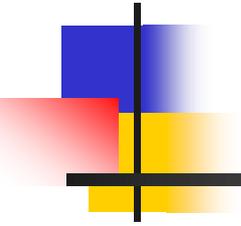


Forests and Fish Rules Review



Presented By:

Jack Shambo

Washington State

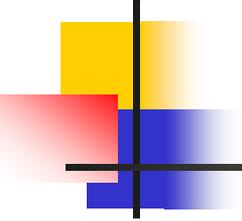
Department of Natural Resources

Pacific Cascade Region



Brief Forest Practices Review

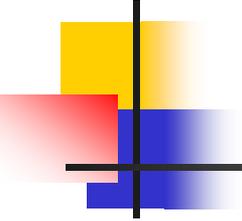
- 1947 Reforestation Act
- 1974 Forest Practices Act
- 1987 Timber Fish and Wildlife
- 1999 Forest and Fish Agreement
- 2001 Forest and Fish Rules Implemented
- 2006 FP-HCP Approved



Why Forest & Fish Rules?

- Current riparian forest conditions in Washington are not meeting functional needs for fish, amphibians and water quality

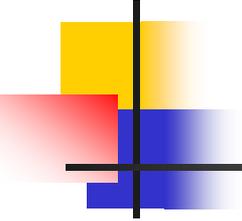




Goals of F & F Rules

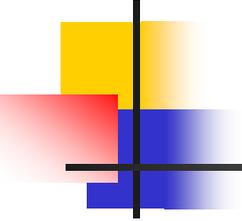
- Provide Endangered Species Act compliance for fish and riparian dependent species
- Restore harvestable fish populations
- Meet Clean Water Act requirements
- **“...coincident with viable forest industry”**





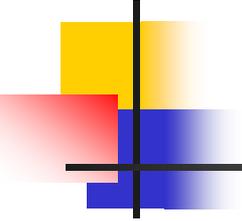
Riparian Functions

- Bank stability
- Woody debris recruitment
- Litter fall
- Nutrients
- Sediment filtering
- Shade



Water Typing System

- **Type S** (Type 1)
 - Shorelines of the state, typically large rivers and streams important for fish and water supply
- **Type F** (Type 2 and 3)
 - Small to moderate-sized streams important for fish



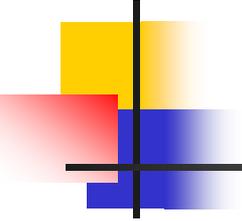
Water Typing System

Type Np (Type 4)

- Perennial, non-fish bearing streams important for amphibians and downstream water quality

■ **Type Ns** (Type 5)

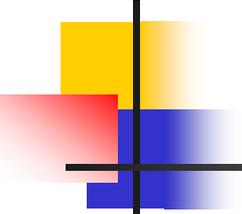
- Seasonal, non-fish bearing streams
- Must connect to typed water



Protection Measures and Management Options

Type S and F Waters:

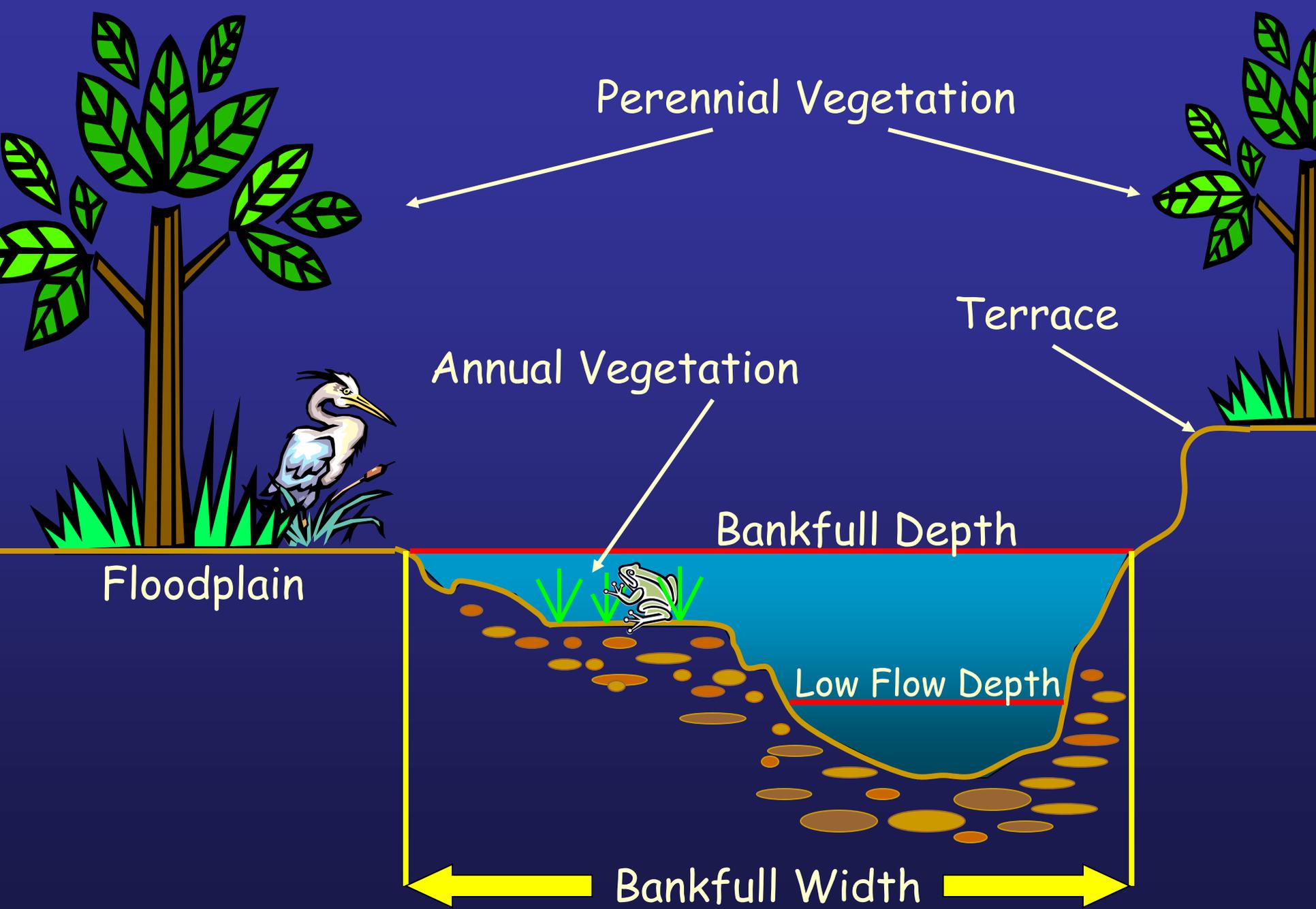
- Rules require trees be left in Riparian Management Zone (RMZ) along stream
- Total width of westside RMZ depends on stream width and site class (soil productivity)



Protection Measures and Management Options

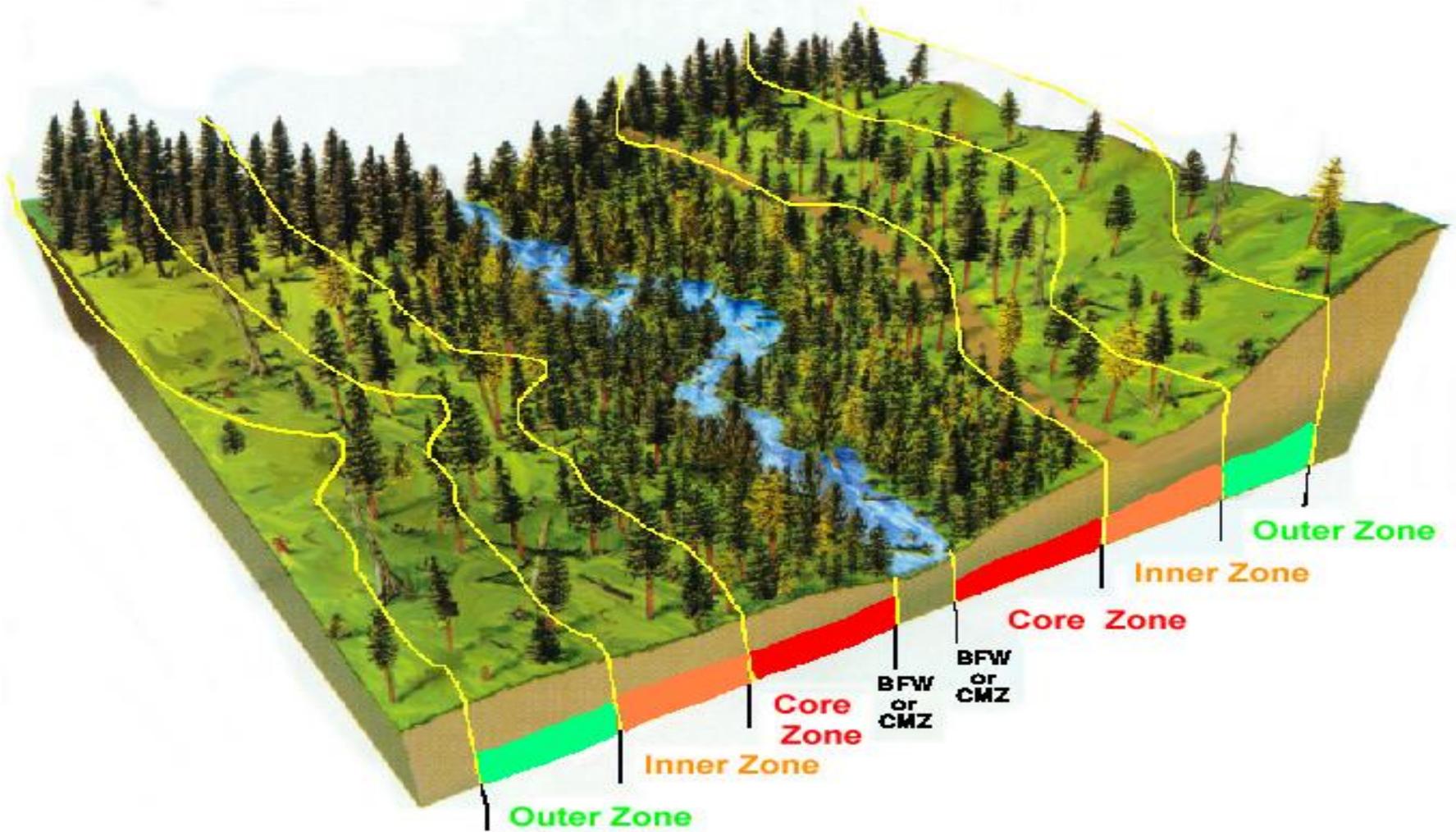
Type S and F Waters – cont'd:

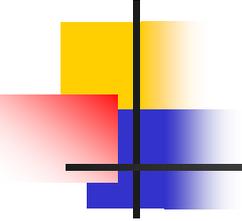
- Equal to one site potential tree height (90 to 200 ft., each side of stream)
- RMZ begins at bankfull channel edge
- RMZ is made up of three zones where varying levels of management are allowed



Riparian Management Zones

A Graphic Representation

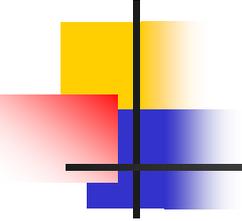




Protection Measures and Management Options

Type S and F Waters – CORE Zone

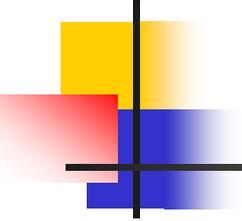
- Nearest the stream
- Most important in providing all desired functions
- **No management activity allowed except...**
 - Road stream crossings
 - Yarding corridors
 - Trees cut must be left on site



Protection Measures and Management Options

Type S and F Waters – CORE Zone

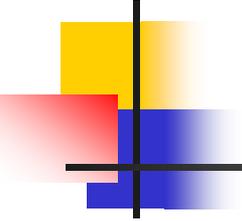
- 50 ft. in width in western WA
- Begin measuring zone from bankfull channel edge



Protection Measures and Management Options

Type S and F Waters – INNER Zone

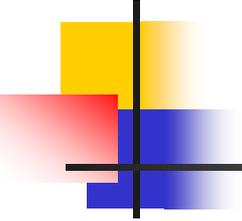
- Middle zone, between Core and Outer
- Some timber harvesting may be allowed
- Zone width ranges from 10 to 100 ft. in western WA



Protection Measures and Management Options

Type S and F Waters – INNER Zone

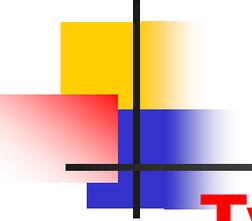
- Stand must be capable of attaining Desired Future Condition (DFC) basal area target if harvest is to occur
- Number and size of trees harvested are based on **stand's capacity to exceed basal area target**



Protection Measures and Management Options

Type S and F Waters – OUTER Zone

- Extensive timber harvest is allowed
- Zone width ranges from 22 to 67 feet in western WA



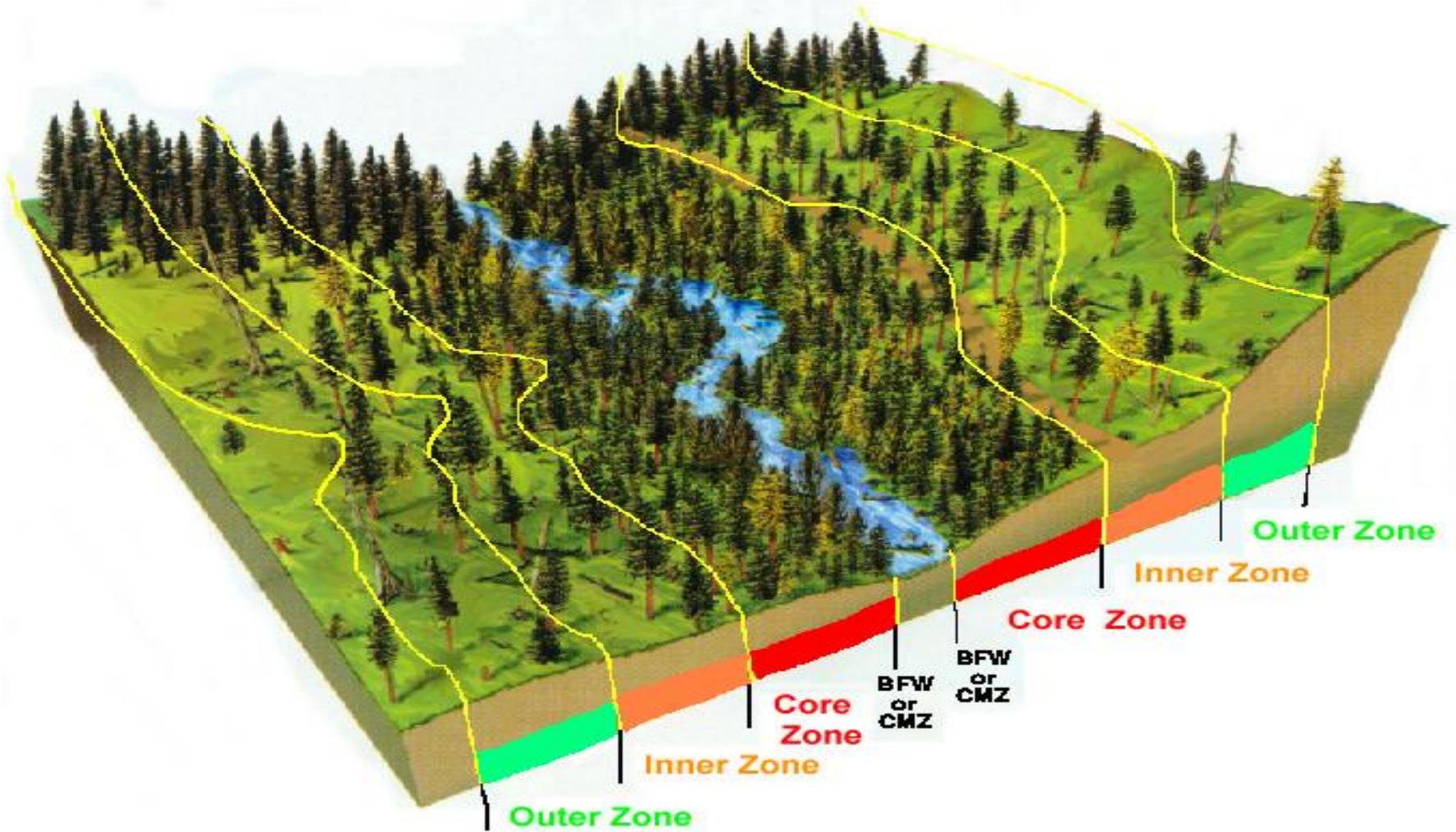
Protection Measures and Management Options

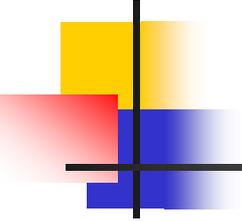
Type S and F Waters – OUTER Zone

- 20 trees per acre must be left
- Trees may be dispersed or clumped within the zone
- Trees must be conifer >12 inches DBH or next largest conifer trees available

Riparian Management Zones

A Graphic Representation



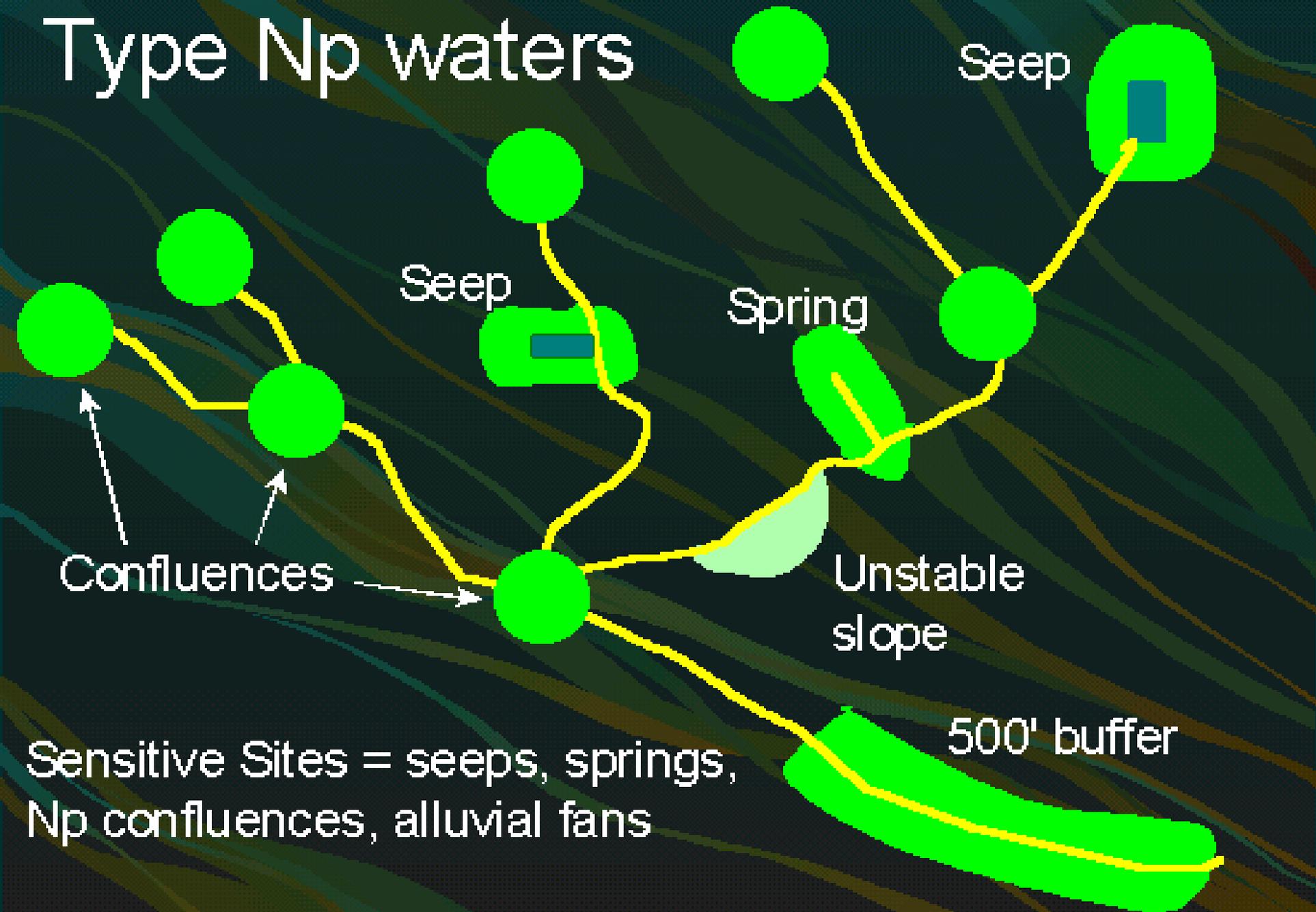


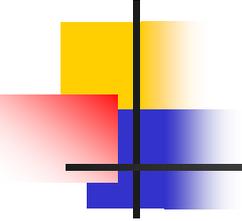
Protection Measures and Management Options

Type Np (perennial, non-fish) Waters

- 50% of the Np stream network must be buffered
- Buffer is 50 ft. wide each side of stream
- No harvest is allowed in buffer
- Preference given to sensitive sites

Type Np waters

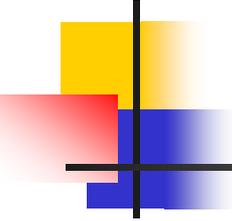




Protection Measures and Management Options

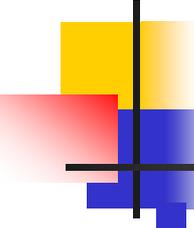
Type Ns (seasonal, non-fish) Waters

- No trees must be left
- 30 foot Equipment Limitation Zone that extends from bankfull channel edge



RMAP Program

- Road work prioritized by worst first:
- All Large Forest Landowners to submit plans
- All work to be complete by June 30, 2016



Worst First Priorities

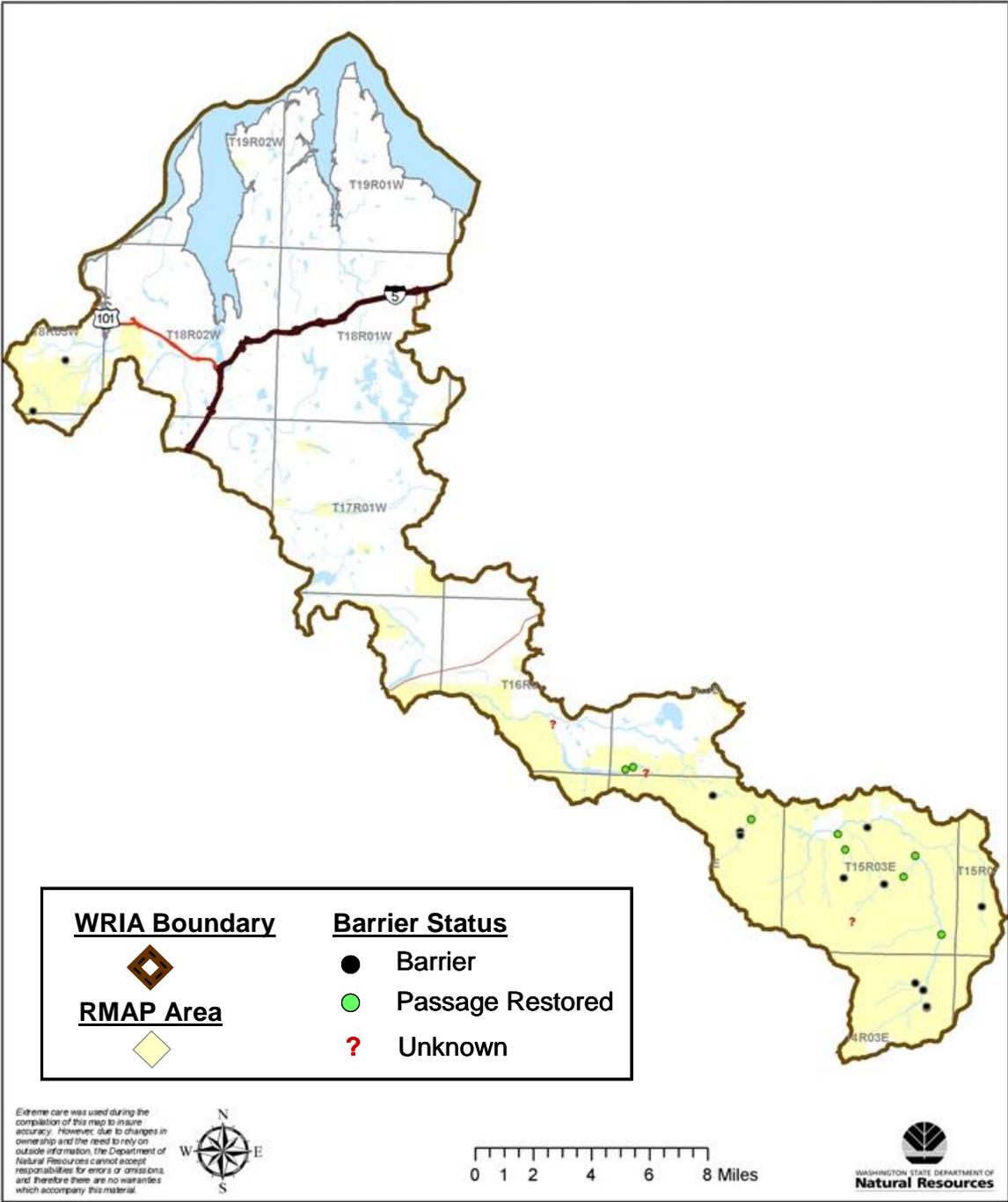
- **Major fish barriers and mass wasting**
- **SAPR sediment issues and NP stream crossings**
- **Minor sediment, NF stream crossings**
- **Other landowner defined objectives**

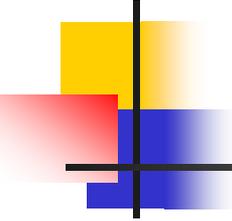
Deschutes WRIA

13



Total Sites	23
Remaining Barriers	15
Passage Restored	8
Stream Miles Opened	4





PC Region RMAP Information

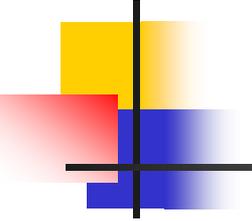
- 21,755 Road miles of Forest Road Under Plan
- 7643 Road miles at standard reported with original plans
- 6427 Miles improved to date
- 480 Miles of road abandonment
- 1777 Fish barriers remaining
- 1253 Sites opened for fish passage
- 600 Stream miles opened for fish use

Unstable Slopes



Resource Protection and Public Safety

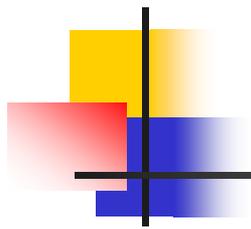




Forest & Fish Protection Measures

Summary

- Goal:
 - restore riparian function
 - comply with Federal laws (ESA & CWA)
- Larger Riparian Buffers
- Water Type Definitions Refined
- Road Management Plans Required
- Unstable Slope Regulations
- Rules are complex



QUESTIONS

