Model Integrated Pest Management Policy for
Whatcom County Public Lands

Policy Statement:
[This institute] will make decisions to reduce and avoid pest problems consistent with the principals of IPM.

Purpose:
To minimize negative impacts to human health and natural services without compromising effective management of nuisance organisms by establishing integrated pest management practices in and on the public lands of Whatcom County. To conserve community and natural values and preserve drinking water quality by providing community-wide examples of safe and effective pest management practices.

Scope:
All public land employees, public pest control operators and contractors engaged in management of nuisance organisms in or upon public lands and structures.

Policy Summary:
This policy elaborates a decision-making system designed to maximize long-term pest management and minimize harmful, unexpected or unintended consequences of managing nuisance organisms. It supplies direction to public pest control operators and contractors charged with the complex task of fulfilling the objectives of multiple rules and policies. The objectives include, but are not limited to, cost effective management of pest populations, protection of human health and safety, minimization of pesticide use, compliance with local, State and Federal regulations, and the conservation of common property natural services. The policy provides guidance to prevent the achievement of one or more objectives from obstructing the fulfillment of others. It encourages careful decision-making by use of Integrated Pest Management practices. The policy suggests that Integrated Pest Management programs to be assessed, monitored, evaluated and reported at scheduled intervals. The policy requires the provision of opportunities for staff training, education, and certification as well as for the provision of information and education to members of the public.

Procedure:

1.0 Definitions
Integrated pest management (IPM) means a sequential decision-making process for the selection and use of pest suppression tactics. It is a long-term management strategy based on sound ecological and economic principles. Integrated Pest Management practices suppress nuisance organisms while minimizing negative impacts on society,
human health, non-target species and the environment. An Integrated Pest Management program undergoes continuous improvement using knowledge accumulated from regular scientific evaluation of its tactics. Preferred Integrated Pest Management techniques include the following measures:

- **Biological management** means the conservation of natural enemies of pest organisms to maintain pest populations at tolerable levels. Biological agents are organisms that effectively prey on, parasitize or compete with pests. Biological management measures are selected to minimize negative impacts on beneficial communities and to enhance the suppressive interaction of biological control agents with pests.

- **Ecological management** means the use of prevention, avoidance and cultural and mechanical tactics that alter habitats and landscapes to provide unfavorable conditions for pest organisms.

- **Chemical management** refers to the use of products that change a pest’s chemistry, behavior patterns or developmental processes in ways harmful to its physiology and reproductive potential. Pest specific chemicals that do not damage the health of people, of non-target species, or of other pest suppression measures are essential in Integrated Pest Management programs.

**Action level** is the level of development of a pest population at which action must be taken to prevent the population from reaching the injury level. Action levels are pest- and site-specific.

**Apparatus** means any type of ground, water, or aerial equipment, device, or contrivance using motorized, mechanical, or pressurized power and used to apply any pesticide on land and anything that may be growing, habitating, or stored on or in such land, but shall not include any pressurized hand sized household device used to apply any pesticide, or any equipment, device, or contrivance of which the person who is applying the pesticide is the source of power or energy in making such pesticide application, or any other small equipment, device, or contrivance that is transported in a piece of equipment licensed under this chapter as an apparatus [RCW 17.21.020 (3)].

**Best Management Practice** means a human activity that achieves its intended outcome at the least possible environmental cost.

**Certified applicator** means any individual who is licensed as a commercial pesticide applicator, commercial pesticide operator, public operator, private-commercial applicator, demonstration and research applicator, or certified private applicator, or any other individual who is certified by the director to use or supervise the use of any pesticide which is classified by the EPA or the director as a restricted use pesticide [RCW 17.21.020 (5)].

**Commercial pesticide applicator** means any person who engages in the business of applying pesticides to the land of another [RCW 17.21.020 (6)].

**Commercial pesticide operator** means any employee of a commercial pesticide applicator who uses or supervises the use of any pesticide and who is required to be licensed under provisions of this chapter [RCW 17.21.020 (7)].

**Injury level** refers to the point at which the growth of a pest problem will cause unacceptable damage to public health and safety, natural services, or recreational and aesthetic values or cause economic injury to desirable plants or to the integrity, function, or service life of public facilities.
**Pests** are any organisms, including weeds, invertebrates, vertebrates, or plant diseases, which threaten human health or compromise the economic, aesthetic, or environmental values of society.

**Pesticides** are substances registered by the U.S. government and Washington State Department of Agriculture as pesticides. Pesticides are chemicals that kill or reduce the reproductive potential of pest populations.

**Restricted pesticides** means any pesticide or device which, when used as directed or in accordance with a widespread and commonly recognized practice, the director determines, subsequent to a hearing, requires additional restrictions for that use to prevent unreasonable adverse effects on the environment including people, lands, beneficial insects, animals, crops, and wildlife, other than pests.

**Public Operator** is a public employee authorized to use restricted pesticides and pesticides delivered through an apparatus. It shall be unlawful for any employee of a State agency, municipal corporation, public utility, or any other government agency to use or to supervise the use of any restricted use pesticide, or any pesticide by means of an apparatus, without having obtained a public operator license from the director [RCW 17.21.020].

### 2.0 IPM Program Coordination

In departments conducting pest management activities, [this institute] shall designate an IPM coordinator. The duties of the IPM coordinator are:

**Supervision**
- Develop an IPM program and assist operating personnel with implementation of the program.
- Participate fully in the planning and design of landscape, engineering, construction, and maintenance criteria applied to facility development projects.
- To the maximum extent possible, harmonize [this institute’s] Integrated Pest Management programs with other pest management operations with similar programs in neighboring jurisdictions.
- Conduct research needed to implement and improve the IPM programs.
- Maintain a Working List of key pests, including a specimen collection.
- Maintain a working compilation of Best Management Practices and other resources for Integrated Pest Management.
- Monitor the compliance of employee and commercial pesticide applicators and operators with applicable laws, regulations, and policies.

**Education**
- Assist with the development and implementation of a continuing education program to promote public awareness and understanding of Integrated Pest Management.
- When possible, assist other jurisdictions with creation of IPM programs.

**Evaluation**
- Designate a review body for consideration of additions to and deletions from the working lists of approved pesticides.
- Conduct an annual workshop for IPM practitioners to evaluate and improve IPM programs and practices. The Workshop agenda should include:
  - ...Opportunities for practitioners to share and compare field experiences.
  - ...Additions to and deletions from the Working List of key pests.
  - ...Review and update Best Management Practices/IPM guidelines.
  - ...Review the list of approved pesticides.
• Opportunity for licensed operators to receive accredited supplementary training time
• Briefings on safety issues
• Submit to the designated review body, a detailed report of workshop findings and recommendations, annually

3.0 Landscape Planning and Design
To the maximum extent possible, Integrated Pest Management strategies will be incorporated into the development, repair, and maintenance of [this institute’s] public facilities. Planning for buildings, landscapes, road rights-of-way, or other facilities will include pest management concerns at the design phase. Design factors such as site selection, types of uses, soils, grade, slope, water table, drainage, and proximity to sensitive areas, have significant pest management dimensions. Pest populations, in turn, have important implications for the costs of maintenance and repair. Plant selections will be determined by pest susceptibility and maintenance requirements. Preference will be given to native plants that satisfy those requirements. Construction of pest barriers and avoidance of pest harboring habitats and materials will be accounted for in the planning of facilities.

4.0 Pest Identification
Prior to conducting pest management activities, both employee and contract practitioners should solicit confirmation of pest identifications. The scope of identification includes nuisance organisms as well as the presence or absence of biological control agents or other beneficial organisms. Sample specimens should be obtained whenever possible to be used as reference material in educating employees. Whatcom County Cooperative Extension office can assist in the identifications of unexpected, unusual, or exotic identifications.

5.0 Threshold Determinations, Monitoring and Record-keeping
The IPM coordinator must establish “action” and/or “injury” thresholds for each site, structure, key plants and/or key pest species. Using appropriate sampling strategies, pest management personnel will conduct field assessments at intervals specified in IPM programs. Record monitoring observations and management activities on standard sampling sheets. Sampling sheet data elements should include:

• Name
• Date, time and location
• Weather observations
• Conducive conditions
• Schematic site drawings
• Pest identification and
• Collection and description of specimens
• Population and damage assessment notes
• Descriptions of suppression activities undertaken
IPM coordinators shall maintain the following records:
• Each jurisdiction’s written IPM program;
• Site- or pest-specific management plans;
• Completed, signed sampling sheets for all activities conducted at maintained sites;
• Copies of pesticide application records. Such records must include but are not limited to, name of licensed applicator, exact time and date of application, physical address of application site, chemical name, brand name, amount, concentration, rate, and total area of application, equipment used, and weather conditions including temperature, precipitation, and wind speed and direction.

6.0 Management Practices
[This Institute] will develop guidelines and procedures for Integrated Pest Management and will maintain lists of recommended Best Management Practices for the suppression of nuisance organisms. Selection of management tactics should emphasize prevention and practitioners should conduct management activities using tactics from the lists. Suggested management practices include the following methods:

• **Tolerance measures** uses information from threshold determinations and monitoring and record-keeping data to decide to ‘do nothing.’ This is the most common and effective strategy in any IPM program.

• **Ecological management measures** change the landscape to avoid or suppress the potential for pest problems.

• **Biological control measures** may be conservative or augmentative. Conservative biological control maximizes the suppressive potential of native and endemic enemies of pests. Augmentative biological control measures introduce natural enemies to suppress pest populations.

• **Pesticide management measures** use chemical substances to change the behavior, physiology or development of pests, resulting in mortality, morbidity and reduction in reproductive potential. All pesticide use must be conducted in accordance with Section 7.0 below.

7.0 Pesticide Usage
It is [This Institute’s] policy to safeguard properly functioning environmental conditions for its people and for the flora and fauna. [This Institute] will use chemical pesticides only as a component of programs conducted in accordance with this Integrated Pest Management Policy. Pest management practitioners will use pesticides in accordance with the Washington Pesticide Application Act (RCW 17.21). Practitioners will store, transport, apply and dispose of pesticides in accordance with the provisions of the pesticide label information. **The label is the law.**

7.01 [This Institute] May Give Preference To Commercial Pesticide Operators
In contracts for pest management services involving the application of chemical pesticides, [This Institute] may give preference to vendors specifying the use of commercial pesticide applicators to conduct such applications, over those specifying the use of commercial pesticide operators to do so.
7.02 [This Institute] Requires Certification and Continuing Education of Public Operators

[This Institute] requires employees buying, handling, transporting, or applying restricted use pesticides or pesticides delivered by means of an apparatus to be public operators (RCW 17.21.220). Public operators must be, at all times, in compliance with the supplementary education and re-certification requirements of RCW 17.21.128. [This Institute] will reimburse current employees who are public operators for WSDA licensing fees and re-certification training costs incurred during the term of their employment.

7.03 [This Institute] Requires Protective Clothing and Equipment

[This Institute’s] employees engaged in the use of pesticides shall follow all clothing and equipment requirements listed on the pesticide label and the Material Safety Data Sheet (MSDS) for the appropriate pesticide. [This Institute] will provide protective clothing and equipment, safety guidelines, and training to employees engaged in the use of pesticides. [This Institute] will likewise provide appropriate sanitation facilities and means within the employees work routine.

7.04 [This Institute] Notifies Public of Pesticide Use

[This Institute] will notify members of the public about pesticide application sites by using caution signs and other visible postings at all primary points of entry (RCW 17.21.410). Prior to any pesticide applications [This Institute] will meet special notice requirements for designated applications, such as those adjacent to community centers or schools, and [This Institute] will notify, individually, listed pesticide-sensitive individuals within the designated notification area (RCW 17.21.420).

8.0 [This Institute] Participates in Planning for Pest Emergencies

To maximize [This Institute’s] discretion during pest emergencies, [This Institute] will participate, to the maximum extent practicable, in the development by State and Federal agencies, of emergency pest management strategies. Certain especially dangerous or damaging species of pests and types of pest infestations are regulated directly by State and/or Federal agencies. In emergency situations involving such pests or infestations, the management options available may be severely limited. Such occasions frequently involve pesticide use may not conform to the guidelines established for the day-to-day operations outlined in locally created and approved Integrated Pest Management Programs. These circumstances might include:

- Development of conditions that poses a serious threat to public health and safety;
- The appearance of an exotic or uncommon pest having the potential to spread rapidly and cause serious ecological or economic damage;
- Necessary escalation of a routinely applied management strategy (i.e., an operation that is significantly larger in scale than the day-to-day routine - e.g., from spot treatment to broadcast treatment);
- The need to apply a pesticide in a sensitive area;
• A situation in which the only effective treatment for a pest emergency involves the application of a chemical that has not been reviewed and approved for use;
• The need to bring extensive pest populations under the designated threshold during the transition from a restoration site condition to a condition manageable through normal Integrated Pest Management practices.

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