2016 Report of the Washington State Noxious Weed Control Board

Covering July 2013 through June 2015

Washington State
Noxious Weed
Control Board

Controlling Noxious Weeds in Washington State

Photo Credit: Top Left: Clark County Vegetation Management, Top Right: Skamania County NWCB, Bottom Left: King County NWCB, Bottom Right: Skamania County NWCB

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: *Noxious weeds invade and impact a wide range of habitats in Washington, including saltmarshes, freshwater wetlands, lakes and rivers, to dryland.*

Photo Credits: Top left, bottom left, and bottom right: WSNWCB; top right: Skamania County NWCB.

Executive Summary

During the 2013-2015 biennium, the Washington State Noxious Weed Control Board (WSNWCB) continued its duties to adopt an annual noxious weed list and improve the listing process, provide outreach and education to the general public, and to support the county weed boards and weed districts throughout Washington.

The noxious weed listing process saw the addition of new terrestrial and wetland species as well as the revisiting of the 2013 Class C listing of Japanese eelgrass, which did not change. The WSNWCB continued the process to have both listed and unlisted invasive plants run through its Comparative Analytical Tool (CAT) by UW students to strengthen the scientific process of assessing species and provide a simple way to quantitatively compare impacts between species, which should be helpful in selecting priority noxious weeds.

With the increasing concern over the health and fate of honeybees and other pollinators, the WSNWCB saw an opportunity to help educate the general public about the importance of honeybees and other pollinators while addressing the removal of noxious weeds – many of which provide nectar and pollen collected by honeybees. The resulting Bee-U-tify outreach campaign distributed almost 70,000 non-invasive, pollinator-friendly seed packets to encourage the planting of new forage patches, along with brochures about bee-friendly noxious weed control.

One of the biggest challenges the WSWNCB continued to face this biennium was addressing the disparity between county noxious weed control board programs. Its expected that each county weed board's functionality is a product of its funding and local priorities, which results in a unique program in each county. However, the programs also run the gamut from having full boards with active and heavily engaged members to boards with vacant positions that continue to be difficult to fill or boards with less involved members. To complicate things further, relationships between county government and county weed boards vary as well, and both county weed boards and county governments alike frequently contacted the WSNWCB seeking clarification of roles, authority, and process. It became increasingly clear that the noxious weed law needed to be updated and clarified so that there were clearer boundaries between county weed boards and county government to maximize the ability of county weed boards to assist landowners with noxious weed control compliance while ensuring better accountability, communication, and cooperation with the counties.

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

Wendy DesCamp joined the WSNWCB as Education Specialist in October, 2010 but left in mid-November of 2014 to explore Shenzhen, China while her husband worked on a temporary project for his company.

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.

Photo Credits: Bottom left: Skamania County NWCB: Bottom Right: Okanogan County NWCB

Dalmatian toadflax is a strong competitor for resources, quickly crowding out desirable plants and reducing forage opportunities for livestock and wildlife.

Phoro Credit: Okanogan County NWCB

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.

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.

After the Carlton Complex fires, noxious weeds were among the first to colonize the burned land.

Photo Credit: Okanogan County NWCB

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 education specialist. 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:

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

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 they gain a strong foothold in the state. There are 37 Class A noxious weeds on the 2015 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 62 Class B noxious weeds on the 2015 weed list.

Scotch broom (Cytisus scoparia), a Class B noxious weed

Canada thistle (Cirsium arvense) 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 47 Class C noxious weeds on the 2015 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 2013-2015

Washington State Noxious Weed Control Board: Strategic plan for FY13-15

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	Establish and maintain successful working relationships with federal, tribal, state, county, and district land management agencies	Maintain a legal and professional Board and staff
Review, revise, and adopt the state noxious weed list for 2014 and 2015	Develop mobile version of website for smartphone access	Help recruit new county weed board members to fill existing vacancies	Address terrestrial vectors of noxious weeds	Establish 2-year term limit to Board officer positions
Generate CAT numbers for the Class A and B noxious weeds.	Produce new outreach brochures on selected noxious weeds and increase availability of Spanish publications	Develop primers for county legislative authorities, legislators, and county weed board members about noxious weed impacts, laws, and the beneficial services provided by programs	Contact state and federal agencies about noxious weed control levels throughout the state	Review Code of Ethics
Report on status of Class A noxious weeds	Develop new outreach campaign to promote revegetation with pollinator friendly non-invasive plants			Improve standardization of listing process
Update noxious weed distribution maps (WSDA)		Update Coordinators' Handbook		Conduct annual performance review of staff
	Update written findings for 8 high-priority species	Review Chapter 17.10 RCW and make recommendations		

The WSNWCB accomplished many of its targeted goals for the FY13-15 biennium, though staff were unable to complete a few of the tasks,

Program Status

WSNWCB staff remained at two FTEs at the start of the biennium, with the executive secretary and the education specialist, who share administrative duties. 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. The WSNWCB office received hundreds of inquiries from the general public, often requesting assistance identifying plants, controlling noxious weeds, or seeking publications. In 2015, the demand for Bee-U-Tify seed packets was steady. The office continued to methodically sort through and digitize boxes of older hard-copy files.

Noxious Weeds and the Listing Process

Changes to the 2014 and 2015 Noxious Weed Lists
The WSNWCB added seven new noxious weeds over the 2013-2015 biennium:

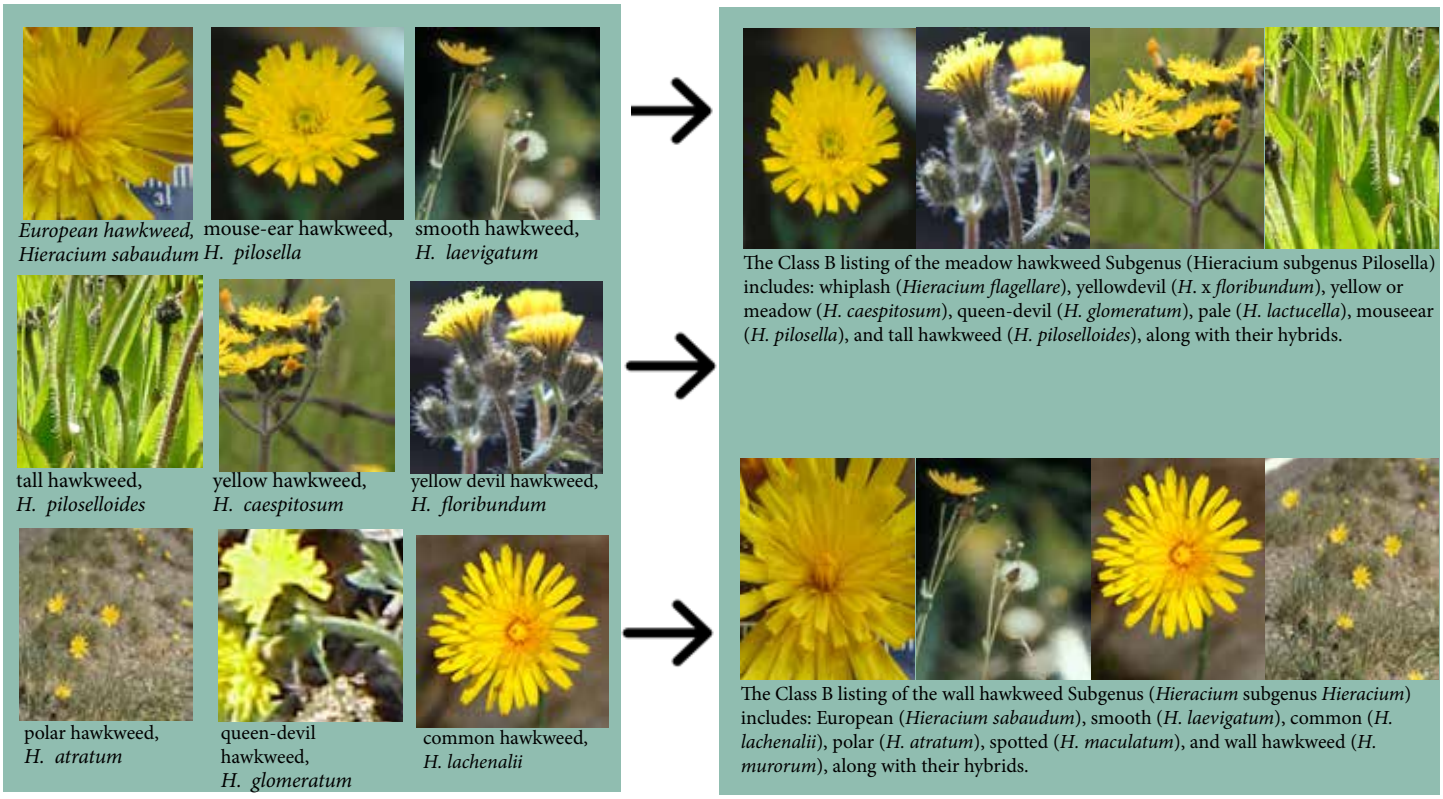
- Lesser celandine, *Ficaria verna*, was added as a Class B noxious weed in 2014. This low-growing plant of moist areas has been used as an ornamental ground cover but has been escaping cultivation, particularly in western Washington. Once established it is very difficult to control.
- Nonnative cattails, *Typha species and hybrids*, were grouped and added as a Class C noxious weed in 2014. These invasive wetland plants can dominate marshes more aggressively and tolerate deeper water and more flooding than our native cattail, *Typha latifolia*.
- Russian olive, *Elaeagnus angustifolia,* was also added as a Class C noxious weed in 2014. This invasive tree with thorny branches is common in eastern Washington, particulalry in riparian habitat.where it displaces many important native species. Its sharp thorns make it a hazard to work around and to control.
- Ravenna grass, *Saccharum ravenna*, was added as a Class A noxious weed in 2015. This large ornamental grass has started to escape cutlivation at an alarming rate in recent years, especially in Benton and Franklin counties.
- Pampas grass, *Cortaderia selloana*, was added as Class C noxious weed in 2015. It is a large, perennial bunch grass with showy plumes that is commonly used in ornamental plantings, particularly in coastal areas where the maritime climate suits it. Although most planted pampas grasses are female and do not produce seed, a large escaped population was discovered in western Washington in 2014.
- Jubata grass, *Cortaderia jubata*, looks similar to pampas grass and is a listed noxious weed in Oregon and California.
- Italian arum, *Arum italicum*, was also added as a Class C noxious weed in 2014. Although this nonnative perennial groundcover has beautiful vareigated leaves and spikes of bright orange-red berries, all parts of the plant are toxic and it is a nightmare to control once escaped.

Ravenna grass (Saccharum ravennae), a new Class A noxious weed for 2015.

During this biennium, the WSNWCB reclassified velvetleaf, *Abuliton theophrasti*, and shiny geranium, *Geranium lucidum*, from Class A to Class B noxious weeds and reclassified buffalobur from a Class A to a Class C noxious weed. It also changed the designations of several Class B noxious weeds.

Improving Process

The WSNWCB continued its efforts to simplify and make the noxious weed list easier to understand. This can be a real problem since our nine yellow-flowered hawkweeds span all three noxious weed classes and have different distributions in Washington, which had the potential to make control requirements confusing. To further complicate matters, some of these yellow-flowered hawkweeds can be hard to identify down to species and tell apart - even by hawkweed specialists. To make it easier for landowners, the WSNWCB lumped the nine listed yellow hawkweed species into two subgenus groups: Meadow (subgenus Pilosella) and Wall (subgenus Hieracium) for the 2014 noxious weed list. The two groups are listed as Class B noxious weeds, are easy to tell apart from each other, and make it easier for landowners to understand control requirements.



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 would allow 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. Dr. Sarah Reichard at the University of Washington had used our CAT as a class asssignment. Not only were 60 of our noxious weeds run through the CAT, but each species was run by three separate students, giving us the opportunity to evaluate variability in the scores. This biennium, Dr. Reichard repeated the assignment, using an additional 52 noxious weed species. Our goal is to have all the remaining noxious weed species run during the next biennium.

Class A reports

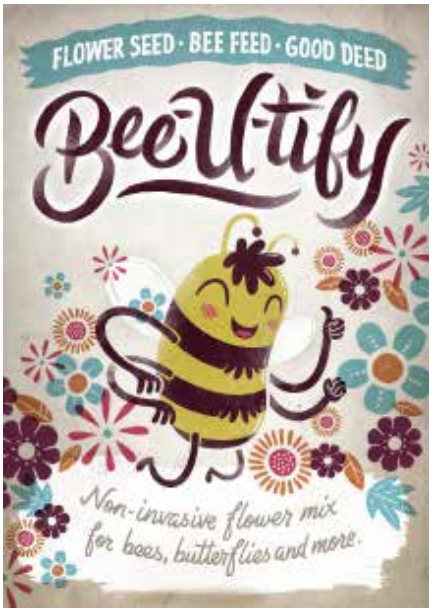
The State Weed board has made it a goal to gather information from county weed boards about the status of Class A noxious weeds at least once per biennium. Surveying the county weed boards help the State Weed Board to evaluate the statewide success of Class A eradication, identify vectors that allow 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 seven new addititions to the noxious weed list, and the Written Findings of seven existing noxious weeds (Japanese eelgrass, blueweed, Scotch broom, common tansy, indigobush, yellow starthistle, and black henbane) were either updateed or rewritten entirely.

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
With increasing concerns about declining honeybee populations and Collany Collapse Disorder (CCD), the WSNWCB decided to implement an outreach campaign to educate the public about the importance of honeybees and other pollinators and how people could control noxious weeds while still helping pollinators. A new brochure called Bees and noxious weed control: finding common ground. was created that explained why that bees were facing many challenges, how to perform bee-sensitive noxious weed control, and how to help bees and other pollinators by replacing noxious weeds with non-invasive or native forage. Along with the brochure, the WSNWCB purchased custom seed packets from Ed Hume Seed Company containing a blend of pollinator-friendly native and nonnative, non-invasive annuals and perennials in January 2015. Featuring an adorable bee designed by Drake Cooper, these seed packets not only complemented our positive message about how the public could help pollinators while controlling noxious weeds, they empowered people by giving them the seeds to plant easy-to-grow forage patches. The seed packets were distributed through the WSNWCB and county weed boards and districts to individuals, gardening groups, schools, and others. They were often given out as a way to thank landowners for controlling the noxious weeds on their property. The seed packets and bee brochures were also a hot commodity at fairs, home and garden shows, expos, and other events where people could learn about noxious weeds and how to help pollinators.



" Just wanted to let you know that we had a really good response to our Bee-U-tify seed packets at the Home Show. As we chatted with folks about noxious weed questions, we asked if they would be willing to plant some bee friendly flowers in their yard. The response was an enthusiastic YES! Often they would take a copy of the Bee brochure as well. People were really appreciative and complimentary of our efforts to encourage the bee population."
- Debbie Ringler, Pierce County Noxious Weed Control Board

Presentations and Outreach

WSNWCB staff gave over twenty-two presentations throughout Washington State including several talks at pesticide recertification classes provided by several county weed boards, CWMAs, growers' associations, forestry meetings, and professional conferences, volunteer groups, field crews, and school students. The WSNWCB Executive Secretary was invited to talk about Washington's noxious weed laws at an invasive aquatic plant workshop in February 2014 in Toronto held by the Ontario Ministry of Natural Resources. The WSNWCB also had a strong presence at the annual Northwest Flower and Garden Show in Seattle and the Washington State Weed Conference in Wenatchee in 2014 and 2015 with exhibitor tables to answer question and provide publications.

Publications

The WSNWCB serves as a central hub of information, education, and outreach for county NWCBs and weed districts, especially those on a limited budget. In fact, almost half of county NWCBs and several weed districts rely on the WSNWCB as their primary source of publications. The remaining county weed boards supplement their own program publications with WSNWCB materials. These publications are widely distributed to county weed boards and districts, conservation districts, teachers, state and county agencies, non-profit organizations, private businesses, gardening and outdoor groups, and directly to the general public. This biennium saw the creation of several new publications, including:

- Bees and noxious weed control: finding common ground, which explains how to conduct bee-friendly noxious weed control and how to provide non-invasive forage for bees and other pollinators.
- Control puncturevine: una maleza nociva en Washington, which is a Spanish translation of our trifold brochure on puncturevine and how to indentify and control this Class B noxious weed.
- Yellow archangel: an aggressive, noxious weed in Washington is a trifold brochure explaining why this viny species is a Class B noxious weed, how to identify it, and different methods to control it.
- Garlic mustard: a high-priority noxious weed in Washington is a trifold brochure that explains why this Class A noxious weed is so problematic, how to recognize it, and different eradication methods.
- Italian arum: a toxic noxious weed in Washington is a trifold brochure that explains how this 2014 Class B noxious weed grows and spreads, and how best to manage this difficult-to-control species.
- Scotch broom: a noxious weed in Washington is a 4-fold brochure that focusing primarily on control and disposal methods of this Class B noxious weed that is so invasive and abundant in western Washington.
- ED/RR postcards in Spanish: The WSNWCB, WSDA, and WSU have worked collaboratively to produce 30 Early Detection/Rapid Response postcards for many of our Class A and Class B noxious weeds. In 2014, three new postcards were created in Spanish for poison hemlock, garlic mustard, and flowering rush.

Due to high demand, the WSNWCB also reprinted some popular, tried-and-true publications:

- The useful pocket field guide Noxious Weeds that Harm Washington State – for western Washington.
- The popular booklet Garden Wise: Non-invasive Plants for Your Garden – for western Washington that included updated information. This was the fifth printing of the western version.
- Brochures detailing identification, impacts, and control measures for tansy ragwort and poison hemlock

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.

The WSNWCB also authored five articles about noxious weeds for the quarterly Washington Native Plant Society Journal Douglasia.

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 magnets, bumper stickers, litter bags, and seed packets, 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. When the active ingredient glyphosate was classified by the WHO's International Association for Research on Cancer (IARC) as a probable human carcinogen in March of 2015, the WSNWCB helped to disseminate existing information about what the classification meant, and about the importance of understanding risk, dose, and facts about glyphosate toxicity.

Equally important is the direct support the WSNWCB is able to give to each indivual 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 avoid 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.

During the FY13-15 biennium, the WSNWCB also focused on that which brings county weed boards together and made it a goal that the county weed boards - regardless of how big or small - all do three things: 1) ensure compliance of the Open Public Meetings Act (OPMA); 2) correctly adopt the annual noxious weed list; and 3) develop a work plan. The WSNWCB helped county weed boards achieve compliance with the first two practices by emailing information on online training resources about the OPMA and detailed instructions on adopting the county noxious weed list. To help with the third objective, the WSNWCB contracted renowned faciliator Ray Ledgerwood to help and inspire county weed board and district coordinators at their annual Washington State Weed Coordinators' Association Conference in May 2015. The half-day workshop was productive and coordinators left with new tools to bring back to their weed boards, along with a collective sense of accomplishment and positive energy.

Funding of Class A Eradication Projects and Other Special Projects
During FY14, $10K was provided as pass-through money to county NWCBs and other agencies towards Class A eradication efforts. In FY15, $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 may appear relatively 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 FY13-15 biennium, are summarized below.

FY14				
Agency	**Eradication Project**	**Area treated**	**Amount**	**In-kind**
Chelan County NWCB	wild four-o'clock	3.35 acres	$2,000	$1,507.32
Clark County NWCB	milk thistle	9 acres (910.01 acres surveyed)	$2,000	$3,085
Cowlitz County NWCB	slenderflower thistle	5 acres	$2,000	$3,346.38
Okanogan County NWCB	wild four o'clock	9.69 acres	$2,000	$2,000
Skamania County NWCB	false brome, garlic mustard, shiny geranium, eggleaf spurge	46.25 acres	$2,000	$7,100

FY15				
Agency	**Eradication Project**	**Area treated**	**Amount**	**In-kind**
Asotin County NWCB	Mediterranean sage	135 acres treated (2,000 acres surveyed)	$2,500	$5,000
Clark County NWCB	false brome	105 acres (1,200 acres surveyed)	$2,460	$3,720
Colville Tribe	wild four o'clock	7 acres (500 acres surveyed) plus educational materials sent to 20,325 households	$1,000	$0
Mason County NWCB.	giant hogweed	2.7 acres	$2,500	$599
Skamania County NWCB	garlic mustard	47 acres plus 349 weed warriors and general public educated at outreach events	$2,500	$2,710

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 left: Adams County NWCB, Top Right: Clark County NWCB, Center Left: Skamania County NWCB, Bottom Left: King County NWCB, Bottom Right: King County NWCB

Summary

County 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. While many only hold part-time hours throughout the year, 55% of counties reduced staff hours or put staff on furlough through the winter for financial reasons, as reported by a 2014 survey. 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.

Lucy Loosestrife travels from her home in Whatcom County to pose with a volunteer in Skamania County.
Photo Credit: Skamania County NWCB

Most counties follow these basic steps when a noxious weed whose control or eradication is required, whether or not they enforce the noxious weed laws. First, the county NWCB verifies the ownership of the land parcel. Next, the landowner receives a written notice, such as a letter, door hanger, survey notice, and educational material about the presence of the noxious weed or weeds growing on his or her property. Many county NWCBs and Weed Districts take the steps to explain: 1) what the noxious weed is; 2) how to identify it; 3) why it poses a problem; and 4) what the control options are. According to a survey conducted in the spring of 2014, every single county NWCB in the state takes these first steps. 52% of county NWCBs offer cost-share programs for one or more noxious weed species. If the landowner fails to comply within the time given, 29 (75%) of the county NWCB will then send a more formal Notice of Violation (NOV). If the landowner does not attempt to contact the county NWCB to arrange a weed control plan, then 27 (70%) county NWCB may choose to follow-up in one of two ways. First, a county NWCB may, following appropriate procedures, come and perform the noxious weed control or eradication work and then bill the landowner. If the bill is not paid, it becomes a lien on the property that must be settled when the property is sold. Alternatively, County NWCBs may issue a civil infraction with a monetary penalty that is handled through the local court system.

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.

Skamania County NWCB staff head out to treat noxious weeds, traveling on foot.

Photo Credit: Skamania County NWCB

Review of Budgetary Situations

County weed boards are financed through one of two sources: a county's general fund or through a small assessment on property taxes. The assessments are typically levied on each parcel of land, with an additional few cents per acres for larger landholdings, and exemptions for certain land uses, such as forestry. During the 2013-2015 biennium, twenty-five NWCBs were funded through county assessments; the remaining thirteen programs were supported by general funds. 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. In 2014, county NWCBs received an average of $98,000 from grants and contracts.

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.

County Noxious Weed Board Membership

One of the biggest challenges of many county noxious weed control boards is filling vacancies in board membership. In fact, 70% of county NWCBs experienced a vacancy in 2014. This is due to several reasons, some of which can be remedied. One such issue is the board member requirements in 17.10 RCW, which were written to ensure that the majority of county weed board members were engaged in agriculture. Moreover, each county must be divided into geographic districts, with each board member represents one district. As agriculture has, unfortunately, dwindled in several counties (particularly in western Washington), it has been more difficult to find prospective board members that meet both criteria: engaged in primary agriculture and living in a specific district. Agricultural lands are not equally distributed throughout counties- rather, they are often concentrated where conditions are most amenable to farming. Many county weed boards - both in eastern and western Washington - have had chronic vacancies due to these criteria.

Kitsap County NWCB trained over 200 weed warriors, including high school students and scout groups. Together, they held an average of 10 vollunteer weed pulls each year.

Photo Credit: Kitsap County NWCB

There may also be a larger problem that is not limited to county weed boards: declining levels of volunteerism over the years. It seems like it is harder and harder for many people to find time to commit to a long-term county weed board position. Many current county weed board members are retired, and so are able to donate their time more easily. Some of these dedicated men and woman have served on their boards for decades. But as they step down, it's been harder to find replacements who meet the criteria and have the time to serve. On the plus side, those who do volunteer usually do so because they deeply care about the fate of agriculture and natural resources and understand the importance of serving on their local county noxious weed control board.

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.

Photo Credit: Skamania County NWCB

In 2015, 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.

Success Stories: The Right Thing to Do

There were many accomplishments in the noxious weed world throughout the biennium, and this report highlights a few success stories at different stages of weed control: early detection/rapid response and the collaborative efforts to control existing and persistent noxious weed infestations. This year, we focus our attention on the extraordinary works of ordinary people who have come together to fight noxious weeds for the sake of our agriculture, our environment, our economy, and, simply, because it's the right thing to do.

Partnerships for Success, Kitsap County

Controlling noxious weeds on roadsides and public utility right-of-ways benefits Washington State not just by improving the aesthetics of our commutes- it also limits a key vector for dispersal of wind-borne seeds. Between 2012-2014, Kitsap County NWCB staff worked alongside Department of Transportations crews to clear tansy ragwort and knapweed species from medians and roadsides. A total of 1,500 sites were treated during this time. As of 2015, the number of individual sites has been reduced to a only 60. Of those sites, the area that required treatment was reduced 84%.


Before treatment (left), this median on Sherman Hill Road was covered in tansy ragwort and other noxious weeds. After treatment by Kitsap County NWCB and DOT, right, no noxious weeds remain.

Photo credit: Kitsap County NWCB

It Takes A Village: Hairy Whitetop, Asotin County

Often, our modern life feels disconnected. We're increasingly comfortable managing most aspects of our lives privately, using automation and other resources without assistance from our fellow citizens. However, the work of noxious weed control, especially in areas with difficult terrain, requires the combined effort of local, state, and federal governments as well as businesses and landowners. In Asotin County, it has been this coordinated teamwork that has led to success. In

Dan and Lynda Kain on their ATVs volunteering to control noxious weeds.

Photo Credit: Asotin County NWC

2005, the county was struggling under 400 infested acres of hairy whitetop, a Class C noxious weed, scattered over 30,000 acres of land. By 2010, Asotin County Noxious Weed Control Board had reduced the total infestation to just 50 acres, a number which they have held for the last five years. Nelle Murray, Coordinator, shares that the only reason they have been successful in controlling such a large and expansive infestation has been through the commitment to control by the eight landowners whose property contain the noxious weed and by a local business, Leading Edge Helicopters. Leading Edge Helicopters provided arial spray services for only the cost of herbicide, charging the board nothing for gas and flight time. Murray shares that, had it not been for this generous service, "... we would never be able to afford to spray 50 acres spread out over 30,000 acres...". We're lucky to have a community in Washington that is so dedicated to preserving our state's natural resources.

Dan and Lynda Kain, Asotin County

It seems, in many ways, that the downturn in vollunteerism in our modern era has prompted a new vigor in those who do give their time and energy to this work. So many of the great folks who come out to volunteer, both in formal events and on their own do so with ambition and passion such that anyone who takes notice finds themselves inspired to do the same at home. Take, for example, the Dan and Lynda Kain. This hard-working retired couple spends three months each year in Asotin County helping to control noxious weeds on their land. They are so dedicated to this pursuit, in fact, that Nelle Murray, Asotin Coordinator, shares that Dan purchased a brand new ATV for Lynda on her birthday last summer for the purpose of spraying noxious weeds!

Protecting through Prevention: Giant Hogweed, Kitsap County

Left: In 2006, over 100 giant ho weed plants were growing on site. Right: The same site in 2014, with no giant hogweed plants and a mix of grasses and other desirable plants.

Photo Credit: Kitsap County NWC

Giant hogweed, a Class A noxious weed, is a poster child for the impacts of noxious weeds in Washington State. Not only does the plant form dense canopies, crowd out native species, and increase soil erosion along streambanks, it's a public health hazard. Poison hemlock's toxic sap can result in severe burns to the affected area when exposed to the sun, causing blistering and painful dermatitis. In 2014, 13 new sites of giant hogweed were identified and quickly treated by the Kitsap County Noxious Weed Control Board. This quick action prevented the spread of millions of seeds and potentially prevented many people from exposure to the toxic plant. Additionally, six sites of ongoing infestation had been reduced from over 300 plants per site to less than a dozen plants. Over a third of all ongoing infestations showed no new growth when revisited.

Garlic Mustard Early Detection/Rapid Response, Snohomish County

When asked about the rapid response that his county made to a discovery of a patch of garlic mustard, a Class A noxious weed, Sonny Gohrman, Snohomish County Coordinator, had sage wisdom to share: *"It's not a big deal*

or a big patch, but it shows how well we all work together because it is just the right thing to do,". Humility aside, this noxious weed is well known for its ability to quickly invade forests and crowd out native plants to a shocking degree. When staff from the King County Noxious Weed Control Board discovered the patch after taking a wrong turn, they called Sonny. Sonny immediately called the Department of Transportation Area 5 staff, who treated the patch the very next day. A year later, it is clear that the disaster was averted as only a few plants remained before Snohomish County NWCB staff treated the site again. It may be just the right thing to do but this is exactly the intention behind Early Detection/Rapid Response outreach: to work together to prevent infestations from taking hold.

Fighting the Biggest Fire in Washington State History, Okanogan County

In July 2014 the Carlton Complex, then considered the biggest fire in Washington State history, seared 256,000 acres in Okanogan County. The areas critically impacted had known infestations of Leafy spurge and Scotch thistle, both of which are mandatory control in Okanogan County. Also known to be well established in the area are Knapweed sp. and Dalmatian toadflax. Fall surveying revealed an explosion of seed for these species, and small sites became much larger. Landowners who had been controlling their noxious weeds were heartbroken to see acreages covered by a blanket of weed rosettes.

With funding provided by the State Legislature, through Okanogan Conservation District, OCNWCB was able to provide some much needed assistance. We developed a list of landowners and began making phone calls. In two and a half months of extreme activity, we were able to assist 550 landowners in their weed control efforts. 2,223 acres were treated with chemical applications and bio control releases. Chemical applications consisted of backpack and minimal broadcast efforts. It was nothing for applicators to put in 20 miles a day with a backpack. 827 hours were spent in chemical treatments, and covered approximately 63,000 acres.

Left and Below: These images show the incredible growth of noxious weeds in areas affected by the Carlton Complex fires. All of these areas were treated and controlled by the OCNWCB.

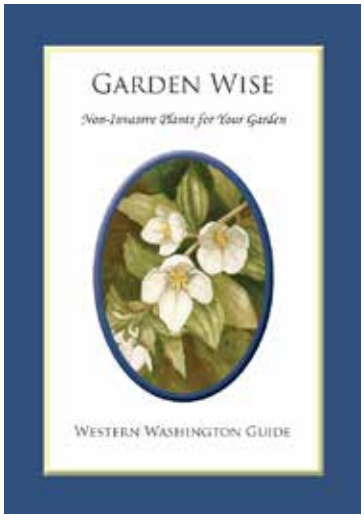
Photo Credit: Okanogan County NWC

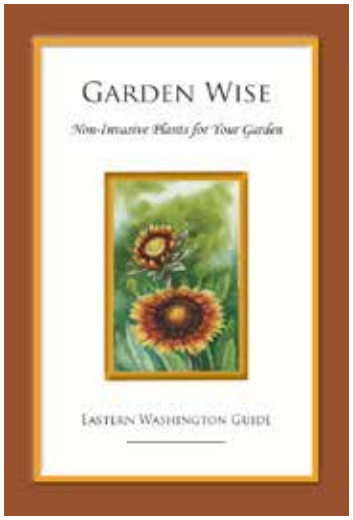
Clark County's NWCB set an excellent example for volunteerism in 2015. As park of a big Earth Day Eco-Fair held by Clark Public Utilities and Clark County, Clark County NWCB recruited over 80 volunteers to join a Pull Together team to control garlic mustard, a toxic, noxious weed, from the Salmon Creek Greenway in Vancouver. The team pulled 6,060 pounds of the Class A noxious weed at the event, drastically improving the health of the Salmon Creek Greenway. Since 2008, the Clark County NWCB has pulled 39,613 pounds (19.31 tons) of garlic mustard in Pull Together events.

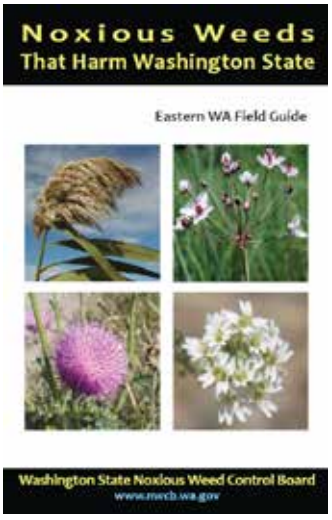
Volunteers at the Clark County Eco-Fair pulled over 6,000 pounds of garlic mustard in 2015.

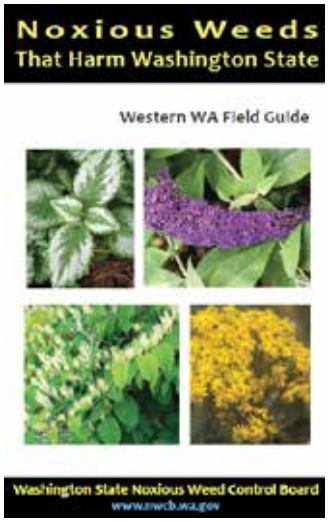
Photo Credit: Clark County NWC

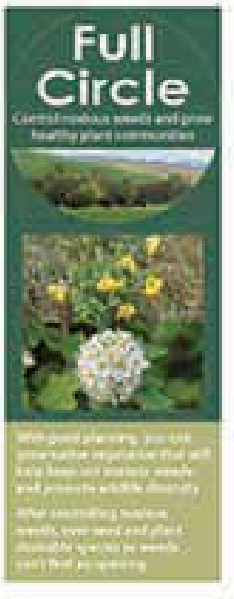
New and Updated Publications for the 2013-2015 Biennium

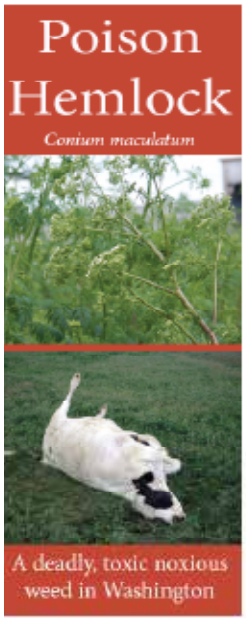












Expenditures of State Funds

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, 1987-2015				
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**

[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.

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. Additionally, the WSNWCB has several other goals for the upcoming 2015-2017 biennium. It will continue with its Bee-U-Tify outreach campaign, continue to educate the general public about Integrated Pest Management (IPM) and all control options available, including herbicides. The issue of weed-contaminated soil, gravel, and other aggregate material continues to be a concern. While the WSNWCB has not partnered with the NAISMA weed-free gravel certfication program, it understands how serious a vector topsoil and gravel are in spreading invasive noxious weed seeds and propagules.

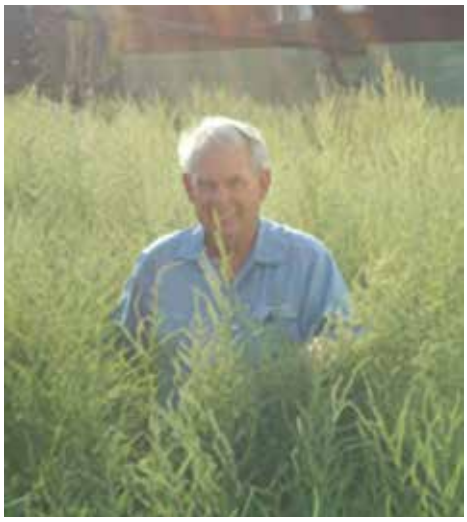
The noxious weed community has continued its mission to help protect Washington’s precious resources from the devastating and costly impacts of noxious weeds. Every noxious weed population controlled now will save money in the future, and Washington’s citizens, agriculture, and natural resources all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

2015 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.

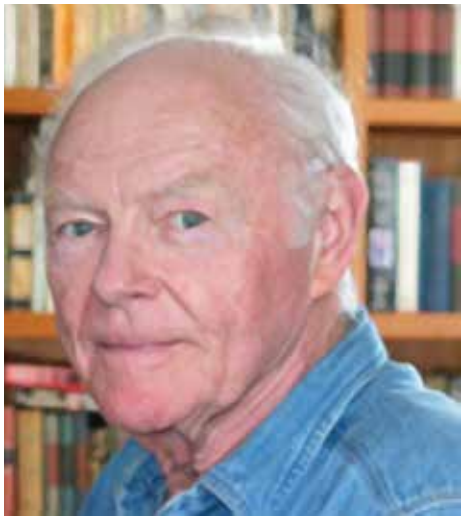
Dr. Sarah Spear Cooke comes to the board with 34 years of experience in botanical, ecological, soils, and geological research. She has 26 years of experience in wetlands research and environmental consulting in Washington. Sarah has represented the public interest of western Washington since 2005 and is currently 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 21 years ago. Jerry represents the southeast tier.



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.

Dr. Brad White is the Acting Assistant Director of the Plant Protection Division at the Washington State Department of Agriculture (WSDA). 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. He was appointed to the WSNWCB in 2013.

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

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 12 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.

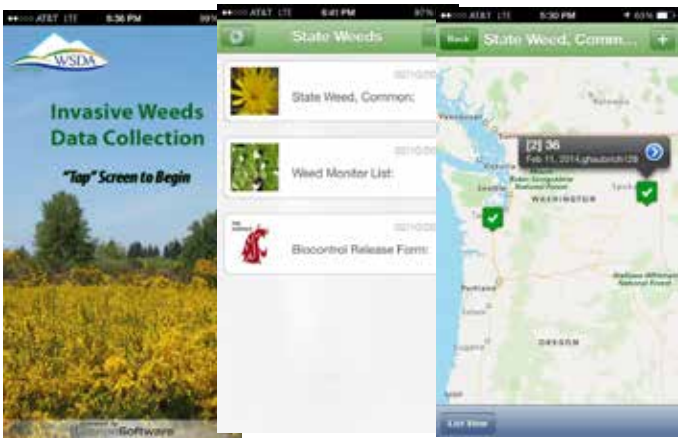
Rod Gilbert has been a field biologist at Joint Base Lewis-McChord for 16 years where his focus has prairie restoration. His work involves both the protection of threatened and endangered native species and the control of invasive plants and noxious weeds. Rod has been a scientific advisor to the WSWNCB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

Farewell and thank-you!

Farewell to Butch Klaveano, who left the WSNWCB in May of 2014. Mr. Klaveano has been actively raising cattle, wheat, barley and irrigated hay for nearly 50 years. He was on the Garfield county weed board for 20 years and served as a county commissioner for 10 years as well. Butch served on the WSNWCB for 13 years and was the previous Chair. Most recently, Mr. Klaveano represented public interests on the eastside.

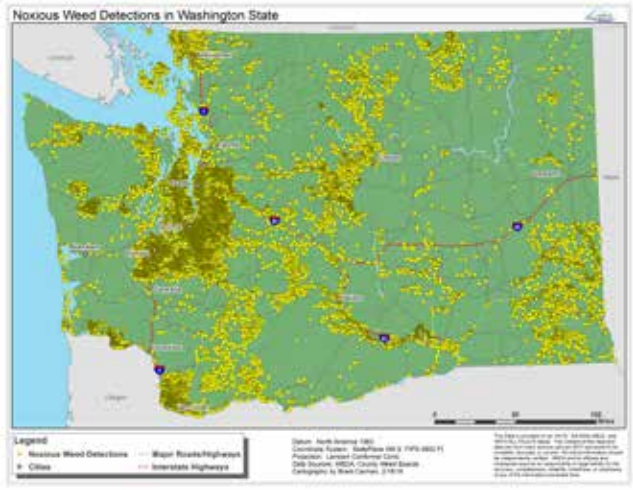
Success Story: iForm

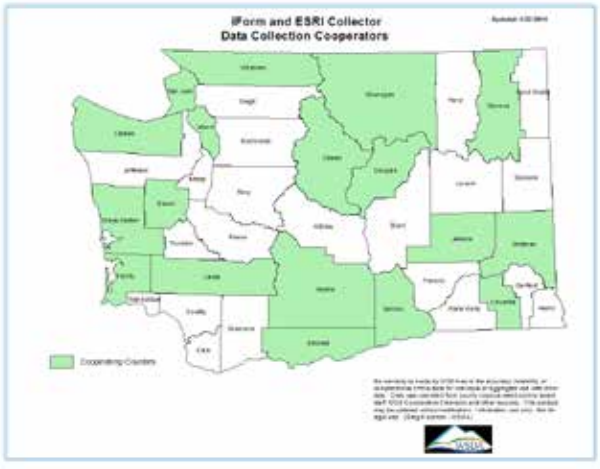
Tracking the distribution and spread of noxious weeds in Washington State is a challenging endeavor. With over 160 data collectors including 14 counties and state agencies working together to contain, control, and eradicate noxious weeds, massive amounts of GPS data points must be accessible for collaboration. Additionally, most noxious weed surveying requires staff and volunteers to be far away from the reach of wifi, making many software programs unusable. This biennium saw a huge rise in popularity and usage of iForm, a powerful system that allows for secure, flexible, offline GPS noxious weed data point entry and tracking from a mobile phone. The system went through extensive field testing in 2013 and launched across Washington with full AGOL integration in 2014, resulting in a 40% reduction in cost and data management time from previous systems. As of 2015, over 200,000 individual records were created and submitted using the program.



Currently, 26 Washington organizations use the program to record and track noxious weeds. In the field, the iForm app allows users to record infestations of noxious weeds quickly and easily, even without wifi. The app is designed with an attrative, easy to use interface accessible from the iPhone, iPad, and iPod.

Photo Credits: Greg Haubrich and Landon Udo, WSDA





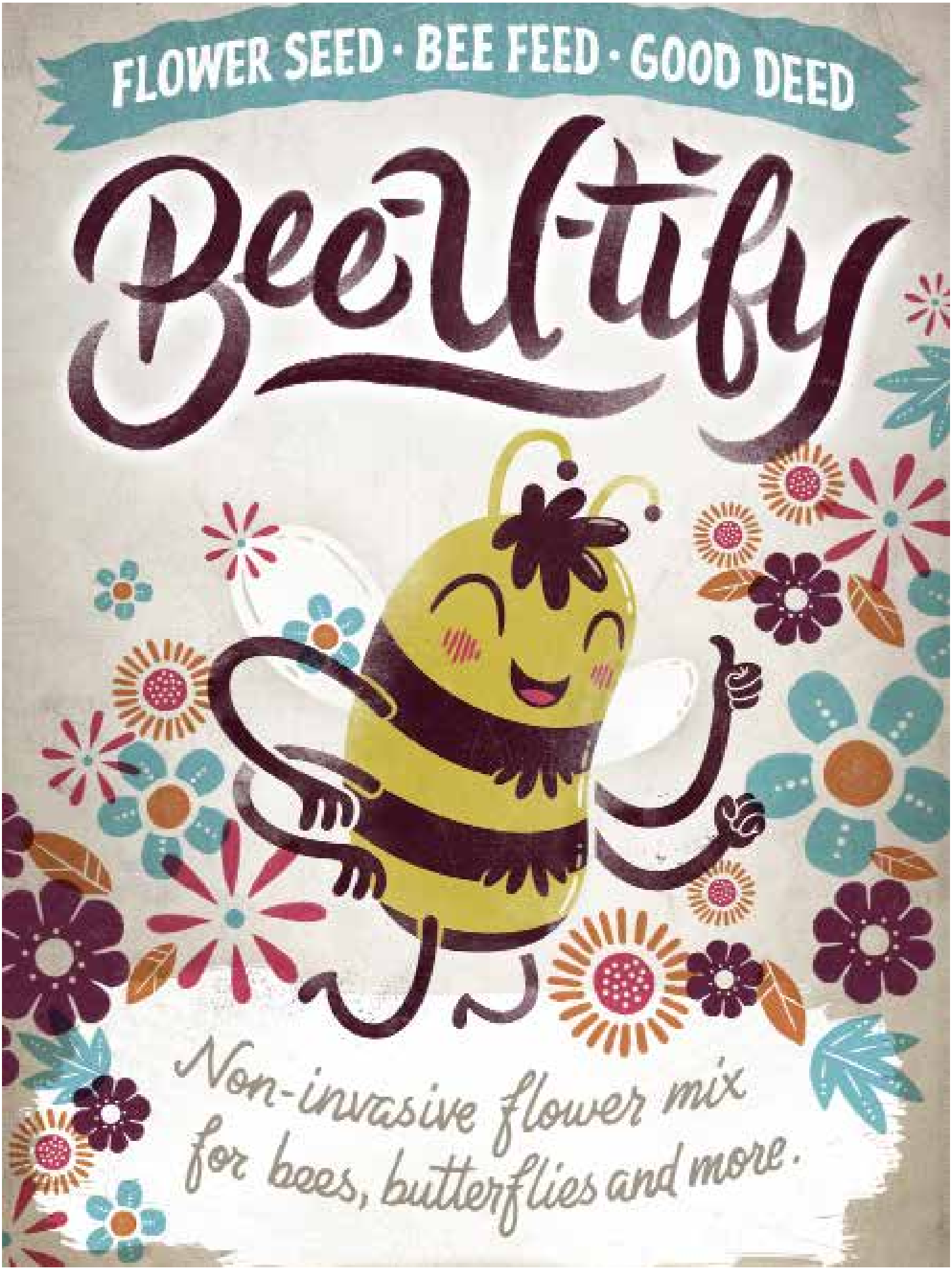
Success Story: King County Reaches Snoqualmie River Milestone

For ten years, the King County Noxious Weed Control Program has been removing invasive knotweed within the floodplain of the Snoqualmie River watershed with the goal of removing all knotweed above Snoqualmie Falls to protect and enhance the salmon bearing waters of the Lower Snoqualmie. By reaching the river confluence this goal is now closer than ever. This year, in partnership with the Snoqualmie Tribe and the Mountains to Sound Greenway Trust, knotweed removal from the confluence to Snoqualmie Falls will begin. The weed control program has also completed preliminary surveys downstream from the confluence to the King County/Snohomish line.

For more information about knotweed in King County please visit: http://www.kingcounty.gov/environment/animalsAndPlants/noxious-weeds/weed-identification/invasive-knotweeds.aspx

Above: Untreated invasive knotweed in Snoqualmie, WA.

Photo Credit: King County NWC


FLOWER SEED · BEE FEED · GOOD DEED
Beeutiful
Non-invasive flower mix
for bees, butterflies and more.