In 2014, the International Maritime Organization (IMO) recognized that underwater noise associated with shipping is something that can be mitigated. Options to reduce ship noise underwater already exist:

- **SLOW DOWN**: Operate below cavitation inception speed and avoid rapid acceleration.
- **MAINTAIN**: Clean hull and maintain propeller.
- **OPTIMIZE**: Insulate ship engine and use resilient mountings for onboard machinery. Modify propeller to minimize cavitation.
- **DESIGN**: Incorporate vessel quieting considerations during re-fits and new vessel construction.
- **REROUTE**: Modify route to avoid whales in immediate vicinity and known sensitive marine areas.

Underwater noise interferes with the ability of marine animals to transmit and receive acoustic information.

**SOURCES OF NOISE**

While there are plenty of naturally occurring sounds in the ocean, an increase in commercial vessel traffic is the main reason for increased underwater noise.

In the North Pacific Ocean, underwater noise has been **doubling in intensity every decade** for the past 60 years.

**IMPACTS**

Underwater noise interferes with the ability of marine animals to transmit and receive acoustic information.

**WHERE VESSEL NOISE COMES FROM**

- Engine and onboard machinery
- Drag from poor hull maintenance
- Bow/stern thrusters
- Propeller
- Cavitation
- Noise increases with speed

Most underwater noise from large vessels is caused by propeller cavitation.

In some areas, vessel noise has reduced the area some whales can communicate by 90%.

**WHAT YOU CAN DO**

In 2014, the International Maritime Organization (IMO) recognized that underwater noise associated with shipping is something that can be mitigated.

Options to reduce ship noise underwater already exist!