Table 2-1. Summary of Documented Invasive Plant Sites

Scientific Names Common Name	acres		acres	Primary Project Areas	Common Habitat in SW Oregon	Gross Treatment Acres (includes Category I & II acres) ³	
					Dicots		
Apiaceae (parsley	family)						
Conium maculatum poison hemlock	Biennial	B list	D3	27.1 acres 38 sites	Rogue National Wild and Scenic River Corridor, Areas of Critical Environmental Concern (ACECs), Fritillaria Management Areas (FMAs), Cook's Iomatium critical habitat	Widespread in riparian areas, floodplains, ditches, roadsides	250
Apocynaceae (dog	bane famil	y)					
Vinca major large-leaf periwinkle	Perennial	NL	D9	6.3 acres 16 sites	Rogue National Wild and Scenic River Corridor	Roadsides, old home sites, residential areas	20
Araliaceae (ginser	ng family)			•			•
Hedera helix, Hedera hibernica English ivy	Perennial	B list	D12	8.4 acres 10 sites	Rogue National Wild and Scenic River Corridor, Cathedral Hills Recreation Site	Old home sites, woodlands near residential areas	25
Asteraceae (aster	family)			•			•
Acroptilon repens Russian knapweed	Perennial	B list	D4	2.9 acres 23 sites	Sam's Valley, roadsides	Roadsides, grasslands	10
Ambrosia artemisiifolia annual ragweed	Annual	B list	D2	4.1 acres 4 sites	Rogue National Wild and Scenic River Corridor	Riparian areas, river bars, valley bottoms	5
Carduus nutans musk thistle	Biennial	B list	D4	6.4 acres 3 sites	Douglas and Oregon Gulch burned areas	Roadsides, ditches, burned areas	100
Carduus pycnocephalus Italian thistle	Annual	B list	D2	0.1 acres 1 sites	Lower West Fork Evans Creek	Roadsides, disturbed soils, meadows, woodlands, chaparral	1
Carthamus lanatus woolly distaff- thistle	Annual	A list	D2	0.2 acres 1 sites	Interstate 5 near Wolf Creek	Roadsides, disturbed openings	1
Centaurea × moncktonii meadow knapweed	Perennial	B list	D4		Rogue National Wild and Scenic River Corridor, Burton Nine Mile District Designated Reserve, Bobby Creek Research Natural Areas (RNA), Eight Dollar Mt ACEC, French Flat ACEC, Reeves Creek ACEC, Rough and Ready ACEC, roadsides, forest management project areas	Roadsides, meadows, river bars, disturbed openings	1,000

Scientific Names Common Name	Life Cycle	ODA Status ¹	Treatment Group ²	Category I acres sites	Primary Project Areas	Common Habitat in SW Oregon	Gross Treatment Acres (includes Category I & II acres) ³
Centaurea diffusa diffuse knapweed	Perennial	B list	D4	79 acres 85 sites	Rogue National Wild and Scenic River Corridor, Soda Mt Wilderness Area, Burton Nine Mile District Designated Reserve, Wild Rogue District Designated Reserve, Pilot Rock FMA, Dakubetede FMA, roadsides	Roadsides, rangeland	200
Centaurea melitensis Maltese starthistle	Biennial	NL	D4	6.6 acres 23 sites	North River Road FMA	Grasslands, disturbed soils, burned areas	10
Centaurea solstitialis yellow starthistle	Biennial	B list	D4	5,201.3 acres 4,033 sites	Rogue National Wild and Scenic River Corridor, Berry Creek District Designated Reserve, Burton Nine Mile District Designated Reserve, Soda Mt Wilderness Area, Cobleigh Road ACEC, Dakubetede ACEC, French Flat ACEC, Mariposa Botanical Area, North River Road FMA, Pilot Rock FMA, Rough and Ready ACEC, Roundtop Butte RNA, Sterling Mine Ditch ACEC, Table Rocks ACEC, roadsides, forest management project areas	Grasslands, disturbed soils, burned areas, river bars, roadsides	10,000
Centaurea stoebe spp. micranthos spotted knapweed	Perennial	B list	D4	872.1 acres 236 sites	Rogue National Wild and Scenic River Corridor, Wild Rogue District Designated Reserve, Cook's lomatium critical habitat near Cave Junction, roadsides, forest management project areas	Roadsides, disturbed openings, meadows, floodplains, river bars	1,000
Centaurea virgata squarrose knapweed	Perennial	A list	D4	0.5 acres 4 sites	Illinois River Valley ACECs and Cook's lomatium habitat, roadsides	Roadsides, disturbed openings, meadows	1
Chondrilla juncea rush skeletonweed	Perennial	B list	D4	337.8 acres 517 sites	Rogue National Wild and Scenic River Corridor, Berry Creek District Designated Reserve, Wild Rogue District Designated Reserve, Table Rocks ACEC, King Mt ACEC, roadsides, forest management project areas	Roadsides, disturbed openings, river bars and floodplains	1,000
Cirsium arvense Canada thistle	Perennial	B list	D4	447.7 acres 1,627 sites	Soda Mt Wilderness Area, Rogue National Wild and Scenic River Corridor, Bobby Creek RNA, East Fork Whiskey Creek RNA, Lost Lake RNA, North Fork Silver Creek RNA, Old Baldy RNA, roadsides, forest management project areas	Widespread in roadsides, ditches, meadows, riparian areas, river floodplains	1,000
Cirsium vulgare bull thistle	Biennial	B list	D4		Soda Mt Wilderness Area, Rogue National Wild and Scenic River Corridor, Bobby Creek RNA, East Fork Whiskey Creek RNA, French Flat ACEC, Bald Mt FMA, Dakubetede FMA,	Widespread in roadsides, meadows, riparian areas, burned areas, other disturbed openings	1,000

Scientific Names Common Name	Life Cycle	ODA Status ¹	Treatment Group ²	Category I acres sites	Primary Project Areas	Common Habitat in SW Oregon	Gross Treatment Acres (includes Category I & II acres) ³
Leucanthemum vulgare oxeye daisy	Perennial	NL	D4	3.6 acres 1 site	Rogue National Wild and Scenic River Corridor, FMAs, Cook's lomatium critical habitat	Widespread in roadsides, meadows, river bars	250
Onopordum acanthium Scotch cotton- thistle	Biennial	B list	D4	2.5 acres 1 site	One occurrence on a roadside north of East Fork Whiskey Creek RNA	Roadsides, disturbed pastures, open riparian areas	2.5
Senecio jacobaea tansy ragwort	Perennial	B list	D4	181.9 acres 1,230 sites	Forest management project areas, burned areas, ACECs, mostly in western half of District	Mesic roadsides, pastures, forest openings	500
Silybum marianum blessed milkthistle	Biennial	B list	D4	0.1 acres 1 site	One occurrence in Quines Creek-Cow Creek watershed in north part of District	Not common, but known from roadsides and disturbed openings	1
Xanthium spinosum spiny cocklebur	Annual	B list	D2	5.6 acres 5 sites	Rogue National Wild and Scenic River Corridor, ACECs, FMAs, Cook's lomatium critical habitat, roadsides	Roadsides, disturbed sites, riparian areas	10
Boraginaceae (boi	rage family)	•	•			
Cynoglossum officinale houndstongue	Biennial	B list	D5	1,027 acres 58 sites	Cascades and oak foothills in eastern part of District, forest management project areas	Forests, woodlands, rangeland, roadsides	1,200
Brassicaceae (mus	tard family)					
Alliaria petiolata garlic mustard	Biennial	B list	D6	153.1 acres 81 sites	Rogue National Wild and Scenic River Corridor	Riparian areas, floodplains	200
Alyssum alyssoides pale alyssum	Annual	NL	D1	0.66 acres 1 site	FMAs, Cook's lomatium critical habitat	Widespread in grasslands, disturbed sites, and open habitats	Rarely treated. 0.1 acre / year
Alyssum corsicum, A. murale yellowtufts	Perennial	A list	D6	40.8 acres 13 sites	All serpentine substrates in the Illinois River Valley	Meadows, savannah, chaparral in serpentine soils	100
<i>Isatis tinctoria</i> dyer's woad	Biennial	B list	D6	318.8 acres 366 sites	Rogue National Wild and Scenic River Corridor, Williams Creek watershed, Oregon Gulch burn area, Soda Mt Wilderness Area, roadsides	River banks, bars, and floodplains; roadsides; burned areas	1,000

Scientific Names Common Name	Life Cycle	ODA Status ¹	Treatment Group ²	Category I acres sites	Primary Project Areas	Common Habitat in SW Oregon	Gross Treatment Acres (includes Category I & II acres) ³
Lepidium campestre field pepperweed	Biennial	NL	D6	1.7 acres 3 sites	ACECs, FMAs, Cook's lomatium critical habitat	Widespread in disturbed sites, rangeland, other open habitats	< 1 acre / year
Lepidium draba whitetop	Perennial	B list	D6	16.3 acres 4 sites	Beaver Creek-Applegate watershed, Rogue National Wild and Scenic River Corridor	Not common, but known from roadsides, cattle corrals, disturbed riparian areas in the Cascades	50
Clusiaceae (St. Joh	nswort fan	nily)	l .	I			
Hypericum perforatum St. Johnswort	Perennial	B list	D9	34.2 acres 78 sites	ACECs, FMAs, Cook's lomatium critical habitat	Widespread in roadsides, rangeland, floodplains, disturbed openings	1,000
Convolvulaceae (n	norning glo	ry family)					
Convolvulus arvensis field bindweed	Perennial	B list	D9	0.4 acres 2 sites	ACECs, FMAs, Cook's lomatium critical habitat	Widespread in roadsides and disturbed openings	500
Dipsacaceae (teas	el family)						
Dipsacus fullonum common teasel	Biennial	NL	D9	36.5 acres 98 sites	ACECs, FMAs, Cook's lomatium critical habitat	Widespread in roadsides, ditches, pastures, cultivated fields, and other open habitats	500
Dipsacus laciniatus cutleaf teasel	Biennial	B list	D9	87.9 acres 37 sites	Soda Mt Wilderness Area, Mariposa Botanical Area, Applegate Valley, meadows and roadsides in the Cascades	Grasslands, roadsides, disturbed open areas	200
Euphorbiaceae (sp	urge family	<i>(</i>)					
Euphorbia esula leafy spurge	Perennial	B list	D9	0.3 acres 2 sites	Rogue National Wild and Scenic River Corridor, Sam's Valley	Grasslands, chaparral, open woodlands, riparian areas, roadsides	2
Fabaceae (pea fan	nily)						
Cytisus scoparius Scotch broom	scoparius broom Perennial B list D12 988 acres and Soda Mountain Wild characteristics, ACECs, FI		Rogue National Wild and Scenic River Corridor, Wild Rogue and Soda Mountain Wilderness Areas, lands with wilderness characteristics, ACECs, FMAs, roadsides, forest management project areas	Widespread in roadsides, forest openings, woodlands, floodplains, riparian areas, meadows	2,000		
Cytisus striatus striated broom	Perennial	B list	D12	0.1 acres 1 site	Known from only one location in Gold Mt Creek watershed, northwest part of District	Roadsides, forest openings, woodlands, meadows	1
Genista monspessulana French broom	Perennial	B list	D12	35.6 acres 43 sites	Rogue National Wild and Scenic River Corridor	Roadsides, forest openings, woodlands, meadows	100

Scientific Names Common Name	Life Cycle	ODA Status ¹	Treatment Group ²	Category I acres sites	Primary Project Areas	Common Habitat in SW Oregon	Gross Treatment Acres (includes Category I & II acres) ³
Lathyrus latifolius perennial peavine	Perennial	B list	D7	28.2 acres 117 sites	Rogue National Wild and Scenic River Corridor, Wild Rogue and Soda Mountain Wilderness Areas, lands with wilderness characteristics, ACECs, FMAs, forest management project areas, roadsides	Widespread in roadsides, woodlands, forest openings, disturbed open habitats	1,000
Melilotus albus, M. officinalis sweetclovers	Perennial	NL	D7	1.4 acres 5 sites	ACECs, FMAs, Cook's lomatium critical habitat	Roadsides, pastures, disturbed open habitats	< 1 acre / year
Spartium junceum Spanish broom	Perennial	B list	D12	31.3 acres 105 sites	Rogue National Wild and Scenic River Corridor, Applegate Valley	Roadsides, river banks, open disturbed habitats	100
Ulex europaeus common gorse	Perennial	B list	D12	0.5 acres 2 sites	Only two sites known, in the Dad's Creek and McCullough Creek watersheds, northwest part of the District	Primarily coastal; otherwise uncommon, but known from roadsides in western edges of District	1
Geraniaceae (gera	nium famil	y)					
Geranium lucidum shiny leaf geranium	Biennial	B list	D8	51.1 acres 8 sites	Rogue National Wild and Scenic River Corridor, Forest Creek watershed, in Applegate Valley	Semi-open riparian areas and woodlands	100
Geranium robertianum Robert geranium	Biennial	B list	D8	0.1 acres 1 site	Whitehorse Creek watershed, east of Azalea	Mesic shaded to semi-open riparian areas, woodlands, forests	5
Haloragaceae (wa	termilfoil fo	amily)					
Myriophyllum aquaticum parrotsfeather	Perennial	B list	A-ALT	0.9 acres 5 sites	Rogue National Wild and Scenic River Corridor	Rogue River, irrigation ditches	10
Lamiaceae (mint fo	amily)						
Lamiastrum galeobdolon yellow archangel	Perennial	B list	D9	0.2 acres 2 sites	Rogue National Wild and Scenic River Corridor	Not common, but known from riparian areas and mesic woodlands	1
Lythraceae (looses	trife family)					
<i>Lythrum salicaria</i> purple loosestrife	Perennial	B list	А	37.6 acres 153 sites	Rogue National Wild and Scenic River Corridor	River banks and bars, riparian areas, ditches, pond and lake margins, wetlands	500
Onagraceae (even	ing primros	e family)					

Scientific Names Common Name	Life Cycle	ODA Status ¹	Treatment Group ²	Category I acres sites	Primary Project Areas	Common Habitat in SW Oregon	Gross Treatment Acres (includes Category I & II acres) ³
Ludwigia hexapetala water primrose	Perennial	B list	A-ALT	8.1 acres 18 sites	Rogue National Wild and Scenic River Corridor	In shallow slow-moving water along rivers, ditches, ponds	20
Ludwigia peploides floating water primrose	Perennial	B list	A-ALT	0.3 acres 1 site	Rogue National Wild and Scenic River Corridor	In shallow slow-moving water along rivers, ditches, ponds	1
Plantaginaceae (p	lantain fam	nily)					
Linaria dalmatica ssp. dalmatica Dalmatian toadflax	Perennial	B list	D10	0.3 acres 21 sites	Cascades east of Ashland, particularly in the Jenny Creek watershed	Not common, but known from roadsides and rangeland in the eastern part of the District	1
Linaria vulgaris yellow toadflax	Perennial	B list	D10		Poorman Creek-Grave Creek watershed, Fall Creek-Klamath River watershed, and along Hwy 62, south of Prospect	Not common, but known from roadsides, pastures, and disturbed open areas	5
Polygonaceae (kno	otweed fan	nily)					
Polygonum cuspidatum Japanese knotweed	Perennial	B list	D11	97.2 acres 251 sites	Rogue National Wild and Scenic River Corridor, Illinois River Corridor	Riparian areas, river banks	200
Polygonum sachalinense giant knotweed	Perennial	B list	D11	0.1 acres 1 site	Rogue National Wild and Scenic River Corridor, Illinois River Corridor	Riparian areas, river banks	1
Ranunculaceae (b	uttercup fai	mily)					
Clematis vitalba evergreen clematis	Perennial	B list	D12	1.1 acres 2 sites	Only known from eastern boundary of East Fork Whiskey Creek RNA	Roadsides, riparian areas, floodplains, residential areas	2
Rosaceae (rose fai	nily)			T			
Potentilla recta sulfur cinquefoil	Perennial	B list	D9	131.2 acres 48 sites	Applegate Valley and Cascades, including Soda Mt Wilderness Area	Roadsides, grasslands, rangeland, other open areas	500
Rubus armeniacus Armenian blackberry	Perennial	B List	D12	acres	Rogue National Wild and Scenic River Corridor, ACECs, forest management project areas, where aggressive populations threaten Bureau Sensitive species	Widespread in riparian areas, drainage ditches, forest openings, roadsides throughout the valley, but most abundant below 3,000 feet elevation	1,000

Scientific Names Common Name	Life Cycle	ODA Status ¹	Treatment Group ²	Category I acres sites	Primary Project Areas	Common Habitat in SW Oregon	Gross Treatment Acres (includes Category I & II acres) ³		
Rubus laciniatus evergreen blackberry	Perennial	NL	D12	3.2 acres 33 sites	Rogue National Wild and Scenic River Corridor, ACECs, FMAs	Roadsides, riparian areas, forest openings	50		
Scrophulariaceae ((figwort far	nily)							
Verbascum blattaria, V. thapsus moth mullein, common mullein	Biennial	NL	D9	33.7 acres 21 sites	Rogue National Wild and Scenic River Corridor, ACECs, FMAs, Cook's Iomatium critical habitat	Widespread in disturbed open sites	< 1 acre / year		
Simaroubaceae (quassia family)									
Ailanthus altissima tree of heaven	Perennial	B list	D12	12.1 acres 6 sites	Rogue National Wild and Scenic River Corridor	Riparian areas, river banks and bars, residential areas	25		
Zygophyllaceae (c	altrop fami	ly)		•					
Tribulus terrestris puncturevine	Annual	B list	D1	15.3 acres 12 sites	Rogue National Wild and Scenic River Corridor, recreation sites, equipment lots	Disturbed sites, parking lots, roadsides, sunny trail sides, sandy soils	30		
				•	Monocots	,			
Cyperaceae (sedge	e family)								
Cyperus esculentus yellow nutsedge	Perennial	B list	А	0.1 acres 2 sites	Rogue National Wild and Scenic River Corridor	Widespread in stream banks, disturbed soils, ditches, cultivated ground	< 1 acre / year		
Iridaceae (iris fam	ily)								
Iris pseudacorus yellow flag iris	Perennial	B list	А	51.7 acres 73 sites	Rogue National Wild and Scenic River Corridor	Wet shores of rivers, ponds, irrigation ditches	100		
Poaceae (grass fai	mily)		T	T		T			
Aegilops cylindrica jointed goatgrass	Annual	B list	M1	10.2 acres 6 sites	Cascade-Siskiyou National Monument, primarily in East Fork Cottonwood Creek and Upper Emigrant Creek watersheds	Roadsides, rangeland, agricultural fields	20		
Aegilops triuncialis barbed goatgrass	Annual	A list	M1	1.2 acres 2 sites	Lower West Fork Illinois River Valley	Roadsides, rangelands, grasslands, including serpentine substrates	5		
Brachypodium sylvaticum false-brome	Perennial	B list	M2	3.4 acres 19 sites	Rogue National Wild and Scenic River Corridor, Illinois River Corridor, Eight Dollar Mt ACEC	River bars, banks, and floodplains; wetlands; roadsides; often in shade	500		

Scientific Names Common Name	Life Cycle	ODA Status ¹	Treatment Group ²	Category I acres sites	Primary Project Areas	Common Habitat in SW Oregon	Gross Treatment Acres (includes Category I & II acres) ³
Bromus tectorum cheatgrass	Annual	NL	M1	8.4 acres 22 sites	Burton Nine Mile District Designated Reserve, Dakubetede ACEC	Disturbed grasslands, rangeland, chaparral, roadsides	1,000
Cynosurus cristatus, C. echinatus dogtail grasses	Annual	NL	M1	0.1 acres 1 site	ACECs, FMAs, Cook's lomatium critical habitat	Open woodlands, forest edges, roadsides	3,000
Phalaris arundinacea ⁴ reed canarygrass	Perennial	NL	M2	0.1 acres 2 sites	, ,	River floodplains, wet meadows, lake shores	25
Taeniatherum caput-medusae medusahead rye	Annual	B list	M1	50.8 acres 51 sites	ACECs, FMAs, Cook's lomatium critical habitat	Roadsides, meadows, rangeland, chaparral, open woodlands including serpentine substrates	5,000

^{1.} Noxious weeds are classified by the ODA for the purpose of prioritizing and implementing noxious weed control projects:

A List: A weed of known economic importance that occurs in the state in small enough infestations to make eradication or containment possible.

B List: A weed of economic importance which is regionally abundant, but which may have limited distribution in some areas. NL: Not listed.

^{2.} Species of invasive plants that would be treated in the same manner have been arranged into treatment groups. Further information about treatment methods for these treatment groups can be found in Table 2-12, *Treatment Key*. Treatment group information for A-ALT can be found in Table 2-13, *Treatment Key* – *Submerged and Floating Aquatics*.

^{3.} Treatment acres include both Category I acres and Category II acres. For more information, see the *Treatment Acres* sub-section in the *Category II, Unmapped Invasive Plant Sites* section.

^{4.} Acres / sites may be incorrect, as it is difficult to distinguish between native and nonnative populations. Native populations would not be treated.

^{5.} Fritillaria Management Areas are further described in the U.S. Fish and Wildlife Service's Recovery Plan (USDI 2003a)

Table 2-2. Summary of Invasive Plants Documented in	n NISIMS by Infestation Size
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	Infestation	Number o	of Sites	Total Acres			
	Size (in Acres)	(percent of to	otal sites)	(percent of total acres)			
	< 0.1	9,063	54.0%	162	1.2%		
	0.1 to < 0.5	5,289	31.5%	1,199	9.1%		
	0.5 to < 1	814	4.9%	562	4.3%		
	1 to < 5	1,236	7.4%	2,826	21.4%		
	5 to < 20	288	1.7%	2,651	20.1%		
	20 to <100	74	0.4%	2,915	22.1%		
	>100	11	<0.1%	2,896	21.9%		

Over 90 percent of mapped sites are smaller than 1 acre each (see Table 2-2 and Table D-1, Invasive Plants Mapped in NISIMS by Infestation Size in Appendix D); however, a relatively small number of large sites account for a majority of infested acres (about 65 percent of the mapped acres are on sites that are bigger than 5 acres).

Category II: Unmapped Invasive Plant Sites

This Category includes species and infestations that are known to occur on the District, but are not mapped in NISIMS. These species are generally widespread and dispersed throughout the District. District botany staff estimated these areas based on their professional judgement and field experience. For some species, this included consideration of vegetation community types and analyzing vegetation layers in GIS. While the locations are not mapped, it is possible to characterize the areas and habitat where they may occur. This Category includes additional unmapped sites for all species that are included in Category I, as well as an additional 140 species (see Table 2-3, *Summary of Unmapped Invasive Plant Sites*). The majority of the species that are in Category II but not in Category I are not listed as noxious weeds (and hence have not been part of the existing integrated weed management program; thus, they generally have not been recorded during inventories or in NISIMS). While it is unknown how many acres of these species occur on the Medford District, it is estimated that nearly 30,000 unmapped acres would be in need of treatment. The most prevalent species are in the aster family (especially yellow starthistle, but also knapweeds and biennial thistles) and annual grasses (such as cheatgrass, medusahead, and dogtail grasses).

Treatment Acres

As shown in Figure 2-1, gross acres are the area of land defined by drawing a line around the general perimeter of the infestation; the net acres are the actual acres of canopy cover of the plants. Table 2-1, Summary of Documented Invasive Plant Sites, and Table 2-3, Summary of Unmapped Invasive Plant Sites, include estimated gross treatment acres for each species. These acres include both mapped Category I sites as well as estimated Category II sites that are proposed for treatment.

As examples:

- There are 1,000 treatment acres of Armenian blackberry listed in Table 2-1, which includes nearly 600 acres of mapped (Category I) sites and an additional estimated 400 acres of unmapped (Category II) sites. It is unknown how many acres of Armenian blackberry exist on the Medford District, but it is estimated that 1,000 acres would be treated over the life of this plan¹⁷.
- Kochia is not mapped on the District (there are no Category I sites), but it exists on the District. While the extent is unknown, it is estimated that less than an acre a year would be treated. Hence, treatment acres would be less than one acre per year of Category II sites.

¹⁷ As further described in the *Prioritizing Areas for Treatment* section, later in this Chapter, areas treated would be areas where invasive plant infestations have exceeded action thresholds and would be prioritized based on abundance, location and value of neighboring resources, potential spread, and treatment effectiveness. Armenian blackberry is very widespread on the District and it would generally not be treated. However, treatments may occur when infestations threaten Special Status plants or where forest management projects are contributing to the spread.

Table 2-3. Summary of Unmapped Invasive Plant Sites

Scientific Name Common Name	Life Cycle	ODA Status ¹	Treatment Group ²	Gross Treatment Acres	Primary Project Areas	Common Habitat in SW Oregon
		I		Dio	ots	1
Amaranthaceae (amaranth family)						
Bassia scoparia kochia	Annual	B list	D1	< 1 acre / year	ACECs, FMAs, Cook's lomatium critical habitat	Widespread in disturbed soil, roadsides, cultivated ground
Apiaceae (parsley family)	•			•		
Anthriscus caucalis bur chervil	Annual	NL	D2	< 1 acre / year	ACECs, FMAs, Cook's lomatium critical habitat	Widespread in woodlands, riparian areas, roadsides
Daucus carota Queen Anne's lace	Biennial	NL	D3	10	ACECs, FMAs, Cook's lomatium critical habitat	Widespread in disturbed soil, cultivated ground, meadows, open woodlands
Foeniculum vulgare sweet fennel	Perennial	NL	D3	100	Rogue National Wild and Scenic River Corridor, ACECs, FMAs, Cook's Iomatium critical habitat	Widespread in disturbed soil, roadsides, river banks and bars
Torilis arvensis spreading hedgeparsley	Annual	NL	D2	3,000	ACECs, FMAs, Cook's lomatium critical habitat	Widespread in woodlands, riparian areas, roadsides
Asteraceae (aster family)						
Centaurea cyanus bachelor's button	Annual	NL	D2	20	Applegate River corridor, Rogue National Wild and Scenic River Corridor	Roadsides, oak woodlands, river bars
Cichorium intybus chicory	Perennial	NL	D4	< 1 acre / year	ACECs, FMAs, Cook's lomatium critical habitat	Roadsides, cultivated sites, disturbed openings, river bars and floodplains
Matricaria discoidea, M. recutita pineapple weed, wild chamomile	Annual	NL	D2	< 1 acre / year	ACECs, FMAs, Cook's lomatium critical habitat	Widespread in roadsides, disturbed openings
Bignoniaceae (trumpet creeper family)						
Catalpa bignonioides southern catalpa	Perennial	NL	D12	20	Rogue National Wild and Scenic River Corridor	River bars and banks
Brassicaceae (mustard family)						
Brassica nigra, B. rapa field mustards	Annual	NL	D1	•	ACECs, FMAs, Cook's lomatium critical habitat	Widespread in roadsides, ditches, grasslands, disturbed openings
Descurainia sophia flixweed	Biennial	NL	D6		ACECs, FMAs, Cook's lomatium critical habitat	Occasional in rangelands, chaparral, forest openings, roadsides
Lepidium chalepense lens-podded whitetop	Perennial	B list	D6	10	ACECs, FMAs, Cook's lomatium critical habitat, roadsides	Not common, but known from roadsides, rangeland, other open habitats
Lepidium strictum upright pepperweed Caryopyllaceae (pink family)	Perennial	B list	D6	< 1 acre / year	ACECs, FMAs, Cook's lomatium critical habitat, roadsides	Not common, but known from roadsides and disturbed openings

Scientific Name Common Name	Life Cycle	ODA Status ¹	Treatment Group ²	Gross Treatment Acres	Primary Project Areas	Common Habitat in SW Oregon
Saponaria officinalis bouncing-bet	Perennial	NL	D9	< 1 acre / year	Rogue National Wild and Scenic River Corridor, ACECs, FMAs, Cook's lomatium critical habitat	Floodplains and alluvial soil
Stellaria media common chickweed	Annual	NL	D1	< 1 acre / year	ACECs, FMAs, Cook's lomatium critical habitat	Widespread in disturbed sites, open habitats
Fabaceae (pea family)						
Coronilla varia common crown-vetch	Perennial	NL	D7	1	Roadsides	Roadsides, road cuts
Lathyrus aphaca yellow vetchling	Annual	NL	D2	1	Roadsides	Uncommon, but known from roadsides and pastures
Lotus corniculatus, L. uliginosus bird's-foot trefoils	Perennial	NL	D7	< 1 acre / year	ACECs, FMAs, Cook's lomatium critical habitat	Widespread in roadsides, pastures, disturbed open habitats
Medicago sativa et al. medicks, burclovers, alfalfa	Perennial	NL	D7	< 1 acre / year	ACECs, FMAs, Cook's lomatium critical habitat	Roadsides, pastures, disturbed open habitats
Robinia hispida, R. pseudoacacia bristly locust, black locust	Perennial	NL	D12	10	Roadsides and open habitats near residential areas	Interstate 5 corridor, roadsides, fencerows, pastures, primarily near residential areas
Vicia villosa winter vetch	Annual	NL	D2	500	ACECs, FMAs, Cook's lomatium critical habitat	Roadsides, woodlands, forest openings, disturbed open habitats
Geraniaceae (geranium family)			1			
Erodium cicutarium storksbills	Biennial	NL	D8		habitat	Roadsides, meadows, woodlands, forest openings, disturbed open habitats
Geranium molle et al. geraniums	Biennial	NL	D8	< 1 acre / year	ACECs, FMAs, Cook's lomatium critical habitat	Disturbed open riparian areas, woodlands, cultivated sites
Haloragaceae (watermilfoil family)						
Myriophyllum spicatum Eurasian watermilfoil	Perennial	B list	A-ALT	< 1 acre / year	Howard Prairie Lake, Illinois River Corridor	Ponds, lakes, reservoirs, rivers
Lamiaceae (mint family)						
Marrubium vulgare horehound	Perennial	NL	D9	< 1 acre / year	ACECs, FMAs, Cook's lomatium critical habitat	Roadsides, rangeland, disturbed open habitats
Melissa officinalis garden balm	Perennial	NL	D9	< 1 acre / year	Rogue National Wild and Scenic River Corridor, ACECs, FMAs, Cook's lomatium critical habitat	Not common, but known from stream banks, riparian areas
Mentha × piperita, M. spicata peppermint, spearmint	Perennial	NL	D9	< 1 acre / year	Rogue National Wild and Scenic River Corridor, ACECs, FMAs, Cook's Iomatium critical habitat	Not common, but known from stream banks, riparian areas
Linaceae (flax family)		•	•			
Malvaceae (mallow family)						

Scientific Name Common Name	Life Cycle	ODA Status ¹	Treatment Group ²	Gross Treatment Acres	Primary Project Areas	Common Habitat in SW Oregon
Malva neglecta mallows	Biennial	NL	D9	< 1 acre / year	ACECs, FMAs, Cook's lomatium critical habitat	Roadsides, rangeland, disturbed open habitats
Papaveraceae (poppy family)	•	•				·
Phytolaccaceae (pokeweed family)						
Phytolacca americana American pokeweed	Perennial	NL	D9	< 1 acre / year	Rogue National Wild and Scenic River Corridor, ACECs, FMAs, Cook's Iomatium critical habitat	Not common, but known from roadsides and parks in the Rogue River floodplain
Plantaginaceae (plantain family)						
Digitalis purpurea purple foxglove	Biennial	NL	D10	< 1 acre / year	ACECs and FMAs	Not common, but known from roadsides, meadows, riparian areas, mesic forest openings
Kickxia elatine, K. spuria cancerworts	Annual	NL	D1	< 1 acre / year	Rogue National Wild and Scenic River Corridor, ACECs, FMAs, Cook's Iomatium critical habitat	Not common, but known from sandy bars on the Rogue River and other open disturbed sites
Veronica anagallis-aquatica water speedwell	Biennial	NL	D10	< 1 acre / year	Rogue National Wild and Scenic River Corridor and ACECs	Riparian areas, wetlands
Ranunculaceae (buttercup family)						
Ranunculus repens creeping buttercup	Perennial	NL	D9	< 1 acre / year		Road ditches, irrigation ditches, riparian areas, wet meadows
Rosaceae (rose family)		•				·
Rosa eglanteria, R. multiflora sweetbrier, multiflora rose	Perennial	NL	D12		Rogue National Wild and Scenic River Corridor, ACECs, FMAs	Fencerows, woodland edges, thickets, residential areas
	•	•		Mon	ocots	·
Cyperaceae (sedge family)						
Cyperus difformis Asian flatsedge	Annual	NL	M1	5	Rogue National Wild and Scenic River Corridor	Sandy river banks and bars
Poaceae (grass family)		1				
Agrostis gigantea redtop	Perennial	NL	M2	5	Rogue National Wild and Scenic River Corridor, ACECs	Moist and often disturbed meadows, pastures, ditches
Agrostis stolonifera bentgrasses	Perennial	NL	M2	5	Rogue National Wild and Scenic River Corridor, ACECs	Moist and often disturbed pastures, ditches, stream sides
Alopecurus pratensis meadow foxtail	Perennial	NL	M2	< 1 acre / year	ACECs, FMAs, Cook's lomatium critical habitat	Moist meadows, pastures, roadsides, ditches, stream sides
Anthoxanthum odoratum sweet vernalgrass	Perennial	NL	M2	< 1 acre / year	ACECs, FMAs, Cook's lomatium critical habitat	Meadows, roadsides, disturbed soils, forest openings, sometimes in dense shade
Avena barbata, A. fatua slender wild oats	Annual	NL	M1	< 1 acre / year	ACECs, FMAs, Cook's lomatium critical habitat	Widespread in disturbed grasslands, roadsides

Scientific Name Common Name	Life Cycle	ODA Status ¹	Treatment Group ²	Gross Treatment Acres	Primary Project Areas	Common Habitat in SW Oregon
Bromus spp. other annual bromes	Annual	NL	M1	< 1 acre / year	ACECs, FMAs, Cook's lomatium critical habitat	Disturbed and mostly dry grasslands, rangeland, roadsides
Dactylis glomerata orchard grass	Perennial	NL	M2	< 1 acre / year	ACECs, FMAs, Cook's lomatium critical habitat	Pastures, meadows, woodlands, roadsides
Elymus repens quack grass	Perennial	NL	M2	< 1 acre / year	ACECs, FMAs, Cook's lomatium critical habitat	Disturbed sites, roadsides, ditches, stream sides
Eragrostis cilianensis et al. annual lovegrasses	Annual	NL	M1	< 1 acre / year	ACECs, FMAs, Cook's lomatium critical habitat	Disturbed sites, roadsides
Eragrostis curvula weeping lovegrass	Perennial	NL	M2	< 1 acre / year	ACECs, FMAs, Cook's lomatium critical habitat	Disturbed sites, roadsides, meadows
Festuca rubra, F. trachyphylla red fescue, hard fescue	Perennial	NL	M2	< 1 acre / year	ACECs, FMAs, Cook's lomatium critical habitat	Disturbed sites, roadsides, meadows
Holcus lanatus common velvetgrass	Perennial	NL	M2	< 1 acre / year	ACECs, FMAs, Cook's lomatium critical habitat	Moist disturbed sites, roadsides
Lolium perenne perennial ryegrass	Perennial	NL	M2	< 1 acre / year	ACECs, FMAs, Cook's lomatium critical habitat	Disturbed sites, roadsides, meadows
Phleum pratense timothy	Perennial	NL	M2	< 1 acre / year	ACECs and FMAs	Pastures, rangelands
Poa bulbosa bulbous bluegrass	Perennial	NL	M2	< 1 acre / year	ACECs, FMAs, Cook's lomatium critical habitat	Disturbed grasslands, chaparral, roadsides
Poa compressa, P. pratensis, P. trivialis perennial bluegrasses	Perennial	NL	M2	< 1 acre / year	ACECs, FMAs, Cook's lomatium critical habitat	Disturbed and often moist meadows, roadsides, riparian areas
Polypogon monspeliensis rabbitsfoot grass	Annual	NL	M1	< 1 acre / year	ACECs, FMAs, Cook's lomatium critical habitat	Moist disturbed sites, stream sides
Schedonorus arundinaceus, S. pratensis tall fescue, meadow fescue	Perennial	NL	M2	< 1 acre / year	ACECs, FMAs, Cook's lomatium critical habitat	Widespread in pastures, meadows, roadsides, lawns
Sorghum halepense Johnsongrass	Perennial	B list	M2	< 1 acre / year	ACECs, FMAs, Cook's lomatium critical habitat	Disturbed and often moist meadows, pastures, roadsides
Thinopyrum intermedium, T. ponticum wheatgrasses	Perennial	NL	M2	< 1 acre / year	ACECs and FMAs	Grasslands, rangeland
Ventenata dubia Ventenata	Annual	NL	M1	500	ACECs, FMAs, Cook's lomatium critical habitat	Increasingly widespread in grasslands, rangeland, roadsides

^{1.} Noxious weeds are classified by the ODA for the purpose of prioritizing and implementing noxious weed control projects:

A List: A weed of known economic importance that occurs in the state in small enough infestations to make eradication or containment possible.

B List: A weed of economic importance which is regionally abundant, but which may have limited distribution in some areas. NL: Not listed.

^{2.} Species of invasive plants that would be treated in the same manner have been arranged into treatment groups. Further information about treatment methods for these treatment groups can be found in Table 2-12, *Treatment Key*. Treatment group information for A-ALT can be found in Table 2-13, *Treatment Key* – *Submerged and Floating Aquatics*.

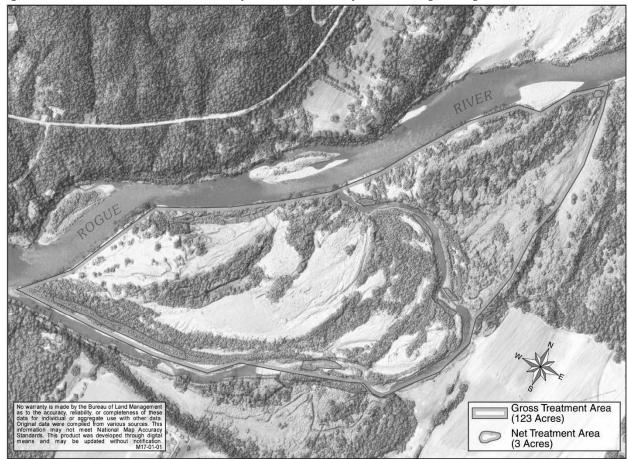


Figure 2-1. Gross and Net Treatment Acres of a Garlic Mustard Infestation along the Roque River

Category III: Spread from Existing Invasive Plant Sites

The current spread rate for noxious weeds is estimated to be about 12 percent annually (USDI 2010a:135-137, 594-597) and new sites are found on the District with each invasive plant inventory. Invasive plants can spread quickly and over great distances by wind, water, animals, and humans through vehicle and foot traffic. Infestations begin mostly on disturbed sites such as roads and trails, logged areas, burned areas, cultivated fields and pastures, wildlife and livestock concentration areas, mining areas, and recreation sites. Livestock and wildlife (including birds) can introduce invasive plant seeds from their coats and feces. The checkerboard ownership pattern and patchiness of vegetation, particularly on the valley floors, increases opportunities for invasive plant movement onto the District.

Linear disturbances such as roads and utility corridors are primary pathways for spread on the District. Many invasive plant species for which there are no currently available effective control methods (such as invasive bromes) are being spread along roads by vehicles annually. (See Maps 2-2B and 2-2C, Routes of Invasive Plant Spread: Ground Transportation Network and Utility Corridors and Water Developments.)

Streams are also major pathways for the movement of invasive plants. The Applegate, Illinois, and Rogue River and smaller tributaries transport invasive plant propagules downstream. These areas attract birds, wildlife, and humans who spread invasive plants along these corridors. (See Map 2-2A, *Routes of Invasive Plant Spread: Recreation Sites and Waterways.*)

Recreation sites, both developed and dispersed, are the hub of several means of invasive plant spread. Recreation sites bring together people and their recreation equipment, vehicles, pack stock and pets where roads, trails, and waterways converge. Invasive plants can be easily transported from one site to other areas on the District and beyond. (See Map 2-2A, *Routes of Invasive Plant Spread: Recreation Sites and Waterways*.)

Timber harvest, restoration, prescribed fire, and silviculture activities disturb vegetation and soil in ways that can stimulate existing invasive plant seed banks, reduce barriers to invasive seed dispersal, and improve site conditions for invasive plant establishment and growth. Particularly where project disturbances are more severe, such as skid roads and burn pile scars, invasive plant infestations can persist and become sources for further seed spread. Equipment and work crews can also spread invasive plant seeds to and from project areas.

Mineral material sites such as quarries and mining operation sites are continuously disturbed and may have numerous users. Vegetation and top soil are removed during mining activities, and revegetation efforts may need several successional phases in order to reclaim the site. During these phases, the site may be vulnerable to establishment by invasive plants. (See Map 2-2D, *Routes of Invasive Plant Spread: Material Sites and Mineral Resources*.)

Wildfires create disturbances and remove shade and native vegetation, creating opportunities for invasive plants to establish before native vegetation has a chance to regrow. High intensity wildfire can destroy organic soil horizons that are conducive to native plant establishment and propagation. Without these substrates, invasive plants can gain a foothold. Invasive plants may also increase hazardous fuels in ways that increase fire intensity or frequency in ecosystems (Brooks et al. 2004).

Category IV: New Invaders

Species of invasive plants not previously documented on the District may be found at any time. Initial infestations are small, but may become large before being discovered. Common routes of spread (e.g., roads and waterways) are checked regularly. Species of concern not yet documented on the District but documented on adjacent lands include perennial pepperweed (*Lepidium latifolium*), plumeless thistles (*Carduus acanthoides, C. crispus,* and *C. tenuiflorus*), and myrtle spurge (*Euphorbia myrsinites*) (see Table 2-4, *Invasive Plants Documented on Neighboring Lands but Not Known to Occur on the District*). For example, perennial pepperweed is present around the shore of Emigrant Lake on adjacent public and private lands, but has yet to be detected on BLM-managed lands. The District works with numerous entities to coordinate early detection activities across jurisdictional boundaries and educate the public about new invasive plants that are invading the area. All new invaders are a high priority for treatment in order to prevent them from becoming established on the District (see further information in the *Prioritizing Areas for Treatment* section later in this Chapter).

Table 2-4. Invasive Plants Documented on Neighboring Lands but Not Known to Occur on the District

Family	Scientific Name	Common Name	Duration	ODA Status ¹	Treatment Group ²				
Dicots									
Apocynaceae (dogbane)	Nerium oleander	oleander	Perennial	NL	D9				
Aquifoliaceae (holly)	Ilex aquifolium	English holly	Perennial	NL	D12				
Asteraceae (aster)	Carduus acanthoides	spiny plumeless thistle	Biennial	A list	D4				
	Carduus crispus	curly plumeless thistle	Biennial	A list	D4				
	Carduus pycnocephalus ssp. cinereus	Turkish thistle	Annual	B list	D2				
	Carduus tenuiflorus	winged plumeless thistle	Annual	B list	D2				
	Centaurea iberica	Iberian starthistle	Perennial	A list	D4				
	Hieracium aurantiacum	orange hawkweed	Perennial	A list	D4				
	Onopordum tauricum	bull cottonthistle	Biennial	A list	D4				
	Tussilago farfara	coltsfoot	Perennial	A list	D4				

Family	Scientific Name	Common Name	Duration	ODA Status ¹	Treatment Group ²
Balsaminaceae (touch- me-not)	Impatiens glandulifera	ornamental jewelweed	Annual	B list	D1
Poraginações (horago)	Anchusa azurea	Italian bugloss	Perennial	NL	D5
Boraginaceae (borage)	Echium plantagineum	salvation jane	Biennial	A list	D5
Practicacoao (mustard)	Lepidium latifolium	perennial pepperweed	Perennial	B list	D6
Brassicaceae (mustard)	Lunaria annua	annual honesty	Biennial	NL	D6
Buddlejaceae (butterfly bush)	Buddleja davidii	orange eye butterflybush	Perennial	B list	D12
Cuscutacea (dodder)	Cuscuta spp.	dodder	Perennial	B list	D9
Freehauliaaaaa (aaruusa)	Euphorbia lathyris	caper spurge	Annual	NL	D1
Euphorbiaceae (spurge)	Euphorbia myrsinites	myrtle spurge	Perennial	B list	D9
Fabaceae (pea)	Galega officinalis	goatsrue	Perennial	A list	D7
	Salvia aethiopis	Mediterranean sage	Biennial	B list	D9
Lamiaceae (mint)	Salvia sclarea	clary sage	Biennial	NL	D9
	Lythrum hyssopifolium	hyssop loosestrife	Biennial	NL	D9
Lythraceae (loosestrife)	Lythrum tribracteatum	threebract loosestrife	Biennial	NL	D9
Malvaceae (mallow)	Abutilon theophrasti	velvet-leaf	Annual	B list	D1
Menyanthaceae (buckbean)	Nymphoides peltata	yellow floatingheart	Perennial	A list	A-ALT
Oleaceae (olive)	Ligustrum vulgare	European privet	Perennial	NL	D12
Onagraceae (evening primrose)	Ludwigia grandiflora	large-flower primrose willow	Perennial	B list	A-ALT
Orobanchaceae (broomrape)	Orobanche minor	clover broomrape	Annual	B list	D1
Polygonaceae	Polygonum polystachyum	cultivated knotweed	Perennial	B list	D11
(buckwheat)	Polygonum bohemicum	Bohemian knotweed	Perennial	NL	D11
·	Lysimachia nummularia	creeping Jenny	Perennial	NL	D9
Primulaceae (primrose)	Lysimachia punctata	large yellow loosestrife	Perennial	NL	D9
	Lysimachia vulgarism	garden yellow loosestrife	Perennial	A list	D9
Ranunculaceae (buttercup)	Ficaria verna	fig buttercup	Perennial	NL	D9
` ',	Cotoneaster spp.	Cotoneaster	Perennial	NL	D12
Rosaceae (rose)	Crataegus monogyna et al.	hawthorns	Perennial	NL	D12
	Prunus avium et al.	ornamental cherries	Perennial	NL	D12
	Pyracantha coccinea, P. fortuneana	firethorns	Perennial	NL	D12
	Pyrus calleryana	Callery pear	Perennial	NL	D12
	Solanum aviculare	New Zealand nightshade	Perennial	NL	D9
Solanaceae (nightshade)	Solanum rostratum	buffalobur	Annual	B list	D2
Tamaricaceae (tamarisk)	Tamarix ramosissima	saltcedar	Perennial	B list	D12
(Mono				
Araceae (arum)	Arum italicum	Italian lords and ladies	Perennial	NL	M2
Cyperaceae (sedge)	Isolepis setacea	bristleleaf bulrush	Perennial	NL	A
Hydrocharitaceae (frogbit)	Egeria densa	South American waterweed	Perennial	B list	A-ALT
Poaceae (grass)	Arundo donax	giant reed	Perennial	NL	M2
	Bambusoideae spp.	bamboo	Perennial	NL	M2
	Cortaderia jubata, C. selloana	pampas grasses	Perennial	B list	M2
	Nardus stricta	matgrass	Perennial	A list	M2
	Saccharum ravennae	ravennagrass	Perennial	A list	M2
	Setaria faberi	Japanese bristlegrass	Annual	NL	M1
Pontederiaceae (pickerel-weed)	Eichhornia crassipes	water hyacinth	Perennial	NL	M2
.,	hy the ODA for the purpose of prioritizing	1			1

^{1.} Noxious weeds are classified by the ODA for the purpose of prioritizing and implementing noxious weed control projects (ODA 2017):