Subject: How 23 CFR 772 and 774 Work Together: Analyzing Noise Impacts for Receptors

Within Section 4(f) Resources Where Quiet is Important (QII)

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From: MnDOT Office of Environmental Stewardship, Environmental Modeling and Testing Unit

The purpose of this narrative and the flow chart is to address the process when a noise-based impact to a Section 4(f) resource might induce a constructive use per 23 CFR 774.15. This potential for a constructive use from noise is limited to the subset of Section 4(f) resources meeting the characteristics outlined in 23 CFR 774.15(e).

What is the definition of "quiet is important"?

"Quiet is important", or QII, is not a definition that exists in Title 23 CFR. A Category A receptor (23 CFR 772) and a QII receptor are not the same thing. QII is a Minnesota-established branding given to a subset of Type I project noise-sensitive receptors (23 CFR 774.15) that:

- 1) Have thresholds in addition to the 23 CFR 772 Category C NAC thresholds, and
- 2) Have the potential to cause constructive use to Section 4(f) resources

Illustrative examples of QII receptors include:

- 1) Hearing the performances at an outdoor amphitheater
- 2) Sleeping in the sleeping area of a campground
- Enjoyment of a historic site where a quiet setting is a generally recognized feature or attribute of the site's significance

These are the most common types of QII receptors, not an exhaustive list. Apply the looks-like-a-duck-quackslike-a-duck test to potential QII receptors as part of building the noise model. If you have receptor(s) in a Section 4(f) resource like any of the activities listed in (or having similar attributes) 1-5, contact MnDOT Environmental Modeling and Testing Unit (EMTU) to determine if you have QII receptor(s).

- 4) Enjoyment of an urban park where serenity and quiet are significant attributes
- 5) Viewing wildlife in an area of a wildlife and waterfowl refuge intended for such viewing

Note the theme: It's focused on the impact to a Section 4(f) resource in the context of how humans use it.

Isn't everything noise covered by the FHWA noise regulations in 23 CFR 772?

No. An update to the Section 4(f) regulations addressed how noise might cause a constructive use under Section 4(f).

When might a constructive use happen specifically from noise?

A constructive use from noise is when the use and enjoyment of a noise-sensitive Section 4(f) is negatively impacted to a degree that is substantially interferes with the use and enjoyment of the QII portion of a Section 4(f) resource. 23 CFR 774.15(f) defines specific situations when noise does not negatively impact the use and enjoyment of noise-sensitive Section 4(f) resources. The Section 4(f) regulations (23 CFR 774) do not use the same definition or thresholds as 23 CFR 772 to determine the existence of an impact.

Do I have to have a Type I project under 23 CFR 772 for a noise-based Section 4(f) constructive use to be a possibility?

Yes. If the project is Type III per 23 CFR 772, there is no obligation to determine if there is a noise-based Section 4(f) constructive use per 23 CFR 774.15(e).

Does mitigation for noise-caused constructive use under 23 CFR 774 for a noise impact have to be a noise abatement measure as normally thought of under 23 CFR 772?

No. A typical noise abatement measure (e.g. noise barrier, noise wall) is among the types of mitigation measures to consider, but other illustrative possibilities include: moving part of all of the noise-sensitive resource (e.g. campground) to a location that does not cross the 774 noise-centric thresholds, improving other attributes, features, and activities that qualify the Section 4f resource. Recall that Section 4(f) constructive use is based upon the <u>net impact</u> to the Section 4(f) resource.

How do the concepts of 'feasible and reasonable' under the FHWA noise regulations differ from 'feasible and prudent' under the Section 4(f) regulations? Can one concept be substituted for another?

The definition of 'feasible and reasonable' is defined by the MnDOT Noise Requirements documents and applies only to fulfilling the requirements of 23 CFR 772. The concept of 'feasible and prudent' only applies to the Section 4(f) process. One cannot supplant or be a substitute for the other. When a project is both Type I under 23 CFR 772 and has a noise-centric impact to a Section 4(f) resource under 23 CFR 774.15(e), the requirements of both must be met. For example, analyzing an impact under 23 CFR 772 for a Section 4(f) resource under Category C is not a substitute for fulfilling the obligations of 23 CFR 774.15(e). The flowchart shows how to meet the requirements of both.

Does Section 4(f) constructive use happen often?

Constructive use if very rare. It's often avoidable by thoughtful alternative development and/or design refinements.

How does the attached flowchart help me?

The attached flowchart outlines the process of how 23 CFR 772 and portion of 23 CFR 774 (specific to the potential of noise-based constructive use) work together on a Type I project. It incorporates the letter, spirit, and intent of the regulations into a questions-based decision-making process that addresses common questions when trying to navigate the expectations of 23 CFR 772 and 23 CFR 774. The noise staff at the MnDOT Environmental Modeling and Testing Unit (EMTU) and environmental staff at the Minnesota Division of FHWA are available for technical assistance. EMTU is always your first point of contact.

If my 23 CFR 772 noise mitigation (that plays into the net noise increase at nearby QII receptors) measure) either (1) gets voted down at any time by the benefited receptors *OR* (2) gets eliminated because of design changes that lead to elimination of 23 CFR 772 noise mitigation measures in the area of QII receptors, do I have to revisit the potential noise impacts to the Section 4(f) QII receptors?

Yes, you must then revisit the potential noise impacts to QII receptors in that scenario because that would be a material change in the assessment impacts in the project setting. If the noise levels then cross the thresholds for Section 4(f) constructive use considerations, the likely paths at that point

include implementing the mitigation measure (previously done under 772) as a Section 4(f) mitigation measure or exploring mitigation options, changes to plan and/or profile to get the QII levels below the 774 thresholds. In short, revisiting the noise impacts to QII receptors under Section 4(f) means following the flow chart process as though there are no feasible and reasonable 23 CFR 772 mitigation measures in that area. This situation is cause for a post-NEPA reevaluation under 23 CFR 771.