

Developing the Vessel Movement Module: Vessels that do not transmit AIS data



More information

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How you can help:

We are looking for feedback on this draft approach from tribes and stakeholders, especially those with expertise and interest in the operational patterns for vessels do not regularly transmit data via AIS, such as:

- Recreational vessels
- Commercial fishing vessels
- Tribal fishing vessels
- Smaller workboats/tugs
- Others

Contact information

JD Ross Leahy
425-410-9806

jd.leahy@ecy.wa.gov

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Introduction

This focus sheet describes the challenge of modeling vessels that do not regularly transmit their location data via Automatic Identification System (AIS). We are seeking your input on how to approach this challenge.

Our draft list of vessel types that do not regularly transmit AIS includes recreational vessels, fishing vessels, and small workboats and tugs. We have included questions on page 2 that may help you provide your thoughts.

You can provide feedback using our [eComment system](#). We are also hosting [a technical discussion on this topic on November 4, 2020](#).

To learn more about the model we are building, and how the modeling of these vessels relates to the Vessel Movement Module please review our [Modeling Approach focus sheet](#).

Basic Operating Information needed for vessels that do not regularly transmit data via AIS

To build the Vessel Movement Module we are relying heavily on historical AIS data. Larger commercial vessels are required to transmit their navigational information via AIS, but this requirement does not extend to all vessels. For example, most non-towing vessels under 65 feet long, and towing vessels under 26 feet long do not have to transmit AIS information. As a result, some recreational vessels, fishing vessels, and smaller workboats and tugs may operate without transmitting AIS.

In the context of quantifying oil spill risk, these smaller vessels play an important role in the larger functioning of the vessel traffic system.

To appropriately represent these vessels in our model, we will need to



Figure 1: Photo of sailboats and powerboat sharing a waterway

Vessels required to transmit information via AIS under 33 CFR 164:

- A self-propelled vessel of 65 feet or more in length, engaged in commercial service.
- A towing vessel of 26 feet or more in length and more than 600 horsepower, engaged in commercial service.
- A self-propelled vessel that is certificated to carry more than 150 passengers.
- A self-propelled vessel engaged in dredging operations in or near a commercial channel or shipping fairway in a manner likely to restrict or affect navigation of other vessels.
- A self-propelled vessel engaged in the movement of certain dangerous cargo, or flammable or combustible liquid cargo in bulk

approximate the following basic operating information for each vessel type that does not use AIS:

- Number of vessels operating in the study area
- Vessel size and general characteristics
- Where and when they operate
- Characteristics of their operation (speed and route)

Recreational vessels

Recreational vessels include pleasure craft, both powered and sail, and sport fishing vessels. We have identified the following potential recreational vessel data sources and welcome your feedback on other ways to quantify recreational vessel movements:

- Washington State Department of Licensing vessel registrations
- Canadian pleasure craft licenses
- State Park boat launch records
- Marina locations and occupancy levels

Fishing vessels

Fishing vessels under 65 feet long, including both commercial and tribal vessels, often operate without transmitting an AIS signal. We have identified the following potential fishing vessel data sources, and welcome your feedback on additional ways to quantify fishing vessel movements:

- Department of Fish and Wildlife fish ticket and licensing data
- Tribal fisheries catch and licensing data
- Fishing openers and catch areas

Smaller workboats/tugs

Tug under 26 feet long and workboats under 65 feet long may operate without transmitting an AIS signal. We welcome your feedback on other ways to quantify their movements.

How to provide input on ways to quantify movements of vessels that do not regularly transmit AIS?

We welcome feedback on this topic at our upcoming technical discussion session as well as in writing. All feedback is welcome, but you may find the following questions helpful in guiding your comments:

- Are there other vessel types that regularly operate without transmitting AIS data?
- For each of the listed vessel types, where do they operate, and where are they homeported?
- Are there additional data sources you would suggest we investigate as part of this work?
- What strategies would you suggest we use to gather operational and movement data for vessel types that does not regularly transmit AIS?

[Register for our November 4, 2020 Discussion Session](#)
[Provide written feedback via eComment](#)