Control Options for Common Fennel

General Information
Common fennel, a native of southern Europe and the Mediterranean area, is a perennial herb in the umbel (carrot) family. It has been introduced to North America for use as a culinary crop, medicinal plant and ornamental plant and has become a weed in disturbed waste areas, roadsides and embankments. The mature plant reaches a height of four to ten feet, with finely divided leaves and yellow flowers. The stem and leaves have a strong anise or licorice-like odor. Fennel reproduces by seed, which can be spread by water, machinery, animals and agricultural products. Seed can lie dormant in the soil for several years. It can also reproduce from pieces of the root crown, which can be spread during cultivation and by water. Once it is well established, fennel tends to dominate a site, excluding other vegetation.

Manual/Mechanical Techniques
Small stands of common fennel can be controlled through hand removal. Plants should be dug, taking care to remove the entire long taproot; this is best done when soil is moist. Disturbance of the soil during manual control may cause the germination of any fennel seeds in the soil, so the area should be monitored to control any new seedlings or regrowth from remaining roots. Mowing or pulling the tops is ineffective, as the plant will regenerate from the root crown.

Chemical Recommendations
Common fennel can be controlled using specific herbicides. When using herbicides, always read and follow label directions for rates, spraying conditions, personal protective equipment and grazing intervals. If spraying is the chosen option, spray late in the evening to reduce the direct impact on pollinating insects. Do not spray when it is windy or raining, or when rain is forecast. Do not cut sprayed plants for at least 2 weeks after herbicide application. Herbicides should not be sprayed within 60 feet of water bodies and creeks, without further consultation with the Noxious Weed Board. Remember, it is the herbicide applicators responsibility to apply the product in accordance to the instructions on the label.

**Glyphosate** (RoundUp® and many other brands) can be applied to actively growing plants in the rosette stage before they begin to bolt. An herbicide containing a 41% or higher concentration of glyphosate should be used at a 2% solution (2.66oz/gallon of water). Premixed solutions will be too weak to be effective. Glyphosate will kill grass and other vegetation so care should be taken if used around desired vegetation. The loss of surrounding plants also may allow germination of any fennel seeds in the soil.

**Triclopyr** (Garlon® and others) can be applied to actively growing plants, before flowering. Follow label directions for mixing the appropriate solution strength (0.5 to 1% solution). It will affect other broadleaf plants. A combination of triclopyr and glyphosate can also be used.

**2,4-D** (many brands) can be applied to plants before flowering at 0.25 to 0.5% solution. It is less effective than trichlopyr and will also affect other broadleaf plants.

*NEVER apply RoundUp® or other herbicides to standing water unless they are distinctly labeled for aquatic use.* Ingredients in non-aquatic products may be toxic to fish and other aquatic organisms. Aquatic formulations of herbicides are generally only available to licensed pesticide applicators in Washington State. If the target plants are immediately adjacent to or are in standing water, a state permit may be required in order to treat those plants with an aquatically approved herbicide.

- Always read and understand the label of the herbicides you choose to use.
- More is NOT better when using herbicides, and may actually hinder the ability of the herbicide to injure the target plant if the solution is too strong. This wastes money and effort and puts more product into the environment than is necessary. ALWAYS follow the recommended rates on the label.
- With all herbicides, when you apply them is as important as how you apply them.

The mention of a specific product brand name in this document is not, and should not be construed as an endorsement or as a recommendation for the use of that product. Herbicide information is taken from Weed Control in Natural Areas in the Western United States and Thurston County Noxious Weed Program (Olympia WA)