

# Worksheet for North Idaho Grand Fir (NIGF) Forest Type - Option 1 (60/30)

**INNER ZONE**

Stream Length Surveyed =  X  $\frac{25' \text{ (inner zone width)}}{43560 \text{ (sq. ft. per acre)}} = \text{ Acres}$

DBH Class	NIGF RS/Tree values	Acres	RS value per tree	Trees Surveyed	RS per DBH Class	Cut Tree RS Value	Retained RS per DBH Class
4-7.9	0.097	0.115	0.845	7	5.915	cut 1 0.845	5.070
8-11.9	0.209	0.115	1.821	5	9.104	cut 1 1.821	7.283
12-15.9	0.347	0.115	3.023	4	12.092	-	12.092
16-19.9	0.506	0.115	4.408	3	13.225	-	13.225
20-23.9	0.683	0.115	5.950	2	11.901	cut 1 5.950	5.950
24-27.9	0.878	0.115	7.649	1	7.649	-	7.649
28 +	1.088	0.115	9.479	1	9.479	-	9.479
Total RS * = <input type="text" value="69.36"/>					Retained RS** = <input type="text" value="60.75"/>		
(sum of RS/DBH Class)					(sum of Retained RS/DBH Class)		

\* Total RS must be > 60 or no inner zone harvest may occur

\*\* Retained RS must be > or = 60 RS following harvest

**OUTER ZONE**

Stream Length Surveyed =  X  $\frac{50' \text{ (outer zone width)}}{43560 \text{ (sq. ft. per acre)}} = \text{ Acres}$

DBH Class	NIGF RS/Tree values	Acres	RS value per tree	Trees Surveyed	RS per DBH Class	Cut Tree RS Value	Retained RS per DBH Class
4-7.9	0.097	0.230	0.423	7	2.958	cut 2 0.845	2.113
8-11.9	0.209	0.230	0.910	10	9.104	cut 4 3.642	5.462
12-15.9	0.347	0.230	1.512	10	15.115	cut 4 6.05	9.069
16-19.9	0.506	0.230	2.204	7	15.429	cut 4 8.82	6.612
20-23.9	0.683	0.230	2.975	3	8.925	cut 2 5.950	2.975
24-27.9	0.878	0.230	3.825	2	7.649	cut 1 3.825	3.825
28 +	1.088	0.230	4.739	1	4.739	cut 1 4.739	0.000
Total RS * = <input type="text" value="63.92"/>					Retained RS** = <input type="text" value="30.06"/>		
(sum of RS/DBH Class)					(sum of Retained RS/DBH Class)		

\* Total RS must be > 30 or no outer zone harvest may occur

\*\* Retained RS must be > or = 30 RS following harvest

**INSTRUCTIONS:**

- 1) Measure "Stream Length Surveyed" by measuring the length (in feet) of the stream that is adjacent to the Stream Protection Zone being considered for harvest. When harvesting both sides of a stream measure them separately.
- 2) Calculate "Acres" by multiplying the "Stream Length Surveyed" by the width of the zone being measured (25 or 50 feet) and dividing by 43,560 square feet per acre.
- 3) Input the "Acres" number into each of the lines in the table under the "Acres" category.
- 4) Divide the "NIGF RS/ac values" by the "Acres" in each row this will give you a "Relative Stocking value per tree" which you fill in under that category.
- 5) Count the number of live trees in each "Diameter Breast Height Class," and fill in the number on the table according to the DBH Class under the "Trees Surveyed" column.
- 6) In each row multiply "RS value per tree" X "Trees Surveyed" this gives you "RS per DBH Class," fill in those values under the column "RS per DBH Class."
- 7) Add the values in the "RS per DBH Class" column this will give you your "Total RS". NOTE: If this number is less than the minimum requirement for tree retention under the FPA rules you may not harvest any trees in that zone.
- 8) Using the "RS value per tree" numbers you may now calculate how many trees from each "DBH Class" may be harvested while ensuring that the "Retained RS" will be greater than or equal to the minimum RS required for that zone.

# Worksheet for North Idaho Grand Fir (NIGF) Forest Type - Option 1 (60/30)

## INNER ZONE

$$\text{Stream Length Surveyed} = \boxed{\phantom{000}} \times \frac{25' \text{ (inner zone width)}}{43560 \text{ (sq. ft. per acre)}} = \boxed{\phantom{000}} \text{ Acres}$$

DBH Class	NIGF RS/ac values	Acres	RS value per tree	Trees Surveyed	RS per DBH Class	Cut Tree RS Value	Retained RS per DBH Class
4-7.9	0.097	÷	=	X	=	-	=
8-11.9	0.209	÷	=	X	=	-	=
12-15.9	0.347	÷	=	X	=	-	=
16-19.9	0.506	÷	=	X	=	-	=
20-23.9	0.683	÷	=	X	=	-	=
24-27.9	0.878	÷	=	X	=	-	=
28 +	1.088	÷	=	X	=	-	=
Total RS * = <input style="width: 100px;" type="text"/>					Retained RS** = <input style="width: 100px;" type="text"/>		
(sum of RS/DBH Class)					(sum of Retained RS/DBH Class)		

\* Total RS must be > 60 or no inner zone harvest may occur

\*\* Retained RS must be > or = 60 RS following harvest

## OUTER ZONE

$$\text{Stream Length Surveyed} = \boxed{\phantom{000}} \times \frac{50' \text{ (outer zone width)}}{43560 \text{ (sq. ft. per acre)}} = \boxed{\phantom{000}} \text{ Acres}$$

DBH Class	NIGF RS/ac values	Acres	RS value per tree	Trees Surveyed	RS per DBH Class	Cut Tree RS Value	Retained RS per DBH Class
4-7.9	0.097	÷	=	X	=	-	=
8-11.9	0.209	÷	=	X	=	-	=
12-15.9	0.347	÷	=	X	=	-	=
16-19.9	0.506	÷	=	X	=	-	=
20-23.9	0.683	÷	=	X	=	-	=
24-27.9	0.878	÷	=	X	=	-	=
28 +	1.088	÷	=	X	=	-	=
Total RS * = <input style="width: 100px;" type="text"/>					Retained RS** = <input style="width: 100px;" type="text"/>		
(sum of RS/DBH Class)					(sum of Retained RS/DBH Class)		

\* Total RS must be > 30 or no outer zone harvest may occur

\*\* Retained RS must be > or = 30 RS following harvest

## INSTRUCTIONS:

- 1) Measure "Stream Length Surveyed" by measuring the length (in feet) of the stream that is adjacent to the Stream Protection Zone being considered for harvest. When harvesting both sides of a stream measure them separately.
- 2) Calculate "Acres" by multiplying the "Stream Length Surveyed" by the width of the zone being measured (25 or 50 feet) and dividing by 43,560 square feet per acre.
- 3) Input the "Acres" number into each of the lines in the table under the "Acres" category.
- 4) Divide the "NIGF RS/ac values" by the "Acres" in each row this will give you a "Relative Stocking value per tree" which you fill in under that category.
- 5) Count the number of live trees in each "Diameter Breast Height Class", fill in the number on the table according to the DBH Class under the "Trees Surveyed" column.
- 6) In each row multiply "RS value per tree" X "Trees Surveyed" this gives you "RS per DBH Class", fill in those values under the column "RS per DBH Class".
- 7) Add the values in the "RS per DBH Class" column this will give you your "Total RS". NOTE: If this number is less than the minimum requirement for tree retention under the FPA rules you may not harvest any trees in that zone.
- 8) Using the "RS value per tree" numbers you may now calculate how many trees from each "DBH Class" may be harvested while ensuring that the "Retained RS" will be greater than or equal to the minimum RS required for that zone.

# Worksheet for North Idaho Grand Fir (NIGF) Forest Type - Option 2 (60/10)

## INNER ZONE

$$\text{Stream Length Surveyed} = \boxed{\phantom{000}} \times \frac{50' \text{ (inner zone width)}}{43560 \text{ (sq. ft. per acre)}} = \boxed{\phantom{000}} \text{ Acres}$$

DBH Class	NIGF RS/ac values	Acres	RS value per tree	Trees Surveyed	RS per DBH Class	Cut Tree RS Value	Retained RS per DBH Class
4-7.9	0.097	÷	=	X	=	-	=
8-11.9	0.209	÷	=	X	=	-	=
12-15.9	0.347	÷	=	X	=	-	=
16-19.9	0.506	÷	=	X	=	-	=
20-23.9	0.683	÷	=	X	=	-	=
24-27.9	0.878	÷	=	X	=	-	=
28 +	1.088	÷	=	X	=	-	=
Total RS * = <input style="width: 100px;" type="text"/>					Retained RS** = <input style="width: 100px;" type="text"/>		
(sum of RS/DBH Class)					(sum of Retained RS/DBH Class)		

\* Total RS must be > 60 or no inner zone harvest may occur

\*\* Retained RS must be > or = 60 RS following harvest

## OUTER ZONE

$$\text{Stream Length Surveyed} = \boxed{\phantom{000}} \times \frac{25' \text{ (outer zone width)}}{43560 \text{ (sq. ft. per acre)}} = \boxed{\phantom{000}} \text{ Acres}$$

DBH Class	NIGF RS/ac values	Acres	RS value per tree	Trees Surveyed	RS per DBH Class	Cut Tree RS Value	Retained RS per DBH Class
4-7.9	0.097	÷	=	X	=	-	=
8-11.9	0.209	÷	=	X	=	-	=
12-15.9	0.347	÷	=	X	=	-	=
16-19.9	0.506	÷	=	X	=	-	=
20-23.9	0.683	÷	=	X	=	-	=
24-27.9	0.878	÷	=	X	=	-	=
28 +	1.088	÷	=	X	=	-	=
Total RS * = <input style="width: 100px;" type="text"/>					Retained RS** = <input style="width: 100px;" type="text"/>		
(sum of RS/DBH Class)					(sum of Retained RS/DBH Class)		

\* Total RS must be > 10 or no outer zone harvest may occur

\*\* Retained RS must be > or = 10 RS following harvest

## INSTRUCTIONS:

- 1) Measure "Stream Length Surveyed" by measuring the length (in feet) of the stream that is adjacent to the Stream Protection Zone being considered for harvest. When harvesting both sides of a stream measure them separately.
- 2) Calculate "Acres" by multiplying the "Stream Length Surveyed" by the width of the zone being measured (25 or 50 feet) and dividing by 43,560 square feet per acre.
- 3) Input the "Acres" number into each of the lines in the table under the "Acres" category.
- 4) Divide the "NIGF RS/ac values" by the "Acres" in each row this will give you a "Relative Stocking value per tree" which you fill in under that category.
- 5) Count the number of live trees in each "Diameter Breast Height Class", fill in the number on the table according to the DBH Class under the "Trees Surveyed" column.
- 6) In each row multiply "RS value per tree" X "Trees Surveyed" this gives you "RS per DBH Class", fill in those values under the column "RS per DBH Class".
- 7) Add the values in the "RS per DBH Class" column this will give you your "Total RS". NOTE: If this number is less than the minimum requirement for tree retention under the FPA rules you may not harvest any trees in that zone.
- 8) Using the "RS value per tree" numbers you may now calculate how many trees from each "DBH Class" may be harvested while ensuring that the "Retained RS" will be greater than or equal to the minimum RS required for that zone.