

# Skagit Fisheries Enhancement Group

## WEED CONTROL POLICY

### GOAL:

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Control invasive weeds species that can impede establishment and growth of native plants at riparian restoration sites in a manner that is cost effective and consistent with accepted ecological restoration methods. Minimize use of herbicides by utilizing non-chemical methods whenever it can be done practically and cost effectively.

### WEEDS OF CONCERN

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#### **Washington State Class A weeds:**

Washington State Class A weeds are those species where control is required when these species are found. SFEG will conduct an annual training session to teach SFEG staff and contractors to recognize all state Class A invasive weeds that could be present in our work areas. If encountered in the field SFEG will report Class A weeds to the landowner in writing, and will provide information on state control requirements and recommended methods. If approved by the landowner, SFEG will control these weeds using recommended methods, and will report infestations to the appropriate Cooperative Weed Management Area (CWMA).

#### **Washington State and County Class B weeds required for control:**

Washington State Class B weeds are those species where control is recommended by the state and/or recommended/required by the county noxious weed board. If encountered at a work site, SFEG staff will inform the landowner of the presences of Class B species and provide information on recommended means of control. State/County Class B weeds that are considered to threaten riparian restoration success include the following:

- Japanese Knotweed (*Polygonum cuspidatum*)
- Giant Knotweed (*Polygonum sachalinense*)
- Himalayan Knotweed (*Polygonum polystachyum*)
- Policemans's Helmet (*Impatiens glandulifera*)

Species are deemed to be a threat if they grow and/or spread fast enough to choke out trees before they attain a height sufficient to outcompete the trees. If the above species are identified within SFEG restoration sites we will build costs to control them into all grants and/or contracts covering our work.

Washington State Class B weeds where control is required by the state and or Skagit County but that are NOT expected to interfere with successful riparian restoration include the following:

- Yellow Archangel (*Lamium galeobdolon*)
- Scotch Broom (*Cytisus scoparius*)
- Tansey Ragwort (*Senecio jacobaea*)

If identified within a current or proposed project site, SFEG will inform the landowner of the presences of these species and provide information on recommended means of control. If infestations are small SFEG will treat during normal site maintenance in order to prevent these weeds from spreading. If requested by the landowner prior to securing funding and supported by the funding source SFEG may include costs for control of these species and assist with the work. The decision to accept additional invasive weed control work will be made by the Restoration Ecologist and/or SFEG Board, and will consider: a) the effect on our ability to accomplish other project related work; and b) consistency with SFEG's policy of minimizing herbicide use.

## Washington State and County Class C weeds:

Class weeds are pervasive throughout the state and thus control is not required. However, the following Class C weeds are considered to be a threat to successful riparian restoration if they occur within restoration sites:

- Himalayan blackberry (*Rubus armeniacus*)
- Evergreen Blackberry (*Rubus laciniatus*)
- Morning glory (*Convolvulus arvensis*)
- English Ivy (*Hedera spp.*)
- Old Man's Beard/Travelers Joy (*Clematis vitalba*)
- Reed Canarygrass (*Phalaris arundinacea*)

Species are deemed to be a threat if they grow and/or spread fast enough to choke out trees before they attain a height sufficient to out compete the trees. The above class C weeds will be controlled as part of restoration site preparation and maintenance when they occur within restoration sites and are judged to have the potential to interfere with planting success.

SFEG will work with landowners to develop a site specific weed control plan prior to initiating restoration work. The plan will include recommendations for control over a ten-year period following planting. In general SFEG strives to secure funding to complete weed control for at least 3 years following planting. If possible we will work with landowner to secure additional funding beyond that point. However, funding for ongoing maintenance is NOT guaranteed, and landowners will be responsible for ongoing control following the end of grant projects according to applicable landowner agreements. If funding sources do NOT support control of these species, SFEG may elect to assist landowners with ongoing weed control **if** costs are paid by the landowner, and **if** work can be completed without interfering with required restoration work at other sites.

## WEED CONTROL METHODS

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A summary of weed species SFEG typically encounters, the 2018 list status, and typical treatment methods is provided in Appendix A. If practicable, manual weed control is SFEGs preferred method of treatment. Manual treatment techniques include the following:

### Mowing

Mowing is the preferred method of weed control in abandoned pastures or farm fields where there is risk of infestation of weeds considered to be detrimental of surrounding farms, including thistle, tansy ragwort, and teasel. Mowing is general practicable only on relatively flat fields (i.e. slopes <5%) that are dry during the summer months. Mowing 2-3 times per year is effective at controlling the flowering and spread of certain annual and perennial weeds, and also helps reduce the risk of vole predation. Where mowing is identified as the preferred method of treatment, SFEG will install trees in rows that are spaced sufficiently wide to allow a riding lawnmower and small tractor to pass between rows both longitudinally and cross-wise. On smaller sites (<1/2 acre), or sites where terrain is not amenable to mechanized equipment mowing may be accomplished using weedwhackers. Mowing with weedwhackers is not considered practicable on sites larger than 5 acres.

If mowing is identified as the preferred method of control SFEG will request funding to complete two rounds of mowing per year, which will occur once in the spring (late April through early June) and once in the late summer (mid-July through September). If additional mowing is requested by the landowner SFEG may elect to assist with this work **if** costs are paid by the landowner, and **if** work can be completed without interfering with required restoration work at other sites.

SFEG recommends installation of plant protectors in these types of planting sites. Plant protectors protect native plants from both voles and from damage during site maintenance. SFEG will build in funding to remove plant protectors from plants in the final year of funded maintenance. If desired by the landowner SFEG may leave plant protectors on longer, but may not be able to remove them without additional costs to the landowner. It may be possible to engage volunteers to remove plant protectors after grant funded maintenance. Alternatively, SFEG staff can return to remove protectors if staff time, travel and disposal costs are paid for by the landowner.

### Manual grubbing

Manual grubbing may be a practicable means of invasive weed control for Himalayan blackberry, morning glory, or clematis, provided infestations are small. Plants are removed by pulling roots by hand or digging them out with hand tools. Manual grubbing tends to be most effective if combined with an initial year or two of herbicide control. Manual grubbing will be conducted in the early spring, late fall or winter. Due to cost and staff time constraints, SFEG generally only utilizes this method on sites with small work areas (<0.5 acre) or limited/scattered infestations. SFEG may agree to utilize manual control on larger sites if the landowner is willing to participate, and/or a volunteer group can be found to “adopt” the site and assist with control via at least two mid-week work parties per year.

## Herbicide

SFEG strives to minimize the amount of herbicide used at our riparian restoration sites; however, on large sites, irregular terrain or with extensive infestations herbicide may be the only practicable approach. Steps taken to minimize the amount and possible impacts of products used include the following:

- Cut back tall weeds early in the season in order to stress plants and reduce leaf area. Treatment of lower growing vegetation also reduces the risk of overspray;
- Spot treatment is conducted using hand or backpack sprayers to ensure that products are applied only to target weeds;
- Treat only when winds are <10 mph and no rain is forecast for at least 8 hours to limit overspray, ensure effective translocation, and minimize the risk of rainwash.
- Do not treat weeds when pollinators or amphibians may be present
- Prepare and utilize site specific mixes that include surfactants/dyes that have been tested and are known to be safe.
- When possible inject or cut stems and paint rather than spraying.
- Work with landowners to make sure neighbors are notified prior to each application.
- Post public access sites with information including the date of treatment and product.

All SFEG herbicide treatment is conducted under the direction of a licensed Applicator according to Washington State laws and requirements. SFEG also obtains a NPDES permit annually for herbicide applications near water bodies. Field work is overseen by a licensed operator. SFEG's applicator and operators are required to have endorsements for aquatic, right of way, agricultural and ornamental work. Each licensed applicator/operator is required to complete at least 40 hours of training every 5 years in order to maintain a license in good standing.

In general SFEG's approach for extensive infestations is to conduct two years of site prep using herbicide. Thereafter manual weed control is the preferred method.

Where restoration sites are located adjacent to properties known to be used for organic farming SFEG will make every effort to meet with landowners to discuss herbicide use prior to initiating treatment. Regulations governing the certification of organic farms require that landowners ensure that there are 25 "buffers" between fields and areas where herbicide be used. While this is not the responsibility of neighboring properties SFEG will work with farmers and restoration property owners to ensure that sufficient buffers are identified and respected. No herbicide application is conducted when winds speeds are greater than 10mph. SFEG operator's record windspeed and direction on site prior to each application with a handheld anemometer; if wind directions are such that overspray could travel towards organic farms we will work on spraying in alternate areas.

## HERBICIDE USE

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### **Licensing and Permits**

Herbicide is applied only under the supervision of a licensed applicator, with a licensed operator on site at all times during work. SFEG operators must have current endorsements for Aquatics, Right of Way, Agricultural (includes forestry), Turf & Ornamental. SFEG staff with licenses are required to complete annual continuing education credits in order to keep their licenses current.

Herbicide is applied in accordance with guidelines designated by the Environmental Protection Agency on appropriate herbicides for fish bearing streams. No herbicide application is conducted when rain is predicted within 6-hours or winds speeds are greater than 10mph.

SFEG applies for and receives an NPDES permit to treat invasive weeds in Washington State each year, and the Licensed Applicator for SFEG reports to NPDES yearly on our herbicide applications. Herbicide data sheets for each site are completed daily, and tracked using a GIS database.

### **Posting& Notification**

On sites with the potential for public access, or where landowners request it SFEG installs signs during spraying activities. Information included on sign include: type of chemical used and concentration percentage, date applied and re-entry date. Some public sites require posting prior to herbicide treatment. In this case local laws take precedent.

Every year SFEG receives a list from Washington Department of Agriculture listing sensitive individuals. This list is cross referenced annually to see if any of these addresses are adjacent to herbicide treatment sites. If so alternative methods of weed control are prescribed.