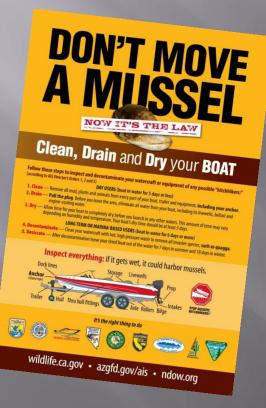
UPDATING ARIZONA'S AIS DIRECTOR'S ORDERS FOR 2016...

Tom McMahon

AIS Program Coordinator Wildlife Management Division Aquatic Wildlife Branch



...WHY AND HOW??



AQUATIC INVASIVE SPECIES PROGRAM WATERCRAFT DECONTAMINATION STATION CLEAN • DRAIN • DRY | AZGFD.GOV/AIS

Market Content



USBOR monitoring – Sample collected at Canyon Lake (Mormon Flat Dam) on Oct 29, 2015



USBOR / AzGFD monitoring – Samples collected at Canyon Lake, Fall 2015

In addition, subsequent sampling efforts by USBOR and AzGFD confirmed <u>PCR</u> and limited <u>microscopy</u> findings of Dreissenid mussels at the Canyon Lake Marina, Apache Lake (Horse Mesa Dam), and Granite Reef Dam (lower Salt).



AzGFD – Long-Term Moored Boat at Canyon Lake Marina; just out of the water for transport. December 15, 2015

AzGFD Dive February 25th, 2016 Canyon Lake Marina area (near Dock H)

2 dive teams.

Inspected 3 cables holding Dock H in place and rock wall on west end of dock.





 Dive Team found 1 ADULT mussel attached to cable.
USBOR plates were pulled and 2 ADULTS were attached to the rope.



Aug, 2016 Saguaro Lake Salt River Project reported:

- Initial discovery of small ADULT Quagga mussels on Stewart Mtn Dam monitoring plates and on the face of the dam.

FROM WESTERN REGIONAL PANEL-ANSTF "BUILDING CONSENSUS - 2012-14"

Waterbody definitions:

- Status Unknown Waters that have not been monitored.
- Undetected/Negative sampling/testing is ongoing and nothing has been detected, or nothing has been detected within the time frames for de-listing.
- Inconclusive (temporary status), Water body has not met the minimum criteria for detection (e.g. eDNA only).

Management ■ Suspect – Water body that has met the minimum criteria for detection once (e.g. one verified detection of an ANS).

- **Positive** Multiple (2 or more) subsequent sampling events that meet the minimum criteria for detection.
- Infested A water body that has an established (recruiting or reproducing) population of AIS.



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Management -Trigger →

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Findings (and the pumpback capabilities of Horse Mesa and Mormon Flat Dams) indicate a "Suspect" to "Positive" designation for Canyon, Saguaro, and Apache Lakes is warranted and necessary. That means these three lakes are now "affected" by the presence of quagga mussels and were listed in AIS Director's Orders in May, 2016.



UPDATED DIRECTOR'S ORDERS FOR 2016

Non-Native Mussels Have Invaded Arizonal

DON'T MOVE Pull Your Boat's Drain Plug EVERY TIME You Leave the Lake

A MUSSEL

CLEAN - DRAIN - DRY HOUR WATERCART & COURSENT | AZGED.GOV/AIS





2009

Aquatic Invasive Species Interdiction Act

Senate Engrossed House Bill

State of Arizona

House of Representatives Forty-ninth Legislature First Regular Session 2009

CHAPTER 77

HOUSE BILL 2157

AN ACT AMENDING SECTION 5-323, ARIZONA REVISED STATUTES; AMENDING TITLE 17, CHAPTER 2, ARIZONA REVISED STATUTES, BY ADDING ARTICLE 3.1; RELATING TO GAME AND FISH.

Be it enacted by the Legislature of the State of Arizona:

Section 1. Section 5-323, Arizona Revised Statutes, is amended to read:

17-255. Definition of aquatic invasive species

IN THIS ARTICLE, UNLESS THE CONTEXT OTHERWISE REQUIRES, "AQUATIC INVASIVE SPECIES":

1. MEANS ANY AQUATIC SPECIES THAT IS NOT NATIVE TO THE ECOSYSTEM UNDER CONSIDERATION AND WHOSE INTRODUCTION OR PRESENCE IN THIS STATE MAY CAUSE ECONOMIC OR ENVIRONMENTAL HARM OR HARM TO HUMAN HEAL

2. DOES NOTE FLUDE: ANY NONINDIGENOUS SPECIES LAWFULLY OR HISTORICALLY INTRODUCED INTO THIS STATE FOR SPORT FISHING RECREATION (b) ANY SPECIES INTRODUCED INTO THIS STATE BY THE DEPARTMENT, BY OTHER GOVERNMENTAL INTITIES OR BY ANY PERSON PURSUANT TO THIS TITLE.

17-255.01. Aquatic invasive species program; powers

A. THE DIRECTOR MAY ESTABLISH AND MAINTAIN AN AQUATIC INVASIVE SPECIES PROGRAM.

B. THE DIRECTOR MAY ISSUE ORDERS:

1. ESTABLISHING A LIST OF AQUATIC INVASIVE SPECIES FOR THIS STATE.

2. ESTABLISHING A LIST OF WATERS OR LOCATIONS WHERE AQUATIC INVASIVE SPECIES ARE PRESENT AND TAKE

STEPS THAT ARE NECESSARY TO ERADICATE, ABATE OR PREVENT THE SPREAD OF AQUATIC INVASIVE SPECIES WITHIN

OR FROM THOSE BODIES OF WATER.

 ESTABLISHING MANDATORY CONDITIONS AS PROVIDED IN SUBSECTION C OF THIS SECTION ON THE MOVEMENT OF WATERCRAFT, VEHICLES, CONVEYANCES OR OTHER EQUIPMENT FROM WATERS OR LOCATIONS WHERE AQUATIC

INVASIVE SPECIES ARE PRESENT TO OTHER WATERS.

APPROVED BY THE GOVERNOR JULY 10, 2009.

FILED IN THE OFFICE OF THE SECRETARY OF STATE JULY 10, 2009.

Current (2016) AIS Director's Orders

DO1 AIS Species

quagga mussel

zebra mussel rusty crayfish red claw crayfish New Zealand mudsnail Didymo giant salvinia apple snail Asian carp whirling disease LMB virus



DO2 AIS Affected Waters

Lake Mead Lake Mohave Lake Havasu Lake Pleasant CAP canals and endpoints Lake Powell <u>(Lees Ferry)</u> <u>Canyon, Apache, Saguaro Lks</u> <u>SRP canals</u>

Iower Verde River to confluence of Verde and Salt down to Granite Reef Recreation Area/Dam on Iower Salt River <u>(Red Mtn Lake and Iower</u> <u>portions of Indian Bend Wash)</u> <u>{Evelyn Hallman-CFP lake??</u>}



DAY USERS

"Before leaving the vicinity of any listed water in Arizona..."

Clean, Drain, and Dry your Watercraft and Equipment ...or "Clean Your #@!!% Boat"...



DAY USERS



"Upon removing a WC from any listed waters in Arizona and <u>PRIOR TO TRANSPORT</u>:

- Remove all *DRAINAGE* plug(s)..."

Clean, Drain, and Dry

LONG TERM USERS OR MOORED BOATS

Mandatory Decontamination Procedures

"Before leaving the vicinity of the listed water/location "

 <u>Remove any clinging material</u> {plants, animals, mud} from anchor, boat, motor, boat, equipment and trailer.

- <u>Remove the plug</u> (if applicable) and drain the water from the bilge, live-well and any other compartments that could hold water. Drain water from engine and engine cooling system(s).

Physically remove all attached mussels from boat surfaces, motors, impellers, outdrives, rudders and through hull fittings.

- <u>Keep the boat out of the water and ensure all areas of the boat are dry</u> including bilge, through hull fittings and engine for a minimum of <u>18 consecutive days</u> during the months of November through April and <u>7 consecutive days</u> from May through October.

- Flush engine and cooling system and any other through hull fittings with hot water that exits at 140 degree Fahrenheit for 10 seconds.

LONG TERM USERS OR MOORED BOATS

Mandatory Decontamination Procedures

"WC...that have been in or on an AIS listed water for more than 5 days and PRIOR TO TRANSPORT from that AIS listed water..."

- Remove any clinging material ...
- Remove <u>ALL DRAINAGE</u>Plug(s) and drain the water
- Physically remove all attached mussels

- Keep the boat out of the water and ensure all areas of the boat are dry ...18 consecutive days during the months of November through April and 7 consecutive days from May through October.

- <u>"Where WC decontamination facilities exist (PRIVATE or GOVERNMENT)...</u>"Flush engine and cooling system...with hot water ...

- "PRIOR TO TRANSPORT of WC to any other Arizona waters or out of state, the owner, operator, and/or transporter SHALL: <u>complete and sign an AISBIR</u>..."

AQUATIC INVASIVE SPECIES TITLE 12-NATURAL RESOURCES CHAPTER 4-GAME AND FISH COMMISSION

ARTICLE 11-AQUATIC INVASIVE SPECIES R12-4-1101 & R12-4-1102

"Upon removing a watercraft.... remove any PLUG or other barrier that prevents water drainage..."











WESTERN STATES

Prevent the spread of Aquatic Invasive Species

