

Willamette Aquatic Invasive Network Meeting

Tuesday, October 27, 2015
City of Salem Meeting Hall
606 Church St. SE, Salem, OR
10:00 AM – 12:30 PM

Fall Meeting Agenda and Notes

- I. Welcome, introductions, check in (10 min)
- II. Share other fieldwork experiences and accomplishments –WAIN members (20 min)
- III. Present some results from the 2015 Willamette Aquatic Invasive Field Survey– Marci Krass and Rich Miller (20 min)
- IV. Brainstorming session to begin developing a prioritization for treatments in the Willamette – Andrea Berkley (40 min)

Break (10 min)

- V. WAIN Steering committee - Let's develop one! (15 min)
- VII. Discussion on whether to have a Ludwigia Working group meeting? – Vern Holm (10 min)
- VIII. Discussion about WAIN projects for 2015-2016 Oregon State Weed Board grant cycle (10 min)
- IX. Discuss next steps and adjourn meeting (15 min)

WAIN Fall Meeting Notes-10/27/15

Introductions- The meeting began with a round of introductions. There were 19 people in attendance.

Meeting Participants included:

1. Rich Miller- PSU
2. Alex Staunch- Mosaic Ecology
3. Vern Holm- Western Invasives Network
4. Marc Trinks- City of Salem Parks Department
5. John Kleeman- City of Salem Parks Department
6. Norm Reiss- Community Volunteer/ Paddler/ Interested Citizen
7. Mitch Bixby- City of Portland
8. Christa Von Behren- City of Portland
9. Jenny Meisel- Marion SWCD
10. Kristen Larsen- Luckiamute Watershed Council
11. Glenn Dolphin- OR State Marine Board
12. Mark Akimoff- City of Keizer
13. Mark Sytsma- Portland State University
14. Ryan Murdoff –USFS
15. Andrea Berkley- OPRD
16. Glenn Miller- ODA
17. Lauri Holts- City of Eugene
18. Marci Krass- Willamette Riverkeeper
19. Crystal Durbecq- Benton SWCD

Updates and sharing on accomplishments, lessons learned, and experiences from this summer field season related to aquatic invasives.

Natural screening booms

- An idea for creating natural screening booms was presented to the group using Christmas trees. Norm Reiss suggested strategically placing the trees across small side channels to catch aquatic invasives and prevent them from flowing downstream. Consider, a few hundred trees for a small location. (Norm Reiss).
- Consider Willamette Mission State Park as a potential place to consider trialing some Christmas trees or another type of screen (floating silt curtain? Other types Holly Crosson knows about) in the Windsor Slough side channel and/or Mission Lake. How can we contain what's there? We will need to consider the challenges with permitting, since structure of this nature will impede and effect navigation, and need to be cleaned our periodically. (Andrea Berkley).

AIS sighting at the mouth of the Luckiamute

- Ludwigia was discovered at the confluence with the Willamette River and the lower Luckiamute River in June. Kristen Larsen paddled the lower Luckiamute and discovered it. Luckily some Parks staff jumped on it and used hand pulling to quickly control it. Two treatments were also completed with herbicide at mouth of Luckiamute. (Kristin Larsen). Norm mentioned that he is interested in helping as a volunteer if needed in the future.

Water Quality Monitoring related to AIS

- Alex Stauch on behalf of Mosiac Ecology, conducted some water quality monitoring in Benton County in partnership with Benton SWCD at one of their restoration sites. (Alex Stauch).
 - He is working to develop a protocol to undergo a more systematic effort. Look into funding for more widespread and detailed effort.
 - Crystal mentioned that the USGS has some interest in helping out with this effort.
 - They conducted a kit based sampling with a hand held WSI pro plus meter. Measured PH, temp, dissolved oxygen, etc...Interested in more permanent probes.
 - In total in 2015 they gathered samples at 4 different sites (one site was a control with no treatments, the other 3 had measurements taken pre and post treatment). Interested in a larger breath of sampling in 2016 and beyond. Consider selecting additional sites where treatments are planned. Consider measurements in parrotfeather areas as well
 - They found evidence of lower DO under invasive plant beds. For example at Stuart Slough and Oxbow where there were thick beds of Ludwigia they found lower DO <2. PH was also low.
 - Consider gathering data at an area with no Ludwigia. Bathymetry studies to see if sediment changes with removal of ludwigia?
 - Funding and time are the main constraints for more extensive monitoring.
 - Again, the USGS seems like a good option to help with this work to leverage some additional resources. Would like to involve Army Corps as well.

AIS in the Columbia Slough Basin

- Alex Stauch is also working in the Columbia Slough Basin in partnership with the Multnomah County drainage district to control aquatic invasives in this system. (Alex Stauch)
 - They used a mix with 3% glyphosate to reduce up to 90% of fragrant water lily population.
- *Sagittaria platyphylla* - Delta arrowhead which was recently discovered at the Blue Heron Wetlands.
 - This is the only known location in the watershed. This is a scary new invasive to watch out for. It's currently on Washington's quarantine list. It's not yet known to spread to other water bodies. QA QC plan.

- There was a recommendation to share this data with DEQ and work with DEQ to develop a collection plan to meet DEQ protocol. The presence of the plant may be changing the water quality of an area enough for it to be listed under 303d, . Which might help to make funding available from the Clean Water Act. Steve Hansen is a good contact at DEQ. Glenn will more forward to list with DEQ.
- If you have questions about this please contact Alex Stauch at stau9723@gmail.com.

Benton SWCD treated about 4 miles of aquatic invasives at Stuart Slough.

- Crystal Durbecq is the project manager.
- So far they have treated 40 acres in Stuart Slough and 10 acres of invasives in a gravel pond owned by Knife River.
- Landowners = happy about the work being completed.
- Update on the weed Board meeting. Site visits to see sites with the Weed Board.
- Also 2nd year of treatments at Collins Bay.
- Benton also worked with partners (especially WRK) to help facilitate on the water workshops and hand pulling with volunteers in the Corvallis to Albany stretch of river.

Long Tom Watershed Council conducted treatments during the summer of 2016. Christer LaBrecque lead this effort. Glenn highlighted some of Christer's work in the Long Tom Watershed.

- Glenn spent a few field days working with Christer in the field on treatments.
- There are lots of examples of agriculture and recreation being impacted by these plants. There is not evidence of Ludwigia in Fern Ridge Reservoir.
- Christer also worked closely with ODOT. Their work is very related to work the City of Eugene is working on at Golden Gardens.

Long Tom Watershed Council Ludwigia Treatments During 2015 (Christer LaBrecque)

Highlights:

- OSWB = \$15k
- Total w/ match = \$34k
- Treated (3% glyphosate, 0.5% Agridex; follow-up 0.5% imazapyr, 0.5% Agridex):
 - Appx. 15 acres of ODOT pond & freeway floodway (connected to Golden Gardens ponds -> Amazon Creek -> Long Tom River -> Willamette River)
 - Appx. 0.5 acres of privately owned ponds (Park Ave ponds) within Eugene (very close proximity to Delta Ponds project, though not hydro-connected; flows to Flat Cr. -> Spring Cr. -> Willamette River)
 - Volunteers manually removed plants from one of the 3 ponds. It had the lowest density of plants and some very herbicide-sensitive neighbors

- Approx. 14 miles of the Long Tom River banks (from the Amazon / Bear Cr. / Long Tom confluence, which is below the Fern Ridge reservoir, to the Willamette River at Norwood Island)
 - Difficult to estimate acreage for this, but there were 12-15 larger patches that were larger than 1000' sq. (a couple that were over ¼ acre or so)

Lessons Learned:

- It was really important doing adequate outreach/education as well as follow-up with neighbors (we did mailings, in-person meetings, neighborhood walk-arounds, loads of emails and phone conversations, and a public meeting)
- Timing is critical to allow for adequate follow-up(s) (LTWC got started appx. 1 month late)
- Imazapyr worked well as the late-season follow-up, but might not have been necessary if we'd gotten an earlier start
- Annual per-acre max is not hard to reach with glyphosate for solid, dense infestations (also a factor when switching to imazapyr)
- On-the-ground limitations need to be addressed far in advance so that estimates for the cost of these potential sites can be addressed (boat access, equipment, personnel, travel time, etc.)
 - LTWC encountered a variety of sites with their own unique limitations
 - a) Easily accessible w/ vehicle & large spray rig (\$)
 - b) Good access; treat from drift/john/motor boats or from rig w/ large hose/reel from shore (\$\$)
 - c) Limited access; treat from canoe/kayak only (\$\$\$)
- Drone photos and/or recon are potentially a nice resource to take advantage of

Update on the City of Eugene's work.

- Lauri talked about the ongoing work to treat Golden Gardens. The Empire Park population drains through the city park systems also the Beltline Drainage. All the water eventually ends into the Amazon Creek.
- Another population of Ludwigia was also discovered at Creek Lake Road.
- There is an evolving containment strategy to keep weeds from Long Tom out of the Mainstem Willamette. (Lauri Holts)

Delta Ponds Project Update

- There was a greater resurgence of plants than expected.

- A beaver dam blew out drained main pond. Mud flatty, moist lots of AIS seeds germinated. The Beaver Dam then came back and when compounded with warm conditions it was the perfect storm for even more germination.
- Delta Ponds and Golden Gardens are now at hunt and peck stage for weed control. This allowed contractors to dial back herbicide and instead hand pull.
- Lauri also mentioned that she led a group of volunteers from a fly-fishing group to help to hand pull target plants. She is ready to start using more volunteers for hand pulling.
- After 2 Years of heavy herbicide use, year 3 light herbicide and hand pulling.
- Sites that are deeper are in better condition.
- Native *Ludwigia palustris* is doing really well. *Ranunculous aquaticas* Sp? Seeing parrotsfeather, and water shield. (Lauri Holts).

Results from 2015 WAIN Field Survey-Marci Krass and Rich Miller

- Rich from PSU gave an overview of the surveys they conducted from Dayton downstream to Ash Island as well as between Willamette Falls and Molalla River State Park.
- Willamette Riverkeeper surveyed from Junction City at Marshall Island Access to Salem covering over 85 river miles.
- The Fulcrum app was used to collect data for the field surveys. The data form needs to be refined, and can be a central location for all *Ludwigia* data.
- A yellow floating heart infestation was found in an Upper Willamette side channel in the vicinity of Buckskin Mary during the surveys; this is high priority for treatment.
- In the Corvallis-Albany reach, Wapato Cove and Bower's Rock are large source populations
- The Albany to Independence reach is very infested. There is a large source population at Black Dog Landing.
- Drone photos were very useful for areas that were not accessible by boat
- If you see *Ludwigia* on the river, there is a good chance that the population is connected to a slough/side-channel system off the mainstem. These areas can be hard to access and are usually privately owned.
- Additional surveys are being planned for the summer of 2016 to fill in gaps, more thoroughly cover the Upper Willamette and gather more information. We will be reaching out to partners to join us in this effort.

Benton SWCD

- Treated 4 miles of slough with 4 people. 2 in canoes with a hose/reel system and 2 with backpacks
- Treatments took 2 weeks to complete plus 1 week of follow up sprays. 50 acres were treated at an approximate cost of \$40,000. They have 4 years of treatments budgeted.

Minto Brown Island Park

- Detailed mapping using a Trimble GPS Unit was conducted in the heavily infested slough
- The City of Salem is looking for outside funding for treatment

Willamette Mission State Park

- Windsor Slough and Mission Lake are heavily infested; the mouth of the slough is now inaccessible by boat because of the Ludwigia.
- This is a large source population
- Willamette Riverkeeper and OPRD have are partnering with other Willamette Stakeholders for a Focused Investment Partnership with OWEB for the Middle and Upper Willamette. The Willamette Mission project is one of several projects on the list to be funded if a Willamette FIP is approved by the OWEB Board. This will include comprehensive treatments of aquatic invasives in Windsor Slough and Mission Lake.

Brainstorming session to begin developing a prioritization for the Willamette.

Brainstorming Activity

- An interactive, hands on activity was facilitated by Andrea Berkley.
- Criteria for the Willamette to help in developing a prioritized action plan were generated in advance of the meeting. They were each listed on a big sheet of paper and placed around the room.
- Everyone was then given an opportunity to place 3 colored dot stickers on the 3 criteria that they felt were most important for determining where our efforts and resources should go to address Ludwigia/AIS on the Willamette.
- This method is called “multi-voting” and gives each person an opportunity to weigh in equally on a narrowing down of criteria.

Willamette Aquatic Invasive Prioritization Criteria

- Property or project area/channel size.
- Connectivity/adjacency to conserved lands/other restoration projects
- Connectivity of the site to the mainstem Willamette mainstem at low flows
- Presence of priority species (e.g. chub, wapato, howellia) and/or priority habitats (e.g. areas with large amounts of off-channel habitat; SLICES cold points)
- Ecological health rating for the site (qualitative assessment of how degraded or intact a site is; sites that are more intact are prioritized in a “protect the best” approach) (Note: how to assess a site’s health would be TBD)
- EDRR site (i.e. smaller, newer infestation)
- Large patch/ infestation (i.e. has large impact on habitat quality at the site; serves as a large source population for points downstream)
- Location of site in the watershed (i.e. upper vs mid vs lower)
- Probability of success (sites where limited resources are going to have the highest probability of successfully restoring habitat) (Note: How to assess the probability of success would be TBD)
- Logistical factors, such as site access, fundability, sustainability, etc.
- Human factors, such as active/interested partners, site visibility, public use, community support, landowner/neighbor support, economic factors, impacts to water rights.

Activity results

The "top 5" criteria with the most dots included.

1. Location of site in the watershed (i.e. upper vs mid vs. lower) – **15 dots** total
 2. Large patch/infestation (i.e. has large impact on habitat quality at the site; serves as a large source population for points downstream) – **13 dots** total
 3. Presence of priority species (e.g. chub, wapato, howellia) and/or priority habitats (e.g. areas with large amounts of off-channel habitat; SLICES cold points) – **12 dots** total (Note that which species or habitats we treat as priorities is TBD)
 4. Connectivity/adjacency to conserved lands/other restoration projects – **10 dots** total
 5. EDRR site (i.e. smaller, newer infestation) – **9 dots** total
- The activity was followed with a good conversation about why folks selected particular criteria. We also talked about priority species vs. priority locations.

Willamette Strategy Sub Committee

- There is a lot more work to do to develop a priority plan so we formed a subcommittee to work on this. This will include revisiting the prioritization criteria, determining which species are priorities, then crosswalking these priorities against the survey data and coming up with a plan.
- Subcommittee members include:
 - Glenn M. and Beth – ODA
 - Mark – PSU
 - Vern –Western Invasives Network
 - Crystal- Benton SWCD
 - Glen D. –OR State Marine Board
 - Ryan –USFS
 - Andrea- OPRD
 - Marci- Willamette Riverkeeper
 - Elaine Stewart- Metro
 - Mitch B.? –City of Portland
- If you would like to join this steering committee please email marci@willametteriverkeeper.org.

WAIN Steering Committee

- We discussed the benefits of creating a subcommittee to help guide the work of the Willamette Aquatic Invasives Network.
- We will ask individuals to commit for one calendar year at a time. The initial term will be from November 2015- November 2016.
- Ideally we would someone who works primarily in the Upper Willamette.

WAIN Steering Committee

- Mark- PSU
- Crystal- Benton SWCD
- Mark A. – City of Keizer
- Jenny – Marion SWCD
- Vern- Western Invasives Network
- Michelle Delepine- West Multnomah SWCD
- Andrea B- OPRD
- If you are interested in joining a steering committee for WAIN please email marci@willametteriverkeeper.org.

Ludwigia Working Group

- Vern posed to the group the idea of forming a *Ludwigia* specific working group.
- He mentioned that Brenda Grewell is working on developing a BMP for *Ludwigia*.
- Several folks advocated that we focus on managing sites holistically, rather than a singular species focus.
- If you are interested in forming a working group to focus on *Ludwigia*, please contact Vern Holm at weeds@cascadepacific.org. He will be happy to help make this happen.

Discussion about WAIN projects for the OSWB

- There is consensus that collaboration and the desire to present a somewhat unified front to the Oregon State Weed Board will be more likely to yield funding success for projects that will focus on AIS in the Willamette.
- We spent a little time talking about projects that folks are thinking about submitting to the OWSB for the 2015 grant deadline on DECEMBER 10, 2015.
- Glenn Miller highly recommends that each group plan on asking for a maximum of \$35,000/ project.
- If you are considering applying for OWSB funds for an AIS project in the Willamette, please email marci@willametteriverkeeper.org so we can coordinate all of our requests so they are all as competitive as possible!

Potential Ripe AIS Projects to be submitted to the OSWB Grant Program in December 2015.

- Wapato Cove in Benton County – by Benton SWCD/ Benton County Cooperative Weed Management Area
- Minto Brown Island Slough System Phase 1= by City of Salem/ Marion SWCD/Willamette Riverkeeper
- Delta Ponds- by City of Eugene
- Long Tom Watershed – by Long Tom Watershed Council
- Mainstem Willamette EDRR Aquatic Invasive Species – by WAIN/ Willamette Riverkeeper/ ODA/ Long Tom Watershed Council + more partners
- Others?

Next steps and final thoughts

- We will try to hold WAIN meeting Quarterly in the Fall, Winter, and Spring seasons. If folks are interested we can also plan a field trip/site visit in the summer.
- We will also strive to plan a few reach specific workshops this coming spring before the field season.
- Consider inviting Brian Bangs to our winter meeting in Jan for an update.
- Continue surveys next year: Conduct more in the upper Willamette Watershed, particularly areas that didn't get surveyed this year. Need to also focus on surveys from American Bottom to Ash Island.
- Glenn Miller will continue to work on a survey of the Lower Columbia with the CWMA. Ludwigia has already been found in the Multnomah Channel
- A list serve will be created for this group to keep in contact and share information

To Do Items:

- Develop BMP's for dealing with honey bee populations during treatment season
- Put all treatment sites onto 1 map.
- Share GIS Layers for each project site. Set up a Dropbox folder for everyone to upload appropriate Shapefiles. We will send out a specific call for this information soon so stay tuned!
- Everyone sign up for the three groups mentioned above if you want to get more involved. Regular updates will be provided from these groups to the broader WAIN community, but these groups will meet more often and get into more details than the larger WAIN group:
 1. WAIN Steering Committee (contact Marci to sign up)
 2. Willamette Strategy Sub Committee (contact Marci to sign up)
 3. Ludwigia working group (contact Vern to sign up)

Upcoming Event

Join Willamette Riverkeeper for a paddle trip to learn more about the impact of aquatic invasives in the Middle Willamette in the reach between Keizer Rapids Park and Wheatland Ferry THIS Saturday, 11/14!!

River Discovery- Saturday, 11/14
Explore the Middle Willamette from Keizer Rapids Park to Wheatland Ferry



Come join Willamette Riverkeeper for our last River Discovery trip of the year! We'll tour a scenic reach of the river downstream of Keizer. Along the way we'll learn more about the impact of aquatic invasive plants and enjoy a riverside walking tour of our on-going floodplain forest restoration project at Willamette Mission State Park.

What: [Keizer Rapids Park](#) to [Wheatland Ferry](#), 8 miles

When: Saturday, 11/14 from 9:00am or 9:30am to 2:00pm (Rain or Shine!)

Details: Let's be honest, it's going to be wet folks, but this is Oregon after all! Embrace it, grab some rain gear, and join us! Riverkeeper canoes are available upon request (you must register with a paddling partner). We will provide a limited shuttle service, otherwise you will need to arrange your own shuttle. If you reserve a seat in our shuttle, meet us at the Wheatland Ferry next to Willamette Mission State Park off of Matheny Rd N at 9:00am. Here you will park, and then hop into our van. If you have a boat that needs to be transported, it will need to be 12 feet or longer to fit on our trailer.



Our group will launch from Keizer Rapids Park at 10:00am (so if you are not using our shuttle

service and are getting dropped off, aim to be at the park at 9:30am). Pack water and a lunch for the river. Bring rain gear, pants, and hat, plus extra layers for warmth, and gloves. Depending on the weather, you may want to keep your feet warm and dry in tall rubber boots, especially when we explore the Willamette Mission restoration project.

To Register: e-mail kate@willametteriverkeeper.org or call her at 503-223-6418.