

3.5 NOXIOUS WEEDS

3.5.1 Affected Environment

Noxious weeds are defined as non-native invasive plants. They represent a legal classification in which their spread is controlled by the state. Noxious weeds are fast spreading and expensive or difficult to control. When introduced to an area, noxious weeds can quickly dominate the landscape, especially when their populations are uncontrolled. Noxious weeds may proliferate to the point of crowding out other plants that benefit wildlife and domestic animals. Wildlife and grazing animals do not often eat noxious weeds, because their thorns, spines, and a chemical content make them unpalatable.

Noxious weeds are spread from infested areas by people, equipment, livestock/wildlife, and the wind. The potential for additional weed infestations grows along with increased weed populations due to man’s activities such as mining, oil and gas exploration, road maintenance, grazing, and recreational use, primarily through off-road vehicle use.

The WFO conducts ongoing inventories of noxious weeds through contract and with office personnel. The purpose of inventory is to document locations of weed infestations so that control and eradication measures can be implemented. This inventory was started in 1997 and is ongoing.

Table 3.5-1 lists the noxious weeds that have been inventoried and found to occur within the WFO.

**TABLE 3.5-1
NOXIOUS WEED LIST
(AS OF AUGUST 2000)**

Common Name	Scientific Name	Common Name	Scientific Name
Poison hemlock	<i>Conium maculatum</i>	Canada thistle	<i>Cirsium arvense</i>
Russian knapweed	<i>Acroptilon repens</i>	Musk thistle	<i>Carduus nutans</i>
Leafy spurge	<i>Euphorbia esula</i>	Scotch thistle	<i>Onopordum acanthium</i>
Medusahead	<i>Taeniatherum caput-medusae</i>	Whitetop or hoary cress	<i>Cardaria draba</i>
Perennial pepperweed	<i>Lepidium latifolium</i>	Yellow star thistle	<i>Centaurea solstitialis</i>
Saltcedar (tamarisk)	<i>Tamarix ramosissima</i>		

Treatments are currently done within the District for Russian knapweed, leafy spurge, perennial pepperweed, scotch thistle, whitetop or horay cress, and yellow star thistle. An increase in funding for noxious weeds would allow treatment of more species, as prioritized from the inventory. Field office specialists set priorities at the beginning of each field season, and

treatments are conducted either by contract or by field office personnel certified as pesticide applicators in conjunction with the Nevada Department of Agriculture.

Noxious weeds problems may be reduced by ensuring construction equipment entering the assessment area are cleansed of dirt that may contain noxious weed seeds.

3.5.2 Environmental Impacts

3.5.2.1 Proposed Action

Direct Impacts – There are no direct impacts to issuing leases for future geothermal exploration, development, and production activities.

Indirect Impacts – When considering the “reasonably foreseeable development scenario,” each project would be evaluated on a case-by-case basis. Native vegetation in localized areas where facilities and utility corridors would be built or constructed could be damaged or destroyed by crushing, exposing roots, soil compaction, and blading for construction. The construction would open areas for weed invasion. The loss of native vegetation could result in the introduction of non-native, undesirable vegetation. During the exploration and development phases, noxious weeds could spread. The degree to which noxious weeds spread would be directly correlated to human activities and weed control efforts in the area. Although natural elements, such as wind and wildlife, would contribute to weed proliferation under this alternative, range animals (livestock and horses) and activities involving off-highway vehicles (OHVs) would contribute to most of the increased weed populations.

The following are the potential environmental impacts on noxious weeds when analyzing the “reasonably foreseeable development scenario.”

Exploration. The exploration process could disturb natural vegetation and increase the potential for weed introduction and spread; however, the small number and sizes of vehicles used, the short duration of exploration activities, and the small areas of disturbance would limit exposure in terms of area and time.

Development. This phase would cause the most extensive disruption to the surrounding environment and would present the greatest opportunity for noxious weed introduction and proliferation. The number and size of construction vehicles and construction activities could lend themselves to transporting noxious weeds to areas where they had not previously existed.

Production. During the production phase, introduction of noxious weeds would be limited primarily to the day-to-day vehicle traffic, traveling to and from the production site and support facilities. However, the new roads in and out of the production area could provide increased opportunities and numbers of non-production related vehicle traffic transiting the area. The potential for noxious weed seed introduction would be proportional to the numbers and types of all vehicle traffic.

Close-Out. The close-out phase would again see an increase in the number of large construction vehicles traveling into and out of the production area. These vehicles could include those involved in earth moving and re-contouring. Unless monitored and controlled, noxious weed seed introduction could increase with these activities. Seed used for re-vegetation must be free of non-indigenous, noxious weeds.

3.5.2.2 No Action Alternative

Direct Impacts – There are no direct impacts to issuing leases for future geothermal exploration, development, and production activities.

Indirect Impacts – Indirect impacts from the No Action Alternative would be similar to those described in the Proposed Action; however, updated mitigation measures and stipulations would not apply using the 1982 Geothermal EA.