Fox, Lori

CAHA # 1799

From: Frank_Turina@nps.gov
Sent: Tuesday, December 29, 2009 2:42 PM
To: Sandra_Hamilton@nps.gov; Fox, Lori
Subject: Fw: CAHA soundscapes

Sandy and Lori,

Below are Kurt's comments. Some are editorial in nature. Let's talk briefly this afternoon about if and how we may want to address the others

Thanks

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When quiet is all around, with no sounds but natural ones - bird songs, wind, washing of waters against shores - the stage is always set for meditation and reflection.
-- Sigurd Olsen
----- Forwarded by Frank Turina/FTCOLLINS/NPS on 12/29/2009 02:39 PM -----

Kurt Fristrup/FTCOLLINS/NPS 12/23/2009 01:28 PM		To: Frank Turina/FTCOLLINS/NPS@NPS cc: Subject: Re: Fw: CAHA soundscapes(Document link: Frank Turina)

Frank,
Here are my comments.
The second sentence under Methodology really needs to be revised. I would recommend splitting it into smaller and simpler declarative sentences, and use the paragraph structure to integrate these statements to make the main point (impact analysis will focus on the beach).
P2L9-12: this discussion implies that absorption and frequency were taken into account. It does not specify what frequency and absorption coefficients were used. Did we check to determine that absorption makes a signficant difference to the results? Perhaps another simplifying assumption would have been justified.

P2 line 12-14: revise this sentence. Trees and shrubs are not ground surfaces. This sentence confuses ground effects with vegetation effects.
The physical mechanisms of interaction with sound are different, and the effects are different. Split this long sentence up and clarify the diction.
P2 line 16-18: In what sense does neglecting ground effects providee a general sense of noise drop-off? Although I agree with the simplifying assumption, this is a very poor justification. A stronger statement would be that many surfaces at CAHA are expected to be highly compacted or waterlogged, so they would be very "hard." Noise can have the most extensive impacts under these conditions, so the models will investigate these with the understanding that the estimated impacts will provide an upper bound for possible effects.
P2, line 21-24: The previous assumption suggested that the goal of the analysis was a reasonable upper bound on impacts. Here, a contrary assumption is being made that surf noise is at the maximum measured levels.
This makes it difficult to assess exactly where the estimated impacts will fall in the full range of conditions that might be realized.
p4 line 12: "which" should be "that:" restrictive rather than parenthetical. Repetition of "that" should be eliminated by restructuring the sentence. More generally, the
p4 line 14-16: In this analysis, it does not matter whether the road and offroad impact on wildlife are strictly mediated by sound, because the other factors will be present here as well. This qualification is irrelevant and distracting.
P4 line 37: "alerting distance for prey" rather than "of."
P5: I agree that distance criteria are a reasonable indicator for managment. How were the distance thresholds established? How can they be justified based on the spatial distributions of resources and their sensitivity to noise effects? Can we show that these thresholds were established before the resource managers saw Randy's modeling results?

I stopped reading here.

Was there any informal analysis or discussion of vibration and compaction impacts to to the surface and interstitial ecosystems on the beach?

Kurt