## DAY 1 - Monday, April 25th

<table>
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<tr>
<th>TIME</th>
<th>TOPIC</th>
<th>SPEAKER</th>
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<tr>
<td>11:00am</td>
<td>Call to Order</td>
<td>Edna Stetzar, Panel Chair</td>
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<tr>
<td></td>
<td>- Welcome</td>
<td>Katlyn Fuentes, Panel Coordinator</td>
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<td>- Virtual format housekeeping</td>
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<td>- Introductions – New members?</td>
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<td>11:10am</td>
<td>Old Business</td>
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<td>- Review and approve agenda fall meeting minutes</td>
<td>Edna Stetzar</td>
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<td>- Status of annual reports from states with active plans</td>
<td>Steve Pearson, Vice Chair</td>
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<td>- Regional Law Enforcement AIS Task Force status/update</td>
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<td>- Regional Research Priorities Update</td>
<td>Mike Allen, Panel Fiscal Agent</td>
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<td>- Update on International Conference on Marine Bioinvasions</td>
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<td>11:30am</td>
<td>Budget and funded project updates</td>
<td>Mike Allen</td>
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<td>11:45am</td>
<td>New Business</td>
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<td>- Recommendations for ANSTF</td>
<td>Edna Stetzar</td>
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<td>- Regional Success or Challenge to present to ANSTF, and speaker</td>
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<td>- Fall 2022 Meeting</td>
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<td>- Nominating Committee</td>
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<td>- Panel Representation (fed, state, academic)</td>
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<tr>
<td>12:30am</td>
<td>Mid-Atlantic Region AIS introductions and NAS program updates</td>
<td>Ian Pfingsten</td>
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<td>12:40am</td>
<td>Presentation: Blue catfish in the Nanticoke River: Life history and potential impacts</td>
<td>Christine Densmore</td>
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<td>1:00pm</td>
<td>Break/Lunch</td>
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<td>1:30pm</td>
<td>Presentation: The Role of Native Plantings in Phragmites australis Management</td>
<td>Sylvia Jacobson</td>
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<td>1:50pm</td>
<td>Presentation: Overview of Aquatic Species Efforts at Deep Creek Lake, Maryland</td>
<td>Julie Bortz</td>
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<td>2:20pm</td>
<td>Presentation: Watercraft Inspection and Decontamination Training</td>
<td>“Quagga D” Davis</td>
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<td>2:40pm</td>
<td>Presentation: Watercraft Inspection and Decontamination Data Sharing System</td>
<td>Robert Walters</td>
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<td>3:00pm</td>
<td>Wrap up and adjourn</td>
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*THIS MEETING WILL BE RECORDED FOR INTERNAL USE TO ENSURE THE ACCURACY OF NOTES*
**MAPAIS Spring 2022 Meeting**  
**Tuesday April 26, 2022**  
[Click here to join the meeting on Microsoft Teams]  
**Join by phone:** +1 202-991-0477  
**Access code:** 158 751 836#

**DAY 2 – Tuesday, April 26th**

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<th>TIME</th>
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</table>
| 11:00am | Call to Order  
- Welcome/Introductions  
- Follow up from Day 1 | Edna Stetzar, Panel Chair     |
| 11:10am | Review of 2022 MAPAIS Grant Proposals                               | Mike Allen, Panel Fiscal Manager|
| 1:00pm  | Break                                                                |                                |
| 1:30pm  | Panel Member and Interested Party updates  
*(Or continue grant review if needed and send updates via email)* | Edna Stetzar                    |
| 3:30pm  | Adjourn                                                              |                                |

*THIS MEETING WILL BE RECORDED FOR INTERNAL USE TO ENSURE THE ACCURACY OF NOTES*
MAPAIS Spring 2022 Meeting (Virtual)

DAY 1, April 25th – Attendees

<table>
<thead>
<tr>
<th>Name</th>
<th>Agency/Institution</th>
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<tbody>
<tr>
<td>Aleksandra Voznitza</td>
<td>NPS</td>
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<td>Christopher Smith</td>
<td>NJ-DEP</td>
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<td>Edna Stetzar</td>
<td>DE-DNREC</td>
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<td>Ian Pfingsten</td>
<td>USGS</td>
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<td>Julie Bortz</td>
<td>MD-DNR</td>
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<td>Ken Klipstein</td>
<td>NJWSA</td>
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<td>Luz Quiñones</td>
<td>Smithsonian Institution, SERC</td>
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<td>Mike Allen</td>
<td>MD Sea Grant</td>
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<td>Robert Walters</td>
<td>Colorado Parks &amp; Wildlife</td>
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<td>Sean Hartzell</td>
<td>PA-FBC</td>
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<td>Alex Gunnerson</td>
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<td>Carolyn Juneman</td>
<td>US DOT</td>
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<td>Ellyn Campbell</td>
<td>SRBC</td>
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<td>Jay Killian</td>
<td>MD-DNR</td>
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<td>Katherine Zipfel</td>
<td>WV-DNR</td>
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<td>Kiersten Carlson</td>
<td>PA Natural Heritage Program</td>
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<td>Mark Lewandowski</td>
<td>CBP</td>
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<td>“Quagga D” Davis</td>
<td>Pacific States Marine Fisheries Commission</td>
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<td>Sara Mirabilio</td>
<td>NC Sea Grant</td>
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<td>Sara Stahlman</td>
<td>PA Sea Grant</td>
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<td>Steven Minkkinen</td>
<td>USFWS</td>
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<td>Steven Pearson</td>
<td>NY-DEC</td>
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<tr>
<td>Sylvia Jacobson</td>
<td>MD Sea Grant</td>
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11:00 – CALL TO ORDER

Edna Stetzar (Panel Chair) & Katlyn Fuentes (Panel Coordinator)

- Roll call and technological reminders about virtual meetings.
- The Fall 2022 Meeting is expected to be in person with a hybrid component to allow for those who wish to attend virtually.

11:10 – OLD BUSINESS

Edna Stetzar (Panel Chair)

- Review and approve Fall 2021 meeting minutes
  - Motion made: Steven Pearson
  - Seconded: Jonathan McKnight
  - Approved by the Panel
- Status of annual reports from states with active plans:
  - Virginia was not in attendance, business as usual from the rest of the states
  - Concern was expressed regarding Virginia not being in attendance, as there is more work to be done on the nutria monitoring plan.
11:30 BUDGET AND FUNDED PROJECT UPDATES

Mike Allen (Panel Fiscal Agent)

- $7,500 in travel & meeting costs unspent; most likely due to lack of traveling during COVID
- $171,000 small research grant funding allocated over the past 4 years
- One project wrapped up and presented at Aquaculture science meeting in February
- Six projects currently underway and four projects about to start
- Some projects delayed because of COVID; main delays are due to hiring staff and getting the appropriate approvals
- Follow-up from Fall 2021 Meeting: The panel agreed to sponsor the International Conference on Marine Bioinvasions (ICMB). However, this meeting was delayed until 2023, so this sponsorship will be incorporated with the next funding cycle.
  - Event will take place May 15-19, 2023, in Baltimore, MD.
  - If you have any questions related to this conference, please contact Whitman Miller (millerw@si.edu).

11:45 NEW BUSINESS

Edna Stetzar (Panel Chair)

- Edna Stetzar requested more support for getting more federal & D.C. members on the panel
  - ACTION: For information on panel membership or to nominate a new member, please contact Edna Stetzar (edna.Stetzar@delaware.gov).
- RECOMMENDATIONS FOR ANSTF - REGIONAL SUCCESS OR CHALLENGE: MAPAIS will be presenting to ANSTF on May 26th from 1:10-1:30pm.
  - Edna Stetzar: One possible success and challenge would be VA nutria management, expanding on the connection between the south and north parts of the region
    - Jonathan McKnight offered to give the presentation along with another member. Said this example shows how progress in a certain area can be undone by lack of progress elsewhere in the region.
    - Steven Pearson supported this idea, said it shows regional management.
    - Edna Stetzar is in favor of this idea.
  - Rob Emens: Another idea on a “success” could be ability to coordinate grants across the region. Many grants in the South Atlantic and Gulf regions have spent most of their money on meetings and travel to meetings, whereas MAPAIS spends more time on programs.
  - Ian Pfingsten: Recommended a presentation on water chestnuts by Rybicki et al.
  - ACTION: Panel decided to select the example of nutria as both a success and challenge.
- FALL 2022 MEETING
  - The current plan is to hold this meeting in a hybrid format, with both in-person and virtual attendance options available.
  - ACTION: Panel voted to use the newly renovated USFWS Chesapeake Bay Field Office conference space in Annapolis for the Fall 2022 meeting.
- NOMINATING COMMITTEE: The nominating committee is comprised of the following according to the standard operating procedures. The committee will review those nominated and present a slate of nominees at the next meeting.
  - Jay Killian – former committee member
  - Rob Emens – state representative
  - Katherine Zipfel – federal representative
• **PANEL REPRESENTATION**
  - Gary Walters (former PA rep) has retired.
  - Heather Desko nominated Dr. Julie Lockwood (Rutgers University), Chair of Evolution and Ecology in the Department of Biology. Dr. Lockwood is a leading scholar on invasive species and research on illegal wildlife trade. She has experience with eDNA.
    - Nomination seconded by Jonathan McKnight and approved by the Panel.

12:00 MID-ATLANTIC REGION AIS INTRODUCTIONS AND NAS PROGRAM UPDATES
**Ian Pfingsten (USGS)**

• **NEW AIS INTRODUCTIONS:** To alert the public of new species occurrences at country, state, county, and watershed (HUC8) scale, please visit this website: [http://nas.er.usgs.gov//AlertSystem](http://nas.er.usgs.gov//AlertSystem)
  - Website will be updated over the course of the next two years
  - New search feature for NAS Alert System
  - Example: 7 NAS alerts since December 2021
    - **Hydrilla:** two new sightings
      - Located via iNaturalist by a Longwood biology professor at Holiday Lake State Park in Virginia. Species seemed quite established. New to the county, but not to the drainage.
      - Located by US ACORE Mike Greer outside of the Erie Canal in the Niagara River. First record of this occurring.
    - **Red Swamp Creek:** while fairly common in SE PA, this is the first sighting for the Pennypack River. Verified by PA Boat Commission.
    - **Alleghany crawfish:** found in Susquehanna River, but believed to be undercounted
    - **Chinese mystery snail:** found at Westmoreland State Park along shoreline of the Potomac River
    - **New Zealand mud snail:** new to Delaware, found in Brandywine creek in Wilmington. Previously reported at Wissahickon Creek, Schuylkill River, PA
    - **Oscar Fish:** continually found as failed introductions suggest that these species do not survive

• **IMPACT TABLES:** Ranked for different ecological and economic factors, can be sorted according to parameters.

• **QUESTIONS/COMMENTS:**
  - **Edna Stetzar:** Since many are identified via photo, are samples ever provided?
    - **Ian Pfingsten:** Sometimes for species such as snails and biovalves, otherwise photos generally suffice. Looking through iNaturalist is a big lift.
    - **Edna Stetzar:** what happens if the observer does not include photos?
    - **Ian Pfingsten:** we follow up and ask them about it, but due to legal reasons we must be careful about what we ask them to do.
  - **Julie Bortz:** Is there a way to search by waterbody to determine what AIS species are found there?
    - **Ian Pfingsten:** It can be difficult because of differing names for the same waterbody and because there is not always a shapefile for each waterbody. There is work underway to use the NHD dataset for names. There is a new high resolution data set that is coming out that might be able to address this question. Essentially, they are working on it and the hang ups have been on the technical data availability side.
12:40 BLUE CATFISH IN THE NANTICOKE RIVER: LIFE HISTORY AND POTENTIAL IMPACTS
Christine Densmore (USGS)

- This is a very collaborative set of projects which involves USGS EESC, DE DNREC, Salisbury University, MD DNR, Virginia Commonwealth University, and the CBP invasive catfish workgroup.
- Blue catfish were introduced to lower Chesapeake bay tributaries in the 1970’s and have since undergone a rapid range expansion and population growth. Most all major tributaries are now inhabited.
- Link to the Chesapeake Bay Program’s Invasive Catfish Workgroup (within the Sustainable Fisheries Goal Implementation Team) and the 2020 Outcome Management Strategy

**CURRENT SCOPE OF WORK:**
- Diet analyses: what are they eating and how does this vary throughout their range? Answer is that they are very opportunistic and eat most everything.
  - Nanticoke River, DE: gross and molecular identification of stomach and intestine contents → 80-90 samples
  - Partnering with Salisbury university masters project
  - “The question is: what won’t they eat”
- Health and Disease: pathogens/parasites of and potential health related impacts to blue catfish populations and other aquatic animals
  - Necropsy-based fish health assessments
  - Histological assessments of organs/tissues
  - Microbial culture (kidney and spleen)
- Spawning and reproduction: develop and utilize hormone based assays to evaluate reproductive status and behaviors within and among Chesapeake tributaries
  - Currently concentrating work in the Nanticoke in tandem with the diet analysis

- This work connects with the work of the USGS Chesapeake Bay Science team lead by Scott Phillips and Ken Hyer
- **ACTION:** For any additional questions or comments, please contact Christine Densmore (cdensmore@usgs.gov)

1:30 THE ROLE OF NATIVE PLANTINGS IN PHRAGMITES AUSTRALIS MANAGEMENT
Sylvia Jacobson (MD Sea Grant)

- The Eurasian lineage of *Phragmites australis* has expanded widely in wetlands across the United States, including in tidal wetlands in the Chesapeake Bay region Background on Phragmites australis
  - It grows densely in clonal stands, block out native vegetation
- Outcomes of Phragmites removal vary widely
  - More than $4 million is spent annually in the U.S. for Phragmites removal
  - Efforts typically focus on Phragmites eradication rather than on native plant recovery
- **Objective:** assess the role of planting native wetland species in post-Phragmites restoration
  - Study sites:
    - Severn River (3 sites)
Used solarization – technique where black plastic raises the temperature of the soil to levels that do not allow for phragmites to return.

- Rhode River at the Smithsonian Environmental Research Center (SERC) (3 sites)
- Parkers Creek at American Chestnut Land Trust (6 sites)

**Lesson:** salinity influences native plant recovery
- Low salinity sites had, on average, 4x greater weight of aboveground plant biomass compared to intermediate salinity sites (in non-planted study areas)
- Why? → Low salinity sites may naturally recover more quickly due to greater plant diversity and greater dominance of annuals

**Challenges of wetland planting:** most native plantings died after first year at 8 out of 12 sites

Potential benefits of native planting at brackish (higher salinity) wetlands → Where plantings survived, they spread and increased native plant aboveground biomass

**PRELIMINARY CONCLUSIONS:**
- Native plantings have potential to improve vegetation recovery at more saline tidal wetlands
- Plant size and timing may be important for wetland planting success

**QUESTIONS/COMMENTS:**
- **Mike Allen:** was there any Phragmites re-invasion in any of the planting plots?
  - **Sylvia Jacobson:** There was a little bit, but once we removed it a second time it did not return.
- **Rob Emens:** Did you feel solarization worked? Do you think it would work with deeper rhizomes?
  - **Sylvia Jacobson:** For smaller patches, it seemed to work well. Not quite sure for deeper rhizomes, but worth checking into. Might not be as scalable as repeated herbicide use.
  - **Rob Emens:** How long does the solarization black plastic need to be put down?
  - **Sylvia Jacobson:** At least a month, needs to be an extended period of time.
- **Rob Emens:** There is a group in North Carolina arguing that Phragmites might be worth keeping around because of ecosystem services, like sequestering carbon and reducing erosion.
  - **Sylvia Jacobson** is familiar with the conversation and thinks there is a role for both. Some value in managing phragmites where it is limited and already located, otherwise protect native species given the importance of species diversity and benefits to local species that depend on particular vegetation for habitat
- **Steven Pearson:** How might this impact higher elevation areas, like forest edges or dry areas?
  - **Sylvia Jacobson:** It could be possible to apply for forest edge. Part of the issue with getting native species to return is that frequent flooding can make it difficult. It may be easier for native species to return in these higher areas, but it might make it easier for phragmites to return as well.

**1:50 OVERVIEW OF AQUATIC SPECIES EFFORTS AT DEEP CREEK LAKE, MARYLAND**

**Julie Bortz (MD-DNR)**

**Background on Deep Creek Lake (DCL):**
- Artificial lake, created in 1925 for hydropower
- One of 16 state-owned lakes, also the largest
Four season destination with lots of use from neighboring states, and year-round fishing, boating, and water sports.

- **Management of DCL**: State of Maryland bought Deep Creek Lake from previous owner/manager Pennsylvania Electric Company (Penelec) in 2000. The lake itself and buffer strip are managed by MD DNR, the watershed is managed by Garrett County, MD, and the water levels are regulated by MDE.

- **Timeline for MD DNR monitoring and management at DCL**
  - 2000: Acquired by MD
  - 2009 & 2010: Began monitoring
  - 2013: Found Hydrilla verticillata in southern end of lake
  - 2014: Began herbicide control (Launch Steward Program)
  - 2015: State Lakes Invasive Species Act of 2015 (House Bill 860) passed, which prevents launch of dirt boats; funds appropriated in 2018
  - 2021: AIS Watercraft Inspection and Decontamination Training for Marinas

- **Background on *Hydrilla verticillata***
  - Why the concern? → Very pervasive, spreads rapidly from floating components
  - Treatment
    - A panel was convened of hydrilla experts from around the country to offer management guidance
    - Panel suggested controlling the population with herbicide, which was applied for approx. one decade
    - For the treatment to work, needed Boat Launch Steward Program

- **Boat Launch Steward Program**: began in 2014, continues to present
  - Provides a lot of useful data
  - Got local high school students to staff the inspections
  - Focus on education with signage, information on MD DNR website
  - **Challenge**: targeting visitors from out of state or outside of the region
    - Most of the visitors come from out of state, need to get them to “Clean, Drain, and Dry” before they get here
    - Additionally, greater pressure with more and more boats coming in dirty
  - The majority of boats inspected are ‘local’ boats, last used on Deep Creek Lake; however about **25% of vessels were last on a waterbody that contains at least one or more known AIS**

- As a precaution, started Zebra Mussel Monitoring Program
  - No Zebra mussels have been found thus far, and the lake is considered to have low habitat suitability

- **TAKE HOME MESSAGE**: Program costs about $30k/year and offers face to face education for the public about AIS; Additionally one of the best lines of defense against potential AIS introductions

- **What’s next for AIS efforts**:
  - **Local efforts at Deep Creek Lake**
    - eDNA early detection
    - expand education
    - target rental agencies at DCL with educational materials
    - radio ads and other road signs
    - close loopholes at state park and other marinas
  - Potential statewide efforts
Mid-Atlantic Panel on Aquatic Invasive Species
Spring Meeting
April 25th and 26th, 2022
Meeting Minutes

- Education/outreach statewide
- Possible statewide self-certification program
- AIS funding for the whole state, not just lakes
- Decontamination training and gear
- Boater registration/licensing to include additional AIS info
- Work with businesses and marinas throughout the state on AIS
  - Regional efforts
  - Collaboration on inspections/decontamination and AIS
  - WID (Watercraft Inspection and Decontamination) Database

**QUESTIONS/COMMENTS:** For any additional questions or comments, please contact Julie Bortz, MD DNR, (julie.botz@maryland.gov)

- **Steven Pearson:** How is the data collected?
  - **Julie Bortz:** We use form connect right now, but are hoping to move over to the WID database. We looked to Lake George as an example.

- **Edna Stetzar** expressed interested in a regional collaboration, as Delaware does not have and existing program.
  - **Julie Bortz:** There is some funding to do this via ASNTF.

**2:20 WATERCRAFT INSPECTION AND DECONTAMINATION TRAINING**

*Quagga D Davis (Pacific States Marine Fisheries Commission)*

- **Fouled Watercraft Interceptions:** Collect data on where they are coming from, how long they were in the water, and where they were going.
  - Largest sources were Midwest and Lower Colorado River

- **WIT/WID Objective:**
  - Course designated for those implementing watercraft inspection and/or decontamination
  - **Uniform Minimum Protocols and Standards (UMPS):**
    - Learned from other regions and states
    - Goal is to provide a consistent message – “**clean, drain, and dry**”

- **Examples of jurisdictions that have implemented these programs:**
  - Lake Mead
  - Lake Tahoe
  - Lake Powell

- **Education and Outreach are key for changing boater behavior**

- **Quality Assurance:**
  - Ensure consistency of WID protocols
  - Provide support to field stations
  - Secret shopper evaluations
  - On the job training
  - Customer service evaluations

- **Data sharing:**
  - Switched from paper because of delays
  - **Western States Watercraft Data Sharing:** provides boater information in real time and allows for querying the boat’s history

- **Resources:** [https://www.westernais.org/](https://www.westernais.org/)

**QUESTIONS/COMMENTS:**
Julie Bortz: What is the Pacific Marine Fisheries Commission’s decision on taking these trainings outside of the region?

Quagga D Davis: I can present anywhere country-wide, generally between January and Memorial Day. Reach out now for 2023 availability.

Edna Stetzar: What is your advice for starting with a state like Delaware, which has no requirements?

Quagga D Davis: Start with education and voluntary inspection to ease into the mandatory regulation, resources from National Sea Grant Law Center (Stephanie Showalter) outline how to make this transition.

2:40 WATERCRAFT INSPECTION AND DECONTAMINATION DATA SHARING SYSTEM

Robert Walters (Colorado Parks & Wildlife)

- Background on the WID data sharing system:
  - In 2012: Colorado Parks and Wildlife began developing an application to share data across jurisdictions, which expanded to New Mexico and Utah in 2015
  - In 2021: 12 states participating, many more are potential users
    - 2021 Stats: 2.25 million inspections, 35,000 decontaminations
- Website application is more administrative, whereas the mobile application is:
  - Compatible with iOS and Android devices
  - Customizable
  - Used mostly by those in the field and at the launch and inspection stations
  - Bi-directional → can enter and retrieve data from it
  - Reduces risk at WID stations by automatically notifying the on-the-ground inspectors if the boat was coming from AIS positive waters
  - 24/7 Helpdesk
- Watercraft Movement Notices: lets destination waters and agencies know that a boat from an infected water body is planning on coming that way.
  - Mid-Atlantic states may receive these notices, even if they don’t want to use the full functionality of these tools
- Call Before you Haul Integration: Allows for boaters to call and get more information
  - ACTION: Mid-Atlantic states should provide contact information for their agencies to Robert Walter (Robert.Walters@colorado.state.gov) for getting boat notices and allowing for Call Before You Haul integration.
- Data driven decision making allows for agencies to understand trends in the data and where boats are coming from, in addition to understanding risk
- QUESTIONS/COMMENTS:
  - Julie Bortz: It would be great to the eastern states involved. What do you think it will take?
    - Robert Walters: Don’t be afraid to just start out as one state, but a collaborative approach from the start works too. Might be best to utilize this framework and adapt/customize as necessary.
  - Edna Stetzar: Who is the audience?
    - Robert Walters: Call Before You Haul focuses on new and used commercial vessels
  - ACTION: Edna Stetzar will send the contact information for Delaware.
11:00 CALL TO ORDER
Edna Stetzar (Panel Chair)
- Roll call and technological reminders about virtual meetings.
- FOLLOW-UP FROM DAY 1:
  - MAPAIS Fall 2022 Meeting:
    - Steve Minkkinen confirmed that the USFWS conference room is available Nov. 8th through 10th, and Dec. 13th through 15th.
    - ACTION: Katlyn will send out a When2Meet to determine the best times/dates for everyone.

11:10 REVIEW OF 2022 MAPAIS GRANT PROPOSALS
Mike Allen (Panel Fiscal Manager)
- In 2022, MAPAIS offered a small grants competition. The call for proposals was distributed via email and posted to the MAPAIS website, and the full solicitation can be viewed here.
- Program priorities: The following elements are of high priority to the MAPAIS and were considered in proposal reviews:
  - Activities that will increase public understanding of and compliance with the prevention and control of AIS
  - Clear description of proposed actions, products, and other deliverables
  - Relevance to the mission and priorities of MAPAIS
  - Regional significance
  - Leveraging of other funding sources
- MAPAIS Membership additionally identified the following as high priorities for the 2022 grant competition:
  - Develop outreach and educational materials for classrooms and specific populations (K-Gray) to prevent the introduction and spread of AIS.
  - Conduct research on AIS issues in the region such as prevention, early detection, rapid response, emerging invasions, and how climate change may influence AIS.
  - Conduct innovative approaches to AIS control/eradication, or control/eradicate a high priority AIS population.
  - Continue to develop vector management strategies for states and the region.
  - Encourage states to develop and implement AIS management plans meeting the standards set by the Aquatic Nuisance Species Task Force
Proposals were due April 8, 2022

COMPETITION: 5 proposals received from 5 different institutions
- 2 Maryland, 1 New Jersey, 2 Pennsylvania

PROPOSAL REVIEW: each proposal was reviewed and scored by 3 panel reviewers. Reviewers were not permitted to review proposals from their own organizations, and proposals were scored and ranked on the following criteria:
  - Technical Merit and Feasibility (40%)
  - Relevance, Outreach and Impact (40%)
  - Applicant’s Qualifications (20%)

During this discussion, proposal summaries and reviewer comments were provided to Panel Members for consideration. Those in attendance who were not Panel Members or had conflicts of interest with the proposed projects were asked to leave the meeting and enter a “waiting room” while this discussion occurred.

The following three projects were voted upon and recommended for funding by the Panel:
- “Developing of an Aquatic Invasive Species Management Plan for New Jersey”
- “Investigating the feeding ecology of two invasive predators in the Nanticoke River, USA using stomach content and stable isotope analysis”.
- “Ecosystem Experiment to Evaluate the Return of American Eels for Controlling Invasive Crayfish & Restoring Ecological Structure in Streams and Rivers”

ACTION: Edna Stetzar will draft and send announcement letters detailing which projects were funded/not funded.

ACTION: Next week, Steven Pearson will inform those that weren’t selected of the Panel decision. Edna Stetzar will send a draft of last year’s documents to Steven for reference.

1:30 PANEL MEMBER AND INTERESTED PARTY UPDATES
Edna Stetzar (Panel Chair)

NORTH CAROLINA (Updates from Rob Emens):
- A&S management plan: preliminary review and needs to be revised
- Giant Salvinia: sensitive to freezing temperatures. May be at limit of range. Have site that’s only 1 mile into NC from SC (rural Columbus County) that has an infestation. Couple hundred acres in size. Site is difficult to access. Not known how it was introduced.

NEW JERSEY:
- Updates from Heather Desko:
  - Looking to develop a state AIS plan (this was a funded proposal)
  - NEAMS panel hydrilla genetic study: all samples from NJ (and other states incl. PA, NY) were not related to the Connecticut river hydrilla
  - Continuing additional hydrilla projects
  - Chinese pond mussel: samples in 2021. Nothing downstream or in suspect waterbodies. These samples were taken after Hurricane Ida, so there’s possible interference. Additional eDNA sampling in May & June 2022. Will report results in Fall MAPAIS Meeting.

  ▪ **New 4th boat steward program:** merrel cr. Reservoir is starting this. They already have personnel doing boat inspections, so now they’ll be looking for AIS and will do education.

  ▪ **Northeast Aquatic Plan Management Society:** field ID and management training. In person in NY in December 2022.

**QUESTION/COMMENTS:**

  ▪ **Jonathan McKnight:** panel previously funded work on Chinese pond mussels. What’s the plan for dealing with the source population?
    - **Heather Desko:** Didn’t know that this population was still there until doing the new eDNA work.

    ▪ **Updates from Chris Smith:**
      - Finally received clearance for sampling to restart
      - Summer electrofishing plans for snakeheads and Asian swamp eels
      - Will be putting together state management plan in near future

  • **WEST VIRGINIA** (**Updates from Katie Zipfel**):
    - Do not have much of an update for eastern panhandle waters.
    - Still working on an avenue to get a plan written and submitted, but do not have a timeline for that yet.

    ▪ **Silver Carp:** WV DNR has been seeing and sampling more silver carp in our section of the river, which is concerning. USFWS has officially opened their new invasive carp satellite office nearby at the Ohio River Islands NWR, which will be a welcome addition to helping control carp at the invasion front.

    ▪ Katie will share the information on the boater inspection collaboration with staff near MD (Morgantown and Eastern Panhandle) and see if they would be interested in participating or helping out in some way. Currently, there is no similar program in place at any waterbodies in the state.

  • **PENNSYLVANIA** (**Updates from Sean Hartzell**):
    - **AIS Control plans:**
      - Finalized Didymo (*Didymosphenia geminata*) control plan; last revised in 2011.
      - Rusty crayfish control plan was also recently finalized.
      - Hoping to finalize & post Red-eared Slider Turtle and Zebra Quagga Mussels in the next two months

    ▪ **AIS disposal boxes:** Have funding now to install in two areas but there are currently administrative delays.

    ▪ **Upcoming fieldwork:**
      - Continuing work on New Zealand Mud Snails
      - Round Goby in French creek
      - Flathead catfish – survey work is planned in lakes

    ▪ **58 PA Code ch. 71 & 73 regulations** – transport of fish in the state (legal definition of fish, not taxonomic definition)
Regulations are in place but want to enhance to prevent spread of AIS
Yesterday, the proposed new language was presented to and approved by the Board of Commissioners.
Official voting will occur in the next calendar year, following time for public comment.

**Highlights on what is currently included:**
- Stocking permitting
- Fish health regulations
- Language proposing to make it unlawful to release bait (e.g., leftover minnows) into the waters of the commonwealth
- Watercraft disinfection

**PA Invasive Species Council: aquatic & terrestrial**
- Pushing for funding at state level for species control
- Partners in Regional Invasive Species Management (PRISMs)
- Good traction following legislative hearing last year
- Governor has proposed and approx. $3.5mil in budget next year to get this kickstarted
- Budget hearing in June 2022 and will hopefully be funded

**QUESTIONS/COMMENTS:**
- Edna Stetzar: Does “waters in the state” include private water?
  - Edna: This potentially includes private ponds as property of the commonwealth. No definitive legal answer at this time, will need to wait for the feedback period.

**DELAWARE (Updates from Edna Stetzar):**

**NEW YORK (Updates from Steven Pearson):**
- 2022 Boat Steward Program planning is underway
  - Anticipating 200 stewards at over 240 sites
- There was a two-day Organism and Trade symposium held in March 2022
  - **ACTION:** If you are interested in viewing this recording, please email Steven Pearson (Steven.Pearson@dec.ny.gov).
- Ongoing larger-scale control projects:
  - **Croton River Hydrilla Project** in its sixth year. First 5 years were successful – at end of the season, no hydrilla is found. However, the upstream reservoir begun widespread treatment in 2021, and this treatment has continued into 2022.
  - **Ludwigia peploides project** in Eastern Long Island. This is the only location in NY with this species. Planning to treat approx. 50 acres across 7 miles of river. Permitting is under review and contractors have been hired for both plant surveys and herbicide applications. Anticipating this will begin Summer 2022.
- **Snakehead** distribution in DE River basin has been increasing. Dispersal upstream in the delaware has been impacting movements. In 2021, Snakeheads reported in Basha Kill WMA (largest freshwater wetland in southeastern NY). Electrofishing and eDNA survey results came back positive for widespread presence throughout the WMA. Presently, no known snakehead
in the Hudson Watershed. Currently working to survey upstream of any known locations in order to define distribution of this species, as well as install blocking seines and potential permanent hydrologic separations between these two watersheds.

- **Round Goby**: in 2021, this species found in Hudson River. There is major concern with this species entering upstream portions of the canal. Response plans are being drafted to strategize ways in which to prevent this species from moving up the Champlain Canal into Lake Champlain.

- **Regional AIS coordinators** have been hired in the Finger Lakes and Lake Erie shoreline regions of NY. Still looking to fill positions in Lower Hudson (region 3).

- **Long Island Boat Steward Program**: 2022 program will be larger than previously.

- **USFWS (Updates from Steve Minkkinen)**:
  
  - Maryland Congressman Andy Harris has expressed interest in northern snakeheads. Additional funding has been provided for the creation of a Control and Management Plan, specifically for the Chesapeake Bay Watershed. A biologist was just hired to spearhead this project and a working group is being assembled.
    
    - **ACTION**: If you are interested in participating in this working group, please contact Steven Minkkinen ([Steve_Minkkinen@fws.gov](mailto:Steve_Minkkinen@fws.gov)).

3:30 MEETING ADJOURNED.