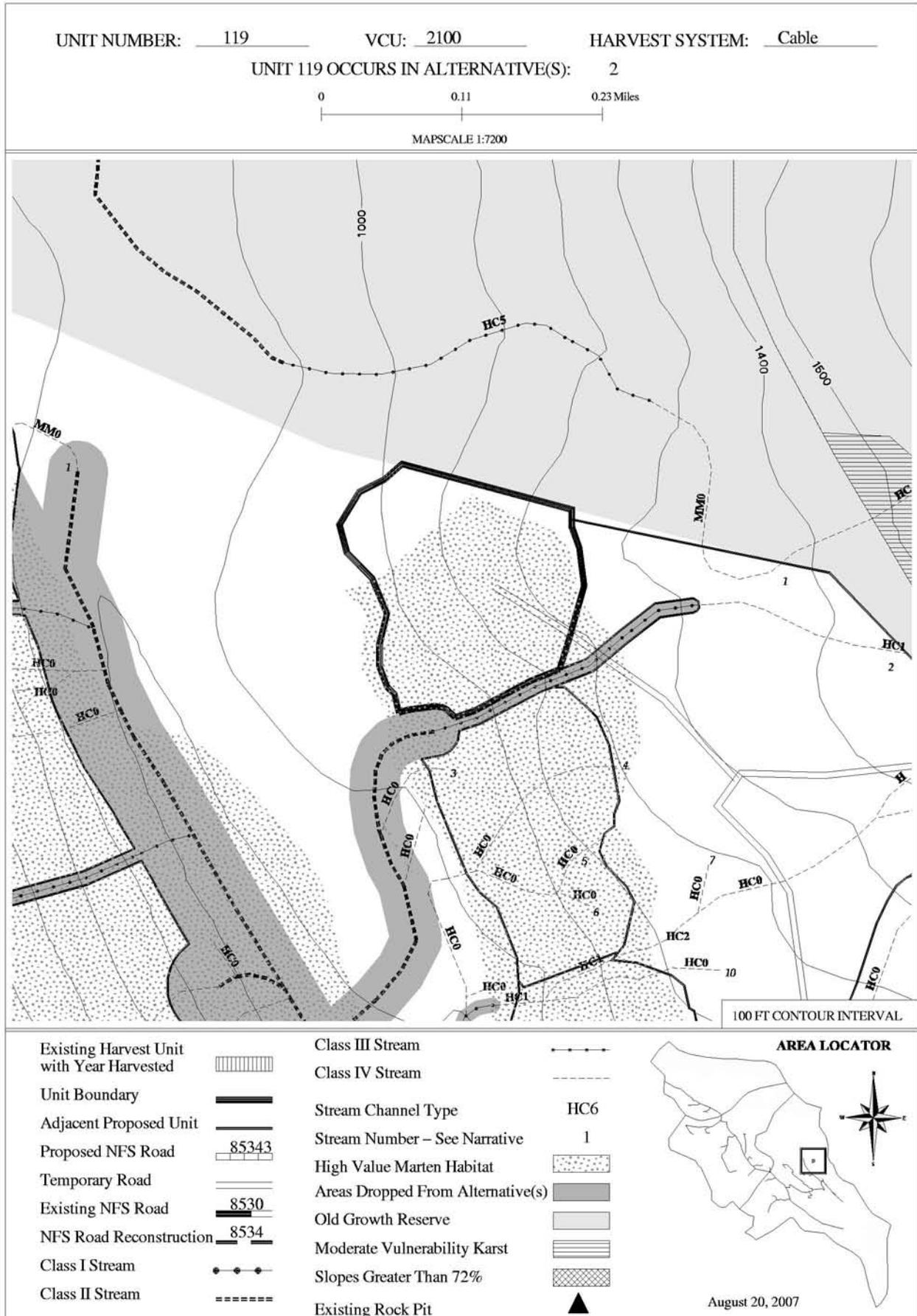


IYOUKTUG TIMBER SALE UNIT CARD PLANNED HARVEST UNIT MAP



Unit Data Card – Iyouktug Timber Sale Draft EIS
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Unit Number:	119	In Alternatives:	2	Total Unit Acres:	18.0	Vol Strata Acres:	High 13.4 Med: 4.4 Low: 0.2
VCU Number:	2100	Harvest System:	C	Net Estimated Harvest Volume (MBF):	387	Prescription /Percent Retention:	CC

Summary of Concerns, Responses, BMPs and Mitigation
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SILVICULTURE:

Existing Stand Condition/Vegetation: Stand is comprised of primarily even-aged 16-43" DBH spruce (38% BA) and 12-28 " DBH western hemlock (62% BA). This is mainly a wind generated stand with a high stem count and low defect. The majority of the trees are in 16-24" diameter classes. Well drained soils characterize the stand. Wind risk is high throughout unit.

Silvicultural Objective/Desired Future Condition: Create an even-aged managed stand of the same species composition as the original stand that meets Forest Plan scenery and high value marten habitat requirements, uses an economical regeneration method, and is windfirm, free of mistletoe infection and growing at full site potential.

Silvicultural Prescription: Even-aged management – clearcut: This unit contains a stream buffer along the southern boundary and splits units 119 and 120. The RAW zone will be included in Unit 120 (refer to fish/watershed section). A high wind risk boundary may be created in the NW side of unit using the RAW zone tree retention criteria. Review during layout to determine if windfirming is warranted. The majority of this unit is high value marten habitat. Designate reserve trees of sufficient size and condition within high value marten habitat to meet marten standards and guidelines. Clump trees where possible as specified under wildlife section.

TIMBER/LOGGING: This unit is comprised of one cable setting.

ENGINEERING/ROADS: Temporary road 85344C accesses unit from existing Road 8534 via planned temporary road 85344. New construction of 85344 begins after 0.19 miles of reconstruction. Road location has been flagged. Deviations to flagged route must be approved by USFS prior to construction.

BOTANY RESOURCES: No concerns

FISH/WATERSHED: Concern: The middle portion of stream 2 is Class III HC channel type. **Response:** Category B protection (BMP 12.6, 13.14). No harvest within v-notch (RIP III). **Concern:** The lower portion of stream 2 is class II HC channel type. **Response:** Category A protection (BMP 12.6, 13.14). No harvest within 100 feet and side-slope break (RIP III). Manage 120 feet beyond no-harvest buffers for windfirmness.

GEOLOGY/KARST: No carbonate bedrock found within unit. No karst resource concerns identified.

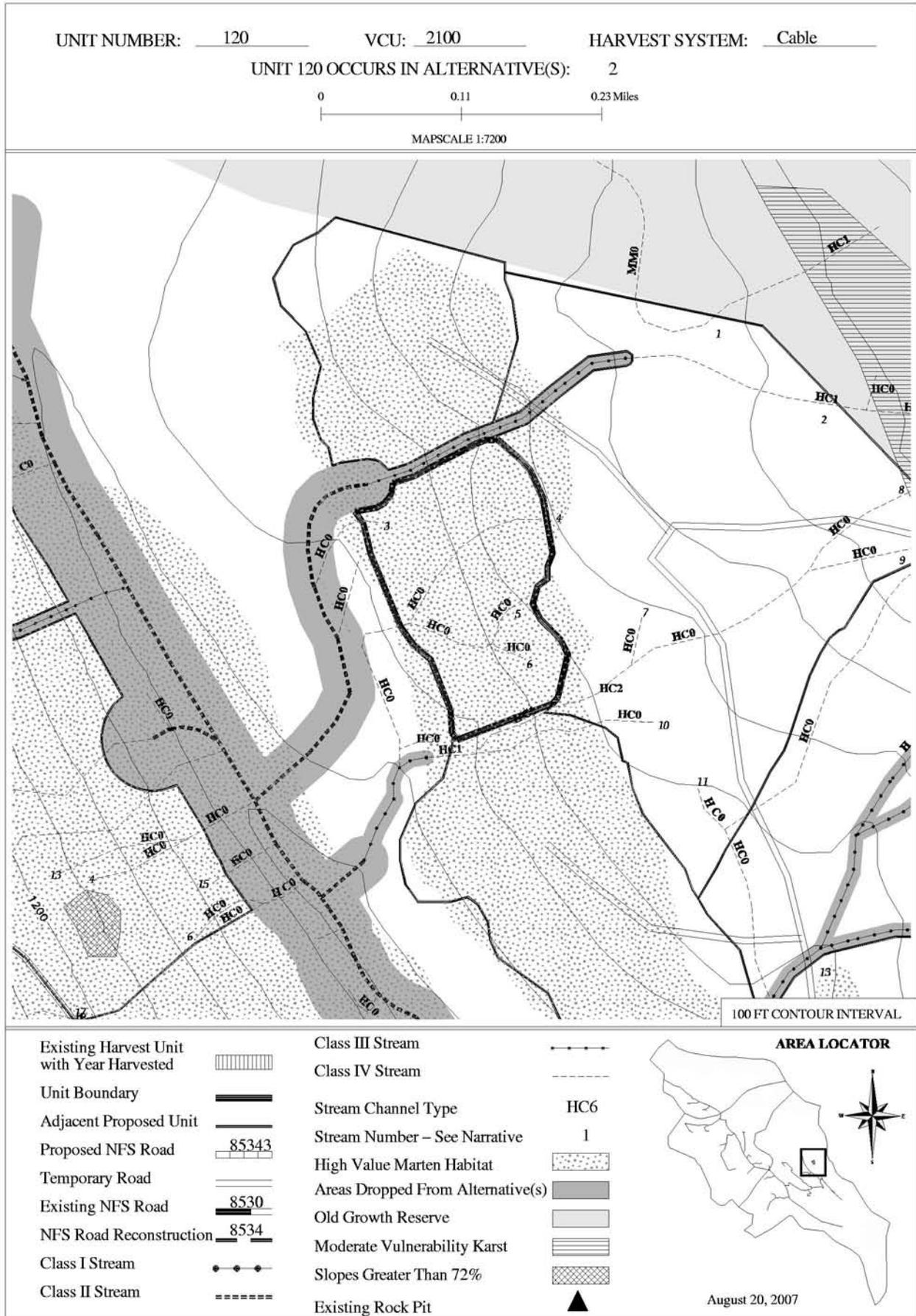
HERITAGE RESOURCES: No concerns

SCENERY/RECREATION: No concerns

SOILS/WETLANDS: Slopes range from 30-65% slope in Unit 119. A minimum of partial suspension is required to meet soil quality standards. (BMP 13.9)

WILDLIFE: Concern: Unit contains high value marten habitat. **Response:** Retain 10-20% of original stand structure as measured by basal area or trees per acre in high value marten habitat. Maintain an average of 4 large live trees/acre (20-30" DBH or larger), 3 snags or decadent trees/acre (20-30" DBH or larger), and 3 large, downed trees/acre (20-30" DBH or larger and 10 feet long). Where trees this large are not available, substitute next largest trees. Retained trees can be clumped to maintain a reasonable assurance of windfirmness and to minimize operational difficulties. Recommend that this retention be maintained adjacent to the south stream buffer adjacent to Unit 120 to maintain wind firmness.

IYOUKTUG TIMBER SALE UNIT CARD PLANNED HARVEST UNIT MAP



Unit Data Card – Iyouktug Timber Sale Draft EIS
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Unit Number:	120	In Alternatives:	2	Total Unit Acres:	16.2	Vol Strata Acres:	High: 16.2 Med: 0 Low: 0
VCU Number:	2100	Harvest System:	C	Net Estimated Harvest Volume (MBF):	365	Prescription /Percent Retention:	CC

Summary of Concerns, Responses, BMPs and Mitigation
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SILVICULTURE:

Existing Stand Condition/Vegetation: Stand is comprised of primarily even-aged 12-35" DBH spruce (42% BA) and 12-40" DBH western hemlock (58% BA). This is mainly a wind generated stand with a high stem count and low defect. The majority of the trees are in 16-24" diameter classes. Well drained soils characterize the stand. Wind risk is high throughout unit.

Silvicultural Objective/Desired Future Condition: Create an even-aged managed stand of the same species composition as the original stand that meets Forest Plan scenery and high value marten habitat requirements, uses an economical regeneration method, and is windfirm, free of mistletoe infection and growing at full site potential.

Silvicultural Prescription: Even-aged management – clearcut: This unit contains a stream buffer along the northern boundary with a RAW zone. For RAW zone retain trees less than 16" DBH within specified distance (refer to fish/watershed section) from windward (southeasterly) edge of stream buffers to minimize windthrow in buffers. The majority of this unit is high value marten habitat. Designate reserve trees of sufficient size and condition within high value marten habitat to meet marten standards and guidelines. Clump trees and locate in RAW zones where possible as specified under wildlife section.

TIMBER/LOGGING: This unit is comprised of one cable setting. The landing is located on Road 85344C in Unit 123. Both this unit and Unit 123 should be logged concurrently.

ENGINEERING/ROADS: Temporary road 85344C accesses unit from existing Road 8534 via planned temporary road 85344. New construction of 85344 begins after 0.19 miles of reconstruction. Road location has been flagged. Deviations to flagged route must be approved by USFS prior to construction.

BOTANY RESOURCES: No concerns

FISH/WATERSHED: Concern: The middle portion of stream 2 is Class III HC channel type. **Response:** Category B protection (BMP 12.6, 13.14). No harvest within v-notch (RIP III). **Concern:** The lower portion of stream 2 is class II HC channel type. **Response:** Category A protection (BMP 12.6, 13.14). No harvest within 100 feet and side-slope break (RIP III). **Concern:** Streams 3, 4, 5, 6 and, 7 are Class IV HC channel types. **Response:** Category C protection (BMP 12.6, 13.14). Remove logging debris from channel (BMP 13.16). **Concern:** Wind risk is high throughout unit. **Response:** Manage 120 feet beyond all no-harvest buffers for windfirmness.

GEOLOGY/KARST: No carbonate bedrock found within unit. No karst resource concerns identified.

HERITAGE RESOURCES: No concerns

SCENERY/RECREATION: No concerns

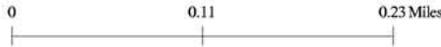
SOILS/WETLANDS: Slopes range from 20-65% slope in Unit 120. A minimum of partial suspension is required to meet soil quality standards. (BMP 13.9)

WILDLIFE: Concern: Unit contains high value marten habitat. **Response:** Retain 10-20% of original stand structure as measured by basal area or trees per acre in high value marten habitat. Maintain an average of 4 large live trees/acre (20-30" DBH or larger), 3 snags or decadent trees/acre (20-30" DBH or larger), and 3 large, downed trees/acre (20-30" DBH or larger and 10 feet long). Where trees this large are not available, substitute next largest trees. Retained trees can be clumped to maintain a reasonable assurance of windfirmness and to minimize operational difficulties. Recommend that this retention be maintained adjacent to the north stream buffer adjacent to Unit 119 to maintain wind firmness.

IYOUKTUG TIMBER SALE UNIT CARD PLANNED HARVEST UNIT MAP

UNIT NUMBER: 121 VCU: 2100 HARVEST SYSTEM: Cable

UNIT 121 OCCURS IN ALTERNATIVE(S): 3 5



MAPSCALE 1:7200



100 FT CONTOUR INTERVAL

- Existing Harvest Unit with Year Harvested
- Unit Boundary
- Adjacent Proposed Unit
- Proposed NFS Road 85343
- Temporary Road
- Existing NFS Road 8530
- NFS Road Reconstruction 8534
- Class I Stream
- Class II Stream

- Class III Stream
- Class IV Stream
- Stream Channel Type
- Stream Number – See Narrative
- High Value Marten Habitat
- Areas Dropped From Alternative(s)
- Old Growth Reserve
- Moderate Vulnerability Karst
- Slopes Greater Than 72%
- Existing Rock Pit

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- HC6
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August 20, 2007

Unit Data Card – Iyouktug Timber Sale Draft EIS
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Unit Number:	121	In Alternatives:	3, 5	Total Unit Acres:	37.1	Vol Strata Acres:	High: 32.7 Med: 4.1 Low: 0.3
VCU Number:	2100	Harvest System:	C	Net Estimated Harvest Volume (MBF):	816	Prescription /Percent Retention:	CC

Summary of Concerns, Responses, BMPs and Mitigation
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SILVICULTURE:

Existing Stand Condition/Vegetation: Stand is comprised of primarily even-aged 12-40" DBH spruce (31% BA) and 12-40 " DBH western hemlock (69% BA). This is mainly a wind generated stand with a high stem count and low defect. The majority of the trees are in 16-24" diameter classes. Well drained soils characterize the stand. Wind risk is high throughout unit.

Silvicultural Objective/Desired Future Condition: Create an even-aged managed stand of the same species composition as the original stand that meets Forest Plan scenery and high value marten habitat requirements, uses an economical regeneration method, and is windfirm, free of mistletoe infection and growing at full site potential.

Silvicultural Prescription: Even-aged management – clearcut: This unit contains a stream buffer along the southern boundary and splits units 121 and 122. The RAW zone will be included in Unit 122 (refer to fish/watershed section) The majority of this unit is high value marten habitat. Designate reserve trees of sufficient size and condition within high value marten habitat to meet marten standards and guidelines. Clump trees where possible as specified under wildlife section.

TIMBER/LOGGING: This unit is comprised of two cable settings that are defined by a logical setting break based on topography and lateral yarding capabilities. There are some limited shovel yarding opportunities near the road.

ENGINEERING/ROADS: Temporary road 22 accesses unit from existing Road 8534 via planned temporary road 85344. New construction of 85344 begins after 0.19 miles of reconstruction. Road location will be flagged by USFS prior to construction.

BOTANY RESOURCES: No concerns

FISH/WATERSHED: Concern: Stream 8 is a Class IV HC channel with unstable side-slopes.

Response: Category C protection (BMP 12.6, 13.14) with split yard or full suspension to protect v-notch.

Concern: Stream 10 is a Class IV HC channel. **Response:** Category C protection (BMP 12.6, 13.14).

Remove logging debris from channel (BMP 13.16). **Concern:** Stream 13 is a Class III HC channel.

Response: Category B protection (BMP 12.6, 13.14). No harvest within v-notch (RIP III). Manage for windfirmness 120 feet from v-notch (RIP III). **Concern:** Temporary road – stream crossings. **Response:**

Log stringer bridge designated for Stream 13. Crossing structures and locations will be approved by USFS prior to construction. Upon completion of unit harvest, restore natural drainage patterns by removing road fill from channels and installing water bars as necessary (BMP 13.16). Seed and fertilize disturbed soil adjacent to streams (BMP 12.17)

GEOLOGY/KARST: No carbonate bedrock found within unit. No karst resource concerns identified.

HERITAGE RESOURCES: No concerns

SCENERY/RECREATION: No concerns

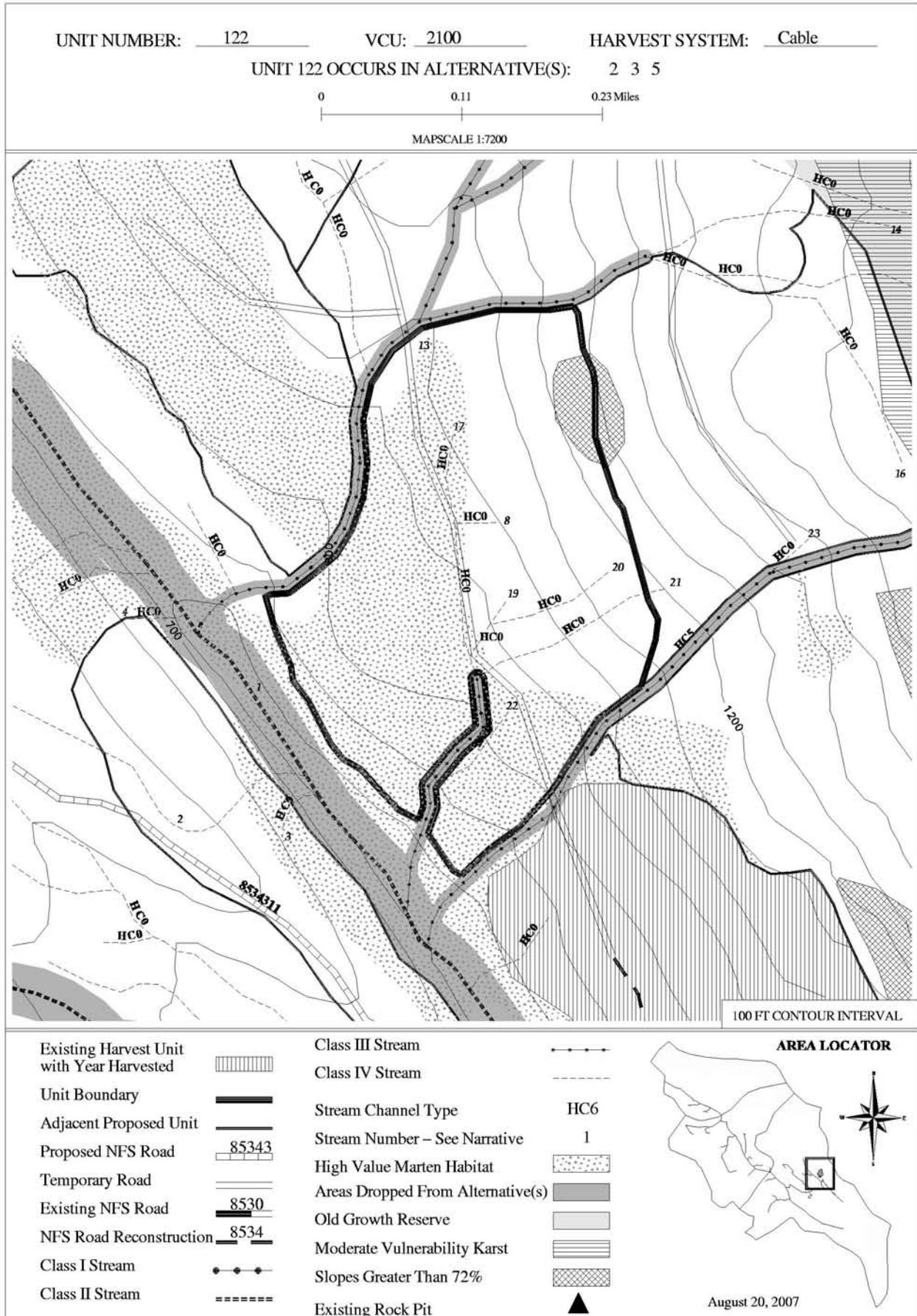
SOILS/WETLANDS: Slopes range from 10-30% on benches and from 45-55% between benches in Unit 121. A minimum of partial suspension is required to meet soil quality standards. (BMP 13.9) **Concern:** Benchy terrain may limit road location. **Response:** Keep road on top of benches to avoid sidehilling and erosion.

Summary of Concerns, Responses, BMPs and Mitigation

WILDLIFE: Concern: Unit contains high value marten habitat. **Response:** Retain 10-20% of original stand structure as measured by basal area or trees per acre in high value marten habitat. Maintain an average of 4 large live trees/acre (20-30" DBH or larger), 3 snags or decadent trees/acre (20-30" DBH or larger), and 3 large, downed trees/acre (20-30" DBH or larger and 10 feet long). Where trees this large are not available, substitute next largest trees. Retained trees can be clumped to maintain a reasonable assurance of windfirmness and to minimize operational difficulties. Recommend that this retention be maintained adjacent to the south stream buffer adjacent to Unit 122 to maintain wind firmness. **Concern:** Red-tailed hawk was observed around unit. **Response:** Maintain a 600-foot no-harvest buffer that is windfirm around active raptor nest if identified and restrict harvest and road building activities from March 1 to July 31 within the buffer.

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IYOUKTUG TIMBER SALE UNIT CARD PLANNED HARVEST UNIT MAP



Unit Data Card – Iyouktug Timber Sale Draft EIS
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Unit Number:	122	In Alternatives:	2, 3, 5	Total Unit Acres:	55.4	Vol Strata Acres:	High: 29.5 Med: 25.9 Low: 0
VCU Number:	2100	Harvest System:	C	Net Estimated Harvest Volume (MBF):	1,357	Prescription /Percent Retention:	CC

Summary of Concerns, Responses, BMPs and Mitigation
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SILVICULTURE:

<p>Existing Stand Condition/Vegetation: The western portion, near the footslope, consists primarily of even-aged 12-28" DBH western hemlock with scattered spruce. This is a wind generated stand with a high stem count and low defect. The eastern portion, along the backslope, is an older uneven-aged stand comprised of 20-45" DBH trees with a slightly higher spruce component. Wind risk is high throughout unit. There is an area of windthrow associated with previous harvest along the southeastern edge of unit.</p>

<p>Silvicultural Objective/Desired Future Condition: Create an even-aged managed stand of the same species composition as the original stand that meets Forest Plan scenery and high value marten habitat requirements, uses an economical regeneration method, and is windfirm, free of mistletoe infection and growing at full site potential.</p>

<p>Silvicultural Prescription: Even-aged management – clearcut: This unit contains stream buffers and RAW zones. For RAW zones retain trees less than 16" DBH within specified distance (refer to fish/watershed section) from windward (southeasterly) edge of stream buffers to minimize windthrow in buffers. A high wind risk boundary may be created in the NW side of unit using the RAW zone criteria above. Review during layout to determine if windfirming is warranted. This unit contains greater than 2 acres of high value marten habitat. Designate reserve trees of sufficient size and condition within high value marten habitat to meet marten standards and guidelines. Clump trees and locate in RAW zones where possible as specified under wildlife section.</p>
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<p>TIMBER/LOGGING: This unit is comprised of three cable settings. The southern-most setting accesses the area south of stream #17, a class III stream that requires split yarding. The other two settings access the remaining area and are defined by a logical setting break based on topography and lateral yarding capabilities. There are some limited shovel yarding opportunities near the road.</p>

<p>ENGINEERING/ROADS: Temporary road 85344 accesses unit from existing Road 8534. New construction of 85344 begins after 0.19 miles of reconstruction. Road location has been flagged. Deviations to flagged route must be approved by USFS prior to construction.</p>

<p>BOTANY RESOURCES: No concerns</p>

<p>FISH/WATERSHED: Concern: Streams 13, 17 (lower) and 23 are Class III HC channels. Response: Category B protection (BMP 12.6, 13.14). No harvest within v-notch (RIP III). Manage for windfirmness 120 feet from buffer on south side of streams 13 and 17, or increase buffer width if selective harvest is not feasible. Manage for windfirmness 120 feet from buffer north of stream 23. Concern: Streams 17 (upper), 18, 19, 20, 21, and 22 are Class IV HC channels. Response: Category C protection (BMP 12.6, 13.14). Remove logging debris from channel (BMP 13.16). Concern: The lower 100 feet of Stream 21 is a Class IV HC channel with unstable side-slopes. Response: Split yard this channel segment or fully suspend across channel. Concern: Temporary road – stream crossings. Response: Log stringer bridge designated for Stream 13. Crossing structures and locations will be approved by USFS prior to construction. Upon completion of unit harvest, restore natural drainage patterns by removing road fill from channels and installing water bars as necessary (BMP 13.16). Seed and fertilize disturbed soil adjacent to streams (BMP 12.17)</p>
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<p>GEOLOGY/KARST: No carbonate bedrock found within unit. No karst resource concerns identified.</p>

<p>HERITAGE RESOURCES: No concerns</p>

<p>SCENERY/RECREATION: No concerns</p>

Summary of Concerns, Responses, BMPs and Mitigation

SOILS/WETLANDS: Slopes range from 10-30% on benches and from 45-65% between benches in Unit 122. A minimum of partial suspension is required to meet soil quality standards. (BMP 13.9) **Concern:** Proposed temporary road crosses about 100' of wetlands while trying to maintain grade. **Response:** Provide adequate cross drainage, remove structures and close the road after harvest. (BMP 14.9) (33 CFR BMPs 4, 5, 6)

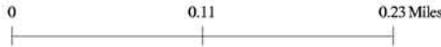
WILDLIFE: **Concern:** Unit contains high value marten habitat. **Response:** Retain 10-20% of original stand structure as measured by basal area or trees per acre in high value marten habitat. Maintain an average of 4 large live trees/acre (20-30" DBH or larger), 3 snags or decadent trees/acre (20-30" DBH or larger), and 3 large, downed trees/acre (20-30" DBH or larger and 10 feet long). Where trees this large are not available, substitute next largest trees. Retained trees can be clumped to maintain a reasonable assurance of windfirmness and to minimize operational difficulties. Recommend that this retention be maintained adjacent to the north stream buffer adjacent to Unit 121 to maintain a wider buffer/corridor and wind firmness. **Concern:** Red-tailed hawk was observed around unit. **Response:** Maintain a 600-foot no-harvest buffer that is windfirm around active raptor nest if identified and restrict harvest and road building activities from March 1 to July 31 within the buffer.

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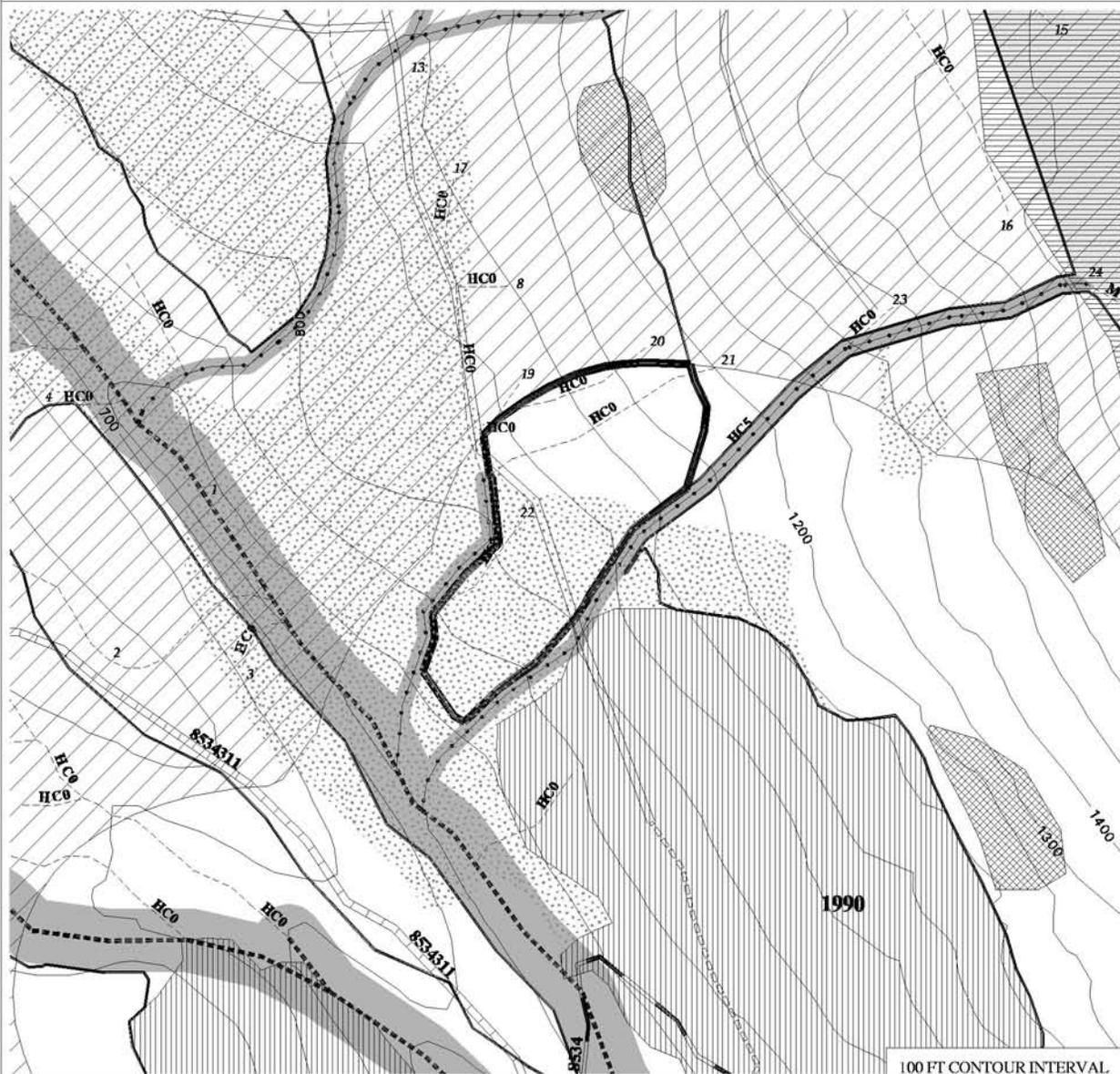
IYOUKTUG TIMBER SALE UNIT CARD PLANNED HARVEST UNIT MAP

UNIT NUMBER: 122 VCU: 2100 HARVEST SYSTEM: Cable

UNIT 122 OCCURS IN ALTERNATIVE(S): 4



MAPSCALE 1:7200

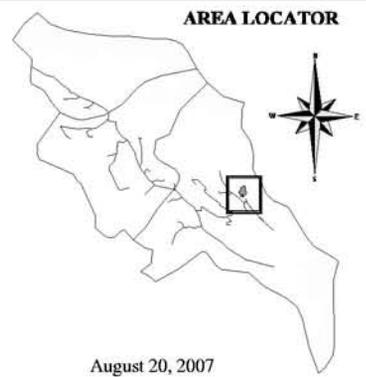


100 FT CONTOUR INTERVAL

- Existing Harvest Unit with Year Harvested Unit Boundary
- Adjacent Proposed Unit
- Proposed NFS Road
- Temporary Road
- Existing NFS Road
- NFS Road Reconstruction
- Class I Stream
- Class II Stream
- Class III Stream

- Class IV Stream
- Stream Channel Type
- Stream Number – See Narrative
- High Value Marten Habitat
- Areas Dropped From Alternative(s)
- Inventoried Roadless
- Old Growth Reserve
- Moderate Vulnerability Karst
- Slopes > 72%
- Existing Rock Pit

- HC6
- 1



Unit Data Card – Iyouktug Timber Sale Draft EIS
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Unit Number:	122	In Alternatives:	4	Total Unit Acres:	13.7	Vol Strata Acres:	High: 7.1 Med: 6.6 Low: 0
VCU Number:	2100	Harvest System:	C	Net Estimated Harvest Volume (MBF):	336	Prescription /Percent Retention:	CC

Summary of Concerns, Responses, BMPs and Mitigation
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SILVICULTURE:

<p>Existing Stand Condition/Vegetation: The western portion, near the footslope, consists primarily of even-aged 12-28" DBH western hemlock with scattered spruce. This is a wind generated stand with a high stem count and low defect. The eastern portion, along the backslope, is an older uneven-aged stand comprised of 20-45" DBH trees with a slightly higher spruce component. Wind risk is high throughout unit. There is an area of windthrow associated with previous harvest along the southeastern edge of unit.</p>

<p>Silvicultural Objective/Desired Future Condition: Create an even-aged managed stand of the same species composition as the original stand that meets Forest Plan scenery and high value marten habitat requirements, uses an economical regeneration method, and is windfirm, free of mistletoe infection and growing at full site potential.</p>

<p>Silvicultural Prescription: Even-aged management – clearcut: This unit contains stream buffers and RAW zones. For RAW zones retain trees less than 16" DBH within specified distance (refer to fish/watershed section) from windward (southeasterly) edge of stream buffers to minimize windthrow in buffers. A high wind risk boundary may be created in the NW side of unit using the RAW zone criteria above. Review during layout to determine if windfirming is warranted. This unit contains greater than 2 acres of high value marten habitat. Designate reserve trees of sufficient size and condition within high value marten habitat to meet marten standards and guidelines. Clump trees and locate in RAW zones where possible as specified under wildlife section.</p>
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<p>TIMBER/LOGGING: This unit is comprised of one cable setting.</p>
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<p>ENGINEERING/ROADS: Temporary road 85344 accesses unit from existing Road 8534. New construction of 85344 begins after 0.19 miles of reconstruction. Road location has been flagged. Deviations to flagged route must be approved by USFS prior to construction.</p>

<p>BOTANY RESOURCES: No concerns</p>

<p>FISH/WATERSHED: Concern: Streams 13, 17 (lower) and 23 are Class III HC channels. Response: Category B protection (BMP 12.6, 13.14). No harvest within v-notch (RIP III). Manage for windfirmness 120 feet from buffer on south side of streams 13 and 17, or increase buffer width if selective harvest is not feasible. Manage for windfirmness 120 feet from buffer north of stream 23. Concern: Streams 17 (upper), 18, 19, 20, 21, and 22 are Class IV HC channels. Response: Category C protection (BMP 12.6, 13.14). Remove logging debris from channel (BMP 13.16). Concern: The lower 100 feet of Stream 21 is a Class IV HC channel with unstable side-slopes. Response: Split yard this channel segment or fully suspend across channel. Concern: Temporary road – stream crossings. Response: Log stringer bridge designated for Stream 13. Crossing structures and locations will be approved by USFS prior to construction. Upon completion of unit harvest, restore natural drainage patterns by removing road fill from channels and installing water bars as necessary (BMP 13.16). Seed and fertilize disturbed soil adjacent to streams (BMP 12.17)</p>

<p>GEOLOGY/KARST: No carbonate bedrock found within unit. No karst resource concerns identified.</p>

<p>HERITAGE RESOURCES: No concerns</p>

<p>SCENERY/RECREATION: No concerns</p>

Summary of Concerns, Responses, BMPs and Mitigation

SOILS/WETLANDS: Slopes range from 10-30% on benches and from 45-65% between benches in Unit 122. A minimum of partial suspension is required to meet soil quality standards. (BMP 13.9) **Concern:** Proposed temporary road crosses about 100' of wetlands while trying to maintain grade. **Response:** Provide adequate cross drainage, remove structures and close the road after harvest. (BMP 14.9) (33 CFR BMPs 4, 5, 6)

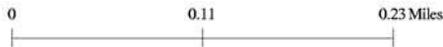
WILDLIFE: **Concern:** Unit contains high value marten habitat. **Response:** Retain 10-20% of original stand structure as measured by basal area or trees per acre in high value marten habitat. Maintain an average of 4 large live trees/acre (20-30" DBH or larger), 3 snags or decadent trees/acre (20-30" DBH or larger), and 3 large, downed trees/acre (20-30" DBH or larger and 10 feet long). Where trees this large are not available, substitute next largest trees. Retained trees can be clumped to maintain a reasonable assurance of windfirmness and to minimize operational difficulties.

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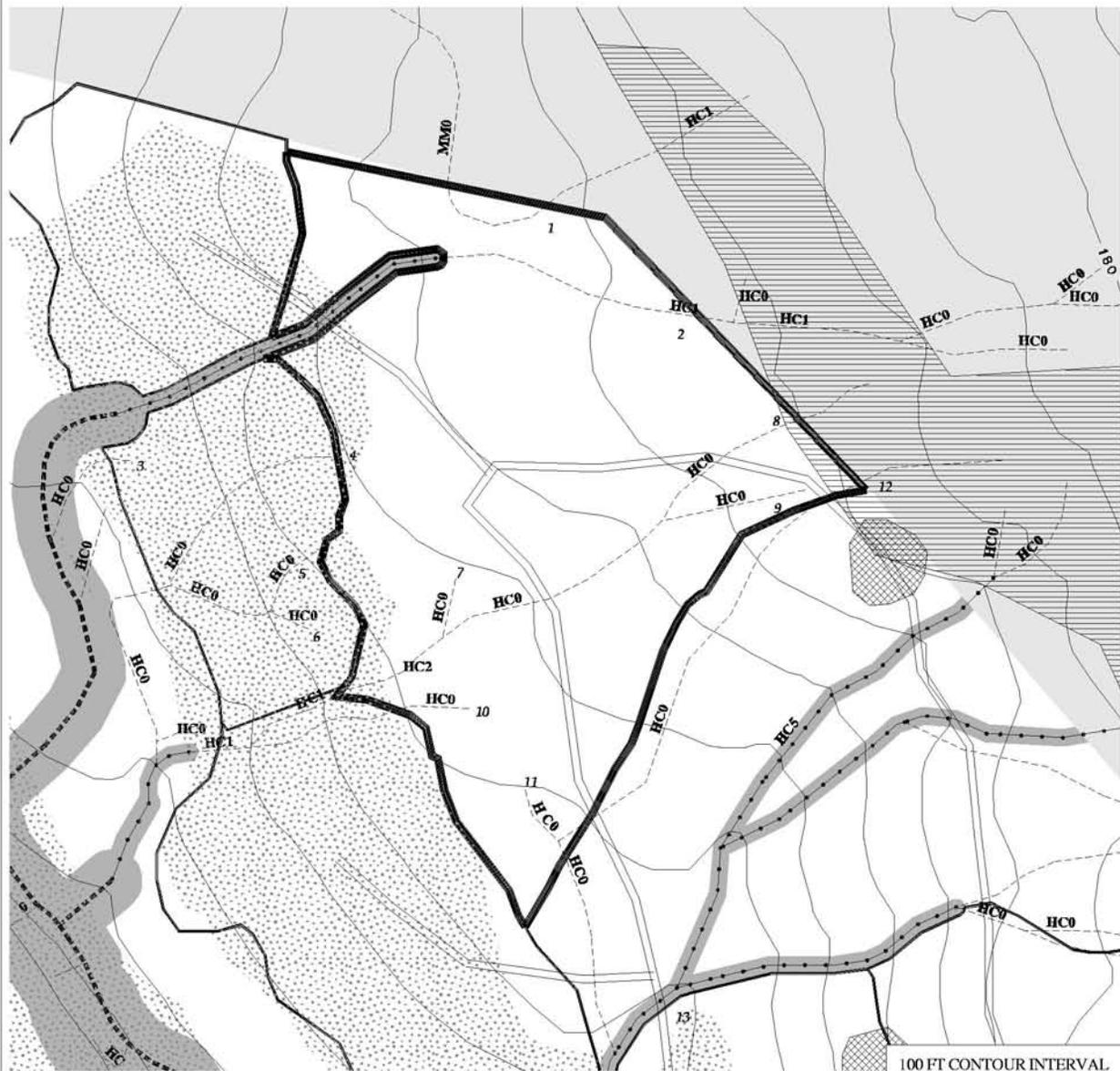
IYOUKTUG TIMBER SALE UNIT CARD PLANNED HARVEST UNIT MAP

UNIT NUMBER: 123 VCU: 2100 HARVEST SYSTEM: Cable

UNIT 123 OCCURS IN ALTERNATIVE(S): 2



MAPSCALE 1:7200



100 FT CONTOUR INTERVAL

- Existing Harvest Unit with Year Harvested
- Unit Boundary
- Adjacent Proposed Unit
- Proposed NFS Road 85343
- Temporary Road
- Existing NFS Road 8530
- NFS Road Reconstruction 8534
- Class I Stream
- Class II Stream

- Class III Stream
- Class IV Stream
- Stream Channel Type
- Stream Number – See Narrative
- High Value Marten Habitat
- Areas Dropped From Alternative(s)
- Old Growth Reserve
- Moderate Vulnerability Karst
- Slopes Greater Than 72%
- Existing Rock Pit

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- HC6
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Unit Data Card – Iyouktug Timber Sale Draft EIS
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Unit Number:	123	In Alternatives:	2	Total Unit Acres:	62.3	Vol Strata Acres:	High: 4.3 Med: 28.5 Low: 29.5
VCU Number:	2100	Harvest System:	C	Net Estimated Harvest Volume (MBF):	1,175	Prescription /Percent Retention:	CC

Summary of Concerns, Responses, BMPs and Mitigation
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SILVICULTURE:

Existing Stand Condition/Vegetation: Stand consists primarily of 12-28" DBH mountain hemlock (61% BA), 12-36" DBH spruce (28% BA) and 16-30" western hemlock (10% BA). Several muskegs and open areas occur throughout the unit. Wind risk is moderate to high throughout unit.

Silvicultural Objective/Desired Future Condition: Create an even-aged managed stand of the same species composition as the original stand that meets Forest Plan scenery and high value marten habitat requirements, uses an economical regeneration method, and is windfirm, free of mistletoe infection and growing at full site potential.

Silvicultural Prescription: Even-aged management – clearcut: This unit contains stream buffers and RAW zones. For RAW zones retain trees less than 16" DBH within specified distance (refer to fish/watershed section) from windward (southeasterly) edge of stream buffers to minimize windthrow in buffers. A high wind risk boundary may be created in the NW side of unit using the RAW zone criteria above. Review during layout to determine if windfirming is warranted. This unit contains greater than 2 acres of high value marten habitat. Designate reserve trees of sufficient size and condition within high value marten habitat to meet marten standards and guidelines. Clump trees and locate in RAW zones where possible as specified under wildlife section.

TIMBER/LOGGING: This unit is comprised of three cable settings. The northern-most setting accesses the area north of stream #2, a class III stream that requires split yarding. The other two settings access the remaining area and are defined by a logical setting break based on topography and lateral yarding capabilities. There are some limited shovel yarding opportunities near the road. Where possible locate landings and shovel corridors to avoid open meadows described under botany section.

ENGINEERING/ROADS: Temporary roads 85344C and 85344 access unit from existing Road 8534. New construction of 85344 begins after 0.19 miles of reconstruction. Road location has been flagged. Deviations to flagged route must be approved by USFS prior to construction. See Unit 124 for additional temporary road discussion.

BOTANY RESOURCES: Concern: Large areas of lady fern/forb wetlands with rare plants. **Response:** avoid ground disturbance in meadows (wetlands) as much as possible. Do not use these areas for landings, log storage or shovel yarding corridors.

FISH/WATERSHED: Concern: Stream 1 is a Class IV MM channel. **Response:** Category C protection (BMP 12.6, 13.14). **Concern:** Stream 2 (lower) is a Class III HC channel. **Response:** Category B protection (BMP 12.6, 13.14). No harvest within v-notch (RIP III). **Concern:** Windthrow risk is high. **Response:** Manage for windfirmness 120 feet beyond no-cut buffers. **Concern:** Stream 2 (upper), 4,5,7,8,9,10,11,12 are Class IV HC channels. **Response:** Category C protection (BMP 12.6, 13.14). **Concern:** Lower 300 feet of Stream 8 in unit is a Class IV HC channel with unstable side-slopes. **Response:** Category B protection (BMP 12.6, 13.14) with split yard to protected side slopes. **Concern:** Temporary road – stream crossings **Response:** Segment of road between Units 123 and 124 must be specified and designed across steep slopes with 2 unstable Class III stream channels to prevent water quality degradation (see Soils/Wetlands). Crossing structures and locations will be approved by USFS prior to construction. Upon completion of unit harvest, restore natural drainage patterns by removing road fill from channels and installing water bars as necessary (BMP 13.16). Seed and fertilize disturbed soil adjacent to streams (BMP 12.17).

<p>Summary of Concerns, Responses, BMPs and Mitigation</p> <p>GEOLOGY/KARST: Concern: There is less than 1 acre of moderate vulnerability karst along the eastern boundary of Unit 123. Response: A minimum of partial suspension is required to meet karst resource objectives (BMP 13.9).</p> <p>HERITAGE RESOURCES: No concerns</p> <p>SCENERY/RECREATION: No concerns</p> <p>SOILS/WETLANDS: Slopes range from 20-50% in Unit 123. There are about 6 acres of forested wetland (BMP 12.5). A minimum of partial suspension is required to meet soil and wetland standards. (BMP 13.9) Concern: Proposed temporary road crosses about 1,000 feet of wetlands while trying to maintain grade. Response: Provide adequate cross drainage, remove structures and close the road after harvest. (BMP 14.9) (33 CFR BMPs 4, 5, 6). See Unit 124 for additional temporary road discussion.</p> <p>WILDLIFE: Concern: Unit contains high value marten habitat. Response: Retain 10-20% of original stand structure as measured by basal area or trees per acre in high value marten habitat. Maintain an average of 4 large live trees/acre (20-30" DBH or larger), 3 snags or decadent trees/acre (20-30" DBH or larger), and 3 large, downed trees/acre (20-30" DBH or larger and 10 feet long). Where trees this large are not available, substitute next largest trees. Retained trees can be clumped to maintain a reasonable assurance of windfirmness and to minimize operational difficulties. Recommend that this retention be maintained adjacent to the north stream buffer to maintain wind firmness. Concern: Red-tailed hawk observed adjacent to unit. Response: Maintain a 600-foot no-harvest buffer that is windfirm around active raptor nest sites if identified and restrict harvest and road building activities from March 1 to July 31 within the buffer.</p>
