Introduction

The Washington State Department of Transportation (WSDOT) South Central Region, Area 3 manages approximately 930 miles of roadside right-of-way throughout Adams, Benton, Franklin, Walla Walla and Yakima counties. This right-of-way is part of the state highway system including I-82, I-182, US-12, SR-395, SR-17, SR-14 as well as and a number of other state routes in the area. A map of the area is shown on the following page.

The primary roadside vegetation management objectives are in relation to traffic safety, employee safety, and preservation of the highway infrastructure. Additionally, as a landowner WSDOT is required to control all listed noxious weeds that occur on the right-of-way by state law (RCW 17.10 and 15.15.010). It is important that WSDOT not only meet the legal requirements for weed control, but also consider the needs and concerns of adjacent landowners in this area.

In order to best manage roadsides with these priority objectives in mind, WSDOT practices an annually cycling process called Integrated Vegetation Management (IVM). Plans like this are maintained and updated annually for all areas of the state, with an overall goal of establishing the most naturally self-sustaining roadsides vegetation possible. Adjustments are made year to year in each area plan based on monitoring the previous years’ accomplishments and results, available budget, and prioritization of other highway maintenance activities.

This plan serves as the guidance document for vegetation maintenance in South Central Region Area 3 for the 2022 growing season. It identifies priority locations and prescribes treatments for accomplishing safety and weed control objectives through the use of a combination of seasonally-timed control measures. Each year’s actions are designed as part of a coordinated multi-year strategy to minimize roadside maintenance requirements wherever possible. This plan also accounts for specific locations where maintenance tactics are adjusted due to environmental issues, neighboring properties, local partnerships, or restoration work done through WSDOT design and construction.

The information contained in this plan document can be geographically referenced by crews in the field using iPads and the agency’s Highway Activity Tracking System (HATS). Accomplishments and results are also tracked geographically through this system, providing site specific reference of historic actions and results. This development in WSDOT maintenance management will greatly improve the agency’s success in properly executing planned actions, monitoring and documenting results of treatments, and in measuring cost and results over time.

WSDOT welcomes input from local public and private entities on its weed control and vegetation management activities. Wherever appropriate the agency is looking for opportunities to plan, cooperate, and partner with others in managing the roadside. Please direct any questions, comments or suggestions to the South Central Region Area 3 Superintendent – Larry Wilhelm, or the State’s Roadside Asset Manager – Ray Willard.

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South Central Region Area 3 – Vicinity Map
Figure 1
**South Central Region Area 3 IVM Work Plan – 2022**

The section outlines the overall approach and geographic distribution of roadside vegetation management requirements throughout the maintenance area in 2022. Information is organized in relation to the four major groups defined in the WSDOT Maintenance Accountability Program (MAP) for the performance of roadside vegetation maintenance activities: **Control of Vegetative Obstructions**, **Noxious Weed Control**, **Nuisance Vegetation Control**, and **Landscape Maintenance**. Sections on **Stormwater and Drainage** and **Safety Rest Area Landscape Maintenance** are also included. Specific locations as noted in this work plan are also mapped in the Highway Activity Tracking System (HATS) for reference by maintenance in the field.

**Control of Vegetative Obstructions – 3A4**
The work of this group of maintenance activities relates to the safety and operational requirements of the highway. These items are considered first priority in terms of the overall roadside maintenance needs. Vegetation management objectives and measured work activities in this category fall into four groups – **Pavement Edge Maintenance/Zone 1**, **Safety Mowing/Zone 2**, **Tree and Brush Control/Zone 2 and 3**, and **Hazard Tree Removal/Zone 3**.

**Pavement Edge Maintenance/Zone 1**

**Work Operation**: 1615  
**HATS Form**: Spray Zone 1  
**HATS Map Layer**: Reference lines – Roadside Features/Spray Zone 1 Reference

This work includes the application of herbicides to road shoulders where necessary throughout the area. The objective of these applications in designated locations is preserving of a band of gravel shoulder adjacent to the pavement that is free of vegetation. This treatment is necessary in the mapped locations described below to provide visibility and maintainability of roadside hardware and guideposts, allow room for vehicles to safely pull off on shoulders, facilitate stormwater drainage, and/or provide added visibility of wildlife approaching the highway.

**Total Units of Planned Treatment**
- Apply approximately **700 acres** of herbicide treatment to road shoulders throughout the area.

**Locations of Planned Treatments**
- Planned treatment sites are mapped in HATS map layer – **Zone 1 Spray** (under development)
- Approximately two-thirds of the shoulders in the area are maintained to be vegetation free, other shoulders are maintained as low growing vegetation up to the edge of pavement.
- A separate mixture of herbicides will be applied in areas with environmental or agricultural sensitivities in the following locations:
  - SR 225 MP 3 - 5.67
  - SR 225 MP 0-0.1 Benton City roundabout
  - SR 14 MP 158.2-158.9, mp161.9-162, and 167.75- 167.95
  - SR 12 MP 299.36-300.74
  - SR 12 MP 305.94-306.04

**Treatment Methods**
- For typical applications, spray equipment will be calibrated to deliver a 4 ft. band of spray on a flat surface adjacent to the spray truck for all shoulder where no hardware is present. For treatment around guardrail base and where wider bare ground is required, additional nozzles may be activated to deliver between a 5 and 18 ft. band on a flat surface adjacent to the truck.
- Application width around the base of hardware shall extend 1 to 2 ft. beyond the back of the hardware.
Actual width of treatment on shoulders may vary depending on the steepness of the slope away from pavement.

Some areas will be treated with previous years blends to clear inventory.

All other noted locations will be treated in mid to late spring with the following mixture of herbicides and adjuvants:

**Blend R1**
- Method 240SL @ 12.64 oz./acre
- Esplanade @ 5 oz./acre
- Roundup-Pro Conc. @ 16 oz./acre
- Escort XP @ 1.5 oz./acre
- In-Place @ 8 oz/acre

**Sensitive areas:**
- Roundup Pro Conc. @ 32 oz/acre
- Esplanade SC @ 5 oz/acre
- Gallery @ 1 lb/acre (will switch next year after inventory is clear)
- In-Place @ 8 oz/acre

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**Safety Mowing/Zone 2**

**Work Operation:** 1625

**HATS Form:** Mowing Zone 2

**HATS Map Layer:** Reference lines – Roadside Features/Mowing Zone 2 Reference

This work includes routine mechanical cutting of all vegetation on the road shoulder in a band width immediately adjacent to pavement. Mowing is necessary in areas where taller growing grasses or other vegetation are present and must be annually or semi-annually cut back for visibility and maintenance of roadside hardware and delineators, to maintenance traffic sight distance at curves and intersections, and for improved visibility of wildlife approaching the highway. Mowing height for these operations is typically 6 to 8 inches above the ground.

**Total Units of Planned Treatment**
- Approximately **400 acres** of shoulder mowing is planned throughout the area.

**Locations of Planned Treatments**
- Locations that will be mowed one pass are mapped in HATS map layer – **Zone 2 Mowing** (under development)
- Locations that typically get mowed once per year include:
  - I-82 MP 69-82
  - SR225 MP 3-4.5
  - SR225 MP 7-11
  - SR14 MP 152-180
  - I-182 MP 2.70-10.68
  - SR240 MP 39.05-42.57
  - SR395 MP 24.13-37.49
  - SR395 MP 14.93-19.95

**Treatment Methods**
- Mowing will be conducted with tractor mounted mowing deck or side arm booms.
- Mowing widths vary between 5 ft. and 15 ft. depending on equipment used and shoulder configuration.

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**Tree and Brush Control/Zone 2 and 3**

**Work Operations:** 1622, 1625, 1626

**HATS Forms:** Tree/Brush Control – Spray, Trimming Mechanical, Trimming Manual, and Mowing

**HATS Map Layer:** None
This includes safety and traffic operations related vegetation obstructions in Zone 2, such as periodic side-trimming or removal of brush and trees or tree branches encroaching on or overhanging traffic operations, and impacting sign visibility. Also included is work in Zone 2 and 3 when selectively controlling emergent early succession tree species – to prevent them from growing into mature hazard trees within striking distance of the road.

**Total Units of Planned Treatment**
- Approximately **10 acres** per year will be mechanically trimmed to reduce the height of native brush species in Zone 2, with a goal of addressing all areas with this type of growth once every 3 to 4 years.

**Locations of Planned Treatments**
- Roadside locations with this type of growth at the edge of pavement include:
  - SR 397 MP 12 to 16
  - SR 022 MP 27.5 to 28.6 north side of the road.
  - SR 225 MP 3-5

**Treatment Methods**
- The goal in locations where trimming sage brush is not to remove the native species, but to reduce their height along the edge of pavement. The areas addressed will be trimmed with tractor mounted boom mowers to a height of approximately 12 inches. The width of trimming will typically be one pass equivalent to the width of the mowing deck.
- Method of treatment will be mowing with arm mower.
- Manual trimming frill and/or cut stump treatment.

**Hazard Tree Removal/Zone 3**
**Work Operation: 1628**
**HATS Forms: Hazard Tree Removal – Individual Tree Removal, Stand Removal, and Cleanup Fallen Trees**
**HATS Map Layer: None**

Trees within and adjacent to the right of way are routinely monitored by maintenance staff for potential risk to the highway and/or neighboring structures. Individual and stands of mature trees identified as a potential imminent threat will be further evaluated and removed as soon as possible where needed. This work also includes removal of trees and large limbs blown down from “non-disaster” events.

**Total Units of Planned Treatment**
- Minimal hazard tree removal is necessary in this maintenance area.
**Locations of Planned Treatments**
- No planned hazard tree removal in 2022

**Noxious Weed Control – 3A2**
This group of activities is focused on control of weed species and infestation locations identified in this plan document. The focus is on species that are legally designated by state and county regulations for required control by all property owners, along with any other identified and agreed upon species/locations that pose a unique threat to the roadside or surrounding environment if not controlled. Work under this group is considered second priority after safety related objectives have been addressed.

In some counties noxious weed laws may be enforced with fines and/or control work by the counties and billing of property owners – if adequate control is not accomplished. WSDOT communicates annually and throughout the season with each County Noxious Weed Board, to identify and prioritize treatment sites on state highways.
WSDOT employs three distinct strategies in planning and executing noxious weed control efforts. Any and all Class A species that occur on the right of way are treated as **Priority Noxious Weed Control**, and all maintenance actions are planned and tracked as individual, multi-year treatment sites. **General Noxious Weed Control** is planned and executed in one of two ways: 1.) Area-wide patrol and control operations are made in the early summer with a goal of spraying or pulling all visible target species prior to seed-set, and 2.) Early and late season treatments are planned for a set of prioritized and mapped infestation points where the goal is early detection/rapid response/eradication.

**Priority Noxious Weed Control**

**Work Operations:** 1616, 1618, 1641, 1699

**HATS Point Feature-based Forms:** Priority Infestation

**HATS Map Layer:** Feature points – Roadside Features/Noxious Weed Control Priority

These operations are directed at locations where Class A noxious weed species are present on the right of way and state law requires complete eradication. Site specific integrated treatment plans are developed for each identified location/species, and all control activities are recorded as point feature data in HATS. Ongoing operations will combine field monitoring and a mixture of seasonally timed treatment methods over a series of years. Sites must also be monitored for 3 to 5 years after control to check for grow back.

**Locations of Planned Treatments**

- No Class A species are known to existing in SC Region Area 3 at this time.

**Species and Locations**

**Planned Noxious Weed Control**

**Work Operations:** 1616, 1618, 1699, 1641

**HATS Form:** Noxious Weed Control General – Noxious Weed Control-Spray, Noxious Weed Control-Mechanical, Noxious Weed Control-Manual, and Noxious Weed Control-Biological

**HATS Map Layer:** Reference points – Roadside Features/Noxious Weed Control General (Under Development)

These operations are timed and carried out throughout the season to prevent the spread of designated noxious weed species, and to reduce or eliminate populations wherever possible. Integrated treatments as described in the table below, are planned to address infestations through 1.) seasonally timed treatments of identified priority sites, or 2.) during late spring/early summer section patrols to treat all visible target weed species. Successful plans are consistently implemented over a series of years and annually adjusted as necessary based on field observations. Care is taken in all cases to avoid damage to surrounding desirable/native vegetation.

**Target Species on WSDOT Right of Way in South Central Region Area 3**

<table>
<thead>
<tr>
<th>Common Name/Botanical Name</th>
<th>Treatment Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buffalobur (Solanum rostratum)</td>
<td>Control where visible in conjunction with summer seasonal patrols</td>
</tr>
<tr>
<td>Bugloss, annual (Anchusa arvensis)</td>
<td>Control where visible in conjunction with summer seasonal patrols</td>
</tr>
<tr>
<td>Cereal rye (Secale cereal)</td>
<td>Not controlled except where mapped for planned treatment due to neighboring agricultural interests</td>
</tr>
<tr>
<td>Common Name/Botanical Name</td>
<td>Treatment Notes</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Common Mullen (Verbascum thapus)</td>
<td>Control where visible in conjunction with summer seasonal patrols</td>
</tr>
<tr>
<td>Common reed (Phragmites australis)</td>
<td>Target sites mapped and treated in early spring</td>
</tr>
<tr>
<td>Common St. Johnswort (Hypericum perforatum)</td>
<td>Control where visible in conjunction with summer seasonal patrols</td>
</tr>
<tr>
<td>Dalmatian toadflax (Linaria dalmatica)</td>
<td>Target sites mapped and treated in early spring, sites are monitored and retreated in the fall if there is any grow back</td>
</tr>
<tr>
<td>Knotweed sp. (Polygonum sp.)</td>
<td>Target sites mapped and treated in the fall</td>
</tr>
<tr>
<td>Hoary cress (Cardaria draba)</td>
<td>Target sites mapped and treated in early spring</td>
</tr>
<tr>
<td>Houndstongue (Cynoglossum officinale)</td>
<td>Control where visible in conjunction with summer seasonal patrols</td>
</tr>
<tr>
<td>Knapweed sp. (Centaurea sp.)</td>
<td>Control where visible in conjunction with summer seasonal patrols</td>
</tr>
<tr>
<td>Knapweed, Russian (Acroptilon repens)</td>
<td>When present in large, well established patches in Zone 3, control only as described under Nuisance Vegetation Management/Zone 3. When present in small patches or isolated plants, control where visible in conjunction with summer seasonal patrols</td>
</tr>
<tr>
<td>Kochia (Kochia scoparia)</td>
<td>When present in large, well established patches in Zone 3, control only as described under Nuisance Vegetation Management/Zone 3. When present in small patches or isolated plants, control where visible in conjunction with summer seasonal patrols</td>
</tr>
<tr>
<td>Longspine sandbur (Cenchrus longispinus)</td>
<td>Monitor only, no infestations are currently known to exist in the area</td>
</tr>
<tr>
<td>Loosestrife, purple (Lythrum salicaria)</td>
<td>Target sites mapped and treated at early flower stage in summer</td>
</tr>
<tr>
<td>Perennial pepperweed (Lepidium latifolium)</td>
<td>Control where visible in conjunction with summer seasonal patrols</td>
</tr>
<tr>
<td>Poison hemlock (Conium maculatum)</td>
<td>Target sites mapped and treated in early spring</td>
</tr>
<tr>
<td>Puncturevine (Tribulus terrestris)</td>
<td>Target sites mapped and treated in early spring</td>
</tr>
<tr>
<td>Rush skeletonweed (Chondrilla juncea)</td>
<td>Target sites mapped and treated in early spring, sites are monitored and retreated in the fall if there is any grow back</td>
</tr>
<tr>
<td>Saltcedar (Tamarix ramosissima)</td>
<td>Not typically found on the right of way, any plants that appear will be controlled</td>
</tr>
<tr>
<td>Spikeweed (Hemizonia pungens)</td>
<td>Present on the east end of the area. Control where visible in conjunction with summer seasonal patrols.</td>
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<tr>
<td>Tansy ragwort (Senecio jacobaea)</td>
<td>Control where visible in conjunction with summer seasonal patrols</td>
</tr>
<tr>
<td>Teasel (Dipsacus sylvestris)</td>
<td>Control where visible in conjunction with summer seasonal patrols</td>
</tr>
<tr>
<td>Thistle, bull (Cirsium vulgare)</td>
<td>Control where visible in conjunction with summer seasonal patrols</td>
</tr>
<tr>
<td>Thistle, Canada (Cirsium arvense)</td>
<td>Control where visible in conjunction with summer seasonal patrols</td>
</tr>
<tr>
<td>Thistle, Scotch (Onopordum acanthium)</td>
<td>Control where visible in conjunction with summer seasonal patrols</td>
</tr>
<tr>
<td>Tree of Heaven (Ailanthus altissima)</td>
<td></td>
</tr>
<tr>
<td>Yellow nutsedge (Cyperus esculentus)</td>
<td>Target sites mapped and treated in early spring, sites are monitored and retreated in the fall if there is any grow back</td>
</tr>
<tr>
<td>Common Name/Botanical Name</td>
<td>Treatment Notes</td>
</tr>
<tr>
<td>---------------------------</td>
<td>------------------------------------------------------</td>
</tr>
<tr>
<td>Yellow starthistle (Centaurea solstitialis)</td>
<td>Control where visible in conjunction with summer seasonal patrols</td>
</tr>
</tbody>
</table>

Total Units of Planned Treatment
- Approximately **300 acres** will be treated with herbicides.
- Minor amounts of hand pulling will be conducted incidental to other activities.
- Approximately **400 acres** will be mowed to prevent seed production on larger, established infestations.

Locations of Planned Treatments
- Planned treatment areas and species as described in the table above are identified in collaboration with the Lewis County Noxious Weed Board and mapped in the HATS map layer – **Noxious Weed Control General**.

Treatment Methods and Timing
- As described in the table above, treatments of species and locations takes place in three time windows throughout the growing season. Herbicide mixtures used within each window are prescribed as follows:
  - **Early Season Targets. February-April**
    - Milestone @ 5oz/acre
    - Spreader 90 @ 32ozl/100g
  - **Mid-Season Targets**
    - Milestone @ 5oz/acre
    - Spreader 90 @ 32ozl/100g
  - **Late Season Targets**
    - Milestone @ 5oz/acre
    - Spreader 90 @ 32ozl/100g

- **Site specific focus areas**
  - E-2 @ 48 oz/acre
  - Syl-Tac @ 8 oz/acre

**Nuisance Vegetation Control – 3A3**
Nuisance vegetation control takes place only in a select set of carefully prioritized locations throughout the area. These locations are delineated on maps in HATS as polygon outlines in Zone 3. Locations are prioritized to take place where there is heightened local interest in the visual appearance and condition of the roadside vegetation. Typical locations include: wider areas along limited access freeways in urban and suburban areas, freeway interchanges for local urban centers, environmentally sensitive areas, and areas where neighbors are willing to partner with WSDOT on management efforts. Because nuisance weed control activities are not related to safety or legal requirements and are primarily undertaken to improve the visual appearance of the roadside, they are considered the last priority vegetation management needs.

For all areas designated to receive Nuisance Vegetation Control, multi-year treatment plans have been developed. The actions contained in these plans will be executed and tracked in relation to specific Zone 3 polygons for **Nuisance Vegetation Control Zone 3**, referenced on HATS maps and described below.

**Nuisance Vegetation Control**
*Work Operations: 1611, 1612, 1641, 1699*
*HATS Feature-based Forms: Herbicide Application, Manual/Mechanical, Biological, and Seed/Fertilize/Mulch*
HATS Map Layer: Feature polygons – Roadside Features/Nuisance Vegetation Control Zone 3

Maintenance activities in each identified location are planned and tracked as multi-year treatment strategies utilizing monitoring and the most effective combination of control methods – with a goal of establishing desirable vegetation that requires only minimal maintenance. Undesirable species are identified and specifically targeted while care is be taken to avoid damage to surrounding desirable/native vegetation. In some cases, soil enhancements may be used as well as seeding or planting of beneficial competition species. Successful plans are consistently implemented over a series of years and annually adjusted as necessary based on field observations.

Total Units of Planned Treatment
- Approximately **150 acres** will be treated with a combination of herbicides and mowing for nuisance weed control.
- Approximately **100 acres** will be mowed as part of IVM treatments.

Locations and Methods of Planned Treatments
- Reference HATS map layer – **Zone 3 Nuisance Vegetation Control**.
- Herbicides will be not be used in any cases where there is potential for damage to neighboring agricultural interests.
- Locations and actions prioritized for nuisance weed control include:
  - SR 012 mile post 295 to 299 mowing with chemical applications to enhance the natural vegetation.
  - SR 182 milepost 0 to 10.7 mowing with chemical applications to enhance the natural vegetation.
  - SR 017 milepost 10 to 15 mowing with chemical applications to enhance the natural vegetation.
  - Exit 69 interchange to exit 82 interchange to include all kochia pockets on right shoulder and in Median. There is mowing done in front of some businesses for aesthetics and vision of products.
- Herbicides used:
  - E2 @ 48 to 64 oz/acre
  - Spreader 90 @ 16 oz/acre

Landscape Maintenance – 3A5

Landscape maintenance work includes all vegetation management activities that take place on roadsides within areas designated as formal urban planting areas where the intention is to enhance the appearance of freeways through urban centers. For these roadsides the goal is to maintain healthy plantings in all three zones and to control all weeds. Planted vegetation is intended to be preserved and enhanced over time through pruning, hedging, trimming, and fertilization where necessary.

Landscape
Work Operations: 1516, 1518, 1525, 1541, 1552, 1561, 1599
HATS Polygon Feature-based Form: Roadside Features/Landscape Maintenance
HATS Map Layer: Feature polygons – Roadside Features/Landscape Maintenance

Landscape maintenance operations are only conducted in a limited number of locations as described below and mapped in HATS. Maintenance activities in each identified location are planned based on a multi-year treatment strategy. Treatment decision are based on monitoring and the proven most effective combination of maintenance actions, to keep plantings (and lawns if present) looking healthy and trimmed throughout the year.

Total Units of Planned Treatment
- There are approximately **43 acres** of formally landscaped roadside.

Locations of Planned Treatments
- Reference HATS map layer – **Landscape Maintenance**.
• Locations of designate formal landscape include:
  o SR395/SR240 Interchange
  o SR395 Lewis St. Interchange
  o SR395/SR182 Interchange
  o Bare rock ground cover SR240 along Richland noise wall
  o Bare rock ground cover SR395 through Kennewick
  o US12/SR730, park at Wallula Junction (SC4 is currently maintaining)
  o Roundabouts – US12/SR124, SR240 and Steptoe, I-82 in Benton City

Treatment Methods and Timing
• Areas with permanent irrigation require annual winterization and startup of systems.
• Lawn at Wallula gets mowed weekly during the growing season.
• Areas maintained as vegetation-free rock for groundcover are treated annually with the following mixes of pre-emergent herbicides:
  Richland rock areas:
    Blend R1
    o Method 240SL @ 12.64 oz./acre
    o Esplanade @ 5 oz./acre
    o Roundup-Pro Conc. @ 16 oz./acre
    o Escort XP @ 1.5 oz./acre
    o Spreader
  Kennewick rock areas:
    o Roundup Pro Conc. @ 32 oz/acre
    o Esplanade 200 SC @ 5 oz/acre
    o Frequency @ 8 oz/acre
    o Spreader 90 @ 16 oz/acre

Drainage and Stormwater Facilities Maintenance – 2A
Highway drainage features which require vegetation management include ditches and culvert ends. Stormwater facilities maintenance operations that include vegetation management considerations are discussed in this section of the plan. This work is regulated by the agreement WSDOT has established under the statewide National Pollution Discharge Elimination System (NPDES) permit granted to the agency by the USEPA.

Drainage System and NPDES Maintenance

Work Operations: 1331, 1368, 1399
HATS Forms: Pesticide Application (for all spray applications), other forms are in Stormwater Feature Layer
HATS Map Layer: All feature types listed under Stormwater Features Layer

Periodic removal of vegetative growth is necessary in ditches and around culvert ends to allow access for routine inspection and repair. There are several vegetation management activities necessary to maintain function and operation of certain constructed stormwater management facilities such as vegetated filter strips and swales along the edge of pavement and throughout the roadside, and stormwater retention/detention ponds in the more urbanized areas. Each of these design features should include a manual which details the requirements in relation to control of vegetation and sediment buildup over time.
• All stormwater management facilities are mapped within the Stormwater Features Layer in HATS.
• All culverts are mapped in HATS, vegetation around culvert ends is maintained to be low growing and free of trees and brush.
• Vegetation management activities in stormwater management features are specified in the Highway Runoff Manual, Chapter 5, and Owner’s Manual for each constructed feature (if it exists). If no Owner’s Manual questions should be directed to Region Hydraulics and Landscape Architecture.
• Required work in stormwater features within the area for 2022 include:
  o None required

**Treatment Methods and Timing**
• Weed control within stormwater management features is carried out in concert with other weed control activities throughout the area, as described in the plan section Noxious Weed Control – 3A2 above.
• Removal of trees and brush in ditches and around culvert ends may be conducted in conjunction with other chemical and mechanical tree and brush control operations.

**Safety Rest Operations – 7B1**
All safety rest areas have planted areas and vegetation maintenance requirements throughout the facility. These are some of WSDOT’s most heavily accessed facilities and often one the first impressions of Washington State for the visiting public. The goal in maintenance of rest area landscape plantings is to present a well-kept appearance and plantings are intended to be maintained in a set condition throughout the year. For landscape treatments in these facilities the goal is to maintain healthy plantings in all three zones and to control all weeds. Planted vegetation is intended to be preserved and enhanced over time through pruning, hedging, trimming, and including irrigation and fertilization where necessary.

**Safety Rest Area Landscape Maintenance**
Work Operations: 1711, 1752, 1789, 1799
HATS Forms: Pesticide Application (for all spray applications)
HATS Map Layers: Formal Landscape and Natural Landscape polygons (coming soon to HATS)

Rest area landscape maintenance operations may be conducted by rest area attendants and/or maintenance area IVM specialists. Planting areas at all rest area sites are mapped as two sets of reference polygons in HATS showing areas with formal landscape plantings and those with naturalized plantings. Treatment plans are based on monitoring and evaluation of previous years’ actions and results. Annually adaptive plans are based on the proven most effective combination of maintenance actions to keep plantings (and lawns if present) looking healthy and trimmed throughout the year.

**Locations of Safety Rest Areas in South Central Region Area 3**
• Proser SRA SR 82
• Polygons have been created for outlines on high and low maintained landscape areas throughout each site. These polygons will be incorporated with HATS in the future.

**Treatment Methods and Timing**
• Vegetation management activities within Safety Rest Areas is conducted by the Area 2 crew with some assistance from the rest area attendants.
• Routine landscape related work requirements include:
  o Annual startup and winterization of irrigation.
  o Weekly mowing and routine edging of lawn areas
  o Weed control in lawns and in planting beds around pedestrian areas