UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668

August 25, 2006

Dennis Sylvia
Planning Staff
Thorne Bay/Craig Ranger Districts
Tongass National Forest
P.O. Box 19001
Thorne Bay, AK 99919-0001

RE: Scratchings Timber Sale, Draft Environmental Impact Statement

Dear Mr. Sylvia:

The National Marine Fisheries Service (NMFS) has reviewed the Scratchings Timber Sale Draft Environmental Impact Statement (DEIS). The Scratchings Timber Sale Area is located on Suemez Island west of Prince of Wales Island and southwest of Craig, Alaska. The project area includes parts of Value Comparison Units (VCUs) 6330, 6340, 6350, and 6360. The Forest Service proposes to harvest 42 million board feet (MMBF) of timber on 1,932 acres of National Forest System land in Alternative 2. Alternative 2 would require 19 miles of new road construction (13 miles National Forest System road and 6 miles temporary). Alternative 3 is the preferred alternative, which emphasizes economic timber harvest. Alternative 3 proposes harvest of 29 MMBF on 1,391 acres with 13 miles of new road construction (8 miles National Forest System road and 5 miles temporary). Alternative 4 addresses concerns about cumulative impacts to the Dolores watershed. Alternative 4 proposes harvest of 24 MMBF on 1,195 acres with 7 miles of new road construction (4 miles National Forest System road and 3 miles temporary). Alternative 5 addresses the roadless area issue. Alternative 5 proposes harvest of 22 MMBF on 1,011 acres with 10 miles of new road construction (6 miles National Forest System road and 4 miles temporary).

Section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) requires Federal agencies to consult with NMFS on all actions that may adversely affect Essential Fish Habitat (EFH). NMFS is required to make conservation recommendations, which may include measures to avoid, minimize, mitigate or otherwise offset adverse effects. For the purposes of this project, 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 Port Refugio, Ulloa Channel, Bucareli Bay, Port Dolores and Port Santa Cruz. The streams in the project area provide important habitat for pink, chum, and coho salmon. The marine waters provide important habitat for a number of groundfish species including Pacific cod, arrowtooth flounder, Pacific Ocean perch, walleye pollock, dusky rockfish, shortraker and rougheye rockfish, yelloweye rockfish, sablefish, flathead sole, rex sole, sculpin and skate.

The Scratchings Timber Sale would adversely affect both freshwater and marine EFH. Regarding freshwater EFH, twenty-one watersheds would be harvested, and all alternatives would exceed 20 percent of the watershed harvested within the past 30 years for the Dolores,

Headwaters, Santa Cruz, Mini Verde and West watersheds. The additional harvesting proposed under the action alternatives would increase the number of watersheds exceeding the 20 percent threshold from one to six. The 20 percent harvest level is considered a threshold of concern in third order watersheds which triggers a more intensive watershed analysis prior to additional disturbances. A watershed assessment (Prussian 2005) is referenced in the DEIS, but was not provided to NMFS as part of our review. According to the DEIS, Prussian (2005) found that past management activities in the headwaters of the Dolores, East and West watersheds have resulted in higher rates of windthrow and excessive erosion of v-notches and that these actions have impacted productive fish streams. This downward trend is a concern for existing and future fish habitat along a portion of the mainstem of the Port Dolores watershed. In addition, Prussian (2005) notes specific cases of erosion and Geier model projections for potential fish habitat degradation for the Headwaters, West, Verde, Refugio and Santa Cruz watersheds. Of particular concern is a reported failure of 40% of a Class III stream buffer on the northern unit of the West watershed that resulted in sedimentation reaching a fish stream. The DEIS unit cards have recommended additional buffer widths where streams would be at risk from windthrow.

Alternative 4 was designed to mitigate for the potential impacts to the Dolores watershed by eliminating some proposed road construction in the vicinity of Dolores Creek, deferring the harvest of some steep slopes, and changing some cable harvest areas to helicopter logging. Due to this higher percentage of helicopter yarding compared to the other alternatives, Alternative 4 would result in a reduced expected bid price and is not the preferred alternative.

The DEIS identified 22 red culverts in the project area. Five of these are on Class I anadromous fish streams and 17 are on Class II streams with resident fish. 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. The DEIS indicates that red pipes will be removed upon completion of the project to improve fish passage. Given the potential length of time to completion of a timber sale this will delay adequate fish passage for many years.

Soil stability is a concern for the integrity of freshwater EFH. Soils are classified by a Mass Movement Index (MMI) that ranges from 1 (most stable) to 4 (least stable). According to the DEIS nearly all naturally occurring landslides are found in MMI 4 soils. On Suemez Island, the number of landslides identified is 383 with with 70 initiated in MMI 4, 232 in MMI 3, 40 in MMI 2 and 40 in MMI 1 soils. Twenty harvest related landslides and 12 road related landslides are identified from past harvest activity which have affected 162 streams. Two of the management related landslides traveled greater than 1,500 feet and emptied directly into Dolores Creek, a class I anadromous fish stream. Clearly, a high number of landslides (232 of 383) on Suemez Island have been initiated on areas classified as MMI3 soils. A possible explanation for this may be due to MMI 4 inclusions in MMI 3 soils. The DEIS indicates that "actual harvest on MMI 4 soils may be slightly higher on the ground due to inclusions of MMI 4 soils mapped within MMI 1 through MMI 3 soils types" (see page 3-131). In addition to soil type, harvest on slopes with gradient greater than 72 percent is a concern for soil stability. Approximately 640 acres of landslide prone slopes were removed from harvest consideration for this project because "the removal of these landslide prone slopes from the unit pool is the most effective mitigation the soil scientist can apply to protect resources" (see page 3-135). Nevertheless, the DEIS goes on to state that "some harvest units with slopes greater than 72 percent remain because they rate

below MMI 4 landslide potential" and because they are "considered suitable for harvest with appropriate harvest prescriptions and mitigations" (see Table 3SL-5).

Marine EFH may be affected by disturbance of the beach fringe and impacts associated with operation of log transfer and rafting activities and use of a floating camp. A recent study in British Columbia (Romanuk and Levings, 2006), suggests that relationships may exist between some nearshore fish species and supralittoral vegetation by comparing effects of secondary growth to old growth. Species showing various effects included juvenile chum and coho salmon, which were strongly associated with supralittoral vegetation characteristics of mature coastal forests such as mosses and western red cedar. A 1,000 foot beach and estuary fringe is classified as unsuitable for timber harvest and new roads, however, changes proposed to old growth reserves in the project area would reconfigure their shapes from linear to more circular. In doing so, several old growth reserves would be extended further inland at the expense of coastal areas (in VCUs 6330 and 6350). The boundaries of the affected old growth areas vary from less than to greater than 1000 feet.

Operation of the log transfer facility (LTF) in Port Refugio will have the potential to introduce bark to the marine environment. The LTF will be reconstructed to accommodate barge transfer, but barging will not be required as a part of the contract. The last dive survey of the LTF was conducted in 2001 and reported "no areas of continuous bark coverage" with discontinuous bark on 7,426 square feet (17 acres) of the 11,195 square feet surveyed (see page 3-121). Bark depth ranges up to 10 inches were reported. "Clams, crab, eel, crabgrass, halibut, hermit crabs, geoducks, kelp, rock cod, sea cucumbers and sea stars" were reported (see page 3-121). NMFS is concerned that cumulative bark accumulation could occur as a result of use of this LTF. Additional bark accumulation can lead to reduced oxygen and high hydrogen sulfide levels in benthic habitats. In addition, if the "crabgrass" reported was eelgrass (*Zostera marina*), its distribution and functions should be evaluated further. Eelgrass is a valuable marine habitat that provides numerous beneficial functions, including primary productivity, nutrient cycling, protection from shore erosion and nursery areas for juvenile fish. Additionally, the DEIS notes that a floating logging camp is likely to be used by the timber sale purchaser in Port Refugio (see page 3-161). As a foreseeable event, this camp should be evaluated as a potential cumulative impact in addition to the LTF.

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

1. Alternative 4 would benefit freshwater EFH by allowing recovery of the Dolores watershed, which according to the DEIS contains valuable anadromous fish streams, but is not the preferred alternative because of the unfavorable economics associated with proposed helicopter logging in some units. NMFS recommends Alternative 4 as the preferred alternative. Its costs may be reduced by dropping those units proposed for helicopter logging, thus retaining only economically feasible units for the timber sale.

2. Provide fish passage at the 22 red culverts that do not meet the current standards concurrent with timber sale use of those roads, as opposed to waiting to correct

deficiencies until the sale is complete. All culverts should again be re-assessed and adequate fish passage provided for all project road crossings at the completion of the timber sale.

3. NMFS is concerned that the soil stability classification is inaccurate, based on the number of landslides reported on MMI 1-3 soils, and the inexact nature of the classification system, particularly in its ability to identify inclusions of other soil types that may alter the probability of landslides. Given the inexactness of this process, NMFS recommends that all harvest on slopes with a gradient over 72% be dropped regardless of their MMI rating.

4. Recent science (Romanuk and Levings, 2006) suggests a relationship between old growth supralittoral vegetation and marine fish, including juvenile salmon. This science is not developed to the point of defining a quantitative relationship that would verify the adequacy of a 1000 foot beach and estuary fringe. The USFS Forest Plan (Appendix K) guidelines for the design of small old growth reserves recommend circular rather than linear shapes to maximize the amount of interior forest habitats. In Figures 2-2 to 2-5, a comparison of the TLMP old growth reserves with the proposed old growth reserves shows that implementing this guideline logic to re-define old growth reserve boundaries reduces the amount of old growth bordering the beach fringe. Given the potential importance of old growth to marine fish, this guideline may favor terrestrial species at the expense of coastal resources. NMFS recommends that portions of TLMP old growth reserves distributed parallel to the coast be maintained rather than eliminated to create circular shapes.

5. As a recognized "recent timber industry practice" (see page 3-122), barging of logs should be a required condition of the timber sale contract. If barging is not used to transfer logs in Port Refugio, EFH consultation should be re-initiated to determine the extent of impact by outlining the log transfer, rafting and storage areas in relation to the known extent of past bark deposition, sensitive resources in the area (including the potential for eelgrass), proximity to the float camp, and consistency with the 1985 "Log Transfer Facility Siting, Construction, Operation and Monitoring/Reporting Guidelines."

If you have questions regarding our comments contact Linda Shaw at (907) 586-7585.

Sincerely,

Robert D. Mecum
FOR Acting Administrator, Alaska Region

cc: *comments-alaska-tongass-thorne-bay@fs.fed.us
*Chris Meade, EPA Juneau

*Tom Schumacher, ADF&G, Juneau
*Richard Enriquez and Bill Hanson, USFWS, Juneau
*Kevin Hanley, ADEC, Juneau
*Mark Minnillo, ADNR-OHMP, Craig
*Erin Allee, ADNR, Juneau
*Don Martin, USFS, Juneau
*Linda Shaw and Katharine Miller, NMFS, Juneau
*Steve Kokkinakis, NOAA, Silver Spring

*email

Literature Cited

Prussian, K. 2005. Suemez Island Watershed Assessment. Unpublished resource report.

Romanuk, T.N., and C.D. Levings. 2006. Relationships between fish and supralittoral vegetation in nearshore marine habitats. Aquatic Conserv: Marine Freshw. Ecosyst. 16: 115-232