



# Aquatic Plant News

The Newsletter of the Aquatic Plant Management Society, Inc.

April, 2023 – Issue 132



*East Indian hygrophylla (Hygrophila polysperma) is native to Southeast Asia, and was cultivated as an aquarium plant until it escaped into natural waters.*

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# APMS President's Update

Dear APMS members,

If you haven't already noticed, apart from our western colleagues, spring has certainly sprung! And if you are geographically close to me, it seems like we never really had a break as aquatic plant and algae management is in full swing here in the southeast. I sure hope you all are getting geared up for management season despite the warmer weather and that you and your teams are prepared to tackle the many existing and new challenges that await you.

If you are wondering about your APMS board and committee members, they have been hard at work as well. Much of the focus has been on the 63rd annual meeting which is just around the corner! Your 2023 meeting will be held in beautiful Indianapolis, Indiana from July 24th-27th at the Hyatt Regency Indianapolis. Your program committee has been working hard to put together a great lineup of speakers for the meeting. You may be especially interested in this year's special session, "Navigating Conflict with Improve Communication". This session will feature experts from across the country who will drive discussions around finding common ground while remaining committed to the scientific process which drives our work. If you are interested in presenting at this year's meeting, don't worry because our abstract submissions are open until June 15th. Registration will also be open soon and feature a brand-new registration process to help you select registration items that are most appropriate for you and your guests. Visit [www.apms.org](http://www.apms.org) and click on the annual meeting page for more information or follow our social media accounts.



Our other committees have also been busy as well -

Meeting planning has been busy finalizing details for our upcoming and future meetings. First, the committee has made an excellent selection for our 2023 Annual Meeting President's Reception to be held on the evening of July 24th at Punch Bowl Social. As usual, the social will allow our guests to mingle with friend and colleagues, but this year's event will feature a bit more! Attendees will have the option to bowl, play pool, bocce ball, and a host of other games. There will also be a karaoke room setup for those of you with (or without) singing talent. The committee has also finalized our 2025 meeting location - Providence, Rhode Island - So start making your plans now.

If you are a student, you will be excited to hear that the student affairs committee will be hosting a field trip to Geist Reservoir. Students will get the opportunity to see active management via a boat tour, which will also provide the opportunity for conversation with program partners including Indiana Department of Natural Resources. Students can select to attend the tour via online registration. The committee also has plans for a resume preparation luncheon for students preparing to enter the workforce. For more info, contact committee chair Dr. Candace Prince.

Strategic planning has also been busy finalizing the Society's path forward. The board of directors approved the plan, which will focus in four specific area - identifying partnership opportunities, increasing collaborative efforts, fostering scientific expertise, and focusing on membership engagement. For more information about the strategic plan, contact committee chair Dr. Mark Heilman.

Lastly, the board has been working with a newly formed ad-hoc committee to develop a code of conduct for APMS. The committee was formed to help set expectations for membership, drive discussion around any existing and potential future conduct issues, and standardize our approach based on other professional societies. Our hope is to continue to help foster a professional environment for our valued membership.

We have also completed the conversion of APMS to a 501(c)(3) organization. This will enable tax-deductible contributions, which is important to our strategic vision of making the Michael D. Netherland Graduate Student Research Grant self-sustaining. This research grant is currently offered every other year and provides a grant for a full-time graduate student to conduct research in aquatic plant management or ecology of regionally or nationally recognized nuisance aquatic vegetation. The grant is currently co-sponsored by APMS and many of our regional APMS chapters. Our goal is to have this research grant awarded yearly, and to be self-sustaining from annual returns. For more information on the Michael D. Netherland Graduate Student Research Grant, visit our website.

I would like to thank all our Officers, Directors, and Committee Chairs and members for all of their hard work. I would also like to thank all of our APMS sponsors and members for all that you contribute and do to make this Society a success.

All the very best,  
Brett Hartis  
President-APMS



# Membership Committee Update

One initiative that the committee has been working on is to develop a more extensive list of professional applicators throughout the United States. While our main objective is to increase membership of APMS, a secondary result could indeed help our regional chapters gain membership or participation as well. The committee developed a contact list for the licensing agencies by state and have reached out with an overview of APMS, our initiatives, and an official request for aquatic licensed applicators. We plan to connect with these professionals and make sure they are aware of APMS and are invited to become involved in the continued education in their profession. As part of this effort, we will also invite the agencies that oversee the licensing process to consider getting involved in APMS. Some states have laws against providing this type of information and some will not allow the use of it for any sales efforts, including membership dues of a non-profit society. We hope that our efforts will still prove to be worthwhile in gaining more members and attendees to our annual conference for those states that we can obtain. Once we get through this process, we will work on identifying other government agencies that are responsible for aquatic plant management decisions, permitting, and activities. Finally, we will work on a focus on growth in academia participation along with the Student Affairs committee.

We ask our current APMS membership and sponsorship to consider sharing any contact information that you have for state or local government decision makers around aquatic plant management activities. Also consider sharing any high school, college, or university programs that educate students on aquatic resource management activities or research. Our goal is to focus on awareness of who APMS is, benefits of becoming involved in APMS, and highlighting the networking potential with government stakeholders, research updates, and industry leaders.

If you have any connections to share for consideration of official invitations to our society, please reach out to Matthew Johnson (Chair), or communicate with any of our committee members: Amy Giannotti, Amy Kay, Mirella Ortiz Ph.D., Candice Prince Ph.D., Gray Turnage Ph.D., Jeremy Slade, or Brian Isaacs.

## Student Committee Update

**By, Dr. Candice Prince, Committee Chair**

We are planning several exciting events for students at the 2023 APMS meeting! We will be implementing a student mentor program for the first time this year, where students who wish to participate will be paired with a professional mentor in their preferred career area. This mentor can answer questions about their job, the field of aquatic plant management, and assist with networking during the conference. We will also hold a resume/CV workshop during the student luncheon to assist students with their professional development. Students are also invited to participate in a field trip to Geist Reservoir, where we will learn about management activities on the lake and hear from managers and local stakeholders.

# Regional Chapter Updates

## MAPMS UPDATE

MAPMS Website: <https://www.mapms.org>



The Midwest Aquatic Plant Management Society (MAPMS) will be holding our annual conference March 13 through March 16th at the Amway Grand Plaza Hotel in Grand Rapids, Michigan. With the theme being, “Equipped”, our goal is that each attendee walks away from the meeting with at least one new tool to equip themselves with this year. We have a few new additions to the conference agenda; highlights include the technical program kicking off with Mark Ostach as our keynote speaker: “Fostering Connection and Wellness in 2023”. We will also have a RISE special session following the conference on Thursday morning: “How do I Advocate for the Aquatics Industry?”. We encourage everyone to visit our website ([www.mapms.org](http://www.mapms.org)) for more information and look forward to seeing you there.

MAPMS received approval for 501(c)(3) status in December, 2022. There are many great advantages to operating as a 501(c)(3), this grants the society income tax exemption as well as allowing supporters to make tax deductible donations to the society. This is something the board has been working on for quite some time and it is great to finally get approved. We see this as a great opportunity to advance the society.

Also, at the October Board Meeting, the MAPMS Board conducted a strategic planning session facilitated by Dr. Ed Osborne, Professor Emeritus, University of Florida. The session was productive and resulted in updates to the mission, vision, core values, and strategic goals of the society. The new strategic plan will be presented to membership at the 2023 Annual Conference. These strategic goals will help advance and drive the society to new levels.

As always, we appreciate everyone’s support of APMS and the regional societies. We hope to put on another great conference in March that provides value to our membership and we are excited to see what we can accomplish in 2023 and beyond.

## TAPMS UPDATE

TAPMS Website: <http://www.tapms.org>



- Our conference will likely be held **Nov 6-8 at the Mesquite Convention Center**, it was the top pick in our recent BOD poll and we are working on finalizing the details.
- In 2023, we welcomed **3 new BOD members**: Anthony Walker, Ryan O’Hanlon, and Olivia Ybarra.
- We are currently looking into updating the TAPMS Bylaws for Membership which will be presented to membership at least 60 days before the Annual Meeting
- For any inquiries, you can contact the TAPMS BOD through [txapms@gmail.com](mailto:txapms@gmail.com)

Submitted by Brittany Chesser  
Aquatic Vegetation Management Program Specialist  
Texas A&M AgriLife Extension Service  
Lead Diagnostic Scientist, TAMU Aquatic Diagnostics Laboratory



# Aquatics Magazine - Women of Aquatics

## Shannon Junior, Women of Aquatics Editor and Aquatic Ecologist

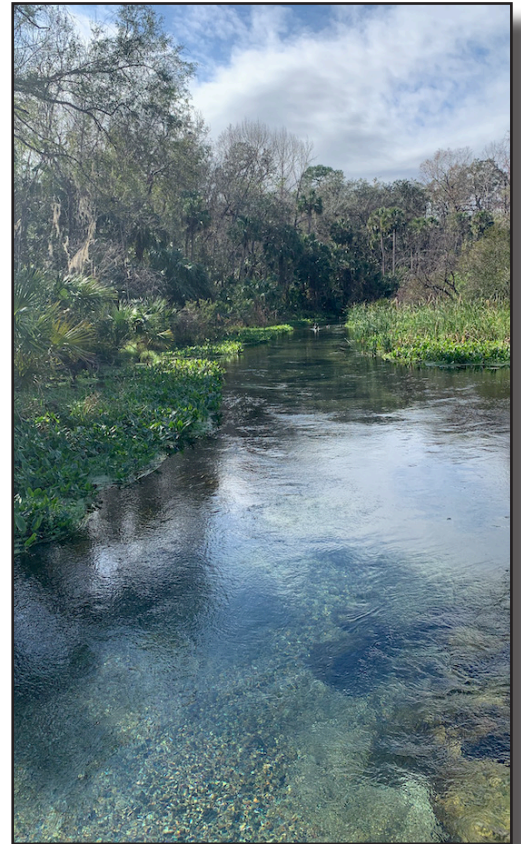
Women of Aquatics (WOA) was created in 2014 to formalize the supportive network of professional women in the Aquatics industry. Women are historically underrepresented in our field, and our goals are not only to support the professional aspirations of our female colleagues, but also to encourage students and younger women to begin careers in the industry. Our areas of focus include career advancement, continuing education, mentorship, work-life balance, and health and wellness.

Women of Aquatics recently held our Annual Retreat in Orlando, Florida. The gathering included a diverse group of women from throughout the United States, representing the public, private and academic sectors of our industry. We also provide financial support for our Student Director to attend the event each year to ensure succession to the next generation of women. This year's retreat included personal presentations from each attendee, professional development workshops, and a fun and educational excursion to Rock Springs at Kelly Park.

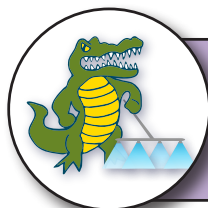
WOA provides extensive opportunities for networking with other female industry professionals, and the mentorship program connects aspiring students with more experienced members to guide them towards their desired career path. We will be hosting networking events during the WAPMS/WSWS conference in Boise, Idaho, at the end of February, and during the MAPMS conference in March in Grand Rapids, Michigan. Our male colleagues are also welcomed to attend the events, and we are so thankful for their ongoing support of our organization and our professional goals. We also hold monthly virtual roundtable discussions on the first Thursday evening of each month, which are open to current members and interested parties.

We are actively accepting new members and annual sponsors, with 2023 committee assignments currently under consideration. You can find more information on our website at [womenofaquatics.org](http://womenofaquatics.org). Please join us!

*Shannon Junior ([sjunior@solitudelake.com](mailto:sjunior@solitudelake.com)) is an Aquatic Ecologist and Senior Business Development Consultant for SOLitude Lake Management. She has worked in the aquatics industry for over 20 years and currently serves as the Editor for Women of Aquatics.*



# 2023 Calendar of Events for Regional Chapter Meetings & Related Events



## UF/IFAS Aquatic Weed Control Short Course

**May 15-18, 2023**

*Orlando, FL*

<https://sfyl.ifas.ufl.edu/aquatic-weed-short-course/>



## 63<sup>rd</sup> Annual Meeting of the Aquatic Plant Management Society

**July 24-27, 2023**

*Hyatt Regency - Indianapolis, IN*

<https://apms.org/2023-annual-meeting/>



## South Carolina Aquatic Plant Mgmt Society Annual Conference

**TBD Fall, 2023**

*Ocean Drive Beach and Golf Resort  
North Myrtle Beach, SC*



## 47<sup>th</sup> Annual Florida Aquatic Plant Management Society Annual Training Conference

**October 16-19, 2023**

*Hilton St. Petersburg Bayfront  
St. Petersburg, FL*

<https://fapms.org/conference/2023-conference/>



## International Aquatic Plants Group

**November 13-17, 2023**

*Antwerp, Belgium*

[www.internationalaquaticplantsgroup.com](http://www.internationalaquaticplantsgroup.com)

# 2023 APMS 63<sup>rd</sup> Annual Meeting

Check the 2023 Annual Meeting site <https://apms.org/2023-annual-meeting/> and follow our social media channels for updates and information.



## EVENTS AT A GLANCE

### Monday – July 24:

- APMS Board of Directors Meeting
- Exhibits Setup
- Presidents' Reception

### Tuesday – July 25:

- Registration
- Exhibit Room Open

#### **Session 1 – Moderator: Jason Ferrell**

- 8am – 10:15am
- President address

10:15-10:30

- Opening Symposium: “Navigating Conflict with Improved Communication”

Coffee Break

10:30-noon

- Presentations

Lunch on your own

Regional Chapters Presidents' Luncheon

#### **Session 2**

1:30-5:00

- Presentations and Coffee Breaks

5:00-6:00

- Mixer and Poster Presentations

### Wednesday – July 26:

- Registration
- Exhibit Room Open

#### **Session 3**

8am – noon

- Presentations and Coffee Breaks

Lunch on your own

Past Presidents' Luncheon

Women of Aquatics Luncheon

#### **Session 4**

1:30-5:00

- Presentations and Coffee Breaks

5:00-6:00

- APMS Business Meeting

7:00-9:00

- APMS Awards Banquet and Reception

### Thursday – July 27:

#### **Session 5**

8am – noon

- Presentations and Coffee Breaks

Noon

- Meeting Adjourned



# 2023 APMS Board of Directors Nominees

## Vice President – Lyn Gettys, University of Florida; FAPMS

Dr. Lyn Gettys is an Associate Professor of Agronomy (Aquatic and Wetland Plant Science) and has been based at the University of Florida IFAS Fort Lauderdale Research and Education Center in Davie since 2012. Prior to that, she spent more than four years working with Dr. Bill Haller as a post-doctoral researcher and a Research Assistant Scientist at the UF/IFAS Center for Aquatic and Invasive Plants in Gainesville. She holds a bachelor's degree in horticulture from the University of Florida, a master's degree in plant breeding from North Carolina State University and a Ph.D. in plant genetics from the University of Florida. Dr. Gettys' research is focused on the biology and ecology of native and introduced aquatic and wetland plants and evaluation of control methods for managing invasive species. She coordinates the UF/IFAS Aquatic Weed Control Short Course, which draws around 500 attendees annually. She also has statewide Extension responsibilities for aquatic weed control. Dr. Gettys has authored or co-authored more than 260 publications, including 69 refereed papers and 30 articles in Aquatics magazine, and was lead editor for the 2nd, 3rd and 4th editions of the Aquatic Ecosystem Restoration Foundation's Best Management Practices Manual. She is the 2022 President of the Florida Aquatic Plant Management Society and the 2022 President of the Florida Weed Science Society. Dr. Gettys served on the APMS Board of Directors from 2019 until 2022 and is the APMS representative to CAST.

## Director – Brittany Chesser, Texas A&M University Extension; TAPMS

Brittany Chesser graduated from Delaware State University with her B.S. in Natural Resources and later went on to receive her M.S. in Wildlife, Fisheries, and Aquaculture at Mississippi State. Brittany joined her current role in 2019 as Aquatic Vegetation Management Program Specialist for Texas A&M Agrilife Extension Service. Her primary duties include providing technical expertise on aquatic vegetation management to the public through identifying plant species, recommending correct management practices, delivering presentations and outreach materials, and maintaining AquaPlant.tamu.edu. Additionally, she is the Lab Specialist for the TAMU Aquatics Diagnostic Laboratory where she performs routine water quality analyses and other diagnostics, produces client reports, and recommends amendments. In 2022, she served as President for the Texas Aquatic Plant Management Society (TAPMS). She continues to Chair the Awards Committee for Texas Chapter American Fisheries Society and Editor for TAPMS. She is currently working towards her Ph.D. in the Department of Rangeland, Wildlife, and Fisheries Management at Texas A&M University.

## Director – Damian Walters (US Army Corps of Engineers Walla Walla District, and currently on detail in Vicksburg, MS with ERDC)

Damian Walters has over 22 years of experience in federal service, majority with the Army Corps of Engineers. Currently on a detail with USACE Engineering Research and Development Center (ERDC) in Vicksburg, MS as a Research Toxicologist in the Aquatic Ecology and Invasive Species Branch. His permanent position is with Walla Walla District as the District Wildlife Biologist managing the district's wildlife and invasive species programs, while working extensively within the Northwest region on aquatic invasive species. He is a member of the USACE Invasive Species Leadership Team and assists on the National Aquatic Plan Control Program. He is also actively involved in the Columbia River Basin 100th Meridian Team and the USACE representative on Western Regional Panel for Aquatic Nuisance Species. As an ISLT member, Damian interacts with USACE's Engineering Research Development Center through the Aquatic Plant Control Research Program and the Aquatic Nuisance Species Control Research Program as well as assisting as needed in providing oversight on ERDC's Harmful Algae Blooms Research. Prior to his time with USACE, he was involved in Academia as both a Research Associate and Student, receiving a bachelor's at Pennsylvania State University in Forest Science (minor in Wildlife and Fisheries Science), a masters at Clemson University in Environmental Toxicology (with a focus in Wildlife Toxicology), and worked on a PhD at Texas Tech University as a Research Associate developing research for staff and students, and at Oregon State University as a Pesticide Toxicologist and Research Associate.





# 63<sup>rd</sup> Annual APMS Conference Call for Papers

## **Present Your Original Research**

You are invited to submit a title and abstract for the 63<sup>rd</sup> Annual Meeting of the Aquatic Plant Management Society to be held at the Hyatt Regency in beautiful Indianapolis, IN (July 24-27, 2023). Oral and poster presentations are solicited for original research on the biology or ecology of aquatic and wetland plants and algae, control methods (biological, chemical, cultural, mechanical) for invasive, exotic or nuisance plant or algal species, and restoration projects involving wetland or aquatic plants and algae. Presentation of original research will be given preference and should be indicated by including results in the abstract. This year's meeting is in the region of the Midwest Aquatic Plant Management Society, so regional presenters are strongly encouraged to submit an abstract.

Oral presentations will be allotted a total of 15 minutes with an additional 5 minutes for questions and discussion. Contributed oral presentations should be scientific or technical in nature, which will be determined from the submitted abstract. All presenters will be required to upload their final PowerPoint presentation to the abstract submission portal prior to the meeting. Note: All presentations that include externally run programs; models or special animation, must be reviewed and approved by the Program Chair prior to the meeting. You will not be allowed to set up a personal computer for your presentation. A poster session will also be scheduled. Free-standing display boards (4' x 4') will be provided for posters.

## **Special Session - Navigating Conflict with Improved Communication**

The society will be holding a special session discussing how to navigate difficult, and often contentious, conversations regarding invasive plant management. Invited speakers and submitted talks will drive discussions around finding common ground while remaining committed to data and the scientific process. Abstracts submitted for the special session should be indicated during the abstract submission process.

## **Students**

The society will provide all student presenters with room accommodations and complimentary registration. First, 2nd, and 3rd place prize money will be awarded in separate contests for both oral and poster presentations. In addition, a student tour of local management sites and scenic places is being put together for student enjoyment. Students may contact the Program Chair (Dr. Jason Ferrell; [jferrell@ufl.edu](mailto:jferrell@ufl.edu)) or the Student Affairs Committee Chair (Dr. Candice Prince, [cprince14@ufl.edu](mailto:cprince14@ufl.edu)) with any questions.



# 63<sup>rd</sup> Annual APMS Conference Call for Papers

## Abstract Submission Information

Abstracts must be submitted on the WSSA abstract system at <https://weedscimeetingabstracts.com/>. Instructions for abstract submittal are below. The WSSA Title and Abstract Submission System is now active and will remain open until June 15, 2023. Acceptance of contributed papers will not occur until after the abstract deadline and will be confirmed by a separate e-mail.

### **Logging in to the WSSA System**

If you have used this system before, enter your e-mail address and password to sign on to the system. If you cannot remember your password, click “Forgot your password?” to reset the password.

If you do not have an account with the WSSA abstract submission system, click “Register as a new user” and follow the instructions.

Once you are logged in, you will see a list of conferences that are open for Title and Abstract submissions. Click on “My Titles” at the top, and then click on “Create New”. You will be prompted to select a conference. Select “2023 APMS” and hit the “Continue” button.

**Entering a Title:** Type in the title capitalizing key words (e.g., Response of Eurasian and Hybrid Watermilfoil to Five Auxin-mimic Herbicides). Please do not submit your title in bold typeface or all caps. Just capitalize the major words in the title.

**Students:** Please indicate if you are a student. The society will provide all student presenters with room accommodations and complimentary registration. There will be a contest awarding 1st, 2nd, and 3rd place for both the oral and poster presentations.

**Section:** Indicate whether you are presenting an oral or poster presentation using the “Type” dropdown menu. Presenter Biography: Please provide a short biography of the presenting author (200 word maximum). Abstract: Type or copy the text of your abstract into the abstract box (300 word maximum).

**Authors:** Be sure to add the full names and contact information of all authors. Please indicate the presenting author with the checkbox. Please enter all authors in the correct order, and the order can be changed by dragging the boxes.

If you have any questions, please contact:

Dr. Jason Ferrell  
2023 APMS Program Chair  
[jferrell@ufl.edu](mailto:jferrell@ufl.edu)

# Science Policy Report

March, 2023  
By, Lee Van Wychen



## Great News in FY 2023 Omnibus Appropriations Bill

The House and Senate passed a FY 2023 Omnibus spending bill just before they left town for the holidays. The table below includes the Omnibus Appropriations for FY 2023, as well as the final appropriations for FY 2021 and FY 2022 for various Federal programs important to weed science and aquatic plant management.

	Final FY 2021	Final FY 2022	Final FY 2023	Percent Increase
	-----\$ millions-----			
<b>USDA-ARS</b>	\$1,492	\$1,633	\$1,744	6.8%
<b>USDA-NIFA</b>	\$1,570	\$1,637	\$1,701	3.9%
-AFRI Competitive Grants	\$435	\$445	\$455	2.2%
-Hatch Act (Exp. stations)	\$259	\$260	\$265	1.9%
-Smith Lever (Extension)	\$315	\$320	\$325	1.6%
-IR-4 Program	\$11.9	\$14.5	\$15	3.4%
-Crop Protection and Pest Management	\$20	\$20	\$21	5.0%
-SARE: Sustainable Ag Research & Educ.	\$40	\$45	\$50	11.1%
<b>Army Corps- Aquatic Plant Control Research</b>	\$7	\$8	\$8	0%
-CT River hydrilla control and research	n/a	n/a	\$6	∞%
<b>EPA - Great Lakes Restoration Initiative</b>	\$330	\$348	\$368	5.7%

I am very excited that the House and Senate approved \$6 million in new funding for a hydrilla research and control program for the Connecticut River Basin to deal with that new strain of hydrilla. Many thanks to Mark Heilman for his leadership and work on this as well!

Other noteworthy parts of the FY 2023 Omnibus Appropriations include:

- A \$9.9 billion, or **12 percent increase**, for the **National Science Foundation (NSF)**. This is largest dollar increase for NSF of all time and the largest percentage increase for NSF in more than two decades. NSF's funding level will support approximately 2,300 additional research and education grants and 35,000 more scientists, technicians, teachers, and students, compared to fiscal year 2022.
- The **EPA's Office of Pesticide Programs (OPP)** was funded at **\$140 million** for FY 2023. While this is not as high as we had asked for (\$163 million), this is still the highest funding for EPA OPP since 2010 and an **8.6 percent increase** over FY 2022.
- Finally, the **5th reauthorization of the Pesticide Registration Improvement Act (PRIA 5)** was included in the FY 2023 Omnibus bill. The APMS along with WSSA and other Regional Weed Science Societies joined many other organizations in a [letter to House and Senate Ag Committee leaders urging them](#) to complete the reauthorization before it expired in 2023. First established in 2004, PRIA put in place pesticide registration service fees paid by registrants in exchange for specific time periods for EPA to make a regulatory decision on pesticide registrations and tolerance actions. The goal of PRIA is to create a more predictable and effective evaluation system that promotes shorter decision review periods for reduced-risk pesticides. Link to: [PRIA overview and history](#).



# Science Policy Report



[Continued]

## Next Congressional Visits to DC?

In November 2022, I organized 15 in-person visits on Capitol Hill for the weed science society president's who flew-in for 3 days. I forgot how effective in-person visits can be! We'll need to find a time frame that works for a fly-in for APMS leadership and who will be flying-in.

We will need to focus almost entirely on ACOE appropriations so that we don't lose the \$6 million for the Connecticut River hydrilla research and control project. We'll also need to advocate for the appropriations for the programs that were re-authorized in the WRDA 2022 bill (see WRDA 2022 below).

## Aquatic Plant Management Appropriations Leadership: 118th Congress (not confirmed yet)

Senate Energy & Water Diane Feinstein (D-CA), Chair John Kennedy (R-LA), Ranking Member	House Energy & Water Mike Simpson (R-ID) Chair Marcy Kaptur (D-OH) Ranking Member
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## WRDA 2022 Signed Into Law as Part of National Defense Authorization Act

The Senate passed the 2022 Water Resources Development Act (WRDA) by a vote of 83-11 in early December, well after the House passed their version of WRDA last summer. The WRDA bill conference agreement was attached to the massive \$858 billion National Defense Authorization Act (NDAA) for a ride to the President's desk where he signed it into law on December 23, 2022, despite his opposition to a military non-vaccination clause in NDAA.

WDRA has been reauthorized by Congress every two years since 2014 to fund projects and research carried out by the Army Corps of Engineers (ACOE). Overall, WDRA will authorize more than \$37 billion in funds for inland waterways projects. The 2022 WRDA language is included under "Division H – Water Resources" in the much larger NDAA law (P.L. No. 117-263).

Under Section 8305, Invasive Species, the following aquatic invasive species provisions were added with WRDA 2022 (highlighted in yellow):

- Amends 33 USC 2263a: Aquatic invasive species research by **adding hydrilla** to the list of priority species, which now reads: *"In general- As part of the ongoing activities of the Engineer Research and Development Center (ERDC) to address the spread and impacts of aquatic invasive species, ACOE shall undertake research on the prevention, management, and eradication of aquatic invasive species, including Asian carp, elodea, hydrilla, quagga mussels, and zebra mussels."*
- Increases from \$50 million to **\$75 million per year through FY 2028** for ACOE invasive species partnerships with states and other Federal agencies to carry out actions to prevent the introduction of, control, or eradicate invasive species that adversely impact water quantity, water quality, **or ecosystems** in the Platte River Basin, the Upper Colorado River Basin, the Upper Snake River Basin, **the Lake Erie Basin, the Ohio River Basin** and the Upper Missouri River Basin. Priority shall be given to projects that are intended to control or eradicate Russian olive (*Elaeagnus angustifolia*), **hydrilla** (*Hydrilla verticillata*) or saltcedar (*Tamarix spp.*).

# Science Policy Report

March, 2023  
By, Lee Van Wychen



- The Harmful Algal Bloom (HAB) demonstration program adds 8 new focus areas to the original 6 focus areas. The **HAB demonstration program is authorized for \$25 million total until expended** by ACOE to determine the causes of, and implement measures to effectively detect, prevent, treat, and eliminate HABs associated with water resources development projects. The HAB demonstration program focus areas now include:
  - (1) the Great Lakes;
  - (2) the tidal and inland waters of the State of New Jersey, including Lake Hopatcong, New Jersey;
  - (3) the coastal and tidal waters of the State of Louisiana;
  - (4) the waterways of the counties that comprise the Sacramento-San Joaquin Delta, California;
  - (5) the Allegheny Reservoir Watershed, New York;
  - (6) Lake Okeechobee, Florida;
  - (7) **the Caloosahatchee and St. Lucie Rivers, Florida;**
  - (8) **Lake Sidney Lanier, Georgia;**
  - (9) **Rio Grande River Basin, Colorado, New Mexico, and Texas;**
  - (10) **lakes and reservoirs in the State of Ohio;**
  - (11) **the Upper Mississippi River and tributaries;**
  - (12) **Detroit Lake, Oregon;**
  - (13) **Ten Mile Lake, Oregon; and**
  - (14) **the coastal waters of the United States Virgin Islands.**
- Adds the **Sacramento-San Joaquin Delta**, California to federally authorized water resources development projects. Specifically, ACOE shall periodically update the Invasive Species Policy Guidance, developed under section 104 of the River and Harbor Act of 1958 (33 U.S.C. 610) and the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 (16 U.S.C. 4701 et seq.), in accordance with the most recent National Invasive Species Council Management Plan developed pursuant to Executive Order 13112 to include specific efforts at federally authorized water resources development projects located in:
  - (1) high-altitude lakes;
  - (2) the Tennessee and Cumberland River basins; and
  - (3) **the Sacramento-San Joaquin Delta, California.**

Do We Need to Meet With Michael Connor?



Michael Connor is the Assistant Secretary of the Army for Civil Works who oversees all civilian work for the U.S. Army Corps of Engineers. Connor held the number-two position at the Department of the Interior from 2014 to 2017 during the Obama administration. Before that, he was commissioner of Interior's Bureau of Reclamation, from 2009 to 2014. Connor was a partner in the law firm Wilmer Cutler Pickering Hale and Dorr LLP. He also worked on Capitol Hill from 2001 to 2009, as counsel to the Senate Energy and Natural Resources Committee.

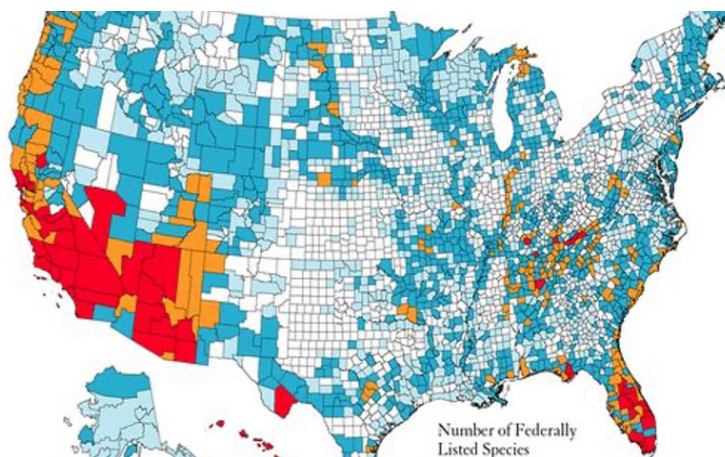
# Science Policy Report



[Continued]

## FIFRA and Endangered Species Act Compliance

FIFRA compliance with ESA will be a HUGE issue for years to come, with the potential to lose many herbicide uses. The WSSA Endangered Species Act (ESA) Committee, chaired by Bill Chism, is hosting a workshop at the WSSA meeting on January 30 to determine how weed scientists can provide useful science-based information to regulators for ESA compliance to FIFRA approved herbicides. There are approximately 1,700 endangered species of which approximately 900 are plants, plus another 700 critical habitats. It is anticipated that glyphosate and other herbicides will impact almost all of those.



**Endangered Species by County.** Source: Precious Heritage: The Status of Biodiversity in the United States.

On November 16, the EPA released an [Updated ESA Workplan](#) that provides more details about how EPA plans to impose various mitigation measures that will be required on pesticide labels to meet its ESA obligations when registering a pesticide. There are concerns about some of the mitigation options such as “buffers to reduce pesticide drift and water runoff” or “do not use when rain is expected in the next 48 hours” -- which raises other issues such as what or how compliance might be proven or enforced.

EPA has previously stated that by using the current ESA compliance approaches, they could only theoretically complete about 5 percent of the ESA required reviews in about 18 years. This means that it **would take EPA about 360 years** to complete its ESA compliance reviews for all pesticides, which is clearly not acceptable.

The Updated EPA Workplan released in November describes mitigation strategies that are “reasonable and prudent alternatives” (RPAs) for ESA compliance to help streamline the process and reduce the unacceptable timeframe of 360 years. However, these updated strategies might lead to fears among some stakeholders that in a “rush” to complete this work, EPA will make overly conservative label restrictions and reduce availability of the pesticide without adequate and legally defensible ESA protections.

The ESA Workplan Update also describes initiatives that, according to EPA, will help it and other federal agencies improve approaches to mitigation under the ESA and improve the interagency consultation process outlined in the ESA Workplan. These initiatives include EPA’s work to [identify ESA mitigation measures for pilot species](#), incorporate early ESA mitigation measures for groups of pesticides (e.g., broadleaf herbicides), and develop region-specific ESA mitigations.

**Comments** on the proposed set of interim mitigation measures and the proposed revisions to label language are now due on **February 14, 2023** after EPA granted a 15 day extension. This will allow us to summarize the results of the ESA symposium and workshop being held on Jan. 31 at the WSSA meeting. **Please submit comments at [EPA-HQ-OPP-2022-0908](#).**



# Science Policy Report



March, 2023  
By, Lee Van Wychen

NISAW: February 20-26, 2023

National Invasive Species Awareness Week (NISAW), <https://www.nisaw.org/> will be digital again in 2023 (although there is the potential for some groups flying in to DC to advocate on Capitol Hill). The WSSA is a Partner Sponsor (\$2,500) of NISAW, its 24th year of supporting NISAW. If you have topics or issues of concern, or would just like to get involved with NISAW planning, please let me know

Biden Administration's Revised WOTUS Rule Now Final

On December 30, 2022, the Biden administration finalized its rendition of the WOTUS rule. **Here is my take on the rule:**

- Land managers, farmers and property owners will face continued uncertainty as they attempt to comprehend and comply with the unclear regulations.
- EPA failed to listen to numerous stakeholders that called on the agency to stay rulemaking on a new WOTUS rule until the Supreme Court ruled on the Sackett case, expected this spring.
- The Biden version of WOTUS is not a complete return to the unworkable Obama rule adopted in 2015. EPA's listed exemptions at least try to address some of agriculture's concerns over lack of clarity.
- Even so, EPA is reintroducing considerable ambiguity in this version of the rule as it attempts to determine what is a WOTUS as seen in the treatment of ditches, ephemeral streams and groundwater, all of which were largely categorically excluded under Trump's WOTUS rule. There is no doubt that continued litigation will occur as a result of this rule.
- It is now clear that four successive administrations of both political parties have been unable to resolve this matter in a way that satisfies the broad range of stakeholders and provides long-term regulatory certainty which is badly needed.
- Depending on the outcome of the Sackett case this spring, it may be time for Congress to step in in a bipartisan manner to provide clarity regarding which bodies of water are under the jurisdiction of the Clean Water Act.

Meetings of the National and Regional Weed Science Societies

Jan. 23 - 26, 2023 Southern Weed Science Society (SWSS), Baton Rouge, LA - [www.swss.ws](http://www.swss.ws)

Jan. 30 - Feb. 2, 2023 Northeastern Weed Science Society (NEWSS), Arlington, VA - [www.newss.org](http://www.newss.org)

Jan. 30 - Feb. 2, 2023 Weed Science Society of America (WSSA), Arlington, VA - [www.wssa.net](http://www.wssa.net)

Feb. 27 - Mar 2, 2023 Western Society of Weed Science (WSWS), Boise, ID - [www.wsweedscience.org](http://www.wsweedscience.org)

Jul. 24 - 27, 2023 Aquatic Plant Management Society (APMS), Indianapolis, IN - [www.apms.org](http://www.apms.org)

Dec. 11 - 14, 2023 North Central Weed Science Society (NCWSS), Minneapolis, MN - [www.ncwss.org](http://www.ncwss.org)

# Sustaining Members

## *Membership does have its privileges!*

The Aquatic Plant Management Society is grateful for our Sustaining Members whose generous annual contributions sponsor our most important core values, especially education and outreach initiatives. Sustaining Membership costs \$500 and includes membership privileges for one designated representative; subscription to the Journal of Aquatic Plant Management; access to the APMS newsletters and social media content; recognition as a Sustaining Member in newsletters, the Annual Meeting Program, and on the APMS website.

For more information on what Sustaining Membership entails, please visit <https://apms.org/sustaining-members/>

## *Thank you all for your support in 2022-2023!*



[AgroShield](https://www.agro-shield.com/our-products/algacides) has been serving the Agriculture and Aquatic industries since 2015. Our Vodaguard product was developed to cure infections in the upper water column. Vodaguard's unique follow the bloom technology concentrates the cure where it is needed the most. Vodaguard C is a copper sulphate pentahydrate product. Vodaguard O is a sodium percarbonate that becomes hydrogen peroxide when introduced to water. Both products have a patented formulation that allows them to be buoyant for 24 to 36 hours. Reduces manpower, machinery, and un-necessary product which reduces cost. Please visit us at: <https://www.agro-shield.com/our-products/algacides>.



Since 1981, [Applied Aquatic Management](https://www.applied-aquatic.com), Inc., (AAM) has provided innovative and effective water management services, selective vegetation control, wetland management and exotic weed control. AAM has clients throughout Florida including developers, homeowners associations, golf courses, mobile home communities, utilities, local, state and federal government agencies and industry. Our experienced professional staff provides unique knowledge along with advanced equipment to manage all types of waterway, right-of-way, wetland, and upland systems.



[AquaMaster Fountains and Aerators](https://www.aquamaster.com) is the industry leader for quality and dependable Fountains and Aerators for all your aquatic requirements. Awareness of water quality management has never been higher. In our environmentally conscious world, today's successful aquatic managers are making aeration equipment the foundation of their aquatic management programs. Their goal is to increase the dissolved oxygen level, which stimulates the natural cleanup process, resulting in an aesthetically pleasing, healthy body of water.

# Sustaining Members



[Aqua Services, Inc.](#) is a full-service water resource management company that has operated continuously in business for 40 years. In addition to its original focus on aquatic weed management operations for federal, state, and private entities, Aqua Services now provides superior fisheries population management, HAB and cyanobacteria control, lake design services, aeration design and installation, and soil sealant services to mitigate lake and pond seepage. Our experienced biologists and technicians work throughout the Southeast and Midwest to provide critical services to numerous clients. Successful projects have also been completed internationally, including Mexico and The Bahamas.



[AquaTechnex, LLC](#) is a lake and aquatic plant management firm that operates in the Western United States. The company is expert in the use of aerial and boat GIS/GPS technologies to assess aquatic environments. The firm is also expert in the management of invasive aquatic weed species and phosphorous mitigation to suppress toxic cyanobacteria blooms. Our web site is [www.aquatechnex.com](http://www.aquatechnex.com); please drop by regularly to get news updates as we have moved our blog onto the site.



[Aquatic Control, Inc.](#) has been managing aquatic resources since 1966. As a distributor of lake management supplies, floating fountain aerators, and diffused aeration systems, Aquatic Control represents all of the major brands of quality supplies and equipment. Aquatic Control has eight offices that offer aquatic vegetation management services including vegetation mapping, application services, fountain and aeration system installation, equipment maintenance, and factory-trained service and warranty repair throughout the Midwest. Harmful Algae Bloom monitoring programs with our in-house laboratory allow us to customize treatment plan design through control of the algae causing taste and odor or toxin production issues. Learn more at [www.aquaticcontrol.com](http://www.aquaticcontrol.com).



[Aquatic Vegetation Control, Inc.](#) (AVC) is a Florida corporation founded in 1986 offering vegetation management and general environmental consulting services throughout the southeast. Since its establishment as an exotic/nuisance vegetation management company specializing in the control of invasive wetland, aquatic and upland species, AVC has broadened its scope of capabilities to include; certified lake management, fish stocking, re-vegetation, mitigation and restoration services, mitigation monitoring services, aquatic, roadside, forestry and utility vegetation management, and environmental/ecological consulting.



[BioSafe Systems](#) has been offering sustainable and effective solutions for lake management, municipal and wastewater treatments and other water resources since 1998. Our uniquely balanced, broad-spectrum chemistries are designed to enhance your water's health, quality and appearance. Alternatives to products that utilize copper, or other harsh and sometimes toxic chemicals, BioSafe Systems' complete line of products are EPA registered, USDA NOP compliant, OMRI listed and effectively alleviate algal issues with minimal impact on the environment.



[Chem One](#) is a national leader of Organic Copper Sulfate for aquatic management. With eight standard EPA label grades; Fine 20, 25, 30, 100, 200, Small, Medium and Large. Chem One has a grade to meet every customer's needs. With our corporate offices and 78,000+ square foot warehouse in Houston, Texas, Chem One is a national wholesale company that is certified to ISO 9001, ISO 14001, OHSAS 18001.



# Sustaining Members



[Clarke Aquatic Services](#) is a global environmental products and services company. Our mission is to make communities around the world more livable, safe, and comfortable. By understanding our customers' needs, we tailor service programs that draw on our unmatched breadth of industry experience, expertise, and resources. Clarke pioneers, develops, and delivers environmentally responsible mosquito control and aquatic services to help control nuisances, prevent disease, and create healthy waterways.



[Compliance Services International](#) (CSI) is a leading regulatory consultancy providing innovative solutions for organizations faced with regulatory and environmental challenges. CSI's experienced scientists and regulatory specialists in the USA and the EU provide innovative approaches to solving regulatory and environmental challenges – combining traditional sciences with developing technologies to deliver economically sensible and scientifically sound results.



[Cygnet Enterprises, Inc.](#) is a national single source distributor of aquatic management products with offices and warehouses in Michigan, Indiana, Pennsylvania, North Carolina, California and Idaho. Cygnet is proud of its reputation for outstanding service, friendly, knowledgeable staff and our unmatched support of the aquatics industry. Cygnet Enterprises is the only aquatic distributor at the Charter Gold Member level in the Aquatic Ecosystem Restoration Foundation (AERF).



Since 1973, [Diversified Waterscapes, Inc.](#) has offered lake management services and ecological products to professional applicators. Our proven field experience in pond and lake cleaning enabled us to develop an eco-friendly line of products that show dramatic results in any aquatic environment. With more than 45 years of experience, we have been providing aquatic treatment products and maintenance service for some of the world's best water features, including the famous Bellagio Fountain in Las Vegas – delivering clearly better results without harming the environment. Our mission is to combine extensive industry experience, mechanical aptitude and scientific knowledge to bring clarity, cleanliness and beauty to water features across the country.



[Duke Energy](#) "Building a smarter energy future". Duke Energy (NYSE: DUK), a Fortune 150 company headquartered in Charlotte, N.C., is one of the largest energy-holding companies in the U.S. It employs 30,000 people and has an electric generating capacity of 51,000 megawatts through its regulated utilities, and 3,000 megawatts through its nonregulated Duke Energy Renewables unit. Duke Energy is transforming its customers' experience, modernizing the energy grid, generating cleaner energy, and expanding natural gas infrastructure to create a smarter energy future for the people and communities it serves. More information about the company is available at [duke-energy.com](http://duke-energy.com). Follow Duke Energy on Twitter, LinkedIn, Instagram and Facebook.

# Sustaining Members



[Lake Restoration](#), located in MN, has specialized in controlling pond weeds, lake weeds, and nuisance algae since 1977. Lake Restoration's product line-up includes: Mizzen, a copper based algaecide, Spritflo and Dibrox herbicides, a variety of pond dyes and nutrient reducers. Lake Restoration also manufactures the TORMADA product application boat, Vitaflume floating fountains, the retractable Goose D-Fence system, and the patented LAKEMAID to eliminate lake weeds automatically.



The [Lee County Hyacinth Control District](#) was formed by the Florida Legislature in June 1961 to curtail excessive growths of water hyacinth. That same year, water managers from across the state convened in Lee County and formed the Hyacinth Control Society, now APMS, to share control strategies and develop a comprehensive management approach to Florida's most prolific aquatic plant. T. Wayne Miller, Jr. of Lee County served as the Society's President for the first two years and Lee County has been a supporting member of APMS since its inception.



[Maxunitech](#) is an integrated enterprise focusing on the Research and Development, production, sales of agrochemicals, and relevant intermediates and other fine chemicals. Established in 2000, under the principles of "people oriented, united for innovation and pursue excellence", we have been researching and developing new products, solving commercial issues from the perspective of technology, and fulfilling enterprise value with value added for our clients.



Invasive weeds can devastate both natural and commercial habitats. [Syngenta](#) provides high performance products to control destructive weeds while helping to restore the habitat of aquatic environments. Syngenta offers proven aquatic herbicides like Reward® and Tribune™ that provide fast burn-down, work well in cool weather and are rainfast in as little as 30 minutes. The active ingredient, diquat dibromide, has been used successfully in sensitive aquatic areas for over 25 years.



ENVIRONMENTAL  
SOLUTIONS

[UPL NA, Inc.](#) is a premier supplier of crop protection products and technologies designed for the agricultural, specialty, fumigation and aquatic markets. The Aquatics Division is part of the Environmental

Solutions group which has manufactured aquatic herbicides and algaecides for the management of lakes, ponds, rivers and irrigation canals for more than 40 years. These products are marketed as Aquathol®, Hydrothol®, AquaStrike®, Current®, Symmetry®, Cascade®, Teton®, and Top Deck™. Most recently the development and commercialization of the ADAPT aquatic drone boat for improved application accuracy and efficiency was launched. With a customer-centric focus, UPL is committed to providing product stewardship and technical support to ensure your plant management operations are successful. Visit us at: <https://uplaquatics.com/>

Incorporated in 1961 as a forum to share  
water hyacinth control experiences,  
today APMS and its seven Regional  
Chapters promote research and outreach  
to manage all species of aquatic plants  
and algae.



# General Info for Membership, Etc.

The Aquatic Plant Management Society, Inc. is an international organization of scientists, educators, students, commercial pesticide applicators, administrators, and concerned individuals interested in the management and study of aquatic plants and algae. The membership reflects a diversity of federal, state, and local agencies, universities and colleges around the world, corporations, and small businesses.

## VISION

The Vision of the Aquatic Plant Management Society is to be the leading international organization for scientific information on aquatic plant and algae management.

## MISSION

The Mission of the Aquatic Plant Management Society is to provide a forum for the discovery and dissemination of scientific information that advances aquatic plant and algae management policy and practice.

## STATEMENT ON EQUITY, DIVERSITY, & INCLUSION

Creating an atmosphere of inclusion is vital to the Aquatic Plant Management Society (APMS). Contributions and perspectives from all members, students, event participants, and our local and international communities are important. Diversity includes age, culture, disability, ethnicity, gender, national origin, color, race, religion, sexual orientation, and diversity of thoughts and ideas. We recognize that embracing and encouraging diversity is critical to fulfilling our mission to 'Provide a forum for the discovery and dissemination of scientific information that advances aquatic plant and algae management policy and practice'. APMS will strive to further cultivate a Society built on mentorship, encouragement, tolerance, and mutual respect, and foster a welcoming environment for all.

To join, visit this link: <http://www.apms.org/society/membership/>

**MEMBERSHIP IS INCLUDED WITH ANNUAL MEETING REGISTRATION - NEW IN 2023!**

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Many of our regional chapters are active on social media, too. Give them a like and a follow!