

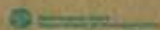
**Northwest Region, Area 1
Integrated Roadside
Vegetation Management
Plan**

2012



**Northwest Region, Area 2
Integrated Roadside
Vegetation Management
Plan**

2012



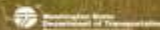
**Northwest Region, Area 3
Integrated Roadside
Vegetation Management
Plan**

2012



**Northwest Region, Area 4
Integrated Roadside
Vegetation Management
Plan**

2012



**Northwest Region, Area 5
Integrated Roadside
Vegetation Management
Plan**

2012



**North Central Region,
Area 1
Integrated Roadside
Vegetation Management
Plan**

2012



**North Central Region,
Area 2
Integrated Roadside
Vegetation Management
Plan**

2012



**North Central Region,
Area 4
Integrated Roadside
Vegetation Management
Plan**

2012



**Olympic Region, Area 1
Integrated Roadside
Vegetation Management
Plan**

2012



**Olympic Region, Area 2
Integrated Roadside
Vegetation Management
Plan**

2012



**Olympic Region, Area 3
Integrated Roadside
Vegetation Management
Plan**

2012



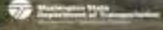
**Olympic Region, Area 4
Integrated Roadside
Vegetation Management
Plan**

2012



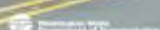
**Southwest Region, Area 1
Integrated Roadside
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Plan**

2012



**Southwest Region, Area 2
Integrated Roadside
Vegetation Management
Plan**

2012



**Southwest Region, Area 3
Integrated Roadside
Vegetation Management
Plan**

2012



**Southwest Region, Area 4
Integrated Roadside
Vegetation Management
Plan**

2012



**South Central Region,
Area 1
Integrated Roadside
Vegetation Management
Plan**

2012



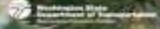
**South Central Region,
Area 2
Integrated Roadside
Vegetation Management
Plan**

2012



**South Central Region,
Area 3
Integrated Roadside
Vegetation Management
Plan**

2012



**South Central Region,
Area 4
Integrated Roadside
Vegetation Management
Plan**

2012



**Eastern Region, Area 1
Integrated Roadside
Vegetation Management
Plan**

2012



**Eastern Region, Area 2
Integrated Roadside
Vegetation Management
Plan**

2012



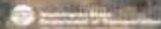
**Eastern Region, Area 3
Integrated Roadside
Vegetation Management
Plan**

2012



**Eastern Region, Area 4
Integrated Roadside
Vegetation Management
Plan**

2012

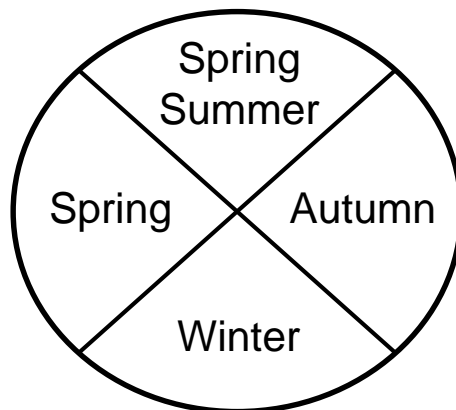


Roadside Vegetation Management and Pollinators

Creating Sustainable Roadsides

Practicing Integrated Vegetation Management as an Agency:

**Conduct Vegetation Management Activities/
Evaluate Results from
Previous Years**



**Determine Refinements/
Changes to the IVM Plan**

Update the IVM Plans

**Conduct Crew Training on
IVM Plan Implementation**

Roadside Vegetation Management and Pollinators

BRIEFING PAPER FOR
Transportation Leaders' Summit: Restoring the Nation's Pollinator Habitat
November 25, 2015

WHAT MAINTENANCE IS DOING FOR POLLINATOR HABITAT

WSDOT revised its mowing policy this past year for economic and environmental reasons. Except in some urban areas, maintenance will no longer mow beyond one pass at the pavement edge unless it is prescribed in the area Integrated Vegetation Management (IVM) Plans as part of a multi-year treatment for weed control. WSDOT will manage vegetation in these areas based on horticultural and ecological science to selectively remove and prevent weeds, and encourage communities of pollinator friendly plants. The goal with this approach is to work within existing budgets and prioritized work plans to eventually establish naturally self-sustaining roadsides statewide.

We will do this through:

- Prescribed multi-year IVM treatments have been developed, prioritized, and mapped in each Area's IVM Plan.
- Using iPads and the new Highway Activity Tracking System (HATS), technicians will reference and track prescribed site specific treatments.
- iPads will also be loaded with reference information such as plant identification, location of environmentally sensitive areas, and location of areas where pollinator enhancement efforts are underway.
- Ongoing crew training will be designed to engage maintenance employees in pollinator protection.
- IVM plans and maps will be evaluated and adjusted each year based on field observations.

WSDOT HERBICIDE USE AND POLLINATORS

- WSDOT has conducted an independent evaluation of environmental and human health risks of all herbicides used for roadside IVM treatments.
- This information has been used to develop a conservative agency policy on herbicide use, limiting and restricting use of products as necessary.
- None of the herbicides used by WSDOT contain neonicotinoids.
- Employees are trained to avoid spraying noxious weeds in bloom whenever possible.
- The goal with WSDOT's IVM approach to roadside management is to reduce the need for both mowing and herbicide use over time; agency herbicide use was reduced by 70% in the first four years of implementing area IVM plans and has remained relatively stable for the past five years.

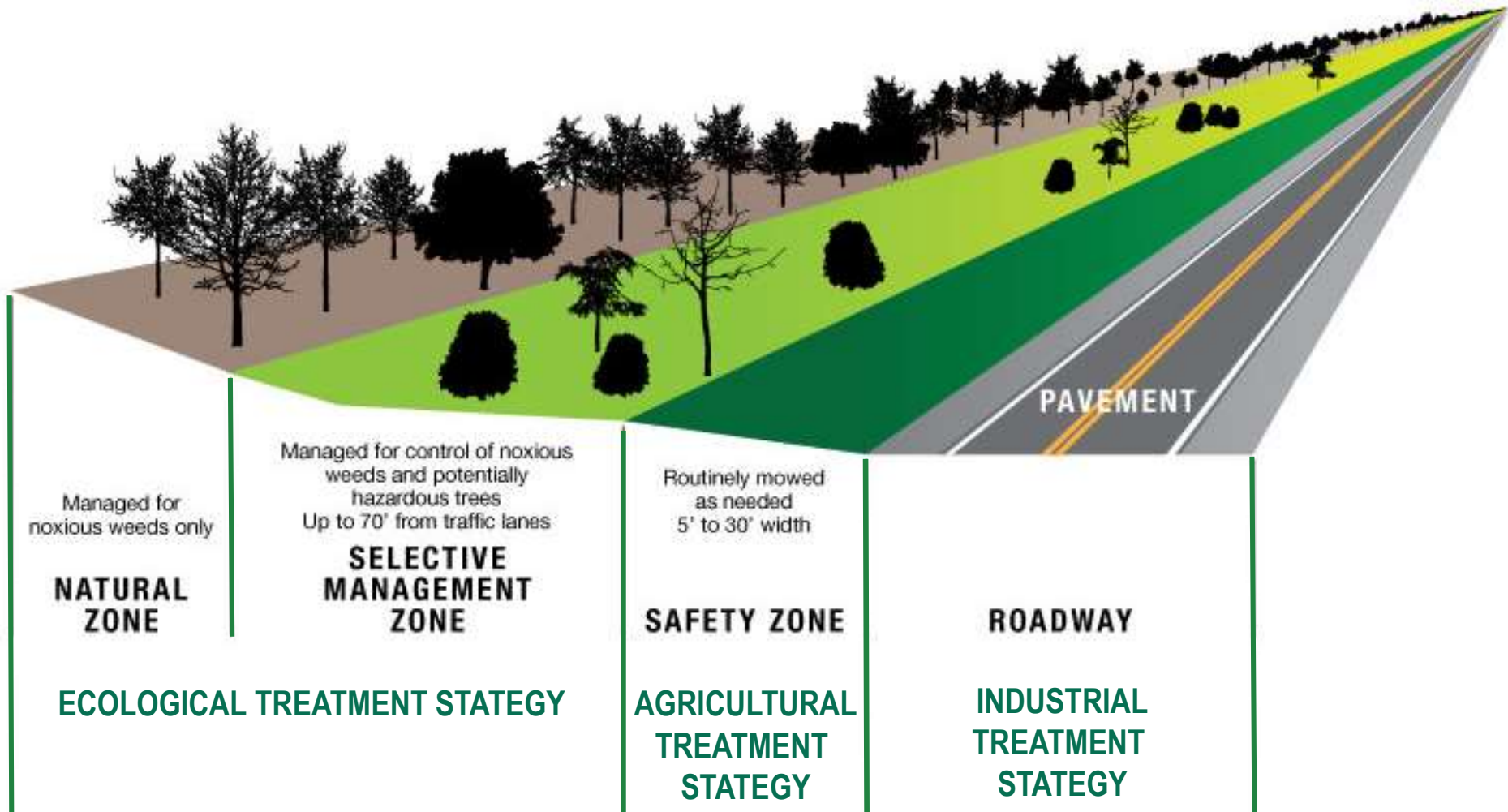
OTHER CHALLENGES

- As WSDOT Maintenance begins implementation of the new mowing policy with multi-year treatments in the highest priority areas, some previously mowed outlying areas will be left to grow wild for many years. This will increase visibility of nuisance weeds, and areas will look unkempt.
- Education and outreach is needed to shift public preference for a neatly mowed roadside look in favor of ecological sustainability; this also relates to maintenance employees and the pride they take in vegetation management.
- Noxious weed species often provide excellent forage for honey bees, some bee keepers may prefer weed infested roadsides.

For further information, contact: **Ray Willard, PLA**
Roadside Asset Manager
360-705-7865

Roadside Vegetation Management and Pollinators

Agronomic vs. Ecologic Treatments



Roadside Vegetation Management and Pollinators

Defining Roadside Vegetation Assets

WSDOT Roadside Vegetative Asset Values and Condition

Vegetative Area Types	Acres	Average Replacement Value/Acre	Replacement Value Total	Annual Maintenance Cost	Data Confidence
Operational Zone (grass and shrubs)	40000	\$52,000	\$2,080,000,000	\$7,900,000	med-high
Naturally Managed Areas (forest or rangeland)	53600	\$223,139	\$11,960,250,400	\$3,250,000	medium
Formally Landscaped Areas	580	\$200,000	\$116,000,000	\$2,100,000	med-high
Resource Conservation Areas	820	\$223,139	\$182,973,980	\$0	medium
Total	95000		\$14,339,224,380	\$13,250,000	

Roadside Vegetation Management and Pollinators

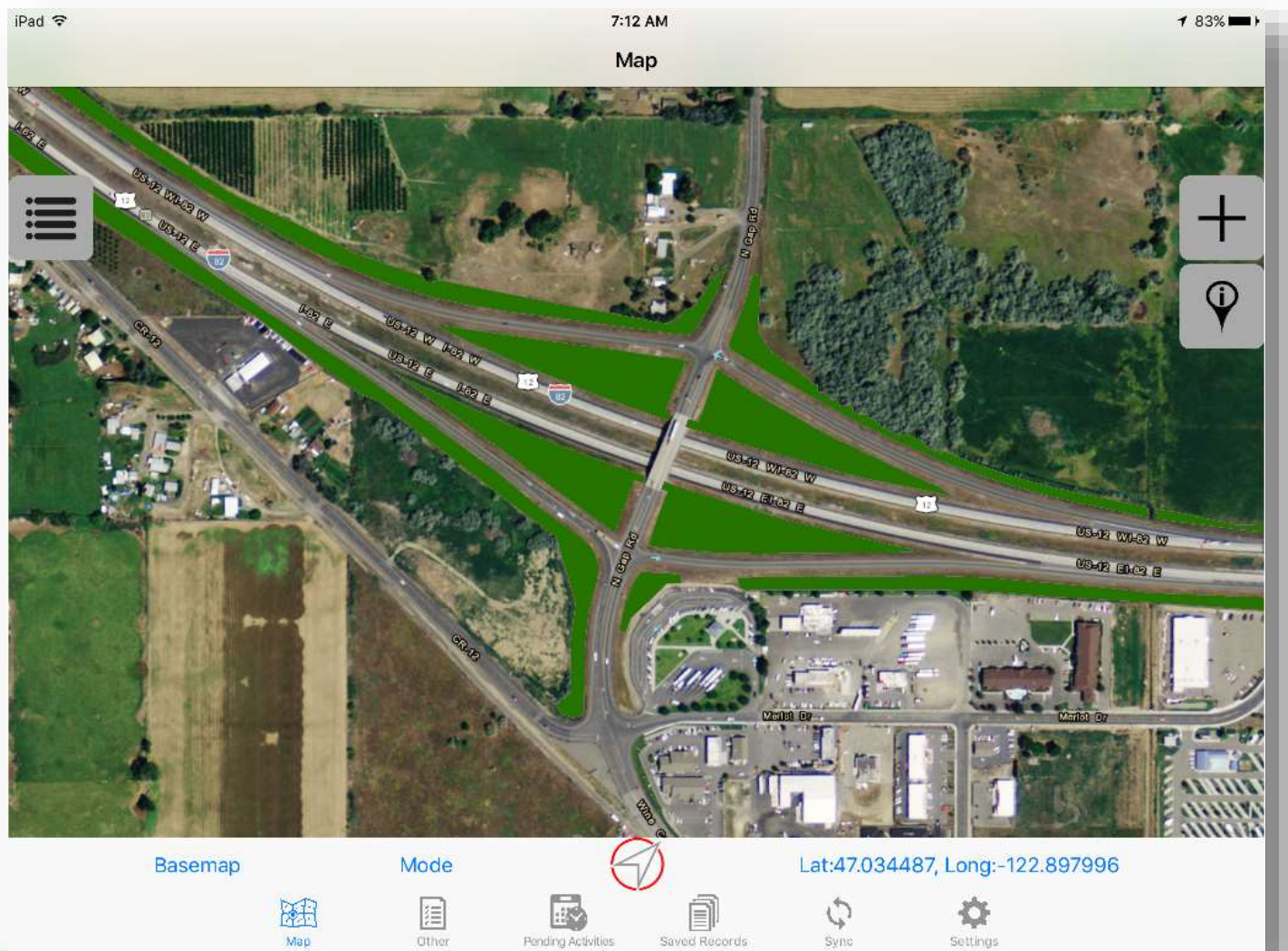
Agronomic vs. Ecologic Treatments

Agronomical Management = Routine Seasonal Maintenance Actions
Hedging/Edging/Mowing
Blanket Treatments
Permanent Irrigation
Predictable Maintenance Cost/Budget

Ecological Management = Integrated Vegetation Management (IVM)
Precise Selective Properly-Timed Treatments
Multi-Year Site-Specific Treatment Plans
Monitoring Results and Adjusting Treatments
Maintenance Costs Go Down over Time
Environmental Benefits Go Up over Time

Roadside Vegetation Management and Pollinators

A Long-Term Strategy



Roadside Vegetation Management and Pollinators

A Long-Term Strategy





A wide-angle photograph of a vast field of purple flowers, likely camas, in full bloom. The flowers are densely packed and stretch across the foreground and middle ground. In the background, a thick forest of tall, dark green evergreen trees stands against a pale, overcast sky. The overall scene is a natural, outdoor setting.

<https://attendee.gotowebinar.com/recording/954034532968768001?assets=true>

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(360)705-7865