




RF08. View east/upslope at rockfall hazard.

Hazard ID #:	RF08
Hazard Type:	rockfall
HIN:	183
Rating:	A
2012 SEIS Alignment Location:	1763
Frequency (yrs):	5-25
Predictability:	unpredictable
Material Volume (CY):	<10
Clast Size (ft):	4+
Source Elev. (ft):	100-500
Centerline Slope:	open_soil_slope
Alignment Location:	deposition_zone
Impact Alignment:	yes
Alignment Exposure (ft):	500+
Vegetation:	disturbed
Deciduous Trees:	no
2012 SEIS Alignment South Margin:	1760+10
2012 SEIS Alignment North Margin:	1767+60
Photo #:	5039, 5040, 5041, 5157, 6209



RF08. View southwest (downslope and down alignment) at rockfall debris. Survey lath represent previous IRP 2006 alignment.

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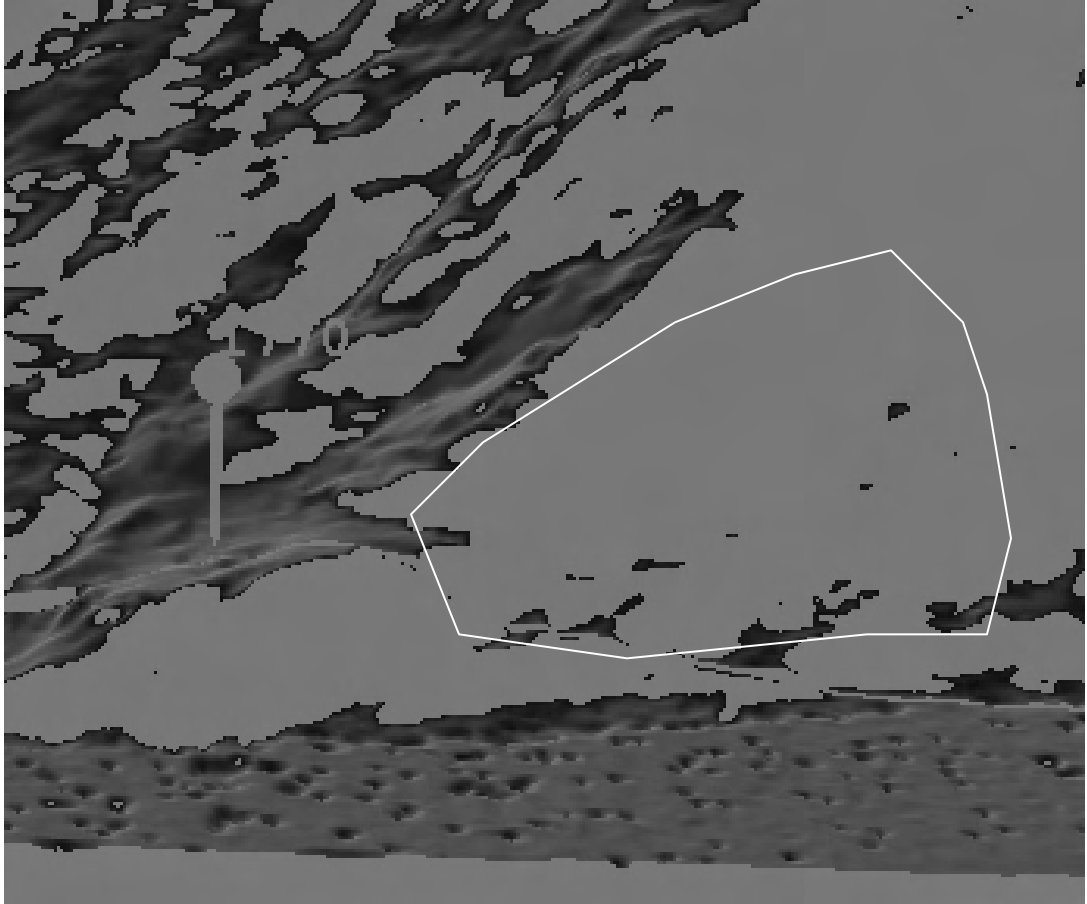
RF09. View east/upslope at area of greater frequency rockfall within rockfall area RF08.

Hazard ID #:	RF09
Hazard Type:	rockfall
HIN:	129
Rating:	A
2012 SEIS Alignment Location:	1764
Frequency (yrs):	1-5
Predictability:	unpredictable
Material Volume (CY):	<10
Clast Size (ft):	2-3
Source Elev. (ft):	100-500
Centerline Slope:	open_soil_slope
Alignment Location:	deposition_zone
Impact Alignment:	yes
Alignment Exposure (ft):	50-200
Vegetation:	disturbed
Deciduous Trees:	yes
2012 SEIS Alignment South Margin:	1764+10
2012 SEIS Alignment North Margin:	1764+70
Photo #:	3878




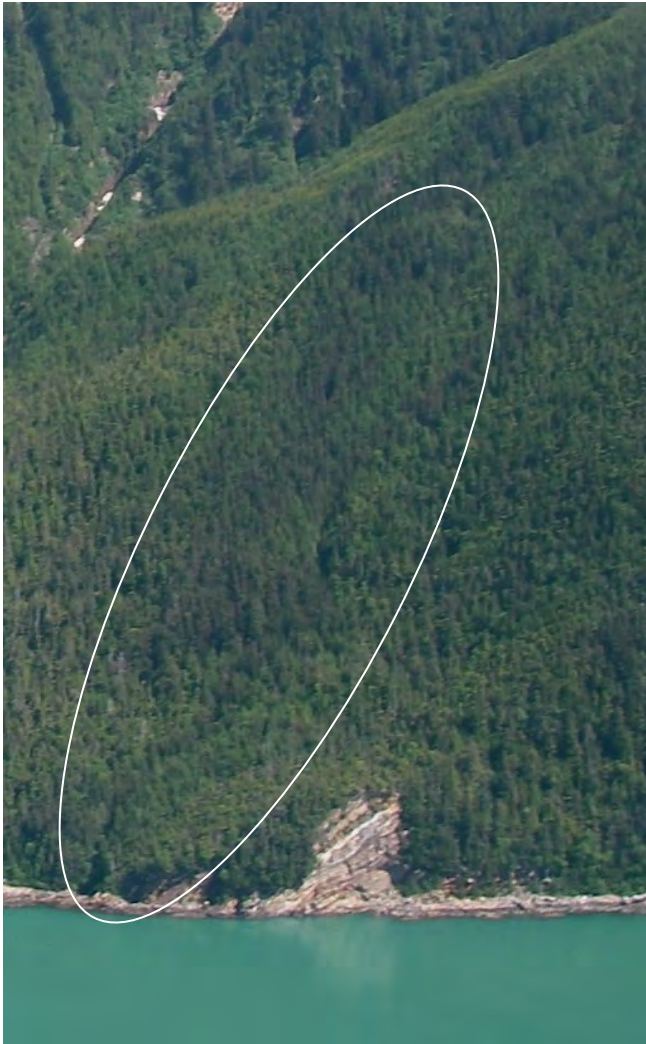
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RF09. Bare earth LIDAR image of rockfall hazard. Station label represents previous IRP 2006 alignment.

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DF14. View east/upslope at debris flow channel.

Hazard ID #:	DF14
Hazard Type:	debris_flow
HIN:	111
Rating:	A
2012 SEIS Alignment Location:	1773
Frequency (yrs):	25+
Predictability:	moderate
Material Volume (CY):	10-100
Clast Size (ft):	2-3
Source Elev. (ft):	>1000
Centerline Slope:	single_channel
Alignment Location:	path
Impact Alignment:	yes
Alignment Exposure (ft):	50-200
Vegetation:	disturbed
Deciduous Trees:	no
2012 SEIS Alignment South Margin:	1772+40
2012 SEIS Alignment North Margin:	1773+20
Photo #:	2093, 4714




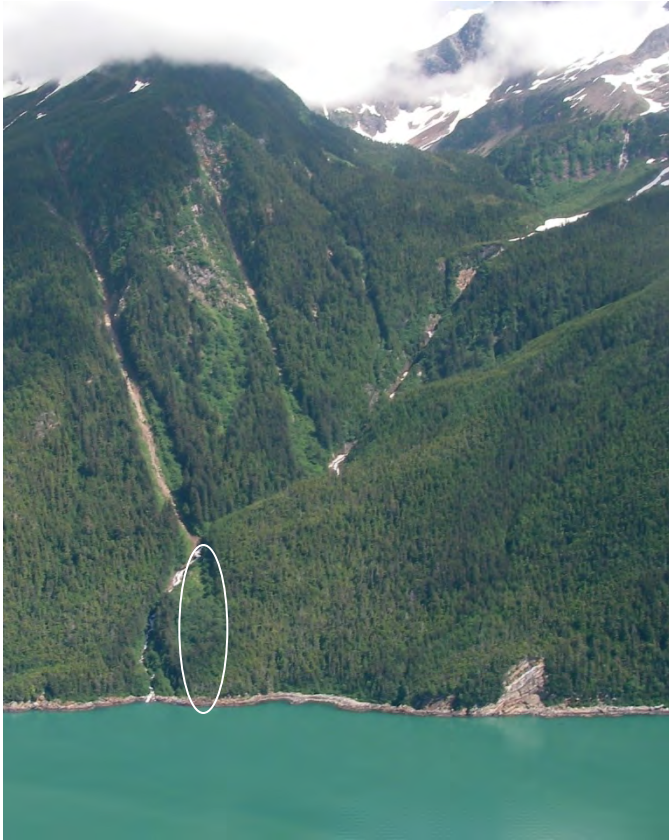
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DF14. View east/upslope at debris flow channel. Old levee walls visible on far left and right sides of photo.

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DF15. View east/upslope at debris flow channel and avalanche path.

Hazard ID #:	DF15
Hazard Type:	debris_flow
HIN:	189
Rating:	B
2012 SEIS Alignment Location:	1784
Frequency (yrs):	5-25
Predictability:	moderate
Material Volume (CY):	1000+
Clast Size (ft):	2-3
Source Elev. (ft):	>1000
Centerline Slope:	multi_channel
Alignment Location:	path
Impact Alignment:	yes
Alignment Exposure (ft):	50-200
Vegetation:	disturbed
Deciduous Trees:	yes
2012 SEIS Alignment South Margin:	1783+80
2012 SEIS Alignment North Margin:	1784+50
Photo #:	3912

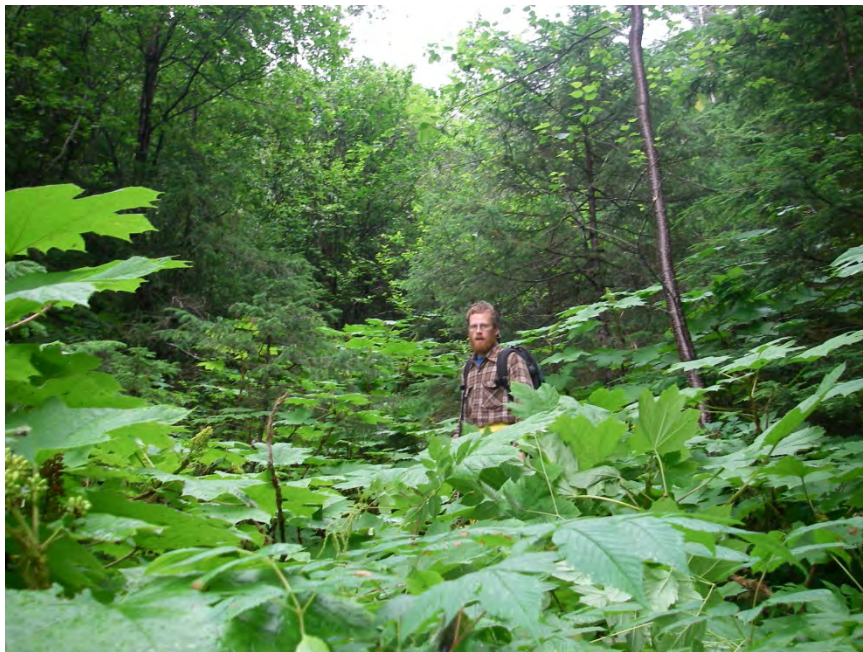


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DF15. View east/upslope at debris flow channel.



DF15. View east/upslope at abandoned/infrequently occupied debris flow path. During large events, this is believed to be an overflow channel from the adjacent, active debris flow channel to the north.

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DF16. View east/upslope at debris flow channel and avalanche path.

Hazard ID #:	DF16
Hazard Type:	debris_flow
HIN:	207
Rating:	A
2012 SEIS Alignment Location:	1786
Frequency (yrs):	1-5
Predictability:	moderate
Material Volume (CY):	1000+
Clast Size (ft):	2-3
Source Elev. (ft):	>1000
Centerline Slope:	multi_channel
Alignment Location:	path
Impact Alignment:	yes
Alignment Exposure (ft):	50-200
Vegetation:	disturbed
Deciduous Trees:	yes
2012 SEIS Alignment South Margin:	1785+00
2012 SEIS Alignment North Margin:	1786+30
Photo #:	1141, 2091, 5158




CADD	ECC
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DF16. View east/upslope at tributary to debris flow channel and avalanche path.

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DF17. View north/up alignment at margin of old debris flow and recent debris flow.

Hazard ID #:	DF17
Hazard Type:	debris_flow
HIN:	129
Rating:	B
2012 SEIS Alignment Location:	1826
Frequency (yrs):	25+
Predictability:	low
Material Volume (CY):	10-100
Clast Size (ft):	1-2
Source Elev. (ft):	2000-3000
Centerline Slope:	fan
Alignment Location:	deposition_zone
Impact Alignment:	yes
Alignment Exposure (ft):	50-200
Vegetation:	disturbed
Deciduous Trees:	yes
2012 SEIS Alignment South Margin:	1825+60
2012 SEIS Alignment North Margin:	1827+00
Photo #:	1186, 4012, 4015, 5159, 6232



CADD	ECC
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FILE No.	GEO_HAZ_SUMM.PPT
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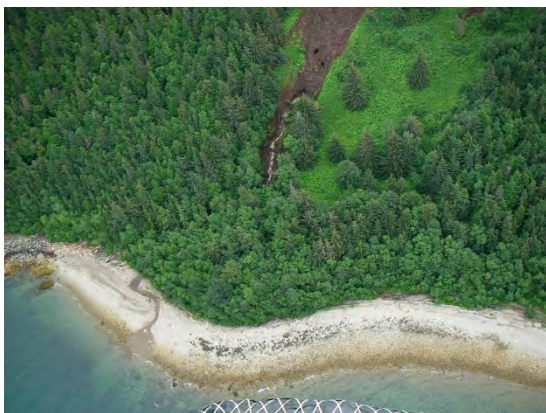
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DF18. Debris flow and avalanche path.



DF18. View east/upslope at debris flow.

Hazard ID #:	DF18
Hazard Type:	debris_flow
HIN:	129
Rating:	A
2012 SEIS Alignment Location:	1828
Frequency (yrs):	1-5
Predictability:	high
Material Volume (CY):	10-100
Clast Size (ft):	0-1
Source Elev. (ft):	2000-3000
Centerline Slope:	fan
Alignment Location:	deposition_zone
Impact Alignment:	yes
Alignment Exposure (ft):	50-200
Vegetation:	disturbed
Deciduous Trees:	yes
2012 SEIS Alignment South Margin:	1827+00
2012 SEIS Alignment North Margin:	1829+00
Photo #:	1186, 4012, 4015, 5159, 6232



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DF18. View east/upslope at debris flow and avalanche path.

	CADD	ECC	TITLE GEOLOGIC HAZARD SUMMARY ARRANGED BY 2012 SEIS STATIONING LYNN CANAL HIGHWAY PHASE 2 2012 SEIS ALIGNMENT HAZARD REVISIONS		
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DF18. View southwest (downslope and down alignment) down a major creek, debris flow fan, and recent deposits that buried small conifer trees. Fan continues across alignment.

	CADD	ECC	TITLE GEOLOGIC HAZARD SUMMARY ARRANGED BY 2012 SEIS STATIONING LYNN CANAL HIGHWAY PHASE 2 2012 SEIS ALIGNMENT HAZARD REVISIONS
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DF19. View east/upslope at debris flow channel and avalanche path.

Hazard ID #:	DF19
Hazard Type:	debris_flow
HIN:	153
Rating:	A
2012 SEIS Alignment Location:	1850
Frequency (yrs):	5-25
Predictability:	low
Material Volume (CY):	10-100
Clast Size (ft):	0-1
Source Elev. (ft):	3000+
Centerline Slope:	fan
Alignment Location:	deposition_zone
Impact Alignment:	yes
Alignment Exposure (ft):	200-500
Vegetation:	denuded
Deciduous Trees:	yes
2012 SEIS Alignment South Margin:	1847+80
2012 SEIS Alignment North Margin:	1851+50
Photo #:	4809, 4812, 4830, 5160

	CADD	ECC	TITLE GEOLOGIC HAZARD SUMMARY ARRANGED BY 2012 SEIS STATIONING LYNN CANAL HIGHWAY PHASE 2 2012 SEIS ALIGNMENT HAZARD REVISIONS
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	CHECK	RGD	
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DF19. View east/upslope from beach at debris flow and avalanche path.

	CADD	ECC	TITLE GEOLOGIC HAZARD SUMMARY ARRANGED BY 2012 SEIS STATIONING LYNN CANAL HIGHWAY PHASE 2 2012 SEIS ALIGNMENT HAZARD REVISIONS		
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DF20. View east/upslope at debris flow channel.

Hazard ID #:	DF20
Hazard Type:	debris_flow
HIN:	135
Rating:	B
2012 SEIS Alignment Location:	1854
Frequency (yrs):	5-25
Predictability:	low
Material Volume (CY):	10-100
Clast Size (ft):	0-1
Source Elev. (ft):	3000+
Centerline Slope:	fan
Alignment Location:	deposition_zone
Impact Alignment:	yes
Alignment Exposure (ft):	50-200
Vegetation:	denuded
Deciduous Trees:	yes
2012 SEIS Alignment South Margin:	1854+00
2012 SEIS Alignment North Margin:	1854+70
Photo #:	1210, 5160

	CADD	ECC	TITLE GEOLOGIC HAZARD SUMMARY ARRANGED BY 2012 SEIS STATIONING LYNN CANAL HIGHWAY PHASE 2 2012 SEIS ALIGNMENT HAZARD REVISIONS
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DF20. View east/upslope at debris channel. Stream is poorly channelized as a result of a high sediment/debris supply.

	CADD	ECC	TITLE GEOLOGIC HAZARD SUMMARY ARRANGED BY 2012 SEIS STATIONING LYNN CANAL HIGHWAY PHASE 2 2012 SEIS ALIGNMENT HAZARD REVISIONS
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HDR / 2012 SEIS JUNEAU ACCESS / AK			G-60



RF10. View east/upslope at rockfall.

Hazard ID #:	RF10
Hazard Type:	rockfall
HIN:	111
Rating:	C
2012 SEIS Alignment Location:	1857
Frequency (yrs):	unknown (5-25?)
Predictability:	unpredictable
Material Volume (CY):	<10
Clast Size (ft):	2-3
Source Elev. (ft):	100-500
Centerline Slope:	other
Alignment Location:	below_deposition zone
Impact Alignment:	no
Alignment Exposure (ft):	50-200
Vegetation:	disturbed
Deciduous Trees:	yes
2012 SEIS Alignment South Margin:	1856+00
2012 SEIS Alignment North Margin:	1857+00
Photo #:	4816



CADD	ECC
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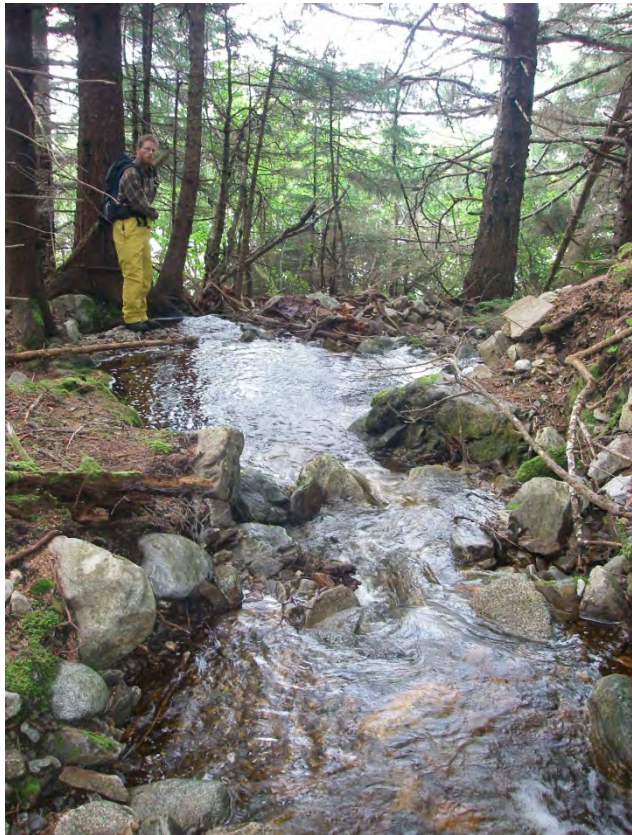
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RF10. View at basalt cliffs that create the rockfall zone.

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DF21. View west/downslope at debris flow deposition zone.

Hazard ID #:	DF21
Hazard Type:	debris_flow
HIN:	123
Rating:	B
2012 SEIS Alignment Location:	1895
Frequency (yrs):	1-5
Predictability:	high
Material Volume (CY):	<10
Clast Size (ft):	0-1
Source Elev. (ft):	2000-3000
Centerline Slope:	single_channel
Alignment Location:	path
Impact Alignment:	yes
Alignment Exposure (ft):	50-200
Vegetation:	disturbed
Deciduous Trees:	yes
2012 SEIS Alignment South Margin:	1894+40
2012 SEIS Alignment North Margin:	1895+60
Photo #:	5161, 6238



DF21. View east/upslope at moderate slope old growth covering the debris flow channel.



DF21. View east/upslope at debris flow channel.



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RF12. View east/upslope at rockfall area.

Hazard ID #:	RF12
Hazard Type:	rockfall
HIN:	105
Rating:	C
2012 SEIS Alignment Location:	1917
Frequency (yrs):	unknown (>25?)
Predictability:	unpredictable
Material Volume (CY):	<10
Clast Size (ft):	4+
Source Elev. (ft):	100-500
Centerline Slope:	-
Alignment Location:	below_deposition_zone
Impact Alignment:	no
Alignment Exposure (ft):	50-200
Vegetation:	disturbed
Deciduous Trees:	yes
2012 SEIS Alignment South Margin:	1916+10
2012 SEIS Alignment North Margin:	1917+30
Photo #:	5162



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RF13. View east/upslope at rockfall area.

Hazard ID #:	RF13
Hazard Type:	rockfall
HIN:	111
Rating:	C
2012 SEIS Alignment Location:	1932
Frequency (yrs):	0-1
Predictability:	moderate
Material Volume (CY):	<10
Clast Size (ft):	1-2
Source Elev. (ft):	100-500
Centerline Slope:	-
Alignment Location:	below_deposition_zone
Impact Alignment:	no
Alignment Exposure (ft):	50-200
Vegetation:	disturbed
Deciduous Trees:	yes
2012 SEIS Alignment South Margin:	1931+00
2012 SEIS Alignment North Margin:	1932+00
Photo #:	5162



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Hazard ID #:	RF14
Hazard Type:	rockfall
HIN:	183
Rating:	A
2012 SEIS Alignment Location:	1943
Frequency (yrs):	unknown (5-25?)
Predictability:	unpredictable
Material Volume (CY):	<10
Clast Size (ft):	2-3
Source Elev. (ft):	100-500
Centerline Slope:	-
Alignment Location:	below_deposition_zone
Impact Alignment:	yes
Alignment Exposure (ft):	>1000
Vegetation:	disturbed
Deciduous Trees:	no
2012 SEIS Alignment South Margin:	1933+30
2012 SEIS Alignment North Margin:	1953+00
Photo #:	5163, 5909, 5910, 5911




RF14. View east/upslope at moderate rockfall hazard below massive gneiss cliffs.



RF14. View west/downslope at fresh rockfall with 3-4 ft diameter boulders.

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Hazard ID #:	RF15
Hazard Type:	rockfall
HIN:	129
Rating:	A
2012 SEIS Alignment Location:	1947
Frequency (yrs):	5-25
Predictability:	unpredictable
Material Volume (CY):	<10
Clast Size (ft):	4+
Source Elev. (ft):	100-500
Centerline Slope:	other
Alignment Location:	deposition_zone
Impact Alignment:	yes
Alignment Exposure (ft):	200-500
Vegetation:	disturbed
Deciduous Trees:	yes
2012 SEIS Alignment South Margin:	1946+60
2012 SEIS Alignment North Margin:	1948+90
Photo #:	5163


	CADD	ECC	TITLE GEOLOGIC HAZARD SUMMARY ARRANGED BY 2012 SEIS STATIONING LYNN CANAL HIGHWAY PHASE 2 2012 SEIS ALIGNMENT HAZARD REVISIONS		
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RF15. View east/upslope at rockfall area within rockfall area RF14.




RF15. View east/upslope at large cliffs, fresh rockfall scars.

	CADD	ECC	TITLE GEOLOGIC HAZARD SUMMARY ARRANGED BY 2012 SEIS STATIONING LYNN CANAL HIGHWAY PHASE 2 2012 SEIS ALIGNMENT HAZARD REVISIONS		
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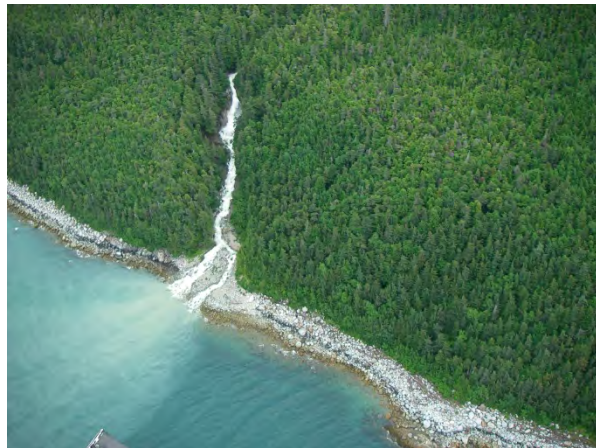


RF15. View north/up alignment across deposit of fresh 2 ft diameter rockfall.

	CADD	ECC	TITLE GEOLOGIC HAZARD SUMMARY ARRANGED BY 2012 SEIS STATIONING LYNN CANAL HIGHWAY PHASE 2 2012 SEIS ALIGNMENT HAZARD REVISIONS		
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DF22. View east/upslope at debris flow channel and avalanche path.




DF22. View east/upslope at debris flow channel.

Hazard ID #:	DF22
Hazard Type:	debris_flow
HIN:	129
Rating:	A
2012 SEIS Alignment Location:	1984
Frequency (yrs):	1-5
Predictability:	high
Material Volume (CY):	10-100
Clast Size (ft):	1-2
Source Elev. (ft):	2000-3000
Centerline Slope:	fan
Alignment Location:	deposition_zone
Impact Alignment:	yes
Alignment Exposure (ft):	50-200
Vegetation:	disturbed
Deciduous Trees:	no
2012 SEIS Alignment South Margin:	1983+50
2012 SEIS Alignment North Margin:	1985+00
Photo #:	5047, 5164, 5914

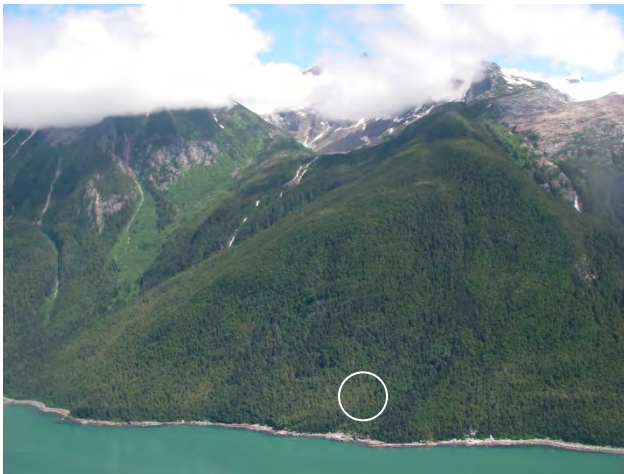


DF22. View southwest (downslope and down alignment) at debris flow fan and avalanche path.

	CADD	ECC	TITLE GEOLOGIC HAZARD SUMMARY ARRANGED BY 2012 SEIS STATIONING LYNN CANAL HIGHWAY PHASE 2 2012 SEIS ALIGNMENT HAZARD REVISIONS
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RF16. View east/upslope at rockfall hazard.




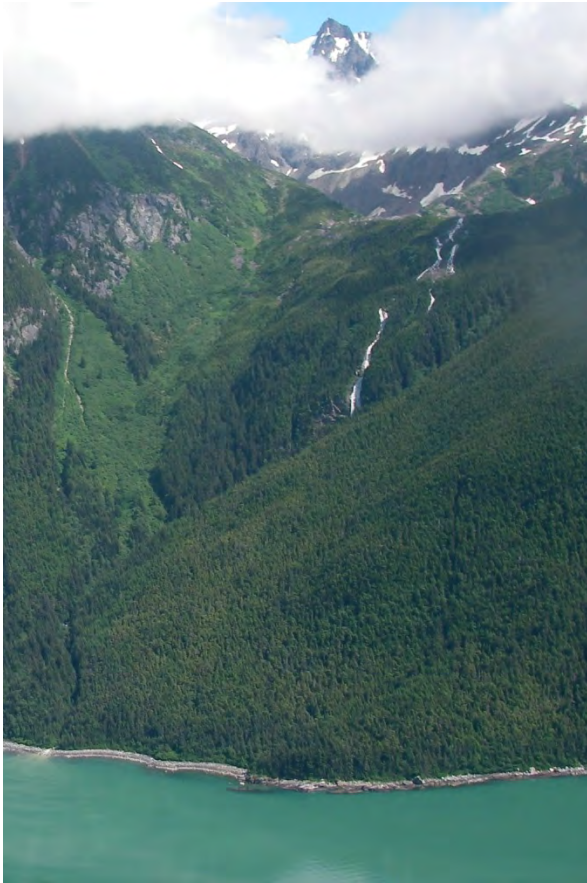
RF16. View east/upslope at rockfall area.

Hazard ID #:	RF16
Hazard Type:	rockfall
HIN:	129
Rating:	B
2012 SEIS Alignment Location:	2014
Frequency (yrs):	unknown (5-25?)
Predictability:	unpredictable
Material Volume (CY):	<10
Clast Size (ft):	3-4
Source Elev. (ft):	100-500
Centerline Slope:	deciduous_trees
Alignment Location:	below_deposition_zone
Impact Alignment:	yes
Alignment Exposure (ft):	200-500
Vegetation:	disturbed
Deciduous Trees:	yes
2012 SEIS Alignment South Margin:	2013+00
2012 SEIS Alignment North Margin:	2015+70
Photo #:	5052, 5053, 6240

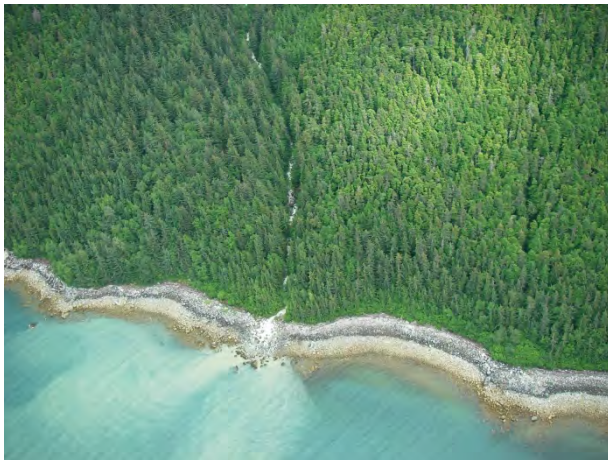


RF16. View north/up alignment across low frequency rockfall area.

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DF23. View east/upslope at debris flow channel and avalanche path.

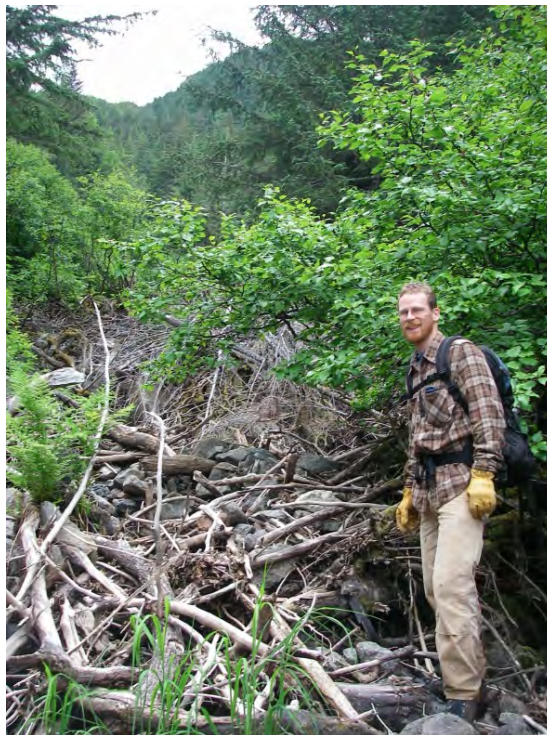


DF23. View east/upslope at debris flow channel and avalanche path.

Hazard ID #:	DF23
Hazard Type:	debris_flow
HIN:	117
Rating:	A
2012 SEIS Alignment Location:	2040
Frequency (yrs):	5-25
Predictability:	moderate
Material Volume (CY):	10-100
Clast Size (ft):	1-2
Source Elev. (ft):	3000+
Centerline Slope:	multi_channel
Alignment Location:	path
Impact Alignment:	yes
Alignment Exposure (ft):	50-200
Vegetation:	disturbed
Deciduous Trees:	yes
2012 SEIS Alignment South Margin:	2039+70
2012 SEIS Alignment North Margin:	2041+20
Photo #:	5057, 5166



DF23. View southwest (downslope and down alignment) into multi-channel debris flow at centerline. Secondary channel is seen to right of person.



DF23. View east/upslope at debris flow channel and avalanche path.



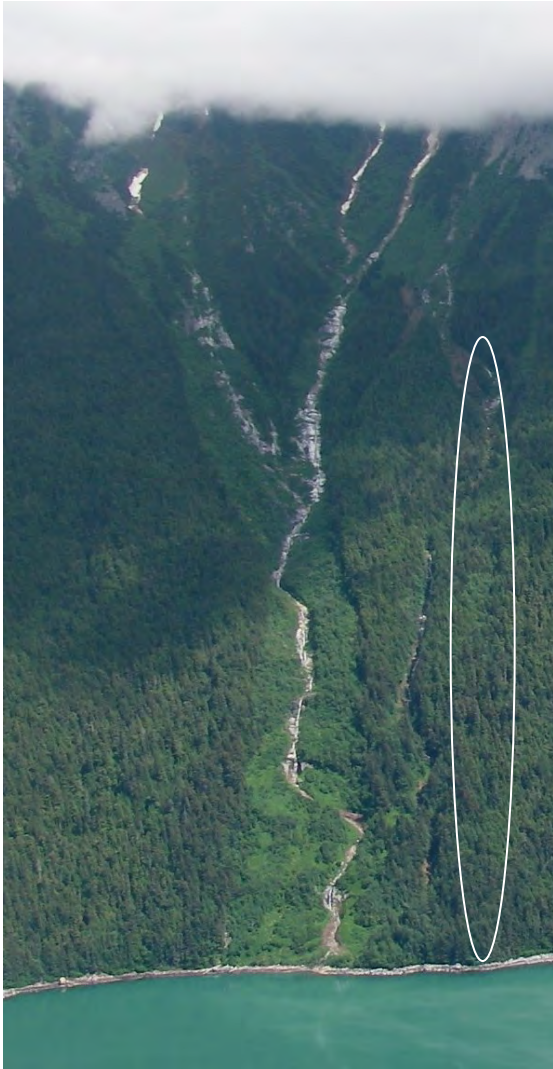
CADD	ECC
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DF24. View east/upslope at debris flow channel and avalanche path (circled, right) and avalanche path (with major stream, center).

Hazard ID #:	DF24
Hazard Type:	debris_flow
HIN:	129
Rating:	B
2012 SEIS Alignment Location:	2054
Frequency (yrs):	1-5
Predictability:	high
Material Volume (CY):	10-100
Clast Size (ft):	1-2
Source Elev. (ft):	3000+
Centerline Slope:	multi_channel
Alignment Location:	deposition_zone
Impact Alignment:	yes
Alignment Exposure (ft):	50-200
Vegetation:	disturbed
Deciduous Trees:	yes
2012 SEIS Alignment South Margin:	2053+00
2012 SEIS Alignment North Margin:	2054+10
Photo #:	2054, 2239, 3462, 3463, 5093, 6195



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DF24. View east/upslope at debris flow channel and avalanche path (circled, right) and avalanche path (with major stream, center).



DF24. View south/ down alignment across debris flow fan. Survey lath represents previous IRP 2006 alignment.



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DF24. View north/up alignment across debris flow fan.

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DF25. View east/upslope at debris flow channel.



DF25. View east/upslope at debris flow channel.

Hazard ID #:	DF25
Hazard Type:	debris_flow
HIN:	111
Rating:	B
2012 SEIS Alignment Location:	2056
Frequency (yrs):	5-25
Predictability:	moderate
Material Volume (CY):	<10
Clast Size (ft):	0-1
Source Elev. (ft):	3000+
Centerline Slope:	fan
Alignment Location:	deposition_zone
Impact Alignment:	yes
Alignment Exposure (ft):	50-200
Vegetation:	disturbed
Deciduous Trees:	no
2012 SEIS Alignment South Margin:	2056+00
2012 SEIS Alignment North Margin:	2057+00
Photo #:	3462, 3463, 5093, 6195



DF26. View east/upslope at debris flow channel and avalanche path.



DF26. View east/upslope at debris flow channel and avalanche path (center).

Hazard ID #:	DF26
Hazard Type:	debris_flow
HIN:	129
Rating:	B
2012 SEIS Alignment Location:	2059
Frequency (yrs):	1-5
Predictability:	high
Material Volume (CY):	10-100
Clast Size (ft):	0-1
Source Elev. (ft):	3000+
Centerline Slope:	fan
Alignment Location:	deposition_zone
Impact Alignment:	yes
Alignment Exposure (ft):	50-200
Vegetation:	disturbed
Deciduous Trees:	yes
2012 SEIS Alignment South Margin:	2058+80
2012 SEIS Alignment North Margin:	2059+60
Photo #:	2241, 3470, 6195




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DF26. View east/upslope at debris flow channel and avalanche path.

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DF27. View east/upslope at debris flow channel and avalanche path.

Hazard ID #:	DF27
Hazard Type:	debris_flow
HIN:	129
Rating:	B
2012 SEIS Alignment Location:	2087
Frequency (yrs):	5-25
Predictability:	Low
Material Volume (CY):	<10
Clast Size (ft):	0-1
Source Elev. (ft):	2000-3000
Centerline Slope:	open_soil_slope
Alignment Location:	deposition_zone
Impact Alignment:	yes
Alignment Exposure (ft):	50-200
Vegetation:	disturbed
Deciduous Trees:	yes
2012 SEIS Alignment South Margin:	2087+30
2012 SEIS Alignment North Margin:	2088+00
Photo #:	3885, 5167, 5924, 6247




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DF27. View east/upslope at debris flow channel and avalanche path.

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DF28. View east/upslope at debris flow channel.



DF28. View northwest (up alignment and downslope) at deposition fan of debris flow.

Hazard ID #:	DF28
Hazard Type:	debris_flow
HIN:	183
Rating:	A
2012 SEIS Alignment Location:	2102
Frequency (yrs):	0-1
Predictability:	high
Material Volume (CY):	10-100
Clast Size (ft):	3-4
Source Elev. (ft):	3000+
Centerline Slope:	fan
Alignment Location:	deposition_zone
Impact Alignment:	yes
Alignment Exposure (ft):	50-200
Vegetation:	denuded
Deciduous Trees:	yes
2012 SEIS Alignment South Margin:	2101+40
2012 SEIS Alignment North Margin:	2102+30
Photo #:	3886, 5916