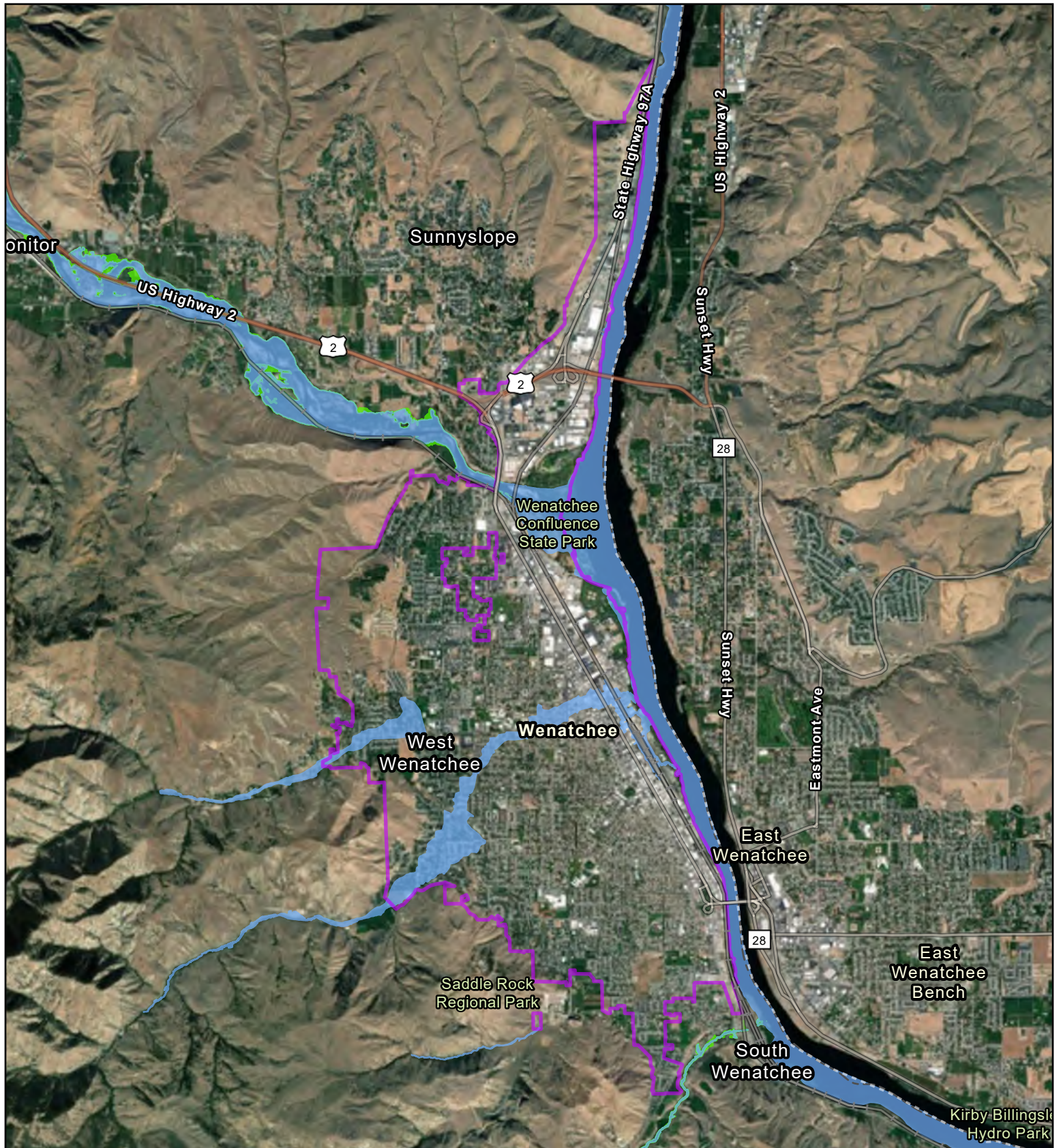


City of Wenatchee: Critical Facilities (Map 2 of 2)

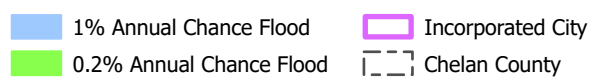
- | | |
|---|---|
| ● Water Systems | ● Transportation |
| ● Energy (Power & Fuel) | Incorporated City |
| ● Communications | Chelan County |

Sources: Chelan Co., City of Chelan, Hazus v6.1, HIFLD, WA DOH, WSDOT, EPA
 Base Map Source: Earthstar Geographics, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS



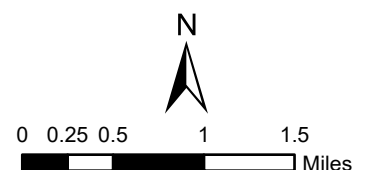


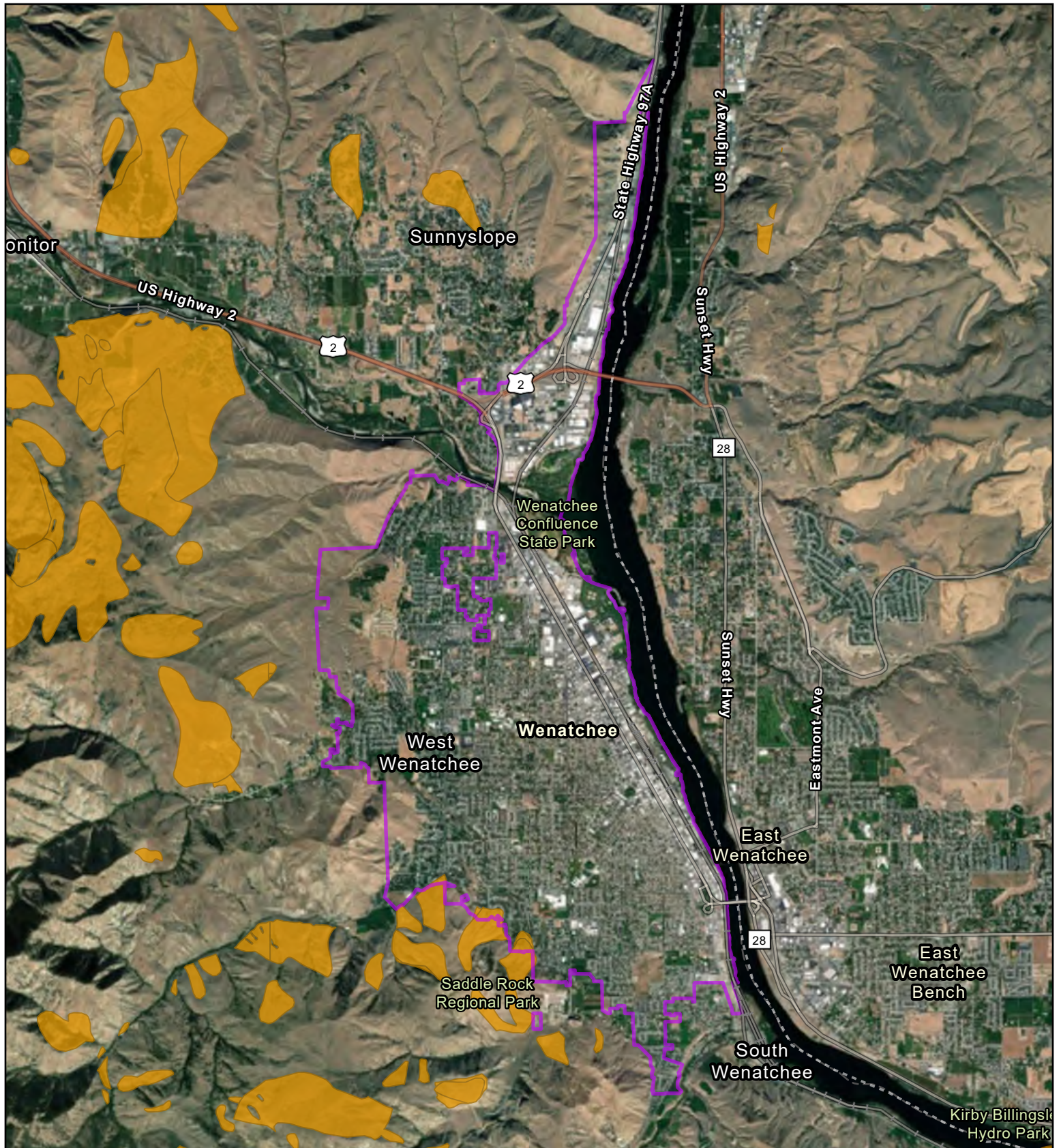
City of Wenatchee: FEMA Flood Zones



Sources: Chelan Co., FEMA

Base Map Source: Earthstar Geographics, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS



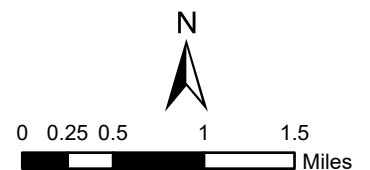


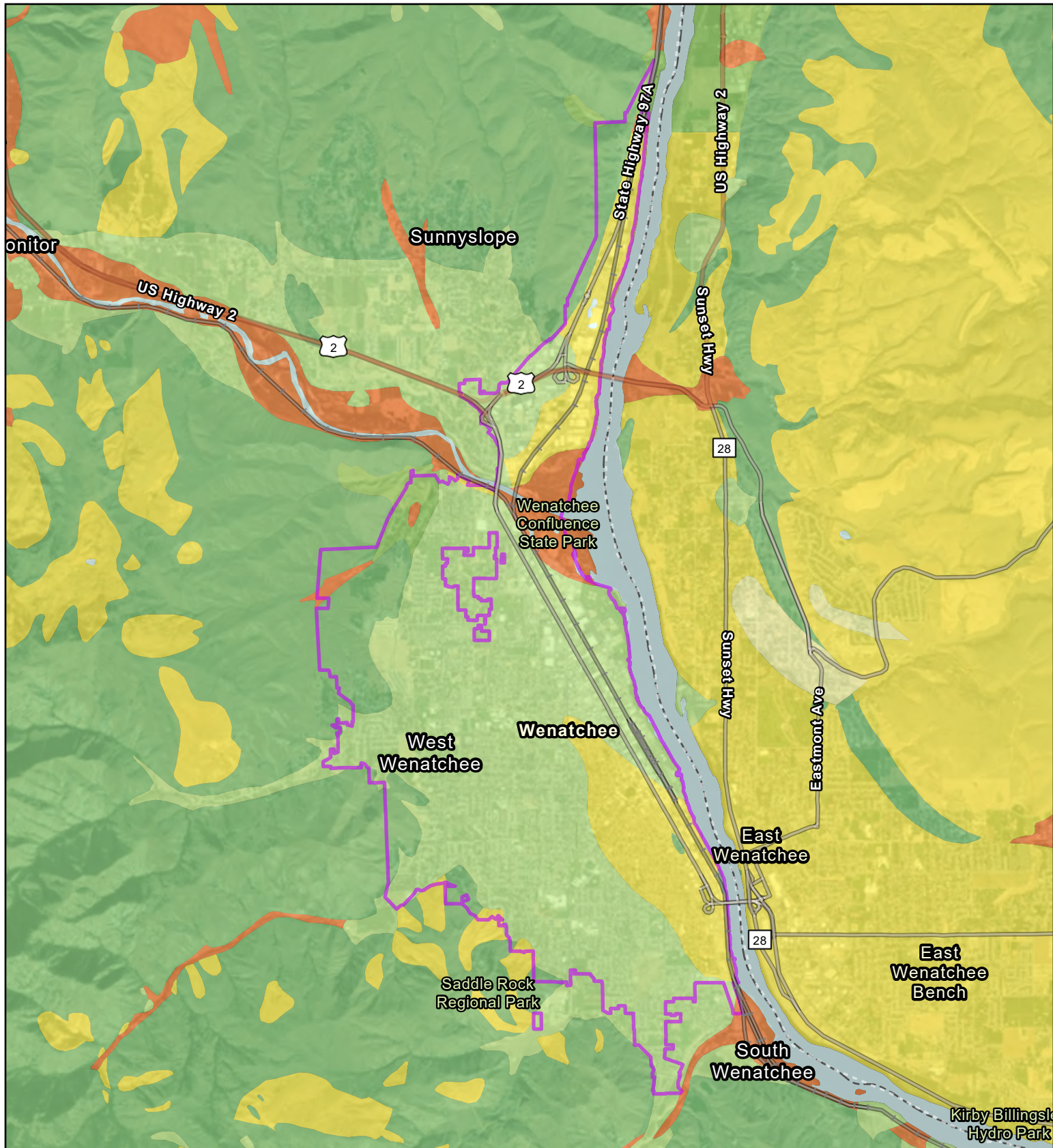
City of Wenatchee: Landslide Areas

- Landslide Area
- Incorporated City
- Chelan County

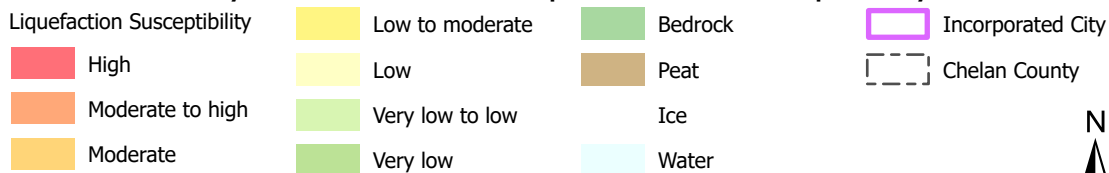
Sources: Chelan Co., WA DNR

Base Map Source: Earthstar Geographics, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS



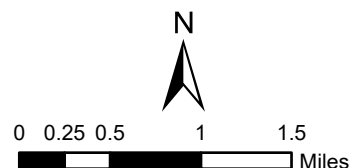


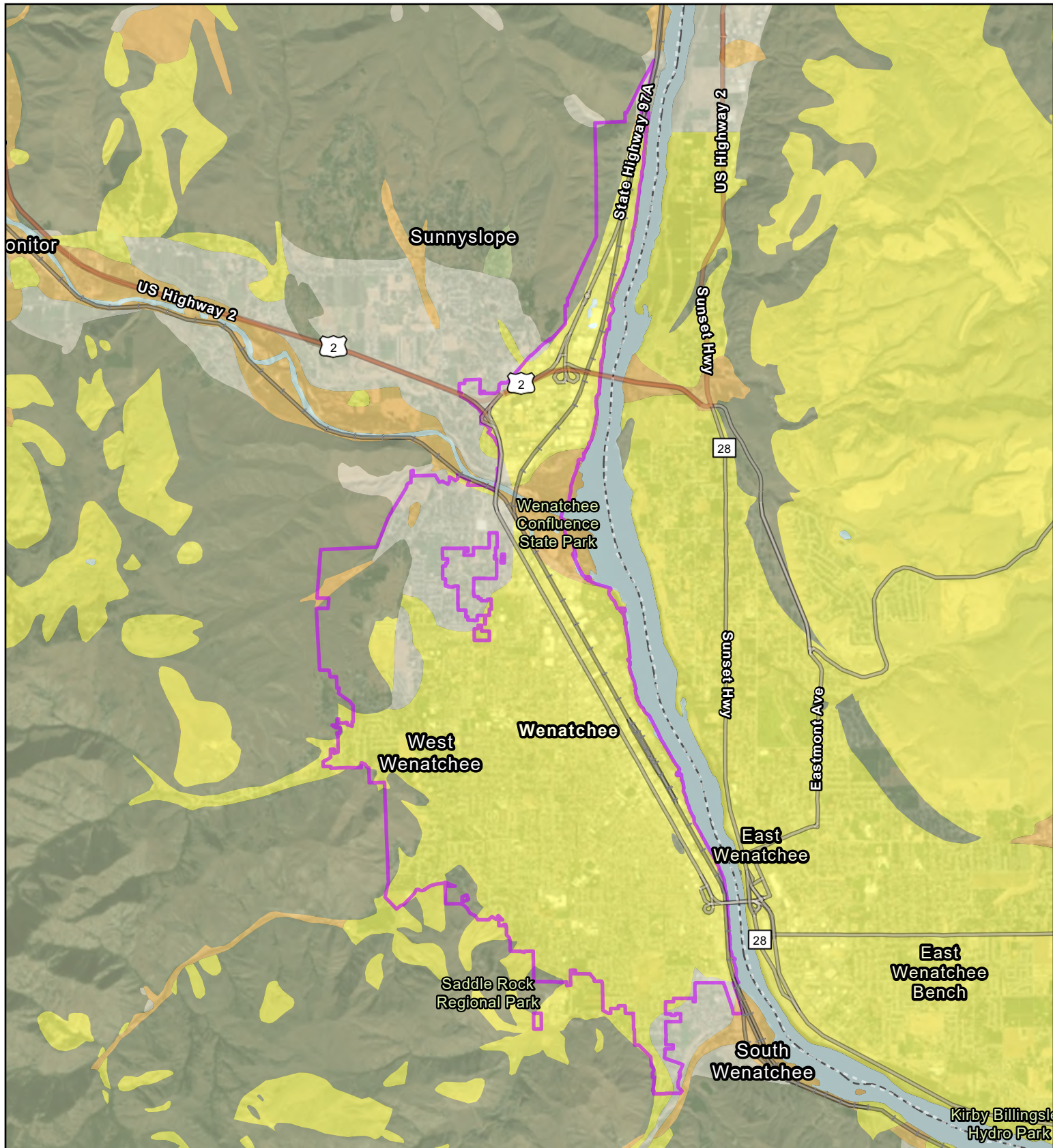
City of Wenatchee: Liquefaction Susceptibility



Sources: Chelan Co., WA DNR

Base Map Source: Earthstar Geographics, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS

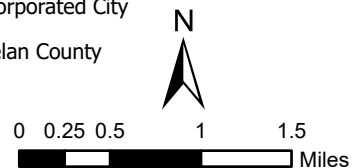


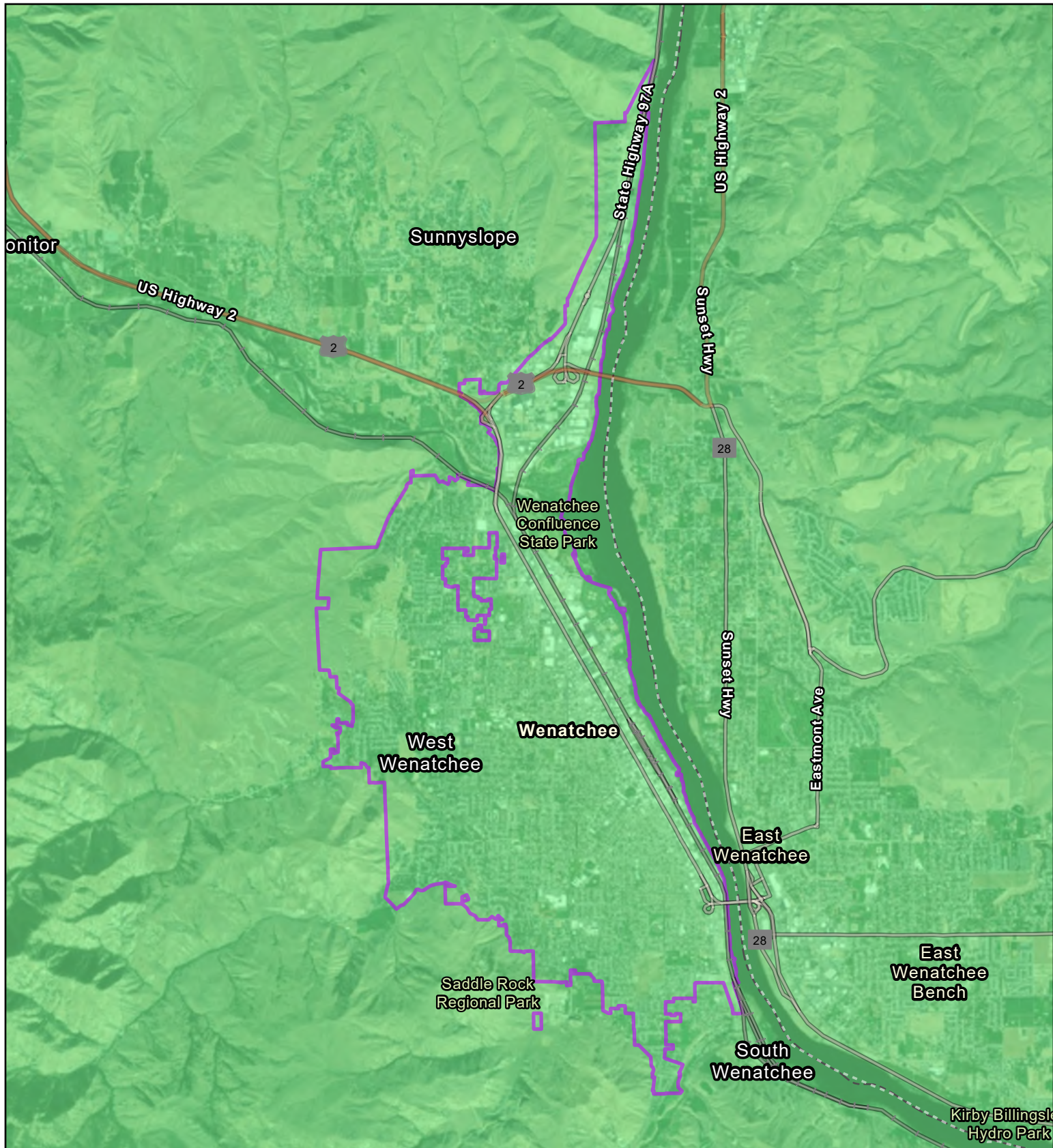


City of Wenatchee: NEHRP Seismic Site Class



Sources: Chelan Co., WA DNR
 Base Map Source: Earthstar Geographics, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS





City of Wenatchee: Cascadia Megathrust M9.34 Scenario

Mercalli Intensity Scale

IV (Light/None)

V (Moderate/Very Light)

Intensity scale described as: (Perceived Shaking/Potential Damage)

VI (Strong/Light)

VII (Very Strong/Moderate)

VIII (Severe/Moderate-Heavy)

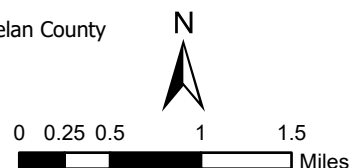
IX (Violent/Heavy)

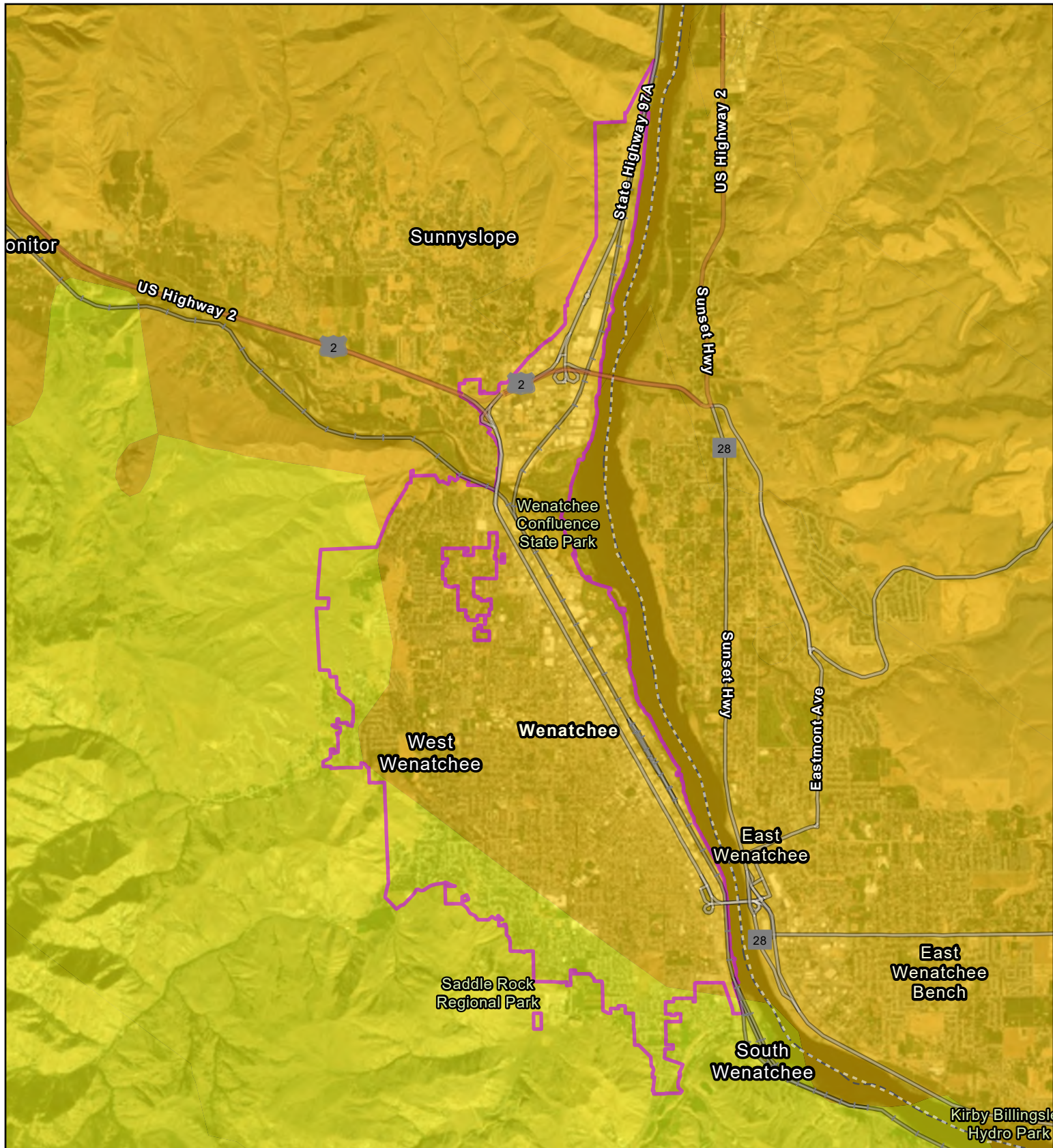
Incorporated City

Chelan County

Sources: Chelan Co., USGS

Base Map Source: Earthstar Geographics, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS





City of Wenatchee: Chelan M7.2 Scenario

Mercalli Intensity Scale

IV (Light/None)

V (Moderate/Very Light)

Intensity scale described as: (Perceived Shaking/Potential Damage)

VI (Strong/Light)

VII (Very Strong/Moderate)

VIII (Severe/Moderate-Heavy)

IX (Violent/Heavy)

Incorporated City

Chelan County

Sources: Chelan Co., USGS

Base Map Source: Earthstar Geographics, WA State Parks GIS, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA, USFWS

