

WAHKIAKUM COUNTY POLICY

April 13, 2021

ROADSIDE VEGETATION MANAGEMENT

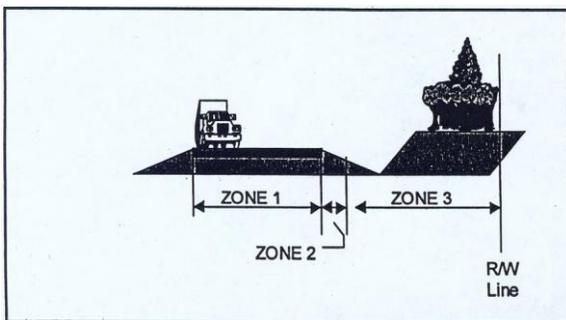
Roadside Maintenance

Wahkiakum County's goal in management of roadside vegetation is to maintain the road system with the least expenditure of financial resources while providing an adequate level of care and maintenance to; protect the safety of the public, protect public investment in transportation infrastructure, and provide adequate protection to threatened and endangered species including their habitat. Roadsides are to be maintained to fulfill the functional needs of vehicular travel with safety as the top priority.

Roadside Management Zones

The Roadside Management Zones are divided into three specific sub-zones (see figure):

- Zone 1 - Comprising the paved surface area: No vegetation is allowed within this area and no soil residuals may be applied within this area.
- Zone 2 - This is the area extending from the edge of the paved surface to the front edge of the ditch. This area averages approximately four feet in width. Within this area vegetation control is necessary to reduce fire potential, provide for visibility and maintenance of roadside hardware, to prevent pavement breakup by invasive plants, to maintain the integrity of the gravel shoulder, to provide for road surface drainage and to provide for sight distance for passing and stopping. No vegetation is allowed in the 2 feet immediately adjacent to the pavement and this area will be sprayed.
- Zone 3 - Within this zone, from the outer edge of Zone 2 to the right-of-way line, the goal is to provide for low maintenance plant communities. Selective herbicides may be used in combination with slope mowers or hand trimming to achieve management objectives. In Zone 3, when located in a Riparian Management Area, extra sensitivity to habitat needs is considered in vegetation management practices selected.



Roadside Management Zones

Vegetation Management

Definition: Wahkiakum County has an Integrated Vegetation Management Program. An Integrated Vegetation Management Program (IVM) identifies the most appropriate method for controlling vegetation. IVM methods typically involve:

- Prevention: Equipment cleaning, re-vegetation of disturbed sites, utilization of weed free gravel/sand and training of staff in pesticide safety.
- Mechanical: hand-cutting and using equipment such as mowers, graders, chain saws, brushers, etc.
- Biological: using a natural predator to control the pest (flea beetle or Cinnabar Moth to control tansy ragwort, for example).
- Cultural: incorporating native, or more appropriate, plant material to out-compete the pest.
- Chemical: applying appropriate pesticides in accordance with state and federal law, and EPA and state guidance.

The County IVM plan for vegetation management includes:

- Goals and objectives for IVM
- Methods to be used to control vegetation
- Best Management Practices

Work is accomplished using an Integrated Management (IVM) decision making process which is a coordinated approach that uses the most appropriate pest control methods and strategy in an environmentally and economically sound manner. The County incorporates routine maintenance activities into the IVM program.

Proper timing of weed control activities is critical to successfully accomplish long term control. It is most desirable to eliminate weed species before they can produce seeds. Activities typically occur between the first of April and the end of November. Exact timing for control of specific weed species varies year to year and throughout the growing season depending on the target plant, weather patterns and control methods being used.

Bare earth in the roadside environment should generally be seeded and mulched as soon as possible, unless an alternative vegetation establishment plan has been developed for that site. Limited use of fertilizer may be necessary during the establishment period.

Integrated Vegetation Management also includes work necessary to manage state and county listed noxious weeds in the roadside environment. Eradicating and controlling the spread of seeds from plants (Class A or B noxious weeds) which are growing in the road right-of-way is required and identified in WAC 16-750. The County Weed Board may also designate specific Class C noxious weeds and other nuisance vegetation for control within the county under this classification process.

Mowing, Brush Mowing, Brush Cutting (by hand)

Description: These Vegetation Management actions are designed to restore and maintain sight distance, reduce ice (due to shading) and to control/prevent slope failure. These actions involve mechanical mowing, trimming, removal of brush and cleanup.

Minimization and Avoidance:

- Integrated Vegetation Management Plans identify mowing areas, and are designed to minimize impact to waterbodies while still maintaining grassed areas. Some roads may be mowed as often as three times during a growing season, while others may be mowed only once, or not at all. Mowing frequencies may be adjusted depending on funds available to accomplish the work.
- Cut brush, in riparian areas, may be left in place where doing so does not interfere with sight distance, create safety issues, cause fire hazards, involve noxious weeds or the proper functioning of highway features (e.g. drainage).
- County Road Maintenance will maintain shade trees along streams and rivers, unless those trees are danger trees, could potentially impact bridge structures, or could impact line of sight. If trees provide shade or bank stabilization within 30 feet of streams and are determined to be danger trees that must be removed, tree removal will be coordinated with the Washington Department of Fish and Wildlife (WDFW) or other

regulatory agency.

- Brush within 20 feet (on either side) of and under all bridge structures may be removed. Other brush not within the County's clear zones will be left in its current condition, unless the brush interferes with sight distance, shades the structure, or the brush is a noxious weed (e.g. scotch broom). Mapping of sensitive resource areas may lead to additional areas not being brushed.
- On culverts of 6-foot or greater diameter, County Road Maintenance may remove up to 10 feet of brush on both sides of the culvert, on the upstream end of the culvert and 10 feet on both sides on the downstream side. Control of noxious weeds may extend beyond 10 feet from either end of a culvert..

When removing mature trees (over 12-inch diameter at breast height) in riparian areas, the County will replant two or more seedlings/cuttings for every tree removed. The County will coordinate with WDFW on species and location of trees to be replanted within the same watershed. The County will ensure that the replanted trees will not pose a future threat to structures.

Herbicide Applications (Spraying)

Description: This Vegetation Management action consists of applying herbicides to control the growth and spread of noxious and nuisance weeds and brush. Herbicides used include: broad-based foliar-active herbicides and soil residual herbicides.

Minimization and Avoidance:

- County Road Maintenance follows an Integrated Vegetation Management program. The local IVM Plan includes protection of sensitive fish, wildlife, and plant species. As a general policy, herbicides will not be applied unless they are needed, according to this policy. A goal in herbicide application shall be to minimize the dispersal of chemicals in the environment. For example, if the area in zone 2 includes areas which are usually maintained as a mowed grassy ditch fore-slope, no herbicide application may be needed in these areas. Conversely, if there is a gravel shoulder area in Zone 2 alongside the paved surface of Zone 1, this should be maintained as a vegetation free zone, so it is clearly identified and maintained as an area designated for vehicular use. It is recognized that a combination of both mowing and judicious application of herbicides may be necessary in some locations to control pest species. The herbicide spray program may include modification of spray times and modifications of spray widths to protect riparian areas or other sensitive plant communities. Specific minimization/avoidance measures will be developed on a site-specific basis. Continuous, non-selective strip spraying will be atypical rather than common practice. Sufficient judgment must be exercised by the applicator to achieve broad objectives.

Best Management Practices for Herbicide Applications (Spraying) will include:

- For noxious weed control in riparian zones, integrated vegetation management strategies will be applied with an emphasis on treatment strategies with potential for long term control to reduce the need for annual treatment with herbicides.
- Within riparian areas, adjacent to identified wetlands, and on structures located over streams, County Road maintenance forces and the Wahkiakum County Weed Board will select herbicides and application methods appropriate for those locations. For example, hand spraying may be the preferred approach when using products registered for use in or near water. Small tributary streams with flowing water should be treated as sensitive areas.
- When roadside applications of herbicides are utilized, they will be applied by trained and authorized personnel according to the label and as directed or recommended by regulating agencies such as the United States Environmental Protection Agency and the Washington State Department of Agriculture. Applications are to be made only within the County right-of-way.
- Within 25 feet of riparian areas, the County will boom spray no further than eight feet from the edge of pavement. Other types of applications (hand spray, back pack spray) can be made that would better target

unwanted vegetation and limit introduction of spray into water or into off-target application areas.

- Near active, flowing streams, application methods will be selected to minimize drift.
- **GIS and GPS technology may be** utilized as the technology is integrated into the operation, **to help efficiency in** avoiding sensitive areas and associated habitat.

Bridge Vegetation

Description: This includes vegetation management around existing bridges. The primary purpose of bridge vegetation management is to maintain sight distance. Vegetation management is also required to maintain access to the bridge structure for inspections, maintenance, fire safety, and to maintain the integrity of the structure.

Minimization and Avoidance:

- County Road Maintenance will normally only remove brush to 20 feet on either side and under all maintained bridges for access or repair. (In some instances, road access under or adjacent to the structure will be outside the 20 foot buffer).
- Only brush control necessary to perform the bridge maintenance activity will be removed.
- When removing mature trees (over 12-inch) in riparian areas, the County will replant as needed. The County will coordinate with WDFW on species and location of seedlings/cuttings to be replanted within the same watershed. The County will ensure that the replanted trees will not pose a future threat to County structures.

Other Vegetation Management

Description: County Road Maintenance removes danger trees and may also remove trees from forested areas, which are weighting unstable slide areas, where the trees or slide have the potential to reach the roadway, or where the presence of trees interferes with the safe and un-restricted use of the public right-of-way. County Road Maintenance also occasionally removes trees, which threaten to fall, and in the falling or uprooting, remove large portions of bank area.

Minimization and Avoidance:

- Where possible, County Road Maintenance will maintain buffer strips corresponding to these Riparian Management Areas (RMA).

SIZE	RIPARIAN MANAGEMENT WIDTHS	EXAMPLES
Large	100 feet	Elochoman River, Grays River
Medium	70 feet	Skamokawa Creek, Wilson Creek
Small	50 feet	Most streams (first-second order tributaries)

County Road Maintenance will maintain shade trees along streams or rivers unless those trees are “danger trees” as described above. If trees provide significant shade to a stream or bank stabilization, and are determined to be danger trees that must be removed, the trees will be removed in consultation with WDFW.

- Prior to removing trees within an RMA to reduce weight on a failing slope, coordination will be performed with WDFW when the slope is adjacent to a stream. Removal of many trees from streamside areas will require a replanting and erosion control plan. Significant consideration will be given to retaining trees, which provide stream shading (e.g. within 50 feet of the active channel).
- Permanent solutions to chronically unstable areas will be pursued through the project development process. Solutions could include artificial hillside drainage or permanent shoring.
- When removing mature trees (over 12-inch) in riparian areas, the County will replant as appropriate. The

County will coordinate with WDFW on species and location of seedling/cuttings to be replanted within the same watershed.

Property Owner Cooperative Management Agreements

Description: The County encourages a cooperative approach to roadside vegetation management in keeping with the desires of individual property owners. Property owners may enter into an agreement to maintain vegetation along the road adjacent to their property. The County Weed Board has a standard “Application and Release for Controlling Noxious Weeds and Brush on County Right-of-Way.” No Spray indicators with a red marked traffic delineator, or similar marking technique, will be placed to designate the no-spray zone.

Operational Guidelines:

- Under any agreements for vegetation management, the County will reserve the right to remove danger trees or other vegetation that presents a safety issue.
- If satisfactory vegetation control by the property owner is not implemented, the County will resume spraying or other means of vegetation management to restore proper control.