Forest Vegetation Restoration Needs Across Washington and Oregon

US Forest Service, Pacific Northwest Region
The Nature Conservancy, Washington
The Nature Conservancy, Oregon

Shared Information Needs

- Goal: Restoration of resilient forest landscapes and healthy communities

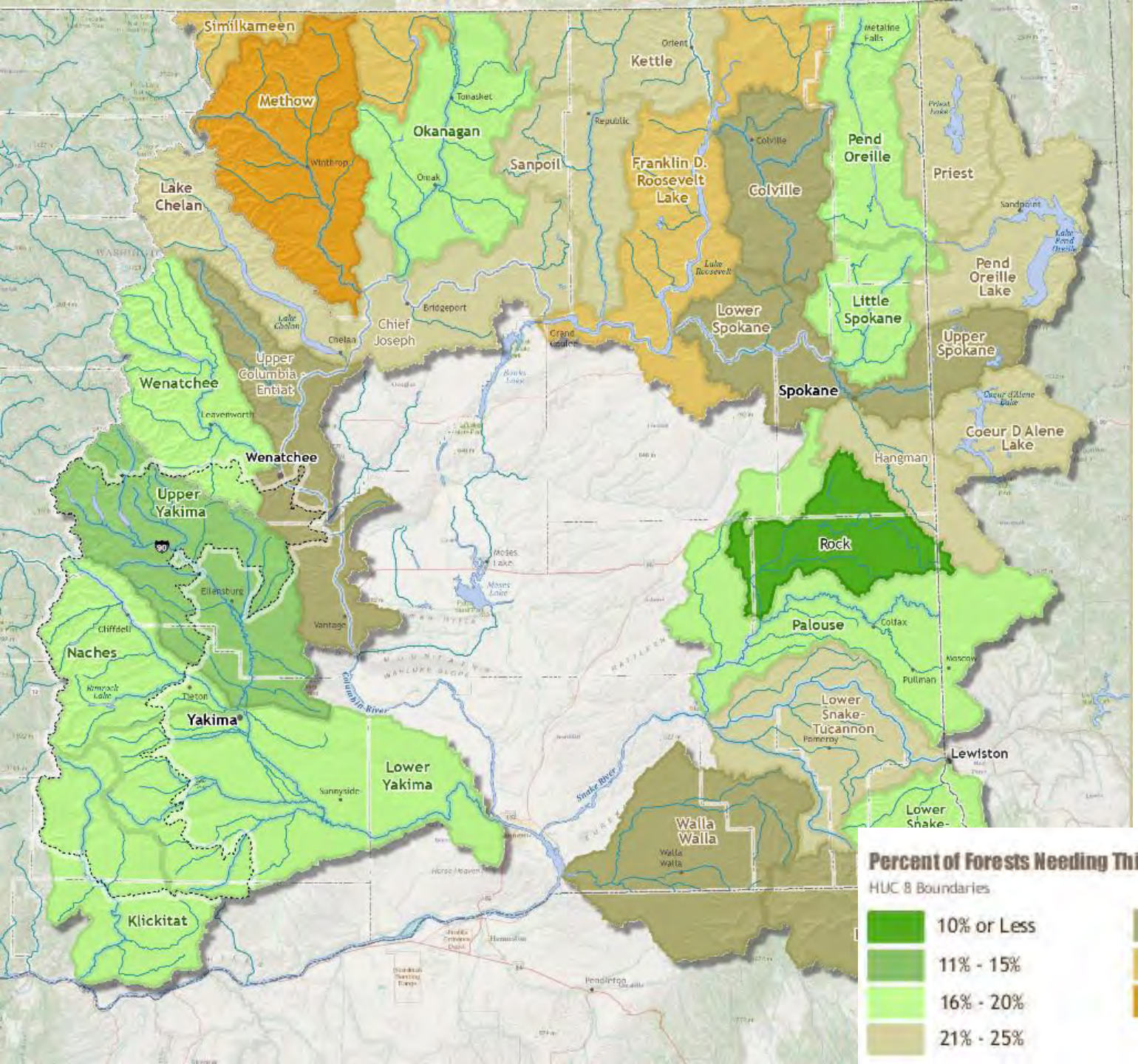
- Region wide - where, how much, what types of forest management?

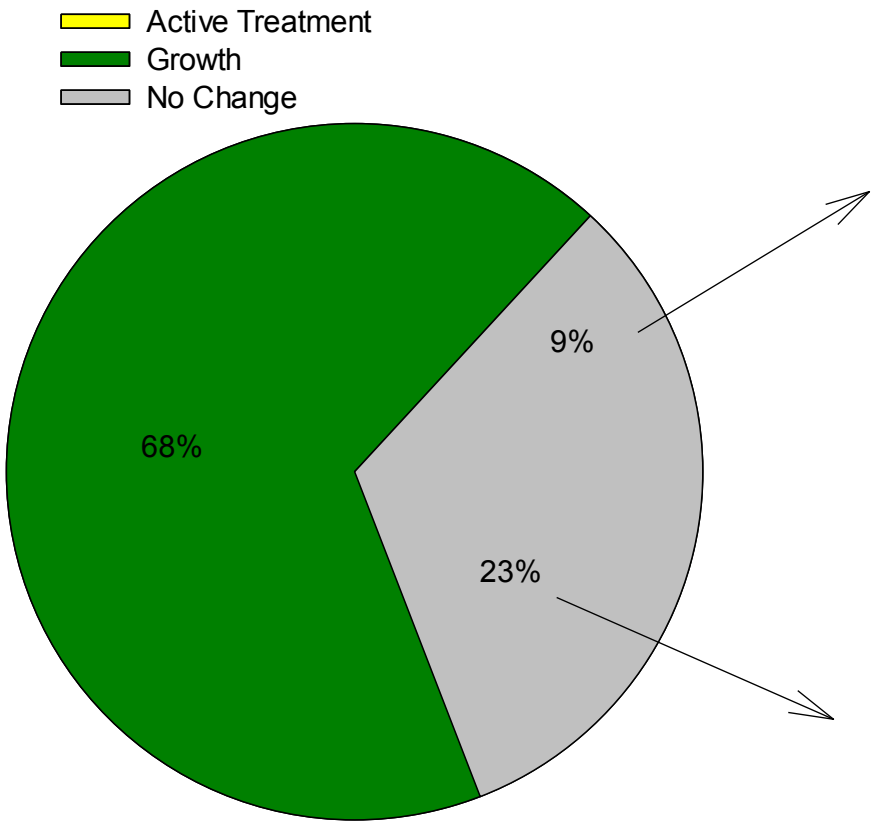
Shared Information Needs

- Quantifying the need (funding!)
- Telling the story
- Setting the context

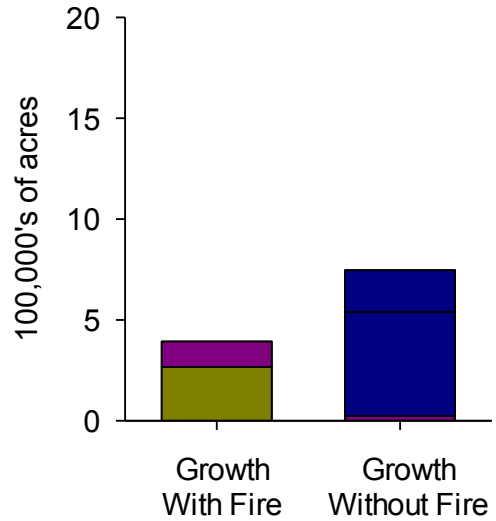
USFS – TNC OR – TNC WA

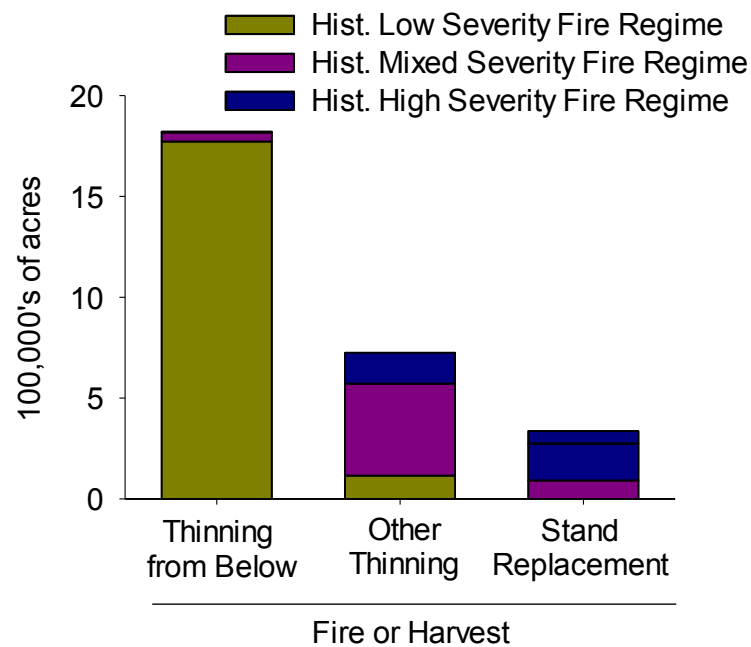
- Active / passive restoration “needs”
- Same data (Landfire)
- Similar logic and assumptions


Similkameen
Methow
Okanagan
Kettle
Sanpoil
Franklin D. Roosevelt Lake
Colville
Pend Oreille
Priest
Lake Chelan
Pend Oreille Lake
Lower Spokane
Little Spokane
Upper Spokane
Chief Joseph
Upper Columbia-Entiat
Wenatchee
Spokane
Coeur D Alene Lake
Upper Yakima
Rock
Palouse
Naches
Yakima
Lower Snake-Tucannon
Lewiston
Lower Yakima
Walla Walla
Klickitat
Orient
Metaline Falls
Tonasket
Republic
Colville
Winthrop
Omak
Sandpoint
Bridgeport
Chelan
Grand Coulee
Leavenworth
Hangman
Moses Lake
Ellensburg
Vantage
Cliffdell
Tieton
Coltax
Moscow
Pullman
Pomeroy
Columbia River
Snake River
Sunnyside
Pendleton
Percent of Forests Needing Thinning/Stand Replacement
HUC 8 Boundaries
10% or Less
11% - 15%
16% - 20%
21% - 25%
26% - 30%
31% - 35%
35% - 40%



12.4 million total forested ac.





Joint USFS-TNC Analysis!

- Mapping forest types (ILAP PVT)
- Reference conditions (Landfire BpS)
- Current conditions (GNN)
- Active, passive restoration logic

- Build a durable process!

Key considerations

- Regional scales only – does not apply to project level!
- Reference NRV does NOT equal DFC
- Vegetation only
- Does not consider spatial patterns

Stay tuned…

- Phase 1: Eastern OR and WA (plus SW OR)
  - June ‘13…
- Phase 2: All forests of OR and WA
- Phase 3: Expanded to non-forested (?)

Landfire BpS *(BioPhysical Settings)*

- Successional Classes
  - "Natural range of variability"
  - Current conditions

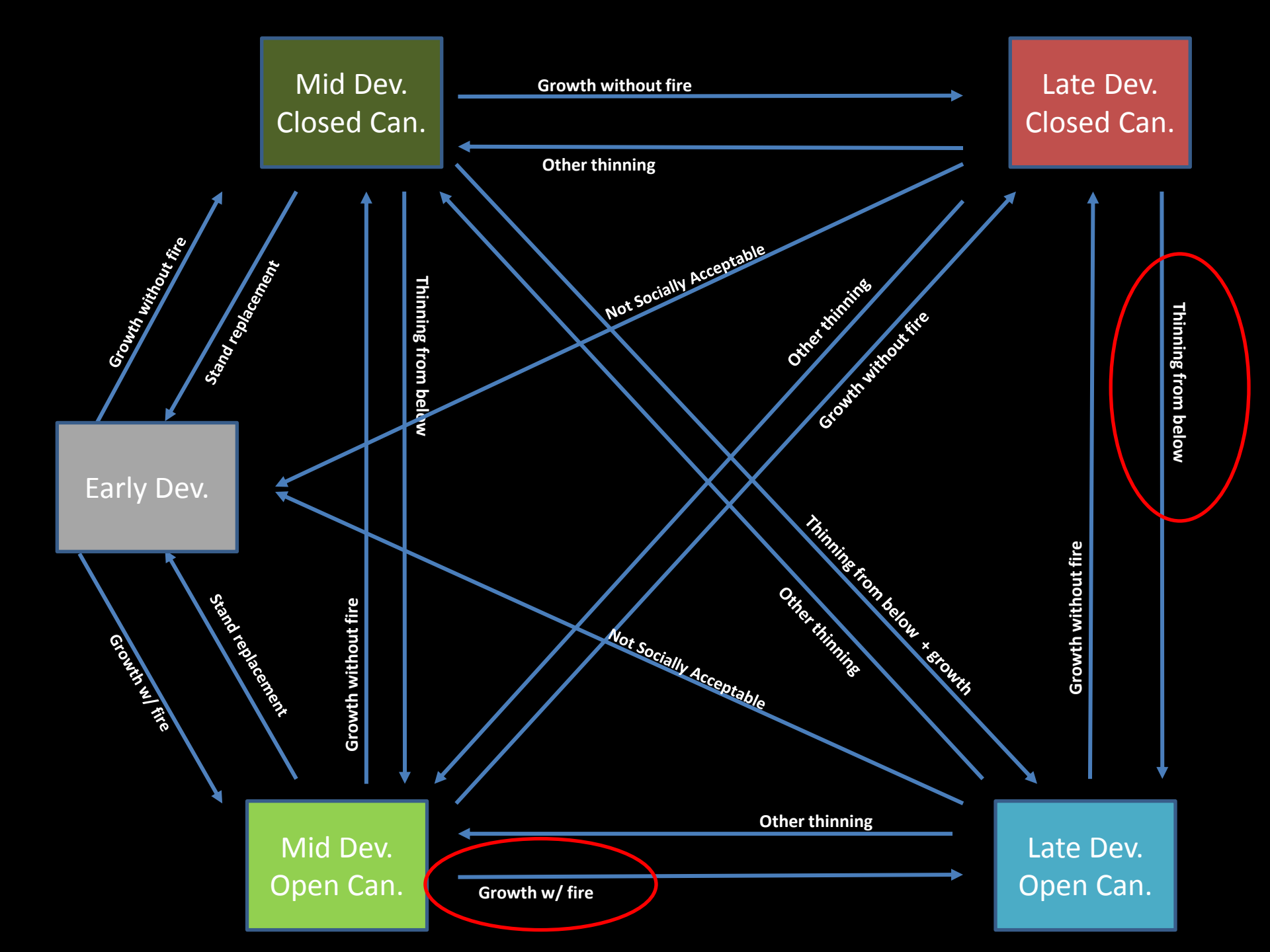
Early Dev.

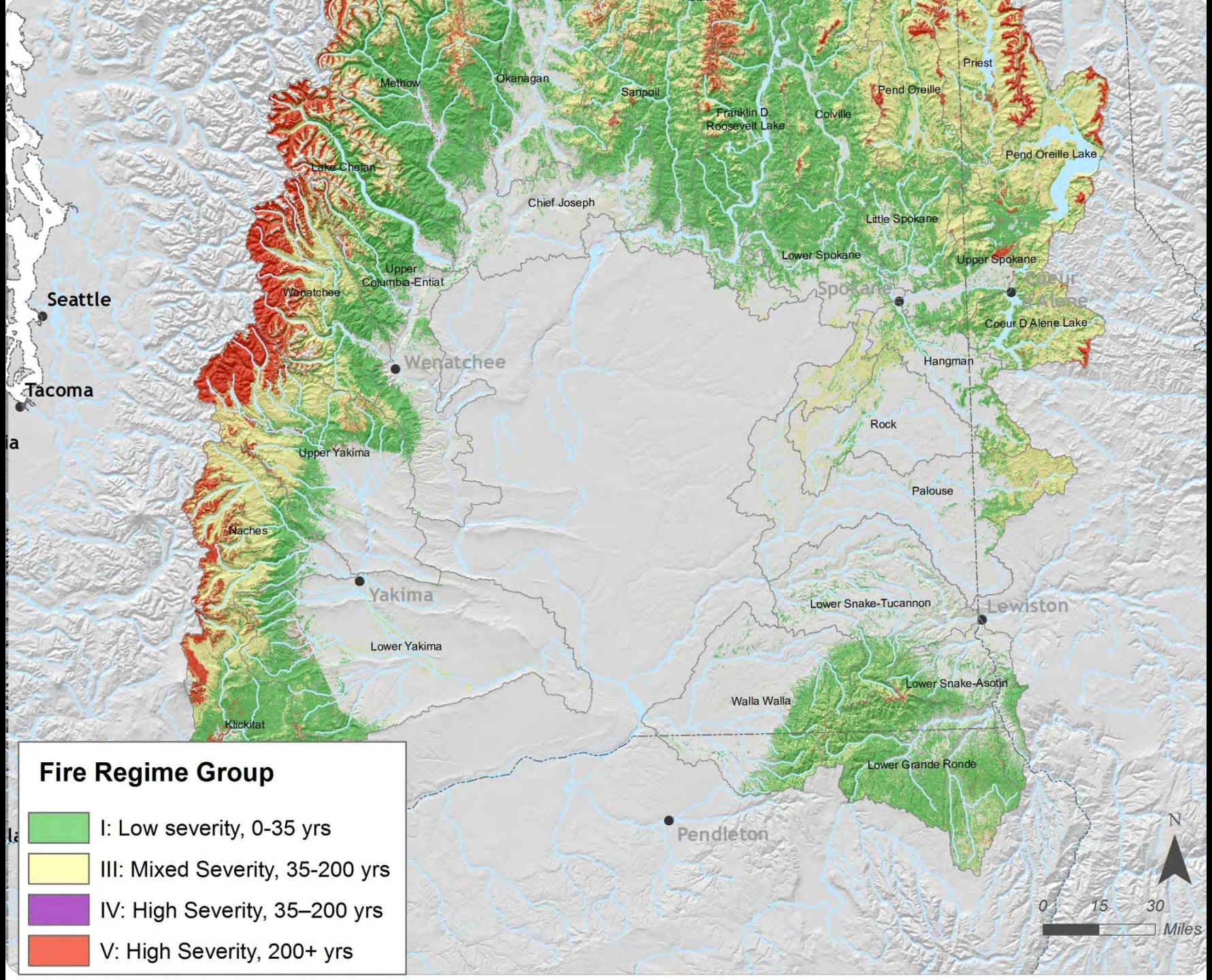
Mid Dev.
Closed Can.

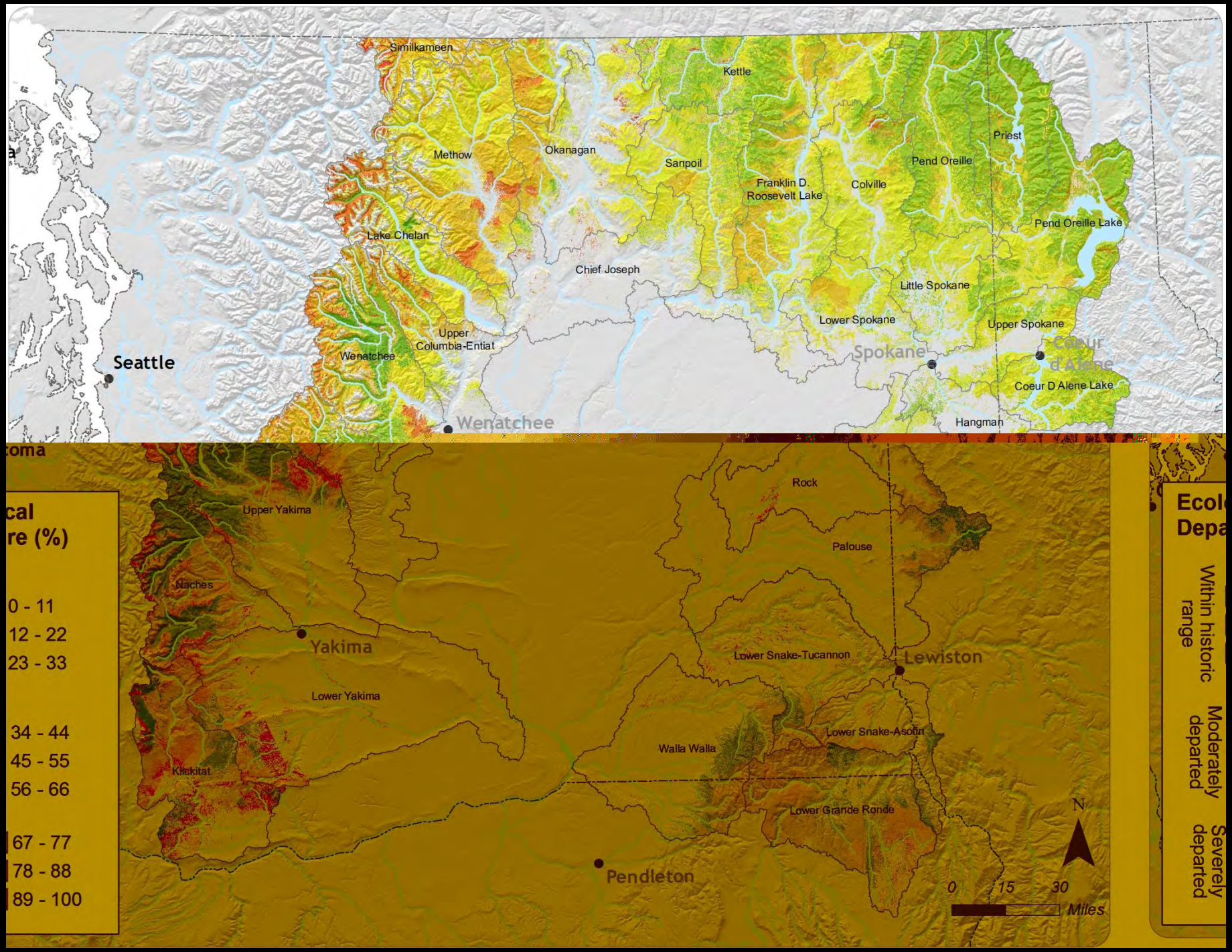
Mid Dev.
Open Can.

Late Dev.
Closed Can.

Late Dev.
Open Can.


Mid Dev. Closed Can.
Late Dev. Closed Can.
Early Dev.
Mid Dev. Open Can.
Late Dev. Open Can.
Growth without fire
Other thinning
Growth without fire
Stand replacement
Thinning from below
Not Socially Acceptable
Other thinning
Growth without fire
Thinning from below
Thinning from below + growth
Growth without fire
Other thinning
Not Socially Acceptable
Growth w/ fire
Stand replacement
Growth without fire
Other thinning
Growth w/ fire


Fire Regime Group
I: Low severity, 0-35 yrs
III: Mixed Severity, 35-200 yrs
IV: High Severity, 35–200 yrs
V: High Severity, 200+ yrs
Seattle
Tacoma
Wenatchee
Yakima
Spokane
Coeur D'Alene
Lewiston
Pendleton
Methow
Okanagan
Sanpoil
Franklin D Roosevelt Lake
Colville
Priest
Pend Oreille
Pend Oreille Lake
Lake Chelan
Chief Joseph
Little Spokane
Lower Spokane
Upper Spokane
Upper Columbia-Entiat
Wenatchee
Coeur D Alene Lake
Hangman
Rock
Upper Yakima
Palouse
Naches
Lower Snake-Tucannon
Lower Yakima
Lower Snake-Asotin
Walla Walla
Klickitat
Lower Grande Ronde
N
0 15 30
Miles


Similkameen
Kettle
Priest
Methow
Okanagan
Sanpoil
Pend Oreille
Franklin D. Roosevelt Lake
Colville
Pend Oreille Lake
Lake Chelan
Chief Joseph
Little Spokane
Lower Spokane
Upper Spokane
Upper Columbia-Entiat
Wenatchee
Spokane
Coeur d Alene
Seattle
Coeur D Alene Lake
Wenatchee
Hangman
Rock
Upper Yakima
Palouse
Naches
Yakima
Lower Snake-Tucannon
Lewiston
Lower Yakima
Lower Snake-Asotin
Walla Walla
Klickitat
Lower Grande Ronde
Pendleton
N
0 15 30
Miles
cal
re (%)
0 - 11
12 - 22
23 - 33
34 - 44
45 - 55
56 - 66
67 - 77
78 - 88
89 - 100
Ecol
Depa
Within historic range
Moderately departed
Severely departed