

Shoreline Master Program (SMP) Update

WRIA 20 IB

June 21, 2011

Rebekah Gentry
Olympic Natural Resources Center

Introduction

- ▶ Progress to date
- ▶ Today: Review proposed changes
- ▶ We want your input
 - Corrections to ICR information
 - Views regarding potential changes
 - Website access to ICR, Preliminary Elements Reports, & maps

Overall Picture

- ▶ WRIA 20 is lightly populated
 - 735,000 acres in WRIA
 - ~1 person per 70 acres
 - Vast areas under public ownership & in forest use
 - All evaluated salmon runs are healthy except Lake Ozette sockeye
 - Few alterations of shorelines (bulkheads, armoring)
 - Few water quality problems
 - Not much population increase since early 1990s
 - 248 miles in conservancy; 148 miles in rural; 2.6 miles in urban
 - 92 miles undesignated

WRIA 20: Ecosystem Analyses

- Vegetation: **Good canopy**
 - ▶ 82.5% closed canopy, 14.1% other natural vegetation, 3.4% is non-forest
- Hydrology: **Few problems**
 - ▶ 34 WQ problems, 27 temperature-related and probably of natural origin: DO at 4 sites; PH at 2; Fecal at 1
 - ▶ Lake Pleasant only place where concern
 - ▶ Few places where bank armoring; most housing outside active migration zones
- Habitat: **Good habitat conditions**
 - ▶ Healthy wild stocks indicate good mix of habitat
 - ▶ Restoration projects include control of invasives and work in smaller tributaries flowing into SSWS

Input Needed

► Focus on Certain Reaches

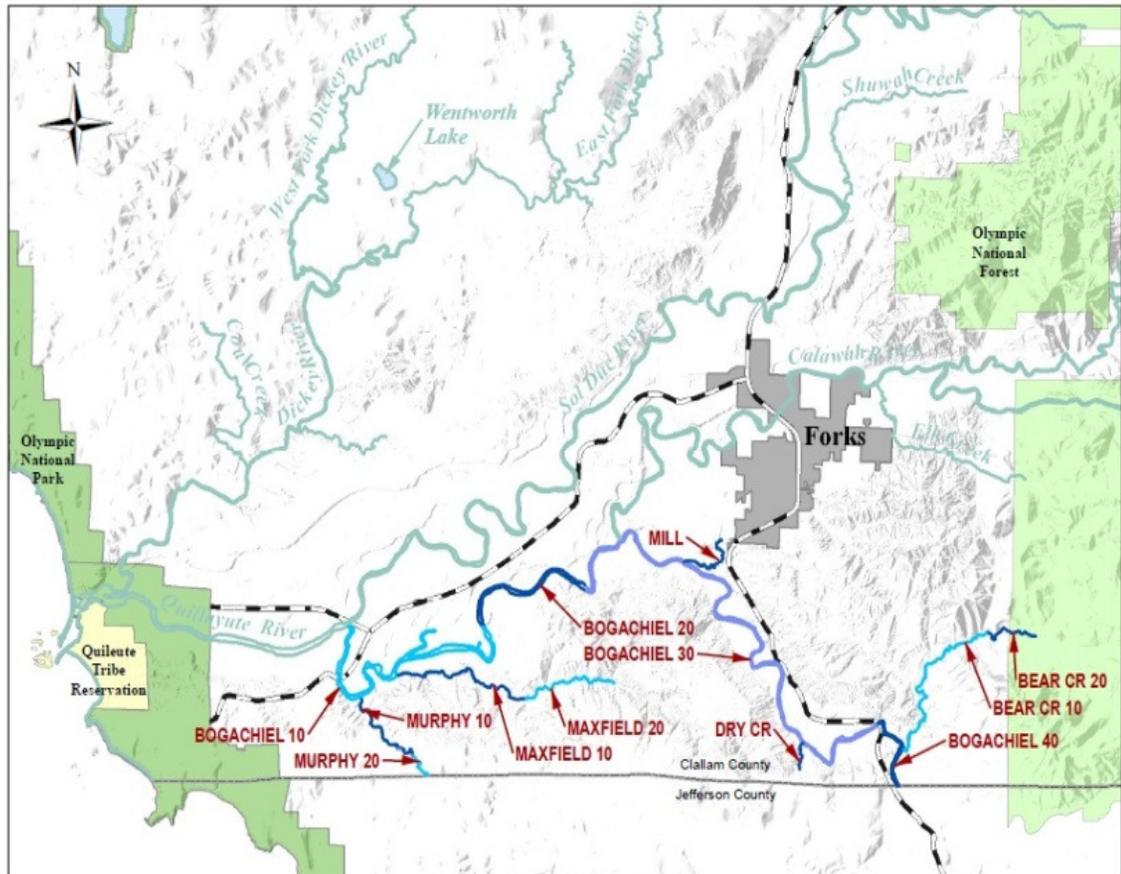
- Bogachiel (Mainstem, Mill Creek, Bear-Bogachiel)
- Calawah/Sitkum (Mainstem in UGA, Elk Creek, Sitkum)
- Sol Duc (Mainstem mid-reaches)
- Lake Pleasant (Lk Pleasant 20 & Lake Creek 10)
- Ozette
- Quillayute
- Sooes
- Dickey (Colby Cr)

Bogachiel System

- ▶ Gentle grades, wide meanders, wide floodplain, active channel migration
- ▶ 86.2% Closed canopy; 10.1% other vegetation; 3.6% non-forest
- ▶ FUGA portion ~1 mile; rural light residential in places, but most lands zoned in timberlands
- ▶ Problems: High temperatures, poor LWD, channel incision
- ▶ Healthy salmon stocks, good public access

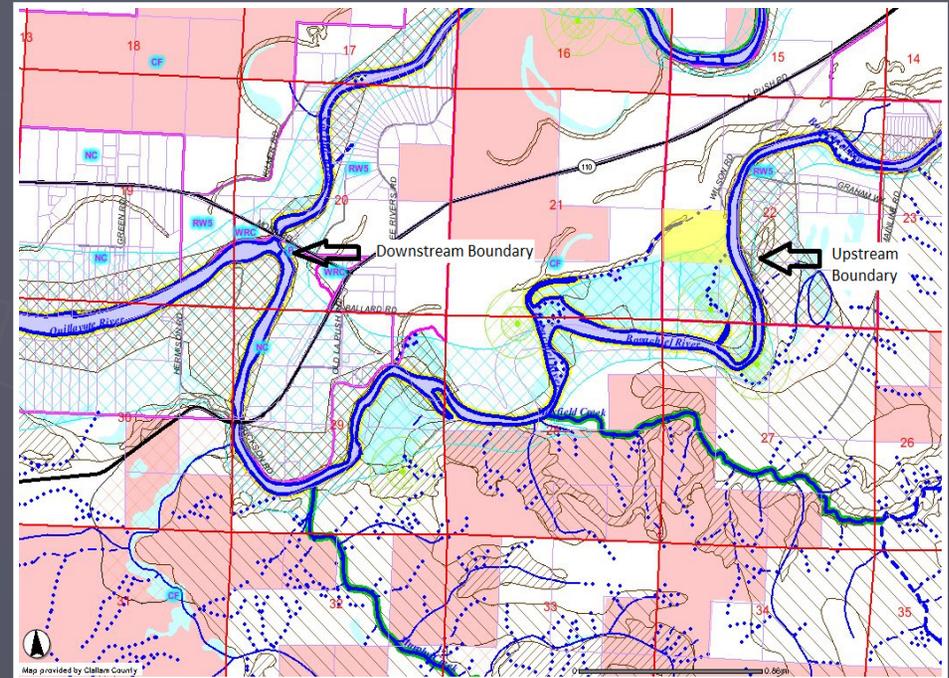
Bogachiel Reaches: Changes to Consider

- ▶ Mainstem
- ▶ MILL
- ▶ BEAR



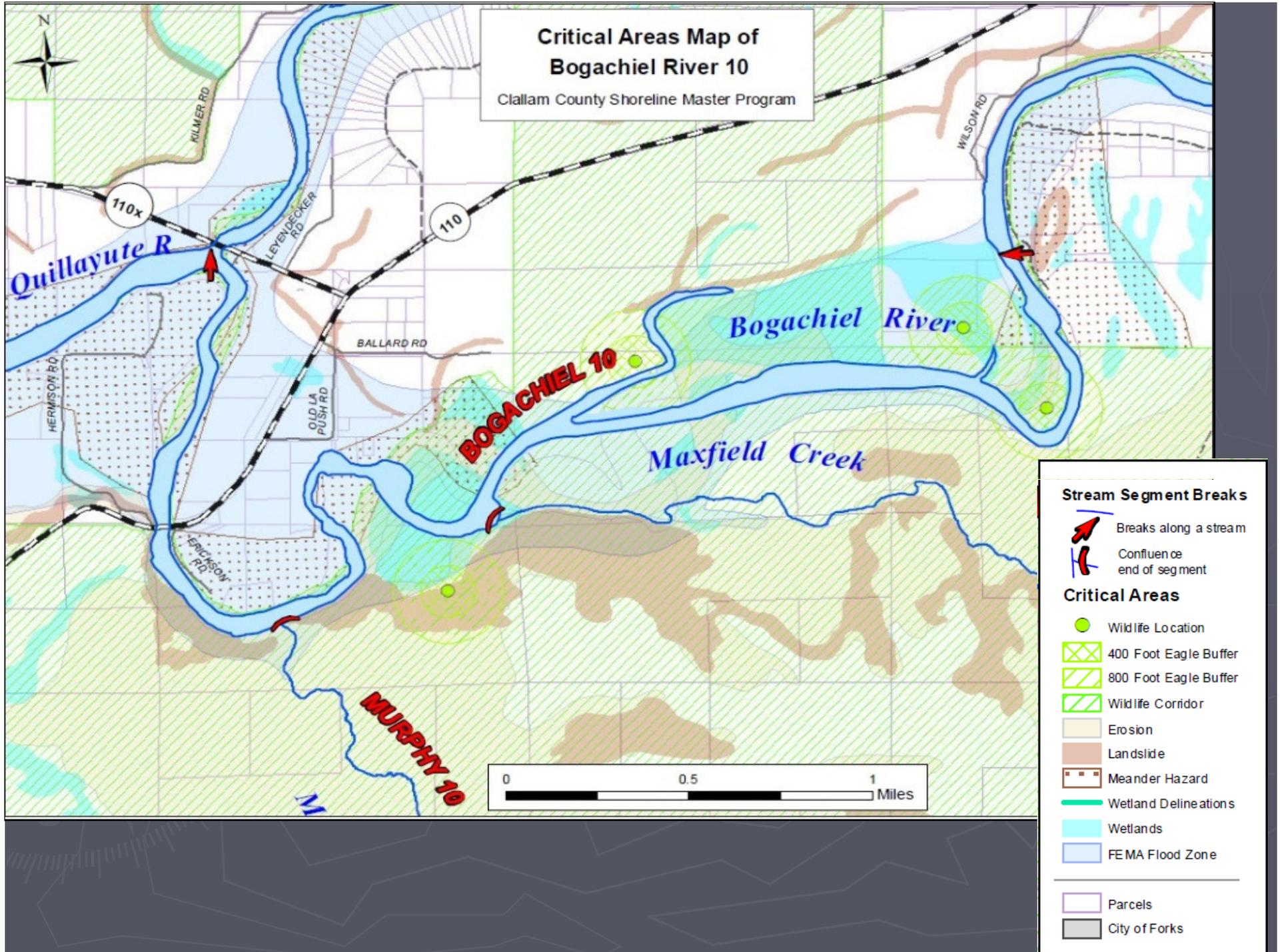
BOGACHIEL 10: Proposed New Reach

- ▶ Active channel migration and erosion zone
- ▶ Key spawning habitat
- ▶ Riparian cover:
 - 83.6% closed canopy
 - 13.8% other veg
 - 2.7% non-forest
- ▶ Current: rural
- ▶ Proposed: conservancy



Critical Areas Map of Bogachiel River 10

Clallam County Shoreline Master Program



Stream Segment Breaks

- Breaks along a stream
- Confluence end of segment

Critical Areas

- Wildlife Location
- 400 Foot Eagle Buffer
- 800 Foot Eagle Buffer
- Wildlife Corridor
- Erosion
- Landslide
- Meander Hazard
- Wetland Delineations
- Wetlands
- FEMA Flood Zone
- Parcels
- City of Forks

Stream Segment Breaks

- Breaks along a stream
- Confluence end of segment

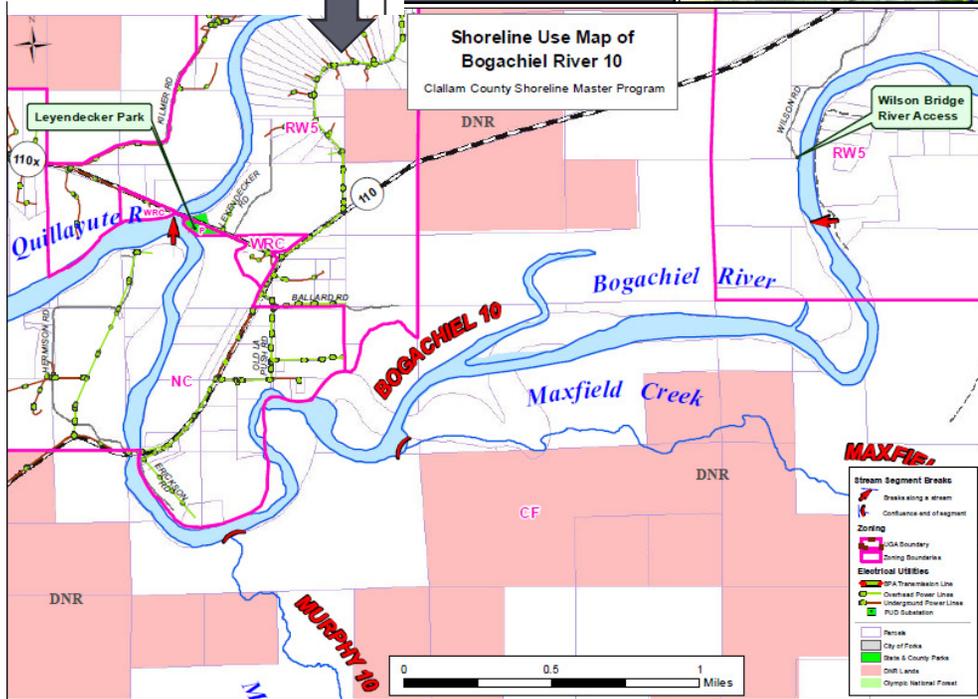
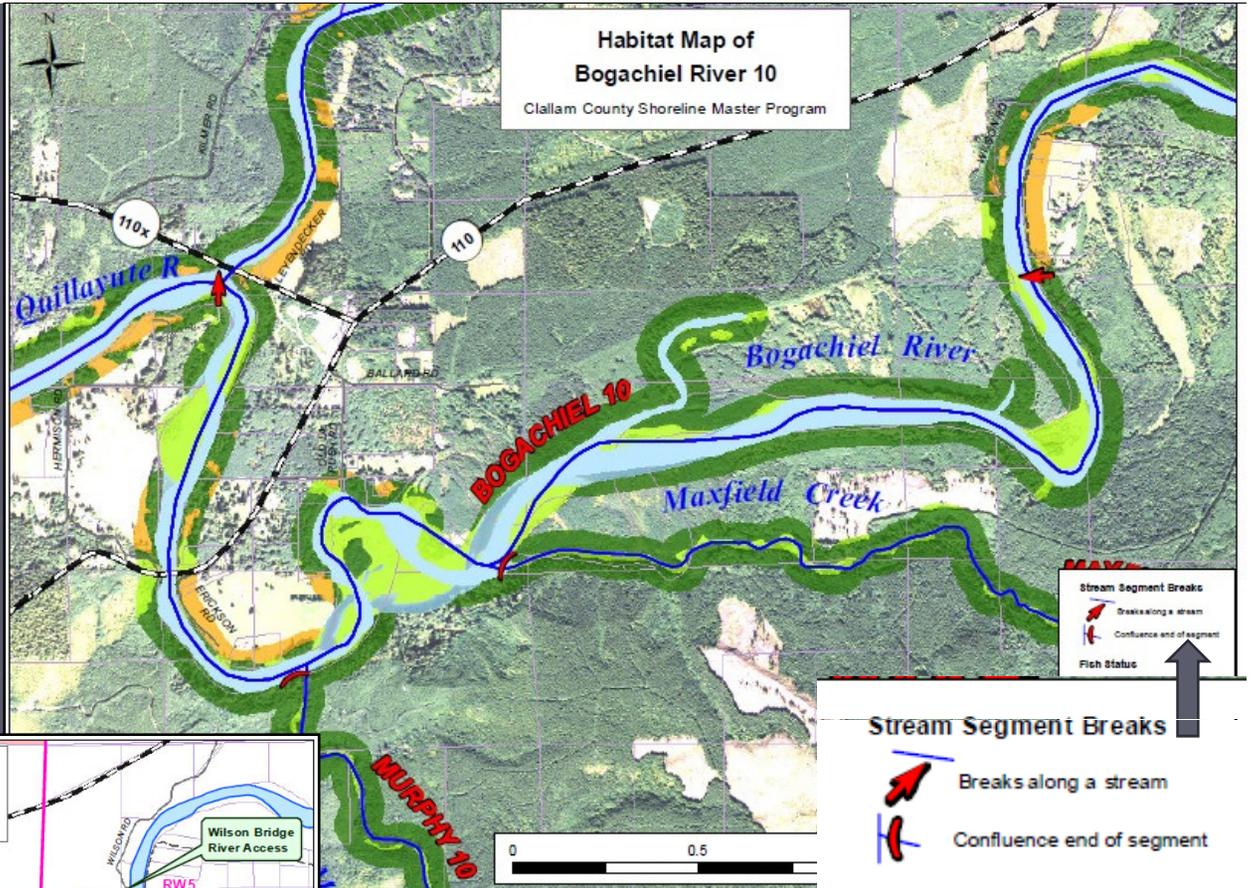
Zoning

- UGA Boundary
- Zoning Boundaries

Electrical Utilities

- BPA Transmission Line
- Overhead Power Lines
- Underground Power Lines
- FUD Substation

- Parcels
- City of Forks
- State & County Parks
- DNR Lands
- Olympic National Forest



Habitat Map of Bogachiel River 10

Clallam County Shoreline Master Program

Stream Segment Breaks

- Breaks along a stream
- Confluence end of segment

Fish Status

- Known Rearing Habitat
- Known Spawning Habitat
- Presence Documented

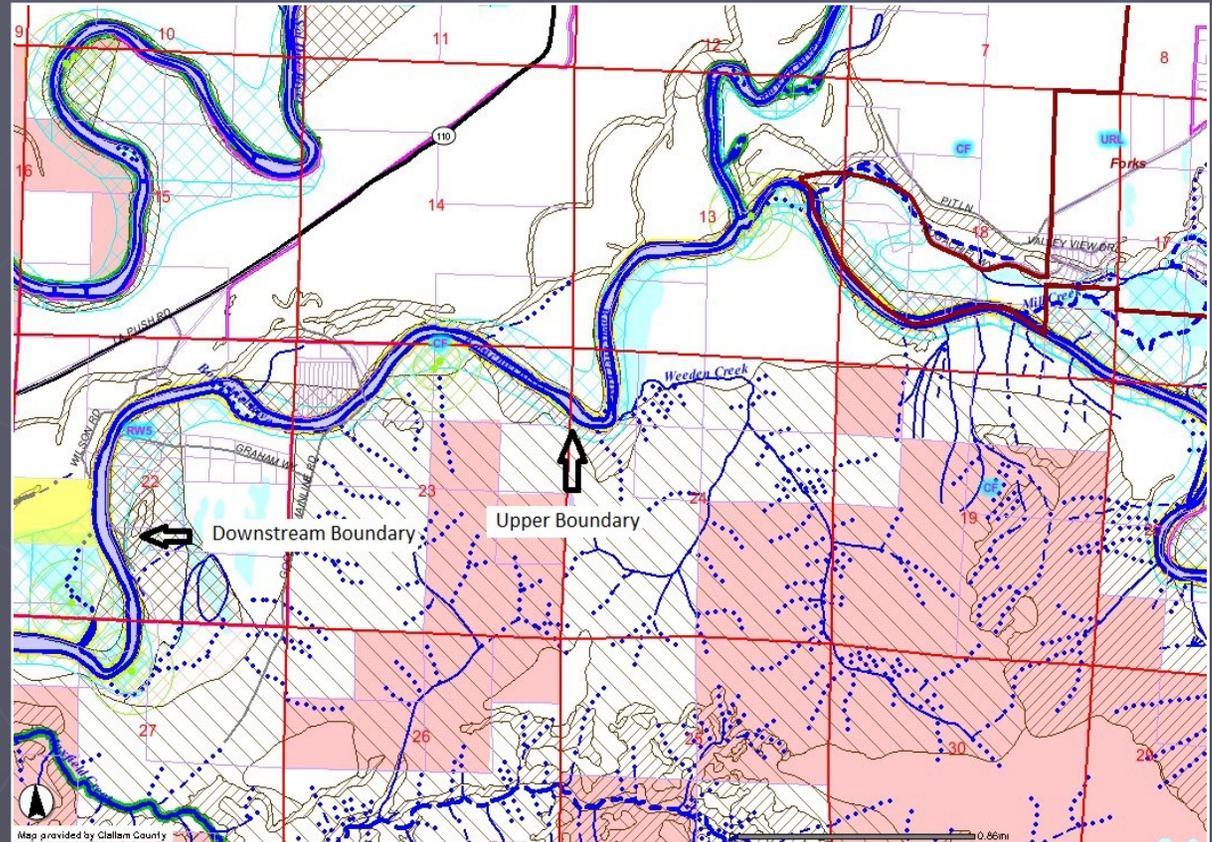
Riparian Habitat

- Closed Canopy
- Non-Forest
- Off-Shore
- Other Natural Vegetation
- Water

- Parcels
- City of Forks

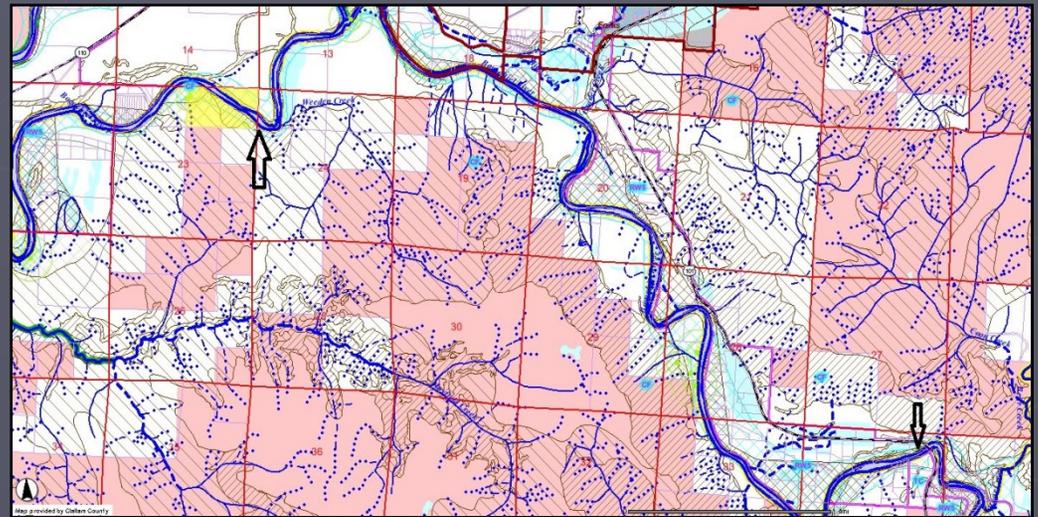
BOGACHIEL 20: Proposed New Reach

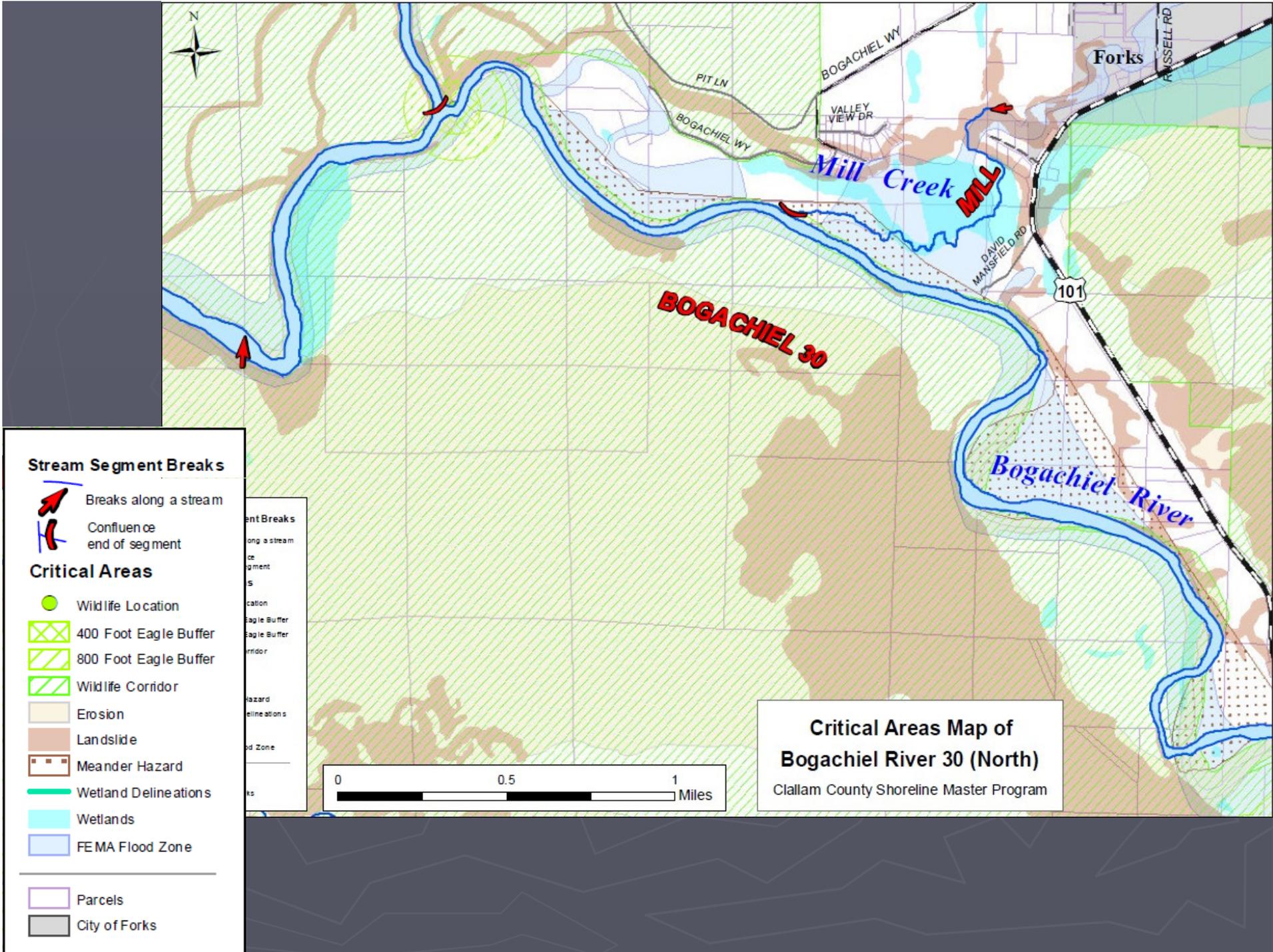
- ▶ Light residential & forestry
- ▶ Riparian cover:
 - 85.9% Closed canopy
 - 10.3% other veg
 - 3.9% non-forest
- ▶ Current: rural
- ▶ Retain Rural



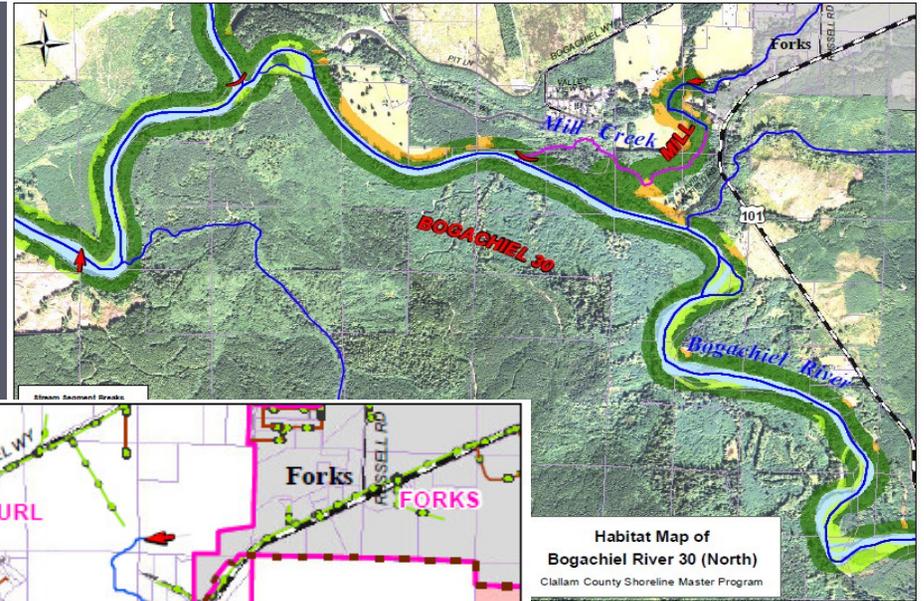
BOGACHIEL 30: Proposed New Reach

- ▶ Active channel migration and wide floodplain
- ▶ Forestry, light residential in UGA
- ▶ Riparian cover:
 - 87% Closed canopy
 - 8.4% other veg
 - 4.6% non-forest
- ▶ Current: rural
- ▶ Proposed: conservancy

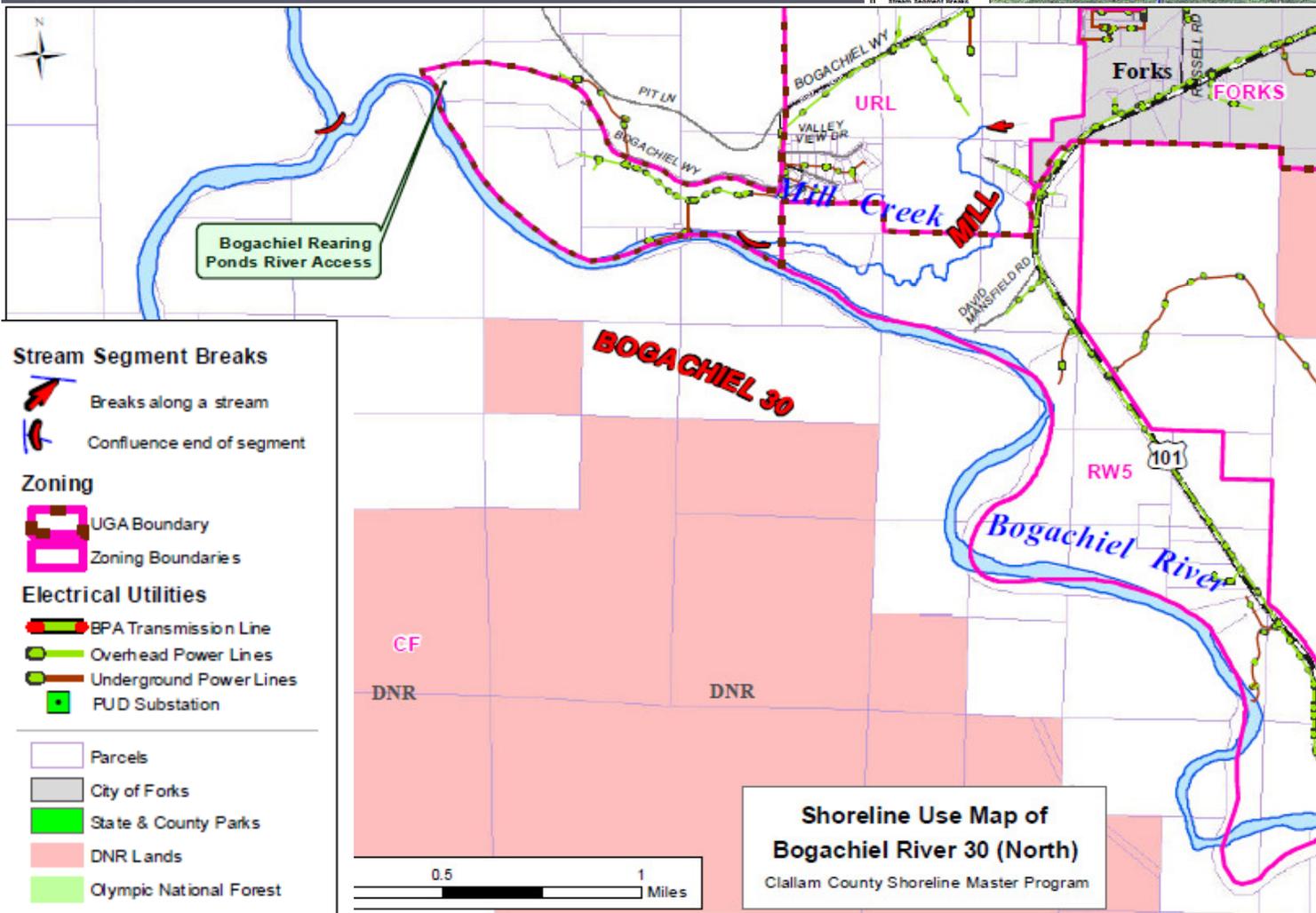




- Issue: Does "Conservancy" Designation in UGA make sense?
- Growth directed in UGA
- Consider a new category?
- Scenic Residential?

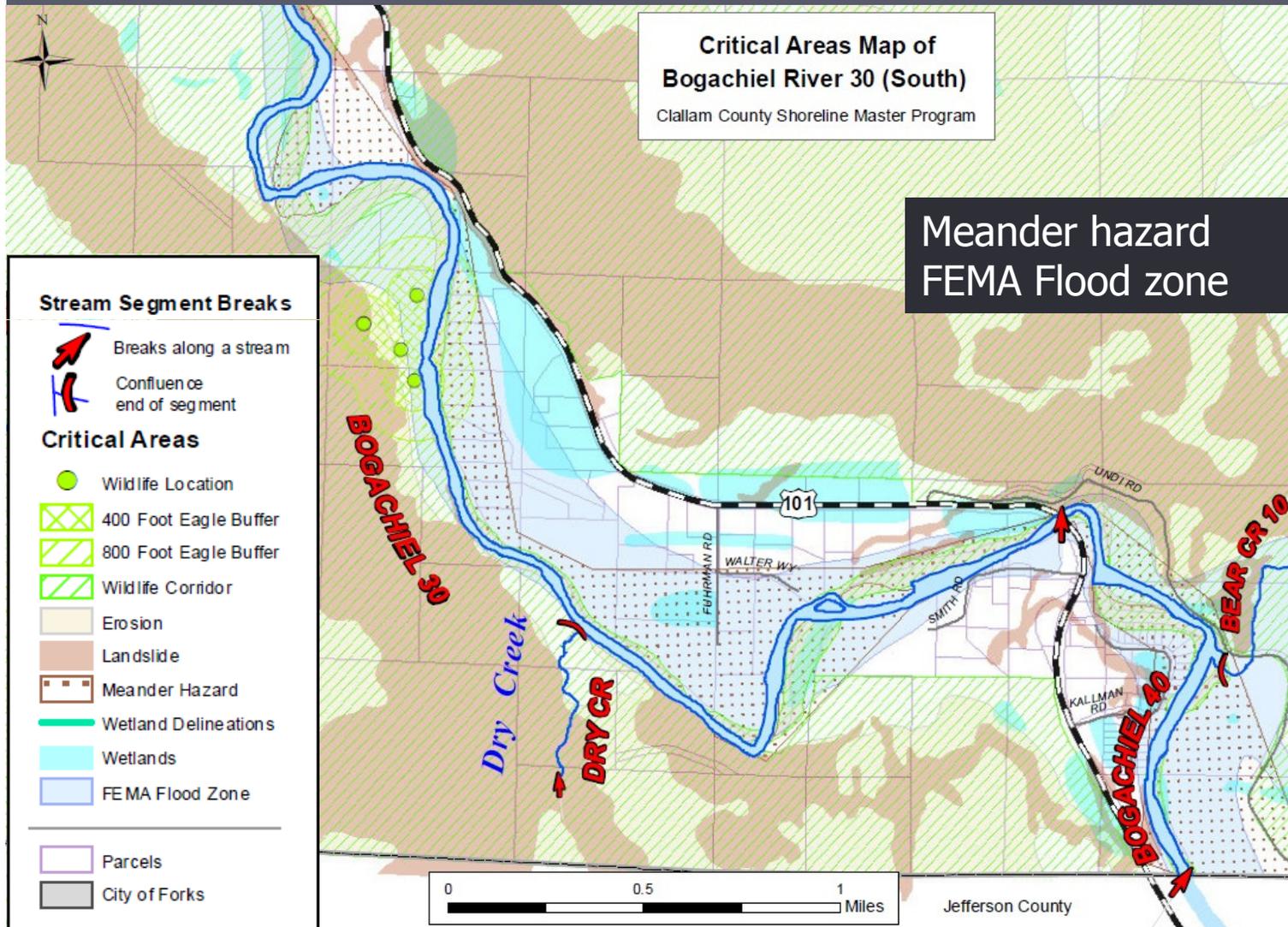


Habitat Map of Bogachiel River 30 (North)
Clallam County Shoreline Master Program



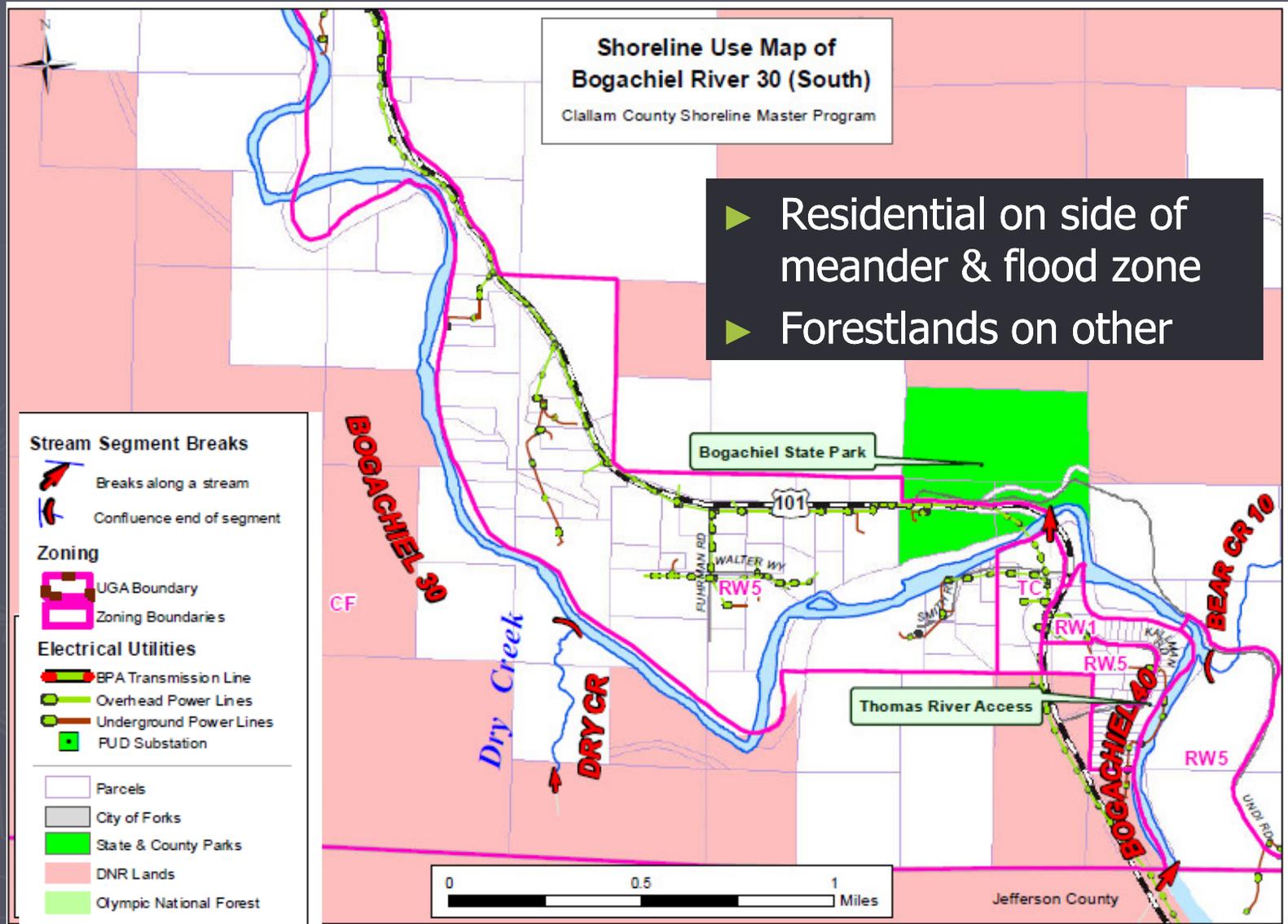
Shoreline Use Map of Bogachiel River 30 (North)
Clallam County Shoreline Master Program

BOGACHIEL 30: Proposed New Reach— Upstream portion



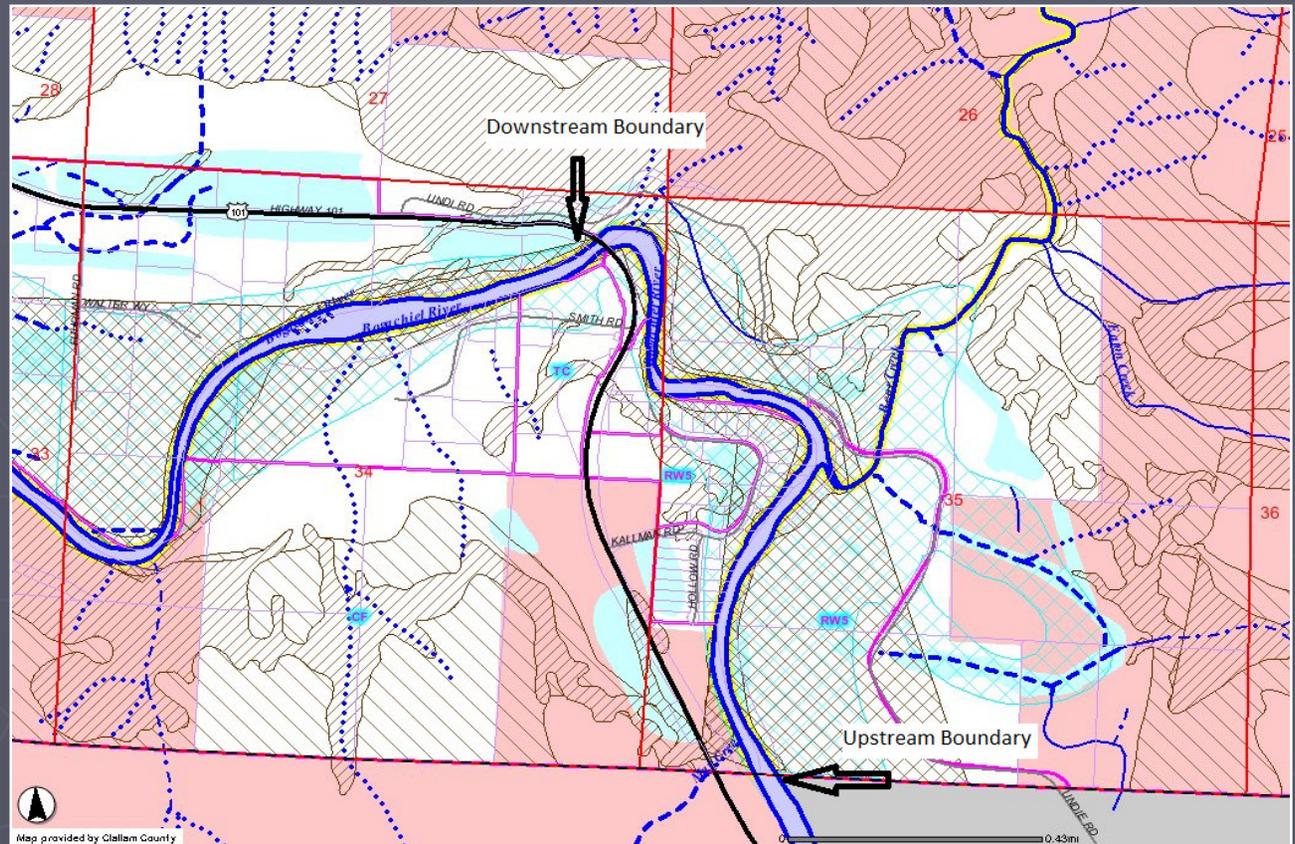
Meander hazard
FEMA Flood zone

BOGACHIEL 30: Proposed New Reach— Upstream portion

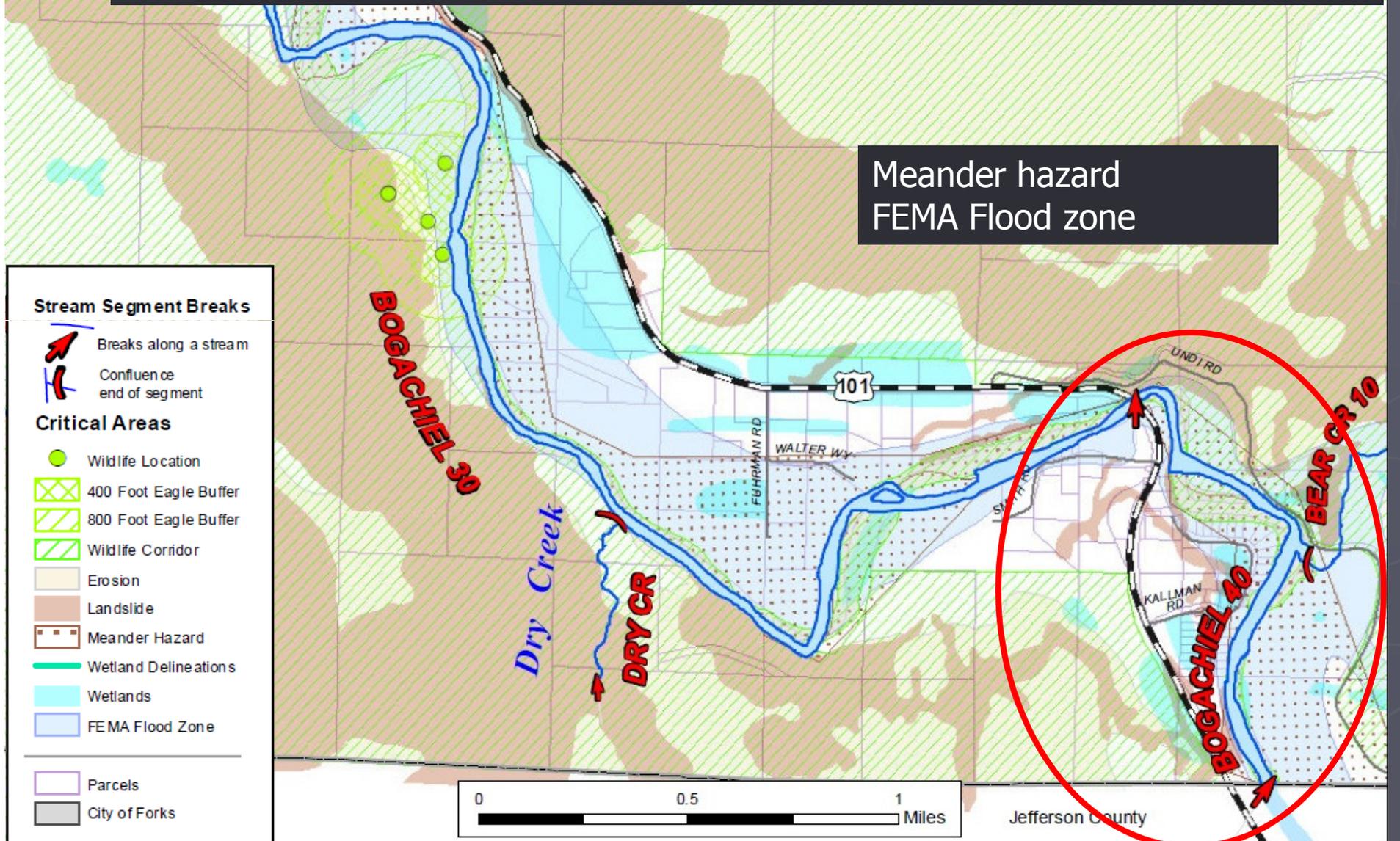


BOGACHIEL 40: Proposed New Reach

- ▶ Light residential & forestry
- ▶ Riparian cover:
 - 92.5% closed canopy
 - 4.2% other veg
 - 3.3% non-forest
- ▶ Current: Rural
- ▶ Retain Rural



BOGACHIEL 40: Proposed New Reach (Closeup on next slide)

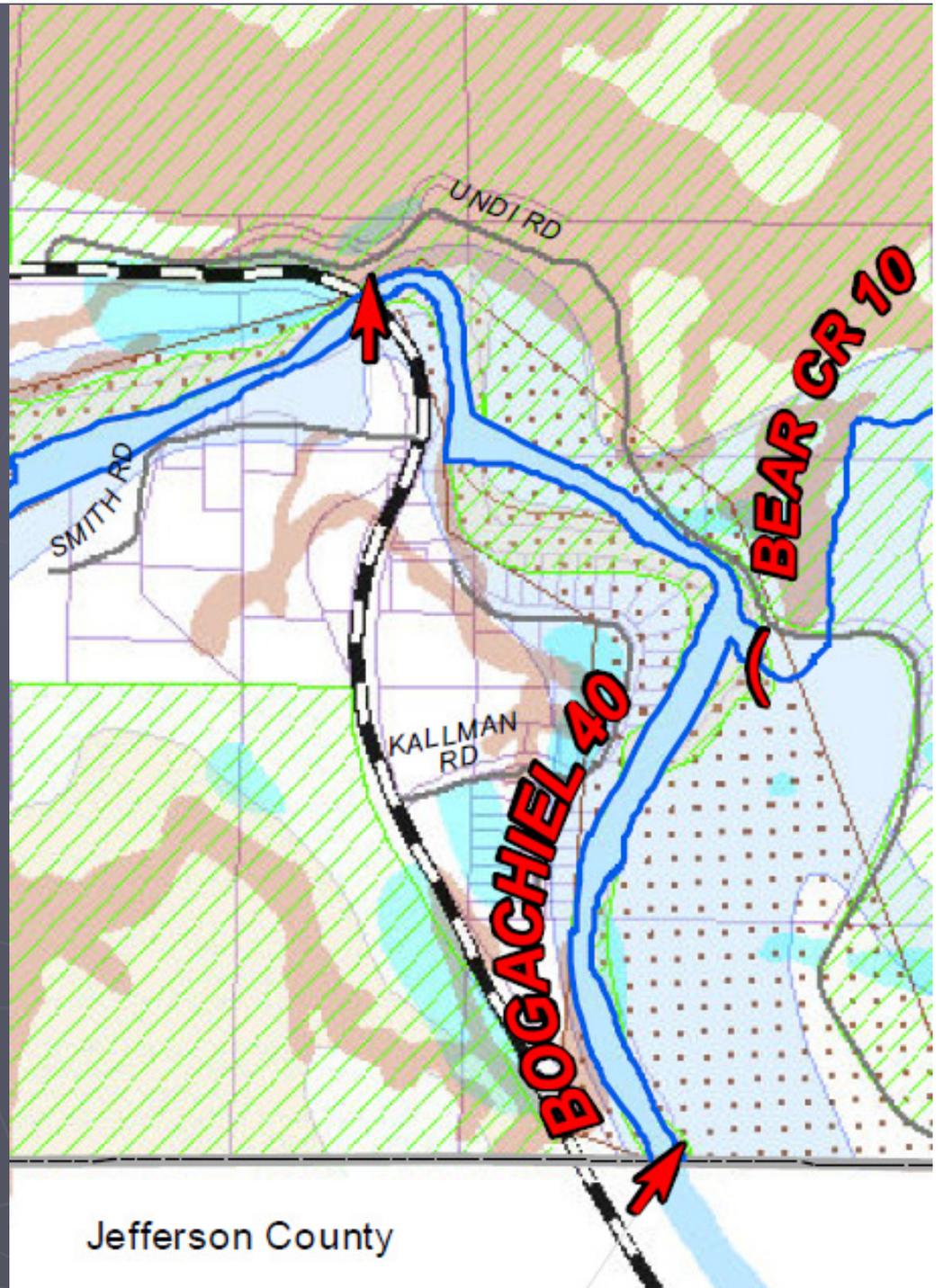


Stream Segment Breaks

-  Breaks along a stream
-  Confluence end of segment

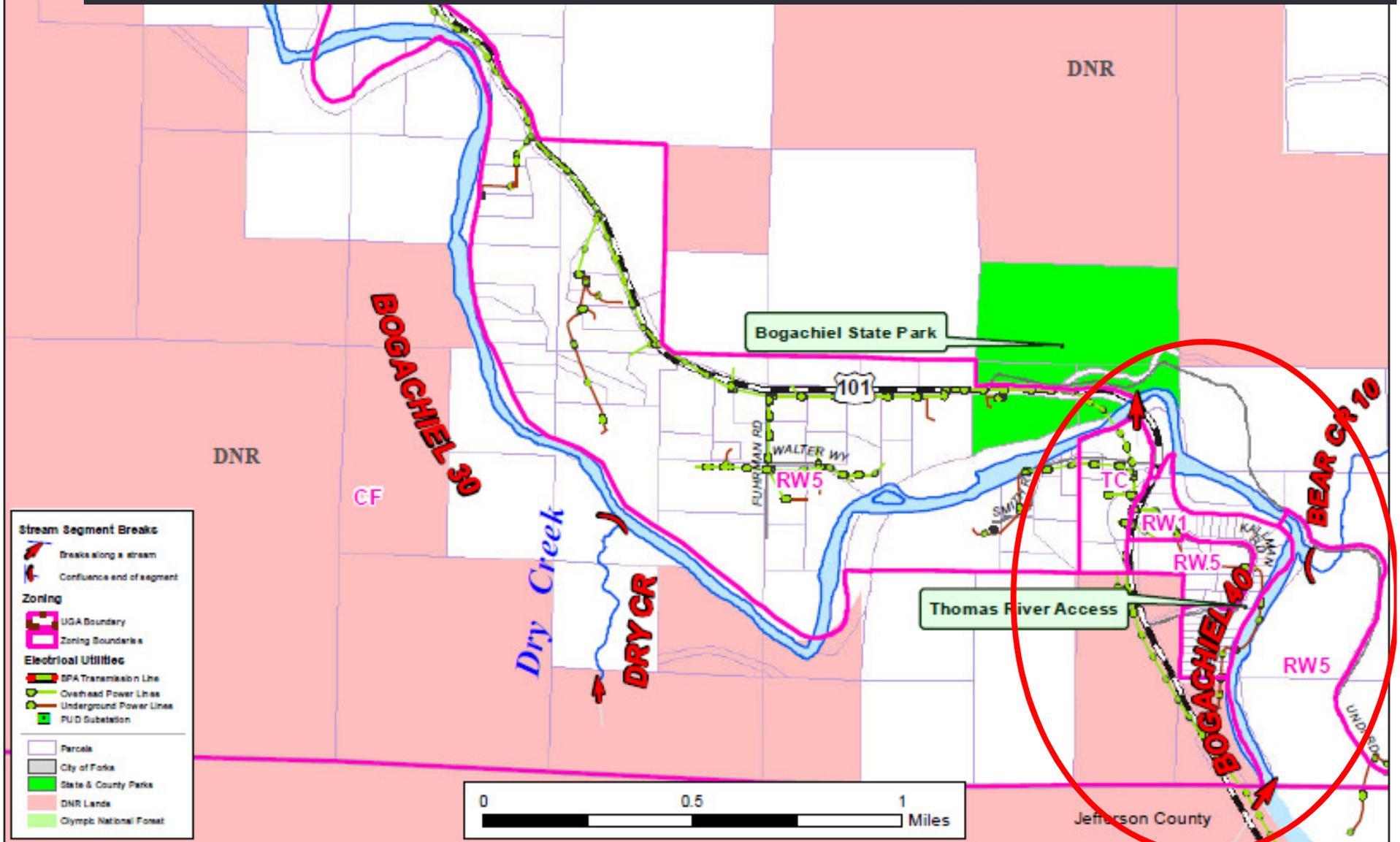
Critical Areas

-  Wildlife Location
-  400 Foot Eagle Buffer
-  800 Foot Eagle Buffer
-  Wildlife Corridor
-  Erosion
-  Landslide
-  Meander Hazard
-  Wetland Delineations
-  Wetlands
-  FEMA Flood Zone
-  Parcels
-  City of Forks

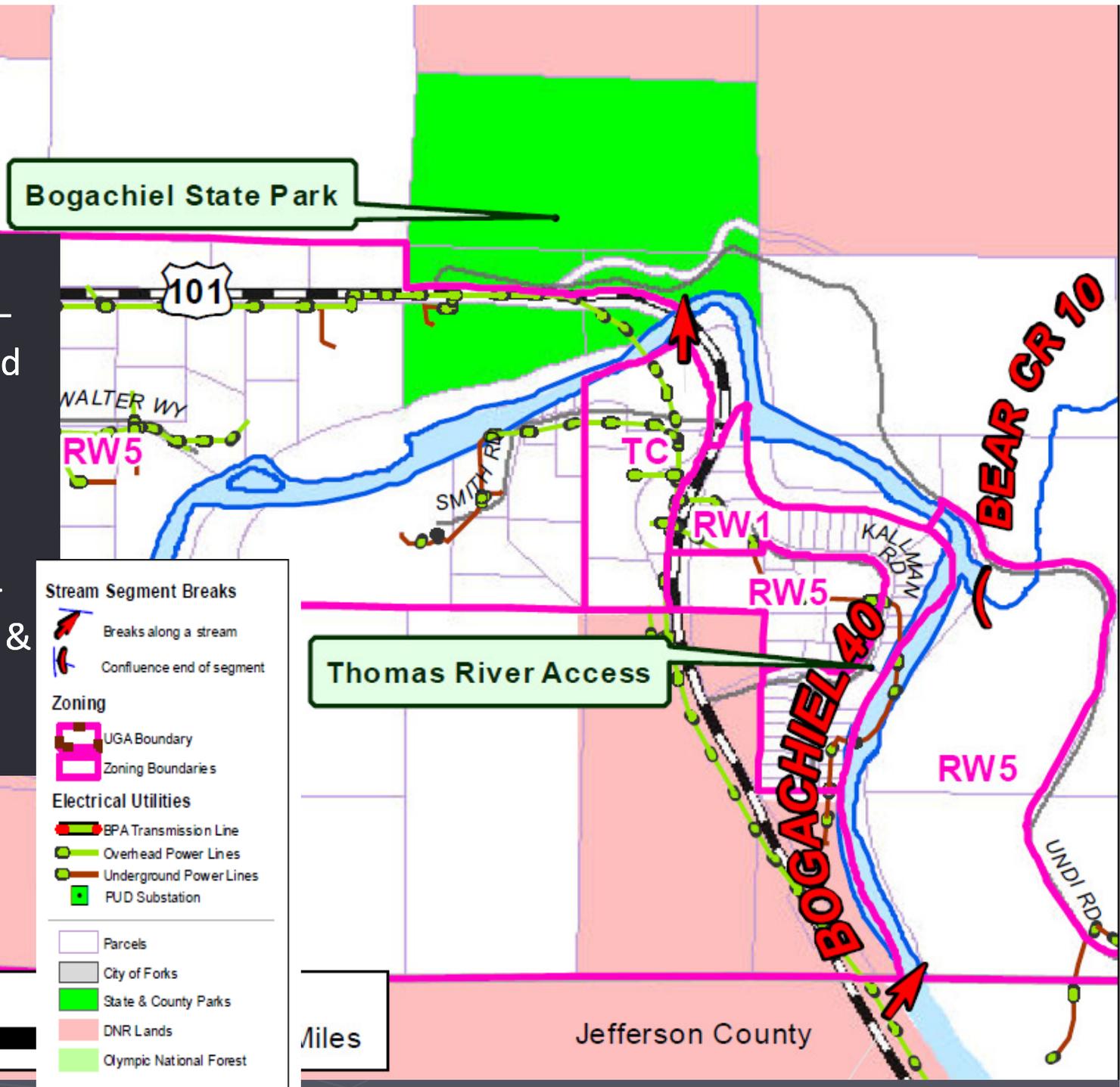


Jefferson County

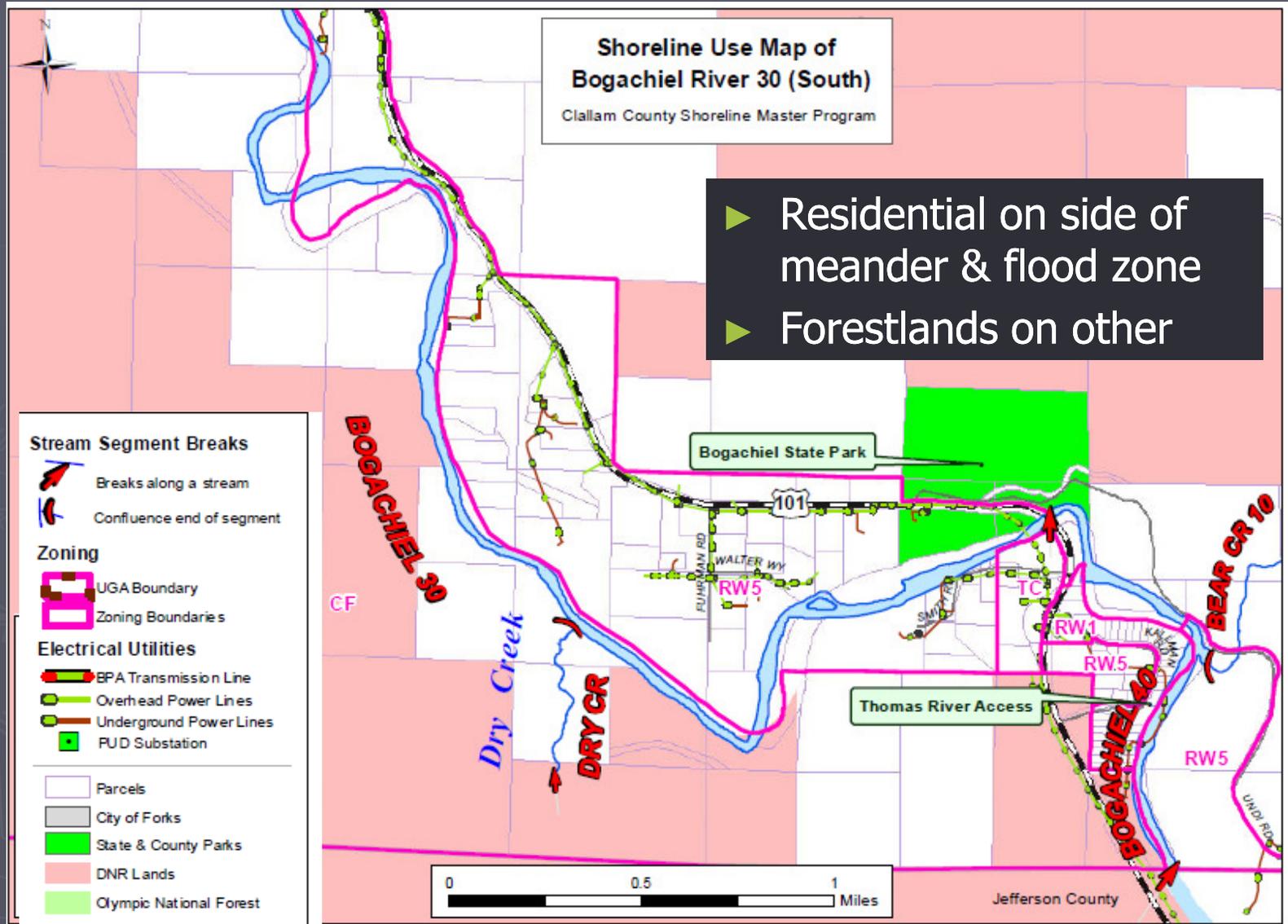
BOGACHIEL 40: Proposed New Reach (Closeup on next slide)



- ▶ Residential on west shoreline – meander & flood zone
- ▶ Residential & forestlands on east shoreline – larger meander & flood zone

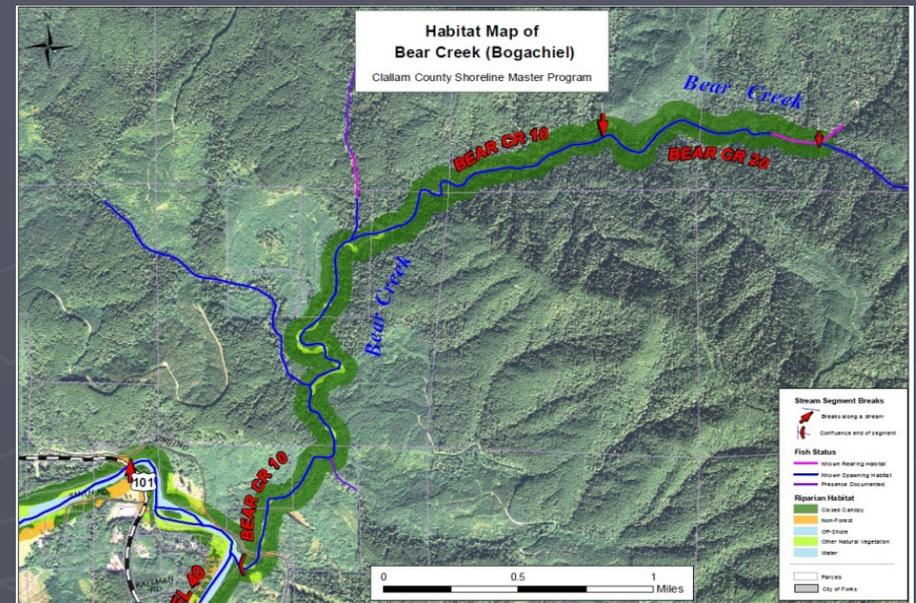
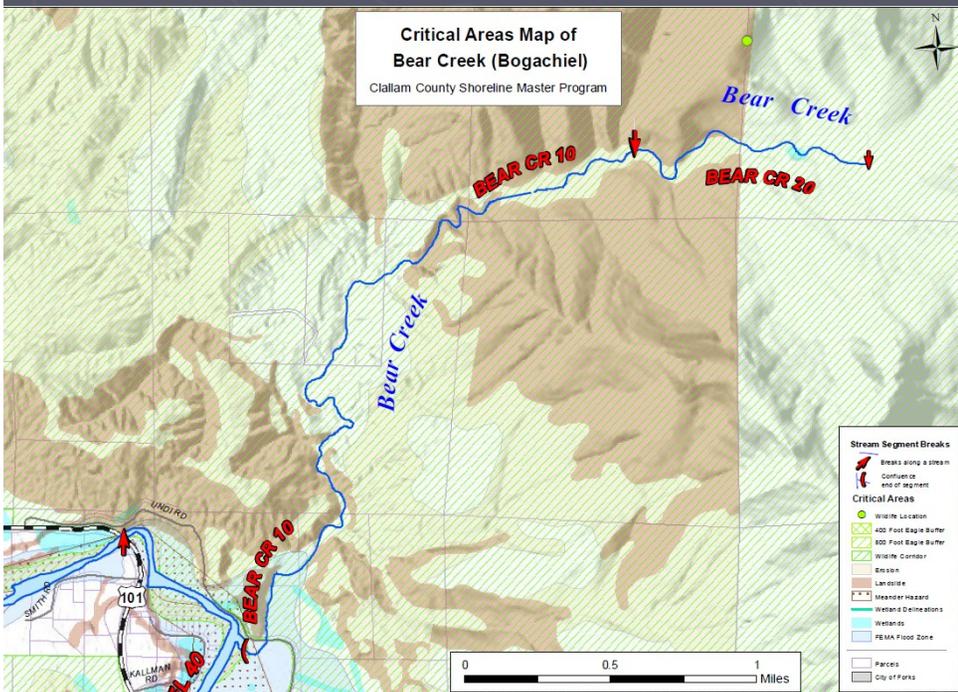
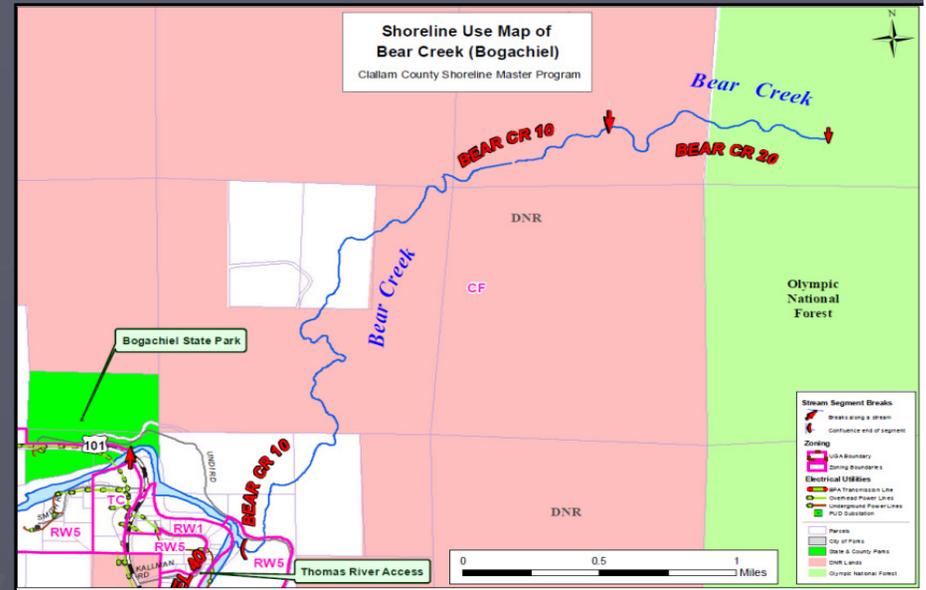


BOGACHIEL 30: Proposed New Reach— Upstream portion



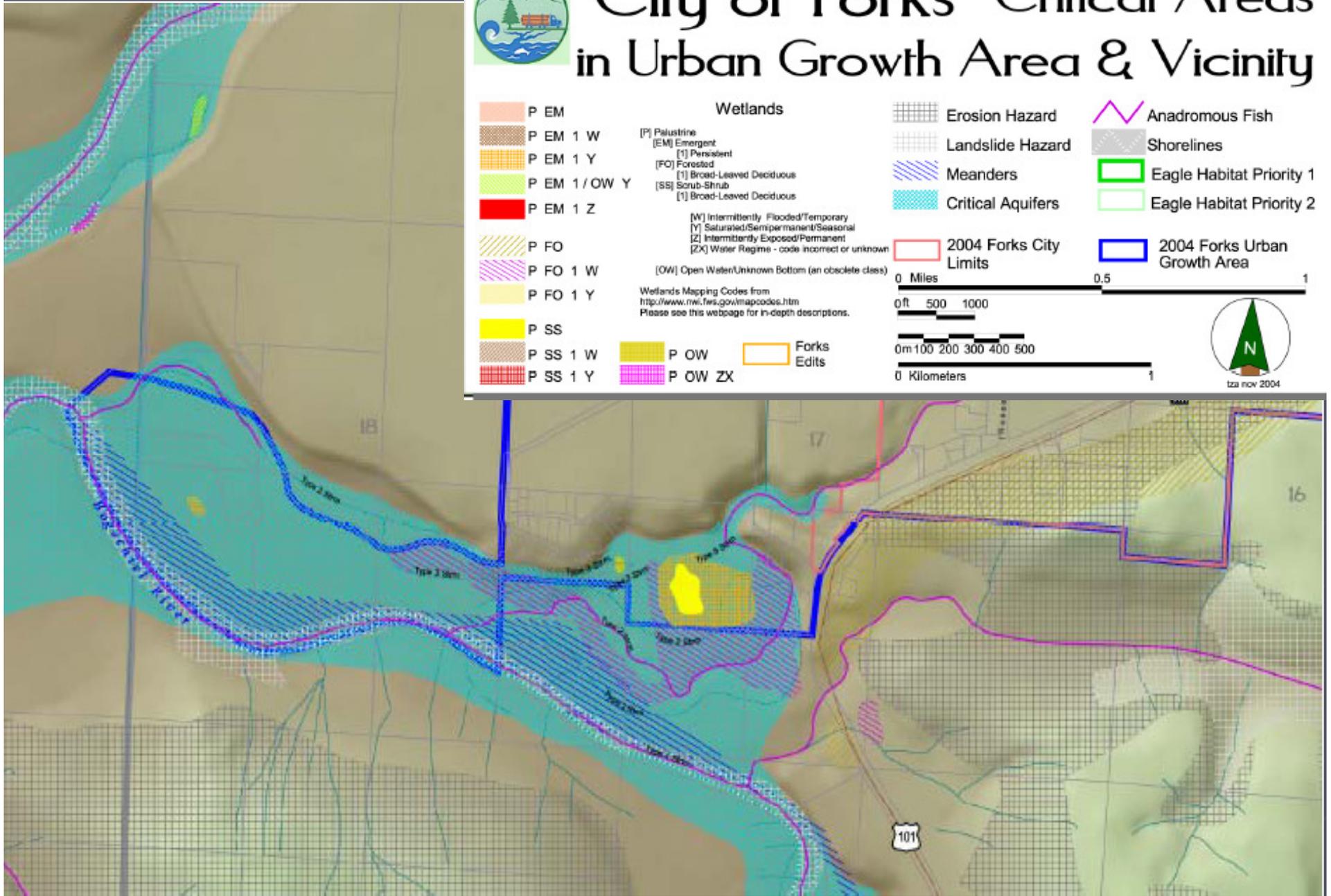
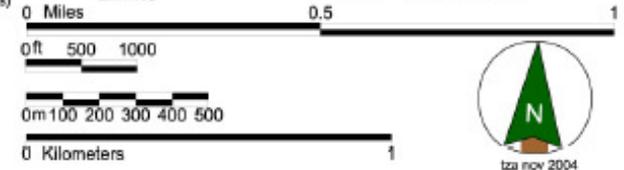
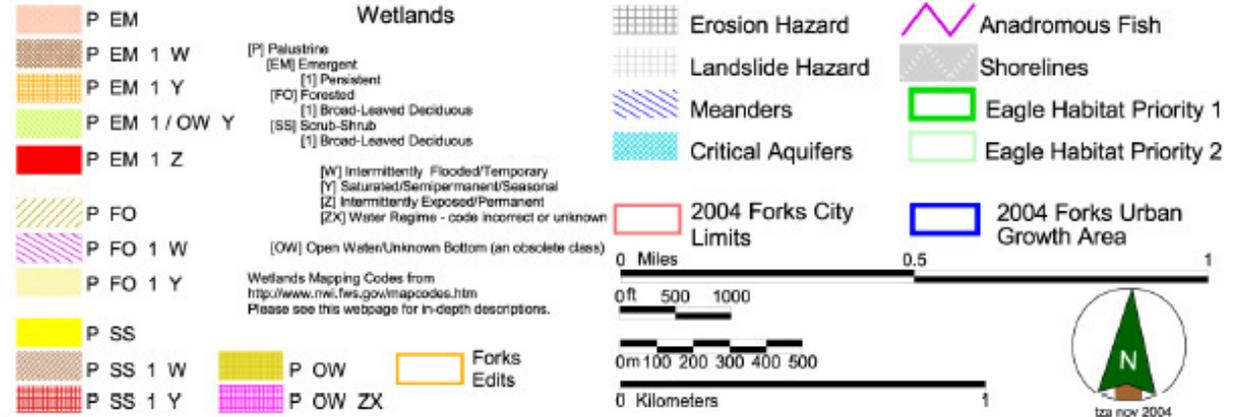
Bear – Bogachiel 10 & 20

- ▶ Mostly forestry
- ▶ Riparian cover:
 - 96% & 100% closed canopy
 - 3.1% & 0% other veg
 - 0.1% & 0% non-forest
- ▶ Current: rural & undesignated
- ▶ Proposed conservancy

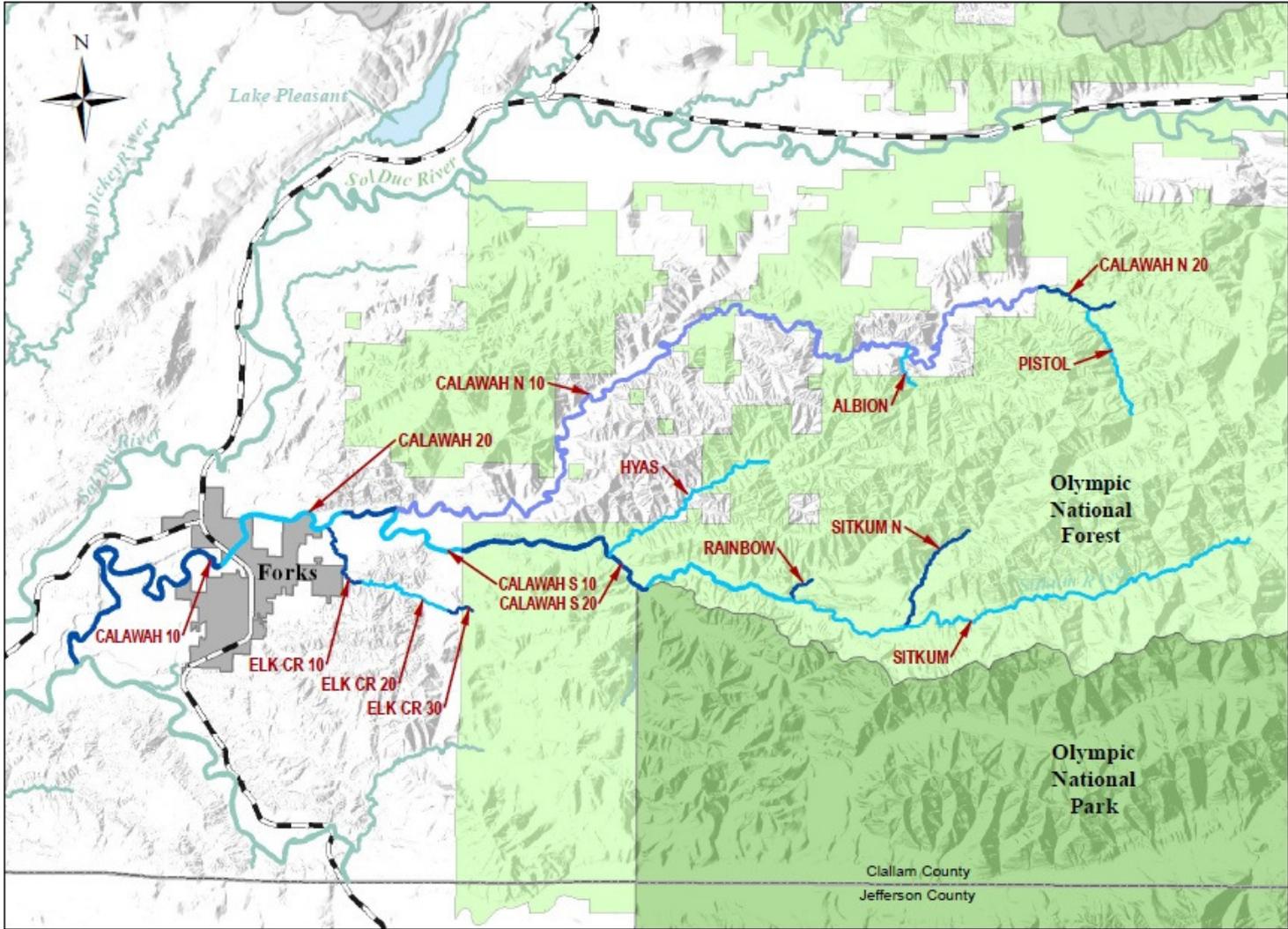




City of Forks Critical Areas in Urban Growth Area & Vicinity



Calawah/Sitkum



Calawah/Sitkum

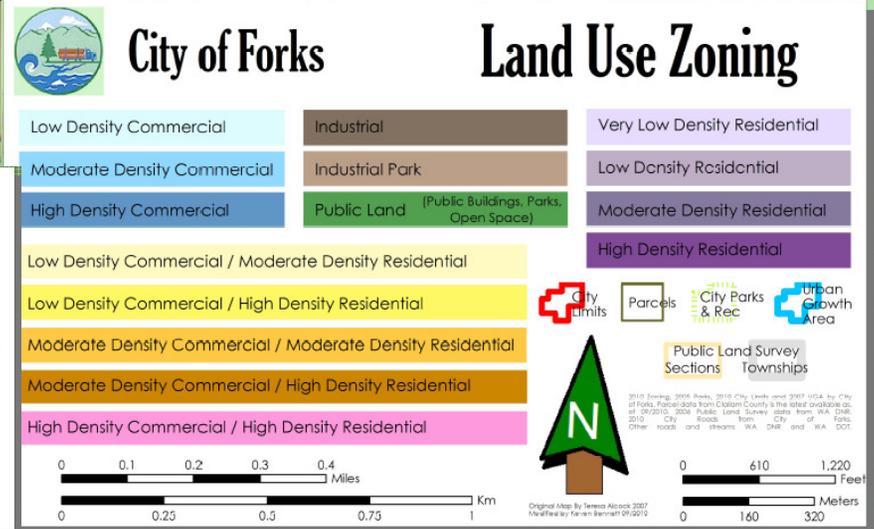
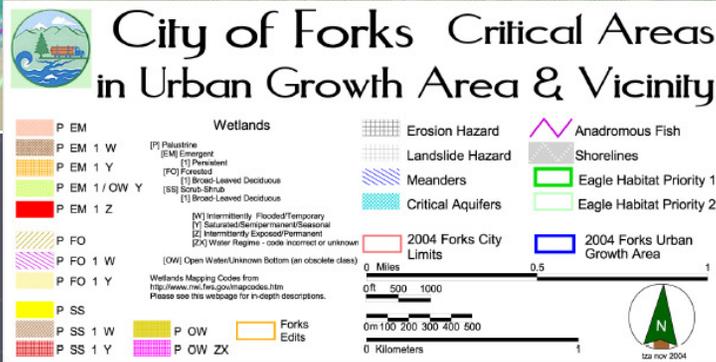
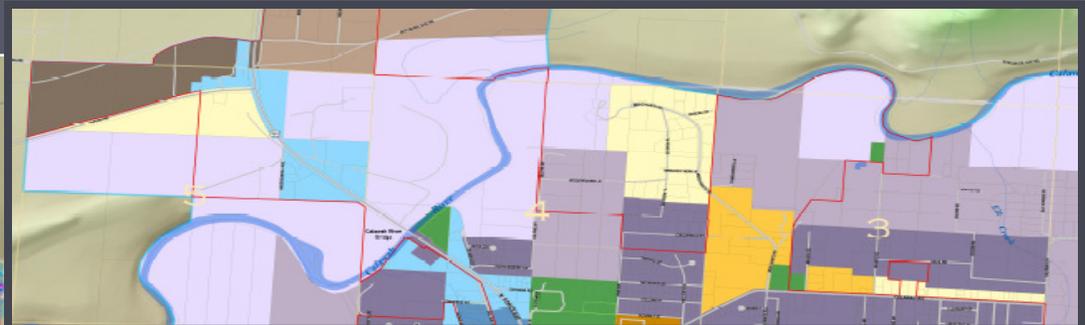
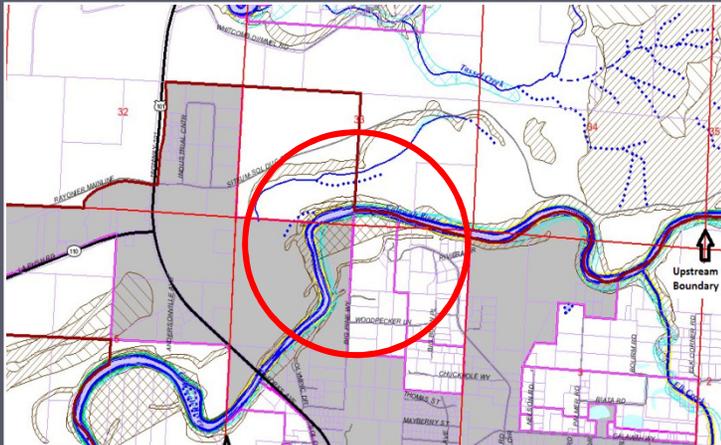
- ▶ Most of system flows through ONF lands no longer intensively logged
- ▶ 1 mile flows through FUGA: currently rural designation for most
- ▶ Salmon runs are healthy
- ▶ Elk Creek, Sitkum, & North Fork sub-basins studied by WSC
- ▶ Key spawning and rearing habitat
- ▶ Riparian: 83.4% closed canopy; 15.2% other natural vegetation, and 4.5% non-forest

Calawah/Sitkum Key Reaches

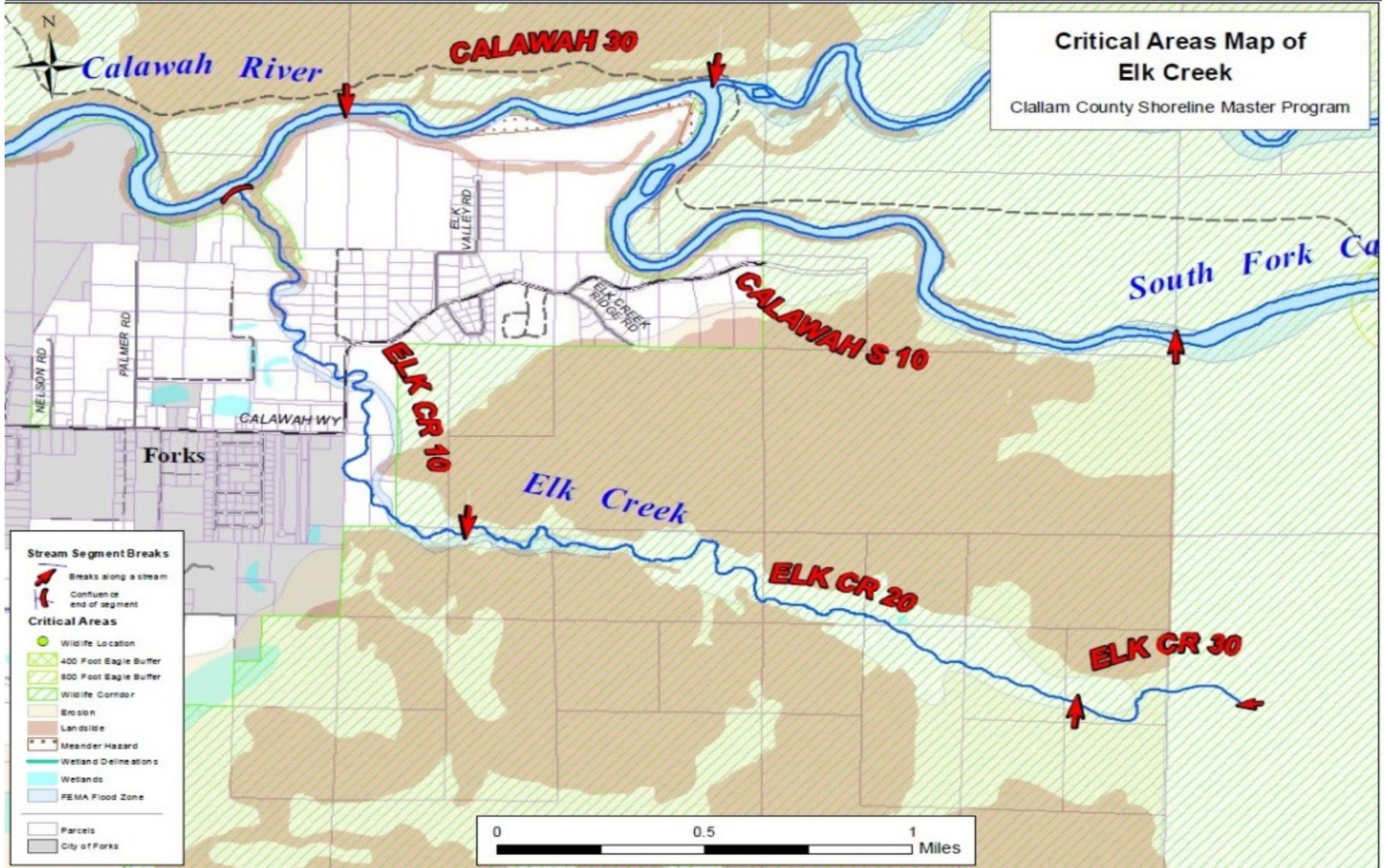
- ▶ CALAWAH 20– Oxbow area inside FUGA focus
- ▶ ELK 10 – Boundary change & Conservancy proposed
- ▶ ELK 20 – Boundary change & Natural Designation Proposed
- ▶ Sitkum, NF Sitkum, Rainbow & Lost– Natural Designation proposed

CALAWAH 20

- ▶ Oxbow-- wide floodplain, meander zone
- ▶ Rural designation
- ▶ Landowner questions data, provides study
- ▶ No change, but protection if needed

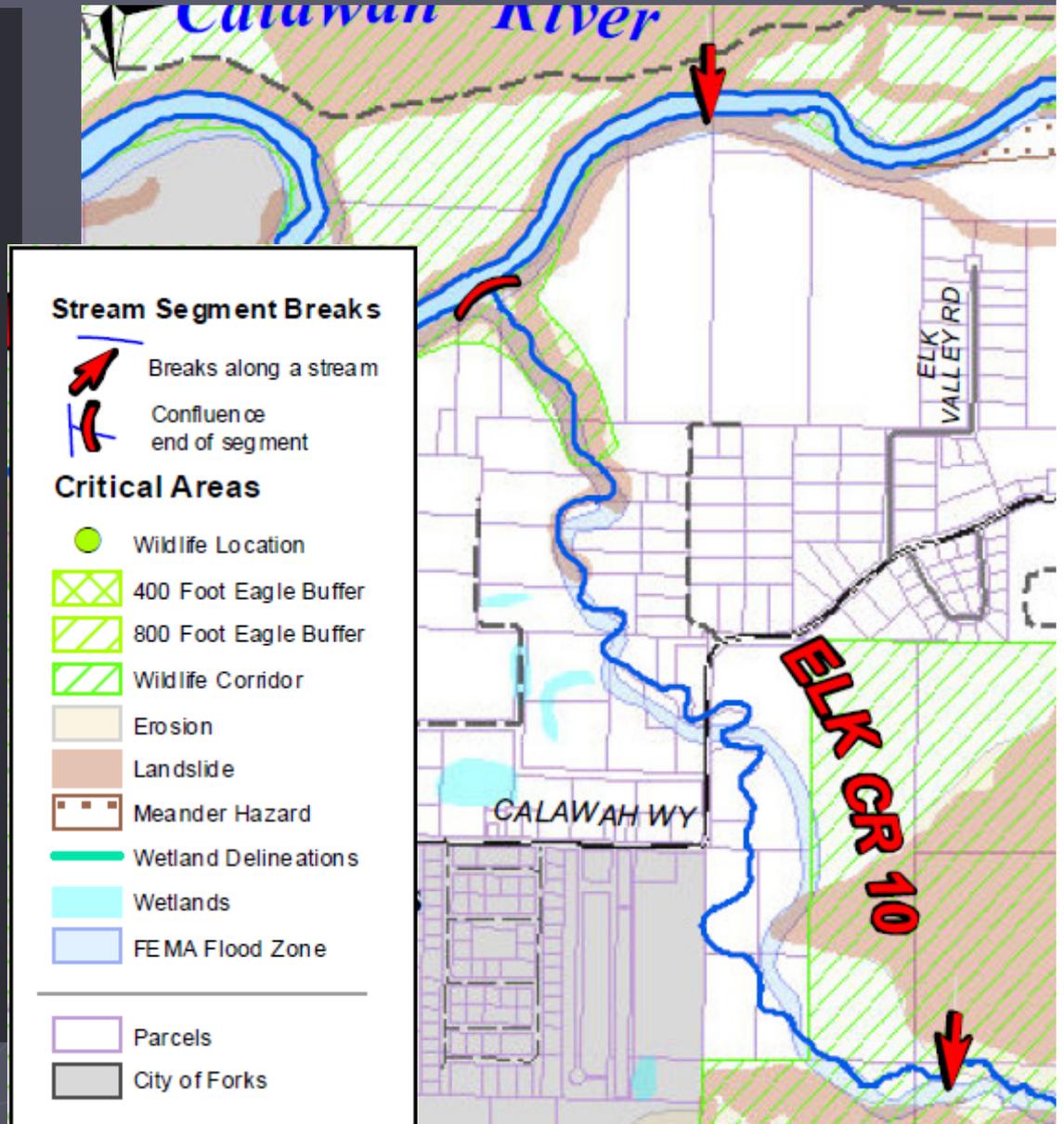


ELK 10 & 20– closeups next slides



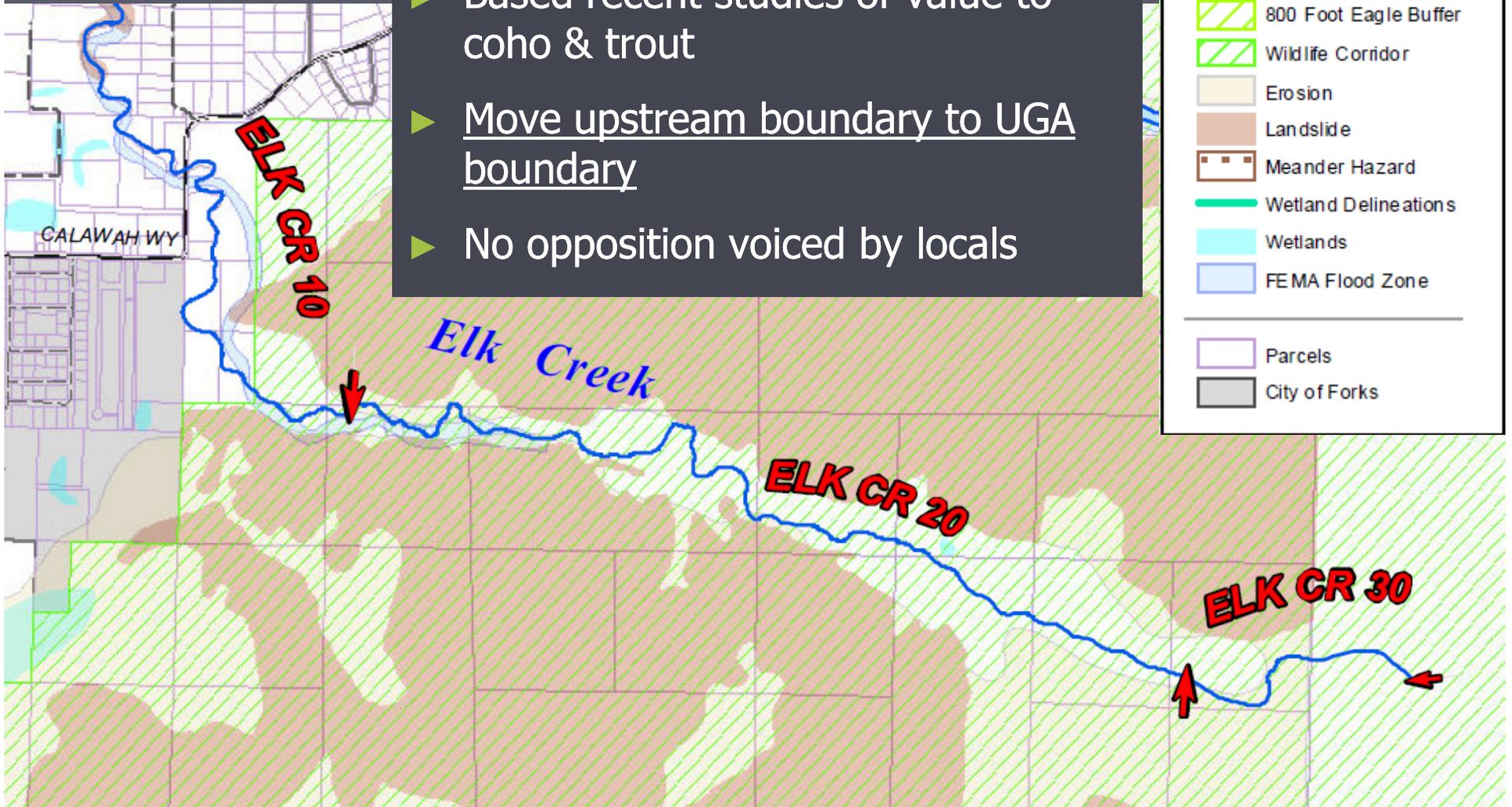
ELK 10 Closeup CA

- ▶ Landslide and FEMA flood zone
- ▶ Current- Rural
- ▶ WSC proposal– Conservancy
 - Based on recent studies of value to coho & trout
- ▶ Move upstream boundary to UGA boundary
- ▶ Locals oppose & question data
- ▶ New designation category?
 - “Scenic residential?”



ELK 20

- ▶ FEMA flood zone
- ▶ Owned by Land Trust
- ▶ WSC proposed- Break change & natural designation
- ▶ Based recent studies of value to coho & trout
- ▶ Move upstream boundary to UGA boundary
- ▶ No opposition voiced by locals



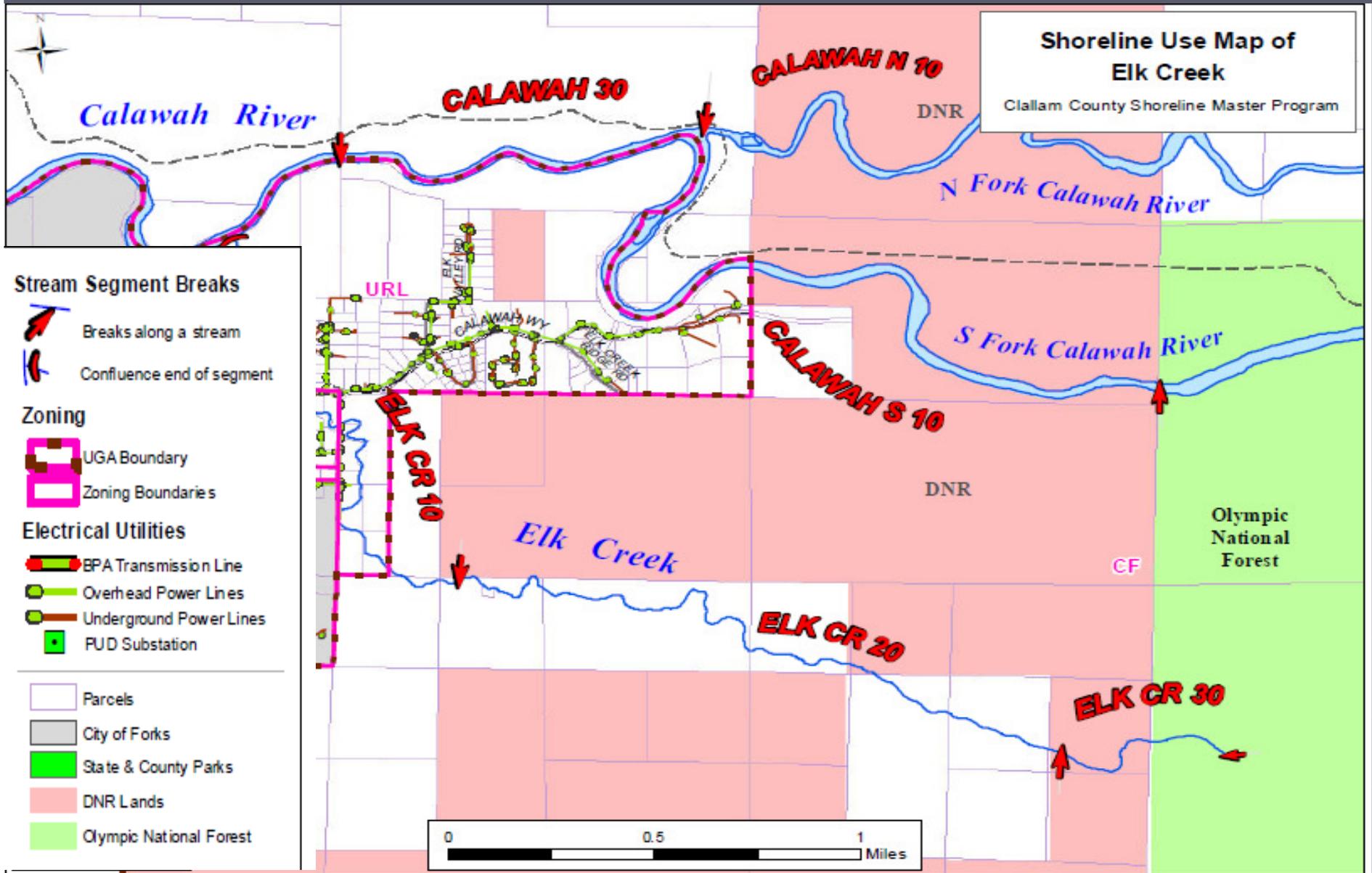
Stream Segment Breaks

-  Breaks along a stream
-  Confluence end of segment

Critical Areas

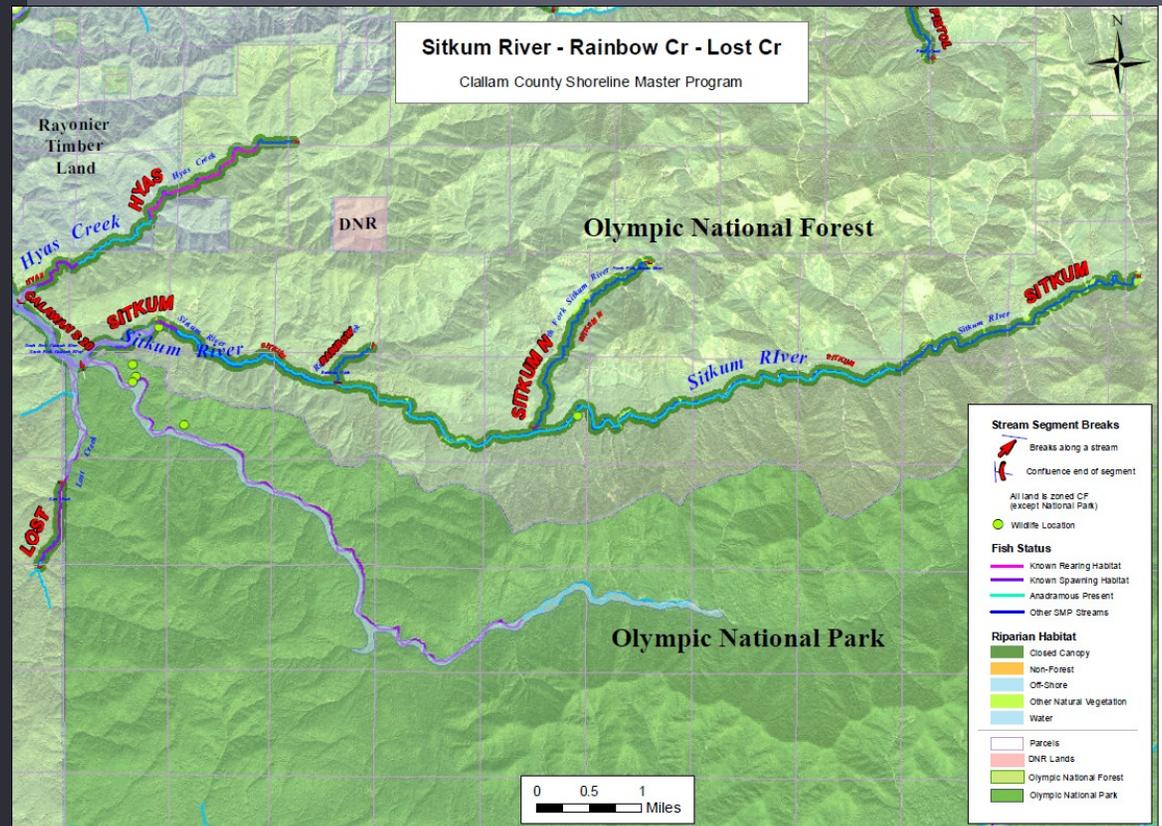
-  Wildlife Location
-  400 Foot Eagle Buffer
-  800 Foot Eagle Buffer
-  Wildlife Corridor
-  Erosion
-  Landslide
-  Meander Hazard
-  Wetland Delineations
-  Wetlands
-  FEMA Flood Zone
-  Parcels
-  City of Forks

ELK 10 & 20 Zoning

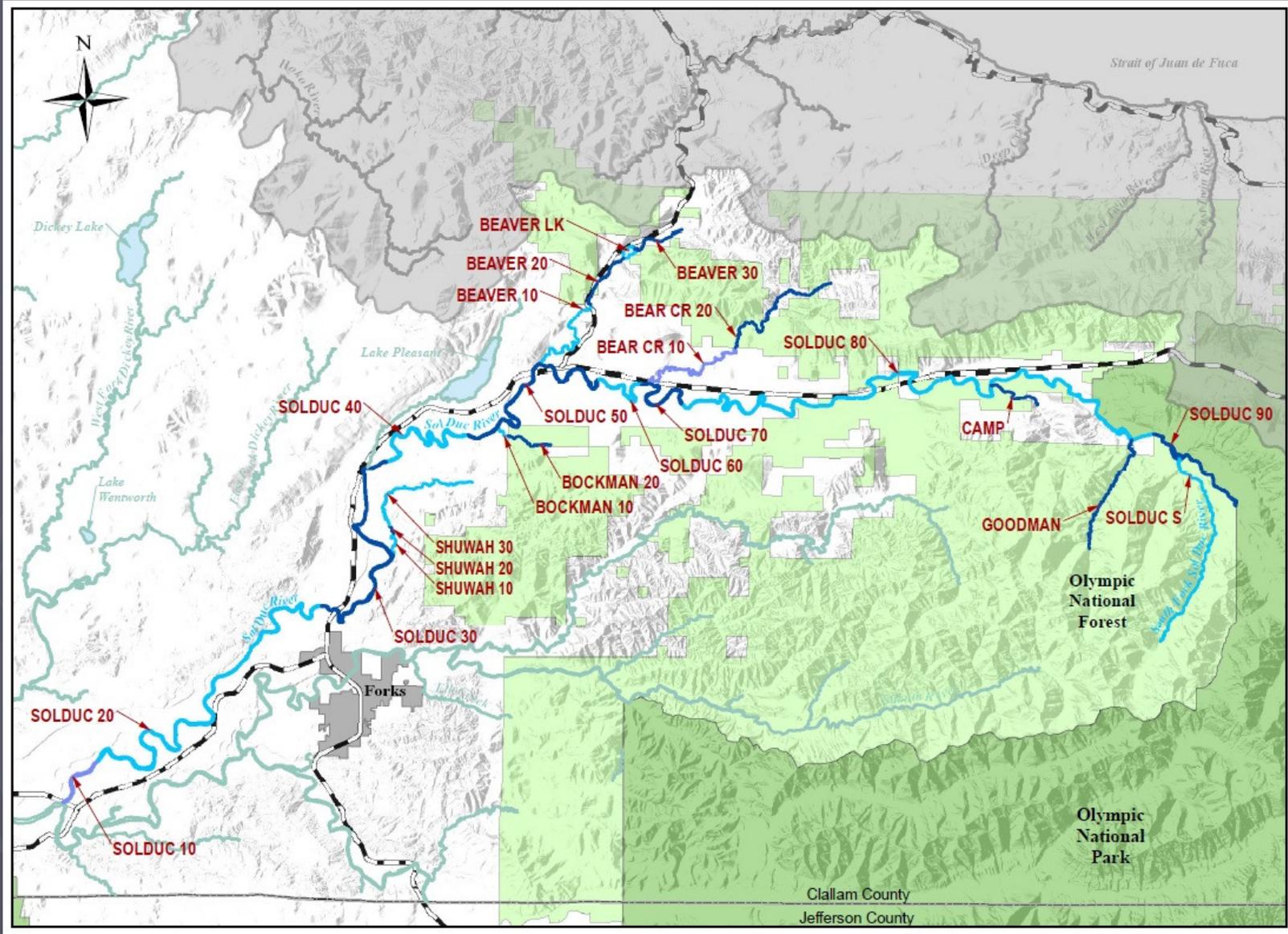


Sitkum, NF Sitkum, Rainbow & Lost

- ▶ Riparian:
 - 92.7% closed canopy;
 - 7.1% other natural vegetation, and
 - 0.1% non-forest
- ▶ Federal ownership
- ▶ Much of landscape in old growth— late successional reserve status
- ▶ WSC proposed Natural designation
- ▶ No local opposition voiced
- ▶ May offset some loosening of restrictions



Sol Duc River & Tributaries

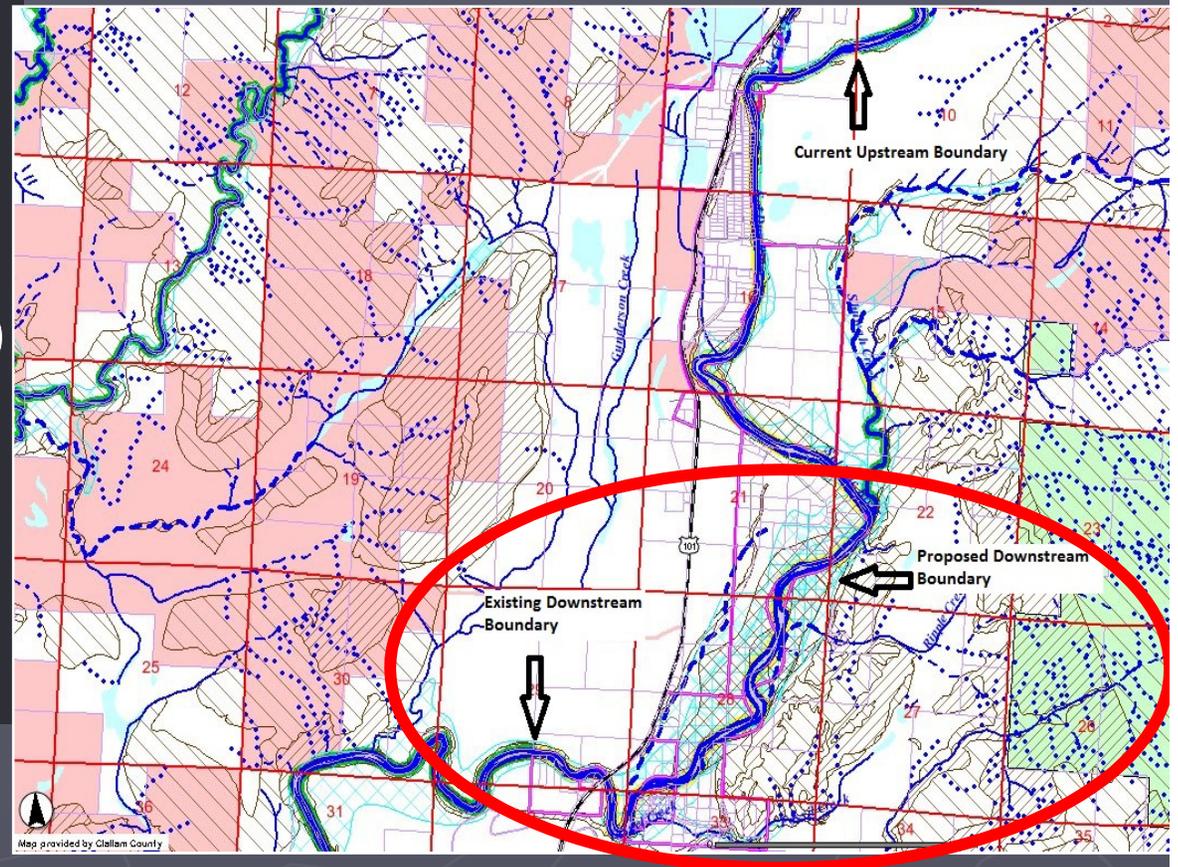


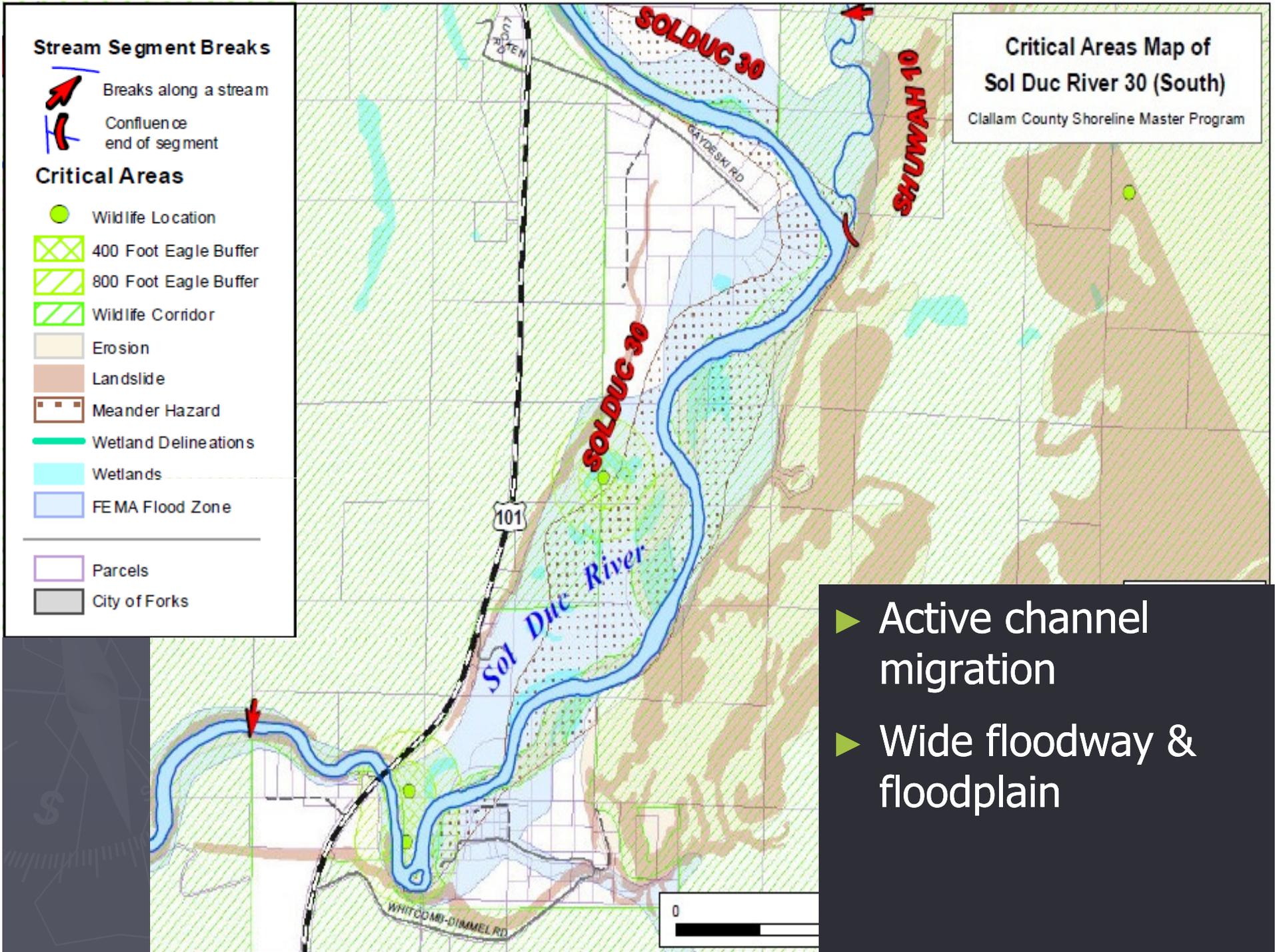
Sol Duc River & Tributaries

- ▶ Mainstem = 64.9 miles long
- ▶ Divided into 9 reaches
- ▶ Major SMP Tributaries: Shuwah, Lake, Bockman, Beaver, Bear, Camp, Goodman, and the South Fork of the Sol Duc.
- ▶ Lake addressed with Lake Pleasant
- ▶ Middle reaches: more residential development:
- ▶ Upper and lower: mostly forestlands

SOL DUC 30

- ▶ Current: Rural
- ▶ Proposed: Shift into downstream "conservancy" reach
- ▶ One of most active channel migration zones in WRIA 20
- ▶ Very wide floodway & floodplain
- ▶ Zoned for residences





- ▶ Active channel migration
- ▶ Wide floodway & floodplain

Stream Segment Breaks

-  Breaks along a stream
-  Confluence end of segment

Zoning

-  UGA Boundary
-  Zoning Boundaries

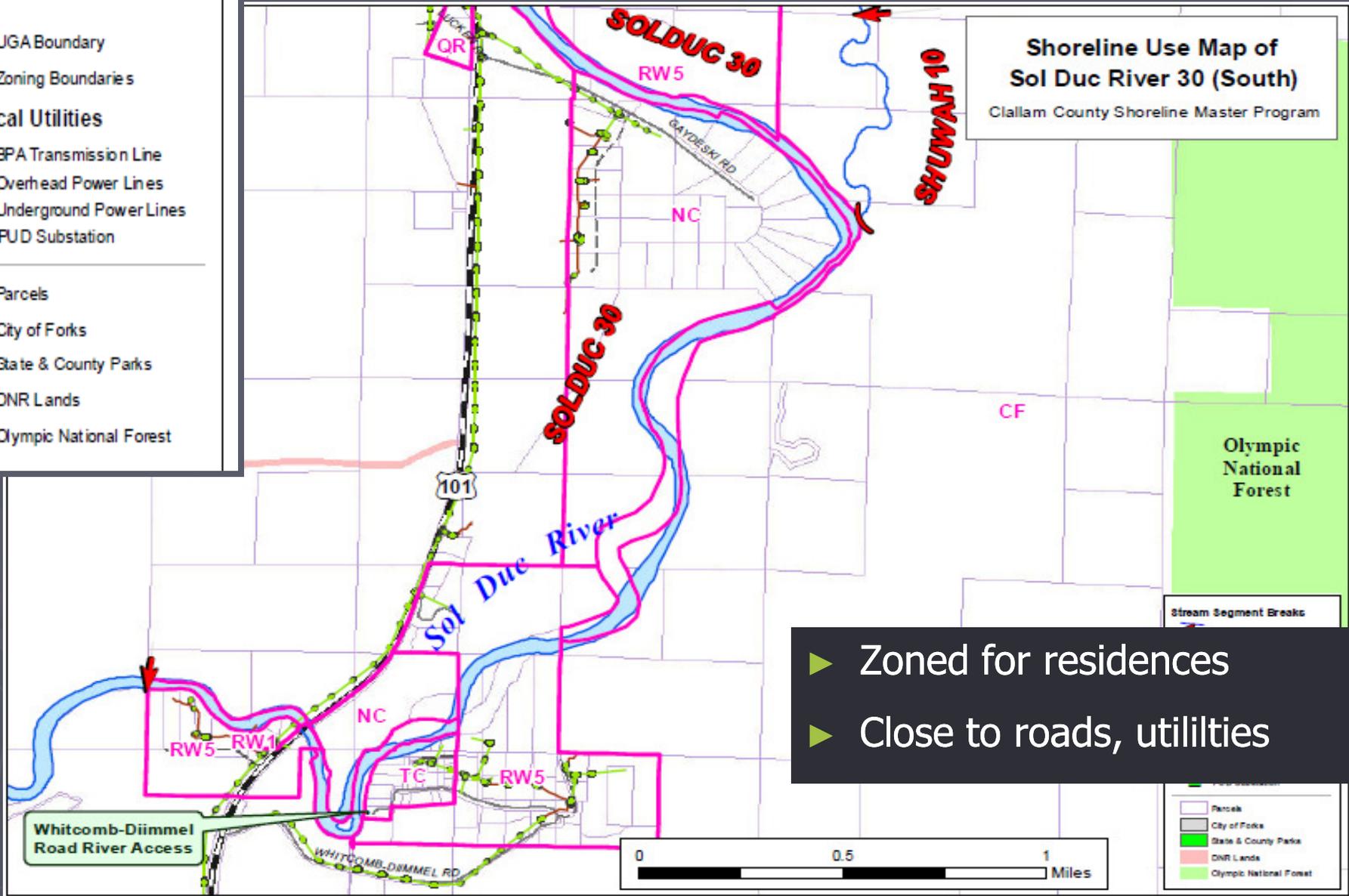
Electrical Utilities

-  BPA Transmission Line
-  Overhead Power Lines
-  Underground Power Lines
-  PUD Substation

-  Parcels
-  City of Forks
-  State & County Parks
-  DNR Lands
-  Olympic National Forest

Shoreline Use Map of Sol Duc River 30 (South)

Clallam County Shoreline Master Program



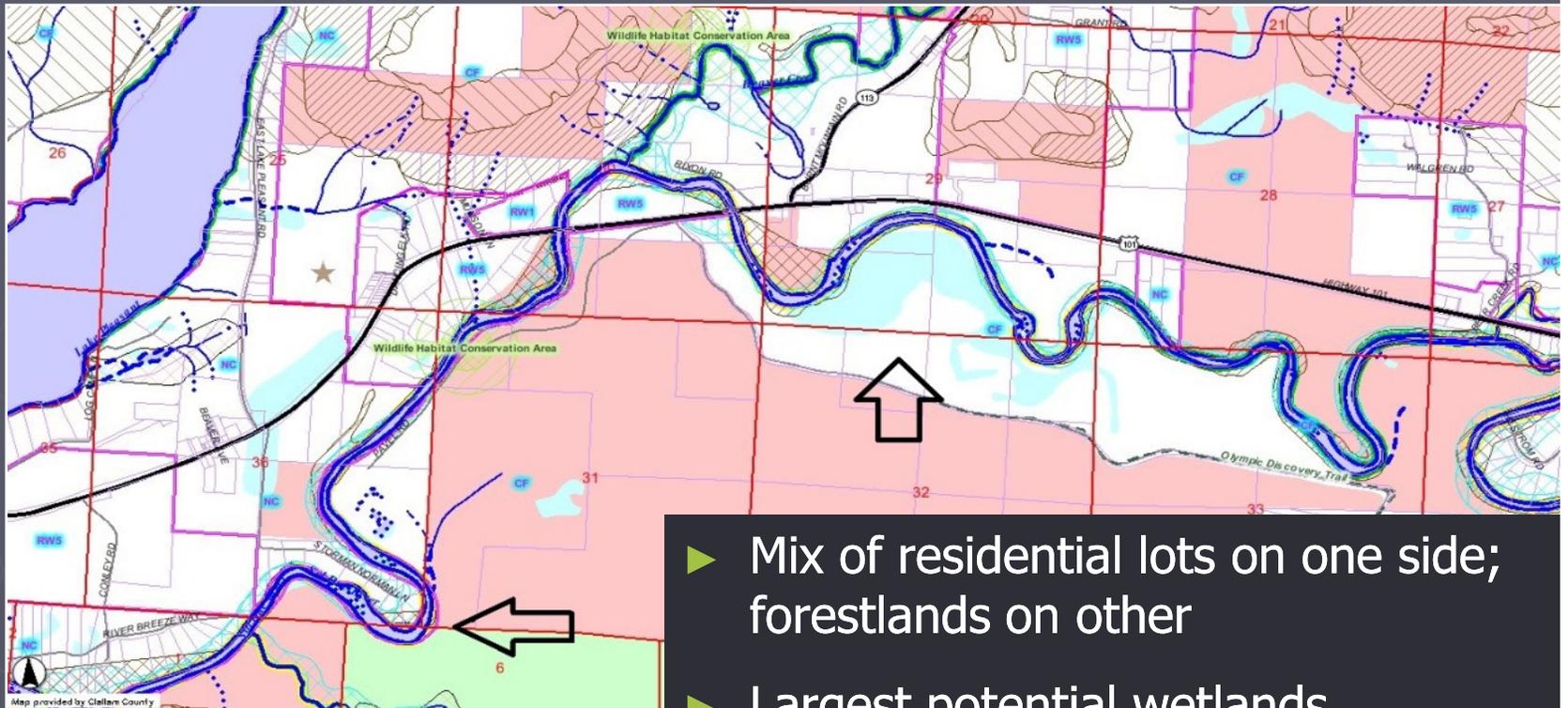
▶ Zoned for residences
▶ Close to roads, utilities

Whitcomb-Diimmel Road River Access

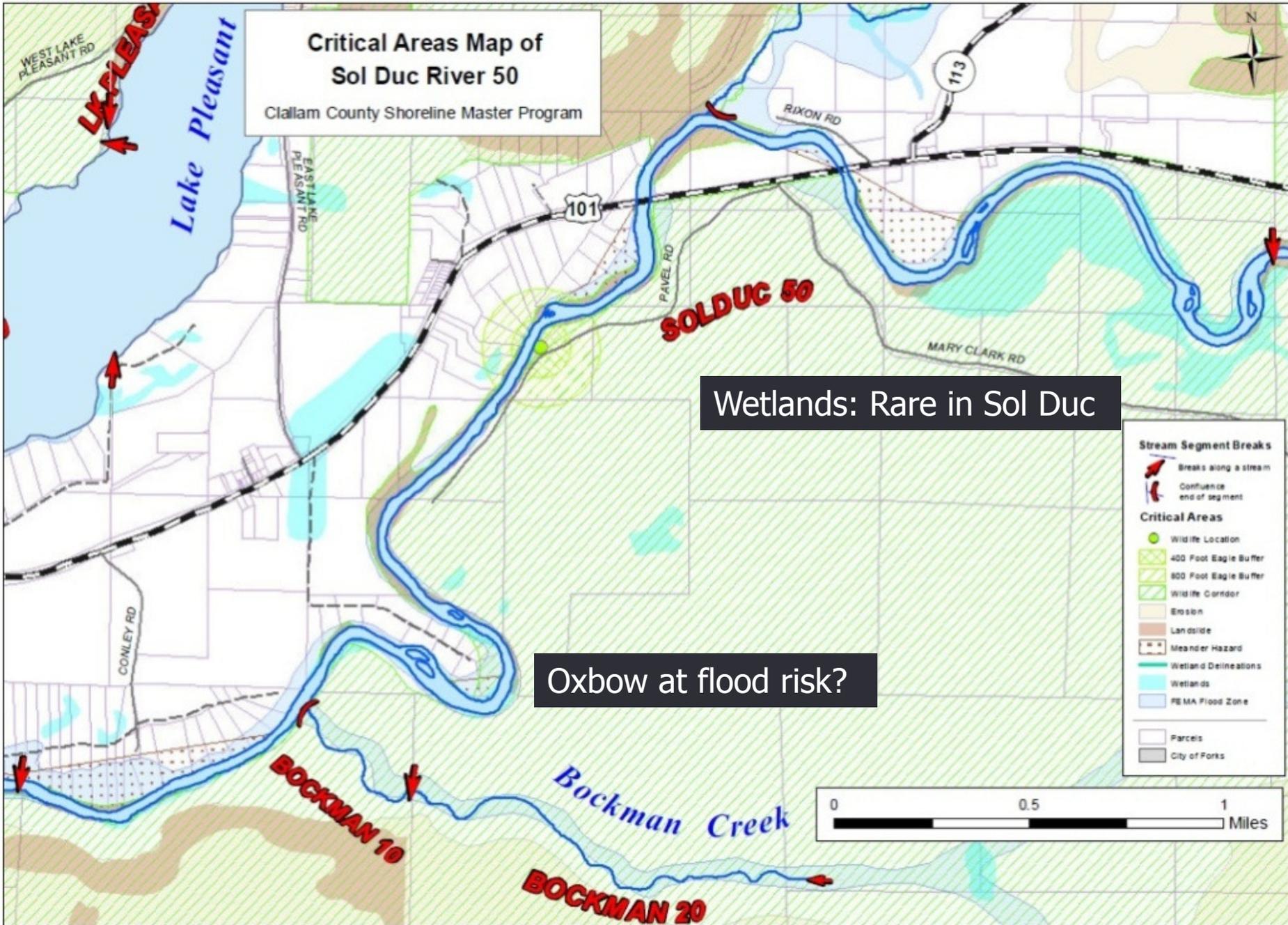
Stream Segment Breaks

-  Parcels
-  City of Forks
-  State & County Parks
-  DNR Lands
-  Olympic National Forest

SOL DUC 50

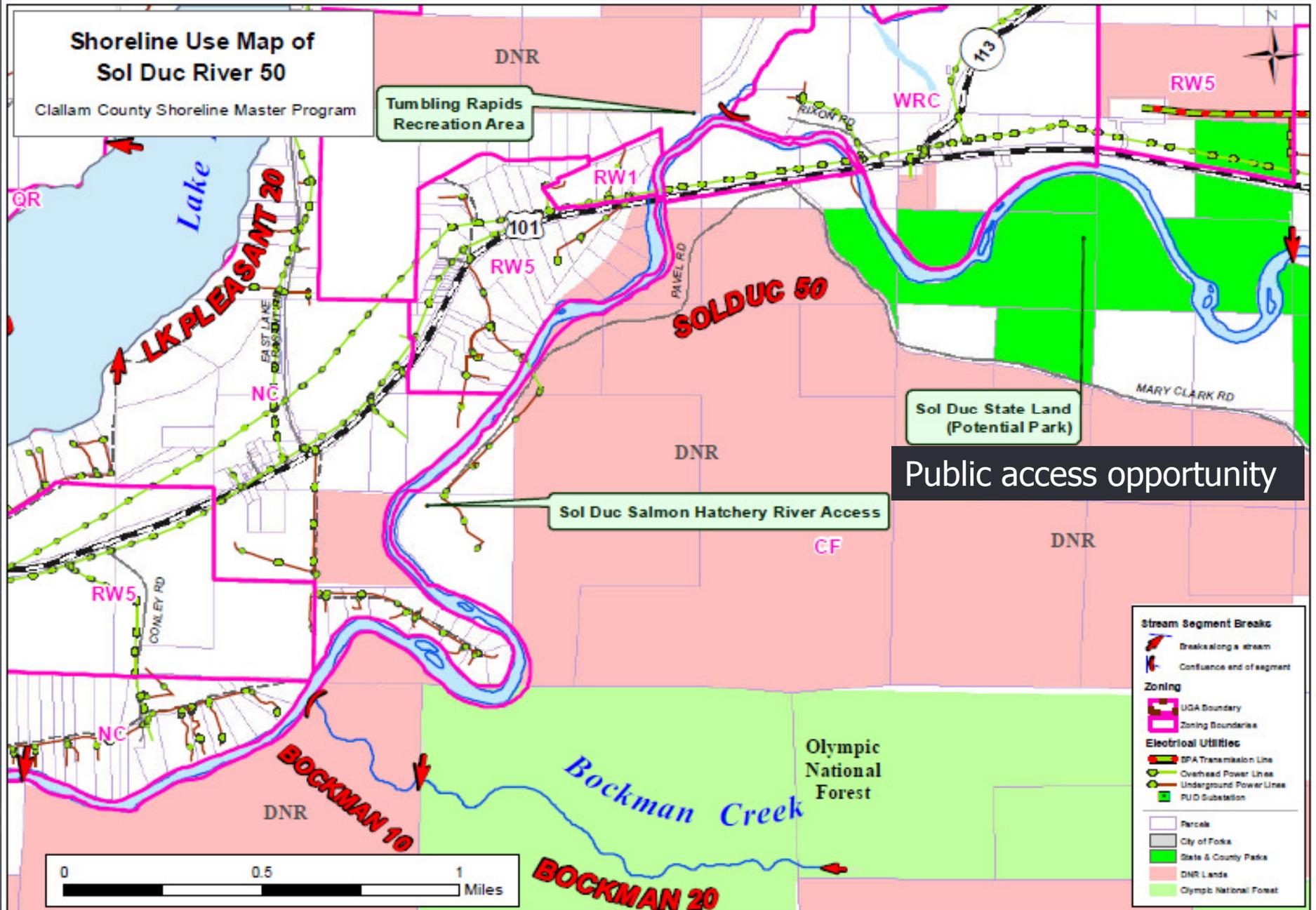


- ▶ Mix of residential lots on one side; forestlands on other
- ▶ Largest potential wetlands complex: rare in Sol Duc
- ▶ Oxbow may become vulnerable in high flows
- ▶ Rural designation appears appropriate



Shoreline Use Map of Sol Duc River 50

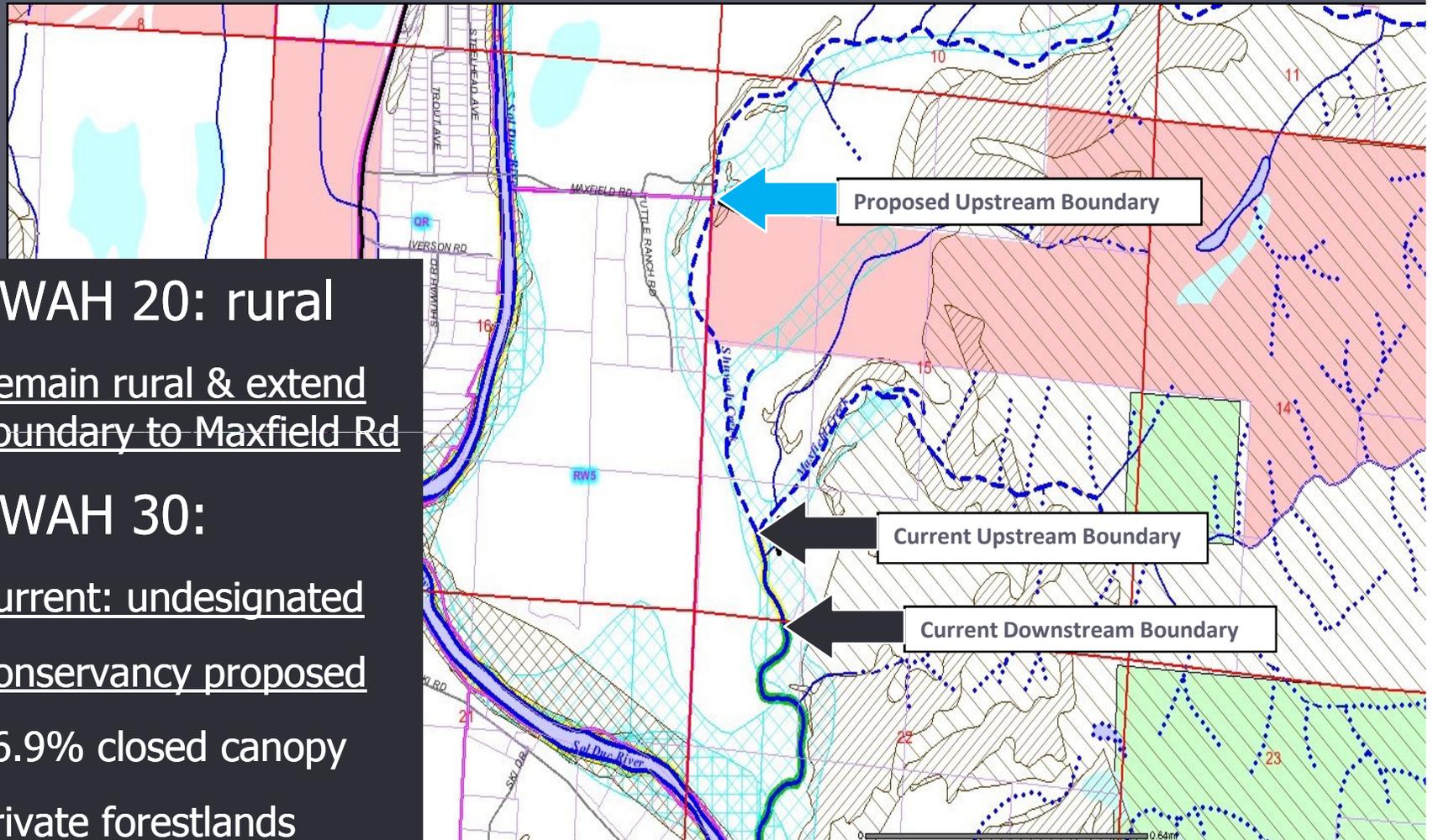
Clallam County Shoreline Master Program



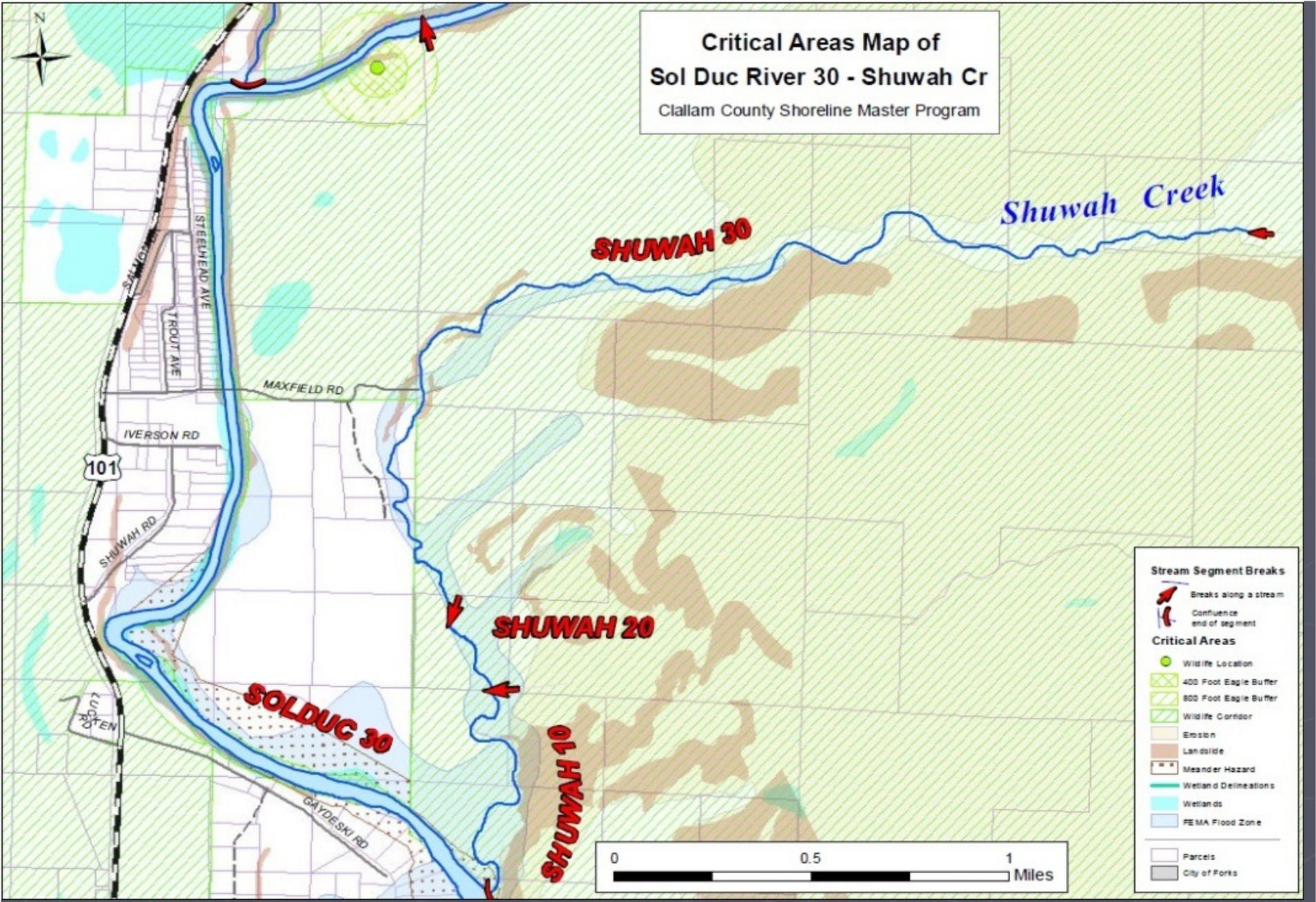
Public access opportunity

Shuwah 20 & 30

- ▶ SHUWAH 20: rural
 - Remain rural & extend boundary to Maxfield Rd
- ▶ SHUWAH 30:
 - Current: undesignated
 - Conservancy proposed
 - 96.9% closed canopy
 - Private forestlands



**Critical Areas Map of
Sol Duc River 30 - Shuwah Cr**
Clallam County Shoreline Master Program



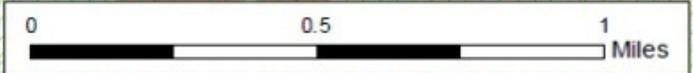
Stream Segment Breaks

- Breaks along a stream
- Confluence end of segment

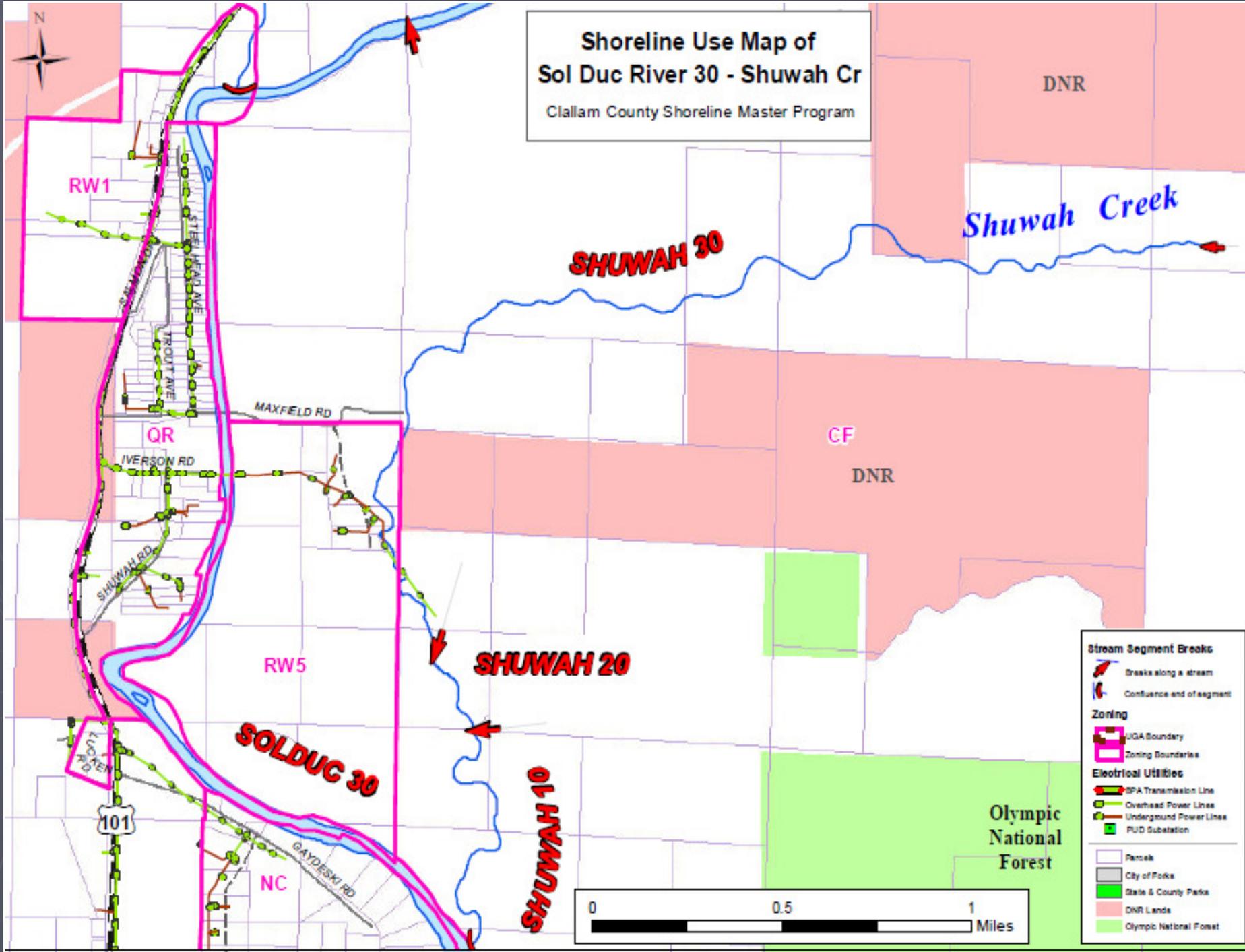
Critical Areas

- Wildlife Location
- 400 Foot Eagle Buffer
- 800 Foot Eagle Buffer
- Wildlife Corridor
- Erosion
- Landslide
- Meander Hazard
- Wetland Delineations
- Wetlands
- FEMA Flood Zone

- Parcels
- City of Forks



**Shoreline Use Map of
Sol Duc River 30 - Shuwah Cr**
Clallam County Shoreline Master Program



Stream Segment Breaks

- Breaks along a stream
- Confluence end of segment

Zoning

- JGA Boundary
- Zoning Boundaries

Electrical Utilities

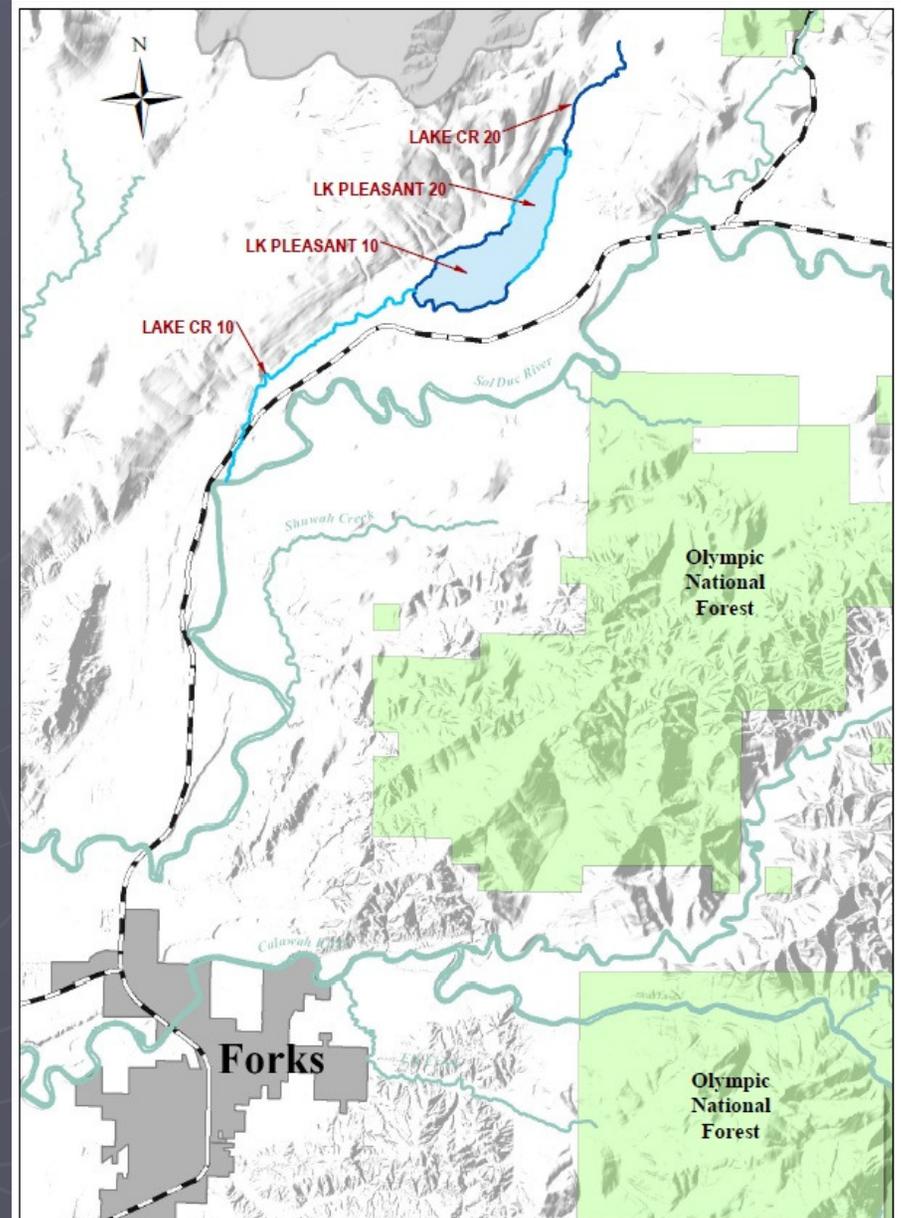
- OPA Transmission Line
- Overhead Power Line
- Underground Power Lines
- PUD Substation

Other Features

- Parcel
- City of Forks
- State & County Parks
- DNR Lands
- Olympic National Forest

Lake Pleasant

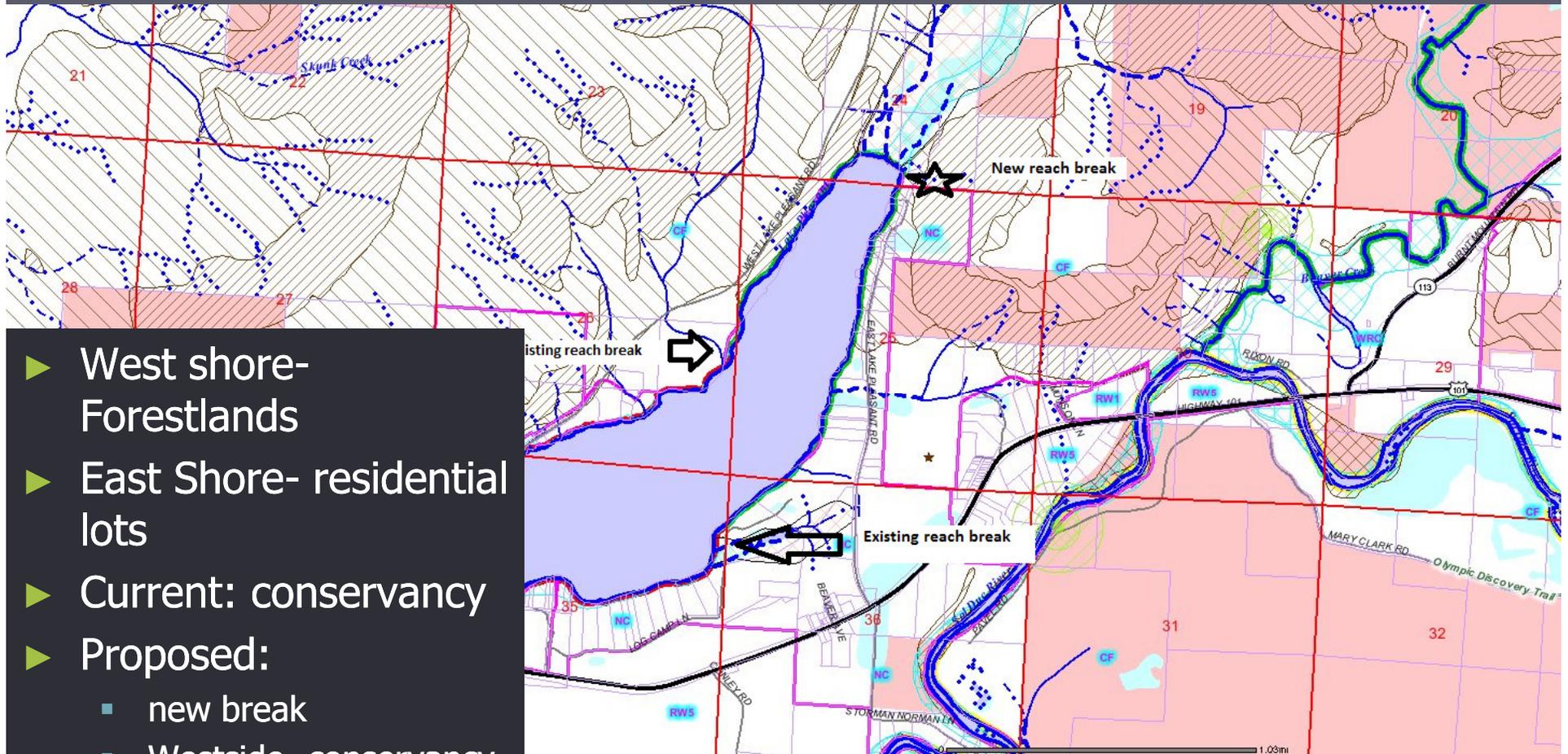
- ▶ LK PLEASANT 10
 - ▶ No change proposed
- ▶ LK PLEASANT 20
 - ▶ New Break/designation
- ▶ LAKE CR 10
 - Current: Undesignated
 - Proposed- New break/designation
- ▶ LAKE CR 20
 - Current: Undesignated
 - Proposed- Conservancy



Lake Pleasant

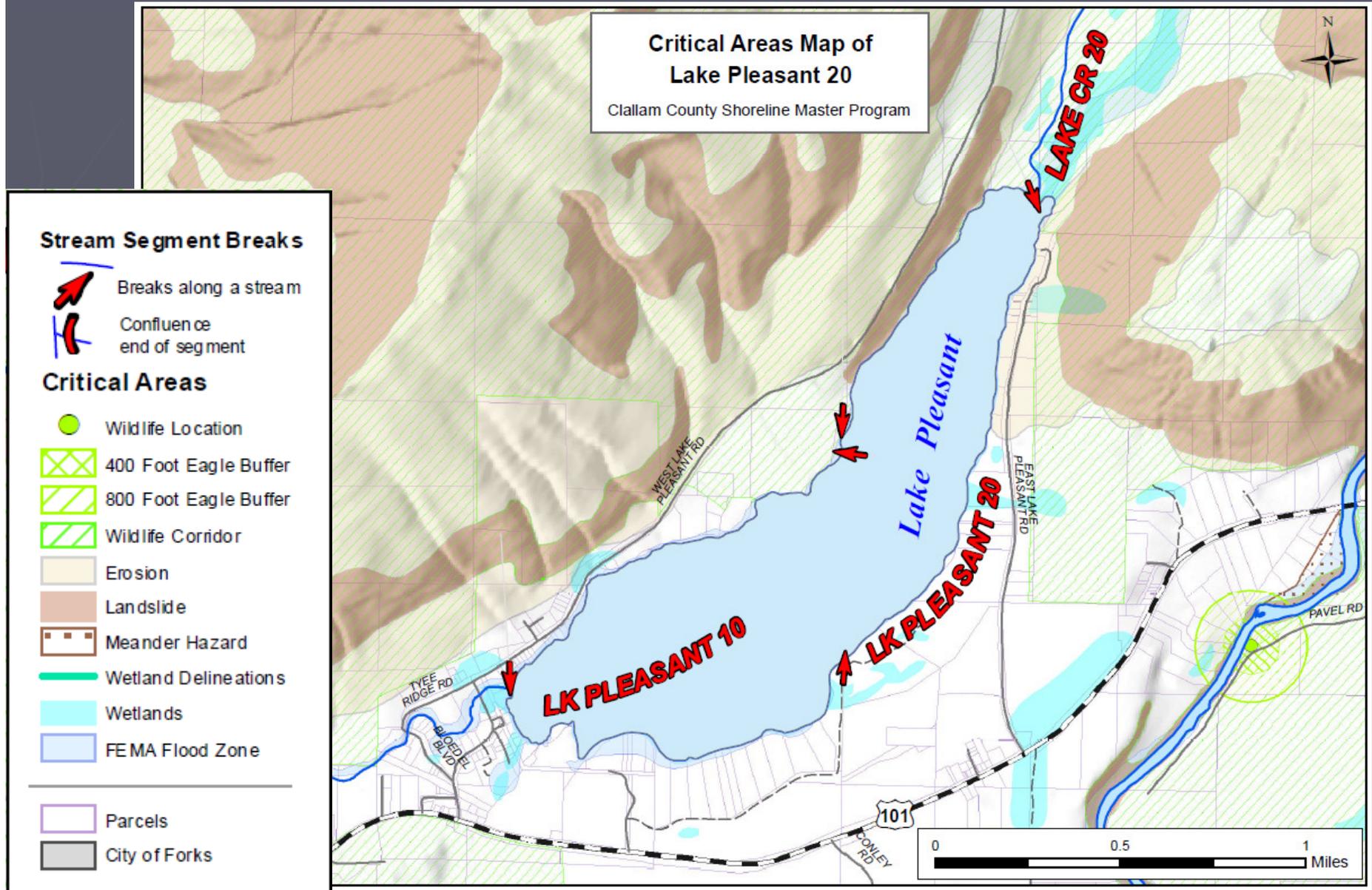
- ▶ 500 acre lake
- ▶ Lk Pleasant 20: northshore
 - Forestlands & light residential along
 - 92.4% closed canopy; 1.7% other natural vegetation; 6% non-forest
 - Sockeye spawning habitat
- ▶ Lk Pleasant 10: southshore
 - Dense & light residential
 - 68.2% closed canopy; 1.3% other natural vegetation; Non-forest 30.5%.

LK PLEASANT 20: closeups next slides



- ▶ West shore- Forestlands
- ▶ East Shore- residential lots
- ▶ Current: conservancy
- ▶ Proposed:
 - new break
 - Westside- conservancy
 - Eastside- new designation category
 - "Scenic residential?"

LK PLEASANT 20



Shoreline Use Map of Lake Pleasant 20

Clallam County Shoreline Master Program



Stream Segment Breaks

- Breaks along a stream
- Confluence end of segment

Zoning

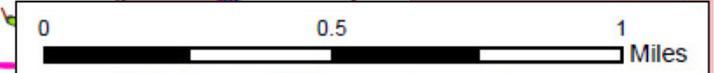
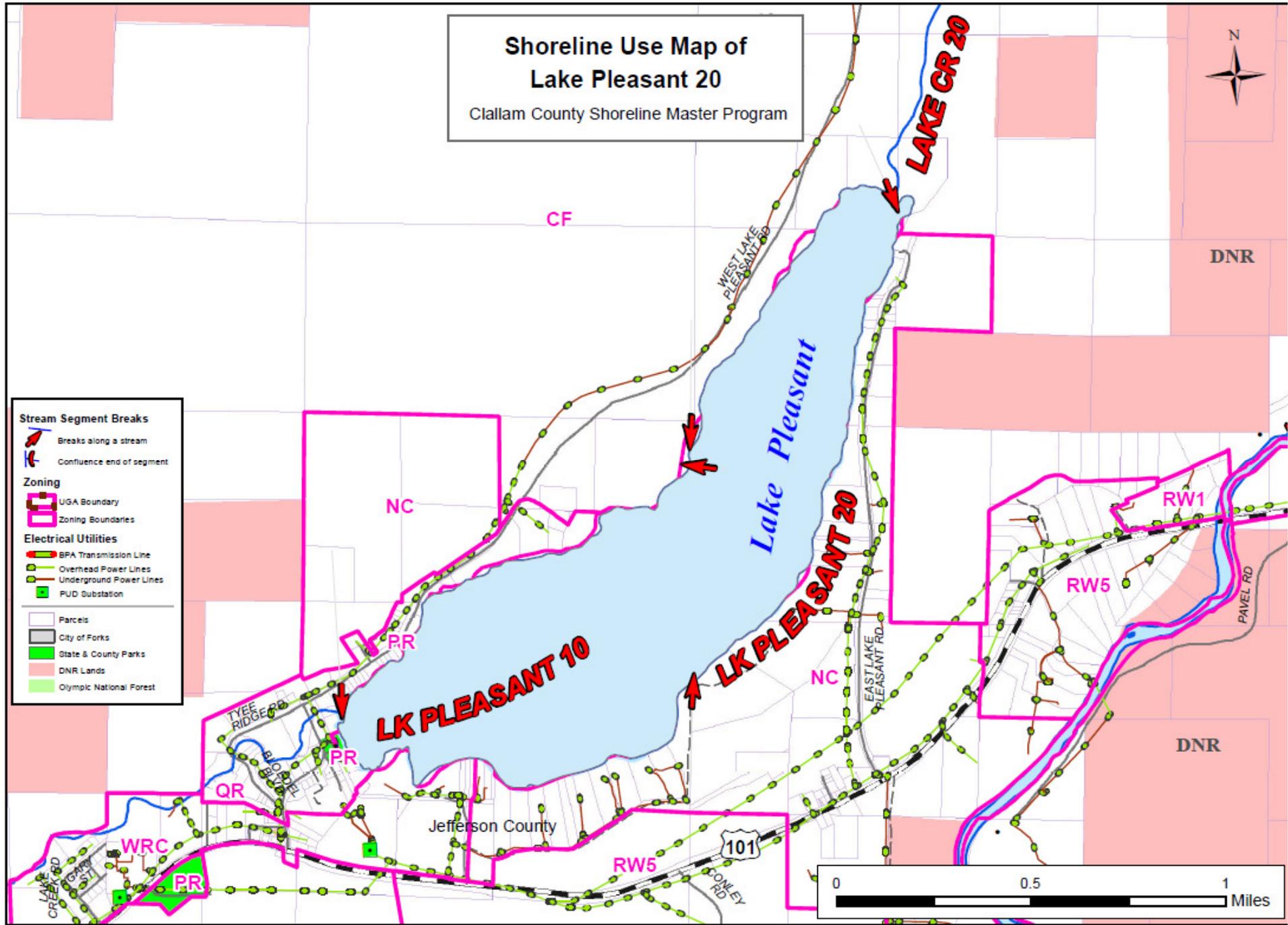
- UGA Boundary
- Zoning Boundaries

Electrical Utilities

- BPA Transmission Line
- Overhead Power Lines
- Underground Power Lines
- PUD Substation

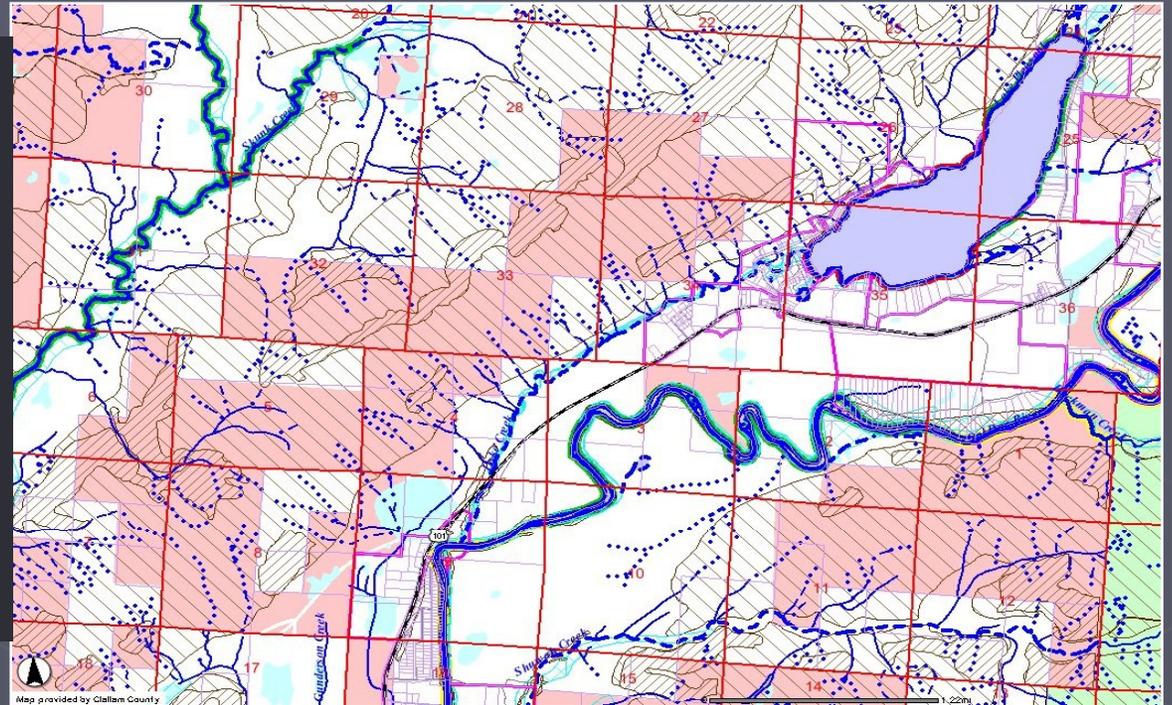
Other Features

- Parcels
- City of Forks
- State & County Parks
- DNR Lands
- Olympic National Forest

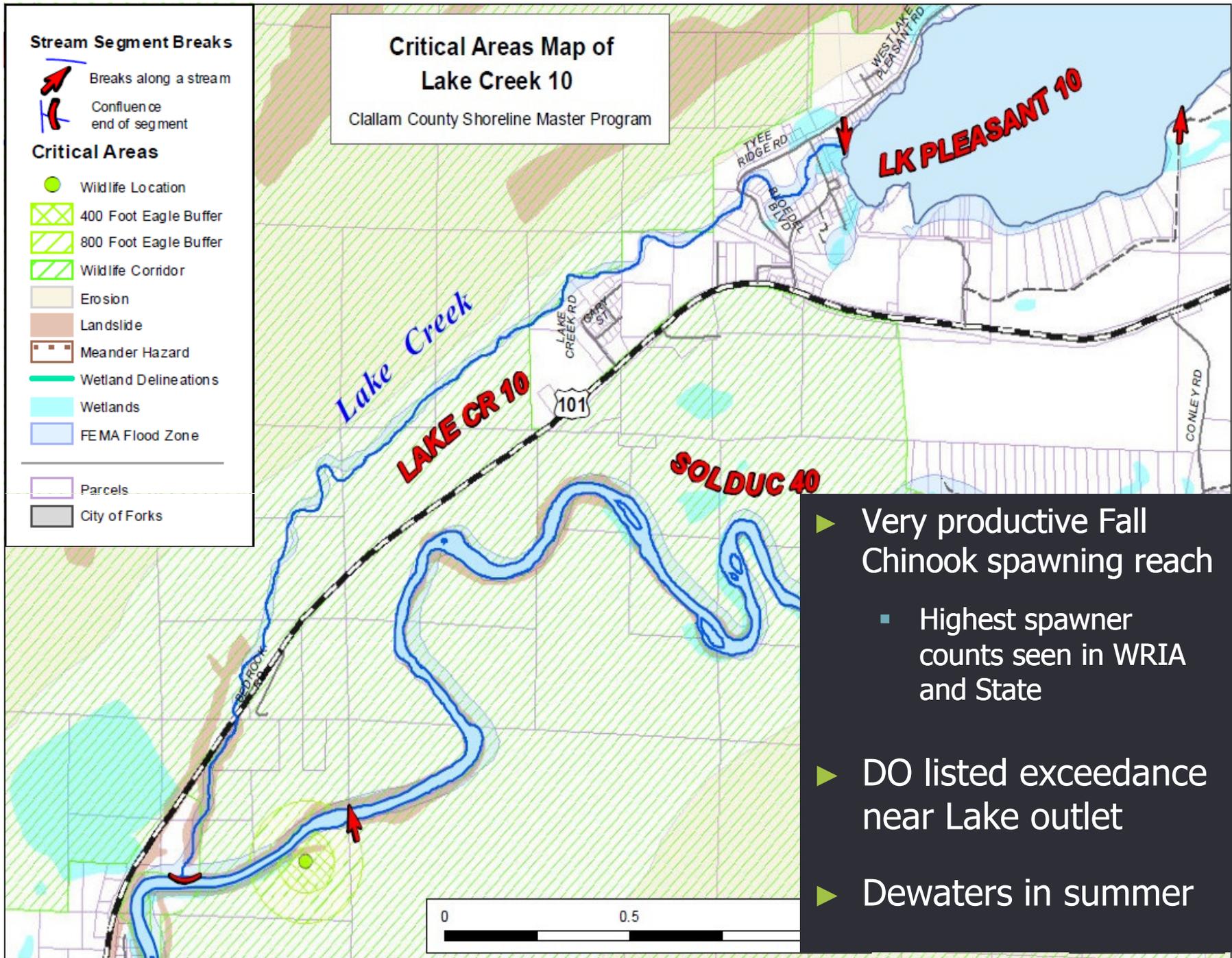


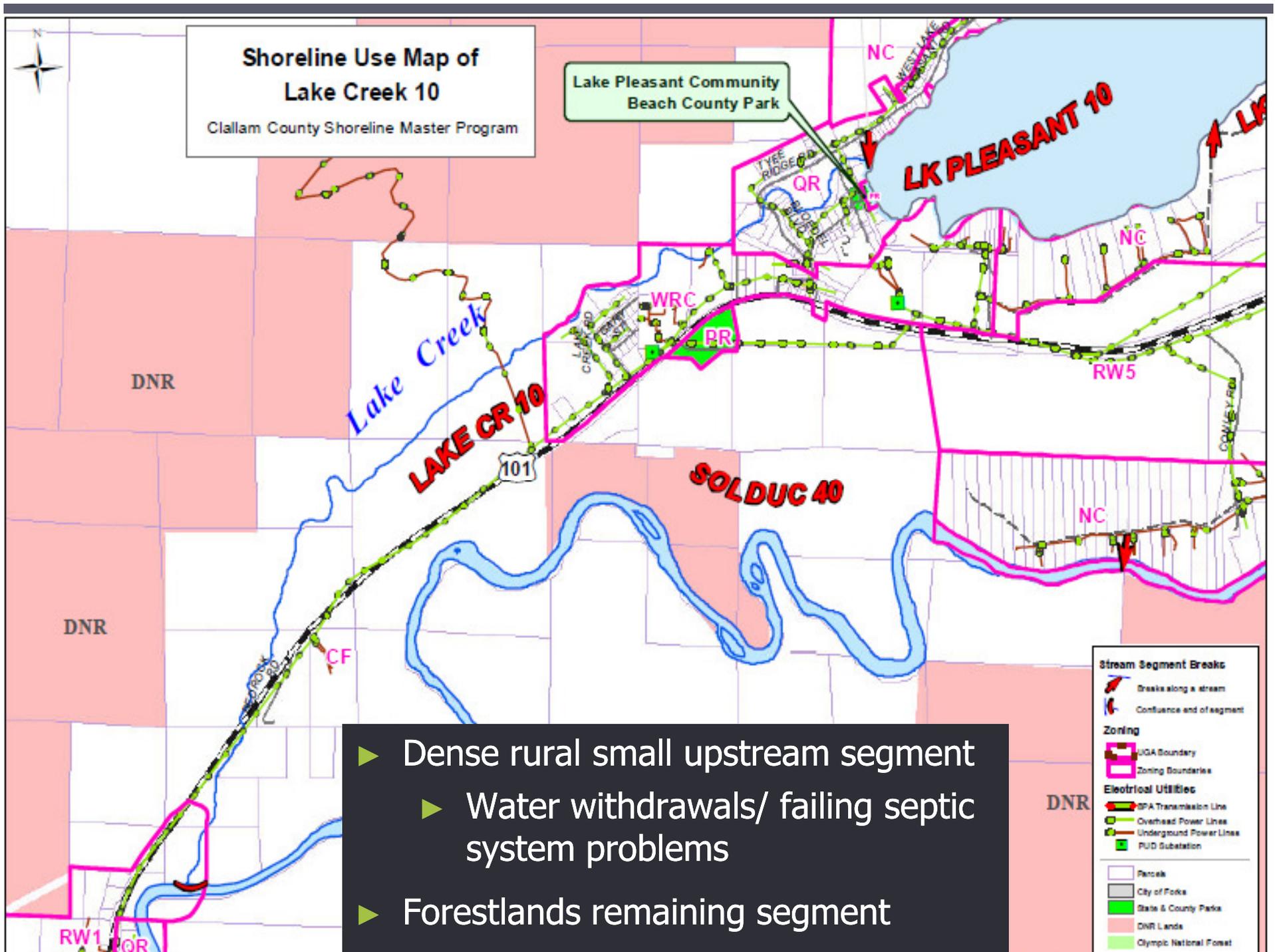
LAKE CR- SOL DUC 10

- ▶ Current: Undesignated
- ▶ Mostly forestland
- ▶ Small stretch of dense residential near Lake
- ▶ DO listed exceedance near Lake outlet



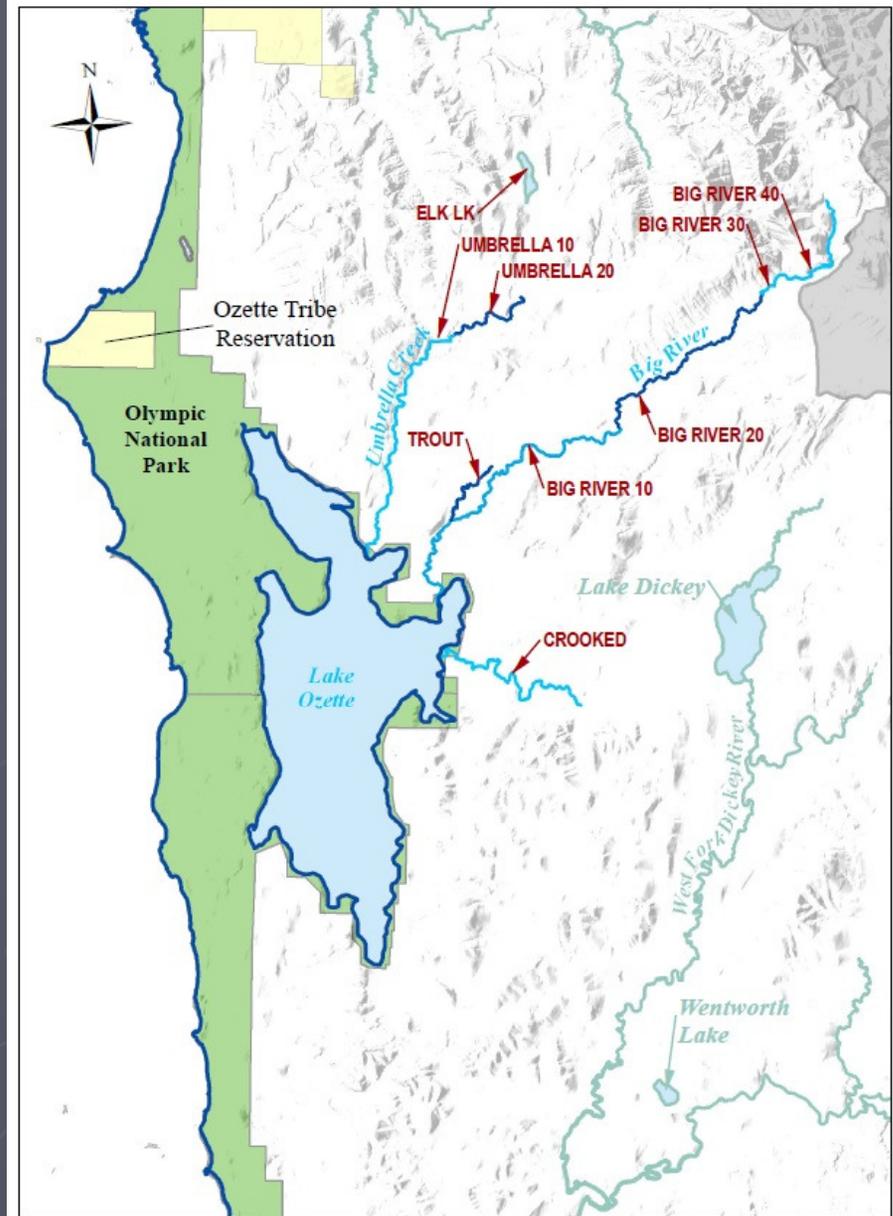
- ▶ Very productive Fall Chinook spawning reach
 - Highest spawner counts seen in WRIA and State
- ▶ 86.6% closed canopy; 0.9% other natural vegetation; 12.5% non-forest





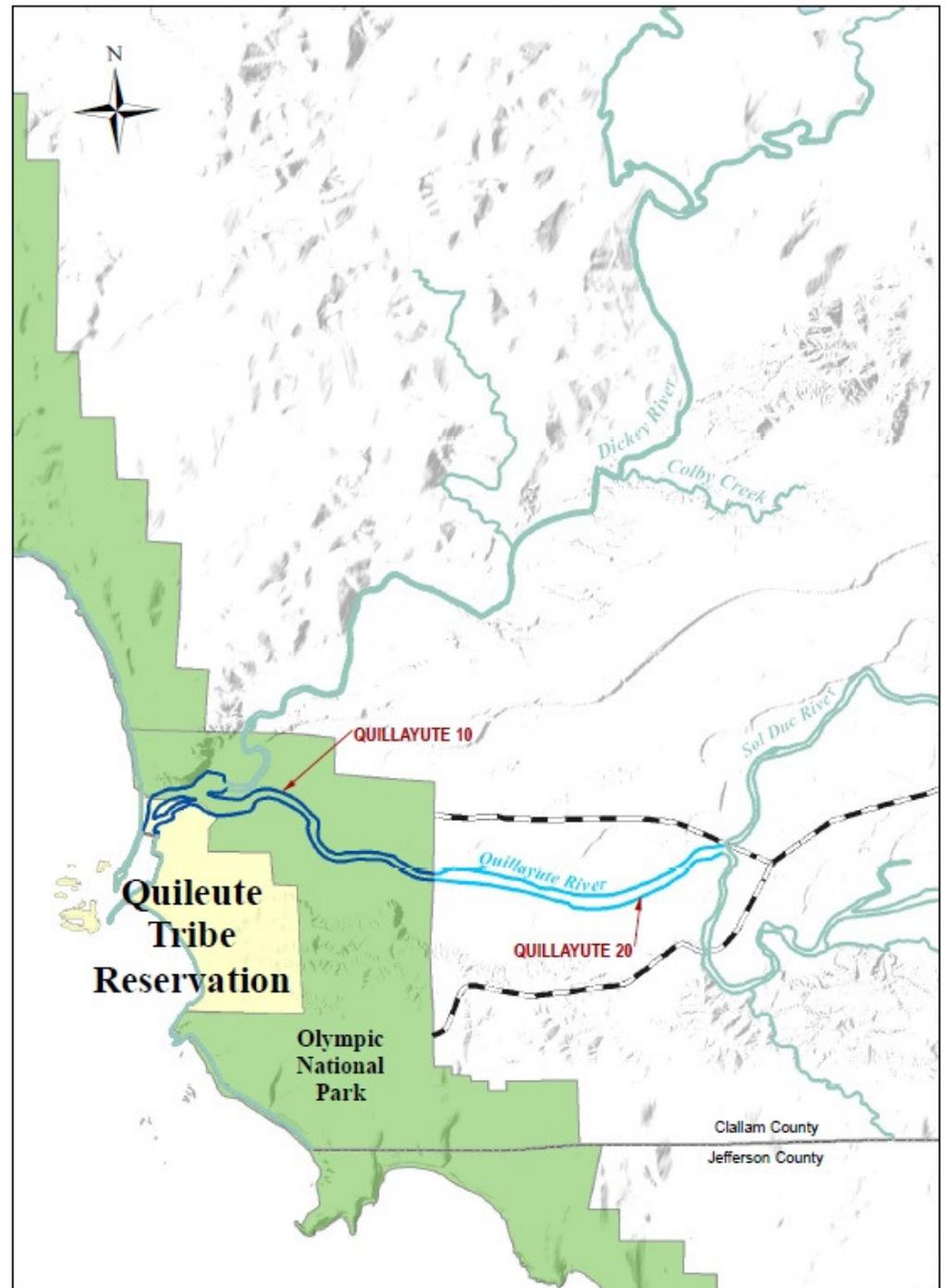
Ozette

- ▶ Current: conservancy or undesignated
- ▶ No change indicated
- ▶ Most reaches in forestlands
 - 78.3% closed canopy, 17.7% other natural vegetation, and 4% non-forest
- ▶ Only rivers with listed salmon— Ozette sockeye
 - High priority for restoration
- ▶ Big River 20 is only rural reach
 - Light residential zoning mixed with forestlands



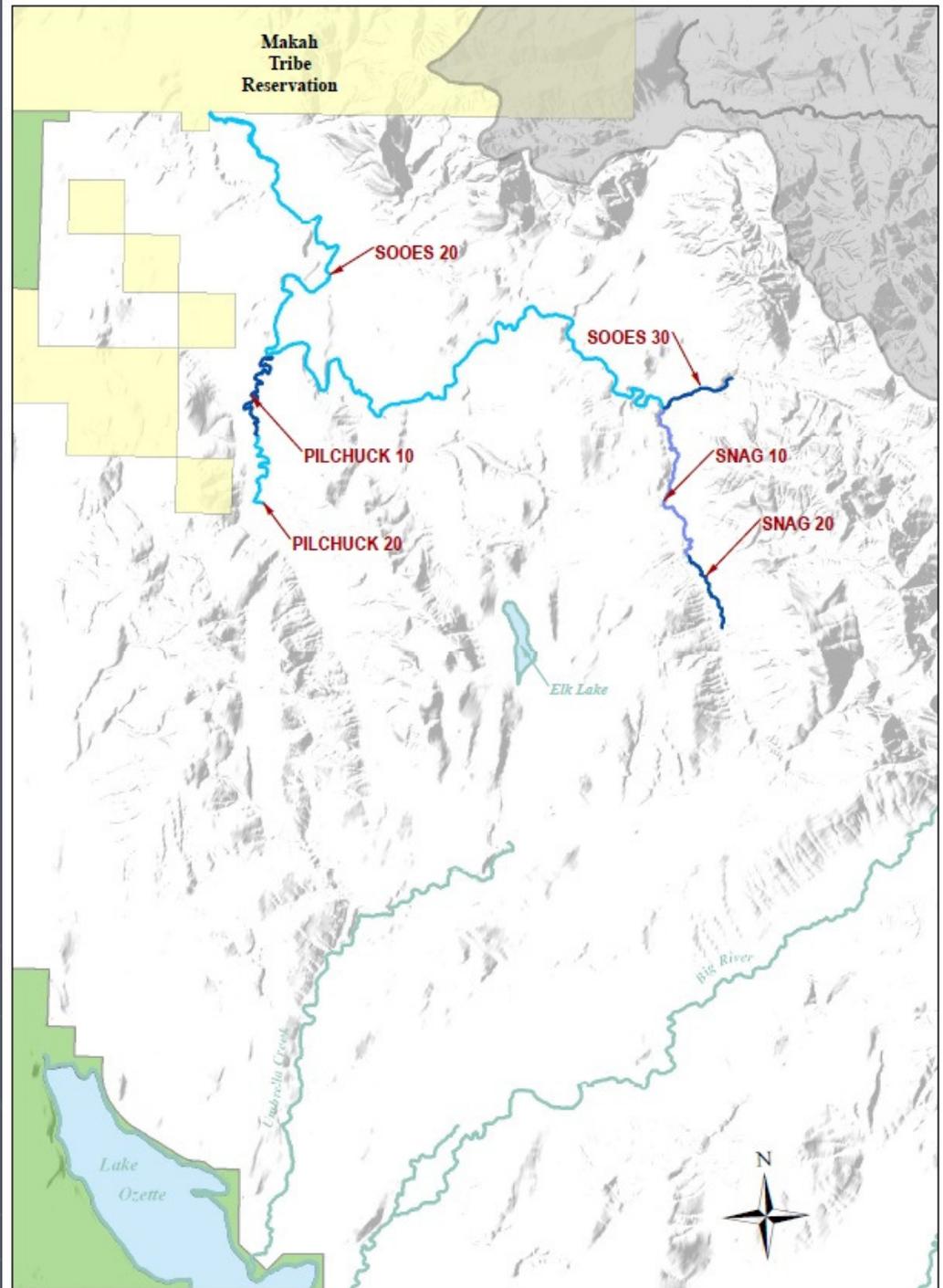
Quillayute

- ▶ Current: Rural
- ▶ No change indicated
- ▶ All salmon runs migrate through mainstem
 - All healthy or unknown status
- ▶ Riparian condition: 84.9% closed canopy, 8.9% other natural vegetation, and 6.2% non-forest
- ▶ Mix of light residential and forestlands
- ▶ Wide floodplain throughout



Sooes

- ▶ Current: Conservancy
- ▶ No change indicated
- ▶ Drains into Makah Bay
- ▶ All zoned for commercial forest uses
 - ▶ 73.8% closed canopy, 25.3% other natural vegetation, and 0.9% non-forest
- ▶ Potential for residential development is low



Dickey

- ▶ Current: conservancy or undesignated
- ▶ Conservancy reaches: No change indicated
- ▶ Undesignated reaches-
 - ▶ Propose conservancy for all except COLBY 20
- ▶ Mostly forestlands
 - 88.4% closed canopy, 10.8% other natural vegetation, and 0.8% non-forest
- ▶ Low gradient, lots of wetlands, rearing and spawning habitat
 - ▶ Very productive coho habitat– also important for steelhead, Chinook & Chum
- ▶ Impacts: past logging practices, high winds and rain off ocean= blowdown; LWD loss



COLBY 20

