

CHAPTER 5

VEGETATION MANAGEMENT

ENVIRONMENTAL CONCERNS..... 5 – 1

MOWING.....5 - 3



DESCRIPTION

Roadside vegetation is managed to provide a safer roadway for the traveling public, maintain sight distance, remove hazard trees, manage non-native species and prevent or repair slides or slip-outs. Vegetation growth can be managed manually or mechanically. Activities include: mowing; trimming; pruning; removal of brush; tree removal; chipping; and disposal of plant debris. Vegetation often needs to be planted after a maintenance project is complete (i.e. hydro-seeding after a culvert repair).



ENVIRONMENTAL CONCERNS

- Discharge of sediment, plant material, to streams or watercourses.
- Harm to aquatic habitat, riparian areas or rare plant populations.
- Loss of trees as shade canopy and a future source of large woody debris in stream systems.
- Water pollution from equipment operations.
- Water pollution from leachate in vegetation disposal areas.
- Damage to vegetation beneficial to erosion control on slopes or sediment filtering.
- Introduction of exotic or invasive plant species or spreading of plant diseases.
- Increasing water temperature due to loss of shade from riparian zone.

BMP OBJECTIVES

- Reduce potential for water pollution from sediment delivery or equipment operations.
- Encourage healthy and native vegetation growth to stabilize slopes, filter sediments entering streams or watercourses and provide healthy riparian and aquatic habitat, including shade over streams.

BEST MANAGEMENT PRACTICES

1) Riparian vegetation is defined as “the vegetation growing in or near the banks of a stream or other body of water on soils that exhibit some wetness characteristics during some portion of the growing season”. The riparian area, includes “stream channels, wetlands and those portions of floodplains and valley bottoms that support riparian vegetation”.^{(1)*} These zones are of utmost value in protecting water quality and salmonid habitat. Therefore, it is extremely important that crews do not perform vegetation management in riparian areas unless under permit or in serious emergency conditions.

2) Vegetation management activities should be addressed by and comply with local vegetation management plans if they exist. These may include county vegetation management plans and chemical vegetation management guidelines issued by the county agricultural commissioner.

3) Mechanical vegetation control and/or integrated pest management methods are preferable to chemical methods when feasible.

4) Vegetation management and planting design should be conducted in a way that promotes native over non-native vegetation.

Mowing

5) Identify and protect drains and inlets from plant materials that may clog the inlets or disturb drainage patterns (i.e. grass clippings, branches, cuttings).

6) Minimize disturbance of ground cover or grass on the shoulder, near ditches and outside of the road right-of-way. If the ground is bladed clean during mowing, the exposed soil will be vulnerable to erosion and could run-off into a creek. Vegetation can also act as a pollution filter that traps sediment and other runoff before it gets into ditches or streams.

7) General guidelines for working within the road right-of-way:

- o Do not mow beyond 5 feet from the edge of the pavement unless that vegetation must be removed to retain existing drainage patterns or for **safety** reasons.

- o Do not remove brush more than 20 feet on either side of the road at bridge structures, unless additional removal is required to address **safety** concerns or to control noxious weeds.

- o Do not remove brush more than 10 feet on either side of a culvert, or 10 feet up and downstream from culverts that are 6-feet in diameter or larger, unless management is required for **safety** concerns or to control noxious weeds.

^{1*}(*Department of Fish and Game. (1998).California Salmonid Stream Habitat Restoration Manual.*)

8) County crews should receive specific training in vegetation management and proper cleaning of equipment to prevent passing contagious diseases to uninfected plant populations (e.g. Sudden Oak Death), and to prevent spreading seeds of invasive, nonnative plant species.

9) When removing invasive plants and noxious weeds, use complete and thorough treatments.

10) Small quantities of cut brush and trees may be left in riparian areas, adjacent to streams, when cut vegetation:

- o Does not cause a safety concern or fire hazard;
- o Does not disturb existing drainage patterns.
- o Does not contain noxious weeds (consult with appropriate staff about types and locations of noxious weeds);
- o Is not stockpiled in concentrated areas that can release leachate to surface water;.

11) Dispose of larger amounts of vegetation and debris in approved upland disposal areas. Do not dispose of vegetation directly into waterbodies such as streams or wetlands. Do not permanently dispose of concentrated amounts of vegetation that can generate leachate that could affect surface or groundwater quality, unless disposal is at a location permitted for this purpose.

12) When feasible, chip removed vegetation and reuse as mulch.

BMP TOOLBOX

Planning and Prevention BMPs

- Seasonal Planning
- Small Spill Kit

Erosion Control BMPs

- Mulching
- Planting

Sediment Control BMPs

- Storm Drain Inlet Protection

Valuable References

- San Luis Obispo County Public Works Department Tree Policy
- San Luis Obispo County Public Works Department Roads Mowing Policy

PERMITS

VEGETATION MANAGEMENT	
Activity or Condition	Required Permit or Limitation
<ul style="list-style-type: none"> • Vegetation disposal sites the could impact surface or groundwater quality 	<ul style="list-style-type: none"> • Waste discharge requirements from California RWQCB.
<ul style="list-style-type: none"> • Removal of scenic resources, which may include large stands of trees; or healthy, mature, scenic trees. 	<ul style="list-style-type: none"> • Comply with County Tree Policy or County vegetation management plan; possible CEQA. • Consult with County Public Works Environmental staff.
<ul style="list-style-type: none"> • Working within the riparian zone. 	<ul style="list-style-type: none"> • DFG 1602 may be needed. • Consult with County Public Works Environmental staff.
<ul style="list-style-type: none"> • In Coastal Zone. • Vegetation Maintenance, including trimming and cutting by hand and mechanical means 	<ul style="list-style-type: none"> • Is exempt from a coastal development permit for maintenance treatment of all vegetative materials growing native within the highway right – of – ways.
<ul style="list-style-type: none"> • Removal of trees along designated <i>State Scenic Highways</i> may require further permitting 	<ul style="list-style-type: none"> • Check with the California Resources Agency Department of Conservation. • Consult wit San Luis Obispo County Public Works Environmental staff.