

KITSAP COUNTY

NOXIOUS WEED CONTROL BOARD



INTEGRATED PEST MANAGEMENT

POLICY

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DEFINITIONS

BIOLOGICAL CONTROL. The deliberate use of natural enemies, as approved by the Animal/Plant Health Inspection Service, APHIS, to suppress plant populations. These natural enemies may be insects, mites, fungi or plant pathogens. This usually reduces weeds to ecologically and/or economically unimportant levels.

CHEMICAL CONTROL. The use of herbicides (pesticides used to kill or inhibit plant growth) approved for use in the state of Washington and Kitsap County, and properly applied as per manufacturer instructions.

CONTROL. "Control" of noxious weeds means to prevent all seed production and to prevent the dispersal of all propagative parts capable of forming new plants, per WAC 16-750-003(2)(a).

CRITICAL AREAS. Those areas specified as such in Kitsap County Code 19.150.215.

CULTURAL CONTROL. The use of management tools such as revegetation, restoration, fertilization, implementation of grazing management systems.

ENFORCED CONTROL. Enforcement action taken by the agency requiring landowners to comply with the state weed law.

FOREST DESIGNATIONS. Those forest lands classified as subject to noxious weed control requirements by RCW 17.10.150(c), following the harvesting of trees for timber.

FOREST ROADS. All roadways open to public access, any time during the year, leading from forest lands into agriculture areas. One forest road acre is measured as 8 feet wide on each side of the road surface for .5 mile.

MANUAL/MECHANICAL CONTROL. Physical control of weeds using methods such as hand-pulling, digging, mowing, and tilling.

MONITORING. Gathering and recording site specific information. As a component of IPM, monitoring means regularly inspecting the places where noxious weeds are most likely to appear.

NOXIOUS WEED. Refers to any plant on the latest weed list established by the Washington State Noxious Weed Control Board. Defined in state law as a plant that when established is highly destructive, competitive, or difficult to control by cultural or chemical practices. Any plant on Kitsap County's *Weeds of Concern* list, or any other invasive plant that is not included in the State's official noxious weed list are not considered noxious weeds.

RIGHTS-OF-WAY. All streets, roadways, utility corridors (phone, gas and transmission), railroads, etc., and the attached easements.

BACKGROUND

Washington State law, RCW 17.15.020, requires each county noxious weed control board to implement integrated pest management (IPM) practices. The state defines integrated pest management as “a coordinated decision-making and action process that uses the most appropriate pest control methods and strategy in an environmentally and economically sound manner to meet agency programmatic pest management objectives.” State law further describes the elements of integrated pest management to include:

- (a) Preventing pest problems;
- (b) Monitoring for the presence of pests and pest damage;
- (c) Establishing the density of the pest population, that may be set at zero, that can be tolerated or correlated with a damage level sufficient to warrant treatment of the problem based on health, public safety, economic, or aesthetic thresholds;
- (d) Treating pest problems to reduce populations below those levels established by damage thresholds using strategies that may include biological, cultural, mechanical, and chemical control methods and that must consider human health, ecological impact, feasibility, and cost-effectiveness; and
- (e) Evaluating the effects and efficacy of pest treatments.

GOAL STATEMENT

The Kitsap County Noxious Weed Control Board (the Board) recognizes that noxious weeds pose a threat to the environment, public health, and natural and agricultural resources of Kitsap County, and seeks to coordinate control of noxious weeds and other invasive plant species of concern through the implementation of IPM practices. This policy is designed to guide decision-making and actions for the Board and Program Coordinator to coordinate implementation of the most appropriate pest management methods and strategies in an environmentally and economically sound manner, in compliance with state law.

What this document is:

- A guide for the Kitsap County Noxious Weed Control Board and Program to promote integrated pest management principles in the coordination of noxious weed control throughout Kitsap County.

What this document is not:

- An action plan to control any specific noxious weed on any specific site.
- A comprehensive manual capturing all activities of the Kitsap County Noxious Weed Control Board and Program.

PRIORITIZATION

With limited resources, noxious weed control efforts must be prioritized to maximize effectiveness and ensure compliance with state weed law. Identifying priority species and land types will help the board and coordinator determine where to allocate limited resources.

Priority Species

Species is the first consideration when prioritizing noxious weed control. The State Noxious Weed Control Board establishes and maintains the state weed list, found in [WAC 16-750](#), and prioritizes species by three classes:

Class A – consist of those noxious weeds not native to the state that are of limited distribution or are unrecorded in the state and that pose a serious threat to the state. Eradication is required.

Class B – consist of those noxious weeds not native to the state that are of limited distribution or are unrecorded in a region of the state and that pose a serious threat to that region. Certain Class Bs are designated for control in various regions of Washington by the state board.

Class C – any other nonnative to Washington state noxious weeds.

The state board establishes class As and class Bs designated for control. County noxious weed control boards can select additional class Bs and class Cs and designate them for local control, with parameters such as infestation size or geographic location as determined appropriate by the Board. In addition to the county weed list, our board also maintains a *Weeds of Concern* list, which contains additional invasive species that are not listed by the state as noxious, but that our board finds to be a local threat. Refer to the latest Kitsap County Noxious Weed List for exact species included.

Beyond the class system established by the state, the Kitsap County Noxious Weed Control Board should identify annually a subset of species on which to focus control and outreach efforts, and this subset shall be known as our Priority Species. Consideration for selection as a Priority Species should include, but not be limited to, infestations that:

- Pose a hazard to human or livestock health, i.e. toxic species.
- Are of limited distribution in Kitsap County; high chance of eradication if addressed.
- Are located in priority land types, such as sensitive watersheds.

Land Types and Areas:

Once priority species are identified, the priority of the land type should be considered. Certain land types may justify higher prioritization by the Board. These lands include but are not limited to:

- high-traffic areas where weeds are likely to spread (roads, highways, rights-of-way, trailheads),

- natural resource or agricultural production lands,
- priority conservation areas (wetlands, streams, critical aquifer recharge areas, fish and wildlife habitat, shorelines, nature preserves),
- areas of outdoor recreation (parks, boat launches, trails),
- areas where public health may be threatened (high foot traffic pathways, trails, parks).

As mentioned above, land prioritization can be incorporated when the Board selects species for local control, by designating control in a certain geographic area for example.

Kitsap County is currently developing a Kitsap Natural Resource Asset Management Plan (KNRAMP) to assist local governments with fiscal and management decisions related to natural resources. The Board can use this tool and others like it to inform decisions on where to prioritize control. Any established priority land types or geographic areas should be detailed along with target species in the annually adopted county weed list.

COORDINATION

Under state law, the duty to control the spread of noxious weeds lies with the “Owner” (i.e. the landowner), defined as the person in actual control of property.¹ Kitsap County’s Noxious Weed Program currently operates without a crew to conduct treatment and focuses instead on outreach and coordination with landowners to support effective control of noxious weeds across the county and to help maintain landowner compliance with state noxious weed law. Most landowners fall under one of two categories: individual private landowners, and public landowning agencies.

Public Landowning Agencies

This group includes cities, state and federal agencies, tribes, and other public landowners that operate within Kitsap County, as well as the county itself. RCWs 17.10.145 and 17.10.201 provide some guidance on coordination with state agencies, and federal and tribal land managing agencies respectively.² The Kitsap County Noxious Weed Control Program should coordinate with public agencies, including county departments, on noxious weed control through the following actions:

I. ESTABLISH CONTACT

- a. Establish and maintain relationship with land manager or person(s) responsible for noxious weed control at each organization or county department.

II. IPM ASSISTANCE

- a. Offer assistance in developing a jurisdiction-specific IPM plan, following the general guidance and IPM principles provided in this policy.

¹ See RCW 17.10.010(9).

² See RCW 17.10.201 and RCW 17.10.145.

III. MEET REGULARLY

- a. At least semi-annually, to share information, review efforts, discuss priorities and opportunities for improvement or collaboration, and update IPM plan if needed.

IV. WEED REPORTING PROCESS

- a. Identify or establish a process to report noxious weeds identified on public land to the appropriate land manager.

Private Landowners

A primary duty of the board and program is to offer technical assistance and education on noxious weed control to landowners. Coordination with private landowners typically occurs when a landowner reaches out to the program for assistance identifying or controlling a noxious weed on their property, or when someone reports the presence of a noxious weed on another property. Currently, reports are made through email, phone, and Kitsap County's SeeClickFix system.

The Kitsap County Noxious Weed Control Program should coordinate with private landowners on noxious weed control though the following actions:

I. RESPOND TO REQUESTS FOR GENERAL INFORMATION/RESOURCES

- a. Emphasize IPM practices in response to requests for general information.
- b. Prioritize responses to landowners who are reporting listed noxious weeds and respond to inquiries about non-noxious weeds as resources allow. Refer non-noxious weed inquiries to the WSU Master Gardeners or other appropriate agencies, if the coordinator cannot directly respond in a timely manner.
- c. Provide educational materials, recommendations, referrals to other agencies, or other resources as appropriate.

II. SPECIMEN IDENTIFICATION

- a. Review inquiries and requests for noxious weed identification.
- b. If the plant(s) in question are identifiable through description or photos, respond with suspected identification in a timely manner.
- c. Coordinate with landowner to schedule a site visit, if needed. Conduct site visit, and with the landowner's permission, take photos or samples of the species.
- d. If the species cannot be identified, collaborate with the Kitsap County Washington State University (WSU) Extension for assistance.
- e. If a noxious weed is discovered to be new to Kitsap County, confer with Kitsap County WSU Extension for verification.
- f. Report any new species to the state board once verified.

III. RESPOND TO NOXIOUS WEED REPORTS

- a. Prioritize reports by Class and local priorities established by the board.
- b. Inspect the reported area to verify presence of the suspected weed. Map infestation in a central database, if possible.

- c. When report is verified, contact attempts are required. Advise the landowner of the problems related to the noxious weed. Ask for compliance.
- d. When possible, notify the person making the complaint as to whether noxious weeds were present. Tell them what follow-up action can/will be taken.

IV. SITE INSPECTIONS

- a. Always attempt to obtain landowner or occupant permission prior to inspecting the property. If permission cannot be obtained, entry may be obtained in accordance with RCW 17.10.160.
- b. Record details of the infestation, including but not limited to:
 - i. Location, class, growth stage, and size/severity
 - ii. Relevant land information (critical areas, habitat types and land uses)
 - iii. Visible control efforts

V. RECOMMENDATIONS/ADVICE

- a. If assisting landowner in developing a site-specific IPM plan, follow the general guidance and IPM principles provided in this policy.
- b. IPM advice shall be written to provide landowners with various options, combining methods and tactics specific to their situation and include:
 - i. Information derived from publications
 - ii. Copies of publications when possible
 - iii. Recognition of critical areas or priority land types specific to that site
 - iv. Whether or not an herbicide is typically used in control
- c. Recommendations for the use of herbicides shall follow strict adherence to manufacturer and agency guidelines.
 - i. Although some publications recommend using herbicides, such use may or may not be appropriate.
 - ii. If herbicide use is found to be necessary for control, refer landowner to professional applicator and provide rates/precaution sheets.
 - iii. If herbicide use is not appropriate, specifically state that it should not be used.

VI. ADDITIONAL ASSISTANCE

- a. If there is a significant inability (through financial hardship or physical disability) for the landowners to control weeds, after consultation and approval by the coordinator, assistance may be offered as follows: **Landowner assistance program is currently being explored. Update this section with details as necessary.**

VII. SPECIAL AQUATIC PLANT SPECIES.

- a. Aquatic species such as Eurasian watermilfoil (*Myriophyllum spicatum*), parrotfeather (*Myriophyllum aquaticum*), purple loosestrife (*Lythrum salicaria*) may be found growing in Kitsap County. Because of their growth patterns and habitat, it may be difficult, if not impossible, to determine ownership of the infestations. For this reason, standard procedures to enforce RCW 17.10, such as those included in the Enforcement Policy, may not apply. A combination of

procedures or approaches may be necessary. This board may work cooperatively and provide support to outside agencies to prevent and control aquatic weed infestations as appropriate.

PREVENTION

Prevention is key, as once an infestation is established, it typically requires more resources to achieve control. Prevention strategies should be considered in the early stages of IPM planning with landowners and landowning organizations.

Prevention strategies include:

I. EARLY DETECTION SURVEYS

- a. Conduct regular early detection surveys for target species at the start of and throughout the growing season
- b. Conduct surveys where infestations are likely to occur

II. RAPID RESPONSE

- a. Encourage rapid response with treatment on priority lands or when target species are identified. Elevate action and communicate to land managers quickly on early infestations of target species.
- b. Develop incentive programs for landowners to control weeds quickly upon identification.

III. LAND MANAGEMENT STRATEGIES

- a. Plant competitive native species on bare or recently controlled sites.
- b. Ensure the use of soil, gravel, or hay that is uncontaminated with noxious weeds.
- c. Retain any contaminated plant material and/or soil on site.
- d. Use a seed mix for revegetation work that includes a fast, early growing species to provide dense vegetation on disturbed sites.
- e. Use Best Pasture Management Practices, such as proper stocking rates, rotational grazing, etc.
- f. Maintain as much ground cover as possible and limit the amount of soil disturbance to meet regeneration needs.

IV. PREVENTING CONTAMINATION

- a. Regularly check and clean tools, equipment, vehicles, and clothing for plant fragments or seeds, especially following treatment and when moving from site to site.
- b. Take care to bag or cover any noxious weeds being removed from a site for disposal.
- c. All weed loads needing to go to the landfill should be bagged or covered.
- d. Yard waste composting is encouraged when the weed species can be safely composted.

V. EDUCATION/OUTREACH

- a. Incorporate target species into presentations and outreach activities to increase awareness.
- b. Highlight seasonal timing of target species emergence and encourage reporting of any new infestations.
- c. Refer to the program's long-term Education and Outreach Plan for details on education and outreach priorities and methods.

MONITORING

IPM practices include regular monitoring for the presence of and damage caused by noxious weeds. Kitsap County's Noxious Weed Control Program alone cannot monitor the entire county for emerging noxious weeds, so an informed and empowered community is imperative. The program relies on individual landowners and community members to identify and report noxious weed infestations across the county. Public agencies should establish monitoring procedures to regularly check sites with known or likely infestations. Sites should be monitored by landowners for priority species on a regular basis.

Monitoring strategies:

I. MONITORING CONTROL OF KNOWN INFESTATIONS

- a. Follow up with private and public landowners with known infestations on a regular basis to track the progress of their control efforts.
- b. Inspect properties with known infestations on a routine schedule, prioritizing infestations of target species and priority land types.
- c. Record status of infestation, noting size, spread or decline, and site conditions.
- d. As resources allow, establish survey routes, in which staff actively search for noxious weeds along:
 - i. State highways, county roads, and city streets;
 - ii. Open forest roads.
 - iii. Open private roads, and utility rights-of-way.
 - iv. Pastures, fields, meadows visible from the roadway.
 - v. Parks and other open areas and public lands.

II. MAPPING

- a. Using GIS software, map all known invasive species infestations in Kitsap County, allowing for long-term monitoring. Utilize Kitsap Natural Resource Asset Management system mapping to visually display priority watersheds and management units.

THRESHOLDS

Certain thresholds, such as density of weeds on a site or in a geographic area, are established to determine when noxious weed control action(s) should be taken. Health, public safety, economic impact, or aesthetics are all valid considerations when establishing thresholds.

Density Thresholds (Population level) – The number of plants present on a site or within a geographic area that should trigger control actions. For example, class A weeds should have a density threshold of one plant, where action is taken upon the discovery of a single plant.

Damage Thresholds (Injury level) – An amount of damage, or risk of damage that has been or could be caused by a noxious weed infestation. In addition to physical damage caused by weeds, risk of damage can also include threats to public safety, to natural, agricultural, or recreational resources, or potential for harm to come to humans, pets, or livestock.

Thresholds may be established on a site-by-site basis, or across an entire jurisdiction. The Board should set thresholds for action associated with established target species and priority land types.

TREATMENT

Integrated pest management is most effective when a combination of treatment methods are employed. Treatment should be initiated when the density or damage threshold for a species or land type is reached and should continue until the targeted weed population or damage level falls below that threshold. Treatment can also be preventative, such as establishment of native or desired plants to make conditions less favorable for noxious weeds. The selected treatment should consider human health, ecological impact, feasibility, and cost-effectiveness. The most common control options include mechanical, cultural, biological, and chemical methods detailed below:

I. MECHANICAL

- a. Hand-pulling, digging, mowing, tilling, or any other physical control or removal.
- b. Recommended for small infestations, or when other methods cannot reasonably be used.
- c. Care should be taken to minimize soil disturbance, as this may encourage noxious weed seed germination.
- d. Mowing or tilling are often short-term control methods, and should be combined with other mechanical, cultural, biological, or chemical treatments to achieve long-term control.

II. CULTURAL

- a. Seeding and planting desirable species, improving soil conditions, managing water and light availability, tarping and mulching, or any other control methods that make site conditions less favorable for noxious weeds and better for desired plants.
- b. Controlled burns can be effective against some weed species, although regrowth may need to be burned again. Recommend checking for state and local restrictions, burn bans, or permit requirements before burning.

III. BIOLOGICAL

- a. Biocontrol agents, such as approved, host-specific insects, can effectively target a specific noxious weed and will not feed on native species or commercial crops.
- b. Grazing animals, such as goats, sheep, or other livestock, control some noxious weeds but may also eat desirable vegetation, so plan to replant afterward if necessary.
- c. The presence of biological agents on a property does not relieve a landowner of the responsibility to control the target noxious weed.
- d. Prior to the use of any biocontrol agents, the Kitsap County Noxious Weed Control Board should hold a public hearing, to gather input from the public.

IV. CHEMICAL

- a. Chemical control includes treating noxious weeds with carefully chosen herbicides. Some herbicides are labeled as Restricted Use and can only be applied by a licensed pesticide applicator. General Use pesticides do not require a license and tend to have a lower level of toxicity.
- b. Ensure compliance with any local pesticide guidelines or restrictions. For example, Kitsap County currently restricts broadcast applications of glyphosate on county property.
- c. The requirements on an herbicide product's label are considered state law and should be followed carefully. Utilize [Home - PICOL \(wsu.edu\)](http://Home - PICOL (wsu.edu)) to find .pdf versions of Washington herbicide labels.
- d. An herbicide's mode of action (MOA) should be alternated frequently (annually for example) to reduce the possibility of targeted noxious weed populations developing tolerance or resistance to a certain herbicide.
- e. Use of herbicide treatment should only be recommended if all other control methods have been exhausted, or if the control of an infestation is only feasible with the use of chemical treatment. Herbicides can open sites for other plants to take root, so revegetation is advised.

EVALUATION

Evaluating the efficacy of treatment strategies is crucial to gauge program success. Evaluation should include data collection, monitoring of treated sites, and mapping.

I. DATA COLLECTION

- a. Work with both public and private land managers to regularly collect and review data necessary for evaluation, including but not limited to:
 - i. Control method(s) used, in as much detail as possible
 - ii. Timing of treatment
 - iii. Site conditions that may have impacted treatment efficacy
 - iv. Size of infestation and number of noxious weed species present
 - v. Any other information that may be helpful in evaluating treatment/control.

II. REINSPECTION OF SITES

- a. Re-inspect as many infestation sites as possible to evaluate effectiveness of control methods being used, following priority established in this policy.
- b. If regrowth is found, work with landowner to develop or revisit an established site-specific IPM to assure that the infestation is again controlled.

III. MAPPING

- a. Map known infestations, using GIS software, allowing for long-term monitoring and evaluation of program progress and effectiveness.
- b. Utilize data from alternate reporting mechanisms when appropriate, such as SeeClickFix, iNaturalist, etc.
- c. Mapping coordinates can vary in accuracy. Initial reports from external sources should be verified in person.