2018 Report of the Washington State Noxious Weed Control Board

Covering July 2015 through June 2017

Washington State
Noxious Weed
Control Board

Table of Contents

Mission Statement

To serve as responsible stewards of Washington by aiding in the protection and preservation of the land, water, and resources from the degrading impacts of noxious weeds.

We believe that the prevention of noxious weeds is the best approach and may be achieved through full implementation of the state noxious weed law. To further this approach, we strive for increased public awareness through improved educational efforts.

As the Board, we do not deal directly with control activities; rather, we work to achieve control through local county weed boards, weed districts. For that reason, we seek to improve communication, gain cooperation, and enhance coordination of the collective efforts of noxious weed control.

Finally, we believe that noxious weed control is best carried out by strong, adequately funded programs at the local level. Thus, we strive to build public support for local programs, and to empower those programs to be more successful.

About the cover: *One of the lingering effects of devasting wildfires such as the Carlton Complex has been the emergence of noxious weeds such as diffuse knapweed and Dalmatian toadflax.*

Photo Credits: WSNWCB

Executive Summary

Noxious weeds are non-native, invasive plant species that, when established, can be difficult to control. They threaten Washington's agriculture, natural resources, and the health of humans and animals. Whether introduced deliberately or accidentally released, noxious weeds can invade rangelands, prairies, forests, subalpine habitat, tidelands, and waterways, where they can displace native species and disrupt ecosystems - sometimes to the point where full restoration is not possible. In some cases, they can transform ecological function by altering wildfire cycles and intensity, changing soil nutrient dynamics, or disrupting food webs. These invasive plants also invade agricultural land, impacting crop yield, timber harvest, and livestock rearing. While not all noxious weeds are toxic, some, such as poison hemlock (*Conium maculatum*) are a deadly threat to humans and animals alike. Others toxic noxious weeds affect livestock, whether consumed fresh in pastures and rangeland or dried in hay.

Washington State has some of the strongest laws to limit the economic and ecological impacts of noxious weeds. Chapter 17.10 RCW is the primary noxious weed law, and it is implemented at the state level by the Washington State Noxious Weed Control Board (WSNWCB) and the Washington State Department of Agriculture (WSDA). While all landowners - private and public are responsible for eradicating and controlling specific noxious weeds locally, it is the network of county noxious weed control boards that survey and map, educate landowners and provide technical advice using Integrated Pest Management (IPM) and Best Management Practices (BMP), and, when necessary, conduct enforcement steps to ensure compliance of the law.

The ability of invasive species to disperse and rapidly colonize, limited resources, and lack of awareness about the detrimental impacts of these noxious weeds can make progress difficult. However, the direct and indirect cost of allowing noxious weeds to flourish in agricultural land and natural areas is too high to ignore this problem. Working cooperatively and steadfastly, landowners can pool resources, prioritize species and/or site locations, and reach long-term goals of replacing these invasive, noxious weeds with native plants or desirable crops, forage, or even home landscaping. The WSNWCB, WSDA, and the county weed boards and weed districts strive to assist these efforts whenever possible.

Alison Halpern has been with the WSNWCB since July, 2005, starting off as its Education Specialist before becoming its Executive Secretary in August, 2007.

Kittanya Locken joined the WSNWCB during the summer of 2016 as an Administrative Assistant. However, she was soon promoted to Communications and Outreach Specialist, based on her talents. She stayed on until April 2017.

Section 1

A Primer on Noxious Weeds

and the

Washington State Noxious Weed Control Board

Protecting Washington State agriculture, environment, and economy from the impacts of noxious weeds are integral to the mission of the Washington State Noxious Weed Control Board. Scenic views, family farms, and precious wildlife habitat are all vulnerable to noxious weeds. It takes a coordinated and extensive network of federal, state, local, and private partnerships to control noxious weeds in Washington State, working together to achieve great things to preserve and protect our land, businesses, and natural areas.

Noxious weed impacts

"Noxious weed" is the traditional legal term for invasive plants that are difficult to control and are destructive to Washington's agriculture and natural resources. Noxious weeds include nonnative herbaceous plants, shrubs and trees that are terrestrial or aquatic. Once established, these invasive plants can colonize our cropland, rangeland, forests, parks, wetlands, estuaries, and waterways, causing economic and ecological damage that affects us all in Washington. The various impacts of noxious weeds are almost as numerous as the weeds themselves. Effects of noxious weeds are often separated into economic, environmental, and health categories; however, the three are usually interrelated. While some noxious weed impacts can be measured with a dollar sign, many are too complex to fully calculate, particularly those affecting natural areas.

Russian knapweed (Acroptilon repens) is a Class B noxious weed that is extremely difficult to control once well established. It infests pastures, hayfields, irrigation ditches, and natural areas. It is fatally toxic to horses but not to cattle.

Agriculture is especially vulnerable to the impacts of noxious weeds. From dairy farmers in Whatcom County, to hay producers in the Columbia Basin, to orchardists in the Wenatchee Valley, noxious weeds cost farmers millions of dollars in control efforts and reduced productivity. Noxious weeds infest fields, reducing crop yields and contaminating seed crops. Aquatic noxious weeds clog irrigation canals that farmers in arid areas rely on for water. Unpalatable weeds such as the knapweeds and yellow starthistle outcompete valuable forage species on rangelands, and ranchers must foot the bill for replacement hay for their livestock. Timberland is also susceptible to noxious weed infestations, particularly when aggressive weeds like Scotch broom interfere with the reforestation process.

Noxious weeds also invade natural areas where they outcompete our native plants, including many threatened or endangered species. In addition to reducing biodiversity, they also degrade valuable habitats. Some species such as purple loosestrife and common reed can create monocultures and completely displace valuable wetland habitat. Knotweed species and butterfly bush colonize riverbanks, where they can cause bank erosion, increase sedimentation, displace native willow habitat, and alter the nutrient cycle. Scotch thistle and Himalayan blackberry block wildlife access to water sources. And knapweeds and thistles can eliminate foraging grounds for elk and other wildlife.

Suburban and urban dwellers are not impervious to the impacts of noxious weeds. For example, invasive knotweeds can cause damage to infrastructure by growing through pavement, pipes, and septic tanks. In fact, in 2010 several of the major banks in the United Kingdom began to deny mortgages for properties that have knotweed, due to its known costly impacts on infrastructure that ultimately reduce property values. Several toxic noxious weeds thrive in rural, suburban, and urban areas alike and can pose a serious threat to human health. Giant hogweed can cause painful burning and blistering, and the accidental ingestion of poison hemlock can result in sickness or even death.

Noxious weed laws

Washington has been a national leader in its creation of noxious weed laws and a statewide infrastructure to implement these laws. The primary noxious weed laws are Chapters 17.10 and 17.04 RCW, and their purpose is to limit the economic loss and other negative impacts that noxious weeds cause in agriculture, natural resources, and human health and safety. The noxious weed laws are administered through the Washington State Noxious Weed Control Board (WSNWCB), county noxious weed control boards (NWCBs) and weed districts, and the Washington State Department of Agriculture (WSDA).

Historically, the primary focus of Washington's noxious weed laws was the protection of agriculture. While

many farmers and ranchers cared deeply about the impacts of noxious weeds on wildlife and native ecosystems, it wasn't until the late 1980's that this concern became integral to the work of both state and county weed boards. Since then, concern about ecosystem impacts has continued to grow, while the deep commitment to protect agricultural lands has remained steady.

Washington's weed laws embody an important principle, which is that all landowners – both public and private – share a civic responsibility for controlling noxious weeds on their land, whether it's a small urban lot, a 1000-acre farm, or a state park. Noxious weeds are oblivious to boundaries of land ownership or political jurisdiction, and their numerous direct and indirect impacts affect everybody. One reason for Washington's success is that the noxious weed law recognizes this reality.

The Washington State Noxious Weed Control Board (WSNWCB)

The WSNWCB serves as the state's noxious weed coordination center, and it is administered within WSDA. The primary roles of the WSNWCB are to adopt the annual state noxious weed list and make other changes deemed necessary to WAC 16.750, disseminate noxious weed information, and to coordinate the educational efforts of the county NWCBs and weed districts. The WSNWCB is also a member of the Washington Invasive Species Council (WISC) and keeps the noxious weed control community apprised about current events and pertinent legislative activity. It often testifies before legislative committees and submits comments regarding draft rule-making and policy changes by state and federal agencies. It is the strong cooperation and open communication between the WSNWCB, WSDA, and the county NWCBs and weed districts that maximize noxious weed management and control efforts statewide.

The WSNWCB is comprised of nine voting members and three non-voting members. Membership is designed to represent the interests of the county weed boards, the public, WSDA, county government, and the scientific community. Four board members are members of, and are elected by, county weed boards, and one member is elected to represent weed districts. One board member is an elected member of a County Commission or Council and is appointed by the Washington Association of Councils (WSAC). A total of six board members are appointed by the WSDA Director. Three are voting members of the WSNWCB. One represents WSDA and two represent the public interests of the eastside and westside of the state. And three are non-voting scientific advisers with expertise in weed identification and control, plant ecology, and aquatic invasive species. Its staff consists of an executive secretary and an education specialist with support from an administrative assistant. To learn more about the WSNWCB members, please see pages 24-25.

The Noxious Weed List

The WSNWCB is responsible for creating and updating the state list of noxious weeds that landowners may be required to control. This list is included in WAC 16.750 and determines which plants meet the criteria of a noxious weed, and where in Washington control may be required. The noxious weed list is divided into three categories:

Class A noxious weeds are nonnative, invasive species whose distribution in Washington is very limited. Eradication of these plants by all landowners is mandatory. The goal is to eliminate these populations before

Flowering rush, (Butomus umbellatus), a Class A noxious weed

they gain a strong foothold in the state. There are 36 Class A noxious weeds on the 2017 noxious weed list.

Class B noxious weeds are nonnative, invasive species that are abundant in some areas of the state, but absent or limited in other areas. The statewide goal is to "draw the line" around and contain infested regions, to keep these noxious weeds from spreading into new areas. Class B noxious weeds are designated for control in those areas where they are absent or limited in distribution, or where they pose a specific threat to local agriculture or natural resources. Landowners in these designated areas are required to control and prevent the spread of these noxious weeds. The WSNWCB defines where Class B noxious weeds are designated for control based on the best available distribution information. In those regions where Class B noxious weeds are already widespread, the WSNWCB does not require control, as it might not be economically feasible for landowners. However, county NWCBs have the option of selecting non-designated Class Bs for mandatory control if there is a local concern. Both the WSNWCB and county NWCBs encourage voluntary control and provide information on best management strategies to interested landowners. There are currently 63 Class B noxious weeds on the 2017 weed list.

Gorse, (Ulex europaeus), a Class B noxious weed

Italian arum (Arum italicum), a Class C noxious weed

Class C noxious weeds meet the criteria of a noxious weed but are often so widespread that there is no realistic hope of eradicating them from the state. Other times, noxious weeds are added to the Class C list when the distribution is not fully known at the time of listing. The WSNWCB provides educational information about Class C noxious weeds but does not mandate control. County NWCBs may require landowners to control Class C noxious weeds if they pose a problem to local agriculture, natural areas, human health, or cause economic harm to tourism, recreation, or infrastructure. There are currently 49 Class C noxious weeds on the 2017 list.

Once the WSNWCB has adopted the annual noxious weed list, county NWCBs then adopt their own noxious weed list. By law, they are required to add all Class A noxious weeds and Class B noxious weeds that are designated for control in that county. The county NWCB may then choose to select Class B non-designates and Class C noxious weeds for mandatory control as they deem necessary. It is this flexibility of the state noxious weed list that allows the WSNWCB to prioritize the eradication and control efforts necessary from a statewide perspective while allowing each county NWCB to further customize its weed list to best meet local needs.

Section 2

WSNWCB Accomplishments of 2015-2017

Washington State Noxious Weed Control Board: Strategic plan for FY16-17

Mission Statement: To serve as responsible stewards of Washington by aiding in the protection and preservation of land and resources from the degrading impacts of noxious weeds.

Goals:

To monitor, document, map, and classify noxious weeds in Washington	Provide statewide noxious weed education and increase public awareness about noxious weeds, laws and regulation, and IPM	Promote and support all county noxious weed control boards and weed districts	Maintain successful working relationships with government land management agencies and stakeholder groups.	Maintain a legal and professional Board and staff
Review, analyze, revise, and adopt the state noxious weed list for 2016 and 2017.	Increase traffic flow to updated website equipped with new content including videos.	Work on agency-requested legislation to clarify and improve RCW 17.10.	Add more state, federal, and tribal contacts to noxious weed email distribution list.	Review Code of Ethics
Report on status of Class A noxious weeds.	Bolster social media presence to build public support and highlight accomplishments.	Develop orientation packet for county legislative authorities, legislators, and county weed board members.	Continue working with beekeeper associations to promote planting of forage when controlling noxious weeds.	Improve communication between Board members and county weed boards and districts.
Document economic impacts of noxious weeds through inter-agency meta-analysis report.	Create online resource about IPM tools.	Update Coordinators' Handbook and provide training webinars.	Create state and local level stakeholder contact directory.	Develop annual performance review process of staff
	Continue to provide statewide noxious weed education	Continue to support county weed board and weed district programs.		
	Create story maps highlighting noxious weed control and restoration efforts.			

The WSNWCB accomplished many of its targeted goals for the FY15-17 biennium. Although staff were unable to complete a few of the tasks, they tackled additional projects aligned with the WSNWCB mission statement.

Program Status

The WSNWCB office started the biennium with 2.1 FTEs – a full-time Executive Secretary and Education Specialist and a 0.1 FTE Administrative Assistant. However, staff was eventually reduced to just one FTE in February 2015, as the Education Specialist was living abroad. To help keep up with education and outreach tasks, the WSNWCB contracted a freelance writer with a horticultural and invasive plant background to create two new brochures, six press releases, and an article for the Washington Native Plant Society journal during the spring of 2015. Later that summer, the WSNWCB hired a part-time administrative assistant to digitize and organize hundreds of documents. Because of her prowess at social media and interest in noxious weeds, the WSNWCB changed her position to the part-time Communications and Outreach Specialist, who focused on the content development of the new website, Yard Guard campaign, Facebook, publication design, and email/phone communication with the public through April 2017. The original Education Specialist returned from living abroad in May 2017 and returned to the office later that month. The WSNWCB ended the biennium with 1.9 FTE – a full-time Executive Secretary, a 0.8 FTE Education Specialist, and a 0.1 Administrative Assistant.

The WSNWCB received hundreds of inquiries from the general public, often requesting assistance identifying plants, controlling noxious weeds, or seeking publications. The interest in and demand for the Bee-U-Tify non-invasive, pollinator-friendly seed packets continued through 2016, and then there was a resurgence of interest when the WSNWCB produced Bee-U-Tify seed packets containing primarily native species for eastern and western Washington for spring 2017. Facebook proved to be an effective means for promoting educational material and information about State and county weed board activities.

Noxious Weeds and the Listing Process

Changes to the 2016 and 2017 Noxious Weed Lists

Every year, the WSNWCB updates the state noxious weed list. One of the strengths of Washington's listing process is its inclusiveness – anybody can request to have a new species added to the list, remove or reclassify an existing noxious weed, or change the designation of a Class B noxious weed. The WSNWCB formally solicits changes to the list from January 1 to April 30. The WSNWCB's advisory committee known as the Noxious Weed Committee (NWC) generally begins reviewing these proposed changes in May and continues deliberation through the summer, gathering additional information as needed, such as known distribution in Washington. For proposed new additions, the NWC may have WSNWCB staff produce technical reports known as Written Findings, which contain information about the distribution, biology, ecology, economic and ecological impacts (both detrimental and beneficial), and control of a proposed species. The NWC will make its recommendations in September, at which point the WSNWCB will vote on which proposed changes to move forward to a public hearing in November. After the hearing, the Board members factor in oral and written testimony before voting on changes to the noxious weed list; those changes go into effect January 1 of the following year.

Medusahead (Taeniatherum caput-medusae), a new Class C noxious weed for 2016.

Three new Class C noxious weeds were added to the 2016 list:

- Medusahead (*Taeniatherum caput-medusae*) is an aggressive, nonnative, winter annual grass with long awns that can be somewhat spreading and twisting, and are covered in small barbs. The unpalatable grass invades many ecosystems, including grasslands and sagebrush steppe, where it significantly reduces native plants and valuable forage.
- Ventenata (*Ventenata dubia*) is another weedy, nonnative, invasive, annual grass that has rapidly expanded in perennial grass systems and in disturbed areas and managed areas in the past two decades throughout the Pacific

English hawthorn, (Crataegus monogyna), a new Class C noxious weed for 2016.

Northwest. In Washington, it is most prevalent in the southeastern region. It is a particular problem in pasture, CRP, and hay production systems, where it can significantly reduce hay yields. Incidentally, both of these grass species had been previously added as Class B noxious weeds in 1988 but were removed in 1990, apparently due to difficult identifying them.

• The third Class C noxious weed added to the 2016 list was English hawthorn (*Crataegus monogyna*), a long-lived small tree that has been used in landscaping because of its white, showy flowers, bright red fruit, and sharp spines that made it useful as a hedgerow. It has been escaping cultivation in western Washington, most particularly on San Juan Island, where it is encroaching on agricultural land and in natural areas. It is also capable of hybridizing with the native western hawthorn.

Ravenna grass, *Saccharum ravennae*, was reclassified from a Class A to a Class B for the 2017 noxious weed list. It was designated for control in Cowlitz County, and in eastern Washington except in Benton, Chelan, Franklin, Grant, and Yakima counties.

Under WAC 16-750-003(g), a Class B noxious weed is designated for control by all landowners in areas where seed production can be prevented within a calendar year. Therefore, it is necessary to match designation to actual distribution on the ground to the best of our ability. Periodically, Class B designations need to be adjusted based on new distribution information. In 2017, common bugloss (*Anchusa officinalis*) was undesignated in a portion of the Entiat River Valley in Chelan County where preventing seed production was not practicable due to infestation levels and terrain. In 2017, the meadow hawkweeds (*Hieracium*, subgenus *pilosella*) and meadow knapweed were designated in Pierce County, while myrtle spurge was undesignated there.

It doesn't happen very often, but a species was removed from the noxious weed list. Lepyrodiclis (*Lepyrodiclis holosteoides*), originally added in 1988, was removed from the 2016 noxious weed list, as this weedy species did not appear to pose the same threat to grain and pea fields as it once did.

Finally, the scientific name for spikeweed was updated from *Hemizonia pungens* to *Centromadia pungens* for the 2016 noxious weed list.

Comparative Analytical Tool (CAT)

During the 2009-2011 biennium, the WSNWCB had developed a comparative analytical tool (CAT). Similar to a risk assessment, this score-able evaluation allowed users to compare noxious weed species by categories, such as ecological and economic impacts, invasiveness, management, and current distribution, making it a valuable tool for species prioritization as well as creating a succinct way to list all the noxious weeds and their impacts. The late Dr. Sarah Reichard at the University of Washington had used our CAT as a class assignment for two of her invasive plant policy courses, running 112 noxious weed or unlisted invasive plant species in 2012 and 2014. In 2016, the invasive plant policy instructor had his students run 50 additional noxious weed and invasive plant species . All of the species were run by two or three separate students, giving us the opportunity to evaluate variability in the scores and assess the reliability of the CAT itself. Among all the species run through the CAT thus far, the ones receiving the highest mean scores included:

- Eurasian watermilfoil, *Myriophyllum spicatum* (105.3)
- Himalayan blackberry, *Rubus armeniacus* (101.0)
- Leafy spurge, *Euphorbia esula* (100.0)
- Smooth cordgrass, *Spartina alterniflora* (100.0)
- Japanese knotweed, *Polygonum cuspidatum* (99.0)
- White bryony, *Bryonia alba* (98.3)
- Cheatgrass, *Bromus tectorum* (98.0)

Class A reports
The State Weed board has made it a goal to gather information from county weed boards about the status of Class A noxious weeds at least once per biennium. Surveying the county weed boards help the State Weed Board to evaluate the statewide success of Class A eradication, identify vectors that allow for new introductions of these species, and better understand steps that can be taken to improve outreach and education to the public about the importance of preventing these noxious weeds from gaining a foothold in Washington. These reports when viewed chronologically help us identify successes and failures in eradication.

Written Findings
Whenever the WSNWCB considers adding a new species to the state noxious weed list, it creates a Written Findings on the species - a technical document that reviews available information about that species' taxonomy, native origin, biology, ecology, impacts (both beneficial and detrimental), control options, and distribution in Washington. Such documents were written for each of the three new additions to the noxious weed list.

Education

An informed public is an empowered public, which is why education and outreach is such a high priority for the WSNWCB. More people will voluntarily control noxious weeds on their property and will be alert for new introductions of invasive plants when they understand how devastating noxious weeds can be. The WSNWCB serves as a central hub of information, education, and outreach for county weed boards and weed districts by helping to provide them with the materials they need to educate residents and landowners. The WSNWCB staff also strives to directly educate Washington residents through its own outreach efforts.

Bee-U-Tify seed campaign
In FY15, the WSNWCB launched an outreach campaign to remind the public that pollinator conservation and noxious weed control did not have to be mutually exclusive and to stress the importance of replacing noxious weeds with noninvasive and/or native pollen- and nectar-rich species. A brochure on bee-friendly weed control was created, and the WSNWCB worked with a Washington-based seed business and a branding company to come up with Bee-U-Tify seed packets, which contained a blend of nonnative but non-invasive and native pollinator-friendly annuals and perennials. That first year, over 35K seed packets were distributed throughout Washington to empower landowners to plant forage patches in their yards, gardens, and containers.

The WSNWCB produced eastern WA and western WA seed packets, which primairly contained native perennials and annuals for people to plant in their yards and gardens.

The Bee-U-Tify seed packets were in such high demand that the WSNWCB continued its outreach efforts during the FY15-17 biennium. In FY16, a total of 65K of Bee-U-Tify seed packets were produced and distributed. In FY17, the WSNWCB tried something different and instead of using the ornamental blend

containing nonnative (but non-invasive) and native species, it worked with a commercial native seed company to obtain two blends of pollinator-friendly species that were primarily native to eastern and western Washington. A total of 60K Bee-U-Tify packets were produced and this effort may represent the first time a government program mass-distributed native seed packets free of charge to the public, who was enthusiastic about this new offering and ability to help provide forage for pollinators.

There were several logistical challenges to using the native blends. Although the vast majority of species in the mixes were native to eastern and western Washington, the actual blend of species did not necessarily represent native plant communities, so it was crucial to remind the public that those wildflower blends were intended for managed land such as yards and not for use in natural areas. Moreover, a few of the species were known to be toxic to horses and livestock, so a warning was added to the seed packet's planting instructions, again stressing that the packets were for yards and gardens only. The seeds also were difficult to package in that small amount (1 gram) due to the amount of chaff, wings, hairs, and bristles on these native species. It was also important to remind the public that the majority of these native plants were perennials, meaning that they would not bloom the first year. However, if cared for, these species would provide beautiful flowers and lasting pollinator forage every year once mature. The WSNWCB felt that this was a highly successful campaign to promote the planting of pollinator-friendly species and an appreciation for many native Washington plants. Unfortunately, there was not sufficient funding to produce the native Bee-U-Tify packets in FY18.

Yard Guard outreach campaign

In FY16, the WSNWCB worked with the branding company that had previously developed the slogans and graphics "Weed 'Em Out" and "Weed 'Em and Reap" to develop a new outreach theme. This time, the message targeted to homeowners of rural, suburban, and urban to: 1) increase public understanding of their role and responsibility in noxious weed control; 2) encourage them to be good stewards and neighbors to local farms, natural areas, and other homes by controlling noxious weeds; and 3) provide simple and effective ways for the ordinary citizen to protect their home and community from noxious weeds. The resulting slogan was "Be a yard guard: keep noxious weeds from spreading", and there were two accompanying graphics – one for adults and one for children. The WSNWCB Communications and Outreach Specialist created a series of twenty-five graphics containing photos, facts about noxious weed impacts, and the Yard Guard logo. Each week, one of these graphics was published on Facebook, along with additional information in the post about control and IPM. The Yard Guard graphics were also shared with all county weed boards and weed districts to use for their own outreach programs.

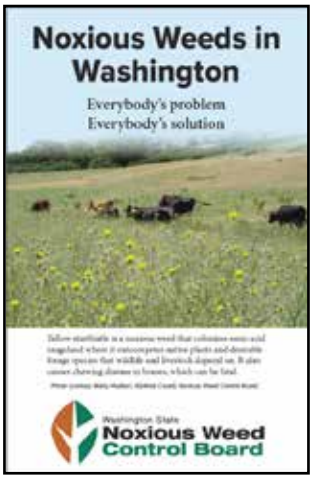
The positive message of the Yard Guard campaign was to take pride in one's own land by choosing to control noxious weeds - especially the widespread ones whose control is not required - so that they didn't spread into neighboring properties.

Facebook

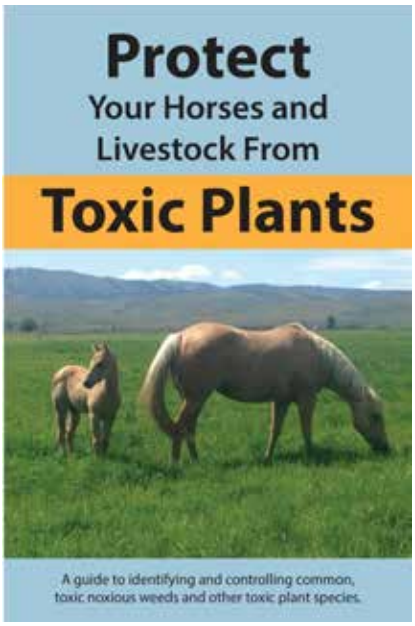
The WSNWCB took to social media to reach out to the public in late February 2016, using its page to highlight specific noxious weed species, county weed board successes and activities, its publications, the noxious weed listing process, and news stories relevant to invasive, noxious weeds. Between its creation and June 30, 2017, The WSNWCB Facebook page attracted 475 followers. Its most popular posts included those featuring toxic noxious weeds and its Bee-U-Tify seed packets. The number of Facebook users reached by a post increased whenever somebody shared it onto their own page; a stronger indicator of interest was the number of times a user clicked on the post or the link provided therein.

Topic	Date	# Facebook users reached	#clicks/actions
Tansy ragwort, *Senecio jacobaea*	May 3, 2016	1,800	449
Poison hemlock, *Conium maculatum*	May 15, 2016	2, 100	196
Hoary alyssum, *Berteroa incana*	July 20, 2016	1,100	162
Tansy ragwort, *Senecio jacobaea*	August 11, 2016	12,000	567
2017 noxious weed list	December 7, 2016	1,400	96
Native blend Bee-U-Tify seed packets	March 28, 2017	21,500	1,500
Poison hemlock, *Conium maculatum*	April 3, 2017	6,300	305
Toxic plants booklet release	June 27, 2017	9,600	612

Publications



Noxious Weeds in Washington: Everybody's problem, everybody's solution. This booklet was printed in FY16 and was an updated version of the 9-panel brochure of the same title that was printed in 2007. This publication was originally based on a brochure from Montana. Covering aspects of the ecological and economic impacts of noxious weeds and the noxious weed laws, the booklet is a handy primer introducing Washington residents to the many ways noxious weeds affect them directly and indirectly, and why controlling these invasive plants is so important.



Protect your horses and livestock from toxic plants: a guide to identifying and controlling common, toxic noxious weeds and other toxic plant species. The idea for this booklet arose after the typical springtime peak in phone calls and emails to the WSNWCB office from horse and livestock owners seeking information about toxic plants, weed-contaminated hay, and noxious weed control strategies in active pastureland. While there were many resources on how to control toxic, noxious weeds, there was a scarcity of guidelines on how specifically to control them in pastures containing susceptible animals. The WSNWCB contracted a pasture management consultant and toxic plants expert, who teamed up with staff to produce a 58-page page booklet that provided information about the identification, symptomology, and control strategies of numerous toxic plants, as well as a section about Integrated Pest Management (IPM) specific to pasture management, and a 2-page spread about inspecting hay for toxic plants. The booklet served as a reference for owners of horses, cattle, llamas and alpacas, goats, sheep, and even chickens and other poultry, since raising backyard

chickens had become so popular. The WSNWCB announced the creation of this new booklet on its Facebook page, and the response was immediate and quite positive. County weed boards and conservation districts requested them by the boxload, and numerous horse and cattle owners requests their own individual copies.

Online publication request form

In mid-June, 2016, the WSNWCB launched an online publication request form for individuals, county weed boards and districts, other government agencies, non-profit groups, businesses, and individuals. Between June 2016 and July 2017, a total of 116 publication requests were made. Booklets including the noxious weed field guides, GardenWise, primer on noxious weeds in Washington, and the toxic plants publication were in substantially higher demand than brochures. Brochures about bee-friendly noxious weed control and noxious weed disposal were among the most sought after. Between June 14, 2016 and June 30, 2017 a total of 116 online requests were made:

- 42 requests by county weed boards or weed districts
- 17 requests by another type of government agency, such as conservation districts
- 25 requests from non-profit organizations, such as gardening clubs, 4-H clubs, homeowners' associations
- 4 requests from local businesses
- 19 from individuals
- 9 from other requesters

The WSNWCB still accepts requests made via email or phone. However, this online format will allow the WSNWCB to keep better track of publication demand, assess popularity of different printing formats (e.g., booklets, brochures, postcards, etc.) and provide an option for the public to request publications anytime of the day or night.

Presentations and Outreach

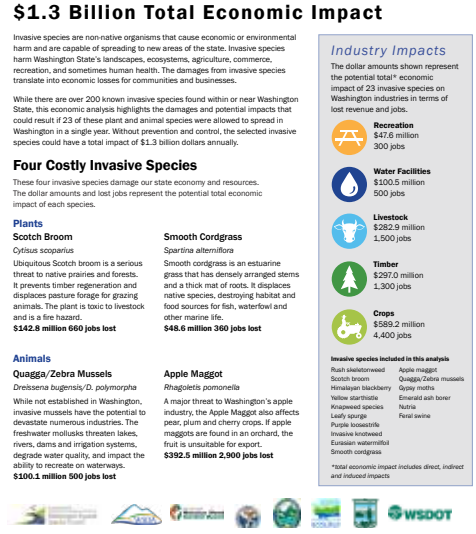
Despite the absence of the Education Specialist for much of the biennium, the WSNWCB staff was still able to give over eighteen presentations throughout Washington and attended three CWMA meetings. Staff also continued the annual tradition of sharing the WSDA/USDA-APHIS booth at the Northwest Flower and Garden Show in 2016 and 2017, where they and county weed board staff provided publications and seed packets and answered questions from attendees. Additionally, the executive secretary served on steering committees for two new symposia: the UW Botanical Symposium and the Scotch Broom Symposium, both of which were well attended.

Jill Silver presents her research at the first Scotch broom symposium, which was organized by WISC, WSDA, WSNWCB, and University of California researchers.

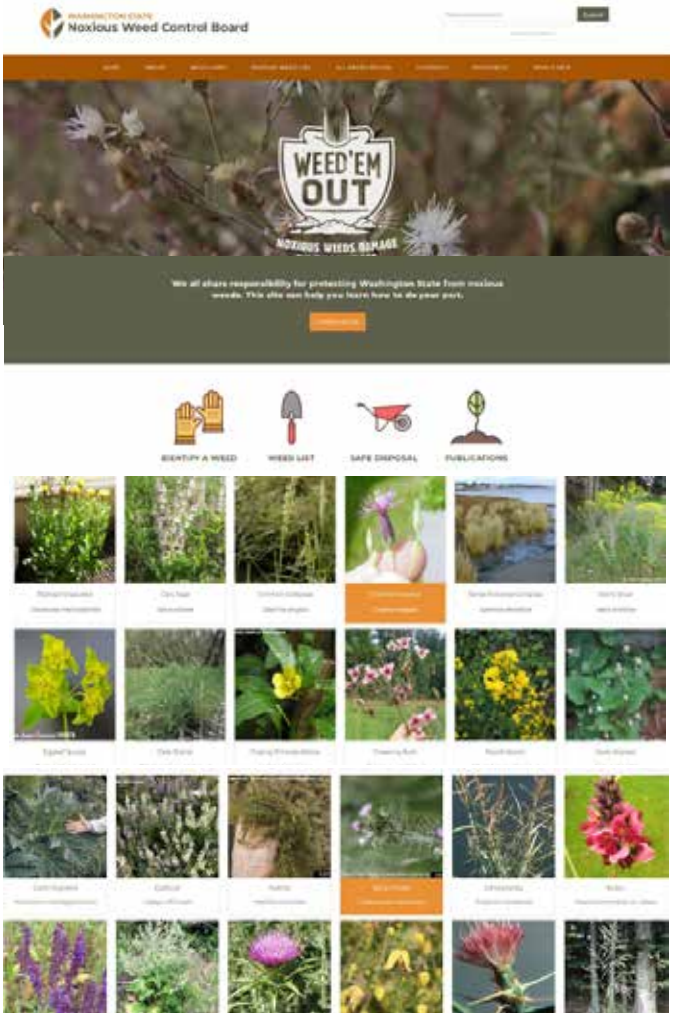
In the news

In 2015, the WSNWCB contracted a freelance writer to produce several press releases that were distributed to daily and weekly newspapers throughout Washington state, including updated releases on poison hemlock and tansy ragwort and new releases about Earth Day and Bee-U-Tify seed packets, Scotch broom, and hoary alyssum. Another press release was written to celebrate a couple's local dedication to noxious weed control in Asotin County. Additionally, WSNWCB staff were interviewed for radio stories related to noxious weeds on KNOA/KUOW, Crosscut/Green Acres Radio, and the Walla Walla Union Bulletin.

Economic impact report



One of the biggest challenges in advocating for noxious weed control is the lack of economic data to describe impacts of these invasive plants. It is inherently understood that noxious weeds have negative economic impacts to agriculture, infrastructure, navigable waterways, property value, and recreational activities; however, it has always been a difficult to find dollar values attributed to these losses. The Oregon Department of Agriculture (ODA) had released an updated version of its valuable report "Economic impact from selected noxious weeds in Oregon" in December, and the WSNWCB, the Washington Invasive Species (WISC) and the Washington Department of Agriculture (WSDA) took the lead on a project with five other state agencies to pool resources to contract a Washington-based company to work with the models used by economic analyst in Oregon and apply them to Washington data to develop estimates of impacts of 23 invasive noxious weeds and animals. The report determined that the collective direct and indirect impacts of these 23 invasive species was an estimated $1.3 billion annually if they were able to spread uncontrolled. For example, the Class B noxious weed Scotch broom had an estimated economic impact of $142.8 million annually if it were to spread into 35% of productive land in certain counties, along with 600 lost jobs and around $36 million in lost wages. [The full report is available here.]



Website

The WSNWCB website is a vital hub for the public to learn about noxious weeds, the noxious weed law, IPM and pollinator-friendly weed control, available publications and how to request them, and the WSNWCB and upcoming meetings. It also provides links and contact information to the county weed boards and weed districts. Because it plays such a key role in disseminating information to a wide audience, it is critical that it be as accessible and navigable as possible. In 2016, the WSNWCB contracted Tiller Creative to rebuild and redesign the website. The previous website was created using the editing software Adobe Dreamweaver, which required training and familiarization with coding. Instead, Tiller developed the new website to utilize a CMS (Content Management System) editor that staff could access online to easily maintain and provide new content to the website in real time. The website was housed on an external server and complied with Web Content Accessibility Guidelines (WCAG-2.0 AA). The new platform was intuitive, easily navigable, and was mobile responsive, meaning that it automatically formatted itself to be viewable on portable devices such as smartphones and tablets. The new website launched in September 2016.

County Weed Board support

One of the most important roles of the WSNWCB is to provide support to the county weed boards and districts. This can sometimes pose a challenge, as every county weed board runs a unique program by design. Differences in available budgets and funding sources, demographics, proportions of land types (*e.g.*, urban, agricultural, and natural areas), noxious weeds present, local priorities, and individual county weed board approaches to assisting landowners comply with the noxious weed laws result in 38 uniquely run programs.

Providing education and outreach at the state level about noxious weeds and helping landowners understand their responsibility to control noxious weeds responsibilities can make the jobs of all the county weed boards and districts a little bit easier. Our publications and outreach items, such as seed packets, magnets, bumper stickers, and litter bags are readily distributed to all county weed boards and districts but are especially helpful to those programs that are run on a limited, general fund-based, budget.

Equally important is the direct support the WSNWCB is able to give to each individual county weed board and district program seeking assistance. Whether it's attending county weed board meetings, showing support for noxious weed assessments, helping to facilitate dialogue between to mitigate conflict between the county weed board and county government or between county weed board and staff, or simply providing a sympathetic ear for venting, the WSNWCB tries its best to help each program as needed. However, it has become apparent that the WSNWCB office is not sufficiently staffed to provide as much coordination and support as needed.

This biennium, the WSNWCB contracted a writer to draft an updated county weed board Coordinator Handbook. This is a valuable resource for all new Coordinators, who often times do not receive specific training for their unique positions. The original Handbook was created in 1998. The new draft is ready for review and refinement, after which point it will be made available to all county weed boards.

WSNWCB staff also redesigned the noxious weed control directory, inviting county weed boards and weed districts to provide pictures of board members and staff. Many programs eagerly provided photos, which brought a level of personalization and sense of community to the directory.

Skamania County NWCB Coordinator Emily Stevenson teaches State Weed Board member Dirk Veleke about the difficulties in finding young garlic mustard plants among native plants in Stevenson, WA. Both the WSNWCB and WSDA have provided pass-through funding to this program to help with efforts to eradicate this Class A noxious weed.

Funding of Class A Eradication Projects and Other Special Projects
During FY16, $10K was provided as pass-through money to county NWCBs and other agencies towards Class A eradication efforts. In FY17, $10,960 was provided towards Class A eradication efforts. Programs that received funding were required to provide a final report as part of the deliverables to track progress of the funded projects.

Although funding amounts are modest, the WSNWCB feels that supporting these eradication projects is critical in making progress in Washington. Moreover, since the WSNWCB does not fund overhead costs and many applicants are able to provide in-kind matching funds (though not required), each dollar the WSNWCB invests yields greater on-the-ground results. Many programs are able to leverage additional funding from local, state, or federal government or through collaborative partners. The eradication projects that the WSNWCB supported during the FY15-17 biennium, are summarized below.

FY16			
Partner	**Eradication Project**	**Area treated**	**Amount**
Chelan County NWCB	wild four-o'clock and Ravenna grass	0.11 solid acres of wild four o'clock treated and 0.04 solid acres of Ravenna grass treated	$2,100
Clark County NWCB	false brome	105 infested acres	$2,500
Columbia County NWCB	Mediterranean sage	25 acres of Mediterranean sage	
Cowlitz County NWCB	false brome	4 acres treated plus 194 linear miles surveyed	$2,500
Franklin County NWCB	Ravenna grass	71% of 82 private landowners eradicated Ravenna plants in their yards with the guidance of the county weed board, with others committing to take action. An additional 20 plants were removed by the Franklin County NWCB.	$2,500
Okanogan County NWCB	spurge flax	over 900 acres surveyed and 15 acres treated	$2,500
Skamania County NWCB	garlic mustard	approximately 47 acres	$2,500

FY17			
Partner	**Eradication Project**	**Area treated**	**Amount**
Skamania County NWCB	garlic mustard	All infestations on 43 gross acres surveyed and treated	$7,500
Spokane County NWCB	garlic mustard	Approximately 60 infested acres	$4,933
Whatcom County NWCB	garlic mustard	2 acres treated	$2,000

Section 3

County Noxious Weed Control Boards

Education is the foremost priority of many county noxious weed boards. Many noxious weeds are dangerously toxic to humans, such as poison hemlock and giant hogweed, and to livestock as well, including yellow starthistle and tansy ragwort. Thus, county weed boards provide a local safety service when they educate about these plants. Moreover, landowners are far more likely to voluntarily control their noxious weeds when they understand why these plants are a problem and the options they have to control them.

Photo Credits: Top: Okanogan County NWCB; Bottom: Skamania County NWCB

Summary

County noxious weed control boards (NWCBs) and weed districts have the daunting task of ensuring that landowners in Washington comply with the noxious weed laws. Each county NWCB is responsible for surveying for noxious weeds, educating landowners on how to control them, and, when necessary, enforcing the laws that require landowners to control or eradicate certain noxious weeds. Some programs are well funded and have permanent full-time and seasonal staff to carry out these duties. Others are more modestly funded and can only afford to employ a part-time coordinator to implement that county's NWCB top priorities to the best of his or her abilities. This disparity in funding, along with local priorities, helps explain why county NWCBs vary widely on how closely they follow Chapter 17.10 RCW. Some counties focus exclusively on education and persuasion and rarely or never actually require landowner compliance with the law. Enforcement procedures can be time-consuming and many programs lack the staff to carry out such actions. Unfortunately, it can impede the progress on noxious weed control and eradication at the local, regional, and state levels, and can cause conflict between neighboring landowners.

Most Coordinators follow these basic steps when a noxious weed whose control or eradication is required, whether or not they enforce the noxious weed laws. Of the 38 county NWCB and weed district Coordinators surveyed:

- 100% (38) verify ownership of the parcel.
- 92.1% (35) attempt to verbally communicate with the landowner (e.g., knocking on the door).
- 92.1% (35) take a less formal, "first contact" approach (e.g., postcard, door hanger, informal letter, inspection notice, educational material).
- 78.9% (30) send a formal, certified-mail notice of violation (NOV) as a first contact or if the landowner has not complied after a less formal approach.
- 47.4% (18) follow up a failure to comply with the NOV by performing the noxious weed control or eradication work (or contracting it out) and then billing the landowner. If the bill is not paid, it becomes a lien on the property that must be settled when the property is sold.
- 26.3% (10) follow up a failure to comply with the NOV by issuing a civil infraction monetary penalty that is handled through the local court system.
- 44.7% (17) send a thank-you note to landowners for controlling the noxious weed infestation.

It cannot be emphasized enough that the majority of contacts made to landowners result in voluntary compliance, and further enforcement actions are usually only a last resort. The Thurston County NWCB analyzed its compliance activities in 2010 and found that while enforcement is a very effective tool, it is not used as frequently as people might think. Although these statistics have been noted before, they bear repeating. Of 2,670 noxious weed infestations where control was required, only 128 formal NOVs were sent to landowners who did not control their noxious weeds after initial communication was made. Only 7 of these NOV cases resulted in full enforcement. In other words, 95% of these landowners receiving NOVs voluntarily controlled their noxious weeds after receiving the formal notice, and *99.75% of noxious weed infestations in Thurston County were voluntarily controlled.*

Currently, 38 of the 39 counties have noxious weed control boards. Douglas County still lacks a NWCB. The WSNWCB believes strongly that every county in Washington should have an activated county noxious weed control board.

Review of Budgetary Situations

County weed boards are financed through one of two sources: a county's general fund or through a moderate special use assessment on properties. The assessments are typically levied on each parcel of land, with an additional few cents per acre for larger landholdings, and exemptions for certain land uses. During the 2015-2017 biennium, twenty-four NWCBs were funded through county assessments; thirteen programs were supported by general funds, and one program was funded solely through grants and contracts. All weed districts

are funded through assessments. In 2014, the average annual budget for a county NWCB in Washington was $196,162. However, 42% of county NWCBs ran their programs with annual budgets of less than $100,000 and 29% of all county NWCBs had an annual budget of less than $50,000. Many boards are heavily reliant on grants and service contracts in order to run their programs.

Two general conclusions can be made about county weed board funding. First, those that rely on county general funding or on grant/service contract money are more vulnerable to reductions than those that are funded through assessment fees. Second, many counties recognized the value of their weed board programs providing necessary services to their residents, and how an increase in investment now can save both economic and ecological resources in the future. A 2017 survey gauged whether county NWCB and weed district Coordinators felt their annual budget was adequate to perform the three main county NWCB duties outlined in Chapter 17.10 RCW (survey for noxious weeds, provide technical assistance, and develop a landowner compliance program).

- Only 7.9% of the 38 Coordinators responding to the survey strongly agreed that their annual budget was sufficient.
- About 36.8% (14) Coordinators agreed their budget was adequate.
- 13% (5) of the Coordinators were neutral.
- 23.7% (9) Coordinators disagreed that their budget was adequate.
- 18.4% (7) Coordinators strongly disagreed that their budget was adequate to perform those three tasks.

Weed Control Through Regional Cooperation and Collaboration

Just as noxious weed infestations can span across political boundaries, so too do weed control efforts. One popular approach to regional weed problems is the formation of Cooperative Weed Management Areas (CWMAs). These are multi-agency and multi-jurisdictional groupings that may include federal, tribal, state and county government agencies, and non-profit citizen organizations. People create CWMAs to improve the effectiveness of weed control efforts in a region or watershed. Sometimes a CWMA is created to address a specific weed or infestation and it grows into a broader and more long-lasting cooperative effort. Some CWMAs are formal organizations with bylaws and memoranda of understandings (MOUs) among members while others are much more informal groupings of people who simply want to share resources, knowledge, and enthusiasm, to improve their effectiveness. The flexibility of the CWMA model allows for customized efforts to make the most of limited resources and this is what makes them so successful.

In 2017, there were 34 known CWMAs in Washington State, some of which had partners in neighboring states and in British Columbia. Some CWMA's have lost momentum due to the reduction in number and amounts of matching grants that are used to fund collaborative projects. Additional sources of funds targeted toward cooperative efforts need to be developed.

Expenditures of State Funds

Everyone in Washington benefits from noxious weed control, whether it's directly, indirectly, or both. Even citizens whose properties are uninfested benefit because effective noxious weed control helps protect their land and the recreational and natural areas they enjoy. Public awareness and education campaigns build diverse support for noxious weed control efforts. Recognizing the importance of noxious weed control, Washington has invested state general funds to support the current state and local noxious weed control programs.

During the first four biennial funding cycles after the creation of Washington's noxious weed program in its current form, the state's investment supported three programs: (1) WSDA (2) the WSNWCB; and (3) the grant program that was administered through the WSNWCB, in which funds were directly invested in noxious weed control projects throughout Washington. Beginning in 1995, the Board shifted the focus of the noxious weed grant program into education and public awareness and special projects of statewide benefit.

State General Fund Support for Noxious Weed Program, 1987-2017				
Biennium	**WSDA**	**Board**	**Grant Program**	**Total**
1987-1989[1]	$181,329	$96,575	$460,698	**$738,602**
1989-1991	$316,715	$121,040	$524,000	**$961,755**
1991-1993	$223,299	$145,090[2]	$506,000	**$874,389[3]**
1993-1995	$110,000	$153,000	$202,000	**$465,000[4]**
1995-1997	$123,746[5]	$198,432	$210,000	**$512,178**
1997-1999	$225,860[5]	$386,277		**$612,137**
1999-2001	$248,450[5]	$395,553		**$644,003**
2001-2003	$253,598[6]	$378,153[7]		**$631,751**
2003-2005	$248,598[8]	$390,706		**$639,304**
2005-2007	$301,144[9]	$512,651[10]		**$813,795**
2007-2009	$275,682[11]	$623,301		**$898,983**
2009-2011	$285,754[12]	$627,419		**$913,173**
2011-2013	$283,856[13]	$453,975		**$737,831**
2013-2015	$371,509[14]	$466,399		**$837,908**
2015-2017	$382,298[15]	$482,069		**$864,367**

[1]WSDA (2 FTE) and Board (1 FTE) staff not hired until 1988.

[2]Clerical support previously paid by a separate account now included in Board budget.

[3]Includes a 1992 supplemental budget reduction of $36,000.

[4]Includes a 1994 supplemental budget reduction of $304,000.

[5]Does not include $800,000 *Spartina* and purple loosestrife programs for which WSDA is lead agency.

[6]Does not include $2,268,532 *Spartina* and purple loosestrife programs for which WSDA is lead agency.

[7]Figure reduced by $21,000 one-time "efficiency savings" and $6,000 carry forward reductions.

[8]Does not include $2,768,500 *Spartina*, purple loosestrife, and invasive knotweed programs for which WSDA is lead agency.

[9]Does not include $2,862,960 *Spartina*, purple loosestrife, and invasive knotweed programs for which WSDA is lead agency.

[10]Includes an annual budget increase of $100,000 effective FY07.

[11]Does not include $3,439,345 for *Spartina*, purple loosestrife, and invasive knotweed programs for which WSDA is lead agency.

[12]Does not include $3,442,621 for *Spartina*, purple loosestrife, and invasive knotweed programs for which WSDA is lead agency.

[13]Does not include $ 2,831,047 for *Spartina*, purple loosestrife, and invasive knotweed programs for which WSDA is lead agency.

[14]Does not include $ 2,867,552 for *Spartina*, purple loosestrife, and invasive knotweed programs for which WSDA is lead agency.

[15]Does not include $ 2,937,623 for *Spartina*, purple loosestrife, and invasive knotweed programs for which WSDA is lead agency.

Recommendations and Next Steps

Because of dedicated and effective noxious weed control, many natural areas are still preserved and protected, and continue to harbor invaluable native plants and wildlife, including salmon. It is because of active noxious weed control that farmers are able to produce more abundant crops and healthier livestock. We would see more degraded habitats, and farmers would spend and work more to produce lesser yields if the noxious weed community had not tirelessly invested in decades of noxious weed control and citizen education and participation.

Noxious weed control is a continuous component of a healthy and productive Washington that saves us all money in the long-term. Our noxious weed laws are considered some of the best in the nation. An adequately funded county weed board can be very effective at helping landowners control their noxious weeds and comply with the law. Unfortunately, the disparity continues between local funding levels of county weed boards, and many lack the resources to perform the duties outlined in Chapter 17.10 RCW. The WSNWCB will continue to work with all county weed board programs and weed districts and provide assistance whenever possible. Publications, funding for Class A eradications and other special projects, and logistical support allow the WSNWCB to give on-the-ground support, particularly to those county programs with smaller operational budgets.

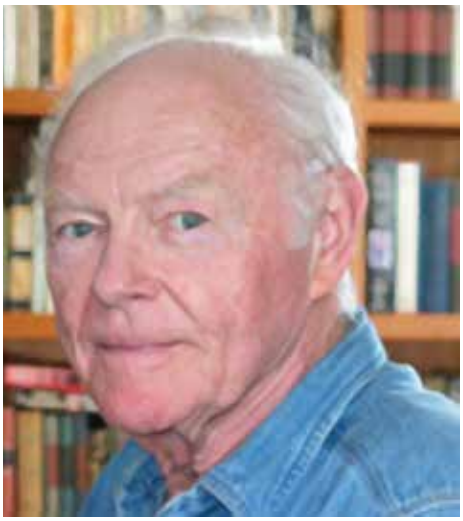
Since many county weed boards and county governments have contacted the WSNWCB seeking clarification about sections of Chapter 17.10 RCW, it seems prudent to review the noxious weed law and move forward with ways to strenghten and improve it. The general dilemma is that county weed boards are programs that are funded through county revenue, be it a noxious weed assessment or money through the general fund. There appears to be a need, in some cases, by county legislative authorities (CLA) for more accountability and structure. However, there also appears to be a need, in some cases, for county weed boards to have the autonomy to ensure that all landowners - including county landowners - comply with the noxious weed law and be treated the same way. In general, county weed boards that are sufficiently funded through an assessment and communicate regularly with the CLA seem to have the least issues. County weed boards that have more modest budgets through general fund have more challenges as far as how they are regarded in the county program hierarchy, and they are often housed within other departments such as public works or within WSU Extension offices. Finding the best approach to updating Chapter 17.10 RCW has been a challenging process; however, as there are many differing views on how the law should be changed - or whether it should be changed at all. While change can be difficult and the unknown disconcerting, there appears to be enough confusion in how county weed boards should operate within counties, along with issues about whether noxious weed assessments can be collected on state-owned land the way Chapter 17.10 RCW is currently written.

The noxious weed community has continued its mission to help protect Washington’s precious resources from the devastating and costly impacts of noxious weeds. Every noxious weed population controlled now will save money in the future, and Washington’s citizens, agriculture, and natural resources all benefit from this long-term perspective.

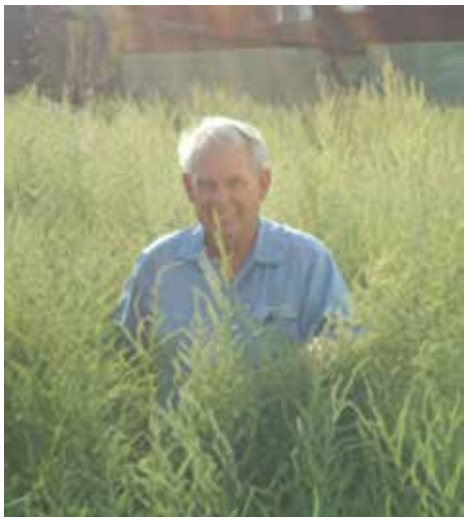
It can be difficult to measure success in the noxious weed world. We often forget about old infestations, and work steadfastly to eliminate current noxious weed problems. Many quiet victories go by unannounced. However, when we see vast and productive agricultural fields or expanses of natural areas untarnished by noxious weeds, we know we are succeeding.

2017 WSNWCB Members

Tony Stadelman was raised on a dairy farm in the Hillsboro Oregon area and then purchased a farm near George, WA and moved there with his family in 1978. In 1995, he was hired to be the Supervisor of Grant County Weed District #3. Tony was elected to the State Noxious Weed Board in 1996 to represent the Weed Districts and is currently the Chair.



Dr. William Agosta is a research scientist who retired in 1998 as Professor and Head of the Laboratory of Organic Chemistry in The Rockefeller University in New York City. He has lived on San Juan Island since retiring. A member of the San Juan County NWCB, Bill represents the northwest tier on the WSNWCB and serves as the Vice-Chair.



Dirk Veleke grew up on a dairy and raspberry farm near Lynden, Washington. He became a Weed District Supervisor in 1989 and later became the first Coordinator for the Kittitas County NWCB. In 2001 Dirk started his own vegetation management company in Chelan County. He has served on the WSNWCB since January 2013 and is currently the Secretary.

Bob Roth has served on the Cowlitz County NWCB since 2004 and is currently the Chair. He has an M.S. in Forest Management from UW and has worked in consulting and industrial forestry for over 30 years. Bob has been with the WSNWCB since March 2012 and represents the southwest tier of Washington.

Jerry Hendrickson grew up on a cattle and wheat ranch in Asotin County in southeastern Washington. He was an educator for over 30 years, teaching in Alaska and then in Olympia. He later moved back to Asotin County and joined the county noxious weed board 23 years ago. Jerry represents the southeast tier.

Carey and her husband are beekeepers who operate a small farm in Pomeroy where they offer commercial pollination and swarm removal services, and they also produce quality, honey-based products. She represents eastside public interest and was appointed in 2015.

Dr. Brad White is the Acting Assistant Director of the Plant Protection Division at the Washington State Department of Agriculture (WSDA) and has represented the WSDA Director on the WSNWCB since 2013. He earned his Ph.D. from the University of Washington in silviculture and forest protection. Brad has worked in regulatory agriculture for over a decade.

Janet Spingath has a degree in Forest Resource Management from the University of Idaho and did her graduate work in Wetlands Ecology. She has since worked as a timber cruiser in Northwest Oregon, taught timber classes at a community college, and has completed a Master Watershed Steward course. She was appointed to the WSNWCB in 2016 and represents westside public interest.

Wes McCart is a Stevens County Commissioner and local farmer with over two decades of experience with water issues at the local, state, national and international level. He also serves on the NACo Western Interstate Region Board of Directors. He represents the Washington State Association of Counties and was appointed in 2016.

Dr. Tim Miller has been working for WSU as an extension weed scientist since 1997. His program includes weed control research in western Washington crops, as well as studying control of nonnative vegetation on agricultural, range, and forest lands. Tim has been a scientific advisor to the WSNWCB for 17 years.

Jenifer Parsons has worked as an aquatic plant specialist for the Washington Department of Ecology since 1994. She monitors aquatic plant populations throughout the state and conducts research on the effectiveness of various aquatic weed control methods. Jenifer has been a scientific advisor to the WSNWCB since 2012.

Rod Gilbert has been a field biologist at Joint Base Lewis-McChord for 16 years where his focus has prairie restoration. His work involves both the protection of threatened and endangered native species and the control of invasive plants and noxious weeds. Rod has been a scientific advisor to the WSWNCB since March 2013.

Farewell and thank-you!

Dr. Sarah Cooke, Ph.D, is a wetland ecologist who joined the WSNWCB in 2005. Her expertise in wetland ecology, restoration, and mitigation was invaluable. She worked to help implement survey standards and helped the WSNWCB develop its ethical guidelines. She served on the WSNWCB for eleven years and was Vice-Chair during her last term.

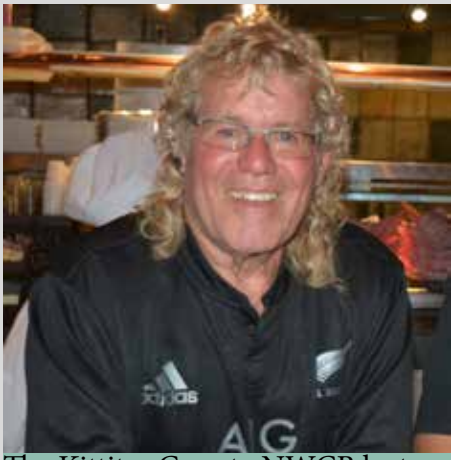
Commissioner Jim DeTro grew up in the Omak area, and received his degree at Eastern Washington State College. He had been in wildland firefighting for over 45 years. He also bought and sold heavy equipment for 30. Jim was the Chair of the Okanogan County Board of Commissioners, and he served on the WSNWCB for four years.

In Memoriam

The WSNWCB and the noxious weed community were shaken by the passings of Weed Warriors who worked alongside and inspired us for many years. They are deeply missed.

Jeanne McNeil represented the Washington Nursery and Landscape Association on the Noxious Weed Committee for many years. She was sharp as a whistle and thoughtful, and her input was deeply appreciated. Jeanne passed away on April 15, 2016.

Dr. Sarah Reichard also served on the Noxious Weed Committee for many years. She was a tireless advocate for the phasing out of invasive, ornamental plants and worked with the horticulural industry on this endeavor. Sarah died unexpectedly on August 28, 2016.



The Kittitas County NWCB lost its lead inspector unexpectedly on February 8, 2017. Mike Scott was a dedicated Weed Warrior, as well as an Olympic Lifter, Bodybuilder and Powerlifter. He was also a really kind person.

Noxious weeds can be difficult to control, and often widespread infestations give the perception that these invasive plants are everywhere. However, it is so crucial for our native ecosystems, such as this western Washington prairie, to continue efforts to eradicate new noxious weeds and control existing infestations. With careful planning and committment, swaths of non-native, invasive weeds can be replaced by the native flora that had existed there beforehand to the benefit of pollinators and other wildlife, as well as us humans.