



TO: Greg Lockwood, Engineer/Architect
Dept. of Transportation and Public Facilities

DATE: April 11, 2024

FILE: Gastineau Channel Bridge: DOT
Second Crossing

SUBJECT: Juneau-Douglas Second Crossing
PEL Draft Level 2 Screening
Project No. SFHWY00299

FROM: Benjamin Mulligan *BOM*
Deputy Commissioner

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Alaska Department of Fish and Game (ADF&G) has reviewed the Draft Level 2 Scoring Table 2-29-24 and Draft Level 2 Impact Table 3-1-24 for the Juneau-Douglas second crossing Preliminary Environmental Linkages (PEL) study. The proposed Level 2 scoring process ranks crossing alternatives based on the sum of scores assigned to each criterion, which appears incomplete and lacks definitions to support assigned scores. Our comments below are on the scoring system and sectioned into the overall scoring system, environmental scoring, Section 4(f)/(6) resources, and general comments per the screening considerations.

Overall Scoring System

The Draft Level 2 Scoring Table 2-29-24 does not present an objective comparison of the components. The table summarizes three different scoring systems; one with five scoring categories (from -2 to 2), and two with three scoring categories (from 0 to -2, and from 0 to 2), resulting in criteria weighted differently. We recommend scoring criteria in the same way or providing more than one table showing the scoring systems and results. Combining the ranking methods is confusing and potentially biased towards individual criteria, such as transportation and development over environmental and public use criteria. We also recommend including footnote references to supporting information, including definitions.

The score assigned to each criterion is not clearly explained how each metric was evaluated; a relative scale is not demonstrated to be consistently applied across criteria, and thresholds are not provided. For example, there is no information on how the 'Wetlands Directly Affected' were assigned scores between 0 and -2. We recommend using an objective method to assign scores, such as characterizing the quality of habitats and associated acreage impacted by its type, location, and fish and wildlife use relative to the project area and to each crossing, and further defined by adjacency to the existing roadway and proposed bridge abutment with overhead area.

We recommend impacts to environmental functions be weighted by the importance to the Mendenhall Wetland State Game Refuge (refuge) and the management objectives.

Environmental Scoring

For 'Impervious Surfaces Added', please reevaluate and provide rationale for the scores assigned to Sunny Point West, Vanderbilt, and Twin Lakes (-2 score) versus Sunny Point East (-1 score).

Ecological functions vary within the types of intertidal habitat, and applying only the acreage of the habitat into the scoring table oversimplifies the consequences of potential habitat impacts. For example, there is a difference in the quality of intertidal habitat at the mouth of the Mendenhall River relative to Lemon Creek near the proposed Vanderbilt crossing. We recommend reevaluating all scores for 'Intertidal Zone Directly Affected' and suggest scoring most if not all build alternatives as -2. Subtidal habitat was mapped and provided in the supplemental information, though subtidal and nearshore habitat criteria are not included.

Wetland data displayed in Figure 2 from the Baseline Data report displays more wetlands than the online mapper and as shown in our March 7, 2024, meeting. Please include references for the data used for wetlands scoring, and the rationale for each score.

Please clearly define the buffer extent considered for 'Stream and Riparian Habitats' scoring and provide rationale for the scores.

Please provide a definition for wildlife habitat and the buffer extent to clarify which habitats across the study area are considered in the scoring, and the rationale for each score. Wildlife habitat should include uplands, wetlands, and intertidal habitats. For example, it is unclear how the Sunny Point East and Salmon Creek alternatives have a 0 score.

The refuge provides important habitat for migratory birds, especially feeding areas during the spring and fall migrations. The 'Important Migratory Bird Habitat Impacted' criterion does not appear to consider the seasonality of migratory bird habitat, and therefore we recommend reevaluating the scores (such as the 0 score for Sunny Point East and -2 score for Sunny Point West). Also, please provide a definition for migratory bird habitat. The Draft Level 2 Impact Table 3-1-24 indicates that this relates to nesting locations within 500 ft, however, this does not consider specific species present like Arctic tern, for which recommended pedestrian buffers from nesting locations is 600 ft; literature suggests considering buffers of 1–2 km.¹

Please update the numbers of anadromous streams potentially affected per Habitat Section's recent field work.²

Section 4(f)/6(f) Resources

The refuge provides opportunities for the public to engage in many important activities that are not specifically identified in the scoring criteria, rather they are lumped together and their importance diluted by being included in other categories. Examples include but are not limited to waterfowl hunting,

¹ Goodship, N.M. and R.W. Furness. (MacArthur Green). 2002. Disturbance Distances Review: An updated literature review of disturbance distances of selected bird species. NatureScot Research Report 1283.

² Flynn Casey, Habitat Biologist, to Kate Kanouse, Southeast Regional Supervisor, Alaska Department of Fish and Game, Habitat Section. Memo: Juneau-Douglas Second Crossing Fish Stream Surveys #SFHWY00299; dated January 10, 2024.

fishing, general recreation, and gathering of plants. Some of these activities, in addition to other uses, are grouped within the criterion labeled 'Section 4(f)/6(f) Resources Affected'.

By integrating these important activities into the 'Section 4(f)/6(f) Resources Affected', it does not adequately reflect the level of importance they have for the people of the area. Further, our ability to evaluate the impacts of each crossing alternative on recreation, fishing, and hunting is diluted by using this category on the scoring table instead of delineating each of these activities. We recommend adjusting the criteria to add each of these activities as a criteria, which would properly acknowledge the impact the alternatives would have and the importance of the refuge for these activities. We recommend including at least these four aspects:

1. Public access to and within the refuge;
2. Opportunities for hunting waterfowl and fishing within the refuge;
3. Opportunities to recreate in the refuge; and
4. Opportunities for viewing, photography, education, and study of fish and wildlife.

In the scores assigned to each crossing under the Section 4(f)/6(f) resources affected, only the Mendenhall Peninsula received a score of -2. Considering that all of the public uses of the refuge as defined in the management plan are lumped into this one criterion, scoring and ultimately ranking of impacts on the Scoring Table appear incorrect. If this category is not broken into the various components, all the crossing sites in these tables should be marked as -2 reflecting the multiple uses in this generalized category. The 4(f)/6(f) resources regulation requires that other alternatives be assessed if they exist; similarly, if off-refuge alternatives exist they must also be considered according to the management plan.

General Comments

Integrity of habitat is not considered in the scoring. One example is the 3.1 acres of wildlife habitat impacted at Salmon Creek with a score of 0, and 2.2 acres of wildlife habitat are impacted at Sunny Point East also for a score of 0. This does not account for bisecting the refuge at Sunny Point East and potentially reducing the value of contiguous habitat and public use. The selected criteria in this draft assessment rank Sunny Point West and East routes as the first and third least impactful alternatives; however, bisecting the refuge may impact its value which would contradict the refuge's origin established in 1976. We recommend including additional criterion to reflect the level of impact to habitat integrity and public use with respect to bisection of the refuge.

Habitat impacted by each crossing alternative is not scored according to its quality. Habitats further from existing roads and development in addition to proposed approaches and bridge abutments are of higher quality relative to wildlife use and the ecological function of the wetlands. Where crossing alternatives affect natural environment criteria distal to existing infrastructure, an additional scoring option may allow for these effects to be reflected in the final rank.

We are interested in understanding more on how you scored the alternatives under 'Level of Public Support'. Please provide the information you used to make these determinations.

Thank you for the opportunity to comment on the draft documents. Please contact Habitat Biologist Jesse Lindgren at jesse.lindgren@alaska.gov or (907) 465-1635 if you have any questions.

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