

North Central Region, Area 3

Integrated Roadside Vegetation Management Plan

2014



Washington State
Department of Transportation
Maintenance and Operations Division

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Summary

The Washington State Department of Transportation (WSDOT) manages approximately 1000 miles of roadside right-of-way throughout Okanogan, Chelan and Douglas Counties. This right-of-way is part of the state highway system including US 97, SR-20, US-2, SR 155, SR 153, SR 17 in addition to a number of other state routes.

As a landowner in this area WSDOT is required to control all listed noxious weeds that occur on this right-of-way by state law (RCW 17.10 and 15.15.010). It is important to WSDOT to not only meet the legal requirements, but also to consider the needs and concerns of adjacent landowners in this area.

In order to better manage these roadsides WSDOT is in the process of developing an Integrated Vegetation Management Plan (IRVM) for this area. This plan will serve as the primary guidance document for maintenance of roadsides in this area and will provide detailed weed control and planting guidance as well as overall policy and procedures. This plan supports WSDOT's long-range goals of managing these roadsides to:

- Reduce maintenance costs
- Improve weed control
- Enhance roadside vegetation by providing stable, sustainable plant communities

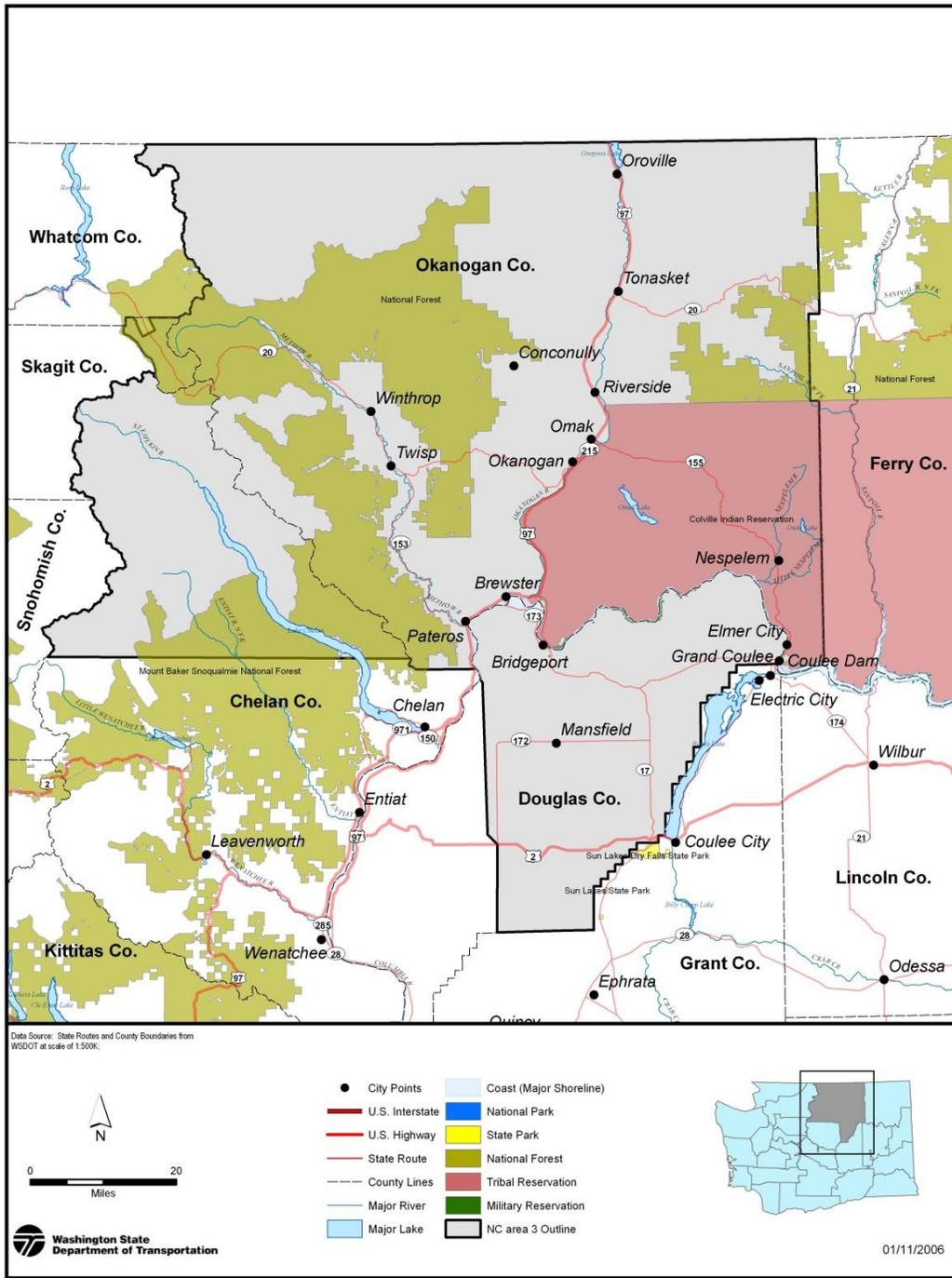
The attached plan consists of three main sections:

1. **Introduction:** This section provides an overview of the maintenance area discussed in the plan. This section also provides contacts, pertinent links and references and the annual work plan while giving the reader a general understanding of the WSDOT roadside program.
2. **Plan:** This is the main body of the document and includes detailed descriptions of specific maintenance activities, policies and objectives.
3. **Appendices:** This section contains prescriptions for weed control and revegetation, noxious and nuisance weed locations, locations of special maintenance areas, forms and records, and a list of local public and private stakeholders.

This plan is a dynamic document that will be developed and updated over time with input from a variety of sources. WSDOT welcomes comments and suggestions from local private and public entities. An electronic version of the North Central Region, Area 3 IVM Plan is available at the following link <http://www.wsdot.wa.gov/Maintenance/Roadside> or available in hard copy upon request. Please contact Dean Hills, or James Morin at the numbers listed below for questions or comments.

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North Central Region, Area 3
Vicinity Map
Figure 1

Program Goals

The purpose of this section is to identify the short and long term operational goals within NCR, Area 3. These goals will help direct decisions that affect roadside management and the construction of roadside. These goals will be updated and evaluated on a yearly basis during the annual Winter Planning Meeting.

Long-Term Goals (2006-2010)

Long-term goals should be achievable within a 5 year period of time and have clearly stated objectives. Long-term goals may be general in nature and should provide direction for short term operational goals.

- **General Weed Control**
 1. Improve consistency and predictability in Vegetation Management (VM) program.
 2. Maintain good communication with County Weed Boards
 3. Revegetate disturbed soil as it occurs
 4. Revegetate 5 acres a year focusing on heavy weed infestations.
- **Noxious Weed Control 3A2 *Map Target: B***
 1. Improve consistency and predictability in noxious weed control program
- **Nuisance Weed Control 3A3 *Map Target B-***
 1. Nuisance weeds will only be controlled incidental to noxious weed control
- **Obstructions 3A4- *Map Target: B-***
 1. Maintain hardware, intersections and low site distance locations to be free of vegetation obstructions.
 2. Reduce Zone 1 bareground by 10% yearly through 2010

Short-Term Goals (2009)

Short-term goals are planned for implementation during the 2009 season. Short-term goals should be specific goals with clear objectives that can be measured and reported.

- **Noxious Weed Control 3A2- *Map Target: B***
 1. Treat an estimated **2450** acres of roadside with selective herbicides for designate noxious weed control
 2. Mow approximately **20** acres of noxious weeds.
 3. Continue investment in biological control to target Spotted and Diffuse Knapweed and Dalmatian Toadflax infestations.
- **Nuisance Weed Control 3A3- *Map Target: B-***
 1. Nuisance weeds will only be controlled incidentally to noxious weed control
- **Obstructions 3A4- *Map Target: B-***
 1. Apply approximately **75** acres of Bareground
 2. Mow approximately **30** acres to control obstructions?
 3. Hand trim approximately **4** acres
 4. Remove approximately **30** danger trees

Long-Range Work Plan (2010-2015)

The purpose of this section is to identify the short and long term operational goals within NCR, Area 3. These goals will help direct decisions that affect roadside management and the construction of roadside. These goals will be updated and evaluated on a yearly basis during the annual Winter Planning Meeting.

Long-Term Goals (2010-2015)

Long-term goals should be achievable within a 5 year period of time and have clearly stated objectives. Long-term goals may be general in nature and should provide direction for short term operational goals.

- **General Weed Control**
 1. Improve consistency and predictability in Vegetation Management (VM) program.
 2. Maintain good communication with County Weed Boards
 3. Revegetate disturbed soil as it occurs
 4. Revegetate 5 acres a year, focusing on heavy weed infestations.

- **Noxious Weed Control 3A2**
 1. Improve consistency and predictability in noxious weed control program

- **Nuisance Weed Control 3A3**
 1. Nuisance weeds will only be controlled incidental to noxious weed control

- **Obstructions 3A4-**
 1. Maintain hardware, intersections and low site distance locations to be free of vegetation obstructions.
 2. Continue to evaluate the need for zone 1 bareground throughout the maintenance area.

Annual Work Plan (2010)

The work plan is updated on an annual basis and should reflect the priorities in the long-term goals.

- **Noxious Weed Control 3A2-**
 1. Treat an estimated **2450** acres of roadside with selective herbicides for designate noxious weed control. *Accomplished 2595 acres*
 2. Mow approximately **20** acres of noxious weeds. *Accomplished approximately 130 acres*
 3. Continue investment in biological control to target Spotted and Diffuse Knapweed and Dalmatian Toadflax infestations. *Accomplished*
- **Nuisance Weed Control 3A3-**
 1. Nuisance weeds will only be controlled incidentally to noxious weed control as resources become available.
- **Obstructions 3A4-**
 1. Apply approximately **75** acres of bareground. *Accomplished 125 acres*
 2. Mow approximately **30** acres to control obstructions.
 3. Hand trim approximately **4** acres
 4. Remove approximately **30** danger trees. *Accomplished approximately 89 trees*

Annual Work Plan (2011)

The work plan is updated on an annual basis and should reflect the priorities in the long-term goals.

- **Noxious Weed Control 3A2-**
 1. Treat an estimated **3000** acres of roadside with selective herbicides for designate noxious weed control. *Accomplished 2577 acres*
 2. Mow approximately **130** acres of noxious weeds. *Accomplished approximately 44 acres*
 3. Continue investment in biological control to target Spotted and Diffuse Knapweed and Dalmatian Toadflax infestations. *Partially Accomplished*
- **Nuisance Weed Control 3A3-**
 1. Nuisance weeds will only be controlled incidentally to noxious weed control as resources become available.
- **Obstructions 3A4-**
 1. Apply approximately **125** acres of bareground. *Accomplished approximately 95 acres*
 2. Mow approximately **30** acres to control obstructions. *Accomplished approximately 5 acres*
 3. Hand trim approximately **4** acres
 4. Remove approximately **75-100** danger trees. *Accomplished 72 trees*

Annual Work Plan (2012)

The work plan is updated on an annual basis and should reflect the priorities in the long-term goals.

- **Noxious Weed Control 3A2-**
 1. Treat an estimated **3000** acres of roadside with selective herbicides for designate noxious weed control. Accomplished 2695 acres
 2. Mow approximately **130** acres of noxious weeds. Accomplished 53 acres, adjust this down, most of mowing should fall within obstructions.
 3. Continue investment in biological control to target Spotted and Diffuse Knapweed and Dalmatian Toadflax infestations. Considered but not needed at this time.

- **Nuisance Weed Control 3A3-**
 1. Nuisance weeds will only be controlled incidentally to noxious weed control as resources become available.

- **Obstructions 3A4-**
 1. Apply approximately **125** acres of bare-ground. Accomplished 63 acres
 2. Apply approximately **100** acres for control of vegetation obstructions. Accomplished 181 acres
 3. Mow approximately **30** acres to control obstructions Accomplished 57 acres, this should be adjusted up to account for brush control on Loup-Loup and
 4. Hand trim approximately **4** acres Accomplished 1211 each (I suspect that this was recorded as "each" instead of acres.
 5. Remove approximately **75-100** dead or dying trees from the right-of-way. Accomplished 575 trees; this number needs to be revised up to keep up with number of trees that need to be removed from the ROW.

Annual Work Plan (2013)

The work plan is updated on an annual basis and should reflect the priorities in the long-term goals.

- **Noxious Weed Control 3A2-**
 1. Treat an estimated **3000** acres of roadside with selective herbicides for designate noxious weed control. **Accomplished 3948 acres-** Increased acreage due to
 2. Mow approximately **100** acres of noxious weeds. **Accomplished**
 3. Continue investment in biological control to target Spotted and Diffuse Knapweed and Dalmatian Toadflax infestations. **Accomplished**

- **Nuisance Weed Control 3A3-**
 1. Nuisance weeds will only be controlled incidentally to noxious weed control as resources become available.

- **Obstructions 3A4-**
 1. Apply approximately **125** acres of bare ground. **Accomplished 322 Acres** - acreage increased for 2013 due to increased bare-ground need on SR 155 as well as several other roads that had heavy stands of tall wheat grass that were occluding the guide posts and causing general site distance problems. A narrow 3' bare-ground application will now be applied in these locations.
 2. Mow approximately **70** acres to control obstructions. **Accomplished**
 3. Hand trim **4-5** acres brush. **Accomplished**
 4. Remove approximately **200** dead or dying trees from the right-of-way. **Accomplished**

Annual Work Plan (2014)

The work plan is updated on an annual basis and should reflect the priorities in the long-term goals.

- **Note:** The Carlton Complex Fire started July 17, 2014 and continued to burn throughout much of this maintenance area through the month of August. Substantial damage occurred throughout the US-97, US-20 and SR-153. The fire has greatly impacted crew availability and normal work routines. There will undoubtedly be other issues such as slides, risk tree removal, revegetation needs and increased weed pressure in these road sections.
- **Noxious Weed Control 3A2-**
 1. Treat an estimated **3500** acres of roadside with selective herbicides for designate noxious weed control.
 2. Mow approximately **100** acres of noxious weeds.
 3. Continue investment in biological control to target Spotted and Diffuse Knapweed and Dalmatian Toadflax infestations.
- **Nuisance Weed Control 3A3-**
 1. Nuisance weeds will only be controlled incidentally to noxious weed control as resources become available.
- **Obstructions 3A4-**
 1. Apply approximately **400** acres of bare ground in support of obstructions on guardrails sections, roadsides, intersections and pits. Guardrail sections and roadside zone 1 treatments will be 2' in band-width unless specifically stated otherwise. Bare-ground will be applied to the following locations.
 - SR-155 MP. 0-45, Coulee City to Nespelem
 - Hwy 2 MP 163 to 208, from Farmer to Lincoln Co. line
 - SR-17 MP. 87-136, Blue Lake to Bridgeport
 - SR-172 MP. 0-35
 - SR-174 MP. 0-24
 - SR-153 MP. 0-31, Pateros to Twisp
 - Pits sites- treat as needed
 2. Mow approximately **150** acres to control obstructions- this consists of mowing for drift control in high drift areas, zone 1 edge of pavement mowing and mowing intersections where sight distance is known to be a problem.
 3. Hand trim **4-5** acres brush
 4. Remove approximately **200** dead or dying trees from the right-of-way

Roadside Maintenance Considerations

The primary objectives for maintenance of roadside vegetation are:

- Provide safe highway operation
- Comply with legal regulations for control of noxious weeds
- Protection of the environment

Visual Quality

All maintenance activities should be conducted in a way that minimizes visual impacts such as wide spread “brown-out” from herbicides or shattered limbs from side trimming. Roadside should look as natural as possible throughout the year. Appropriate visual quality for roadsides throughout the state is defined in the [WSDOT Roadside Classification Plan](http://www.wsdot.wa.gov/Publications/Manuals/fulltext/M25-31/RCP.pdf) (November 2011) <http://www.wsdot.wa.gov/Publications/Manuals/fulltext/M25-31/RCP.pdf>

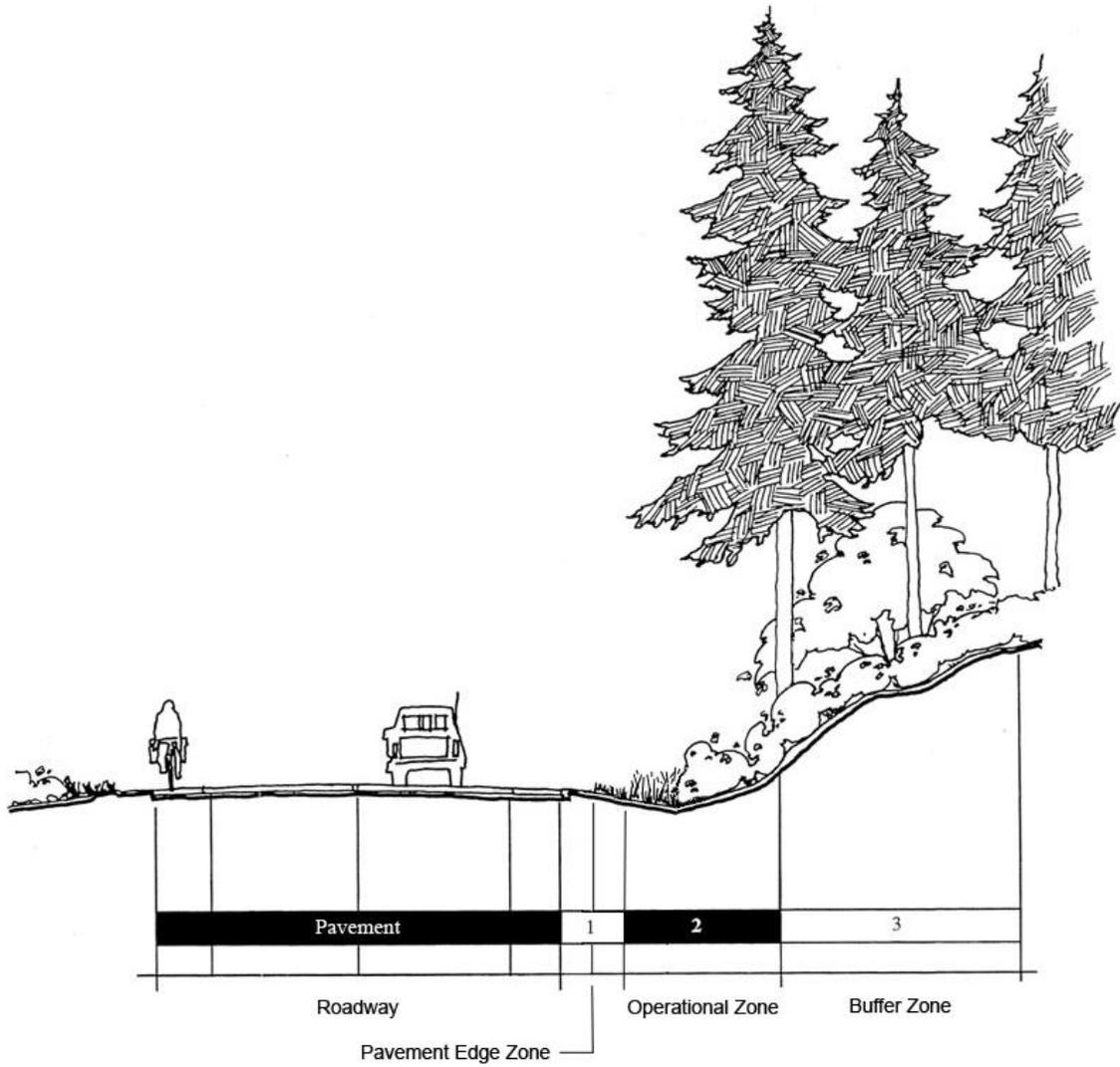
Operational Zones

WSDOT roadsides are divided into several zones for the purposes of assigning management objectives, maintenance intensities, and thresholds for triggering vegetation maintenance actions. Noxious weed species designated for control by state and county law are controlled throughout all zones. Not all maintenance zones will occur along state highways in NC Region, Area 3. In many cases the narrow width of the right-of-way or adjoining land-use, limits the operational zones to Zone 1 and a narrow Zone 2 only. Roadside vegetation management zones are as follows:

Zone 1 – The pavement edge zone is maintained in a manner and width necessary to address highway operations and safety, pavement preservation, guardrail maintenance, and stormwater management. Zone 1 may include a vegetation-free band adjacent to the pavement edge, particularly when guardrail is present, or may consist of desirable vegetation up to the pavement edge depending on site specific needs. A vegetation-free Zone 1 is maintained using non-selective soil residual herbicides. Routine annual mowing may be necessary in some cases where vegetation is established up to the edge of pavement.

Zone 2 – The operational zone extends from Zone 1 to a width necessary to provide for safe errant vehicular recovery, site distance at corners, intersections and for regulatory signs, and to provide for other operational, safety, and environmental protection functions. Zone 2 is typically maintained through periodic mowing, trimming and/or herbicide treatment as necessary to selectively remove undesirable trees, brush and weeds and encourage desirable vegetation. Any plant with an existing or potential trunk diameter of 4” or greater is considered undesirable in Zone 2.

Zone 3 – In areas with sufficient right-of-way width, a buffer or transition zone extends from Zone 2 to the right-of-way line to provide a buffer or transitional area between the highway facility and adjacent land uses. This area is maintained selectively, and to the greatest degree possible as a self-sustaining plant community, to minimize erosion as well as the growth of weeds and undesirable trees and brush.



Pavement Edge Zone
Low Growing or Routinely Mowed Vegetation and/or Vegetation-Free Strip
 Maintained using mechanical and/or chemical methods for sight distance, stormwater drainage and filtration, noxious weed control, pavement preservation and roadside hardware maintenance.

Operational Zone
No Vegetation with Stem Diameter Greater than 4"
 Maintained using IVM techniques for sign visibility, sight distance, errant vehicle recovery and weed control.

Buffer Zone
Native or Naturally Occurring Vegetation
 Where adequate right of way exists, maintained using IVM techniques to encourage desirable, self-sustaining plant communities.

Typical Roadside Vegetation Management Zones
Figure 2

Special Considerations

Herbicide Sensitive Areas

An Herbicide Sensitive Areas consist of all locations within 60' of jurisdictional water bodies. WSDOT limits the use of herbicides in these areas to reduce the potential risk of environmental impact to these sensitive resources. Only products that have successfully undergone an internal risk assessment process will be used in these areas (See Herbicide Safety below).

Special Maintenance Areas

This plan also defines and identifies areas with unique roadside maintenance requirements or where arrangements exist due to the surrounding land use, neighbor concerns or specific highway related functions. Special maintenance areas include highway roadsides sections with agreements for maintenance by neighbors. These areas are further defined in **Special Maintenance Areas, Section 3**.

Public Notification of Herbicide Applications

WSDOT is required by law to notify chemically sensitive individuals on file with Washington State Department of Agriculture, where the residing property abuts the highway right-of-way and the residence is within ½ mile of the property line. Notification to chemically sensitive individuals is accomplished by letter and/or phone conversation prior to each application. For specific herbicide application schedules, the roadside vegetation maintenance personnel can be reached at 509.826.7364.

Herbicide Safety

When applying herbicides, WSDOT takes precaution to avoid any impact on human and environmental health, and to ensure herbicides do not move off target. Applications are made only by trained and licensed employees following all state and federal regulations as well as all recommendations and restrictions given on the individual product labels as approved by the US Environmental Protection Agency.

WSDOT has also conducted a risk assessment for the herbicide products and application methods used on state highways. Toxicological impacts of WSDOT practices were evaluated for human health (both operators and the general public), for aquatic ecosystems, and terrestrial wildlife. The findings of this assessment are summarized in a series of fact sheets for the individual herbicides used by WSDOT. These fact sheets can be viewed and downloaded through the Internet at: http://www.wsdot.wa.gov/Maintenance/Roadside/herbicide_use.htm or copies may be obtained by calling the WSDOT Headquarters Maintenance Office at (360) 705-7850.

Roadside Design and Construction Considerations

Highway and utility construction in many cases has a significant impact on drainage, soils and vegetation adjacent to the paved roadway. WSDOT policy and practice for restoring the operational, environmental and visual functions disturbed by construction is based on the guidelines found in the Roadside Classification Plan (RCP) (WSDOT 2011), and the Roadside Manual (WSDOT M25-30, June 2014).

Internal agency coordination between the Design, Construction, and Maintenance programs is imperative to a comprehensive roadside vegetation management plan. A commitment to increasing communication in these areas is an important component in an ongoing effort to reduced lifecycle costs and improves roadside vegetation. This commitment has been recognized and agreed to by the regional management team.

Below is a list of design/construction projects that may have impacts to roadsides in the next 2-4 years:

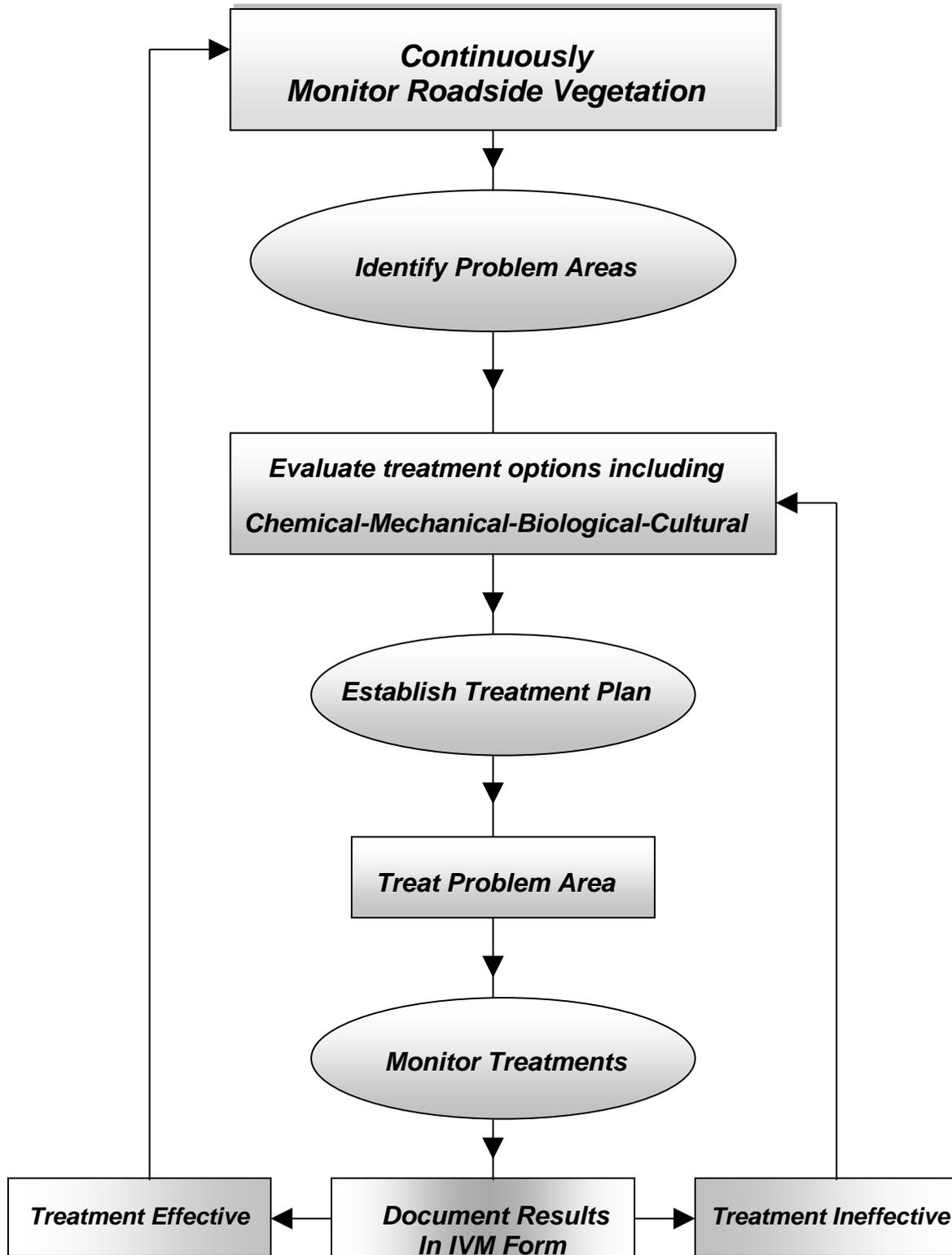
- *No projects planned at this time.*

WSDOT North Central Region Projects Link:

<http://www.wsdot.wa.gov/regions/northcentral/projects/>

Below is a list of permitted utility projects in the North Central Region, Area 3 that are scheduled for construction within the next 2-4 years.

- *There are no utility construction contracts planned for the near future.*



The IVM Decision Making Process
Figure 3

Roadside Vegetation Management Plan

1. INTEGRATED VEGETATION MANAGEMENT ACTIVITIES

Vegetation management activities are planned and carried out using the principles of Integrated Vegetation Management (IVM) and the decision making process described in Figure 3 (pg. 12). The goals of the IVM program are to:

- Provide effective control of noxious weeds
- Reduce maintenance life cycle costs
- Establish stable roadsides with desirable vegetation
- Preserve and enhance environmental quality

1.1. Integrated Vegetation management Planning and Tracking Database

One of the keys to successful use of IVM is carrying out activities in accordance with a long-range plan and then follow up with monitoring and evaluation of treatment results. To facilitate this, IVM forms and a database have been created for statewide use by WSDOT maintenance. This system is being tested as part of the initial development of Roadside Vegetation Management Plans and will be modified and refined as technology in this area continues to develop over the coming years.

1.1.1. Sample Forms

A copy of the Integrated Vegetation Management Form and Application Record are included in **Appendix F, Forms and Records**.

1.1.2. Instructions for Use

Maintenance supervisors and technicians can access the IVM Record through the existing pesticide application record keeping system available from the area office. The IVM form should be used whenever evaluation of a method or product is desired. Entries should include future evaluation dates as well as a description of the site and current conditions.

1.2. Shoulder Maintenance (Zone 1 Bareground)

1.2.1. Policy and objectives

Zone 1 bareground is not present in all locations. When required it is maintained free of vegetation to promote positive surface and subsurface drainage, protect asphalt shoulders from deterioration due to vegetation growth, facilitate preservation and maintenance of roadside hardware (guardrails and delineators), and to minimize fire starts.

The width of the bareground is either 3' or 6' (or to the back side of roadside hardware) as measured from the edge of pavement along the slope of the shoulder. This may include the area behind guardrail and barrier associated with bridge ends, but does not in any case extend down-slope beyond the edge of the bridge abutment.

Bareground applications may be greater or less than the 3-foot standard width under some circumstances for certain operational functions. Prior to application, the area maintenance superintendent must approve all exceptions to standard width applications. These locations will be included on future updates to the area maps and plan documents.

1.2.2. Action Thresholds (Zone 1 Bareground)

An action threshold refers to the point at which action must be taken to control an infestation of weeds. The action thresholds for treatment of zone 1 bareground are listed below.

- Sight distance limited by vegetation within zone 1 and designated for control.
- Special safety considerations as approved by the Area Superintendent.

1.2.3. Methods (timing and procedures)

Where present bareground will be maintained by an annual application of non-selective residual herbicide applied according to label instructions and in compliance with all state and federal regulations. Bareground applications will not be made during periods of heavy rain or in wind greater than 10 miles per hour.

Applications will be made in the spring typically beginning in March. They will be planned and carried out depending on weather patterns and precipitation events. A fall bareground application is typically applied in the following locations:

- SR-155 MP. 0-45, Coulee City to Nespelem
- Hwy 2 MP 163 to 208, from Farmer to Lincoln Co. line
- SR-17 MP. 87-136, Blue Lake to Bridgeport
- SR-172 MP. 0-35
- SR-174 MP. 0-24
- SR-153 MP. 0-31, Pateros to Twisp
- Pits sites- treat as needed

These applications are made during the fall months in high elevation areas to improve control where snow is present until late in the spring.

1.2.4. Prescriptions

See **Appendix A** Bareground prescriptions, Zone Maintenance

1.2.5. Locations

See **Appendix C** Zone 1 Bareground

1.3. Mowing Operations

1.3.1. Policy and Objectives

Mowing will be accomplished throughout the NC Region, Area 3 on an as needed basis. Mowing needs and prescriptions will vary by location. Mowing can be an effective form of weed control, but done incorrectly can cause damage to desirable vegetation and enhance the growing environment for unwanted weeds. It's important when conducting a mowing operation to consider a number of factors including goals, timing, target species, deck height and frequency.

1.3.2. Methods (Timing and Procedures)

Prior to conducting a mowing operation consider the following elements. Review items 1-7 below, then review and follow the appropriate prescriptions in Appendix A. There will be no mowing of desirable vegetation

including grass, forbs, shrubs or woody species without prior authorization of the Area supervisor.

1. **Identify Goals Of Mowing Operation:** Before prescribing mowing as a preferred alternative, it is important to clearly understand what the goals of the operations are. These goals should not only be understood by the manager or decision maker, but also must be clearly communicated and understood by the operator as well. Goals may include; control of seed production, maintenance of sight distance, control of vegetation around hardware features, control of noxious or nuisance weeds in an environmental or crop sensitive area or the removal of weed skeletons for the control of newly emerging weeds.
2. **Identify Appropriate Timing:** When mowing in a stand of established dry land perennial grass, particularly native varieties, it is important to consider timing. Mowing shall not occur until after desirable grasses have reached dormancy or set seed, typically in July-August. If the goal is control of weed seed production in an area where no desirable vegetation is present, mowing should take place as late as possible but prior to seed development. This will increase the likelihood that the target plant will not produce seed.
3. **Identify Target:** Identify target plant or plants to be controlled and ensure that the mowing operation will not spread these weed or exacerbate the existing problem. Some weeds, such as Japanese knotweed, can be easily spread through mowing. Ensure that the operator understands the target species and any desirable species in the area.
4. **Deck Height:** The mower deck height must be maintained at least 6-8 inches from the ground to reduce the likelihood of exposing bare soil. It is also important to maintain this deck height if the mowing operation will include desirable grasses. Close mowing may be allowed in special cases where no desirable species occurs and restoration work will immediately follow.
5. **Clean Mower:** Mowing can easily spread weed seed from infested areas to uninfested areas. It is important to clean the mower after each operation to ensure that mowing operation is not contributing to the spread of noxious and nuisance weeds.
6. **Consider Alternatives:** As with all IVM operations it is important to consider alternative methods. Mowing in NC Region, Area 3 is not a routine maintenance activity. It is a secondary form of weed control to be used on an as needed basis.
7. **Communicate:** Communication with the mower operator is critical to a successful mowing operation. The operator must understand the goals, timing, target species and desirable species before the mowing operation begins.

1.3.3. Prescriptions

See **Appendix A, IVM Mowing Prescriptions**

1.4. Noxious Weed Control

1.4.1. Policy and objectives

As defined by RCW 17.10, all property owners including state agencies, are required to control noxious weeds on lands that they own and manage. Noxious weed control is a high priority for WSDOT as a result of this legal mandate as well as the fact that if they are left unchecked, levels of infestation can begin to spread at exponential rates from year to year. Noxious weeds are invasive, non-native plant species that can quickly dominate native plant communities and spread to other areas or regions. New infestations of noxious weeds often appear first in highway corridors after being transported from other areas by vehicles or transportation of agricultural products. Without timely control, these new infestations can further spread along transportation corridors and to adjacent property. The overall cost and impact to the economic viability of the agricultural community and the health of native ecosystems can be significant. Also, some of these plants are toxic to livestock and/or humans.

WSDOT prioritizes weed control based on three legally defined weed species classification categories. Chapter 16-750 of the Washington Administrative Code lists weed species in classes A through C. Noxious weeds include all plants listed as class A, and those in classes B and C that are designated for control within each individual county.

Class A

Class A noxious weeds are non-native species with a limited distribution in the state. Immediate treatment of these new infestations is required by State law and is the top weed control priority to prevent spread into adjacent areas.

Okanogan County

- Buffalobur (*Solanum rostratum*)
- Meadow clary (*Salvia pratensis*)
- Spurge flax (*Thymelaea passerine*)
- Garlic mustard (*Alliaria petiolata*)
- Syrian bean-caper (*Zygophyllum fabago*)
- Wild four o'clock (*Mirabilis nyctaginea*)

Class B and C Designate Weeds

Class B and C weeds are more widespread than Class A, with control mandated by law only if infestations are generally limited and the species are designated within the individual counties by the County Noxious Weed Control Boards. Containment, gradual reduction, and prevention of further spread are the chief management concerns of Designate species.

Class B and C noxious weeds designated for control within Okanogan, Chelan, Douglas, and Grant Counties, and currently present within WSDOT right-of-way in NC Region, Area 3 include:

Okanogan County

- Bugloss, common (*Anchusa officinalis*)
- Hawkweed, oxtongue (*Picris hieracioides*)
- Hawkweed, mouseear (*Hieracium pilosella*)
- Hawkweed, orange (*Hieracium aurantiacum*)
- Hawkweed, queen-devil (*Hieracium glomeratum*)
- Hawkweed, smooth (*Hieracium laevigatum*)
- Hawkweed, yellow (*Hieracium caespitosum*)

- Hawkweed, tall (*Hieracium piloselloides*)
- Hoary alyssum (*Berteroa incana*)
- Perennial pepperweed (*Lepidium latifolium*)
- Rush skeletonweed (*Chondrilla juncea*)
- Scotch broom (*Cytisus scoparius*)
- Spurge, leafy (*Euphorbia esula*)
- Tansy ragwort (*Senecio jacobaea*)
- Thistle, musk (*Carduus nutans*)
- Thistle, plumeless (*Carduus acanthoides*)
- Thistle, Scotch (*Onopordum acanthium*)
- Velvetleaf (*Abutilon theophrasti*)
- Yellow starthistle (*Centaurea solstitialis*)

Chelan County

- Blueweed (*Echium vulgare*)
- Bugloss, common (*Anchusa officinalis*)
- Camelthorn (*Alhagi maurorum*)
- Canada thistle (*Cirsium arvense*)
- Common reed (*Phragmites australis*)
- Dalmatian toadflax (*Linaria dalmatica ssp.dalmatica*)
- Gorse (*Ulex europaeus*)
- Hawkweed, mouseear (*Hieracium pilosella*)
- Hawkweed, orange (*Hieracium aurantiacum*)
- Hawkweed, smooth (*Hieracium laevigatum*)
- Hawkweed, yellow (*Hieracium caespitosum*)
- Hawkweed, tall (*Hieracium piloselloides*)
- Herb-Robert (*Geranium robertianum*)
- Hoary alyssum (*Berteroa incana*)
- Hoary cress (*Cardaria draba*)
- Houndstongue (*Cynoglossum officinale*)
- Indigobush (*Amorpha fruticosa*)
- Knapweed, meadow (*Centaurea jacea x nigra*)
- Knapweed, Russian (*Acroptilon repens*)
- Knapweed, spotted (*Centaurea stoebe*)
- Knotweed, Bohemian (*Polygonum x bohemicum*)
- Knotweed, giant (*Polygonum sachalinense*)
- Knotweed, Himalayan (*Polygonum polystachyum*)
- Knotweed, Japanese (*Polygonum cuspidatum*)
- Kochia (*Kochia scoparia*)
- Loosestrife, garden (*Lysimachia vulgaris*)
- Loosestrife, purple (*Lythrum salicaria*)
- Oxeye daisy (*Leucanthemum vulgare*)
- Perennial pepperweed (*Lepidium latifolium*)
- Poison hemlock (*Conium maculatum*)
- Policeman's helmet (*Impatiens glandulifera*)
- Puncturevine (*Tribulus terrestris*)
- Rush skeletonweed (*Chondrilla juncea*)
- Saltcedar (*Tamarix ramosissima*)
- Scotch broom (*Cytisus scoparius*)
- Spurge laurel (*Daphne laureola*)
- Spurge, leafy (*Euphorbia esula*)
- Spurge, myrtle (*Euphorbia myrsinites*)
- St. Johnswort (*Hypericum perforatum*)
- Sulfur cinquefoil (*Potentilla recta*)

- Tansy ragwort (*Senecio jacobaea*)
- Thistle, musk (*Carduus nutans*)
- Thistle, plumeless (*Carduus acanthoides*)
- Thistle, Scotch (*Onopordum acanthium*)
- Velvetleaf (*Abutilon theophrasti*)
- Water primrose (*Ludwigia hexapetala*)
- White bryony (*Bryonia alba*)
- Wild chervil (*Anthriscus sylvestris*)
- Willow-herb, hairy (*Epilobium hirsutum*)
- Yellow archangel (*Lamiaeum galeobdolon*)
- Yellow nutsedge (*Cyperus esculentus*)
- Yellow starthistle (*Centaurea solstitialis*)

Douglas County

- Blueweed (*Echium vulgare*)
- Bugloss, annual (*Anchusa arvensis*)
- Bugloss, common (*Anchusa officinalis*)
- Butterfly bush (*Buddleja davidii*)
- Camelthorn (*Alhagi maurorum*)
- Common reed (*Phragmites australis*)
- Hawkweed, mouseear (*Hieracium pilosella*)
- Hawkweed, orange (*Hieracium aurantiacum*)
- Hawkweed, smooth (*Hieracium laevigatum*)
- Hawkweed, yellow (*Hieracium caespitosum*)
- Hawkweed, tall (*Hieracium piloselloides*)
- Herb-Robert (*Geranium robertianum*)
- Hoary alyssum (*Berteroa incana*)
- Houndstongue (*Cynoglossum officinale*)
- Indigobush (*Amorpha fruticosa*)
- Knapweed, meadow (*Centaurea jacea x nigra*)
- Knapweed, Russian (*Acroptilon repens*)
- Knapweed, spotted (*Centaurea stoebe*)
- Knotweed, Bohemian (*Polygonum x bohemicum*)
- Knotweed, giant (*Polygonum cuspidatum*)
- Knotweed, Himalayan (*Polygonum polystachyum*)
- Knotweed, Japanese (*Polygonum sachalinense*)
- Kochia (*Kochia scoparia*)
- Loosestrife, garden (*Lysimachia vulgaris*)
- Perennial pepperweed (*Lepidium latifolium*)
- Poison hemlock (*Conium maculatum*)
- Policeman's helmet (*Impatiens glandulifera*)
- Rush skeletonweed (*Chondrilla juncea*)
- Saltcedar (*Tamarix ramosissima*)
- Scotch broom (*Cytisus scoparius*)
- Spurge, leafy (*Euphorbia esula*)
- Spurge, myrtle (*Euphorbia myrsinites*)
- Sulfur cinquefoil (*Potentilla recta*)
- Tansy ragwort (*Senecio jacobaea*)
- Thistle, musk (*Carduus nutans*)
- Thistle, plumeless (*Carduus acanthoides*)
- Thistle, Scotch (*Onopordum acanthium*)
- Velvetleaf (*Abutilon theophrasti*)
- Water primrose (*Ludwigia hexapetala*)
- White bryony (*Bryonia alba*)

- Wild chervil (*Anthriscus sylvestris*)
- Willow-herb, hairy (*Epilobium hirsutum*)
- Yellow archangel (*Lamiaeum galeobdolon*)
- Yellow nutsedge (*Cyperus esculentus*)
- Yellow starthistle (*Centaurea solstitialis*)

Grant County

- Austrian fieldcress (*Rorippa austriaca*)
- Black henbane (*Hyoscyamus niger*)
- Blackgrass (*Alopecurus mysouroides*)
- Bugloss, annual (*Anchusa arvensis*)
- Bugloss, common (*Anchusa officinalis*)
- Bull thistle (*Cirsium vulgare*)
- Butterfly bush (*Buddleja davidii*)
- Camelthorn (*Alhagi maurorum*)
- Canada Thistle (*Cirsium arvense*)
- Cereal Rye (*Secale cereal*)
- Common barberry (*Berberis vulgaris*)
- Common groundsel (*Senecio vulgaris*)
- Common reed (*Phragmites australis*)
- Common tansy (*Tanacetum vulgare*)
- Common teasel (*Dipsacus fullonum*)
- Dalmatian toadflax (*Linaria dalmatica ssp. dalmatica*)
- Field bindweed (*Convolvulus arvensis*)
- Hawkweed, mouseear (*Hieracium pilosella*)
- Hawkweed, orange (*Hieracium aurantiacum*)
- Hawkweed, yellow (*Hieracium caespitosum*)
- Hawkweed, tall (*Hieracium piloselloides*)
- Herb-Robert (*Geranium robertianum*)
- Hoary alyssum (*Berteroa incana*)
- Hoary cress (*Lepidium draba L.*)
- Houndstongue (*Cynoglossum officinale L.*)
- Indigobush (*Amorpha fruticosa*)
- Jointed goatgrass (*Aegilops cylindrical*)
- Knapweed, diffuse (*Centaurea diffusa*)
- Knapweed, meadow (*Centaurea jacea x nigra*)
- Knapweed, Russian (*Acroptilon repens*)
- Knapweed, spotted (*Centaurea stoebe*)
- Knotweed, Bohemian (*Polygonum x bohemicum*)
- Knotweed, giant (*Polygonum sachalinense*)
- Knotweed, Himalayan (*Polygonum polystachyum*)
- Knotweed, Japanese (*Polygonum cuspidatum*)
- Kochia (*Kochia scoparia*)
- Lepyrodiclis (*Lepyrodiclis holosteoides*)
- Longspine sandbur (*Cenchrus longispinus*)
- Loosestrife, garden (*Lysimachia vulgaris*)
- Loosestrife, purple (*Lythrum salicaria*)
- Oxeye daisy (*Leucanthemum vulgare*)
- Perennial pepperweed (*Lepidium latifolium*)
- Perennial sowthistle (*Sonchus arvensis ssp. Arvensis*)
- Poison hemlock (*Conium maculatum*)
- Policeman's helmet (*Impatiens glandulifera*)
- Puncturevine (*Tribulus terrestris*)

- Rush skeletonweed (*Chondrilla juncea*)
- Saltcedar (*Tamarix ramosissima*)
- Scentless mayweed (*Matricaria perforate*)
- Scotch broom (*Cytisus scoparius*)
- Smoothseed alfalfa dodder (*Cuscuta approximate*)
- Spikeweed (*Hemizonia pungens*)
- Spurge, leafy (*Euphorbia esula*)
- Spurge, myrtle (*Euphorbia myrsinites*)
- St. Johnswort (*Hypericum perforatum*)
- Sulfur cinquefoil (*Potentilla recta*)
- Swainsonpea (*Sphaerophysa salsula*)
- Tansy ragwort (*Senecio jacobaea*)
- Thistle, musk (*Carduus nutans*)
- Thistle, plumeless (*Carduus acanthoides*)
- Thistle, Scotch (*Onopordum acanthium*)
- Water primrose (*Ludwigia hexapetala*)
- White bryony (*Bryonia alba*)
- White cockle (*Silene latifolia ssp. Alba*)
- Wild carrot (*Daucus carota*)
- Wild chervil (*Anthriscus sylvestris*)
- Willow-herb, hairy (*Epilobium hirsutum*)
- Yellow archangel (*Lamiastrum galeobdolon*)
- Yellow flag iris (*Iris pseudacorus*)
- Yellow nutsedge (*Cyperus esculentus*)
- Yellow starthistle (*Centaurea solstitialis*)

1.4.2. Methods

Control of noxious weed species can be very difficult; therefore it is important to incorporate the concepts of IVM. Regardless of the specific method used to control noxious weeds it is important to fully understand the life cycle of the weeds that are being controlled.

- Chemical: In many cases herbicides are used as a means of early control due to levels of infestations and area requiring control. Timing of herbicide treatments within the growth stage of the weed species is critical to achieving complete control of perennial species.
- Mechanical: Mowing, blading, disking and hand pulling are often used in conjunction with other control methods. Mowing considerations are covered in section 2.2 of this document.
- Biological: Biological controls are being used widely throughout WSDOT within the operating right-of-way. It is important to consider climate, level of infestation and available control species when selecting an appropriate biological control. It is also imperative that biocontrols be placed in an area that won't be adversely effected by mechanical or chemical control methods.
- Revegetation/Enhancement: A variety of other measures may be taken to promote natural vegetative competition through seeding, planting, and soil enhancement. Documentation of these methods and related success is essential to the success of long-term control measures. IVM forms will be completed for each of these sites and are located in Appendix E.

1.4.3. Action Thresholds

The action threshold for noxious weed control is met whenever a noxious weed is present on WSDOT right-of-way. WSDOT is required by state law to control and prevent the spread of all noxious weeds on WSDOT right-of-way

(RCW 17.10.040). Control efforts will be initiated prior to the noxious weed producing seed.

1.4.4. Prescriptions

See **Appendix A, IVM Prescriptions, Noxious Weed Control**

1.5. Nuisance Weed Control

1.5.1. Policy and objectives

Nuisance weed control, while not required by state law, provides many positive benefits to the overall condition of the roadside including:

- Stabilization of shoulders and banks
- Improved storm water treatment
- Protection and enhancement of native plant communities
- Reduces spread of weeds
- Enhances visual quality

Depending on crew availability and budget, nuisance weeds will be controlled throughout the roadsides of NC Region, Area 3 as part of the overall Integrated Vegetation Management process. Priority control measures will be given to new infestations where there is a greater chance of control prior to continued invasion into healthy stands of existing vegetation. In some cases, where practical, nuisance weed infestations may be treated in conjunction with treatment of noxious weeds.

For established infestations currently identified in this plan, weed populations will be contained and gradually reduced by applying appropriate vegetation management prescriptions. Control options range from manual cutting, mechanical removal, and biological control, to targeted selective herbicide application, or combinations thereof.

1.5.2. List of species currently present

Numerous Class C nuisance weeds occur throughout NC Region Area 3 within WSDOT right-of-way that are not targeted for control. In some cases they are controlled incidentally or for site-specific reasons, however, WSDOT is not required to control these plants.

- Baby's Breath (*Gypsophila paniculata*)
- China Lettuce (*Lactuca serriola*)
- Common Mullen (*Verbascum thapus*)
- Field Mustard (*Brassica campestris*)
- Mares Tail (*Conyza canadensis*)
- Milk Weed (*Asclepiadaceae*)
- Mustard Species
- Teasel (*Dipsacus sylvestris*)
- Tumblemustard (*Sisymbrium altissimum*)

Nuisance weeds targeted for control in this area include:

- Russian Thistle (*Salsola iberica sennen*)
- Kochia (*Kochia scoparia*)
- Knapweeds (*Centaurea*)
- Canada Thistle (*Cirsium arvense*)

There are many other species of weeds present in the area that are too common and widespread to justify treatment or attempt control. There are also some new species that have only shown up in recent years and are not

yet listed as nuisance or noxious weeds. Other species may be added to this list as they are identified or become priorities for control.

1.5.3. Methods

Control measures for nuisance weed are dependent on the type of plant. Species that are wide spread are treated routinely throughout the season where time and budget allows. Many of these species are treated with a combination of mowing, herbicide treatments, biological control and establishment and/or encouragement of native vegetation.

1.5.4. Action Threshold, Nuisance Weed Control

Action will be taken at the discretion of the area superintendent. WSDOT is not required to control nuisance weeds, however, action is advised where funding is available and one or more of the following instances occur as a result of a nuisance weed infestation.

- Impact to adjacent land owners
- Impact to desirable vegetation
- Impact to structures or ability to maintain the roadway
- Nuisance weed presence reduces effectiveness of noxious weed control due to height or density
- New infestation where local control is achievable

1.5.5. Prescriptions

See **Appendix A, IVM Prescriptions, Nuisance Weed Control**

1.6. Tree and Brush Control

1.6.1. Policy and Objectives

Trees and brush are controlled for safety reasons including preservation of sight distance at curves and intersections, and for visibility of signs, reducing snow drifting, and preventing trees with large trunk diameter from growing too close to traffic lanes.

- Native large shrub and small tree species should be allowed to grow and mature in Zone 2 and 3 and side trimmed if they encroach on site distance or other traffic operational requirements.
- Large coniferous or deciduous tree species such as Douglas fir, bigleaf maple, alder, or cottonwood left to grow in Zone 2, can reach substantial size over a relatively short period of time and should be removed when young.

1.6.2. Methods

Removal of undesirable tree and brush species is accomplished in a variety of manners including hand cutting, herbicide applications, hand pulling, mowing or combinations thereof. A thorough understanding of the species to be controlled and consideration of proper timing is important with any of these control methods to reduce damage, minimize visual impact and be cost effective. Below are specific considerations for the various control methods:

- Mowing: In many cases it is effective to mow back the majority of the existing vegetation to the outside edge of zone 2, then follow with spot mowing or herbicide treatments of undesirable species as needed, leaving desirable species to form a competitive cover.
- Hand Cutting: When possible, cuttings can be chipped in place and applied to the roadside as mulch where needed. In many

cases this can be used to improve soils, reduce erosion and improve vegetation.

- Timing: Consideration should be given to the visual impact of trimming as well as effectiveness of the operation. Chemical control will not be used on deciduous trees and shrubs until after the first of September, except for cut stump treatments.
- Chemical Control: Chemical control will not be used on conifers greater than 2' in height.
- Transplanting: Whenever possible, safe and practical, seedling trees will be dug or pulled by hand and transplanted to areas where there growth will be beneficial and appropriate. Agreements may be signed to allow private citizens or groups to collect seedlings for use as transplants.

1.6.3. Prescriptions

See **Appendix A**, IVM Prescriptions, Tree and Brush Control

1.7. Hazard Tree Removal

1.7.1. Policy and Objectives

Trees within the right-of-way are routinely monitored by the area maintenance staff. Hazard trees may be:

- Dead
- Diseased
- Leaning or
- Structurally damaged or unsound
- Shading by trees, in some cases, can cause excessive frost problems on roadway surfaces. In these cases canopy thinning or removal may take place to mitigate the risk.

Trees that are identified as an imminent threat to the highway or traffic will be evaluated using best horticultural judgment and removed as soon as possible.

2. SPECIAL CONSIDERATIONS

Special Maintenance Areas include any sections of roadside where there are unique maintenance requirements or existing arrangements with any external organizations. Special Maintenance Areas may include interchanges, community entrances or enhancement areas, areas maintained by cities, bicycle paths, storm water retention ponds, state parks, wellheads, environmentally sensitive areas, school zones, and roadsides adjacent to individual properties with current or annual no-spray agreements and new technologies.

2.1. Herbicide Sensitive Areas

2.1.1. Policy and objectives

There are a number of herbicide sensitive areas located within the area where herbicide use will be limited or restricted in order to reduce the potential of environmental impact. In these locations vegetation will be managed using limited herbicides use or non-chemical alternatives.

The Washington State Department of Agriculture maintains a list of individuals who have been diagnosed with Multiple Chemical Sensitivity (MCS). WSDOT is required by law to notify these individuals when making herbicide applications to roadside locations if the highway right-of-way is adjacent to their property and their principle residence is within one-half mile of the application. Concerned individuals can obtain further information by contacting the area maintenance office in Okanogan at **509.826.7364**.

2.2. Adopt-a-Highway and Owner Will Maintain Agreements

2.2.1. Policy and objectives

The Adopt-a-Highway program allows private citizens, volunteer groups, and businesses an opportunity to contribute to an enhanced roadside appearance through direct partnership with WSDOT. The program improves the overall appearance of the roadside primarily through litter control, although other activities that improve the visual and environmental condition of the roadside are permitted as well including limited planting and maintenance of specific areas. Other partnership opportunities are possible through general permits and agreements. Volunteer groups that do enhancement planting on WSDOT roadsides are typically required to establish and maintain the plantings. Communities may partner with WSDOT to develop and maintain selected Community Enhancement Areas as described in the Roadside Classification Plan.

Neighboring property owners may enter into an agreement with WSDOT where they take responsibility for the vegetation management activities along the area where their property abuts state right-of-way. These “owner will maintain” agreements are established through a General Permit and are required to be renewed on an annual basis. These agreements are typically implemented in cases where a neighboring property owner desires a higher level of care in front of their business or residence, or prefers maintaining the area to avoid WSDOT herbicide applications near their home or business.

2.2.2. Locations by Milepost

Locations where partnership agreements exist for accomplishment of roadside maintenance are listed in **Appendix E, Special Maintenance Areas, Table 3.0**.

2.3. Environmentally Sensitive Areas

2.3.1. Policy and Objectives

As a state agency, WSDOT is committed to conducting its activities in accordance with the dictates of sound environmental protection practices. This includes pollution prevention, work to avoid, minimize and appropriately mitigate adverse environmental impacts, and to comply with all environmental laws and regulations applicable to our business and activities.

Numerous environmentally sensitive areas such as streams, rivers, wetlands, lakes, and salt-water beaches containing habitat and species protected by the Endangered Species Act, as well as wellhead areas occur within close proximity to the highway system and sometimes require alternative management techniques or specialized emergency response plans, in order to reasonably avoid or minimize environmental or water quality impacts. Since Integrated Vegetation Management (IVM) techniques will be used along all state highways in NC Region, Area 3 to mitigate impacts from highway operation through the establishment of naturally self-sustaining plant communities in these areas, practices will not vary within these designated areas.

In compliance with the Regional Road Maintenance Endangered Species Act Program Guidelines, as agreed upon with the National Marine Fisheries Service, WSDOT has identified, mapped and located in the field all highway sections within 300 feet of rivers, wetlands and water bodies.

2.3.2. Locations

Environmentally sensitive areas are identified in the field with green guideposts and identified in an area atlas. For more information on the Regional Road Maintenance ESA Program Guidelines refer to: <http://www.wsdot.wa.gov/maintenance/roadside/esa.htm> or contact Gregor Myhr at 360.705.7853.

2.4. Storm Water Management Facilities

2.4.1. Policy and Objectives

Storm water management facilities include bio-filtration swales, retention ponds and infiltration ponds.

Storm water management facilities will be managed for noxious and nuisance weeds following the same guidelines mentioned in previous sections. The primary objectives, with regard to vegetation management within these facilities, are to maintain retention and detention functions to improve water quality.

2.4.2. Methods

Noxious weed control will be conducted at all storm water management facilities as necessary. Control of nuisance weeds will be coordinated with nuisance weed control along the adjacent roadside. Trees and brush should be cleared along both sides of the perimeter fencing for a width of approximately 8 feet as needed. Inlets and outfalls should be kept clear of unwanted vegetation and debris as well.

Refer to vegetation management prescriptions for specific weed, tree and brush species in Sections 1 and 2 of this document for timing and control methods.

2.4.3. Locations table by MP

See **Appendix E, Special Maintenance Areas**, Table 3.0

2.5. Wetland Mitigation Sites

2.5.1. Policy and Objectives

Wetland mitigation results from unavoidable impacts to naturally occurring wetlands from highway construction. In these cases new wetlands are created on WSDOT right-of-way and vegetation is managed to provide environmental functions similar to those eliminated in other areas by the highway's presence.

Wetland mitigation sites are carefully monitored for up to 10 years following their creation to ensure compliance with environmental regulation. In most cases vegetation in these sites are planted and established through the construction process so the maintenance actions are not required unless noxious weeds or hazardous trees become an issue. However, it is important that maintenance be aware of the locations of wetland mitigation sites to avoid impacting the required environmental functions of the sites.

2.5.2. Locations table by Milepost

See **Appendix E, Special Maintenance Areas**, Table 3.0

NC Region Area 3 - IVM Prescriptions

Zone 1 Bare-Ground

Zone 1 Bare-Ground Maintenance - Annual Cycle

Location Type	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
Where needed on site specific areas or guardrail sections Beware of Tree Damage	1'-4' area free of vegetation	Annual herbicide application	Spray truck w/fixed nozzle mounted 18" from ground	Non-selective residual herbicide Perspective @ 10 ozd. Oust/SFM 75 @ 3 ozd. <u>No Buffer Limitations</u>	Spring March/April	Monitor

Zone 1 Bare-Ground Maintenance - Annual Cycle

Location Type	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
Where needed on site specific areas or guardrail sections Beware of Tree Damage	1'-4' area free of vegetation	Annual herbicide application	Spray truck w/fixed nozzle mounted 18" from ground	Non-selective residual herbicide Perspective @ 10 ozd. Esplanade @ 5 ozd. <u>No Buffer Limitations</u>	Spring March/April	Monitor

Zone 1 Bare-Ground Maintenance - Annual Cycle

Location Type	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
Where needed on site specific areas or guardrail sections	1'-4' area free of vegetation	Annual herbicide application	Spray truck w/fixed nozzle mounted 18" from ground	Non-selective residual herbicide Krovar DF @ 8 lbs. Oust/SFM @ 3 ozd. Inplace 16 oz. <u>No Spray Within 60' of Water</u>	Spring March/April	Monitor

Zone 1 Bare-Ground Maintenance - Annual Cycle

Location Type	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
Where needed on site specific areas or guardrail sections	1'-4' area free of vegetation	Annual herbicide application	Spray truck w/fixed nozzle mounted 18" from ground	None-selective residual herbicide Payload @ 8 oz. Oust/SFM 75 @ 3 ozd. <u>No Buffer Limitations</u>	Spring March/April	Monitor

NC Region Area 3 - IVM Prescriptions

Noxious Weed Control

Chemical Control

Noxious Weed Control - General Weed Control (A)

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
All zones	After emergence	Eradication and control of listed noxious weeds.	Spot/Band	Truck mounted injection sprayer	E-2 @ 32-48 ozl Super Spread 90 @ 32 oz per 100 gallons carrier No Spray Within 60' of Water	Early growing season first/second flush	Reapply as necessary. Seed and fertilize to reduce weed competition.

Noxious Weed Control - General Weed Control (B)

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
Zones 2-3	As soon as plants appear	Selective eradication and control of listed noxious weeds.	Spot treatment w/ herbicide most effective	Tank sprayer equipped with Invert system, Injection system tank mix or back pack sprayer	Veteran 720 @ 64 Ozl Escort @ .5 Ozd Super Spread 90 @ 32 oz per 100 gallons carrier No spray w/in 60' of water	Early growing season	Reapply as necessary. Seed and fertilize to reduce weed competition See Appendix B

Noxious Weed Control - General Weed Control (C)

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
All zones Beware of Tree Damage	After emergence	Eradication and control of listed noxious weeds.	Spot/Band	Truck mounted injection sprayer	Perspective @ 5 oz Super Spread 90 @ 32 oz per 100 gallons carrier No Buffer Limitations	Early growing season first/second flush	Reapply as necessary. Seed and fertilize to reduce weed competition.

Noxious Weed Control - Thistles/Knapweeds - Rosette/Bolting Stage

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
All zones	As soon as plants appear	Eradication and control of listed noxious weeds.	Herbicide	Labor, transportation	Milestone @ 7 oz. Super Spread 90 @ 32 oz per 100 gallons carrier No Buffer Limitations	Early growing season	Repeat as necessary. Seed and fertilize to reduce weed competition.

Noxious Weed Control - Rush Skeletonweed - Rosette/bolting Stage

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
All zones	As soon as plants appear	Eradication and control of listed noxious weeds.	Spot treatment w/ herbicide	Backpack sprayer, pickup, etc.	Milestone @ 5 oz. Syl-Tac @ 16 oz per 100 gallons carrier No Buffer Limitations	Early growing season	Reapply as necessary. Seed and fertilize to reduce weed competition.

NC Region Area 3 - IVM Prescriptions

Noxious Weed Control

Noxious Weed Control - Yellow starthistle - At Rosette Stage

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
All zones	As soon as plants appear	Eradication and control of listed noxious weeds.	Spot treatment w/ herbicide	Backpack sprayer or spray bottle, pickup, etc.	Milestone @ 5 oz. Super Spread 90 @ 32 oz per 100 gallons carrier <u>No Buffer Limitations</u>	Early Season	Repeat as necessary. Seed and fertilize to reduce weed competition.

Noxious Weed Control - Dalmation Toadflax - Plant Emergence (A)

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
All zones	As soon as plants appear	Eradication and control of listed noxious weeds.	Spot treatment w/ herbicide	Backpack sprayer, pickup, etc.	Escalade @ 48 ozl Syl-Tac @ 16 oz per 100 gallons carrier <u>No Spray Within 60' of Water</u>	Early growing season	Reapply as necessary. Seed and fertilize to reduce weed competition

Noxious Weed Control - Dalmation Toadflax - Plant Emergence (B)

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
All zones	As soon as plants appear	Eradication and control of listed noxious weeds.	Spot treatment w/ herbicide	Backpack sprayer, pickup, etc.	Tordon 22k @ 32 ozl Telar @ 1 ozl Syl-Tac @ 16 oz per 100 gallons carrier <u>No Spray Within 60' of Water</u>	Early growing season	Reapply as necessary. Seed and fertilize to reduce weed competition

Noxious Weed Control - Poison Hemlock

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
All zones	As soon as plants appear	Eradication and control of listed noxious weeds.	Spot treatment w/ herbicide	Backpack sprayer, pump sprayer	Veteran 720 @ 64 ozl Super Spread 90 @ 32 oz per 100 gallons carrier <u>No Spray Within 60' of Water</u>	Late spring to fall	Reapply as necessary. Seed and fertilize to reduce weed competition.

Noxious Weed Control - Broadleaves in Reseeded Areas - Under 2" (A)

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
All zones	As soon as plants appear	Eradication and control of listed noxious weeds.	Band application	Tank sprayer	Buctril @ 24 oz Super Spread 90 @ 32 oz per 100 gallons carrier <u>No Spray Within 60' of Water</u>	Early Season	Repeat as necessary. Seed and fertilize to reduce weed competition.

Noxious Weed Control - Broadleaves in Reseeded Areas - Over 2" (B)

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
All zones	As soon as plants appear	Eradication and control of listed noxious weeds.	Band application	Tank sprayer	Buctril @ 20 ozl Vista @ 16 ozl Vanquish @ 2-4 ozl Super Spread 90 @ 32 oz per 100 gallons carrier <u>No Spray Within 60' of Water</u>	Early Season	Repeat as necessary. Seed and fertilize to reduce weed competition.

NC Region Area 3 - IVM Prescriptions

Noxious Weed Control
Mechanical Control

Noxious Weed Control - Kochia (Mechanical Control)

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
All zones	Before seed	Reduce seed production listed noxious weeds.	Mow	Mower	None No Buffer Limitations	Late fall	Repeat as necessary

Noxious Weed Control - Scotch Thistle (Mechanical) with herbicide

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
All zones	2' to 6'	Eradiction	Dig up plant	Shovel	N/A	All season	Monitor for reemergence

Biological Control

Noxious Weed Control - Diffuse Knapweed (Biological Control)

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
All zones	Flowering	Reduce/control host plant	Biological	None	Larinus minutus No Buffer Limitations	Spring Summer	Monitor and repeat or redeploy as needed

Noxious Weed Control - Yellow Starthistle (Biological Control)

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
All zones	As soon as plants appear	Reduce/control host plant	Biological	None	Eustenopus villosus No Buffer Limitations	Spring Summer	Monitor and repeat or redeploy as needed

Noxious Weed Control - Poison Hemlock (Biological Control)

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
All zones	As soon as plants appear	Reduce/control host plant	Biological	None	Agonopterix alstroemeriana No Buffer Limitations	Spring Summer	Monitor and repeat or redeploy as needed

Noxious Weed Control - Dalmation Toadflax (Biological Control)

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
All zones	As soon as plants appear	Reduce/control host plant	Biological	None	Macinus Jenthus No Buffer Limitations	Spring Summer	Monitor and repeat or redeploy as needed

NC Region Area 3 - IVM Prescriptions

Tree and Brush Control

Tree and Brush Control - Alder, Maple, Cottonwood (trees under 6' ht.)

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
Zone 2	As soon as seedlings become visible w/in 30' of fog line (no guardrail present)	Control of trees that may impact roadside function if allowed to grow.	Selective foliar treatment w/ herbicide	Truck mounted sprayer where possible, backpack sprayer where necessary	Garlon 3A w/ Redi-vert at label rate. Krenite S on alder at recommended label rates <u>No Buffer Limitation</u>	Late fall to avoid brown out	Reapply as necessary. Seed and fertilize to reduce weed competition See Appendix B

Tree and Brush Control - Alder, Maple, Cottonwood (trees over 6' ht.)

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
Zone 2	Whenever trees are likely or have potential to grow and fall on the highway	Control of trees that may impact roadside function if allowed to grow.	Hand cutting, treatment of cut surface w/ herbicide Chip debris in zone 2	Power saws, loppers, chipper, backpack or hand-held sprayer	Garlon 4 at label rate for cut-stump treatment <u>No spray w/in 60' of water</u>	Anytime	Reapply as necessary. Seed and fertilize to reduce weed competition See Appendix B

Tree and Brush Control - Conifers (trees under 2' ht.)

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
Zone 1 or 2	As soon as seedlings become visible w/in 30' of fog line (no guardrail present)	Control of trees that may impact roadside function if allowed to grow.	Foliar treatment w/ herbicide	Tank sprayer where possible, backpack sprayer where necessary	Garlon 4, Escort, or Krenite S at labeled rates apply w/ Redi-vert when possible <u>No spray w/in 60' of water</u>	Mid summer when new growth is present	Reapply as necessary. Seed and fertilize to reduce weed competition See Appendix B

Tree and Brush Control - Conifers (trees under 2' ht.)

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
Zone 1 or 2	As soon as seedlings become visible w/in 30' of fog line (no guardrail present)	Control of trees that may impact roadside function if allowed to grow.	Hand pulling transplant if possible	Weed Wrench optional	Mechanical <u>No Buffer Limitation</u>	Anytime	Reapply as necessary. Seed and fertilize to reduce weed competition See Appendix B

Tree and Brush Control - Conifers (trees over 2' ht.)

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
Zone 2 or 3	Whenever tree has been identified as defective or likely to fall on the highway	Control of trees that may impact roadside function if allowed to grow.	Hand cutting Chip debris in zone 2 if necessary	Power saws, chipper,	Mechanical <u>No Buffer Limitation</u>	Anytime	Reapply as necessary. Seed and fertilize to reduce weed competition See Appendix B

NC Region Area 3 - IVM Prescriptions

Nuisance Weed Control

Nuisance Weed Control - Mustard Species, Mullen, Teasel, China Lettuce and other Nuisance species (Option A)

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
All zones new or limited infestations	Wherever new infestations occur (dependent on available resources)	Minimize populations and prevent further spread of nuisance weeds	Foliar treatment w/ herbicide	Truck mounted sprayer where possible, backpack sprayer where necessary	Veteran 720 @ 64 Ozl Escort @ .5 Ozd Super Spread 90 @ 32 oz per 100 gallons carrier No spray w/in 60' of water	Prior to seed	Reapply as necessary. Seed and fertilize to reduce weed competition See Appendix B

Nuisance Weed Control - Mustard Species, Mullen, Teasel, China Lettuce and other Nuisance species (Option B)

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
Roadside	As soon as plants appear	Selective eradication and control of listed noxious weeds.	Spot treatment w/ herbicide most effective	Tank sprayer equipped with Invert system, Injection system tank mix or back pack sprayer	E-2 @ 48 Ozl Super Spread 90 @ 32 oz per 100 gallons carrier No spray w/in 60' of water	Early growing season	Reapply as necessary. Seed and fertilize to reduce weed competition See Appendix B

Nuisance Weed Control - Mustard Species, Mullen, Teasel, China Lettuce and other Nuisance species (Option C)

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
Roadside	As soon as plants appear	Selective eradication and control of listed noxious weeds.	Spot treatment w/ herbicide most effective	Tank sprayer equipped with Invert system, Injection system tank mix or back pack sprayer	Vanquish @ 16-24 Ozl Super Spread 90 @ 32 oz per 100 gallons carrier No Buffer Limitation	Early growing season	Reapply as necessary. Seed and fertilize to reduce weed competition See Appendix B

Nuisance Weed Control - Mustard Species, Mullen, Teasel, China Lettuce and other Nuisance species (Option D)

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
All zones new or limited infestations	Wherever new infestations occur (dependent on available resources)	Minimize populations and prevent further spread of nuisance weeds	Foliar treatment w/ herbicide	Truck mounted sprayer where possible, backpack sprayer where necessary	Curtail @64 Ozl Escort @ .5 Ozd Super Spread 90 @ 32 oz per 100 gallons carrier No spray w/in 60' of water	Prior to seed	Reapply as necessary. Seed and fertilize to reduce weed competition See Appendix B

Nuisance Weed Control - Mustard Species, Mullen, Teasel, China Lettuce and other Nuisance species (Option E)

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
All zones new or limited infestations	Wherever new infestations occur (dependent on available resources)	Minimize populations and prevent further spread of nuisance weeds	Foliar treatment w/ herbicide	Truck mounted sprayer where possible, backpack sprayer where necessary	Transline @ 16 ozd Escort XD @ 1 ozd Super Spread 90 @ 32 oz per 100 gallons carrier No Buffer Limitation	Prior to seed	Reapply as necessary. Seed and fertilize to reduce weed competition See Appendix B

Nuisance Weed Control - Mustard Species, Mullen, Teasel, China Lettuce and other Nuisance species (Option F)

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
All zones new or limited infestations	Wherever new infestations occur (dependent on available resources)	Minimize populations and prevent further spread of nuisance weeds	Foliar treatment w/ herbicide	Truck mounted sprayer where possible, backpack sprayer where necessary	Roundup-Pro @ 64 ozd Super Spread 90 @ 32 oz per 100 gallons carrier No Buffer Limitation	Prior to seed	Reapply as necessary. Seed and fertilize to reduce weed competition See Appendix B

NC Region Area 3 - IVM Prescriptions

Nuisance Weed Control - Kochia, Knapweeds, Dalmation Toadflax, Thistle (Mechanical)

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
Zones 2-3	Weed height exceeds 8"	Reduce or eliminate seed production of weeds	Mow at vegetation at 6" to eliminate or reduce production of seeds	Mower	None <u>No Buffer Limitation</u>	Prior to weed seed development	Re-mow as needed or follow up with herbicide, many plants will still produce seeds without follow-up treatment.

Nuisance Weed Control - Knapweeds (Biological)

Location Type	Action Threshold	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
All zones	As soon as plants appear	Eradication and control of listed noxious weeds.	Biological Place 2 bio control agents (bugs) per plant	Hand placement	Larinus minutus <u>No Buffer Limitation</u>	Early growing season	Monitor population and reapply as needed document in IVM form

NC Region Area 3 - IVM Prescriptions

Routine Mowing

Zone 2 Maintenance - Annual mowing

Location Type	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
Operational zone adjacent to shoulder	8 inch average ht. single pass to maintain desirable low vegetation.	Annual mowing, 6' - 8' wide single pass adjacent to Zone 1 as necessary	Mower, attenuator	None required	June on as needed	Seed and fertilize to reduce weed competition if necessary (See Appendix B)

Zone 2 Maintenance - Selective trimming

Location Type	Management Goal	Method	Equipment	Materials	Timing	IVM Follow-up
Operational zone adjacent to shoulder	Annual brush or tree limb control adjacent to shoulder to maintain sight distance and other operational needs.	Annual mechanical trimming where needed. Follow up trimming with pole saw as needed.	Mower with side-arm unit, pole saw, attenuator as needed.	None required	Late in season to minimize visual impacts.	Seed and fertilize if alder/scotch broom are present to reduce competition.

Planting Area A (Okanogan/Omak)

Planting Prescriptions

Seed Mix 1 (Okanogan/Omak)

Species and Variety of Seed in Mixture by Common Name and (Botanical name)	Pounds Pure Live Seed (PLS) Per Acre
Bluebunch Wheatgrass "Duffy Creek" (<i>Pseudoroegneria spicata</i>)	12.00
Sand dropseed (<i>Sporobolus cryptandrus</i>)	1.00
Sandberg Bluegrass "Duffy Creek" (<i>Poa sandbergii</i>)	3.00
Basin Wildrye "Yakima" (<i>Elymus cinereus</i>)	5.00
Total Lbs PLS/Acre	21

Planting Area B

(Pateros/Brewster/Bridgeport)

Planting Prescriptions

Seed Mix 1 (Pateros)

Species and Variety of Seed in Mixture by Common Name and (Botanical name)	Pounds Pure Live Seed (PLS) Per Acre
Thickspike Wheatgrass "Schwindemar" <i>(Agropyron trachycaulum)</i>	4.25
Bluebunch Wheatgrass "Duffy Creek" <i>(Pseudoroegneria spicata)</i>	3.66
Sand dropseed <i>(Sporobolus cryptandrus)</i>	0.15
Sandberg Bluegrass "Duffy Creek" <i>(Poa sandbergii)</i>	0.62
Indian Ricegrass <i>(Oryzopsis hymenoides)</i>	4.75
Total Lbs PLS/Acre	13.43

Planting Area B (Pateros/Brewster/Bridgeport)

Planting Prescriptions

Seed Mix 1 (Pateros)

Kind and Variety of Seed in Mixture by Common Name and (Botanical name)	Pounds Pure Live Seed (PLS) Per Acre
Thickspike Wheatgrass "Schwindemar" (<i>Agropyron trachycaulum</i>)	4.25
Bluebunch Wheatgrass "Duffy Creek" (<i>Pseudoroegneria spicata</i>)	3.66
Sand dropseed (<i>Sporobolus cryptandrus</i>)	0.15
Sandberg Bluegrass "Duffy Creek" (<i>Poa sandbergii</i>)	0.62
Indian Ricegrass (<i>Oryzopsis hymenoides</i>)	4.75
Total Lbs PLS/Acre	13.43

Herbicides Approved for Use on WSDOT Rights of Way

When making herbicide applications:

1. Always read and follow product labels
2. Always use personal protective equipment when mixing, loading, and applying

Chemical Name	Product Names	Mode of Action (WSSA Class)	Where Used	How/Why Used	Notes/ Recommendations	WSDOT Restrictions	Cautions
2,4-D	Agri Star 2, 4-D LV4, Basecamp Amine 4, Clean Amine, Crossbow, Curtail, ES, Escalade, Low Vol 4 Ester, Platoon, Rangestar, Savage, Solution, Veteran 720, Weedar 64, WeedDestroy, Weedmaster, Weedone LV4	Growth regulator - phenoxy synthetic auxin (4)	Noxious and nuisance weed control, and tree and brush control, Zones 2 and 3	Selective broadleaf treatment	Ester and acid formulations of 2,4-D may provide a good alternative to amine formulations. A number of the 2,4-D products come premixed with other herbicides.	Amine formulations of 2,4-D are restricted for use within 60' of all water	Amine formulations cause irreversible eye damage and are highly toxic to rainbow trout. All 2,4-D products pose risks when applied near grapes and other sensitive crops.
Aminocyclopyrachlor	Perspective Plainview Streamline Viewpoint	Growth regulator - mimics plant hormones, synthetic auxin (4)	Nuisance and noxious weed control Zones 2 and 3, Plainview is a bare-ground mixture	Depending on which mixture, can be either selective broadleaf or non-selective pre-emergent control	Each product is premixed with other herbicide to achieve either selective or non-selective control	No WSDOT use restrictions beyond those specified on product labels	Refer to product labels
Aminopyralid	Milestone Milestone VM Milestone VM Plus Capstone	Growth regulator - mimics plant hormones, synthetic auxin (4)	Nuisance and noxious weed control Zones 2 and 3	Selective broadleaf treatment	Effective on many perennial weed species due to some amount of soil residual activity on suppressing seed germination	No WSDOT use restrictions beyond those specified on product labels	Refer to product label
Bromacil	Krovar 1 DF Hyvar	Photosynthetic inhibitor - photosystem II, site A (5)	Zone 1 bare-ground	Nonselective pre-emergent grass and weed control	Krovar is premixed with diuron	<u>Westside</u> - Restricted use <u>Eastside</u> - Krovar restricted for use within 60' of all water	Bromacil is potentially mobile in soil, use caution if rain is possible.
Bromoxynil	Buctril 2EC BroClean Brox 2E Maestro 2EC	Photosynthetic inhibitor - photosystem II, site C (6)	Noxious and nuisance weed control, Zones 2 and 3	Selective broadleaf treatment	Effective broadleaf weed control without grass seed suppression	<u>Westside</u> - Restricted use <u>Eastside</u> - Restricted for use within 60' of all water	Can cause irreversible eye damage, highly toxic to fresh water fish
Chlorsulfuron	Telar XP Landmark XP Throttle XP Perspective	Amino acid synthesis inhibitors - ALS inhibitor (2)	Noxious and nuisance weed control, Zones 2 and 3	Selective broadleaf treatment	Product highly effective on difficult perennials such as Canadian thistle and horsetail. Landmark is premixed with Oust.	No WSDOT use restrictions beyond those specified on product labels	Refer to product labels
Clopyralid	Transline Curtail	Growth regulator - pyridinecarboxylic acid synthetic auxin (4)	Noxious and nuisance weed control, Zones 2 and 3	Selective broadleaf treatment	Curtail is premixed with 2,4-D, Pathfinder is premixed with triclopyr	Curtail and Pathfinder are restricted for use within 60' of all water because of mixture with other restricted herbicides.	Curtail contains 2,4-D amine which causes irreversible eye damage and is highly toxic to rainbow trout

Herbicides Approved for Use on WSDOT Rights of Way

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Chemical Name	Product Names	Mode of Action (WSSA Class)	Where Used	How/Why Used	Notes/ Recommendations	WSDOT Restrictions	Cautions
Dicamba	Vanquish Veteran 720 Dicamba HD E2 Escalade Range Star Viewpoint	Growth regulator - benzoic acidsynthetic auxin (4)	Noxious and nuisance weed control, and tree and brush control, Zones 2 and 3	Selective broadleaf treatment	Vanquish is the dicamba formulation without 2,4-D	Veteran 720 is restricted for use within 60' of all water because of 2,4-D amine content	Veteran 720 contains 2-4-D amine which causes irreversible eye damage and is highly toxic to rainbow trout
Dichlobenil	Norosac 4G Casoron	Cell wall (cellulose) synthesis inhibitor (20)	Ornamental planting beds	Pre-emergent weed control in ground cover beds. Post emergent control of grasses.	Highly effective for pre-emergent control of unwanted weeds in ornamentals	Restricted for use within 60' of all water	Dichlobenil is highly toxic to aquatic insects
Diflufenzopyr	Overdrive	Auxin transport inhibitor (19)	Noxious and nuisance weed control, Zones 2 and 3	Selective broadleaf treatment		No WSDOT use restrictions beyond those specified on labels	Refer to product label
Diuron	Karmex Diuron 4 L Diuron 80 DF Parrot Sahara DG	Photosynthetic inhibitor - photosystem II, site B (7)	Zone 1 bare-ground	Nonselective pre-emergent grass and weed control	Cost effective weed control for Zone 1 in Eastern Washington	Westside - Restricted use Eastside - Restricted for use within 60' of all water	Highly toxic to fish.
Flumioxazin	Payload	Cell membrane disrupter - PPO inhibitor (14)	Zone 1 bare-ground	Nonselective pre-emergent weed control	Requires constant agitation to keep in suspension	Restricted for use within 60' of all salt water	Highly toxic to estuarine invertebrates
Fluroxypyr	Vista E2 Escalade	Growth regulator - pyridinecarboxylic acid synthetic auxin (4)	Noxious and nuisance weed control, Zones 2 and 3	Selective broadleaf treatment	Highly effective on Kochia	No WSDOT use restrictions beyond those specified on product labels	Highly toxic to Eastern Oyster, high surface runoff potential
Fosamine	Krenite S	Growth regulator - inhibits bud and leaf formation (27)	Tree and brush control in Zones 2 & 3	Selective broadleaf treatment	Effective broadleaf tree control without visual impacts	No WSDOT use restrictions beyond those specified on labels	Refer to product labels
Glyphosate	Roundup Pro Razor Pro Buccaneer Aquaneat Rodeo Aquamaster Mad Dog Plus Ranger Pro	Amino acid synthesis inhibitor - EPSP synthase inhibitor (9)	Zone 1, spot spray around shrub and tree plantings, aquatic weed control (Rodeo, Aquamaster)	Nonselective control of all vegetation	Rodeo, Aquamaster and Aquaneat are approved for use in or over water. Aquatic versions of glyphosate products are approved for use with NPDES permit.	No WSDOT use restrictions beyond those specified on product labels	Refer to product labels

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Chemical Name	Product Names	Mode of Action (WSSA Class)	Where Used	How/Why Used	Notes/ Recommendations	WSDOT Restrictions	Cautions
Imazapic	Plateau	Amino acid synthesis inhibitors - ALS inhibitor (2)	All zones	Pre-emergent control of undesirable grasses	WSDOT tests plots show a significant impact on desirable perennial grasses at rates above 6 oz per acre.	Westside - Restricted use Eastside - Restricted for use within 60' of all water	Moderate to high potential to leach into groundwater
Imazapyr	Arsenal Habitat Polaris Sahara DG Imazuron	Amino acid synthesis inhibitors - ALS inhibitor (2)	All zones	Pre and post-emergent non-selective control of all vegetation	Habitat is an aquatic version of Arsenal - good alternative to glyphosate in certain cases, approved for use with NPDES permit.	No WSDOT use restrictions beyond those specified on product labels	High surface runoff potential
Indaziflam	Esplanade	Cellulose-biosynthesis inhibitor (21)	Zone 1 bare-ground	Nonselective pre-emergent weed control	Effective control of annual weeds such as marestalk, kochia, and crab grass	Restricted for use within 60' of all water	Toxic to fish and aquatic invertebrates
Isoxaben	Gallery 75DF	Cell wall (cellulose) synthesis inhibitor (20)	Turf & Ornamental	Pre-emergent weed control in ground cover beds	Works well by itself or with Ronstar	Restricted for use within 60' of all water	Moderate to high potential to leach into groundwater
Metsulfuron-methyl	Escort XP Metsulfuron Methyl 60 DF MetCel VMF Streamline	Amino acid synthesis inhibitors - ALS inhibitor (2)	Noxious and nuisance weed control, and tree and brush control, Zones 2 and 3	Selective broadleaf and conifer treatment	Good control on many difficult perennials.	No WSDOT use restrictions beyond those specified on product labels	Refer to product labels
Norflurazon	Predict	Bleaching - carotenoid biosynthesis inhibitor (12)	Zone 1 bare-ground	Pre-emergent weed control in Zone 1 and ground cover beds	Good Zone 1 product but may be difficult to keep in suspension	Restricted for use within 60' of all water	High surface runoff potential
Oryzalin	Oryzalin A.S. Surflan A.S	Seedling growth inhibitor - microtubule assembly inhibitor (3)	Zone 1 Ornamental planting beds	Pre-emergent weed control in Zone 1 and ground cover beds	Product requires additional rinsing to thoroughly remove residues from empty container	Restricted for use within 60' of all water	Highly toxic to fish
Oxadiazon	Ronstar G Ronstar WSP	Cell membrane disrupter - PPO inhibitor (14)	Turf & Ornamental	Pre-emergent weed control in ground cover beds	Works well by itself or with Gallery	Restricted for use within 60' of all water, gardens, plants bearing edible fruit	Highly toxic to fish
Pendimethalin	Pendulum 2G Pendulum Aqua	Seedling growth inhibitor - microtubule assembly inhibitor (3)	Zone 1 Turf & Ornamental	Nonselective/Selective depending on rate, Pre-emergent grass and weed control		Westside - Restricted use Eastside - Restricted for use within 60' of all water	Highly toxic to fish, high potential for loss on eroded soil
Picloram	Tordon	Growth regulator - pyridinecarboxylic acid synthetic auxin (4)	Noxious and nuisance weed control, Zones 2 and 3	Selective broadleaf treatment	Highly effective for conifer and broadleaf weed control in Eastern Washington	Westside - Restricted use Eastside - Restricted for use within 60' of all water	Highly mobile in soil and readily adsorbed through roots of desirable trees
Pyraflufen	Edict Edict 2SC	Cell membrane disrupter - PPO inhibitor (14)	Noxious and nuisance weed control, Zones 2 and 3	2,-4-D substitute, effective on Kochia, Russian thistle	Effective with Roundup for Kochia control	Restricted for use within 60' of all water	Irreversible eye damage, highly toxic to Rainbow Trout

Herbicides Approved for Use on WSDOT Rights of Way

When making herbicide applications:

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Chemical Name	Product Names	Mode of Action (WSSA Class)	Where Used	How/Why Used	Notes/ Recommendations	WSDOT Restrictions	Cautions
Sulfentrazone	Portfolio Throttle XP	Cell membrane disrupter - PPO inhibitor (14)	Zone 1 bare-ground	Nonselective pre-emergent grass and weed control	Use caution in sandy soils	Westside - Restricted use Eastside - Restricted for use within 60' of all water	High surface runoff potential, potentially mobile in soil if rain is possible.
Sulfometuron-methyl	Oust Landmark XP Sulfomet Throttle XP	Amino acid synthesis inhibitors - ALS inhibitor (2)	Zone 1 bare-ground	Nonselective pre/post emergent grass and weed control	Landmark is a premix with Oust and Telar	Refer to product labels	Oust has been proven to move with wind if not watered in to the ground
Tebuthiuron	Spike 80DF	Photosynthetic inhibitor - photosystem II, site B (7)	Zone 1 bare-ground	Nonselective pre-emergent grass and weed control		Westside - Restricted use Eastside - Restricted for use within 60' of all water	High surface runoff potential, potentially mobile in soil if rain is possible.
Topramezone	Frequency	Bleaching - carotenoid biosynthesis inhibitor (12)	Zone 1 bare-ground	Nonselective pre-emergent grass and weed control	Use in combination with another bare-ground chemical	Refer to product label	Refer to product label
Triclopyr Amine	Capstone, Element 3A, Garlon 3A, Milestone VM Plus	Growth regulator - pyridinecarboxylic acid synthetic auxin (4)	Noxious and nuisance weed control, and tree and brush control, Zones 2 and 3	Selective broadleaf treatment	Works well for scotch broom control	Refer to product label	Can cause irreversible eye damage
Triclopyr Ester	Crossbow, Crossbow L, Element 4, Garlon, Pathfinder	Growth regulator - pyridinecarboxylic acid synthetic auxin (4)	Noxious and nuisance weed control, and tree and brush control, Zones 2 and 3	Selective broadleaf treatment	Works well for cut-stump or basal treatments applications. Crossbow is premixed with 2,4-D, Pathfinder with clopyralid	Restricted for use within 60' of all water	Highly toxic to fish

Appendix C:
North Central Region Area 3
Zone 1 Maintenance
Map 1 of 4

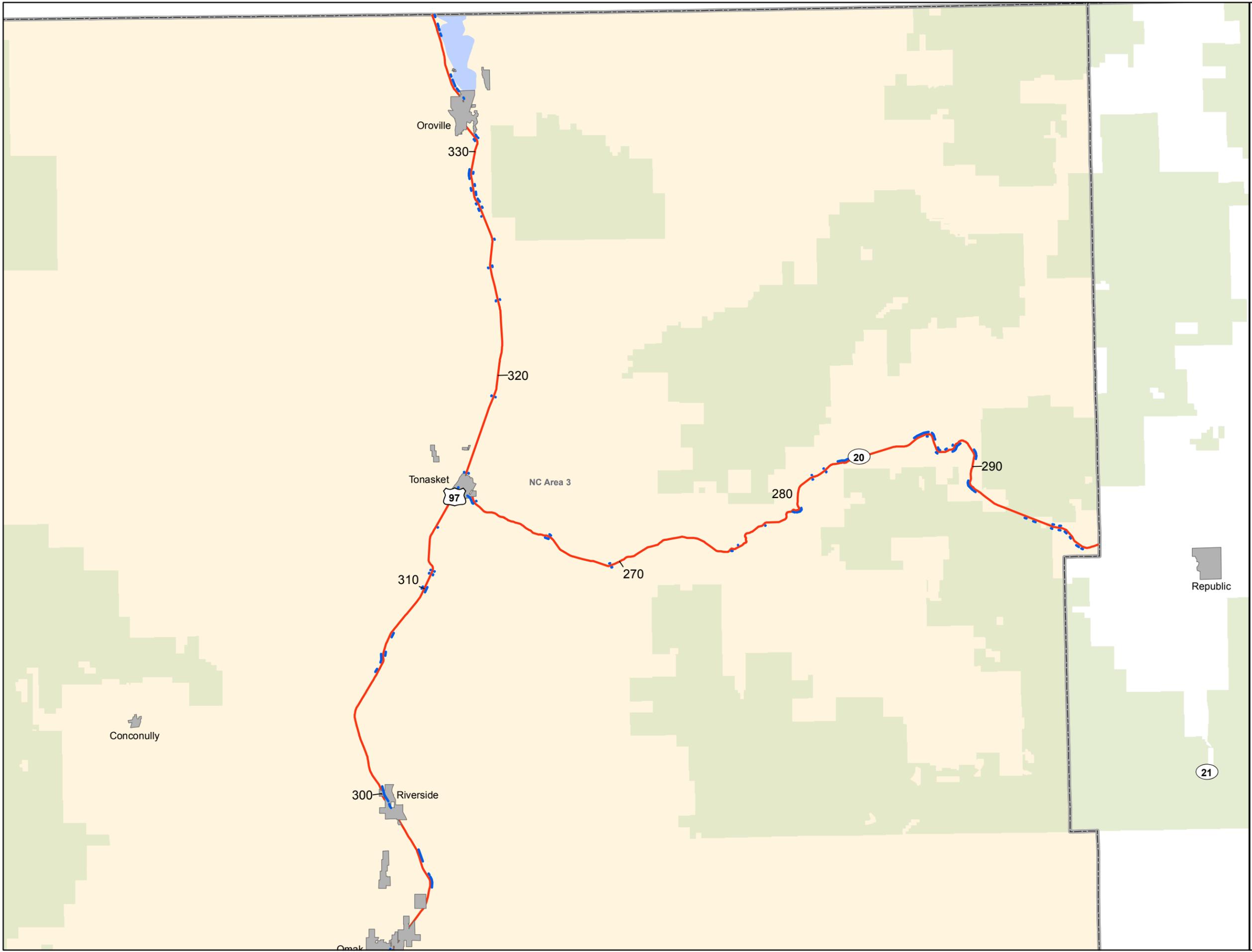


Legend

- Zone 1 Bareground
- 75 — Milepost
- City Limits
- State Route
- County Boundaries
- Major Lakes
- National Park
- National Forest
- NC Region area 3



Appendix C:
North Central Region Area 3
Zone 1 Maintenance
Map 2 of 4



Legend

- Zone 1 Bareground
- 75 Milepost
- City Limits
- State Route
- County Boundaries
- Major Lakes
- National Park
- National Forest
- NC Region area 3



Appendix C:
North Central Region Area 3
Zone 1 Maintenance
Map 3 of 4

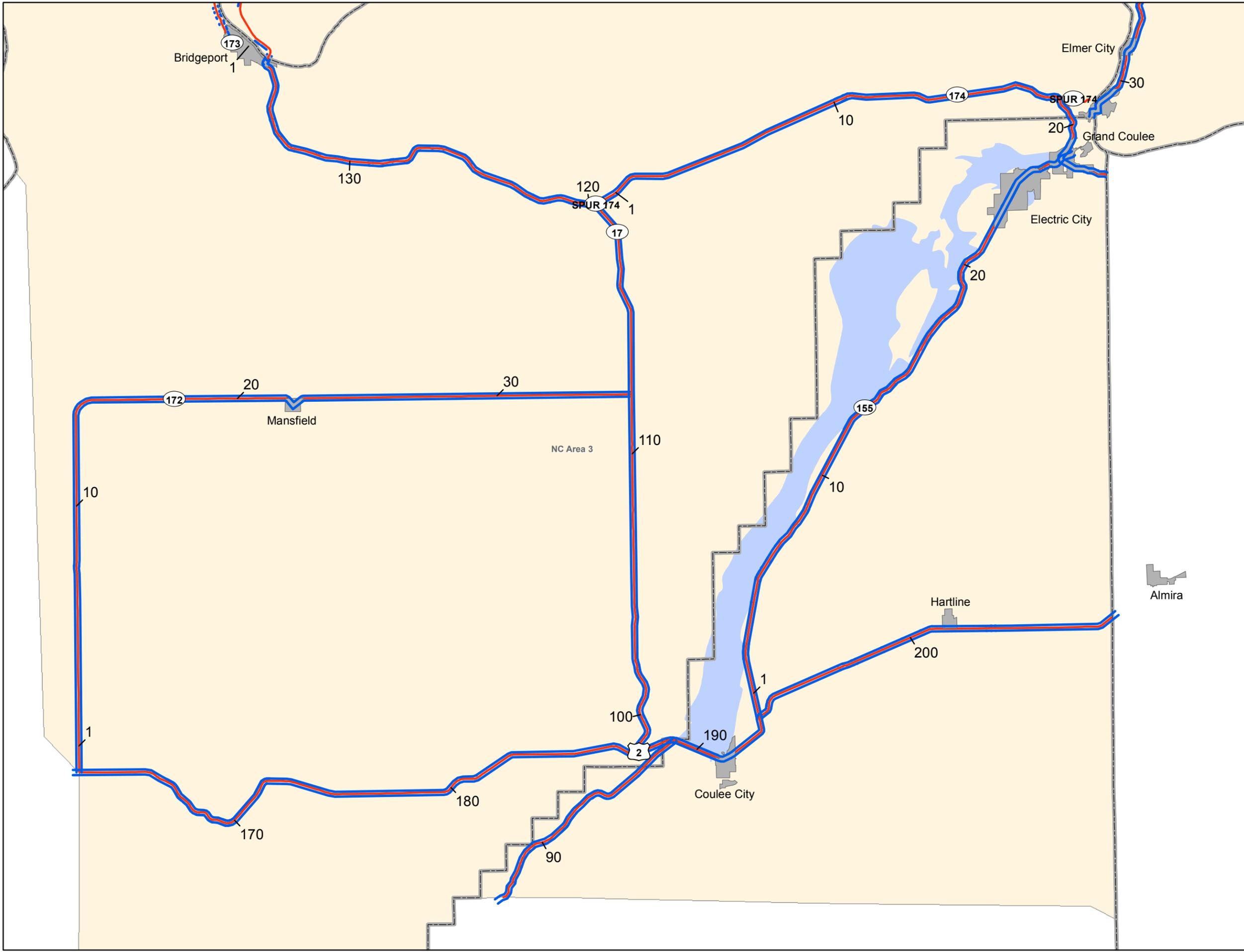


Legend

- Zone 1 Bareground
- 75 — Milepost
- City Limits
- State Route
- County Boundaries
- Major Lakes
- National Park
- National Forest
- NC Region area 3



Appendix C:
North Central Region Area 3
Zone 1 Maintenance
Map 4 of 4



Legend

-  Zone 1 Bareground
-  75 Milepost
-  City Limits
-  State Route
-  County Boundaries
-  Major Lakes
-  National Park
-  National Forest
-  NC Region area 3



Table 3.0

Definitions: Locations area distinguished between opposing sides of the highway by right shoulder (RS) and median shoulder (LS) in relation to direction of travel, indicated by increasing (INC) or decreasing (DEC) mile markers.

Description: Brief explanation of special treatment required

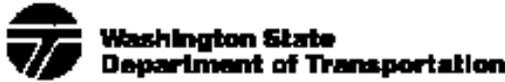
SR	Direction	Shoulder	Beg MP	End MP	Type	Description
002	Both	RS	187.75	188.04	US Bureau of Land Management	
002	Both	RS	190.90	191.31	Coulee City	Maintain by City
017	Both	RS	95.69	95.73	US Bureau of Reclamation	
017	Both	RS	135.60	136.03	City of Bridgeport	Maintain by City
017	Both	RS	136.02	143.85	Colville Indian Reservation	
017	Both	RS	143.85	144.05	State Park	
017	Both	RS	144.05	144.29	Colville Indian Reservation	
020	Both	RS	148.08	177.31	National Park Service	No spray/Mow out area
020	Both	RS	177.54	177.77	US Forest Services	
020	Both	RS	178.05	178.24	US Forest Services	
020	Both	RS	184.68	184.89	US Forest Services	
020	Both	RS	192.66	192.72	City of Winthrop	Maintain by City
020	Both	RS	192.86	194.32	City of Winthrop	Maintain by City
020	Both	RS	200.99	202.69	City of Twisp	Maintain by City
020			201.45	201.55	Stormwater Ponds	Wet Pond
020			202.05	202.15	Stormwater Ponds	Wet Pond
020			202.18	202.28	Stormwater Ponds	Wet Pond
020	Both	RS	210.16	214.75	US Forest Services	
020	Both	RS	232.69	232.97	City of Okanogan	Maintain by City
020	Both	RS	233.01	233.31	Colville Indian Reservation	
020	Both	RS	261.95	262.40	City of Tonasket	Maintain by City
020	Both	RS	292.66	294.00	US Forest Services	
020	Both	RS	294.55	294.84	US Forest Services	
097	Both	RS	246.97	247.66	US Bureau of Land Management	
097	Both	RS	252.24	252.66	US Bureau of Land Management	
097	Both	RS	253.59	254.51	City of Pateros	Maintain by City
097	Both	RS	259.96	261.31	City of Brewster	Maintain by City
097			260.19	260.28	Gravel Lined Infiltration Trenches	Infiltration Trench
097			260.19	260.28	Gravel Lined Infiltration Trenches	Infiltration Trench
097	Both	RS	264.05	291.93	Colville Indian Reservation	
097			288.79	288.89	Stormwater Ponds	Biofiltration Pond
097	Both	RS	291.17	292.11	City of Omak	Maintain by City
097	Both	RS	293.20	293.30	City of Omak	Maintain by City
097	Both	RS	294.78	295.04	US Bureau of Land Management	
097	Both	RS	298.61	300.13	City of Riverside	Maintain by City
097	Both	RS	303.35	303.61	US Bureau of Land Management	
097	Both	RS	314.74	315.43	City of Tonasket	Maintain by City
097	Both	RS	331.22	332.70	City of Oroville	Maintain by City
097	Both	RS	332.44	332.63	State Park	

Table 3.0

Definitions: Locations area distinguished between opposing sides of the highway by right shoulder (RS) and median shoulder (LS) in relation to direction of travel, indicated by increasing (INC) or decreasing (DEC) mile markers.

Description: Brief explanation of special treatment required

SR	Direction	Shoulder	Beg MP	End MP	Type	Description
153	Both	RS	5.77	5.89	US Bureau of Land Management	
153	Both	RS	6.16	6.23	US Bureau of Land Management	
153	Both	RS	8.02	8.51	US Bureau of Land Management	
155	Both	RS	23.88	24.70	Electric City	Maintain by City
155	Both	RS	25.18	26.23	City of Grand Coulee	Maintain by City
155	Both	RS	28.04	29.57	City of Coulee Dam	Maintain by City
155	Both	RS	28.05	30.04	National Park Service	
155	Both	RS	31.01	31.69	Elmer City	Maintain by City
155	Both	RS	44.42	44.48	City of Nespelem	Maintain by City
155	Both	RS	80.46	30.05	Colville Indian Reservation	
172	Both	RS	21.74	22.72	City of Mansfield	Maintain by City
173	Both	RS	0.00	2.24	City of Bridgeport	Maintain by City
173	Both	RS	9.78	10.07	US Bureau of Land Management	
173	Both	RS	10.80	11.99	City of Brewster	Maintain by City
174	Both	RS	20.58	22.88	City of Grand Coulee	Maintain by City
215	Both	RS	0.00	3.33	City of Okanogan	Maintain by City
215	Both	RS	3.68	6.24	City of Omak	Maintain by City
155 Spur	Both	RS	80.15	80.52	City of Omak	Maintain by City
155 Spur	Both	RS	80.42	80.15	Colville Indian Reservation	
174 Spur	Both	RS	20.54	20.92	National Park Service	



Integrated Vegetation Management Record

Org. Code 425320	County okanogan	Date 5/26/2004		Vegetation Management Zone(s) <input checked="" type="checkbox"/> Zone 1 <input checked="" type="checkbox"/> Zone 2 <input type="checkbox"/> Zone 3																		
Area SR 97 MP 253 to MP 253.6			Location Pateroes area																			
Check Appropriate Boxes: <input checked="" type="checkbox"/> Roadside <input type="checkbox"/> Landscaped Area <input type="checkbox"/> Interchange <input type="checkbox"/> Mitigation Site <input type="checkbox"/> Third Party Damage <input type="checkbox"/> Sensitive Sites <input checked="" type="checkbox"/> NB <input type="checkbox"/> EB <input type="checkbox"/> Shoulder <input type="checkbox"/> Rest Area <input type="checkbox"/> Bridge <input type="checkbox"/> Stormwater <input type="checkbox"/> Yes <input type="checkbox"/> Aquatic <input checked="" type="checkbox"/> SB <input type="checkbox"/> WB <input type="checkbox"/> Median <input type="checkbox"/> Park-n-Ride <input type="checkbox"/> Ramp <input type="checkbox"/> Yard/Stockpile <input type="checkbox"/> Wetlands																						
Target: <input checked="" type="checkbox"/> Noxious Weeds <input type="checkbox"/> Brush/Trees <input type="checkbox"/> Other <input type="checkbox"/> Nuisance Weeds <input type="checkbox"/> Hazard Tree List Target/Species: _____ Damage: Toadflax																						
Reason for Action:																						
<input checked="" type="checkbox"/> Noxious Weeds <input type="checkbox"/> Nuisance Weeds <input type="checkbox"/> Fire Prevention <input type="checkbox"/> Restore Native Veg. <input type="checkbox"/> Zone 1 Pilot <input type="checkbox"/> Aesthetic <input type="checkbox"/> Site Distance <input type="checkbox"/> Hazard Vegetation <input type="checkbox"/> Customer Request <input type="checkbox"/> Enhance Vegetation <input type="checkbox"/> Slope Stabilization <input type="checkbox"/> Other _____																						
Long term IVM plan (Describe goals/objectives and a step-by-step approach over time)																						
We released 100-125 Mecinus Janthinus insects per acre. We will monitor this area. We will also continue spot spraying noxious weeds as needed. Most of this area will have to be sprayed with a backpack sprayer because of the 60' ESA buffer zone.																						
Approximate Acres to Accomplish <input style="width: 50px;" type="text" value="1"/>																						
Activities																						
<table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:50%;"></th> <th style="width:20%;">Planned date of Treatment</th> <th style="width:30%;">Actual date of Treatment</th> </tr> </thead> <tbody> <tr> <td> Manual <input type="checkbox"/> Digging <input type="checkbox"/> Pulling <input type="checkbox"/> Planting <input type="checkbox"/> Logging <input type="checkbox"/> Staking <input type="checkbox"/> Other _____ </td> <td style="text-align: center;"><input style="width: 50px;" type="text"/></td> <td style="text-align: center;"><input style="width: 50px;" type="text"/></td> </tr> <tr> <td> Mechanical <input type="checkbox"/> Axial Saw Work <input type="checkbox"/> Tractor Brush Cutter <input type="checkbox"/> Motor Clean <input type="checkbox"/> Manual Brush Cutting <input type="checkbox"/> Tractor Mower <input type="checkbox"/> Other _____ </td> <td style="text-align: center;"><input style="width: 50px;" type="text"/></td> <td style="text-align: center;"><input style="width: 50px;" type="text"/></td> </tr> <tr> <td> Bio-Control <input checked="" type="checkbox"/> Insect <input type="checkbox"/> Pathogen <input type="checkbox"/> Parasite _____ Type/Species _____ </td> <td style="text-align: center;">5-25-2004</td> <td style="text-align: center;">5-26-2004</td> </tr> <tr> <td> Cultural <input type="checkbox"/> Burning <input type="checkbox"/> Grading <input type="checkbox"/> Seeding <input type="checkbox"/> Fertilizing <input type="checkbox"/> Grazing <input type="checkbox"/> Soil Amendment <input type="checkbox"/> Other _____ </td> <td style="text-align: center;"><input style="width: 50px;" type="text"/></td> <td style="text-align: center;"><input style="width: 50px;" type="text"/></td> </tr> <tr> <td> Chemical <input style="width: 50px;" type="text"/> Record Number _____ </td> <td style="text-align: center;"><input style="width: 50px;" type="text"/></td> <td style="text-align: center;"><input style="width: 50px;" type="text"/></td> </tr> </tbody> </table>						Planned date of Treatment	Actual date of Treatment	Manual <input type="checkbox"/> Digging <input type="checkbox"/> Pulling <input type="checkbox"/> Planting <input type="checkbox"/> Logging <input type="checkbox"/> Staking <input type="checkbox"/> Other _____	<input style="width: 50px;" type="text"/>	<input style="width: 50px;" type="text"/>	Mechanical <input type="checkbox"/> Axial Saw Work <input type="checkbox"/> Tractor Brush Cutter <input type="checkbox"/> Motor Clean <input type="checkbox"/> Manual Brush Cutting <input type="checkbox"/> Tractor Mower <input type="checkbox"/> Other _____	<input style="width: 50px;" type="text"/>	<input style="width: 50px;" type="text"/>	Bio-Control <input checked="" type="checkbox"/> Insect <input type="checkbox"/> Pathogen <input type="checkbox"/> Parasite _____ Type/Species _____	5-25-2004	5-26-2004	Cultural <input type="checkbox"/> Burning <input type="checkbox"/> Grading <input type="checkbox"/> Seeding <input type="checkbox"/> Fertilizing <input type="checkbox"/> Grazing <input type="checkbox"/> Soil Amendment <input type="checkbox"/> Other _____	<input style="width: 50px;" type="text"/>	<input style="width: 50px;" type="text"/>	Chemical <input style="width: 50px;" type="text"/> Record Number _____	<input style="width: 50px;" type="text"/>	<input style="width: 50px;" type="text"/>
	Planned date of Treatment	Actual date of Treatment																				
Manual <input type="checkbox"/> Digging <input type="checkbox"/> Pulling <input type="checkbox"/> Planting <input type="checkbox"/> Logging <input type="checkbox"/> Staking <input type="checkbox"/> Other _____	<input style="width: 50px;" type="text"/>	<input style="width: 50px;" type="text"/>																				
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Chemical <input style="width: 50px;" type="text"/> Record Number _____	<input style="width: 50px;" type="text"/>	<input style="width: 50px;" type="text"/>																				
#1 Evaluation and Date																						
We have sprayed this area 2 times per year with Vetran 720 and Escort. This treatment has failed to give us needed control of the Toadflax problem.																						
#2 Evaluation and Date																						
#3 Evaluation and Date																						



Pesticide Application

Org. Code 425320	County OKANOGAN	Date of Application 10/3/2006	Start 8:45 Finish 2:00	<input checked="" type="radio"/> AM <input type="radio"/> PM <input type="radio"/> AM <input checked="" type="radio"/> PM	ICP 023A	Stores Issue Ticket Number(s) E38728
Area SR 20 MP 192.5 to MP 186 and MP 184.7 to MP 192.5 and MP to MP and MP to MP						
Check Appropriate Boxes: <input type="checkbox"/> NB <input checked="" type="checkbox"/> EB <input type="checkbox"/> Roadside <input type="checkbox"/> Landscaped Area <input type="checkbox"/> Interchange <input type="checkbox"/> Yard/Stockpile <input checked="" type="checkbox"/> Spot Spray <input type="checkbox"/> Aquatic <input type="checkbox"/> SB <input checked="" type="checkbox"/> WB <input type="checkbox"/> Shoulder <input type="checkbox"/> Rest Area <input type="checkbox"/> Bridge <input type="checkbox"/> Blanket Spray <input type="checkbox"/> Wetlands <input type="checkbox"/> Median <input type="checkbox"/> Park-n-Ride <input type="checkbox"/> Ramp						
<input checked="" type="checkbox"/> Weeds <input checked="" type="checkbox"/> Noxious Weeds <input type="checkbox"/> Disease <input type="checkbox"/> Other Zone 1 <input type="radio"/> yes <input type="radio"/> no <input type="checkbox"/> Brush <input type="checkbox"/> Insects <input type="checkbox"/> Other List Pests: <u>KOCHIA, MULLEIN, TOADFLAX, KNAPPWEED, THISTLE</u>						
Start Weather Conditions Temperature 40 F (C) Wind (Direction From) E Wind (Range) 1-2 mph (km/h) <input type="radio"/> Sunny <input type="radio"/> Broken <input checked="" type="radio"/> Overcast No Rain <input type="radio"/> Light Scattered Showers <input type="radio"/> Hard Showers						
Finish Weather Conditions Temperature 60 F (C) Wind (Direction From) E Wind (Range) 2-3 mph (km/h) <input type="radio"/> Sunny <input type="radio"/> Broken <input type="radio"/> Overcast No Rain <input checked="" type="radio"/> Light Scattered Showers <input type="radio"/> Hard Showers						
Tank No.	Material Name	Material Type	EPA Reg. No.	Lot Number	Product For Acres (Gallons)	Total Daily Usage Unit
2	Veteran 720	Pesticide	228-295	DE07248713523	64	Ozl 1152 Ozl
2	Telar	Pesticide	352-522	MAR02EL001	1	Ozd 18 Ozd
3	Redi-vert III	Adjuvant	-----		90	Ozl 1620 Ozl
						0
1	OKANOGAN				25	ga 450 ga
Total 18 Acres (hectares) Treated at 25 gallons (liters) of spray per acre (hectare).						
Equipment Number 8B29-3	Tank Size 1 1400 3 150 5	Calibration Date 6/26/2006	Vehicle Speed 4-8 mph (km/h)	Nozzle Pressure 20-25 PSI (Pa)	Width of Spray Pattern 2-5 Feet (meters)	
<input type="checkbox"/> Hand sprayer <input type="checkbox"/> Hand gun <input checked="" type="checkbox"/> Boom <input type="checkbox"/> Backpack <input type="checkbox"/> Fixed Nozzle <input type="checkbox"/> Other (Specify) _____			<input type="checkbox"/> Tank Mix (Cont.) <input checked="" type="checkbox"/> Injection <input checked="" type="checkbox"/> Invert			
Operator Name HARRY MONNIN	Operator Pesticide License No. 70952	Operator Signature			Driver Name BRAD FITZHUGH	
Remark				Buffer Involvement Name		
				Pesticide Sensitivity Registration Applies: <input type="checkbox"/> Yes <input type="checkbox"/> No		
				Contact		
Division of Emergency Management (1-800-258-5990)				Additional Notes		

DOI Form 540-500 07 Revised 1/2007

Distribution: OSC Mand. Operator Region File
Send OSC Copy Within 5 Days

Oz=Ounces Dry L= Pounds g= gram lg=1/2 gram
OzL=Ounces Liquid Ga= Gallon ml=Milliliter L=Liter
P=Pint Q=Quart

Appendix G

STAKEHOLDER LIST

Okanogan County Noxious Weed Control Board.....	143 3 rd St. Okanogan, WA 98840 (509) 422-7165
Grant County Noxious Weed Control Board	32 C St. NW, Suite 321 Ephrata, WA 98823 (509) 754-2011
Skagit County Noxious Weed Control Board	11768 Westar Lane, Suite A Burlington, WA 98233 (360) 336-9430
Douglas County Weed Management.....	P.O. Box 550 Waterville, WA 98858 (509) 745-8531
Chelan County Noxious Weed Control Board	412 Washington St. Wenatchee, WA 98801 (509) 667-6550
USFS Okanogan National Forest.....	1240 S. 2 nd Ave. Okanogan WA 98844 (509) 826-3275
Confederated Tribes of the Colville	P.O. Box 150 Nespelem, WA 99155 (509) 634-2200
Town of Winthrop.....	P.O. Box 459 Winthrop, WA 98862 (509) 996-2320
Town of Twisp.....	P.O. Box 278 Twisp, WA 98856 (509) 997-4081
City of Omak	P.O. Box 72 Omak, WA 98841 (509) 826-1170
City of Okanogan	P.O. Box 752 Okanogan, WA 98840 (509) 422-3600
City of Pateros	P.O. Box 8 Pateros, WA 98846 (509) 923-2571
City of Brewster	P.O. Box 340 Brewster, WA 98812 (509) 689-3464
Town of Coulee City	P.O. Box 398 Coulee City, WA 99115 (509) 632-5331
Town of Coulee Dam	300 Lincoln Ave. Coulee Dam, WA 99116 (509) 633-0320

Appendix G

City of Grand Coulee	P.O. Box 180 Grand Coulee, WA 99133 (509) 633-1105
Town of Electric City	P.O. Box 130 Electric City, WA 99123 (509) 633-1510
Town of Nespalem	P.O. Box 240 Nespalem, WA 99155 (509) 634-4691
Town of Mansfield.....	P.O. Box 218 Mansfield, WA 98830 (509) 683-1112
City of Tonasket.....	P.O. Box 487 Tonasket, WA 98855 (509) 486-2132
City of Oroville	P.O. Box 2200 Oroville, WA 98844 (509) 476-2926
Town of Bridgeport	P.O. Box 640 Bridgeport, WA 98813 (509) 686-4041
DNR Colville	225 S Silke Rd. PO Box 190 Colville, WA 99114 (509) 684-7484
WDFW Region 2.....	1550 Alder Street NW Ephrata, Washington 98823 (509) 754-4624
Cascade & Columbia Railroad	901 Omak Ave. Omak, WA 98841 (360) 807-4325
Grant County PUD.....	P.O. Box 878 Ephrata, WA 98823 (509) 754-0500
Okanogan County PUD	P.O. Box 912, 1331 2nd Ave North Okanogan, WA 98840 (509) 422-3310
Douglas County PUD	1151 Valley Mall Parkway East Wenatchee, WA 98802 (509) 884--7191
US Bureau of Reclamation	1917 Marsh Road Yakima WA 98901 (509) 575-5848