

CITY OF SANDPOINT

INTEGRATED WEED MANAGEMENT PLAN

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Statement of Purpose:

The purpose of this integrated weed management plan (IWMP) is to guide the use of ecologically sensitive weed management strategies with an emphasis on the reduction of herbicide use and implementation of preventative and alternative control measures within the City of Sandpoint. The plan identifies weed control practices that result in minimal impact to human health and the environment. The plan applies to all civic properties, City managed rights of way and is a guide for the residents of our community.

Goals:

- Implement the mandates of the Idaho Noxious Weed statute by creating a plan for the control of noxious weeds using integrated control methods.
- Protect the health, safety and welfare of the community and the environment by employing a range of preventative strategies and least toxic control methods.
- To provide efficient cost-effective maintenance of the City's property, which includes non-chemical controls whenever possible.
- Minimize the quantity and toxicity of chemicals used for weed management.
- Establish clear criteria for acceptable circumstances in which using herbicides is necessary when all other alternatives have been implemented and are shown to be ineffective.
- Provide advance notice to citizens of integrated weed management activities involving the use of herbicides.

Scope:

The integrated weed management plan covers properties that are managed by the City of Sandpoint. All contractors hired by the City will be provided with and required to follow this plan as well as specific best management practices for different control methods and uphold the City of Sandpoint's commitment to environmental stewardship.

Definitions:

Integrated Weed Management – According to Idaho Statute 22, Chapter 24 (Noxious Weeds), an Integrated Weed Management Plan (IWMP) means a plan developed to manage, control or eradicate a noxious weed(s) from a cooperative weed management area or other weed management area. Integrated weed management strategies may include, but are not limited to, prevention, cultural, mechanical, chemical and biological methods.

A decision making process to determine if, where, when and how noxious and nuisance weed problems will be managed. An IWMP includes all potential control strategies, but prioritizes non-chemical controls whenever possible in order to perpetuate a sustainable environment.

Prevention – Any action that reduces the potential for the introduction or establishment of plant species in areas not currently infested with that species or any action that deters the spread of noxious or nuisance weeds.

Cultural Control – The use of sound horticultural practices to optimize plant health and to suppress noxious or nuisance weed growth and the use of site-appropriate design.

Mechanical Control – The use of a variety of tools and equipment for the purpose of eliminating noxious or nuisance weeds.

Chemical Control – The application of herbicides to kill noxious or nuisance weeds.

Biological Control – The use of biological control agents that act as predators, parasites or pathogens of noxious or nuisance weeds. The use of other beneficial organisms that improve plant health by enhancing soil quality.

Natural Herbicides – Meet approval requirements set by USDA NOP or OMRI Organic Materials Review Institute. They include items such as vinegar/soap solutions. Natural herbicides are allowed for use in all areas. They do not require approval or public notification.

Threshold – The term “threshold” refers to the point at which noxious or nuisance weed injury can no longer be tolerated without compromising the health, aesthetic value, desired function or economic value of the surrounding ecosystem. Once a threshold is being approached, some control measure may be necessary to suppress weed activity to acceptable levels.

Decision Making Process:

The decision making process helps the City of Sandpoint determine **if** treatment action is necessary, **where** treatment activity should take place, **when** action should take place and **which** treatment strategy or combination of treatment strategies are best to use.

1. **IF treatment action is necessary:** Instead of taking action at the first sign of a potential weed problem, the IWM process begins with asking whether any actions are needed by assessing the threshold level on a case by case basis. Certain weeds may pose a greater threat in small numbers or may only become threatening in larger numbers.
2. **WHERE treatment activity should take place:** If it is decided that some treatment action is necessary, it's important to thoroughly survey the area to determine the best place to treat in order to solve the problem. Treatment should be applied where actions will have the greatest effect.
3. **WHEN action should take place:** The timing of treatments is important and should be taken into consideration. Often there are optimal times during the weed's life cycle when treatment would have the greatest effect. Conversely, there are also times when treatment could prove to be ineffective or even worsen the problem. Community activities will also influence treatment schedule.
4. **WHICH treatment strategy or combination of treatment strategies are best to use:** The following rationale should be used as a guide in determining whether herbicides shall be used in place of other control methods (unless herbicide use is prohibited). Examples of preventative, cultural, mechanical, biological and chemical practices are provided in the Appendix.
 - ❖ Proper planning and management decisions begin the IWM process.
 - ❖ Cultural methods of weed control will be employed next where feasible and then;
 - ❖ Biological or mechanical methods of weed control will be employed next where they are practical and feasible.
 - ❖ Natural Herbicides will only be used when no other feasible method exists that will control weeds within the realities of the location, site conditions, budget, time and other relevant considerations.
 - ❖ Herbicides will only be used when no other feasible method exists that will control weeds within the realities of the location, site conditions, budget, time and other relevant considerations.

Management Strategies:

Turf Maintenance Program

The overall goal of this program is to have green spaces throughout the City of Sandpoint inspected on a regular basis and provide timely maintenance that is appropriate to the use and function of the green space. Treatment alternatives will be applied as designated by the attached map. The map should be reviewed yearly by the Weeds Superintendent and the Parks and Rec Commission. Areas unmapped such as ROW shall be treated with the “Parks and other Moderate Maintenance Areas” method.

❖ **Athletic Field Turf and other High Maintenance Areas**

The occurrence of noxious weeds should be addressed using the decision making process discussed in the previous section. Athletic fields require a higher level of maintenance than most turf areas within the city. While nuisance weeds (such as dandelions) can be tolerated in other areas of the city they cannot be so easily dismissed in the athletic field areas due to the potential safety impact to the users/athletes. Prevention is the highest priority in this area. Athletic field turf needs to be carefully maintained with appropriate watering, fertilization, aeration, over-seeding and frequent mowing. The use of natural herbicides should be used first before considering traditional herbicides. If the grounds manager feels like traditional herbicide treatment of noxious or nuisance weeds is warranted after all other feasible treatment options have been utilized, an herbicide treatment request will be submitted as described in the section titled “Herbicide Request Procedure”. If herbicide use is approved, then the public must be notified according to the section titled “Herbicide Notification Procedure”.

❖ **Parks and other Moderate Maintenance Areas**

The occurrence of noxious weeds should be addressed using the decision making process discussed in the previous section. No herbicide treatment of nuisance weeds (such as dandelions) is permitted in parks or city-owned property around school grounds, critical care complexes, licensed day-care centers, public education facilities and medical facilities. Nuisance weeds should be managed through cultural, mechanical and biological controls (if available), natural herbicides or some combination of these mechanisms. If the grounds manager feels like traditional herbicide treatment of noxious weeds is warranted after all other feasible treatment options have been utilized, an herbicide treatment request will be submitted as described in the section titled “Herbicide Request Procedure”. If herbicide use is approved, then the public must be notified according to the section titled “Herbicide Notification Procedure”.

❖ **Undeveloped Green Spaces and other Low Maintenance Areas**

The occurrence of noxious weeds should be addressed using the decision making process discussed in the previous section. The primary management strategy for nuisance weeds (such as dandelions)

should be mowing to keep costs associated with other forms of treatment to a minimum. No herbicide treatment of nuisance weeds is permitted. If the grounds manager feels like traditional herbicide treatment of noxious weeds is warranted after all other feasible treatment options have been utilized, an herbicide treatment request will be submitted as described in the section titled “Herbicide Request Procedure”. If herbicide use is approved, then the public must be notified according to the section titled “Herbicide Notification Procedure”.

Landscape Display Program

This program includes floral displays and ornamental shrub plantings within the City of Sandpoint. The occurrence of noxious weeds should be addressed using the decision making process discussed in the previous section. Manual weeding (mechanical control) is the preferred method of nuisance weed control. In addition, yearly cultivation of landscape beds also helps to reduce weed growth by providing an aerated environment for plant growth. Preventative and cultural controls are also useful in minimizing weed growth such as:

- ❖ Landscaping with aggressive plant material in mass plantings to reduce the space, light and nutrient availability to potential weeds.
- ❖ Making compost to eliminate weed seeds.
- ❖ Using landscape material or mulch to conserve moisture and reduce the potential for weed seed germination.
- ❖ Provide growing conditions that allow plants to thrive and compete with weeds.
- ❖ Design and construct landscape beds in a manner that will optimize growing conditions for plants.

Biological controls should also be considered (if available). Hand application of natural herbicides (e.g. vinegar/soap solutions) is encouraged over the use of traditional herbicides. If the grounds manager feels like traditional herbicide treatment of noxious weeds is warranted after all other feasible treatment options have been utilized, an herbicide treatment request will be submitted as described in the section titled “Herbicide Request Procedure”. If herbicide use is approved, then the public must be notified according to the section titled “Herbicide Notification Procedure”. Additionally, if herbicide use is approved, the herbicide must be carefully chosen as many landscape plants are very sensitive to certain herbicides.

Natural and Sensitive Areas Program

This program includes stormwater swales, wetlands, riparian corridors, shorelines and aquatic habitats within the City of Sandpoint. These areas are city-owned property with critical environmental resources, sheltering native ecosystems and wildlife habitat. The City of Sandpoint is also committed to protecting the water quality of Lake Pend Oreille and the Pend Oreille River for the benefit of their aquatic inhabitants as well as those that rely upon these waterbodies as sources of potable drinking water. Traditional herbicide use is not permitted in natural and sensitive areas for noxious or nuisance weeds. The occurrence of all weeds should be

addressed using the decision making process discussed in the previous section, utilizing preventative, cultural, mechanical, natural herbicides and biological controls only.

Herbicide Request Procedure:

If the use of traditional herbicides is desired, a request form should be completed and submitted to the Weeds Superintendent and approved by the City Administrator. An example request form is provided in the Appendix. Use of Natural Herbicides do not require a request form or public notification.

Herbicide Notification Procedure:

The City of Sandpoint recognizes that there is public concern over herbicide use as a weed management strategy due to sensitivity to pesticides and/or lifestyle practices. Therefore, the City will provide the public with advance notice of herbicide use according to the following:

- ❖ Signs posted at least 72 hours before application of the herbicide product, leaving signs in place for at least 72 hours after application.
- ❖ Signs will be posted at public access points and around the perimeter of the area where herbicide will be applied.
- ❖ Signs must be standardized and easily recognizable (see the Appendix for an example)
- ❖ Each sign must contain the following information:
 - The name of the active ingredient in the herbicide product
 - The targeted weed
 - The application date
 - The signal word indicating the toxicity category of the herbicide product
 - The name and contact information of the individual that is responsible for fielding questions regarding the application
- ❖ Copies of posted signs shall be retained for record keeping purposes for one year.

Evaluation of Treatment:

Evaluation is a very important component of the IWMP and is necessary to determine the outcome of various forms of treatment. Follow-up inspections should be conducted to determine:

- ❖ Did the weed population decline to acceptable levels?
- ❖ Was there a negative impact on non-target vegetation?
- ❖ If a combination of weed management strategies were used, how did they complement each other? Or, in the case that they were not compatible, why?
- ❖ Does the native vegetation appear to be able to thrive following a successful treatment?

The frequency and timing of inspections will vary in each situation. Evaluation records should be kept for at least one year after treatment in order to serve as a resource guide to future weed infestations.

Appendix

Examples of Different Preventative and Weed Control Practices:

Preventative –

Preventative maintenance includes (but is not limited to) the following techniques:

- ❖ Using certified weed-free seed and fill materials or using transplants, amendments and mulches that are known to be weed-free.
- ❖ Limiting disturbance to landscapes, especially those that create bare ground.
- ❖ Cleaning boots, clothing, equipment and vehicles of weed plant parts to prevent the spread of weed seed and plants from one area to another.
- ❖ Monitor and amend soil where appropriate.
- ❖ Planting native vegetation after creating a disturbance to the soil.
- ❖ Ongoing monitoring of City property.

Cultural–

Cultural control techniques include (but are not limited to) the following:

- ❖ Proper identification of noxious and invasive weeds.
- ❖ Proper selection and establishment of turfgrass and ornamental plants.
- ❖ Proper mowing practices.
- ❖ Adequate fertilization and watering.
- ❖ Using mulch to conserve moisture and reduce the potential for weed seed germination.
- ❖ Proper species selection suitable for a particular soil type, moisture regime and growing season.
- ❖ Revegetation.

Mechanical–

Mechanical control techniques include (but are not limited to) the following:

- ❖ Hand pulling.
- ❖ Clipping seed heads.
- ❖ Using shovels and similar bladed hand tools to sever tap roots below ground.
- ❖ Mowing.
- ❖ Using weed whips.
- ❖ Soil solarization.
- ❖ Using a propane torch.

Biological–

Biological control techniques include (but are not limited to) the following:

- ❖ **Classical** – initially small numbers of natural enemies are released in target pest areas for long-term control.
- ❖ **Augmentative** – large numbers of natural enemies are released to control a target pest for a short amount of time.
- ❖ **Conservation** – changing environmental conditions to aid in natural enemy survival.

The approved and recommended list of biological control agents for noxious weeds by the Idaho State Department of Agriculture and the Bureau of Land Management can be consulted here:

http://www.agri.state.id.us/Categories/PlantsInsects/NoxiousWeeds/Documents/Bio_Control/2013/Approved%20Agent%20and%20Release%20Info%202013.pdf

There are no currently know biological control agents for weeds that infest turf grass that are commercially available. However, this will likely change over time in response to contemporary research efforts.

Natural/Bio Herbicides-

Natural/Bio herbicides meet approval requirements set by USDA NOP or OMRI Organic Materials Review Institute. They include items such as vinegar/soap solutions and Corn Gluten. Corn gluten meal prevents roots from establishing as seeds germinate. Corn gluten meal is most effective when applied in the spring and fall before the weeds appear. Natural herbicides are allowed for use in all areas.

Chemical–

Chemical control techniques of an appropriately selected herbicide include (but are not limited to) the following:

- ❖ Spray bottles.
- ❖ Backpack sprayer.
- ❖ Paintbrushes.
- ❖ Wicks.

Herbicide Request Form

Date: _____

Name of Person Making the Request: _____

Proposed Treatment Location (attach map): _____

Proposed Treatment Date(s): _____

Proposed Herbicide Common Name: _____

Proposed Herbicide Trade Name: _____

EPA Registration Number: _____

Target Weed: _____

Rationale for Proposed Treatment: _____

Other Methods Used and Outcomes: _____

Description of the possible adverse effects of the herbicide according to the Material Safety Data Sheet if available

Herbicide product label instructions and precautions related to Public Safety

Weed Superintendent _____

Date _____

City Administrator _____

Date _____

Pre-Notification of the Use of Herbicides

[This notice should be posted at least 72 hours prior to application]

Date: _____

To: Residents and Visitors of the City of Sandpoint

From: IWMP Coordinator _____

Phone Number: _____

THIS NOTICE IS TO ADVISE YOU THAT THE FOLLOWING HERBICIDE WILL BE USED

Pesticide Common Name: _____

Pesticide Trade Name: _____

EPA Registration Number: _____

Location of herbicide application: _____

Reason for herbicide application: _____

[3 dates must be listed, in chronological order, on which the application may take place if the preceding date is cancelled]

DATE _____

DATE _____

DATE _____

Description of the possible adverse effects of the herbicide according to the Material Safety Data Sheet if available

Herbicide product label instructions and precautions related to Public Safety

Note: *The Office of Pesticide Programs of the United States Environmental Protection Agency has stated: "Where possible, persons who are potentially sensitive, such as pregnant women, infants and children should avoid any unnecessary pesticide exposure."*

