

How We Responded to the Comments and Requested Revisions



- Looked at the availability of the data
- Considered if the requested data is needed now (at the alternatives stage) or would it be more definitive during the impact analysis
- Looked at the criteria and metrics in the context of other metrics- collectively what do they tell us about the alternative

Methodology

- Working Group feedback informed:

- Refinements/Additions to factors

- Grouping of factors

- Core Factors

Cost to construct, millions	X	L	F	A1	A2	G1	G2
Weighted Score	\$220	\$360	\$930	\$1,078	\$690	\$880	\$520
Cost to Construct Score	1	1	5	5	3	5	3

- Weighting of Factors

- Scoring System

- Core Factors: weighted most heavily (5 out of 5)

- Others: Weights assigned by staff, based on Working Group feedback

Core Factors

- Trees - Areas predominantly:
 - Redwoods
 - Old Growth
 - Mature (Slide Compromised)
 - Green Diamond Marbled Murrelet preserve area
 - Other Mature Conifers
- Cost to build
- Cost to mitigate

Example: Cost to Construct

- District 1 identified Construction Cost as one of many important performance measures
- Working Group Round 1 Meetings – broad agreement cost is “make or break”
- District 1 elevated cost to a “Core Factor”
- Scoring/Weighting
 - **Score**
 - Costs for each alternative compared against each other
 - **Lowest** cost → Lowest (best) score (1 on scale of 1 to 5)
 - **Middle** Cost → 3 on scale of 1-5
 - **Highest** cost → Highest (worst) score (5 on scale of 1 to 5)
 - **Weight**
 - “Core Factors” have heaviest possible weight (5 on scale of 1 to 5)
 - **Weighted Score** = Score X Weight
 - Best Possible = 5
 - Worst Possible = 25



	X	L	F	A1	A2	G1	G2
Cost to construct, millions	\$220	\$360	\$930	\$1,078	\$690	\$880	\$520
Score	1	1	5	5	3	5	3
Weighted Score	5	5	25	25	15	25	15

Alternatives Ranking Matrix

CORE FACTORS	X	L	F	A1	A2	G1	G2	Factor Weight	Equalized Factor Weight
Trees (Sum of all Redwoods (incl GDRC MAMU Preserve) + Other Mature Conifers - acres)	13.9	72.5	1.6	2.3	4.7	4.9	7.2	5	3
Weight	3	5	1	1	3	3	3		
<i>Tree Score (Weight Score X Factor Weight)</i>	15	25	5	5	15	15	15		
Cost to construct, millions	\$220	\$360	\$930	\$1,078	\$690	\$880	\$520	5	3
Weighted Score	1	1	5	5	3	5	3		
Cost to Construct Score	5	5	25	25	15	25	15		
Cost of Mitigation	Medium	Very High	Medium	Very High	Very High	Very High	Very High	5	3
Weight	3	5	3	5	5	5	5		
Cost of Mitigation Score	15	25	15	25	25	25	25		
Total Score, Core Factors	35	55	45	55	55	65	55		
<i>Best Possible Core Factors Score</i>									
	15								
<i>Worst Possible Core Factors Score</i>									
	75								
Ranking, Just the Core Factors	1	3	2	3	3	7	3		

Key:

Green / low number - Best; Red / high number - Worst

GDRC = Green Diamond Resource Company

MAMU = marbeled murrelet (protected species)

Alternatives Ranking Matrix, Page 2

OPERATIONAL FACTORS	X	L	F	A1	A2	G1	G2	Factor Weight	Equalized Factor Weight
Road Closure Potential	H	H	L	L	L	M	M	4	3
Weight	5	5	1	1	1	3	3		
Road Closure Potential Score	20	20	4	4	4	12	12		
Cost to maintain (relative to existing)	H	H	L	L	L	M	M	1	3
Weight	5	5	1	1	1	3	3		
Cost to maintain Score	5	5	1	1	1	3	3		
Traffic Mobility	H	H	L	L	L	M	M	3	3
Weight	5	5	1	1	1	3	3		
Traffic Mobility Score	15	15	3	3	3	9	9		
	X	L	F	A1	A2	G1	G2		
Total Score, Operational Factors	40	40	8	8	8	24	24		
<i>Best Possible Operational Score</i>									
	8								
<i>Worst Possible Operational Score</i>									
	40								
Ranking, Just Operational Factors	6	6	1	1	1	4	4		

Key:

Green / low number - Best; Red / high number - Worst

Alternatives Ranking Matrix, Page 3

CONSTRUCTION FACTORS	X	L	F	A1	A2	G1	G2	Factor Weight	Equalized Factor Weight
Footprint Size (acres)	35.7	167.5	15.4	359.9	371.6	348.7	359.5	4	3
Weight	1	3	1	5	5	5	5		
Footprint Size Score	4	12	4	20	20	20	20		
Time to Construct (years)	3.5	3.5	7	5	3	5	3	3	3
Weight	3	3	3	3	3	3	3		
Time to Construct score	9	9	9	9	9	9	9		
CY of cut/fill deposited within project area	0	0	0	6.8M	7.1M	5.6M	5.9M	4	3
Weight	1	1	1	5	5	5	5		
CY cut/fill deposited on site score	4	4	4	20	20	20	20		
CY of cut/fill to be deposited offsite	400K	2.4M	650K	0	0	0	0	4	3
Weight	3	5	3	1	1	1	1		
CY cut/fill deposited off site score	12	20	12	4	4	4	4		
Trail Relocation Potential (number of trail intersections)	3	7	2	4	2	3	3	2	3
Weight	3	5	1	3	1	3	3		
Trail Relocation Score	6	10	2	6	2	6	6		
Total Score, Construction Factors	35	55	31	59	55	59	59		
<i>Best Possible Construction Score</i>									
	17								
<i>Worst Possible Construction Score</i>									
	85								
Ranking, Just Construction Factors	2	3	1	5	3	5	5		

Key:

Green / low number - Best; Red / high number - Worst

CY = Cubic yards

Alternatives Ranking Matrix, Page 4

NATURAL FACTORS	X	L	F	A1	A2	G1	G2	Factor Weight	Equalized Factor Weight
Other Vegetation-Related Natural Factors (Excludes Redwoods and Mature Conifers - see Core Issues)									
Red Alder (Parks + GDRC)	12.3	61.1	8.0	69.4	69.4	102.9	103.2	3	3
Weight	1	3	1	3	3	5	5		
Red Alder Score	3	9	3	9	9	15	15		
Coastal Scrub/Grassland (Parks + GDRC)	2.5	19.7	0.5	6.0	6.0	23.2	23.4	3	3
Weight	1	5	1	1	1	5	5		
Coast Scrub/Grassland	3	15	3	3	3	15	15		
New Edges - Natl + State Parks (miles)	1.4	2.7	1.7	0.8	0.5	2.2	1.9	3	3
Weight	1	5	3	1	1	3	3		
New Edges - Natl + State Parks	3	15	9	3	3	9	9		
New Edges - GDRC	0.0	0.0	0.0	2.2	2.5	1.0	1.3	1	3
Weight	1	1	1	5	5	3	3		
New Edges - GDRC	1	1	1	5	5	3	3		
Other Green Diamond Land (e.g., logged 2000-2010, logged 2010-2020, other conifer young, and young redwood)	0	0	0	273.3	282.9	192	200.2	2	3
Weight	1	1	1	5	5	5	5		
Other Green Diamond Land Score	2	2	2	10	10	10	10		
	X	L	F	A1	A2	G1	G2		
Combined Score, Other Vegetation-Related Natural Factors	12	42	18	30	30	52	52		
Best Possible Other Vegetation Score									
	12								
Worst Possible Other Vegetation Score									
	60								
Vegetation Factors - Ranking	1	5	2	3	3	6	6		

Key:

Green / low number - Best; Red / high number - Worst

GDRC = Green Diamond Resource Company

Alternatives Ranking Matrix, Page 5

NATURAL FACTORS (continued)	X	L	F	A1	A2	G1	G2	Factor Weight	Equalized Factor Weight
Wildlife-Related Natural Factors									
MAMU <i>occupied</i> habitat	0.0	0.0	0.0	0.4	0.4	0.4	0.4	4	3
Weight	1	1	1	1	1	1	1		
MAMU occupied habitat score	4	4	4	4	4	4	4		
MAMU <i>designated critical habitat</i> (acres)	57.2	137.7	13.7	7.60	10.0	54.8	57.1	2	3
Weight	3	5	1	1	1	3	3		
MAMU critical habitat score	6	10	2	2	2	6	6		
Marten <i>Core</i> habitat (acres)	17.2	36.6	2.4	44.70	56.9	46.1	56.2	3	3
Weight	3	3	1	3	3	3	3		
Marten core habitat score	9	9	3	9	9	9	9		
Potential to Disrupt Wildlife Connectivity (Rating)	Low (1.5)	Low (2)	Low (1.0)	High (4.5)	High (5)	High (3.5)	High (4)	3	3
Weight	1	1	1	5	5	5	5		
Wildlife Connectivity Score	3	3	3	15	15	15	15		
NSO suitable habitat (acres)	14.0	72.5	3.9	146.6	152.5	72.6	79.2	4	3
Weight	1	3	1	5	5	3	3		
NSO suitable habitat score	4	12	4	20	20	12	12		
Combined Score, Wildlife-Related Natural Factors	X	L	F	A1	A2	G1	G2		
Best Possible Wildlife Score	26	38	16	50	50	46	46		
16.0									
Worst Possible Wildlife Score									
80									
Ranking: Wildlife Factors	2	3	1	6	6	4	4		

Key:

Green / low number - Best; Red / high number - Worst

MAMU = marbled murrelet (protected species)

NSO = northern spotted owl (protected species)

Alternatives Ranking Matrix, Page 6

NATURAL FACTORS (continued)	X	L	F	A1	A2	G1	G2	Factor Weight	Equalized Factor Weight
Waters-Related Factors									
New Tributary Crossings	0	1	0	7	8	5	7	3	3
Weight	1	1	1	3	3	3	3		
New Tributary Crossings Score	3	3	3	9	9	9	9		
Wilson Creek Watershed disturbance (acres)	1	66.2	4.5	159	177.6	83.6	91.2	1	3
Weight	1	3	1	5	5	3	3		
Wilson Creek watershed disturbance score	1	3	1	5	5	3	3		
	X	L	F	A1	A2	G1	G2		
Combined Natural Factors (Vegetation + Wildlife + Waters)	42	86	38	94	94	110	110		
Best Possible Natural Factors Score									
	32								
Worst Possible Natural Factors Score									
	160								
Ranking: All Natural Factors	2	3	1	4	4	6	6		

Key:

Green / low number - Best; Red / high number - Worst

Alternatives Ranking Matrix, Page 7

	X	L	F	A1	A2	G1	G2
ALL FACTORS COMBINED - WEIGHTED	152	236	122	216	212	258	248
Best Possible Score							
72							
Worst Possible Score							
360	X	L	F	A1	A2	G1	G2
Ranking All Factors Combined, Weighted	2	5	1	4	3	7	6
	X	L	F	A1	A2	G1	G2
ALL FACTORS COMBINED - ALL FACTORS WEIGHTED EQUALLY (3)	147	225	105	207	201	243	237
Best Possible Score							
72							
Worst Possible Score							
360	X	L	F	A1	A2	G1	G2
Ranking: All Factors Equal Weight	2	5	1	4	3	7	6
Core Factors + Natural Factors	77	141	83	149	149	175	165
Best Possible Score							
47.0							
Worst Possible Score							
235							
Ranking: Just Core Factors + Natural Factors	1	3	2	4	4	7	6

Key:

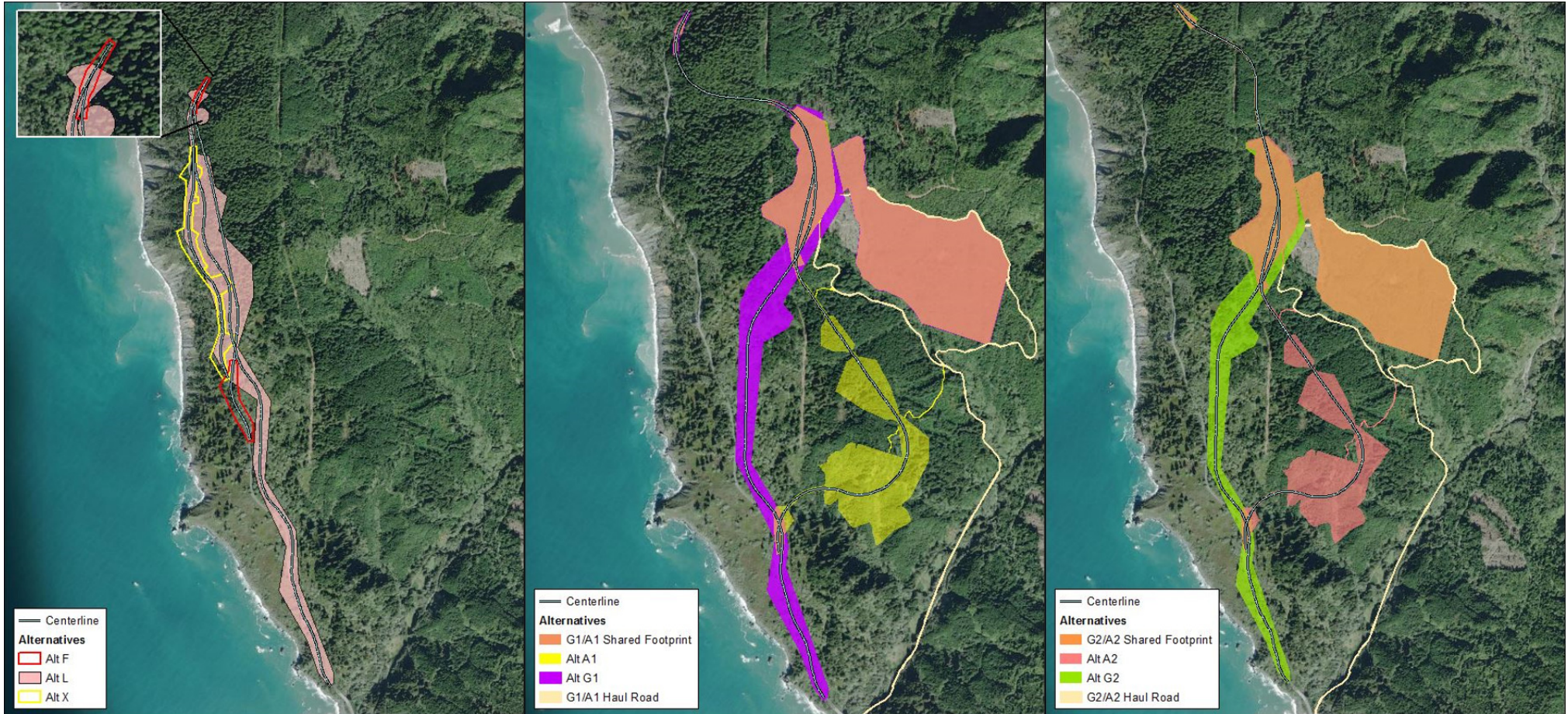
Green / low number - Best; Red / high number - Worst

Alternatives Maps: Proposed Alignments Overview

"West Side"
X (Yellow), F (Red), and L (Peach)

A1 and G1

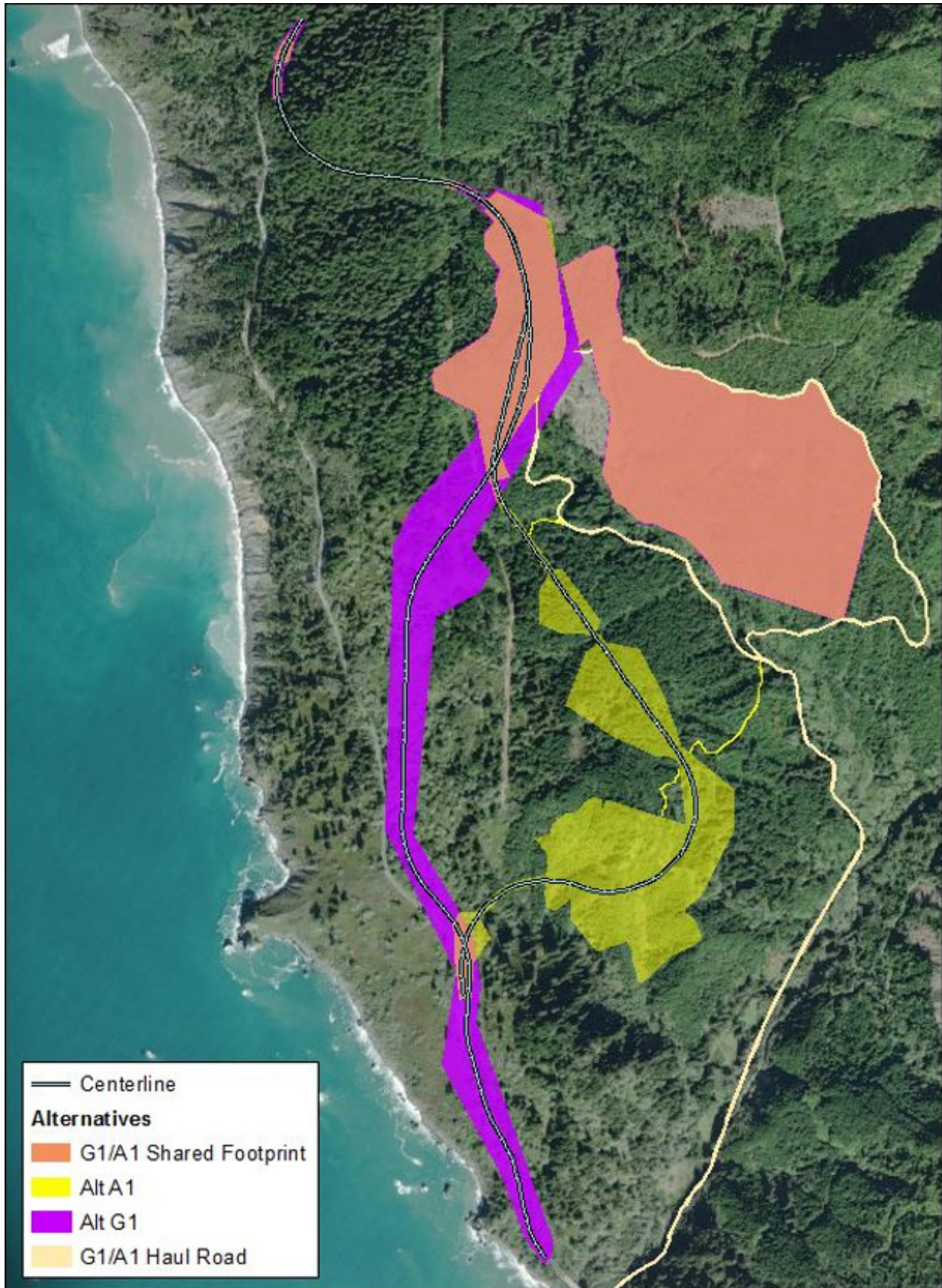
A2 and G2



"West Side"
X (Yellow), F (Red), and L (Peach)



A1 and G1



A2 and G2

