



**UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration**

National Marine Fisheries Service

P.O. Box 21668

Juneau, Alaska 99802-1668

January 20, 2009

Jason C. Anderson
District Ranger
Thorne Bay Ranger District
Tongass National Forest
P.O. Box 19001
Thorne Bay, AK 99919

RE: Logjam Timber Sale
Draft Environmental Impact Statement

Dear Mr. Anderson:

The National Marine Fisheries Service (NMFS) reviewed the Draft Environmental Impact Statement (DEIS) and the Essential Fish Habitat (EFH) assessment for the Logjam Timber Sale on Prince of Wales Island, Thorne Bay Ranger District, Tongass National Forest. The Logjam project area is located northeast of the community of Thorne Bay. This project proposes to harvest 38 to 75 million board feet of timber from approximately 1,694 to 3,703 acres, and to construct up to 8 miles of new National Forest System (NFS) roads, 21 miles of temporary roads, and to reconstruct up to 3.2 miles of existing NFS roads, depending on the alternative selected. The DEIS identified Alternative 2 as the Forest Service's preferred alternative for this project. This alternative proposes to harvest approximately 75 MMBF of timber from an estimated 3,703 acres, and would involve the construction of 8 miles of new NFS roads, 21 miles of temporary roads, and the reconstruction of 3.2 miles of existing road. Under all the action alternatives, the temporary roads would be decommissioned and the new NFS roads would be placed in storage upon completion of harvest activities. Three existing log transfer facilities (LTFs), located at Coffman Cove, Thorne Bay, and Naukati, may be used to transport timber from the Island, though use of the LTF at Naukati is unlikely as it would need to be reconstructed. Both the Coffman Cove and Thorne Bay LTFs are barge facilities at which no inwater log transfer would occur.

The EFH assessment describes potential impacts to EFH in fresh and marine waters. EFH includes all segments of streams where salmon reside during any life stage or period of the year, and the marine waters and substrates of Coffman Cove, Naukati Bay, and Thorne Bay. Freshwater fish habitat in the Logjam Project area supports populations of pink, chum, sockeye, and coho salmon. Potential adverse effects to freshwater EFH include increased stream-flows, increased sediment delivery, altered riparian vegetation, disturbed channel integrity, potential blockage of upstream movement of fish at road crossings, increased wind throw, and potential loss of large woody debris. Potential adverse effects to marine EFH include the addition of wood debris from the transfer of logs which could smother marine organisms and natural habitat, the addition of hydrocarbon chemicals from boat motors or oil/gas spillage, and loss of habitat from the construction of structures in the intertidal zone, and reduced water quality.



NMFS concurs with the Forest Service determination that the Logjam Timber Sale may adversely affect EFH. Harvest is proposed in three watersheds in which over 20 percent of the watershed was harvested within the past 30 years and in one watershed in which eighteen percent of the watershed was harvested within the past 30 years. These watersheds include the Coffman Watershed (29 percent), the Naukati Watershed (26 percent), the Logjam Watershed (18 percent), and the Trumpeter Watershed (21 percent). Under the Forest Plan, the threshold of concern for cumulative watershed effects is reached when more than 20 percent of a watershed consists of second growth less than thirty years old.

Depending on the alternative selected, the additional harvesting proposed for the Logjam Timber Sale would increase the 30-year cumulative harvesting percentages within the Logjam and Trumpeter Watersheds to as much as 23 percent and 27 percent, respectively. As indicated in the DEIS (page 3-47), these watersheds have high fisheries values and the highest levels of harvest and road construction. They also are the steepest watersheds and, therefore, have a higher percentage of unstable soils than the other watersheds in the project area (DEIS, page 3-53). Future cumulative effects as a result of this timber sale are a concern, particularly if Alternatives 2 or 5 are implemented. These alternatives would harvest the most acres, construct the most miles of roads, and would require the greatest number of stream crossings. They would also result in the greatest increases in the 30-year cumulative harvesting percentages within the Logjam and Trumpeter Watersheds.

The DEIS identified 41 red culverts in the Logjam project area. A red crossing is one that cannot pass juvenile fish at some or all flows and does not meet Forest Standards for passing fish in Class I or II streams. Blockage of fish passage is inconsistent with the best management practices under section 404(f) of the Clean Water Act. The 41 culverts that do not meet current standards for fish passage should be described in further detail as well as the corresponding habitat that is impacted and not available or only partially available. The potential for correcting some or all of these culverts should be investigated as part of this timber sale.

Section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) requires Federal agencies to consult with NMFS on all actions that may adversely affect Essential Fish Habitat (EFH). NMFS is required to make EFH Conservation Recommendations, which may include measures to avoid, minimize, mitigate or otherwise offset adverse effects.

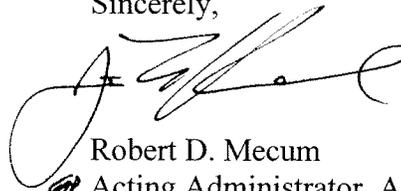
NMFS offers the following EFH Conservation Recommendations pursuant to Section 305(b)(4)(A) of the MSA.

1. NMFS recommends that either Alternative 3 or 4 be selected for the Record of Decision for this project. Both would have the least potential for detrimental cumulative watershed effects.
2. NMFS recommends incorporation of the unit specific comments in the enclosure. These unit modifications would better minimize the potential for negative cumulative watersheds effects within this heavily harvested and roaded area.

3. The 41 red culverts in the project area should be replaced to the Forest Standard as part of the timber sale. We recommend that the Forest Service ensure adequate fish passage is provided at all project road crossings in conjunction with this timber sale.
4. Direct transfer of logs to barges should be a required condition of the timber sale contract.

If you have questions regarding our comments please contact Cindy Hartmann Moore at (907) 586-7585 or cindy.hartmann@noaa.gov.

Sincerely,



Robert D. Mecum
Acting Administrator, Alaska Region

Enclosure

cc: *Chris Meade, EPA Juneau
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Enclosure

Unit-specific Comments for Logjam Timber Sale

Unit 573-01: This unit is rated moderate for windthrow risk; however, the Fisheries section of the unit card identifies “*heavy blow-down*” along the Class I stream on the northeast side of the unit, and “*moderate blow-down*” along that portion of the Class III stream in the northwest corner of the unit that occurs adjacent to a previously harvested unit. Consequently, this unit should be implemented as proposed under Alternative 3, which defers harvest in the vicinity of these streams specifically “*for blowdown and related water quality concerns.*”

Unit 573-10: The Comments section of the unit card states “*Concerns in Alternative 3 are – Drop east edge and do not harvest below proposed road prism (based on multiple stream channel concerns); Exclude the northwest portion due to multiple Class IV streams; Drop the proposed west spur road to reduce road lengths and associated Class III water quality concerns. Wind concerns from southeast; Multiple Class IV stream channel concerns; Water quality concerns regarding harvest near stream channels.*” Therefore, this unit should be laid-out and harvested as proposed under Alternative 3, which specifically addresses these concerns.

Unit 573-12: As planned under Alternatives 2 and 5, this unit contains numerous Class III and IV streams, several of which are identified in the Fisheries section of the unit card as being particularly sensitive to disturbance. Therefore, this unit should be implemented as proposed under Alternatives 3 and 4, which defer harvest in the areas of these streams.

Unit 573-12: Although this unit is rated moderate for windthrow risk, the Fisheries section of the unit card identifies “*heavy blow-down*” along eight Class II and IV streams within and adjacent to the unit. As planned under Alternatives 2 and 5, the clearcut shovel yarding prescription proposed for the eastern portion of the unit would greatly increase the risk of additional blowdown along several of these streams, particularly since proposed NFS Road 3000390 would be constructed within the buffers of two of these streams located in the southeastern portion of the unit, thereby greatly compromising their windfirmness and integrity. Under Alternative 3, the unit would not require the construction of this road, and would be laid-out and helicopter yarded to provide better protection to these streams. Therefore, this unit should be implemented as described for Alternative 3.

Unit 577-15: This unit is proposed only under Alternative 2, and would be accessed by constructing proposed NFS Road 2360000-2 which crosses six Class III and IV streams. This unit should be dropped from harvest consideration to avoid additional cumulative effects on Logjam Creek. In

addition, the relatively low volume of timber within the unit does not appear to justify the cost of constructing the 2360000-2 Road.

Unit 577-16: Under Alternative 2, this unit is accessed by proposed NFS Road 3000386 and a temporary road extension. Together, these road segments would cross a total of twelve streams, including one Class I stream, three Class II streams, two Class III streams, and six Class IV streams. Alternatives 3, 4, and 5 avoid constructing these roads and yard the unit by helicopter. Therefore, to minimize impacts to water quality, this unit should be implemented as proposed under either Alternatives 3, 4, or 5.

Unit 577-17: As with Unit 577-16, this unit should be implemented as proposed for Alternatives 3 and 5, which do not construct the 3000386 road and its associated crossings of five streams that are directly tributary to Logjam Creek located a short distance downstream of the lower unit boundary.

Unit 577-18: This entire unit is proposed for shovel logging, which indicates that road construction within the unit is not necessary. Therefore, proposed NFS Road 3000386 should be dropped and the unit should be accessed directly from the existing 3000000 Road. This would avoid crossing the Class I stream located along the southwest side of the unit. If shovel yarding distance is a concern, then a temporary spur road could be constructed off the 3000000 Road.

Unit 577-23: This unit is rated high for windthrow risk and is proposed only under Alternative 2. According to the Fisheries section of the unit card, "*Heavy blow down*" exists along the Class II stream adjacent to the northwestern boundary of the unit. The clearcut prescription for the unit would make the buffer along this stream highly susceptible to additional blowdown, especially if Unit 577-22, located on the northeast side of the stream, is clearcut as proposed under Alternative 2. The Comments section of the unit card states "*Concerns in Alternative 3 are – Drop unit. Cumulative effects in Logjam watershed; Blowdown concerns in the northern half of unit; Fish stream in north half of unit; Poor economics.*" Therefore, this unit should be dropped from harvest consideration. Dropping this unit would also avoid the temporary road crossing of the Class II stream located at the southern boundary of the unit.

Unit 577-24: This unit is rated high for windthrow risk, which presents a significant concern for blowdown within the process group buffers of the Class III stream that bisects the northeastern portion of the unit and the Class III stream located on the northwest boundary of the unit. This is of particular concern if the northern portion of the unit is clearcut as proposed under Alternatives 2 and 5. Therefore, this unit should be harvested as proposed under Alternative 3, which includes helicopter yarding and a 75 percent basal area retention prescription for this portion of the unit.

Unit 577-25: This unit has a high risk of windthrow, which is evidenced by the “*heavy blow down*” along several streams that is described in the Fisheries section of the unit card. The northeastern portion of the unit encompasses five Class III streams that transition to Class II fish habitat immediately adjacent to the unit boundary. Under Alternatives 2 and 5, this portion of the unit would be harvested using a 75 percent basal area retention prescription and yarded by helicopter. In addition, an isolated stand located just east of this area and between the riparian buffers of a Class I and a Class II stream would be clearcut and shovel logged. Given the high risk of windthrow and the associated potential for impacts to water quality and fish habitat, these areas should be dropped from harvest consideration. This is particularly important for the isolated stand located between the Class I and Class II stream buffers, as “*heavy*” blowdown already exists in this area. Clearcutting this stand would compromise the integrity of these buffers and make them highly susceptible to windthrow. Therefore, this unit should be harvested as proposed under Alternatives 3 and 4 which avoid these areas altogether.

Unit 577-26: This unit is rated high for windthrow risk, with “*heavy blow down*” documented in the area of the Class II stream that occurs along the northern boundary of the unit. Clearcutting is proposed for the unit under all the action alternatives; however, only Alternative 5 proposes harvesting the entire unit, including the area adjacent to the Class II stream along the northern unit boundary. Clearcutting this portion of the unit would very likely result in extensive windthrow within the riparian buffer of this stream. Therefore, this unit should be implemented as proposed under Alternatives 2, 3, or 4, all of which avoid harvesting near this stream.

Unit 577-29: This unit is rated high for windthrow risk which presents concern for blowdown within the riparian buffer of the Class I/II stream that bisects the central portion of the unit and is oriented perpendicularly to the prevailing storm winds. Alternative 4 expands the width of this buffer on the south side of the stream to provide a wildlife corridor. This prescription would also increase the windfirmness of the buffer and, therefore, should be implemented for Alternatives 2, 3, and 5 as well.

Unit 577-31: The Comments section of the unit card states “*Concerns in Alternative 3 are – Drop northern portion of unit to reduce potential for sedimentation. The entire stream in unit is Class IV. There is stored sediment in stream with fish located a couple hundred feet below unit.*” Therefore, this unit should be implemented as proposed under Alternative 3 which avoids this area.

Unit 577-32: The Comments section of the unit card states “*Concerns in Alternative 3 are – Drop proposed road and middle section of unit to reduce overall road construction, sedimentation and risk of blowdown in stream buffers; Harvest northern polygon and southern polygon to an existing road*”

system.” Therefore, this unit should be laid-out and harvested as proposed under Alternative 3.

Unit 577-34: As depicted on the unit and road card maps, proposed NFS Road 3035255 angles through the riparian buffer of the Class I stream located in the south-central portion of the unit. Since topography does not appear to be a limiting factor, this road should be relocated to the north to avoid encroaching upon this buffer.

Unit 577-35: The Silviculture section of the unit card indicates that windthrow risk is low; however, according to the Fisheries section of the card, “*heavy blow down*” exists along the Class I stream that occurs along the northern boundary of the unit. Therefore, to minimize the potential for additional windthrow within the riparian buffer of this stream, this unit should be harvested as proposed under Alternatives 3, 4, and 5, which prescribe 50 percent basal area retention and helicopter yarding.

Unit 577-36: Under Alternatives 2 and 5, this unit would be accessed by constructing proposed NFS Road 2052090. The Comments section of the unit card states “*Concerns in Alternatives 3 and 4 are – Drop Road; Helicopter-partial cut up to 50% of basal area. Concern related to road construction based on water quality issues (cumulative effects), wetlands and economics.*” According to the road card, “*The majority of the road traverses through moss muskeg, tall sedge fens, short sedge fens, and forested wetlands.*” In addition, the relatively low timber volume of this unit does not appear to justify the cost of constructing the 2052090 Road. Therefore, the unit should be harvested using the 50 percent basal area retention prescription and helicopter yarding that is proposed for Alternatives 3 and 4.

Unit 577-38: Under Alternative 2, this unit is proposed to be clearcut and shovel logged. However, it is unclear how the shovel will access that portion of the unit located on the west side of the Class II stream that bisects the unit. Given that five Class II stream crossings would be required to access the unit by proposed NFS Road 2000531, this unit, as well as nearby Unit 577-39 should be harvested as proposed under Alternatives 3, 4, and 5, which use a 50 percent basal area retention prescription and helicopter yarding.

Unit 577-46: Under Alternative 2, this unit would be accessed by proposed NFS Road 2300300, which would require four stream crossings, including two Class I streams, one Class II stream, and one Class IV stream. Under Alternatives 3 and 5, the unit would be harvested using a 50 percent basal area retention prescription and yarded by helicopter, thereby avoiding the construction of this road. The Comments section of the unit card states “*Concerns in Alternative 3 are – Drop Road; Helicopter-partial cut of up to 50% basal area. Proposed road construction makes it un-economic; Additional road construction may be a water quality issue.*” Therefore, this unit should be

implemented as proposed under Alternatives 3 and 5.

Units 577-49 & 577-50: These helicopter units are proposed only under Alternative 2. Averaging only 5,428 and 5,375 board feet/acre, respectively, both are obviously uneconomical to harvest. In addition, as the unit card for Unit 577-49 states, “*Logjam watershed already contains a high percent of second growth (cumulative effects).*” Therefore, these units should be dropped from harvest consideration.

Units 577-52 & 577-53: These units are proposed under Alternative 2 and average only 12,677 and 13,385 board feet/acre, respectively. In addition to being uneconomical to harvest, both occur within an Inventoried Roadless Area and would contribute to concerns regarding cumulative effects in the Logjam Watershed. Therefore, these units should also be dropped from harvest consideration.

Units 577-55, 577-56, & 577-57: These units are not included in Alternative 3 due to sediment concerns “*affecting fish and hydrology.*” In addition, after the proposed clearcutting of units 577-55 and 577-56, the riparian buffer along the Class I stream located between these units will be highly susceptible to windthrow given its perpendicular orientation to the prevailing storm winds. Consequently, these units should be dropped from harvest consideration. Doing so would also avoid constructing proposed NFS Road 3000362 and its associated stream crossings, two of which are Class I streams.

Unit 577-59: The Comments section of the unit card states “*Concerns in Alternative 3 are – Drop northeast portion of unit due to blowdown, high concentration of fish streams, and potential water quality (sediment) concerns; Droop southeast corner where multiple streams are present (water quality-fish concerns). Water quality concerns present in northeast corner where blowdown concerns are present and a Class III stream is pumping sediment; Concern related to multiple streams located in the southeast corner; Concern related to multiple proposed road crossings of Class I stream channels*” ... “*Concerns in Alternative 4 are – Drop all but central portion of unit to reduce the overall size and maintain access to Logjam Creek. Very large unit; As proposed unit blocks travel access to Logjam Creek.*” Therefore, given these concerns, this unit should be laid-out and harvested as proposed under Alternatives 3 and 4.

Unit 577-60: The Comments section of the unit card states “*Blowdown concerns related to a Class I stream channel (located along the west side of the unit) following harvest activities*” ... “*Concerns in Alternative 4 are – Drop western ½ along Logjam Creek to maintain size of travel route along Logjam Creek.*” Dropping this portion of the unit would also increase the windfirmness of the riparian buffer along Logjam Creek; therefore, this unit should be laid-out and harvested as proposed under Alternative 4.

Unit 573-62: Although this unit is rated moderate for windthrow risk, according to the Fisheries section of the unit card, moderate to heavy blowdown was documented along nearly all of the streams adjacent to the unit. In addition, the Comments section of the unit card states “*Contains a fish stream of special concern due to blowdown.*” Alternatives 2, 3, and 5 propose clearcutting the entire unit, which would make the riparian buffers highly susceptible to blowdown. Under Alternative 4, the areas adjacent to these buffers are either avoided (south side of Class I/II stream in the northwestern portion of the unit) or the buffers are expanded in width (Class I stream along the northern boundary of the unit) for wildlife concerns. Therefore, to minimize the potential for blowdown and associated impacts to water quality, this unit should be laid-out and harvested as proposed under Alternative 4.

Unit 573-66: This unit would be accessed by constructing proposed NFS Road 3030820 and a temporary road extension. The 3030820 Road would require crossing a Class II stream and a Class III stream. The Comments section of the unit card states “*Concerns in Alternative 3 are – Drop unit. Poor economics; Fish recommends dropping a large portion of the unit based on lots of stream and wetland concerns; potential water quality (sediment) concerns.*” Given these water quality concerns and the poor economics of accessing and harvesting this unit (it averages only 13,638 board feet/acre), it should be dropped from harvest consideration.

Units 573-67 & 573-68: Under Alternatives 2, 4, and 5, these units would be accessed by constructing proposed NFS Road 3030710-2 which crosses at least 14 streams, including numerous crossings on the same streams. In addition, both units are rated high for windthrow risk which presents concerns for blowdown of the process group buffers along the Class III streams within the clearcut settings that are proposed for both units under Alternatives 2, 4, and 5. Given the significant concerns for cumulative effects to water quality, as well as the high cost of road construction, these units should be harvested as proposed under Alternative 3, which avoids constructing the 3030710-2 Road and uses a 75 percent basal area retention prescription and helicopter yarding.

Unit 573-73: This unit is rated high for windthrow risk, with evidence of blowdown within the stand. This presents concerns for windthrow within the process group buffers along the Class III streams in the south-central portion of the unit where clearcutting is proposed under Alternatives 2 and 5. These alternatives would also construct an extension of the existing 3030720-2 Road to access this area. Alternative 3 avoids constructing this road and, instead, helicopter logs this area using a 75 percent basal area retention prescription which would greatly minimize the potential for blowdown within these buffers, and would avoid the cost and soil disturbance associated with constructing the 3030720-2 Road extension. Therefore, this unit should be laid-out and harvested as proposed under Alternative 3.

Units 573-76 & 573-77: These units occur adjacent to one another in the Trumpeter Creek Watershed. According to the unit cards, they contain or abut numerous Class II, III, and IV stream channels that are described in the Fisheries sections of the cards as having unstable banks, landslide deposited debris, blowdown, and active bank erosion. In addition, the Comments section of the card for Unit 573-76 states “*Multiple special concern streams; soils*” ... “*Drop unit. Numerous special concern streams.*” Therefore, given the significant concerns for impacts to water quality, these units should be dropped from harvest consideration. Doing so would also address concerns for cumulative effects in the Trumpeter Creek Watershed, which is currently at the 20 percent/30-year old harvest threshold.

Unit 573-79: This helicopter unit should also be dropped from harvest consideration for the same reasons as Unit 573-76 and 573-77. The Fisheries section of the unit card describes concerns for all but one of the streams within or adjacent to the unit, such as “*heavy blow down and steep side slopes along stream,*” “*heavy blow down and high gradient,*” “*heavy blow down, bank instability, and steep side slopes along stream,*” “*heavy blow down, side slope instability, and high gradient,*” “*evidence of past slide adjacent to stream and below unit.*” Although heavy blowdown is identified along these streams, the Silviculture section of the unit card states that windthrow risk is moderate, and proposes a 50 percent basal area retention prescription for the unit. However, this prescription may result in increased blowdown in this, apparently, high windthrow risk area. In addition, this unit is located within the Trumpeter Creek Watershed where cumulative effects are a concern.

Unit 573-84: This unit is proposed to be yarded by helicopter and is prescribed for 50 percent basal area retention. The Silviculture section of the unit card rates the unit as moderate for windthrow risk. However, the Fisheries section of the card describes the Class III stream that bisects the unit as having “*heavy blow down and bank instability along stream.*” Consequently, this unit should be dropped from harvest consideration to minimize additional cumulative effects within the Trumpeter Creek Watershed. However, if it continues to be among those units selected for harvesting, then the harvest prescription should be changed to 75 percent basal area retention to better minimize the risk of blowdown and associated impacts to water quality.