



# Alaska Department of Transportation and Public Facilities Integrated Pest Management Plan

**IPM Plan Effective Dates:** April 2022 through April 2024

**Management Area Name/Location:** Alaska Department of Transportation and Public Facilities (DOT&PF)

**General Site Description:** DOT&PF owned or leased lands and facilities

**Land Uses:** Public rights-of-way, airports, and other lands and facilities owned or leased by DOT&PF

**Name of Person in Charge:** Jess Parks, Statewide Environmental Analyst, DOT&PF

**Certified Applicator Name(s):** Various

**Certification Numbers:** Various

This IPM plan complies with Chapter 18, Section 90 of the Alaska Administrative Code (AAC). To apply herbicides under this IPM plan, you must follow the instructions on the DOT&PF IPM webpage:

<http://dot.alaska.gov/stwdmno/ipm/>

## 1. Action Thresholds

Check the types or categories of pests that might present a problem or need to be controlled at this management site:

	Category
✓	Vegetation

For each pest category listed above, describe the level at which the pest becomes a problem which requires control measures to be taken.

Vegetation:

- Vegetation becomes a problem when it compromises sight distances, compromises transportation facilities or structures, or causes shade-related icing issues on pavement.
- Vegetation becomes a problem when invasive weeds are present.

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**2. Monitor and Identify Pests**

**How often will the management area be inspected for the presence of pests?**

DOT&PF maintenance personnel perform vegetation monitoring as part of their routine maintenance activities. The frequency and regularity of maintenance activities differ for DOT&PF right-of-way, airports, and facilities based on resources and access.

Areas within DOT&PF owned or leased lands and facilities are informally inspected for invasive weeds during the growing season by cooperating Alaska Invasive Species Partnership members or contractors.

**Which locations will be inspected?**

All DOT&PF owned or leased lands and facilities.

**What methods will be used for identifying and quantifying the presence of pests?**

- 1: M&O inspections for safety and infrastructure management, based on AASHTO and DOT&PF crash data.
- 2: The AK-EPIC database, in addition to in-person and drive-by surveys by AKISP cooperators.

**How will pest species be identified?**

Visually, by individuals with training and experience.

**Describe record keeping procedures:**

For each application of pesticides, DOT&PF pesticide application forms, public notices, drinking water system notifications, DEC notification emails, and DOT&PF authorizations will be submitted to DOT&PF by the certified applicator(s). The DOT&PF Statewide Environmental Office in Juneau will store records for at least two years after the application of each pesticide.

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**3. Prevent Pests**

**For each pest category listed under Section 1, describe preventative measures that will be taken:**

Preventative vegetation control methods include the following activities:

- Asphalt patching
- Establishment of low-maintenance plantings, such as grasses, during road construction or rehabilitation
- Maintenance of gravel pads
- Road resurfacing

- Routine mowing/landscaping
- Using native soils for backfill, where possible, from weed-free sources during road construction

**How often will preventative measures be applied?**

Preventative measures will be ongoing.

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**4. Control Measures**

**For each pest category listed under Section 1, list potential non-chemical control measures that may be used:**

<p><b>Cultural Controls:</b></p>	<ul style="list-style-type: none"> <li>• Certified weed-free seed mixes and erosion and sediment control materials are used in accordance with DOT&amp;PF's <i>Standard Specifications for Highway Construction</i> and <i>Standard Specifications for Airport Construction</i>.</li> <li>• Known Invasive trees and shrubs are not planted for landscaping within DOT&amp;PF owned and leased lands.</li> <li>• Contractors on construction projects may clean equipment and vehicles transported to project sites from other locations.</li> </ul>
<p><b>Mechanical Controls:</b></p>	<p>DOT&amp;PF uses various mechanical methods to control vegetation within its roadway and airport system, such as:</p> <ul style="list-style-type: none"> <li>• Mowing</li> <li>• Brush cutting</li> <li>• Hydro-axing</li> <li>• Invasive Species Best Management Practices</li> </ul> <p>Mechanical methods employed at scale by DOT&amp;PF are labor intensive, fuel intensive, and expensive. Mechanical controls are the primary tool used to manage vegetation for safety and infrastructure management on DOT&amp;PF owned and leased lands, but can be ineffective against certain species of noxious and invasive weeds and may result in the unintentional spread of unwanted weeds.</p> <p><i>Best Management Practices: Controlling the Spread of Invasive Plants During Road Maintenance</i> by University of Alaska Fairbanks, Cooperative Extension Service and DOT&amp;PF, provides maintenance personnel with a variety of mechanical control strategies to help prevent the spread of invasive plants.</p>

**For each pest category listed under Section 1, describe the characteristics needed in any chemical controls that may be used:**

Vegetation: Product must be a systemic herbicide to ensure that the entire plant, including the roots, is controlled. Typically, only certain herbicides applied at the correct time will work to control unwanted vegetation. Residual control is very helpful for species with long seed viabilities and a wide range of germination times.

**For each pest category listed under Section 1, list potential chemical controls that may be used:**

<b>Target Pest</b>	<b>Product Name</b>	<b>EPA Registration No.</b>
Vegetation	Bayer Streamline	432-1570
	Escalade 2	228-442
	Escort XP	432-1549
	EZ-JECT Diamondback Herbicide Shells	83220-1
	Garlon 4 Ultra	62719-527
	Habitat	241-426-67690
	Milestone	62719-519
	Navitrol Landscape and Aquatic Herbicide	8959-56
	RoundUp Custom for Aquatic and Terrestrial Use	524-343
	RoundUp Ready-to-Use Weed and Grass Killer III	71995-33
	Shredder 2,4-D LV6	1381-250
	Transline	62719-259
	Telar XP	432-1561

**Describe how treated areas will be re-inspected and evaluated for effectiveness of controls:**

Following application of controls (cultural, mechanical, or chemical), certified applicators will re-inspect each treated area in the current season and/or following growing season(s) to determine if the applied controls achieved the target control level.

The certified applicator may recommend modifications or additional controls. Reapplication of control methods will likely be necessary to achieve full control.