ATTACHMENT #3

MEMORANDUM

State of Alaska

Department of Fish and Game Division of Habitat

то: Jackie Timothy

Southeast Regional Supervisor

DATE: August 28, 2015

FILE NO: 58.3600 N, 134.5780 W

SUBJECT: Jordan Creek greenbelt

Trip Report August 21, 2015

FROM: Greg Albrecht

Habitat Biologist

PHONE NO:

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Background

The Juneau Police Department and Transportation Safety Administration requested Juneau International Airport (JNU) staff remove limbs from the bottom 8 ft of trees in the Jordan Creek greenbelt parallel to Yandukin Drive to discourage illegal activity, camping, and dumping and reduce the need for regular foot patrols along the trail¹. JNU staff contacted Habitat Division to determine if a fish habitat permit was needed to limb trees adjacent to Jordan Creek. Fish habitat permits are not required to limb trees adjacent to anadromous water bodies.

City and Borough of Juneau (CBJ) code 49.70.310(b)(1) prohibits disturbance within 25 feet of an anadromous fish stream unless a variance is granted. JNU staff began tree trimming prior to obtaining a variance and the CBJ Community Development Department (CDD) issued a notice of violation requiring mitigation. CDD has also verbally requested a scientific study to determine if the trimming has negatively affected fish.

USDA airport Wildlife Biologist Tyler Adams requested I assess how tree pruning and remaining brush piles would affect anadromous fish in Jordan Creek.

Observations

I visited the site on August 21, 2015 with Tyler, Scott Rinkenberger (airport maintenance and operations superintendent) and several JNU maintenance staff members. The trail through the Jordan Creek greenbelt is surrounded by dense second growth conifers at the north end transitioning to larger old growth trees and patchy grass meadows to the south. Staff did not cut, and do not propose to cut, limbs hanging over the main channel of Jordan Creek. I observed the limbing did not change the amount of light contacting the creek as the canopy above 8 ft remains intact and the summer sun is at a high angle. In the winter, when the angle of the sun is lower from the S SW direction, more light may penetrate to the creek.

¹ Trail and bridges were constructed by JIA as mitigation for the taxiway extension in the early 1990s.

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Discussion

Opening the forest floor near the creek will promote forb, shrub, and berry growth on and around the streambank; a benefit to fish and wildlife. Streamside alder limbing will result in new leafy growth that provides shade and allochthanous input.

A 25 ft no disturbance zone is valuable for maintaining ecological functions of streams such as large woody debris input, bank stability, channel morphology, water temperatures, shading, stream flow, water quality, nutrient cycling, food sources, and clean spawning gravels. At this location on Jordan Creek, these stream functions will be maintained by the limbing to 8 ft.

Recommendations

A study to determine impacts from limbing is unnecessary. The brush piles are not impacting fish habitat and JNU proposes to remove the limbs once they receive a CBJ variation.

On the north end of the trail, I recommend thinning the stand to promote growth of the strongest spruce trees and return the corridor to a characteristic old growth state, a commonly used stream restoration technique on the Tongass National Forest. Selecting dominant spruce and removing all trees within an 8 ft radius will accelerate growth, reduce the number of trees to be limbed and maintained in the future, and increase low growing forbs and shrubs. At the southern end of the trail and downstream from the trail end, replacing reed canary grass infestations with native grass and alders staked along the banks would benefit the stream.

If JNU is granted a variance and wishes to pursue thinning, I am available to help with tree selection.



Figure 1.—Streamside alder limbing along the main channel.

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Figure 2.–Limbs from this tree previously overhung the trail and concealed a campsite. Creek remains shaded in the background.

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Figure 3.—Picture showing trail limbing (foreground) and the removal of three spruce trees by Alaska Energy, Light, and Power to maintain power line easement. Creek is immediately to the left.



Figure 4.—Limbing along the dense second growth stand on the elevated portion of the trail at the north end. Main channel is below the path at photo right.

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Email cc:

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