

PNW GM Working Group Meeting Notes

Thursday Nov 15, 2018, 10am-2:30pm

East Multnomah Soil & Water Conservation District

Attendance:

- In person:
 - Jon Wagner, EMSWCD
 - Karen Peterson, Clark County Noxious Weed
 - Beth Myers-Shenai, ODA
 - Maria Winkler, King County Noxious Weeds
 - Charlie Nappi, PP&R
 - Jeff Lesh, Clackamas SWCD
 - Mitch Bixby, BES
 - Cyndi Soliz, Skamania Noxious Weed Control
 - Nichole Linehan, PP&R
 - Cia Bywater, Clark County Vegetation Management
 - Crystalyn Bush, Columbia SWCD
 - Jeff Duvall, Clark County Weed Management
 - Justin Cooley, Yamhill SWCD
 - Sanoë Keli'inoi, Clark County Vegetation Management
 - Tyler Pedersen, Tualatin SWCD
 - Lindsey Karr, Clackamas SWCD
 - Justin Colell, Clark County Vegetation Management
 - Chris Aldassy, EMSWCD
 - Jeff Merrill, Metro Parks & Nature
 - Sam Leninger, Clackamas SWCD
- By phone:
 - Teddy Orr, Umatilla County Noxious Weed Control Board
 - Kris Schaedel, Hood River SWCD
 - Heather Hendrickson, Hood River SWCD
 - Emily Stevenson, Skamania Noxious Weed

Notes:

- Introductions
 - Hood River SWCD is the weed control agency for their region.
- Background of PNW-GMWG
 - First meeting in 2014, 2018 is our 4th “annual” meeting
 - Prevention
 - BMPs/IPM methodologies
 - Collaboration
 - Mapping
- Roundtable Updates From the Field
 - **WMSWCD** – Majority of 283 sites are experiencing a reduction in % cover, other than a few large sites with historic seedbanks. 88 “patches” had no new garlic mustard. Found a new large site north of Cornelius pass Rd, that expanded to cover over an acre in just a few years according to landowner. Many sites were found early in invasion curve and after 4-5 years of control have been reduced to small fraction. Footprint harder to whittle down, but feel good about identifying and controlling what we think is out there.
 - **EMSWCD** – Corbett containment zone explained. Work in the Gorge, Sandy River, Larch Mtn., plus a little in Hood River County. Still seeing GM at sites that they've visited. Fall

spray work on large sites w/ high % cover. Seen plants flowering in November. Cliffs make control difficult at Latourell Falls, concentrated visitor use due to fire closures. Grass seeding trials w/ blue wildrye have seen a lot of success, especially/even on sites they've had heavy control at.

- **Clark County Vegetation Management** - same footprint, fewer plants. Significant infestation in North Clark County, but was surveyed fairly extensively and appears contained, with control undertaken (initially handpulled but LO ultimately allowed herbicide). Terrain makes treatment difficult. Private properties that they can see show ~90% compliance (doesn't include those they can't see). May conduct streamside surveys. Natural areas – footprint decreased a bit. Handpulled w/ WCC crew. Saw fewer plants during fall treatment this year. Seen a huge amount of reduction in infestation over the years. Salmon Creek drainage, ~50 acres total, <2
- **Clackamas SWCD** – got to most sites 2x, including islands. Some fall spraying combined w/ knotweed work. Urban areas (West Linn, Lake Oswego): extensive/thorough surveys & management, treat 2x/year, handpull and spray (prefer spray). Challenges – permissions, no treatment that can eradicate GM in a reasonable amount of time (i.e. 5 years). Rural – still finding edges of extent. 100s of acres being managed, still need to survey a lot. Some large properties w/ GM have denied survey/control. Treat 2x/year, expensive b/c of large areas. Need to survey from the Willamette River and get landowner permissions on those sites. Rural Oregon City has very big infestation, extent still unknown.
- **Tualatin SWCD** – taking over treatment from CWS for GM, knotweed, hogweed. 4.6 net acres treated. Down by ~90% from 2014. New 8,000 sq ft patch at North Johnson Creek (neighbor to Rob Emanuel! Highly suspicious...). Gales Creek, 16+ stream miles, is largest infestation. Efficacy of treatment varies by site, maybe depending on contractor. Looking at using more handpulling to keep up during wet weather. New site at McPhee Creek.
- **Metro Parks & Nature** (east side of region) – working at 3 natural areas on Beaver Creek, Sandy River area, Johnson Creek near Gresham. Big Rock Island in Willamette Narrows. Sense that populations are shrinking, no new sites. Jeff Merrill has observations on Vastlan.
- **Yamhill SWCD** – NE corner of county and Cozine Creek is where their infestation is. Upstream and downstream extent of infestation not much larger than expected (total of ~ < 0.5 mile), but will survey further. OpenSite has given residual control (label use permits up to water's edge), commonly used in District. Hoping to do fall treatment later this year.
- **Columbia SWCD** – in coordination w/ watershed council, has been treating Scappoose Creek infestation. Got a good contractor for that patch. Reduction upstream, more downstream – causes unkn (funding constraints? Flooding?). May have a new occurrence of GM upstream of furthest known upstream patch. Will prioritize surveying upstream next year. Disturbed areas on forest margins around Fishhawk Lake (tributary

to Nehalem River) – new patches there, applying for grant to treat next year. There is a lot of nearby ODF/Forest land at risk, as well as active logging.

- **Portland Parks & Recreation** – West side natural areas: ~40 parks, try to treat 2x/year. Most of SW is manageable, but at Forest Park don't have time to survey properly (size + terrain) so survey is incomplete and only have time to treat patches they know about. Also difficult to deal with park visitors who have *feelings* about herbicide. "Restore Forest Park" project (to get rid of ivy) is creating bare gaps for GM, shiny geranium to move in.
- **Skamania Noxious Weed Control** – 3 main sites. Handpull in spring, spray in fall. Treated for ~4 years, as well as since 2009 at an HOA site. Seeing lots of tiny flowering plants, individual plants flowering 2x/year.
- **Portland Bureau of Enviro Services** – Mitch knows where ~90% of GM is (Okay, sure). Mostly west side roadsides. Germantown/St Johns Bridge <1 gallon used now. 2018 is 2nd year of using Vastlan. 80% of sites are roadsides. The rest are private property and along creeks. Hoping to start surveying headwaters/uphill extents. "Making progress/holding the line at least". Lack of 2x treatment using Vastlan is making a difference.
- **King County Noxious Weeds** – Weed laws require landowners to allow GM control (get to decide handpull vs. spray). Data not in yet for urban areas, feeling like footprint is about the same. Good relationships w/ property owners allows for herbicide use. Just starting to see a decrease in footprint since a spike in 2014 (steadily increased from 2000-2014). 19.5 net acres in 2017. 550 parcels, with parks being largest contingent. Seeing a decrease in flowering plants, seeing a lot more small, mature plants. "Definitely holding it at bay". Obviously would have been a lot worse had we done nothing. Infestation in Cedar River almost definitely came from their own crews, but now focusing on prevention methods/cleaning.
- **ODA** – Umatilla and Hood River survey and treatment. Fishhawk Lake assistance for Clatsop SWCD and Columbia SWCD. ODF has been on top of satellite pop around Fishhawk Lake. iNaturalist reports helped ID them, but some old iNaturalist reports weren't followed up on from a few years ago. Lots of urban interface weed issues in the Fishhawk Lake area. **State Weed Board Grant Cycle closes Dec 14th, focused on satellite populations and vector control.** Offer to look over those by Nov 26 if you want feedback.
- **Umatilla County** – Infestation goes from I-84 corridor to Umatilla River, follows Umatilla River to Columbia River, probably present on Columbia River banks, definitely in Hermiston. Goal – keep it from heading south to USFS lands. Tribes treat their own property. "Maintaining status quo".
- **Hood River SWCD** – 2 sites they work on (1 large organic orchard on FS border, 1 urban yard). Expanded survey this year, found some new patches in predictable areas (disturbance from moles/squirrels, equipment). 80% decrease in orchard due to their own weed control efforts (mulching and light tilling). Got permission and 3-4 years of

funding to treat forested areas around orchard w/ herbicide. Been working on these sites for 9 & 12 years – a long time! Using Avenza for mapping/surveying/photo points.

- **Spokane County** – have had GM for ~10 years they think, along banks of Spokane River (maybe on City property?). Recently discovered a patch 10 miles away from known patches. Spokane County now knows about us, the GM Working Group! **Add them to the listserv!** They feel it's a losing battle ☹
- **Biocontrol Update**
 - Once release of a biocontrol is approved, field testing takes place locally.
 - **Root crown mining weevil *Ceutorhynchus scrobicollis***
 - Root crown miners are “the ideal biocontrol”
 - This class of agents does the most damage to plants
 - Released in Canada in Aug & Oct 2018
 - 1st biocontrol agent released for mustard family
 - Likely to be approved for field release in 1-3 years. Canada release makes it likely to be approved here given time.
 - **Seed feeding weevil *Ceutorhynchus constrictus***
 - Very cute
 - CABI (international biocontrol research body) is rearing it, in testing stages
 - Does lay eggs on 3 native species (2 of which are in Oregon) but no adults emerged from those
 - 79% of GM seeds were destroyed
 - Likely 3-5 years away from permitting
 - Joel Price, Biocontrol Entomologist at ODA, is an expert! jprice@oda.state.or.us, 503-986-4624
 - Deploying a biocontrol assumes/accepts the ongoing presence of the plant on the landscape
- **Best Management Practices and IPM Matrix Updates**
 - Timing, %, other IPM:
 - Clark County – sprayed in early flowering using Garlon3A, flowering plants would curl and then straighten. If plants have seed pods, they handpull. Prevents herbicide resistance.
 - EMSWCD – increases % over the course of the year, 1.5% in spring, 2% during flowering, 2%+ later in season
 - WMSWCD – treats most sites 1x/ year, rarely treats 2x / year
 - Residual herbicides may be ultimately more efficient/ effective by shortening the lifespan of treatment, lowering number of treatments and total amount of herbicide used.
 - Vastlan
 - Mitch Bixby: Vastlan choline formulation @ 1.5% is slower to see any results (~1 week) than Element/amine formulation @ 2% (~1 hour). Only 60-80% seeds

aren't viable – not enough to make Mitch happy. Likely not a coverage issue. Maybe more volume used with Vastlan than Element.

- Clackamas SWCD: 4-5 weeks after spraying, plants are curling but still green. When sprayed before seed pod development, seed pods develop but majority of seeds don't seem viable. But, any seeds that are viable are going to have herbicide-resistant offspring. 5 weeks later, sprayed rosettes are still green. Possibility that lack of good growing conditions (no rain) contributed to ineffectiveness of Vastlan (requires good growing conditions).
- WMSWCD – Element was super effective in an 11th hour late May treatment with hard seedpods. Seeds developed but didn't look viable. Site went from monoculture to >5% of initial infestation in 4 years, with <10% after first treatment.
- Chemical details: Wilbur-Ellis says you can still get Garlon if you ask for it, but they're not marketing it. TechLine study shows Garlon4 is shown to be more effective (94%) than Vastlan (71%) @ 1.25% for both. Suggestion by a chemical rep to use Garlon4 in winter on rosettes (don't have to worry about volatility, less veg affected nearby, but maybe more runoff issues). Lower signal word for Vastlan makes it worth it for applicators, unless there's a definitive study that says Vastlan is less effective. But, the actual safety of Garlon is supposedly very similar to Vastlan, its just too expensive for Garlon's safety rating to be re-reviewed in the same way that Vastlan was. Anecdotal evidence that Vastlan will eventually work, it just takes WEEKS.
- King County spring treatments on mostly rosettes are 1% Element, 2% Glyphosate, Agridex , works well.
- Possibly more effective to handpull very large plants
- Imazapyr
 - Works well for King County when used on floodplains in midsummer-on (used in conjunction with knotweed work).
 - 1.5 seasons of residual control, but native layer comes back eventually (especially bleeding heart).
 - Broadcast spray has caused damage to already-stressed hardwoods
 - Sandy soil causes higher risk to trees
 - Elderberry not highly affected, salmonberry very susceptible
- Plateau (Imazapic)
 - Umatilla is finding good results, it stunts brush but not permanently
- Surflan experiment
 - Didn't work too well for King County b/c of weather/ regulations
- Gallery75
 - Currently being tested in King County
- Surfactants
 - Agridex is safer for fish than Competitor despite recent Competitor upgrades (compared to Hasten, an older surfactant). May be possible to ask for an "EA"

- Glyphosate discussion
 - Seattle glyphosate ban
 - Seattle has “temporary moratorium” on glyphosate - can’t be used on city property or parks
 - Unknown who/why instigated this
 - Effect on enforcement by Noxious Weed Control Board is still up in the air
 - Seattle and King County are reviewing their IPM policies
 - Noxious weed board was not considered during a recent policy re-write
 - King County Noxious Weeds will continue to use/recommend glyphosate
 - Implications for Portland
 - Currently a moratorium on neonictinoids, but exemption for midge control (Midge control?) in rose garden.
 - Banning glyphosate is a slippery slope
 - Gracefully weather it and see how things go...or should we use this is a chance to engage?
 - One-on-one conversations with the public are usually “successful/ not harmful”, but group meetings are less productive
 - Communication to the public
 - NPIC is a good public resource
 - **NPIC/OSU Extension glyphosate Q & A publication is great**
 - Coordinated communications would be good - Invasives 2.0, OPB special “Silent Invasion” might be good jumping-off point for outreach.
 - Strategies: simultaneous press releases? Prepare messaging ahead of time. Stress consequences of inaction.
 - In the public’s mind, glyphosate = Monsanto, especially because of recent high-profile lawsuit case where some equipment malfunctioned, guy got cancer, won the lawsuit. How to address public comments on this?
 - No new science used in this case
 - Jury on the case was not made up of experts
 - Study on ag workers over 20 years, showed no risks of cancer for them or family members, wasn’t readily available during the trial
 - Bee gut biota study – glyphosate affects bee gut biota
 - Methods of application/mixing doesn’t necessarily apply to how we use glyphosate.
- Regional Maps
 - GM gives us the capability to collaborate through data. Most states have centralized data repositories. Improving these for GM will improve them for all weed species.
 - Oregon
 - Umatilla – first recorded GM in Oregon, 1859
 - 4-county area, expanding east and west, Clatsop/Columbia County.

- Cost: ~\$140/hr., equivalent to cost of 4-person crew in Portland area. Can only handpull where the dog is working, but not a hindrance to treatment in Tualatin's case.
 - Tualatin SWCD is considering using them again, needs to figure out good sites
- Moving forward/Collaborations
 - Disposal
 - Good idea to ensure bags are well sealed and disposed in a way that ensures they aren't diverted to green waste
 - Commercial landfill is capped and not conducive to weeds escaping—on way to landfill is more of a potential concern
 - Arlington, OR- Portland landfill site; Yakima, WA- Clark County landfill site
 - Education & Outreach
 - Montana State IPM Center sells fake silk garlic mustards
 - Michelle has a few of these left for distribution if you need one
 - Factsheets—4-County CWMA has educational GM factsheets. Many extra for those in need. Great for public outreach, but not super detailed IPM info. Use IPM Matrix for detailed IPM strategies for managers. Contact Michelle or Mitch for copies of the factsheets.
 - Will have summary notes/poster for getting the word out about this group to other land managers, etc.
 - Collaborations with OISC/WISC
 - Will continue to stay engaged with state invasive species councils to highlight our work and collaborate on PR opportunities/getting the word out.
 - Prevention
 - East Multnomah SWCD mandated water-powered boot brushes for contractors entering the Gorge, set it up in Rooster Rock SP maintenance yard. Also set one leaving.
 - Getting them installed in contractor trucks is hard. **Jeff Duval simply uses a backpack sprayer filled with water.** Also he has pumps for moving water around in his truck so can use water-powered boot brush on the vehicle.
 - Continue to mandate contractor compliance for clean footwear & equipment.
 - **We are the ones working in these garlic mustard areas, we are the ones responsible for ensuring it doesn't get spread.**
 - Hot tips
 - Shindowa backpack sprayers have really good nozzles, even though they're plastic. Jeff can get great pressure with his equipment – which is almost always greatly improved/modified after being taken out of the box. **Jeff Duval should talk about/demo tools next time.**
 - King County required control – “enforcement” hardly ever necessary, just told people they'd get billed for a contractor if they didn't let King County treat. Absentee

landowners who never replied will have a bill before they sell. Not a big problem for them.

- Goals/ homework
 - **Get someone from each adjacent county to yours to join the GM listserv**

Notes taken by Ari DeMarco, with edits from Michelle Delepine 11-15-2018