

Chapter 6 *Roadside Management*

6-1 General

This chapter addresses roadside maintenance issues primarily as they relate to vegetation management and roadside land use assets. It also covers maintenance activities and work planning with relation to litter control, and touches on issues with regard to auxiliary features such as Safety Rest Areas, viewpoints, and historical markers. Roadside management as it pertains to Maintenance responsibility for drainage, stormwater management, shoulder pavement, and maintenance of barriers and structures are covered in other chapters. Project permitted Environmental Mitigation Sites are also considered an important component of the agency's Roadside Land Use assets, but until these sites are fully established (10 to 12 years after construction) they are monitored and maintained through the HQ/Regional Environmental Services Offices.

This chapter has been written to integrate with information relating to roadside management topics presented in all other departmental documents. In particular it is tied to the contents of the [Roadside Manual M 25-30](#), the [Roadside Policy Manual M 3110](#), the [Design Manual M 22-01](#) and the annually updated [Region/Area Integrated Roadside Vegetation Management Plans](#).

6-2 Definitions

Roadside – The roadside is the area of highway right of way outside the traveled roadway. This applies to all lands owned and maintained by the Washington State Department of Transportation (WSDOT) and may extend to elements outside the right of way boundaries. It includes unpaved median strips and auxiliary facilities such as rest areas, roadside parks, viewpoints, heritage markers, pedestrian and bicycle facilities, wetlands and their associated buffer areas, stormwater treatment facilities, park and ride lots, and quarries and pit sites within the right of way.

Roadside Management – encompasses the planning, design, construction, and maintenance of the non-paved highway right of way. The bulk of this work involves soils and vegetation systems, but also includes visual issues like litter control and graffiti removal. Management of specific detailed functions within the area of roadside right of way, such as Drainage, Stormwater Filtration, and Roadside Hardware are covered in other sections.

Roadside management goals include:

- Provide for all highway operational objectives
- Restore, protect, and preserve native ecosystems
- Mitigate highway impacts on the environment
- Create and/or maintain desirable visual quality

These goals can be achieved with the lowest life cycle costs by:

- Design and construct roadside plantings that are well established by the time they are turned over to Maintenance responsibility.
- Applying consistent, long-term IVM strategies throughout the management process.
- Using a GIS-based data management system to plan activities, track accomplishments, and monitor the results of IVM treatments.

Roadside Land Use – The major types of landscapes managed by WSDOT, each with a unique set of design and management objectives. WSDOT distinguishes between five types of land use:

- **Operational Right of Way** – The first 15 to 30 foot band of land adjacent to the roadway pavement edges throughout the state. This area is managed in response safe highway operation and drainage.
- **Non-Operational Right of Way** – The land that WSDOT owns and maintains beyond the operational right of way, primarily along major freeway corridors and interchanges. This area is managed as a buffer between the highway and surrounding natural and built environment.
- **Formal Landscape** – Areas of roadside along freeways and interchanges through major cities throughout the state that have been designed to be maintained in a set condition and require routine annual mowing/trimming, weed control, and irrigation in many cases.
- **Resource Conservation Areas** – Naturalized areas of mature native plant communities purchased with Federal dollars, during initial development of the Interstate Highway System for preservation in perpetuity. WSDOT is responsible for ensuring that land remains as undisturbed as possible.
- **Environmental Mitigation Sites** – Sites designed and constructed based on environmental permit conditions. These sites are maintained by the Environmental Services Division until they are fully established (up to 12 years). Once sites have been adequately established to satisfy permit conditions, responsibility shifts to the Maintenance Division and areas area added to the area of non-operational right of way.

Integrated Vegetation Management (IVM) – Integrated Vegetation Management (IVM) is defined as a coordinated decision making process that uses the most appropriate vegetation management strategy on a site-specific basis. It utilizes a monitoring and evaluation system to ensure achievement of roadside maintenance program goals and objectives. IVM practices are environmentally responsible and economically sound. WSDOT uses IVM to design and construct roadsides which will grow and evolve with the natural ecosystem. The type of site specific vegetation chosen is designed to require the least possible attention from maintenance over the long term.

Integrated Roadside Vegetation Management (IRVM) Plans – Integrated Roadside Vegetation Management Plans are updated and published annually for all regions and areas of the state. These plans explain the priorities, procedures, and locations for planned IVM treatment for throughout the state.

Environmental Mitigation Sites – These sites are the result of project permits for environmental mitigation, and fish passage restoration. Because these sites are monitored for permit compliance until fully established, management is funded and carried out through the Environmental Services division. Once fully established and permits are signed off, these sites become the responsibility of the Maintenance Division.

Illegal Camping – The term used to describe the unpermitted use of roadside areas and bridge abutments for temporary housing of transient population.

Pesticides – Federal and State labeled chemical compounds used to control unwanted living organisms. The only pesticides used by WSDOT are herbicides, which are specifically designed to target plant material.

Herbicides – Federal and State labeled chemical compounds used to control and/or eliminate unwanted plant material. Herbicides are approved for use on state highway in Washington based on specific scientific analysis of risk from roadside applications throughout the state. Products are restricted from use in any situations where there is a health risk to the public or the environment.

Best Management Practices (BMPs) – They are physical, structural, and/or managerial practices that, when used singly or in combination, reduce the downstream quality and quantity impacts of stormwater.¹ These assets have vegetation management requirements in many cases. Typical BMPs include biofiltration swales, wet ponds vegetated filter strips, and wet vault/tanks. BMP details can be found in the [Highway Runoff Manual](#) Chapter 8.

6-3 Reference

[Roadside Manual](#) M 25-30

[Roadside Policy Manual](#) M 3110

[Region/Area Integrated Roadside Vegetation Management Plans](#) (updated annually)

[WSDOT Maintenance Manual for Water Quality and Habitat Protection Guidance](#), WSDOT, IL 4020.00, July 1, 1999

[Highway Runoff Manual](#) Chapter 8

[Design Manual](#) M 22-01

[Maintenance Accountability Process Handbook](#)

¹ [Highway Runoff Manual](#) M 31-16. WSDOT

6-4 Resources

- Headquarters Maintenance Office
- Regional and Area Maintenance Offices/Crews
- Region Landscape Architects
- Headquarters Roadside and Site Development Office
- Statewide and Regional Mitigation/Restoration Crews
- Washington State Parks Arborist Crews
- Department of Ecology Youth Corps Crews
- Department of Corrections Work Release Crews
- Volunteer and Sponsored Adopt-a-Highway Participants

6-5 Sustainable Roadside Design and Management

The roadside is designed and managed to support the highway's purpose in four functional categories: **operational, environmental, visual, and auxiliary**. By fulfilling highway needs in these four categories, the roadside contributes to WSDOT's delivery of transportation services. Exhibit 6-1 explains the functions and gives examples.

The [Roadside Policy Manual M 3110](#) provides the basis for solutions to site specific questions on how to develop and manage the roadside. This document provides guidance for resolving the roadside functional needs with variations in site conditions, vegetative patterns, and geographic surroundings. The [Region/Area Integrated Roadside Vegetation Management Plans](#) contain the details of how the majority of the agency's roadside vegetation is maintained, mile-by-mile along all highways in the state, to achieve ongoing compliance with all safety and operation, social, visual, and environmental objectives.

The process for coordination and consultation between Design and Maintenance during the design and construction process varies from region to region, but agency policy dictates (Section 1.1 of the [Roadside Policy Manual](#)) that design coordinate with local maintenance managers on roadside planting design. Once roadsides have been redesigned and constructed following highway improvement projects, the plans for ongoing management are added to the locally adapted Region/Area IRVM plans.

In general terms roadside plantings are designed to function in zones extending outward from the edge of the pavement. Roadside planting design is dictated by highway transportation management objectives in relation to safety and legally required weed control. Roadsides are designed, planted and maintained in bands of land area extending from the edge of pavement. There are also locations throughout the highway system where roadsides are designed and maintained to support local conditions such as Resource Conservation Areas, and Formal Landscapes around urban freeways and interchanges.

Roadside functions and design objectives are further explained Exhibit 6-1.

Exhibit 6-1

Function	Definition
Operational	<p>Those functions that provide safe and multi-use roadsides. Operational functions include:</p> <ul style="list-style-type: none"> • Right of Way Access control • Provide for a free-draining pavement edge • Maintaining a low-growing vegetative ground cover where operational function dictates • Maintain sight distances for intersections, corners, and sign visibility • Controlling trees in vehicle recovery areas • Removing mature hazardous trees • Providing for snow removal storage and snow drift control where needed <p>The Design Manual M 22-01 provides the primary guidance for operational roadside vegetation design guidance. The Area/Region IRVM Plans contain an inventory of all planned work required to provide for operational and safety functions.</p>
Environmental	<p>Those functions that protect, buffer, and/or enhance our natural and built surroundings. Environmental functions mitigate the roadway's impact on its surrounding ecosystem. Major environmental functions include:</p> <ul style="list-style-type: none"> • Water quality (preservation, protection, and improvement) • Storm water detention and retention • Wetland and sensitive area protection • Noxious weed control • Pollinator forage and habitat • Noise control • Habitat protection and connectivity • Air quality improvement and Carbon Sequestration • Erosion control <p>Many roadside environmental functions are regulated by federal, state, and local regulations and as a result, all permit related vegetation management and/or litter control is managed and conducted by the Environmental Services Offices in Headquarters and the Regions.</p>
Visual	<p>Those functions that are designed and experienced primarily from a visual perspective. Visual functions promote a positive quality of life and are integral to operational, environmental, and auxiliary functions. They include:</p> <ul style="list-style-type: none"> • Enhancing roadway delineation, guidance, and navigation • Litter control and cleanliness • Partnering with local communities for enhancement of interchanges and state highway corridors through cities • Screening undesirable views/distractions and maintaining scenic views at viewpoints • Creating visual corridor continuity <p>In addition many activities such as noxious weed control, litter control and illegal camping, wetland and sensitive area preservation, and habitat preservation/connectivity are readily perceived and evaluated through sight.</p>
Auxiliary	<p>Those functions that provide additional operational, environmental, and visual functions to support or supplement the transportation system in local situations. Examples of auxiliary facilities are:</p> <ul style="list-style-type: none"> • Safety rest areas • Stockpile sites • Community enhancement areas • Roadside parks/viewpoints/heritage markers • Bicycle and pedestrian facilities • Park and ride lots

6-6 Roadside Management Zones

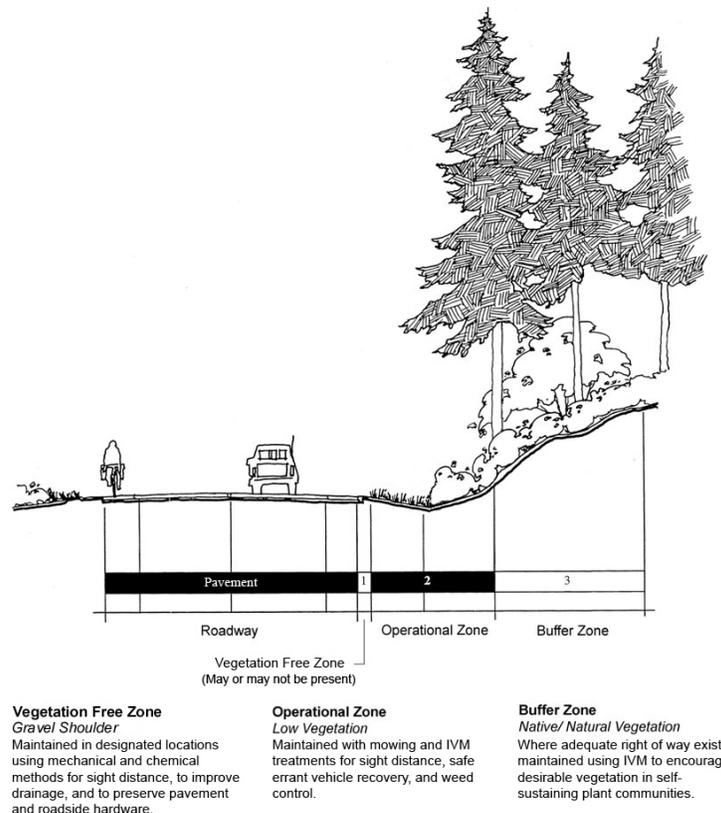
To address the highway's functional needs (as describe above), the roadside is designed and maintained in three major bands of area referred to as Zone 1 – Vegetation Free, Zone 2 – Operational, and Zone 3 – Transition/Buffer. Roadside maintenance priorities within these zones are established beginning with activities relating to the safe traffic operations, maintenance and preservation of the built highway infrastructure, legally required noxious weed control, and environmental mitigation, restoration, protection, and preservation wherever possible.

[Exhibit 6-2](#) shows a cross-section of a typical divided highway, illustrating typical relationships of the Roadside Management Zones within the highway right of way and giving examples of the functional objectives as they apply to the three zones.

6-6.1 Operational Zones

The Operational Zones include a vegetation-free gravel shoulder in most cases, adjacent to band of routinely trimmed low-growing vegetation. These areas require routine roadside maintenance activities occur in **Zones 1 and 2**. These areas are designed and maintained to facilitate operational roadway functions, such as surface and subsurface drainage, traffic operations visibility and site distance. Zones 1 and 2 also allow unobstructed vehicle recovery where traffic may accidentally leave the roadway (referred to as the **Design Clear Zone**). The [Design Manual](#) M 22-01 provides guidance on the required extent of the roadside “clear zone” (Zone 2) for varying highway configurations. In some cases the actual requirements for the clear zone may extend beyond the right of way lines.

Exhibit 6-2 Roadside Management Zones and Objectives



6-6.2 *Non-Operational Zones*

Along freeway corridors and areas with wide rights of way where there is area available outside the Operational Zones the roadside can function as a buffer to surrounding land use, and provide an opportunity to create pollinator forage and other ecosystem benefits. Zone 3 is managed to address some safety functions such as prevention and removal of hazard trees and trees shading the roadway. There are other operational functions which may be addressed within the area of **Zone 3**, such as drainage, noise and visual attenuation, and stormwater management needs. However, Zone 3 is primarily developed and maintained to address the visual, auxiliary, and non-regulated environmental functional needs of the highway. Zone 3 offers the greatest opportunity to create and maintain self-sustaining, low maintenance plant communities.

Non-operational roadside areas also include:

- **Formal Landscape** – Areas that have been planted with ornamental landscapes in urban settings are measured, planned, and tracked as a separate set of activities. Plantings in formal landscapes are maintained in a set condition and in many cases include permanent irrigation systems. These roadsides are designed and routinely maintained in accordance with all legal and highway operational requirements. Some formal landscape areas are maintained by local government’s forces using WSDOT funds.
- **Resource Conservation Areas** – Areas of significant ecosystem preservation value were purchased throughout the state during the expansion of the Interstate Highway System in the 60s and 70s. These areas were purchased with Federal Interstate Completion dollars, with the understanding that they would be preserved in perpetuity. The areas typically consist of mature vegetation that provide screening from junkyards and other developed areas.

Where either of these conditions exist, the roadside area is considered part of Zone 3 and maintenance actions are defined in [Region/Area Integrated Roadside Vegetation Management Plans](#).

6-6.3 Functional Zone Objectives

The Area/Region IRVM Plans contain an inventory of all the planned treatments necessary to achieve the necessary functional objectives for highway operation and maintenance. Treatments are designed to accomplish objectives listed in Exhibit 6-3 in Operational and Non-operational zones throughout the state.

Exhibit 6-3 Functional Zone Objectives

Zone 1 – Vegetation Free	Zone 2 – Operational	Zone 3 – Transition/Buffer
<p>(2 to 5 feet from pavement, maintained where necessary along the majority of road shoulders)</p> <ul style="list-style-type: none"> • Provide for surface drainage • Reduce fire potential • Provide for visibility and maintenance of roadside hardware • Prevent pavement breakup by invasive plants • Provide sight distance for passing, stopping, and at intersections • Prevent the buildup of wind blown debris and winter sand at the pavement edge 	<p>(From Zone 1 or pavement edge to meet operational and maintenance needs)</p> <ul style="list-style-type: none"> • Maintain design width for vehicle recovery • Provide sight distance for passing, stopping, at interchanges and at intersections • Maintain hydraulic capacity of ditches • Eliminate vegetative obstructions (trees with a trunk diameter of 4" or more) • Control weeds • Prevent erosion • Provide wildlife habitat where compatible with roadway traffic • Accommodate underground utilities • Enhance visual quality 	<p>(From Zone 2 to Right of Way line)</p> <ul style="list-style-type: none"> • Promote self-sustaining plant communities that support all ecosystem services mentioned in Exhibit 6-1. • Blend and/or screen adjacent surroundings to meet the goals and objectives of the Roadside Policy Manual M 3110 • Eliminate hazard trees and branches causing excessive shade (ice and frost potential) on the highway pavement • Control noxious weeds • Prevent erosion • Promote pollinator forage • Maintain and enhance visual quality • Preserve wetlands and wildlife habitat • Accommodate utilities • Preserve and conserve native plants and wildflowers

6-7 The Practice of Integrated Vegetation Management

Integrated Vegetation Management (IVM) is a coordinated decision-making process that determines and implements the most appropriate vegetation management methods and strategy, along with a monitoring and evaluation system, to achieve roadside maintenance goals and objectives in the most environmentally and economically sound manner.

The IVM process relies on Highway Activity Tracking System (HATS) and the IRVM Plans, in combination with annual crew training to deliver the most practical and long-term sustainable solutions to roadside vegetation management challenges throughout the state.

The majority of roadside management work is focused on the control of undesirable vegetation – That is, controlling vegetative growth that is in conflict with the objectives listed in Exhibit 6-3. This goes hand in hand with providing care for desirable vegetation – the practice of IVM is intended to encourage roadside plant communities that compliment and support surrounding native ecosystems. WSDOT's IVM program emulates the principles of Integrated Pest Management (IPM) and complies with state law as cited in [RCW 17.15](#), which requires that all state land management agencies to utilize IPM principles when controlling invasive species and other unwanted organisms.

6-7.1 *Components of Integrated Vegetation Management for Roadsides*

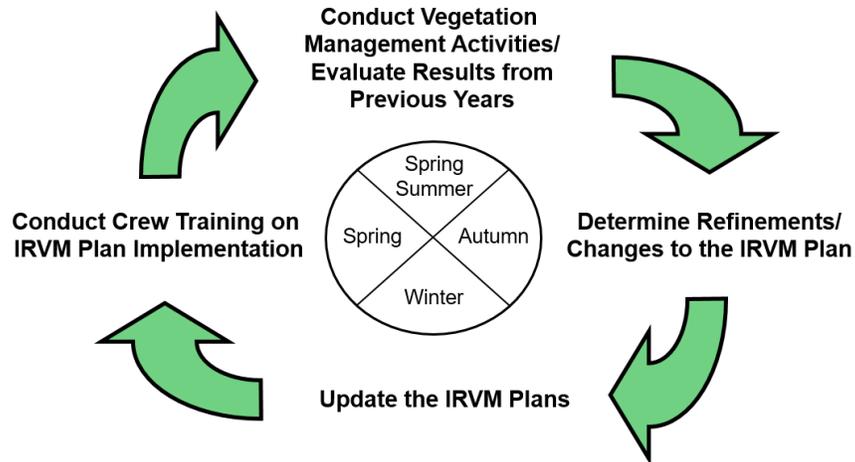
Managing vegetation in relation to designed and constructed roadside zones is a continually adaptive process, as roadside ecosystems never stop growing and evolving in response to maintenance inputs and controls. Planning for this work requires annual consideration of the previous year's accomplishments and the observed response of the plant material to maintenance treatments. In order to accomplish this throughout WSDOT's 100,000 acres of roadsides throughout the state, the agency has developed HATS which includes a geographically oriented inventory of the vegetation maintenance workload, and an accompanying record-keeping system. The annual planning and performance data collected by HATS provides the basis for WSDOT accountability in maintenance and stewardship of the states roadside land use assets.

Roadside vegetation management and the practice of IVM requires specialized knowledge, skills, and certification on the part of the maintenance crews engaged in the work. Crew members responsible for leading vegetation management projects are required to obtain a Pesticide Applicator's License from WSDA and accumulate continuing education credits in IVM practice to maintain the license. Crew training and engagement in IVM planning is a central component of WSDOT's IVM program.

The annual cycle illustrated in Exhibit 6-4 shows the process followed by all WSDOT crews, for all roadside vegetation maintenance on state highways.

This process is supported with planning documents, a geographic inventory of planned treatments, field-based mobile technology that allows geographic recording of all accomplished work, annual statewide crew training and area work planning sessions, and an IVM reference library that can be accessed as needed in the field using mobile devices.

Exhibit 6-4



6-7.2 Roadside Management and the Highway Activity Tracking System

Maintenance activities are mapped and recorded in HATS as shown in Exhibit 6-5.

Exhibit 6-5 Roadside Records and Features in HATS

Group 3 Activities	Work Op/HATS Records	Mapped Reference Features	Unit Reporting
3A1 – Litter	Litter Bag Pickup	N/A	Cubic Yards removed
	Encampment Cleanup	Points representing existing and previous encampments	Cubic Yards removed
3A2 – Noxious Weed Control	Noxious Weed Control – Spray	Points representing locally prioritized infestation sites	Acres treated
	Noxious Weed Control – Manual/ Mechanical		Acres treated
3A3 – Nuisance Vegetation Management	Nuisance Veg. Control – Spray	Polygons representing areas where Nuisance Veg. Management may be required	Acres treated
	Nuisance Veg. Control – Manual/ Mechanical		Acres treated
3A4 – Control of Vegetation Obstructions	Zone 1 Spray	Lines representing locations where routine herbicide treatments are planned	Acres treated
	Zone 2 Mow	Lines representing locations where routine mowing treatments are planned	Acres mowed
	Tree & Brush Control – Spray	N/A – Annually prioritized locations are described in IRVM Plans	Acres treated
	Tree & Brush Control – Mechanical	N/A – Annually prioritized locations are described in IRVM Plans	Acres trimmed
	Tree & Brush Control – Manual	N/A – Annually prioritized locations are described in IRVM Plans	Acres trimmed
	Hazard Tree Removal	N/A	Trees removed
3A5 – Landscape Maintenance	Landscape Maintenance	Polygons representing areas where formally landscaped areas are maintained	Acres maintained

6-8 Vegetation Management Methods and Procedures

Administration of the roadside vegetation management program involves a number of specialized agency processes and functions. It is essential to the function and integrity of the agency that these issues be addressed consistently throughout the state in accordance with the following topics and information.

6-8.1 Chemical Control Methods

Chemical control measures are an essential component of the IRVM program. The use of chemical controls is a highly regulated process and requires that WSDOT maintenance technicians obtain and maintain a Pesticide Application License from the Washington State Department of Agriculture.

When applied in accordance product labels, and used in combination with other vegetation management methods, herbicides are one of the safest, most effective and economical tools available to the roadside vegetation managers.

To further ensure the safety of applicators, the public and all environmental endpoints, WSDOT has invested in additional research into the assessment of environmental and human health risks from use of herbicides. Based on this research, the agency has developed guidelines for agency specific restrictions and application guidelines for [Herbicide Applications on State Right of Way](#).

The largest portion of WSDOT herbicide use is for control of vegetation at the edge of pavement (Zone 1). For other tasks considered in the IVM decision-making process, herbicides are used to achieve initial control of weed infestations, and/or prevent seed production. Once the infestation has been reduced or eliminated through herbicide applications, other methods can be employed for long-term vegetation management. Therefore, in a successful IVM program, overall herbicide use should decrease and applications become increasingly selective over time as beneficial competitors are allowed to become more established on the roadside.

Applicator Licensing and Legal Requirements

All pesticides applied on state highway right of way must be applied by WSDOT employees or contractors licensed through the Washington State Department of Agriculture (WSDA). Licenses are obtained by passing uniform tests administered by WSDA. In order to maintain a pesticide license, applicators must attend and receive credit for continuing education certified through WSDA. Forty recertification credits are required every four years and no more than 15 credits can be counted for any one year.

Maintenance technicians are personally liable for following all state and federal regulations and product label requirements. Legal requirements for pesticide application are defined in [RCW 17.15](#).

Premium Pay for Pesticide Applicators

Due to the technical requirements and personal legal liability inherent in the application of chemical controls, maintenance technicians receive additional pay when preparing for and carrying out the application of herbicides. The details of how this pay is administered and who receives it for which tasks is part of the negotiated agreement is documented in the biennially updated Collective Bargaining Agreement between the State and the Washington Federation of State Employees, Council 28 AFSCME.

6-8.2 *Herbicide Risk Assessment and Product Screening*

WSDOT has developed a detailed and agency-specific risk analysis of potential human health and environmental impacts from the use of herbicides to manage roadside vegetation. This research was used to create a conservative agency policy for application of herbicides and minimize potential risks. The table [Herbicides Approved for Use on WSDOT Rights of Way](#) includes a list of approved herbicide compounds alongside associated products available on the state contract. This table also include herbicide compound specific recommendations, restrictions and additional cautions applied by crews statewide.

Any and all new herbicide compounds with potential application for roadside vegetation management will be formally evaluated for environmental and human health impacts prior to addition to the statewide contract and use on highway right of ways. The State Roadside Asset Manager will be responsible for determining when new products should be evaluated and for administering the contract for toxicological analysis. Once compounds have been analyzed, the state manager is responsible for approving use and determining any necessary restrictions or application buffers.

Pesticide Record Keeping

[RCW 17.21](#) requires that all pesticide applications be documented with a WSDA approved record-form and retained for 7 years. All WSDOT pesticide applications made by agency employees are required to be recorded in HATS on the day the applications are made. HATS Pesticide Application Records are recorded on iPads throughout the day as applications are prepared and carried out. WSDA approved record forms are generated when iPads are synced with HATS Web. Records are stored in the HATS online database for seven calendar years as required by law.

Managing Product Material Inventory

All materials used for making herbicide applications must be accounted for on a daily basis when applications are being made. Daily use of chemical herbicides and additive products recorded in HATS Pesticide Application Records is also tracked through WSDOT's inventory management system. To transfer data between HATS and the agency-wide tracking system, area maintenance offices record amounts on an 8420 form and information is manually input by area office personnel into WSDOT's DataMart system.

Posting Requirements

For all other applications made on the right of way with power equipment, posting is required in the form of placards on the spray apparatus. Requirements for posting right of way applications can be found in [RCW 17.21.400](#). For application of pesticides in areas that are intended for public access, such as Safety Rest Areas and bicycle/pedestrian paths it is required that notification flags be placed throughout the site. [RCW 17.21.410](#) lists legal requirements for posting public access.

Aquatic Pesticide Applications

Pesticide applications made in or over open water or within delineated wetlands are subject to additional regulation and come under the jurisdiction of the Washington State Department of Ecology (WSDOE). Operators making such applications must have aquatic certification on their pesticide applicator's license and a special permit must be obtained through WSDOE. The permit includes limitations on the products available for use and provisions for public posting and notification. The Headquarters Maintenance Office is responsible for negotiating and maintaining statewide coverage for aquatic pesticide applications.

Pesticide Sensitive Individuals

State law requires that pesticide applicators, prior to making an application, will notify individuals who have been medically certified as "pesticide sensitive" and live within one-half mile of the highway application site. The WSDA maintains and annually updates a list of individuals who have received this certification and their addresses. The HQ Maintenance Office is responsible for supplying information on pesticide sensitive individuals to the maintenance areas where notification is required. [RCW 17.21.420](#) explains the process and requirements for establishing the list through WSDA. [RCW 17.21.430](#) explains the requirements for notification of individuals on the list.

Container Disposal

The Washington Administrative Code ([WAC](#) 16-228-185(2)) states in part: "No person shall transport, handle, store, load, apply, or dispose of any pesticide, pesticide container or apparatus in such a manner as to pollute water supplies or waterways, or cause damage or injury to land, including humans, desirable plants and animals, or wildlife:...."

To comply with the law, all pesticide containers shall be triple rinsed (three times) each time, using a volume of an appropriate solvent (water, diesel, oil, etc.) equal to approximately 10 percent of the container's capacity. Rinsing of containers shall be accomplished as soon as possible after emptying. The rinse solution shall be added to the spray tank and considered as part of the pesticide carrier. Proper triple rinsing removes the "hazardous" stigma from the containers. However, the rinsed container must still be disposed of in the proper manner, as listed on the pesticide label.

The need for rinsing and disposal of containers can be eliminated if products are available in refillable bulk containers. Utilizing bulk and “mini-bulk” containers and metered pumps to transfer products from the container to the spray equipment reduces the chance of human contact. Where this system is used in conjunction with injection type spray equipment, unused product may be returned to the bulk container at the end of the day.

Returnable, Reusable, Closed-System Containers

Whenever practical, herbicide products are ordered and delivered in sealed containers with pre-blended mixtures in water, and/or straight concentrate. Use of this type of delivery system is encouraged whenever possible because it decreases the risk of employee exposure to synthetic chemicals and eliminates a portion of the waste from use of traditional, non-recyclable containers.

Hazard Trees

Dead, leaning, or structurally unsound trees within the right of way can pose a threat to the traveling public. They can also damage the pavement, structures, or other parts of the highway. Remove all danger trees as soon as possible after they have been identified.

When practical, debris and wastes may be left on site within the boundaries of Zone 3. The Regional Maintenance Engineer will direct off-site disposal or reuse of the wood. Danger trees outside the highway right of way (or permit boundaries such as in National Forests) may also be removed by WSDOT maintenance. If possible, consult with the property owner where the danger tree was grown prior to removal. If an emergency exists due to a danger tree outside the right of way, remove the tree immediately and notify the property owner at the earliest opportunity. When necessary to access neighboring property for hazard tree removal, there is a Right of Entry and Hold Harmless Agreement in the HATS File Library that protects the legal liability of WSDOT and its agents in this case.

In areas where logging activities occur, adjacent clear-cuts may create a fringe of unstable trees on the highway right of way if not removed or thinned at the time of the adjacent logging. Whenever possible dangerous trees should be removed prior to or in conjunction with the adjacent logging operation. The process for removal and disposal (or sale) of timber from state property is outlined in [RCW 47.12.140](#).

Clear cuts adjacent to the highway may create undesirable views from the road. Especially on corridors designated as scenic and recreational highways, care should be taken to preserve and protect as much of the smaller trees and native vegetation on the right of way as possible to maintain the desirable visual character of the corridor.

Disposal of Logs Dumped on Right of Way

Logs dumped on any state roadway, in any state highway drainage ditch, or within 30 feet of the edge of pavement, are to be removed immediately. Logs that remain within the state right of way for a period of 30 days should be confiscated and removed or disposed of as directed by the Maintenance Superintendent.

The log transporting firm is required to immediately remove any logs dumped on the roadway or drainage ditch. If it becomes necessary for the WSDOT to remove such logs in order to comply with the law, the transporting firm will be billed for the operation including any damage to the highway.

If any logs are left on state right of way for a period of 30 days, the region will notify the transporting firm, by letter, that the logs have been confiscated by the state.

The method of disposing of such logs is at the discretion of the Regional Administrator, taking into account the merchantable value.

Removal of Dangerous Objects and Structures

WSDOT has the authority to remove any structure, device, or natural or artificial object located sufficiently close to a state highway to constitute a hazard or obstruction.

Maintenance personnel should not arbitrarily remove any object from the roadside unless the object represents a definite danger to the highway itself or to highway users. The matter should be brought to the attention of the region office for an initial decision unless immediate local action is required. In some cases “Memorandums of Understanding” are in place with agencies like the Forest Service and National Park Service in order to handle these issues in the areas where they have jurisdiction.

Illegal Tree Removal

[RCW 47.40](#) states that removal or damage to any desirable plant on the right of way by an unauthorized individual is a misdemeanor and punishable by law. [RCW 64.12.030](#) and [040](#) discuss how courts assess damages for injury or removal of desirable plants. In cases where actions are witnessed or where it is obvious who the perpetrator is, the State Patrol and the Attorney General’s Office should be called in for assistance.

Unauthorized removal of materials often occur when adjoining parties feel that the trees are blocking visibility across the highway right of way. A desire to have better visibility for their establishment, their product advertising, or simply wanting a better view of the surrounding area may lead these parties to remove vegetation without proper permission.

While it is difficult to continually monitor the entire right of way for this type of illegal activity, certain locations are more prone to neighbor’s visibility issues than others and should be watched.

6-8.3 *Trespass and Encroachment*

All WSDOT maintenance employees are required to obtain permission from property owners before entering private property, except in cases of an immediate emergency.

Encroachment – General

Maintenance field personnel are not expected to be familiar with all the laws and policies pertaining to the use of public right of way for non-state highway purposes; however, they should at least be aware of the following basic facts:

- No work of any kind shall be permitted on state right of way except that authorized by law. The department has adopted policies, rules, and regulations governing legal encroachments, and permission to occupy the right of way is always covered by a written permit, franchise, or agreement.
- On some highways the access rights of abutting property owners have been purchased by the state. This means that no approach roads to the highway can be constructed except those authorized in the access control plan as a result of right of way agreements.

Encroachment – Maintenance Crew Responsibilities

Maintenance Supervisors assigned to sections are charged with the responsibility of reporting to their superintendent any evidence of intended or actual encroachment on the right of way by individuals, firms, or agencies for non-state highway purposes.

Most violators are not aware of the law or have encroached inadvertently because of poor communication and/or unclear delineation of the right of way line.

Good public relations require that the local Lead Technician politely inform violators of the legal requirements as soon as an impending encroachment is observed, rather than to permit unauthorized work to proceed without such warning while the matter is being referred to someone else for handling. Major work is quite often contracted, and a contractor's crew may not have knowledge of a permit or franchise even if one has been granted. By a radio inquiry to his area office, the maintenance technician can usually determine if authority has been requested or granted.

Generally it can be assumed that permission has not been granted for anyone to install or erect signs, sub-standard or otherwise, on the right of way. Contact the local Maintenance and/or Region Traffic Office if there are questions about the legality of any sign.

Maintenance crews should be familiar with the right of way widths on their sections in order to detect possible encroachments.

Franchises and Permits

Franchises and permits are issued on standard forms that contain applicable legal requirements. Each encroachment document will include its exact location, any applicable special provisions required in the project, and how the installation is to be constructed.

A single application form, in which the applicant describes, with the aid of sketches and/or maps, what he wants to do, is used for both permits and franchises. An area or region employee makes a field investigation to determine whether or not the proposed work is permissible by law, what its effect will be on existing highway conditions, and what construction designs must be adopted to protect the interests and legal requirements of the state. If all is in order, the field investigator submits a recommendation that the application be accepted and approved and what, if any, conditions or restrictions should be included.

Maintenance should check to ensure adequate provisions are included for revegetation of any and all disturbed soil.

Franchises are issued for all utility encroachments that extend along the highway for a distance of more than 300 feet. Approval can only be granted by action of the department after the applicant has furnished proof that he has complied with all the legal requirements of posting and advertising.

Permits are issued for encroachments less than 300 feet in length. Permit forms are shorter than franchise forms and there are no posting and advertising requirements.

All permits on restricted access highways, and permits for any gas or petroleum products crossings, except local gas service line on any highway, regardless of access restrictions, must be approved by the department.

The department has extended authority to the Regional Administrator to approve all other encroachment permits, including those for local gas service crossings and for the cultivation and/or growing of agricultural crops.

See the [Utilities Manual](#) M 22-87 for further information on WSDOT policy on franchises and permits.

Burning Debris

Burning of brush, slash, tumbleweeds or any other waste shall be accomplished in a manner and time that conforms to the rules and regulations of the regulatory agency for that area. Contact local air pollution authorities and fire departments regarding burning requirements.

6-9 Litter Control

6-9.1 *Removal of Large Debris Rubbish and Animal Carcasses*

Debris and rubbish deposited on or along the highway is picked up and disposed periodically as necessary. Debris such as fallen branches and articles that have fallen from vehicles, rocks, or earth slides onto the traveled portion of the roadway or onto shoulders or ditches should be removed immediately.

The remains of animals killed by motor vehicles should be removed promptly and buried at convenient locations. If license tags are present on domestic pets, notification of appropriate city or county is encouraged. A HATS record must be completed for this activity. This record of killed wildlife aids in the placement of signing and other preventive measures.

Occasionally, items of value are cleared from the right of way. If possible, the owners of the property should be notified. Otherwise, the property is retained for 30 days and the area office is notified. Generally, owners of such property will contact the department. If the property is not returned to the owners, the region either places the item in inventory or declares it surplus.

6-9.2 *Removal and Cleanup of Illegal Campsites*

WSDOT is reactive to this issue. Public complaint or need of access will trigger necessary efforts to remove and clean an illegal campsite. Illegal encampment cleanup requires the cooperation of agencies that are able to provide social service outreach and law enforcement resources.

6-9.3 *Litter Control and Partnerships for Roadside Enhancement*

Litter is highly visible. A clean or littered roadside creates a perceived indication of the overall maintenance service level. Litter control and local community roadside enhancement are not high maintenance priorities. Roadside partnerships allow WSDOT to accomplish roadside clean up and enhancement at minimal cost.

Responsibility for litter control on state highways is shared between WSDOT and Ecology.

The majority of litter pick up initiated by WSDOT takes place through the administration of the Adopt-a-Highway (AAH) program. WSDOT maintenance employees typically pick litter in advance of mowing operations to prevent shredding and spread of litter by mowing equipment, or where large debris such as discarded furniture items and tire shreds are present and pose a hazard to traffic.

Ecology administers a fund generated through a state tax imposed by [RCW 82.19.010](#) on the sale of all containerized goods, and is charged with leading education and prevention programs. Ecology also utilizes a portion of the fund to pay for litter pick up programs such as the Ecology Youth Corps, which employs seasonal crews to assist with cleaning litter on state highways.

It is necessary for Ecology to notify local WSDOT maintenance of when and where they plan to conduct litter collection activities. This communication insures that EYC activities do not interfere with WSDOT maintenance work and WSDOT maintenance crews are aware of the presence of filled litterbags for collection and disposal.

The largest maintenance expenditure for litter control results from the pick-up and disposal of bags filled by AAH volunteers, Corrections Crews and WSDOE sponsored programs.

6-10 Adopt-a-Highway

The Adopt-A-Highway Program (AAH) allows citizens and businesses an opportunity to contribute to a cleaner environment and an enhanced roadside appearance through partnership with the WSDOT. The program is authorized and governed by state law as defined in [RCW 47.40.100](#).

The program is intended for use in those situations where a volunteer group or business entity wishes to help WSDOT in the performance of litter control or other activities that will enhance the appearance of the roadside. Any activity undertaken as part of this program must be in the primary interest of the traveling public and must contribute to an improved visual and/or environmental condition. The outcome of any activity must be compatible with the surrounding roadside conditions and the department's overall policy and program goals.

6-10.1 Program Rules

It is important to maintain a level of consistency in administration of the program throughout the state, but the individual area maintenance offices must be somewhat flexible in their interaction with participating groups. Management of the program will therefore vary to some degree throughout the state; these rules and procedures are intended to provide consistency on statewide programmatic and legal issues.

6-10.2 Participant Eligibility

Any organization, individual, family, business, corporation, or combination thereof may participate in the Adopt-a-Highway Program by either voluntary efforts or by financially sponsoring roadside enhancement activities. The terms for each assignment shall be specified on the Adopt-a-Highway Agreement and subject to the following rules:

The name displayed on the AAH recognition sign shall be the official name of the organization, individuals, or business. Only the name may be displayed on the sign, no other information may be included. In the case of privately sponsored adoptions, where logo panels are provided by the sponsoring organization, additional information may be included if it is part of the organization's official logo.

Organizations shall not be eligible if their name:

1. Endorses or opposes a particular candidate for public office.
2. Advocates a position on a specific political issue, initiative, referendum, or piece of legislation.
3. Includes a reference to a political party.
4. Includes any words or reference to anything that may be considered or construed to be obscene to the general public.

Organizations whose agreements are terminated for failure to comply with terms shall be ineligible for participation until five years from the date of the termination.

6-10.3 *Assignment of Sections*

Sections shall be assigned on a first come, first served basis. Consider the type of location and anticipated volume of litter in relation to the type of group or privately sponsored adoption. Assignment of groups, locations, management of waiting lists, and special limitations or restrictions are determined by the regions and area management. Limit volunteer adoptions due to safety concerns in locations with high traffic volumes, high litter volume, or difficult access. Sponsored adoptions may occur anywhere except construction zones. Standard litter control sections range from a minimum of two centerline miles to ten centerline miles or more in length. Single organizations may adopt as many sections as desired, but sign placement for each section adopted by that organization on a given route must be managed in cooperation with region traffic offices. Wherever possible assign new adoptions next to existing adoptions.

Sometimes the AAH Program is used to initiate a roadside enhancement in addition to or other than litter control. The activities may include planting projects or graffiti removal.

In these situations assignments may be made for specific locations less than two miles in length, such as at interchanges or bridge crossings.

For type and placement of AAH participant recognition signs, see [Traffic Manual](#) Section 2-20.1 and Appendix, 2-26 and 2-27, signs I6-904, I6-905A, I6-906, I6-906A, and I6-906B.

Standard AAH agreements last for a minimum period of four years. The termination or renewal date for all agreements is four years from the beginning date, unless otherwise canceled by either party. Agreements can be terminated by either party upon 30 days notice. For routine four year renewals, organizations with previously assigned sections have first right of refusal for their sections upon renewal.

Interruption of agreements may occur due to highway construction or improvement projects. WSDOT will notify all affected participants in the event of interruptions. During this period the area will be reserved for the original participants. Upon completion of construction the original participants have the option of renewing or terminating the agreement.

In some cases, it may be desirable to establish agreements for special clean up or enhancement activities through a General Permit with Special Provisions for Roadside Maintenance. A temporary agreement can be set up within the Adopt-a-Highway Tracking System database to serve this purpose. The procedures are the same as a standard four year agreement and all applicable forms must be completed.

6-10.4 *Volunteer Adoptions*

Volunteer adoptions are established through the form titled Application for Adopt-a-Highway Volunteer Group ([DOT Form 520-032](#)).

Each volunteer organization participating in the program shall have a designated leader or coordinator.

All participants shall be at least 15 years of age.

All participants will submit a signed Adopt-a-Highway Participant Registration Form ([DOT Form 520-031](#)) to WSDOT. This includes the requirement for signed parental consent to be submitted for all minors (participants under the age of 18), prior to their participation in any roadside activities.

During roadside clean up or enhancement activities, there shall be at least one adult supervisor present for every eight minors.

Upon completion of any and all AAH events, volunteers shall complete and submit to the department within seven days an Adopt-a-Highway Volunteer Participant Activity Report ([DOT Form 520-030](#)).

6-10.5 *Sponsored Adoptions*

Sponsored adoptions are established through the form titled Adopt-a-Highway Agreement for Privately Sponsored Work ([DOT Form 520-028](#)). This is a three party agreement between WSDOT, the sponsoring organization, and the organization providing the clean up or enhancement. WSDOT is not responsible for agreements or contracts made between a sponsoring organization and the organization providing the clean up or enhancement. Sponsored adoptions may be initiated by either a sponsor or a potential contractor wishing to solicit a sponsor. Agreements are granted on a first come, first served basis and will only be granted when a sponsor or contractor presents a copy of a signed contract to conduct the required work.

The cost of privately sponsored adoptions and the work involved is intended to be covered by the sponsor. The agreement between the sponsor and the sponsor's contractor must include provisions for all the equipment, materials, labor, and insurance necessary to accomplish the work specified in the agreement. Sponsors are required to pay a fee to the department covering the cost of sign fabrication, installation, and maintenance. The fee is based on the size and total number of signs required to satisfy the agreement, times the average cost per square foot for fabrication, and installation of the signs. The per-sign cost also includes a nominal administration fee to help defer the cost of establishing the agreement and coordinating with the sponsor and the sponsor's contractor over time.

Each sponsoring organization shall have a designated contact person. Each organization providing clean up or enhancement work shall have a designated crew leader for each adopted section and a designated central contact for the organization.

If, during the agreement period, the sponsoring organization fails to meet its financial obligation for the activities specified, WSDOT will allow the organization providing the clean up or enhancement to continue work under the agreement for up to 30 days, at their own expense. If the organization providing the enhancement work fails to obtain a new sponsor within 30 days, the agreement automatically terminates and all agreed upon conditions for default shall apply.

If, during the agreement period, the organization providing the cleanup fails to meet its obligation or otherwise dissolves its agreement with the sponsoring organization and discontinues work, the sponsoring organization has 30 days to find a new organization to provide the cleanup. If the sponsoring organization fails to contract with a new organization to provide the clean up within 30 days, the agreement automatically terminates and all agreed upon conditions for default shall apply.

Upon completion of AAH events, the organization providing the cleanup completes and submits a monthly report to the department.

6-10.6 *General Permits for Roadside Enhancement*

In some cases a General Permit with Special Provisions for Vegetation Management may serve as the most appropriate means to accomplish proposed roadside enhancement or special clean-up work. Use this as an option over an AAH agreement if:

- The permit Grantee is not interested in recognition through the AAH program.
- The proposed work overlaps with existing AAH litter control assignments.
- The proposed work is a situation where an abutting neighbor maintains, such as a “No Spray” agreement.
- The proposed work consists of a limited number of events.

Fill out all General Permits for roadside enhancement work using the AAH database program. This allows information to be recorded and accessed in relation to any questions regarding statewide roadside partnerships.

6-10.7 *AAH Administrative Roles and Responsibilities*

Each region, and each maintenance area has unique personnel resources and responsibilities. They must assign responsibilities for the AAH Program to fit their maintenance and operations management structure.

6-10.8 Maintenance and Operations Responsibilities

The State Maintenance Engineer will designate the AAH Program Manager. This position will be responsible for:

1. Establishing and maintaining standard procedures to provide uniform implementation of the statewide AAH Program.
2. Providing, maintaining, and updating a statewide network database containing all participant information and standard forms, agreements, correspondence letters, and recognition certificates for the AAH Program.
3. Developing, producing, updating, and distributing to the regions all public information on the AAH Program. This includes the administration of the Adopt-a-Highway Tracking System (AAHTS), brochures, safety literature, safety videos, internal SharePoint site and the WSDOT public Web site.
4. Maintaining records on all participating sponsored contractors including proof of insurance, and monthly reports.
5. Assisting the regions in coordination of AAH partnerships throughout the state including litter control and enhancement efforts.
6. Overseeing and commenting on all procedures and issues relating to the AAH Program, including review of all proposed agreements which include enhancement activities other than litter control prior to signature.
7. Pay premiums or assessments required under the [RCW 51.12.035](#) to secure medical aid benefits under [Chapter 51.36 RCW](#) for all volunteers participating in the Program.
8. Oversee the recording of all agreement information and participant activity on the statewide AAH Database and updates.

6-11 Region Responsibilities

The Regional Administrator may delegate responsibilities for regional management and operation of the AAH Program to best serve the Program in that region. Day-to-day interaction with AAH participants will occur at the maintenance area level, but the area offices will receive varying levels of assistance from the regional offices throughout the state. The regions shall delegate responsibility for the following:

1. Assignment of participating groups or sponsors to appropriate sections of highway.
2. Work with potential partners to develop proposals for roadside enhancement other than litter control.
3. Determine appropriate specifications for all agreements, including frequency of litter pick up, special provisions, and plans for special enhancement projects.
4. Inform and discuss, if requested, with the Washington Federation of State Employees; regional Chief Shop Steward, any projects other than volunteer litter control prior to approval of the agreement.

5. Erect and maintain AAH Recognition Signs in accordance with signing guidelines contained in the *Traffic Manual* Section 2.7.J.
6. Furnish volunteer groups with trash bags, required sign(s) and stand(s), a warning light, hats and vests for all volunteer participants, and all or a portion of the materials and provide assistance required for implementation of enhancement projects other than litter control.
7. Distribute safety information, training aids, and provide consultation to volunteer groups and sponsored contractors.
8. Pick up and dispose of litterbags collected by volunteer participants.
9. Collect and distribute funds paid for privately sponsored agreements to cover costs of sign fabrication, installation and maintenance, and processing agreement.

6-11.1 *Guidelines for Litter Crew Traffic Control*

- Review traffic control plans prior to going out to pick up litter as published in the online version of the M 54-44.
- Drive through assigned section and determine what safety concerns you will be facing.
- No stopping, parking, or buffering in the travel lane.
- Choose a safe place to let crew members out of the vehicles.
- Passengers should get out of the vehicle on the side away from traffic.
- Litter crew members should not walk on the paved shoulder.
- Walk facing traffic whenever possible.
- All litter crew members are required to wear an approved class 2 reflective safety vest.

6-11.2 *Two-Lane/Two-Way Roadway*

1. Work areas should be limited to 2-mile increments.
2. Pick litter up only one side of the road at a time.
3. Use pullouts and driveways to get safely off the road.
4. Vehicles must stay off the paved, traveled portion of the highway and should use pullouts and driveways for buffering, loading and unloading.

6-11.3 *High Speed Roadway*

1. Work areas should be limited to 2-mile increments.
2. Pick litter up on one side of the road at a time.
3. Vehicles must stay off the paved, traveled portion of the highway.
4. Find a safe place to set up signs and unload crew members.
5. When parking on shoulder, a minimum of 2 feet from the travel lane is recommended.

6-11.4 Median

1. Work areas are 2-mile increments.
2. Find a safe place to set up signs and unload crew members.
3. Vehicles must stay off the paved, traveled portion of highway.
4. When parking on a shoulder, a minimum of 2 feet from the travel lane is required.

6-12 Auxiliary Facilities

6-12.1 Safety Rest Areas

Safety rest areas have been developed throughout the state adjacent to the highway and within the right of way. These facilities provide places where motorists can get off the highway for short periods to nap, stretch, snack, and/or use the rest room. They also provide a safe place to pull over and telephone for help in the event of vehicle break down. Rest areas contribute to highway safety by allowing drivers to become refreshed and more alert when they resume their journey.

Regular maintenance of rest areas is important. A clean functioning rest area gives visitors and taxpayers a good impression of the state and of WSDOT. Frequency of maintenance depends largely on the use of the individual areas. Clean and service rest rooms at least twice per day or at four-hour intervals during periods of high use. Empty all trash cans. Pick up ground litter and have it removed on schedule. Wash and clean picnic tables and benches at least once a week or as often as necessary to maintain a neat appearance.

A poorly maintained safety rest area will tend to collect added trash. Users will have little respect or desire to put his trash in a litter barrel when large amounts of trash are already scattered about. Similarly, graffiti and other vandalism must be quickly repaired or additional abuse is likely. Some areas with toilets that are maintained by the department must receive extra attention and be maintained to a high -degree of sanitation. Sewage disposal facilities need scheduled maintenance of septic tanks, drain fields, pumps, filters, and back-flow prevention devices. In some rest areas chemical toilets are provided and maintained under private contract. Check them to assure that they are properly maintained. If they need attention or if there is indication of vandalism, report it immediately.

Pet waste stations should be provided at rest areas that fall within the boundaries of an approved bacteria Total Maximum Daily Load (TMDL) and WSDOT's NPDES Municipal Stormwater Permit coverage area. Pet waste stations consist of signage, pet waste pick-up bags and a garbage can. Maintenance of the stations occur as needed and is to include replacement of the pick-up bags. Periodic checks of the pick-up bags should occur to ensure the stations are properly stocked. Pet waste stations provided at rest areas outside the identified boundaries are subject to the same guidance.

Some areas are provided with drinking water from springs or wells. Check these regularly for repair and sanitation. Take test samples of water to ensure a clean water supply. Turn off or divert contaminated water supplies until the source of contamination is found and corrected.

6-12.2 *Park and Ride Lots*

It is the policy of WSDOT to plan, coordinate, develop, and implement effective partnerships for park and ride facilities. Clean, well maintained facilities help to instill a sense of confidence and safety for the users. Maintenance is critical for customer and vehicular safety, accessibility, utilization, protection of the infrastructure investments, and reduction of potential liabilities for the department and/or transit agency.

Whenever possible, maintenance of park and ride facilities is arranged through agreement with the local transit agency. In cases where WSDOT maintenance is responsible for care of a facility, the *Park and Ride Facilities Manual M 3010* provide guidance on activities and procedures.

6-12.3 *Historical Markers*

Historical markers and other interpretive signing within the right of way are maintained jointly with the Washington State Parks and Recreation Commission. Historical or interpretive signs and associated structures are maintained by Parks. WSDOT maintains road approaches, parking areas, litter barrels, and advance advisory signing.

6-12.4 *Viewpoints*

Viewpoints have been provided at many scenic locations. Like safety rest areas they are a definite asset and safety factor to the motorist. They generally consist of a parking area with litter receptacles. Maintenance requirements are not as intense as for rest areas. But, viewpoints do require regular checks to keep litter barrels emptied and trash picked up. Maintain parking areas and keep fences and guardrail in good repair. Assure all warning signs are in place and clearly legible. Remove all undesirable brush that would reduce sight distance and obstruct the view. Dispose the debris away from the viewpoint.