

# THE IMPACT OF T-32 ON BOAT DESIGN

Elizabeth Brown  
*Independent Contractor*  
PSMFC



The Columbia River Basin Team  
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# PRESENTATION SUMMARY



What is T-32?



Objective and  
Evaluation  
Process



Results



Next Steps



# WHAT IS T-32?

The *Design and Construction in Consideration of Aquatic Invasive Species* (T-32) is a technical information report that was developed by a partnership-based committee of subject matter experts and published in by the American Boat and Yacht Council (ABYC) 2018.

- (1) build boats that are less likely to move AIS
- (2) build boats that are easier to inspect and decontaminate
- (3) amplify the message of clean, drain, dry to prevent the spread of AIS among recreational boaters.

# T-32 RECOMMENDATIONS

## 45 Total Recommendations

- Hull Exterior (16)
- System Component (6)
- Propulsion System (9)
- Trailer (11)
- Literature (3)
  - Website
  - User Manual
  - Collateral Materials







# PROJECT OBJECTIVE

To determine if boats, engines, or components have been produced since the publication of T-32 in 2018 that are designed to:

- prevent the spread of AIS
- make inspection or decontamination easier

# INPUTS

- Online research
- Marine dealerships
- Marine manufacturers
- WRP Decon Think Tank Committee Members
- ABYC AIS Project Technical Committee Members

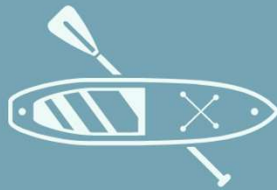


- Alumacraft
- Axis
- Centurion
- Cobalt
- Malibu
- Manitou
- MasterCraft
- Moomba
- Supra
- Tige
- Select Components

# MANUFACTURERS

## WATERCRAFT RISK

HAND-LAUNCHED &  
NON-MOTORIZED



LOW RISK

SIMPLE  
BOATS



MEDIUM RISK

COMPLEX  
BOATS



HIGH RISK

VERY COMPLEX  
BOATS



VERY HIGH RISK



# USER MANUALS

## INCLUDE AIS

- Alumacraft
- Axis
- Centurion
- Manitou
- Tiga

## DO NOT INCLUDE AIS

- Cobalt
- Malibu
- MasterCraft
- Moomba
- Supra





# RESULTS

- In 2015, Premier Pontoon has closed off the strakes in the pontoons and improved other features to prevent AIS and marketed it for AIS
- The Centurion Trailer Mode facilitates draining.
- The Cobalt wake series ballast tanks have access ports and sensors for the ballast tanks that can be removed.
  - When they are out, there is a 4-inch hole that can be used to inspect and towel dry areas with small hands.
  - The port tank is divided into sections, one of which does not have this opening while the center tank has no access at all.
- MasterCraft started putting freshwater flush kits on every boat in 2020.
- Navico Group (Lund, Crestliner, etc.) - All the boats designed for fishing in fresh water have been or are undergoing design changes to ensure the live wells drain down properly and do not retain any water.

# RESULTS

- Volvo stern drive engines include garden hose flushing ports and complete draining with a simple levers.
- Suzuki has a garden hose flush fitting on all models above 25 hp.
- The Indmar strainer has included a garden hose fitting to flush the engine in approximately 50% of the engines produced since 2017 and 100% of those made since 2020.
  - The strainer does not stop AIS but the direct flush fitting was intended to make decontamination easier.
  - OXE diesel outboards used this strainer in their product line for both strainer and flush.
- The Sea Doo Switch is a pontoon boat with direct flushing ports designed to flush the inside of the pontoons for AIS.

# SEA DOO SWITCH

The Sea Doo Switch is a pontoon boat with direct flushing ports designed to flush the inside of the pontoons for AIS.



# CENTURION

The Centurion Ram Fill has a “trailer mode” that is designed with AIS in mind. The goal is to allow air to pass through the tanks while driving on the road to dry them out.





# **VOLVO EASY DRAIN**

Some Volvo engines can be fully drained with the push of a simple lever!

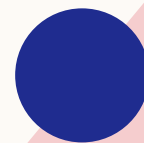


# QZAP 2.0



- **Action:** Continue, expand, and promote partnerships between managing agencies and the marine industry, specifically the National Marine Manufacturers Association, American Boat and Yacht Council, Watersports Industry Association, and BoatUS, to implement the Technical Information Report (T-32) on AIS.
  - **Evaluation Measures:** An increase in the number of engagements with the marine industry. A published ANS standard for all NMMA certified boats to prevent/eliminate the movement of ANS on watercraft and to improve decontamination efficacy and safety.
- **Action:** Alter and/or improve the design, engineering, and manufacturing of ballast tanks, inboard engines, inboard/outboard engines, and new watercraft to eliminate or reduce the probability of quagga or zebra mussels and other ANS from being transported in recreational watercraft, and to make it easier and safer to inspect and decontaminate watercraft compartments and propulsion systems
  - **Evaluation Measures:** Establish a process for new marine technologies to be tested by independent third-party vendors, approved, and released into manufacturing. An increase in the number of marine manufacturers actively engineering new boat designs to reduce the spread of ANS. Effective solutions for ballast tanks, engines, bilge, and other water-holding compartments to prevent ANS are industry standard in marine manufacturing.

# NEXT STEPS





# THANK YOU!

**Elizabeth Brown**  
[elizmbrown4@gmail.com](mailto:elizmbrown4@gmail.com)  
[www.elizabethbrownenvironmental.com](http://www.elizabethbrownenvironmental.com)