



## SNOHOMISH/SKAGIT FOREST STEWARDSHIP EDUCATION

# A Brief Introduction to Forest Practices Regulations

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Some things are beyond the scope of this talk.

- Comprehensive review of regulations
- County-specific regulations
- How to fill out a forest practices application



## Learning objectives:

- Awareness of the types of things regulated
- Basic understanding of leave tree requirements
- Assistance programs
- Where to go for help
  
- ***The bottom line: Know when to call and whom to call.***



## Regulated forest practices

- Timber harvest
  - Thinning
  - Salvage
- Road construction and maintenance
- Reforestation
- Brush control
- Chemical use



## When you will need a Forest Practices Application/Notice:

- Commercial timber harvest (including salvage and thinning)
- Road construction
- Culvert installation/replacement
  - *In-stream work also requires a Hydraulics Project Approval (HPA) from WDFW*
- Aerial application of chemicals





A FPA/N is *not* required for:

- Planting trees
- Seedling protection devices
- Grass/forage seeding
- Hand slash vegetation control
- Harvest < 5 Mbf/yr (1 log-truck load) for personal use (with no resource issues)



## Who is responsible for the FPA/N?

- The **landowner** is responsible for filing the FPA/N (but can designate an agent)
- The FPA/N must be signed by:
  - Landowner
  - Timber owner
  - Operator
- Any of the above may be liable in the event of a violation



Several people may be involved with an FPA/N.

- DNR
- Other state agencies
- Tribes
- Local governments
- Other interested parties





Water features require a riparian management zone (RMZ).

- Water types
  - Type S: “shorelines of the state”
  - Type F: contain fish *habitat*
  - Type Np: nonfish habitat, perennial
  - Type Ns: nonfish habitat, seasonal
- Sensitive features
  - Seeps
  - Springs
  - Intersections of Np streams
  - Unstable slopes



## Westside Riparian Management Zone (RMZ) Rules

- First Issue: Parcel Size
  - Less than 20 contiguous acres?
  - Less than 80 acres of total in-state ownership?
  - Exempt from FFR



## 20-acre exemption rules

Water Type	RMZ Width	Trees/1000'	
		Gravel/cobble	Boulder/bedrock
S/F $\geq$ 75'	29' – 115'	58	29
S/F < 75'	29' – 86'	115	60
F $\geq$ 5'	29' – 58'	86	29
F < 5'	29'	29	29
Np	29'	29	29

- RMZ harvest subject to shade requirements
- 20-acre exemption does NOT ensure compliance with ESA and CWA



## FFR RMZ for Type S/F Waters

- Core Zone
  - 50'
  - No harvest
- Inner Zone
  - Core to 3/4 SPTH for large streams (>10' )
  - Core to 2/3 SPTH for small streams
  - 3 harvest possibilities
- Outer Zone
  - Inner to SPTH
  - Harvest allowed
- *Note: All zones are measured from bankfull width and apply to each side of the stream*



## Site Potential Tree Height (SPTH)

Site Class (King)	SPTH	3/4 SPTH	2/3 SPTH
I	200	150	133
II	170	128	113
III	140	105	93
IV	110	83	73
V	90	68	60





## Desired Future Conditions (DFC)

- Basal Area targets
  - Combined core/inner zones
  - For when stand is age 140
- 100% cruise required in core and inner zone before inner zone harvest
- Cruise data entered into DFC worksheet program to determine harvest options



## Inner Zone Harvest Options

- Leave trees must meet DFC requirements
- Option 1
  - Thinning from below
  - Minimum of 57 trees per acre (TPA) must be retained
- Option 2
  - Leave trees closest to stream
  - Cannot harvest within:
    - 80' of small stream (30' from core)
    - 100' of large stream (50' from core)
    - Only available for Sites I-III (small) and Sites I-II (large)
  - Must leave 20 TPA (conifers  $\geq 12''$  DBH) in harvested portion



## Outer Zone Harvest

- Must leave 20 TPA
  - Conifers  $\geq 12$ " DBH
  - Must be left through all future harvests
- Spatial options:
  - Evenly dispersed
  - Clumped
    - Around sensitive features
    - Well-distributed



# DFC Worksheet

- <https://fortress.wa.gov/dnr/dfc/>

Forest Practices Review System | Privacy Policy

WASHINGTON STATE DEPARTMENT OF  
**Natural Resources**

HOME RECREATION & PUBLIC INFORMATION BUSINESS & PERMITS SCIENCE & ENVIRONMENT CONTACT DNR ABOUT DNR

## Forest Practices Application Review System

### Desired Future Condition Worksheet | Version 3.0

[Getting Started](#) | [Help](#) | [About This Version](#) | [Retrieve Data](#) | [Reset Form](#)

**General Information** ?

Landowner

Address

Phone

Project Name

Legal Description  section  township  range  E

**Site Information** ?

Stream Segment

Site Class

Major Species

Stream Size  Small  Large

RMZ Length (ft)

Eastside High Altitude RMZ?  Yes

**Core Zone Stand Table** ?

Stand Age

DBH Classes Total  **Add Data**

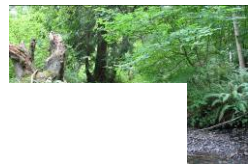
Enter your data in the grid and proceed to the Inner Zone Stand Table.

Core Zone Acres	<input type="text"/>	Basal Area / Acre	<input type="text"/>
Trees / Acre	<input type="text"/>	Percent Conifer	<input type="text"/>

Fill in the 'DBH Classes Total' textbox and click "Add Data"

DBH Class	Conifer	Hardwood

Calculate



## Inner Zone post-thinning Statistics

**Trees / Acre:** 62.26

**Basal Area / Acre:** 207.68

**Percent Conifer:** 98.2200012207031

Required Basal Area of Thinned Inner Zone at age 140 must be at least 328.93 Sq. Ft / Acre at age 140.

Projected Basal Area of Thinned Inner Zone at age 140 will be at least 333.2 Sq. Ft / Acre at age 140.

The inner zone for Option 1 is from 50 to 113 feet.

Calculations → TPA = 62.26, Inner zone = 0.31 acres,  $0.31 * 62.26 = 19.3$  → 19 trees must be left

### Inner Zone Stand Table

DBH	Conifers: Can Be Cut	Required Leave Trees	Hardwood: Can Cut All	Required Leave Trees	Conifer BA Cut	Conifer BA Leave
4	3	0	0	0	0.26	0
6	14	0	0	0	2.75	0
8	16	0	0	0	5.59	0
10	14	0	0	0	7.64	0
12	7	0	1	0	5.5	0
14	7	0	1	0	7.48	0
16	7	1	0	0	9.77	1.4
18	0	3	0	0	0	5.3
22	0	4	0	0	0	10.56
24	0	1	0	0	0	3.14
26	0	4	0	0	0	14.75
28	0	3	0	0	0	12.83
30	0	2	0	0	0	9.82
32	0	1	0	0	0	5.59
<b>Totals</b>					<b>38.99</b>	<b>63.38</b>





## Type N Waters

- 30' Equipment Limitation Zone (ELZ)
- 50' no-cut buffer required for Np Waters:
  - Up to 500' above confluence with Type S/F
  - At least 50% of total length
- Various buffers required around sensitive sites
  - Seeps – 50' no-cut from edge
  - Springs – 56' no-cut radius
  - Intersections of multiple Np waters – 56' no-cut radius



## Eastside 20-Acre Exemption Requirements

- Type S/F
  - RMZ width
    - 35' – 58' for partial cutting
    - Otherwise 35' – 345' , with average of 58'
  - Per Acre Leave Trees
    - All trees  $\leq 12''$  DBH
    - 18 conifers 12'' – 20'' DBH
    - 4 conifers  $\geq 20''$  DBH
    - 2 largest hardwoods
    - 3 hardwoods 12'' – 16'' DBH
    - Any additional trees needed to meet minimums established by bed type
- Type Np – 29' RMZ with 29 trees  $\geq 6''$  DBH per 1000' of stream if necessary



## Eastside FFR Requirements for S/F

- Core Zone
  - 30'
  - No Harvest
- Inner Zone
  - 45' for small streams ( $\leq 15'$ )
  - 70' for large streams ( $> 15'$ )
  - Thinning may be allowed, subject to minimum TPA and BA requirements by “habitat type”
  - *Must leave all trees within 75' for bull trout overlay*
- Outer Zone
  - 0 to 55' depending on site class and stream size
  - Leave 10 or 15 TPA depending on habitat type



## Total RMZ Widths for Eastside

Site Class	Small Stream	Large Stream
I	130'	130'
II	110'	110'
III	90'	100'
IV	75'	100'
V	75'	100'



## Type N Waters

- 30' Equipment Limitation Zone (ELZ)
- 50' buffer required for Np Waters:
  - Same rules as inner zone for partial cuts
  - No harvest similar to Westside rules for clear-cuts





## Wetland Types

- Forested wetland:
  - Can support > 30% crown closure
- Non-Forested wetland
  - Type A
    - > 0.5 acre and associated with at least 0.5 acre of standing open water
    - Any bog > 0.25 acre
  - Type B:
    - Any other nonforested wetland > 0.25 acre



## Wetland Management Zones (WMZ)

Type	Size (ac)	Max	Avg	Min
A	> 5	200'	100'	50'
A	≤ 5	100'	50'	25'
B	> 5	100'	50'	25'
B	0.5 – 5			25'
B	0.25 – 0.5	No WMZ required		



## Wetland Harvest Restrictions

- Forested wetlands
  - Use low impact harvest or cable systems
  - Preference for wildlife reserve trees
- WMZ
  - Leave 75 representative TPA
    - > 6" DBH Westside
    - > 4" DBH Eastside
  - Group removal OK, but openings cannot be:
    - > 100' wide
    - Within 200' of each other



## Other leave trees: Westside

- Wildlife reserve trees:
  - Defective/dead/damaged/dying
  - Westside: 3/ac
  - Eastside: 2/ac
- Green recruitment trees: 2/ac
- Downed logs: 2/ac



## Leave Tree Placement

- 800' Rule
  - Wildlife and recruitment trees can be left in clumps, but:
  - No point in the harvest unit can be  $> 800'$  from a leave tree
- RMZ' s and WMZ' s count towards leave tree requirements





## Other Issues: Harvest size

- Clear-cut size limitations
  - Nothing over 240 acres
  - 120-240 acres must be reviewed
- Perimeter “green-up” requirements
  - At least 30% > 30 years old and 60% > 15 years old or
  - At least 90% > 5 years old or average height > 4’



## Reforestation requirements

- Planting
- Natural
- Established within 3 years:
  - East: 150 TPA (17' x 17' )
  - West: 190 TPA (15' x 15' )



## Road Maintenance and Abandonment Plan (RMAP)

- Required when:
  - Doing timber harvest or salvage
  - Hauling on existing roads on your property
  - Property > 20 ac (80 total)
- Small landowners (harvest < 2 MMbf/yr) can do a simplified “checklist” RMAP