



NOAA
FISHERIES



Public comments close:
January 27, 2014

Public meeting:
January 14, 2014: 2-5pm

Public comments opened:
December 27, 2013

For more information, visit:
<http://www.nmfs.noaa.gov/pr/acoustics/guidelines.htm>

NOAA Draft Guidance for Assessing Effects of Anthropogenic Sound on Marine Mammals

Acoustic Threshold Levels for Onset of Permanent and Temporary Threshold Shifts

Guidance information

The Draft Guidance provides updated acoustic threshold levels for assessing the effects of underwater anthropogenic sound on marine mammal species under NOAA's jurisdiction. It identifies received levels or thresholds, above which individual marine mammals are predicted to experience changes in their hearing sensitivity (either temporary or permanent) for all underwater anthropogenic sources.

The updated acoustic threshold levels do not represent the entirety of an impact assessment but rather serve as one tool to help NOAA evaluate the effects of a proposed action on marine mammals and make findings required by our various statutes.

Who should use the Guidance?

This Draft Guidance is intended to be used by NOAA analysts and managers, other Federal agencies, and other relevant user groups and stakeholders to determine whether and how their activities might result in marine mammal hearing threshold shifts due to acoustic exposure.

What is the purpose of the public meeting? How will public comments be used by NOAA?

This meeting is to provide the public an opportunity to provide oral comments on the Draft Guidance. NOAA will review comments received during the public comment period and consider them in our final decision.

What is the timeline for the Draft Guidance?

- Internal NOAA review (completed 2013)
- Independent peer review (completed 2013)
 - Reviewers nominated by the Marine Mammal Commission
 - Peer Review Report for acoustic threshold levels for auditory impacts will be available when finalized
- Public comment period (in progress 2014)
- Finalization and release (2014)

Submit Public Comments

You may submit comments, identified by NOAA-NMFS-2013-0177:

- Online at www.regulations.gov
- By mail to:
Chief, Marine Mammal and Sea Turtle Conservation Division
Office of Protected Resources
NOAA Fisheries
1315 East-West Highway
Silver Spring, MD 20910
Attn: Acoustic Guidance
- By fax to: 301-713-0376; Attn: Amy Scholik-Schlomer
- At the Registration Desk at the Public Meeting



Further Questions

Contact:

Amy Scholik-Schlomer
301-427-8449
Amy.Scholik@noaa.gov

What has changed between updated acoustic thresholds levels and the thresholds NOAA currently uses?

The Draft Guidance utilizes the best available science, but does not change our regulatory application (issuing permits, conducting consultations, etc.) of the science. Our application of these thresholds under the Marine Mammal Protection Act, Endangered Species Act, and National Marine Sanctuaries Act will remain consistent with past NOAA practice.

NOAA's current acoustic threshold levels, used for most sound sources, consist of a single threshold for cetaceans and a single threshold for pinnipeds regardless of sound source. They do not take into account the hearing ability of different marine mammal groups or the differences among sound sources in terms of auditory impacts.

The updated acoustic threshold levels consider species and sound source and, when finalized, will replace those currently in use by NOAA. These updated thresholds reflect the best available science on the potential for sound to affect hearing sensitivity by:

- Dividing sound sources into two groups based on their potential to affect hearing sensitivity:
 - Impulsive sound sources (e.g., airguns, impact pile drivers)
 - Non-impulsive sound sources (e.g., sonar, vibratory pile drivers)
- Choosing metrics that better address the impacts of sound on hearing sensitivity:
 - Peak sound pressure level
 - Cumulative sound exposure level
- Dividing marine mammals into functional hearing groups and developing auditory weighting functions:
 - Low-frequency cetaceans (hearing range 7 Hz to 30 kHz)
 - Mid-frequency cetaceans (hearing range 150 Hz to 160 kHz)
 - High-frequency cetaceans (hearing range 200 Hz to 180 kHz)
 - Otariid pinnipeds (hearing range: 100 Hz to 40 kHz)
 - Phocid pinnipeds (hearing range 75 Hz to 100 kHz)

The updated acoustic thresholds are more complex than those previously used by NOAA. Given the specific nature of the updates (e.g., different metrics, auditory weighting functions, etc.), it is not possible to directly compare the updated acoustic threshold levels with the thresholds previously used by NOAA. NOAA is working on a companion "User Guide" to be released with the Final Guidance document that will assist applicants and other members of the regulated community to correctly apply updated acoustic threshold levels.

When will the Guidance be finalized and become effective?

NOAA will publish the Final Guidance document after we review and incorporate public comments on the proposed draft. We anticipate having the Guidance finalized in spring 2014.