3. RECOMMENDATIONS FOR WEED MANAGEMENT AREAS

This chapter includes sections for 14 WMAs, ranging from Lassen County Special Weed Action Team in the north to Kern WMA in the south, and including the Eastern Sierra WMA. For each WMA, we recommend a set of top priority opportunities based on statewide risk maps. Species selected as region-wide recommendations in chapter 2 are included as priorities for each WMA unless there are no nearby infestations. Other species with particular spatial opportunities in the WMA may be included. For instance, the southernmost reach of a particular species in the Sierra Nevada may represent an important opportunity to prevent spread.

Each section includes a table showing statistics and opportunity ratings for all species considered in this report as well as maps for top priority species for that WMA. These recommendations are not meant to be definitive. WMAs should refer to the table and full species maps in chapter 4 to determine additional local priorities. (In addition, as described in chapter 1, this study does not include every invasive plant species of potential concern in the Sierra Nevada.) Some species may be judged a top priority in a given WMA based on local impacts. Others may be judged a top priority by specific natural resource management entities within a WMA. For instance, common velvet grass (*Holcus lanatus*) is a top priority for managers in Sequoia-Kings Canyon National Park, but may be less of a priority for natural resource managers at lower elevation in the foothills.

Some WMAs fall completely within the Sierra Nevada ecoregion, while others are only partly within it. Sacramento WMA and Northern San Joaquin Valley WMA are not included although small portions fall within the Sierra Nevada. (See map in chapter 1.) Statistics for each WMA are calculated for the entire WMA, including any portion outside the Sierra Nevada region. Maps follow the species order of the table.

These recommendations focus on the portion of Tulare WMA within the Sierra Nevada ecoregion (see map in chapter 1). Statistics are based on all of Tulare County.

Eradication is recommended for species that have limited occurrence within the WMA. Of the species examined, the following are priority eradication opportunities for Tulare WMA:

spotted knapweed (*Centaurea maculosa*)

Scotch broom (*Cytisus scoparius*)

French broom (*Genista monspessulana*)

Containment is recommended for species that are more widespread, where eradication may not be a realistic goal. The following species are priority containment opportunities for Tulare WMA:

yellow starthistle (*Centaurea solstitialis*) – prevent spread to higher elevations as part of YST Leading Edge Project

Scotch thistle (*Onopordum acanthium*)

Spanish broom (*Spartium junceum*)

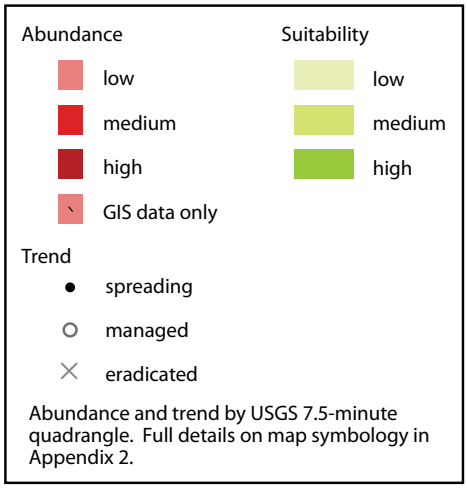
giant reed (*Arundo donax*)

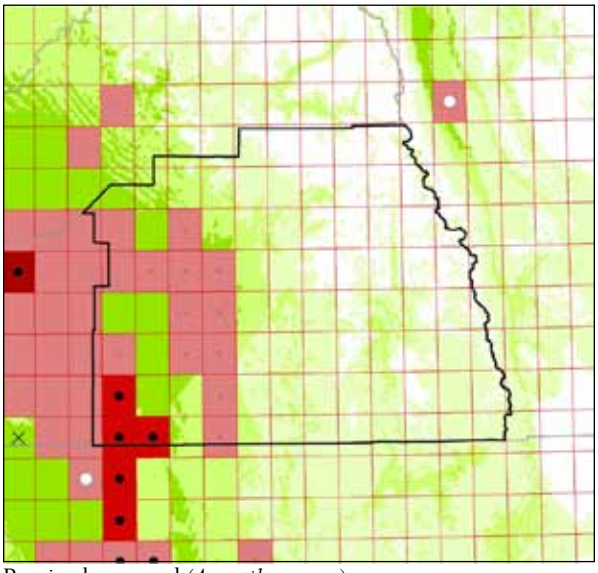
Surveillance is recommended to prevent spread into the WMA:

Russian knapweed (*Acroptilon repens*)

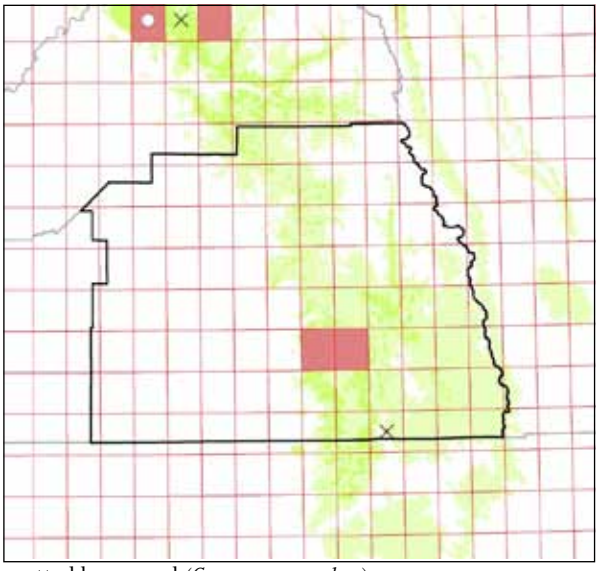
rush skeletonweed (*Chondrilla juncea*) – several quads infested in southern Fresno County and western Inyo County

Dalmatian toadflax (*Linaria genistifolia* subsp. *dalmatica*) – one quad infested on edge of Sierra region in Tulare WMA

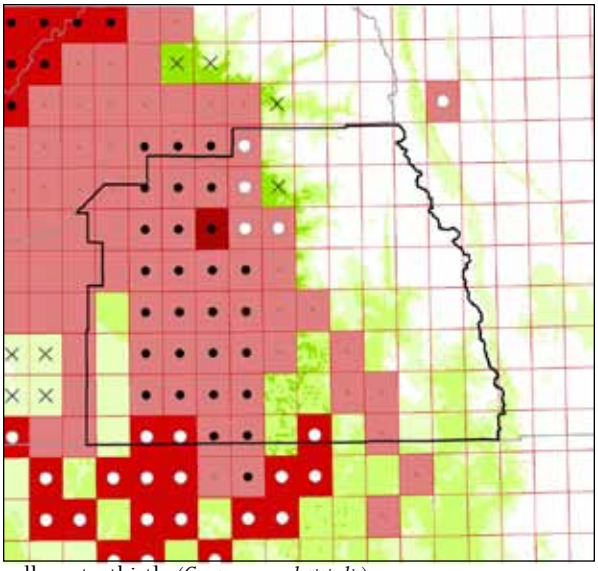




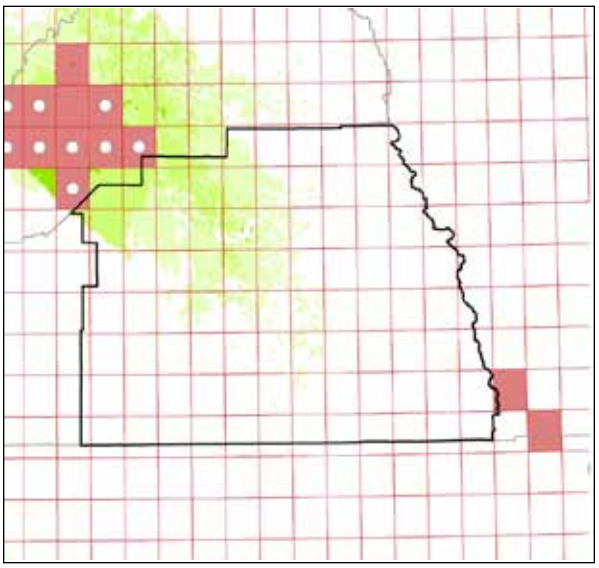
Russian knapweed (*Acroptilon repens*)



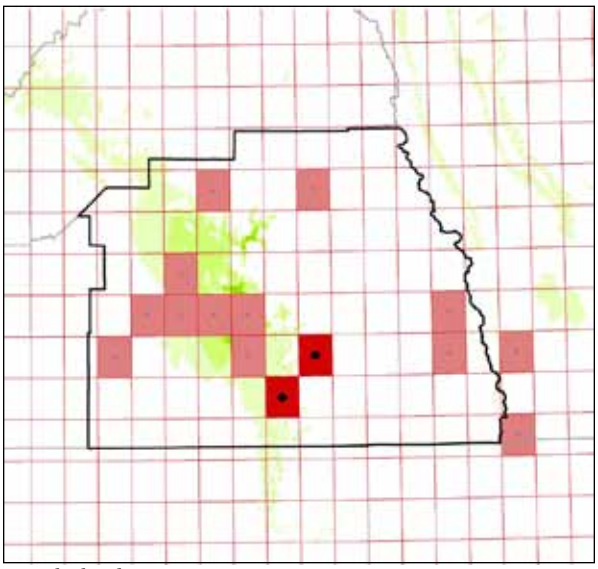
spotted knapweed (*Centaurea maculosa*)



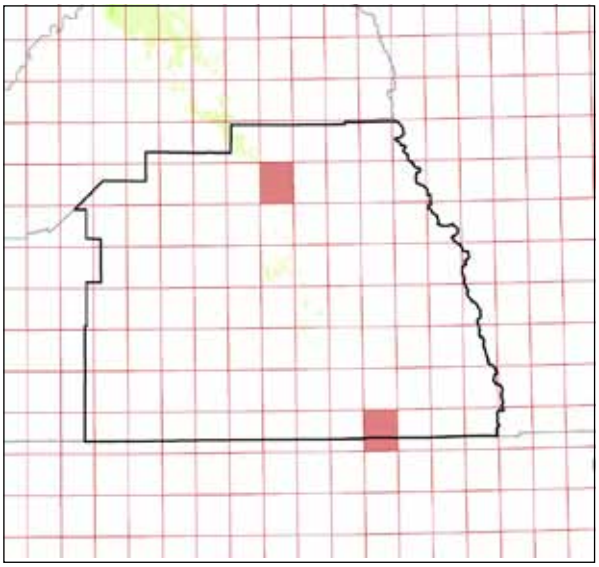
yellow starthistle (*Centaurea solstitialis*)



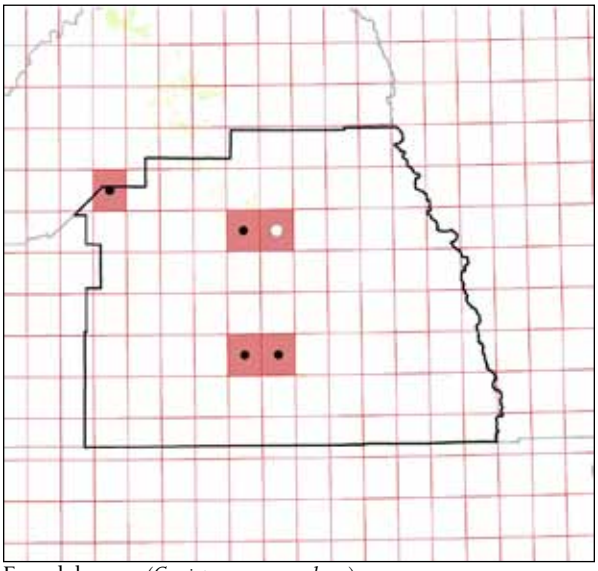
rush skeletonweed (*Chondrilla juncea*)



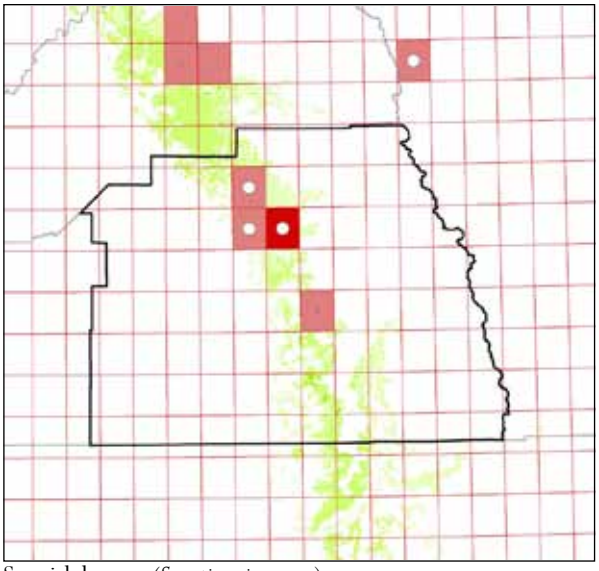
Scotch thistle (*Onopordum acanthium*)



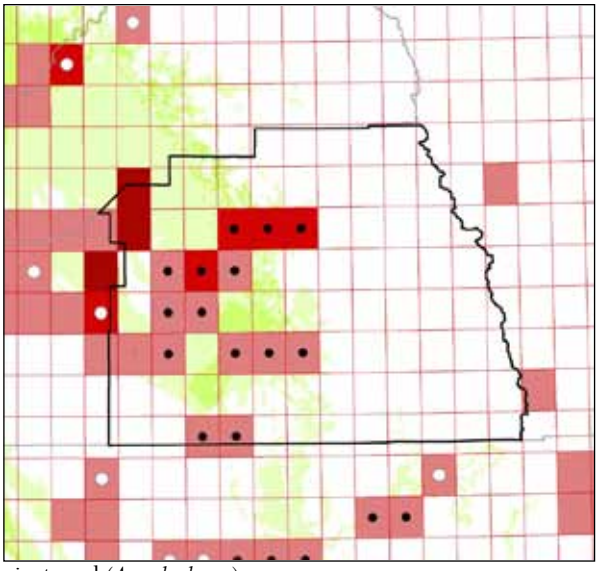
Scotch broom (*Cytisus scoparius*)



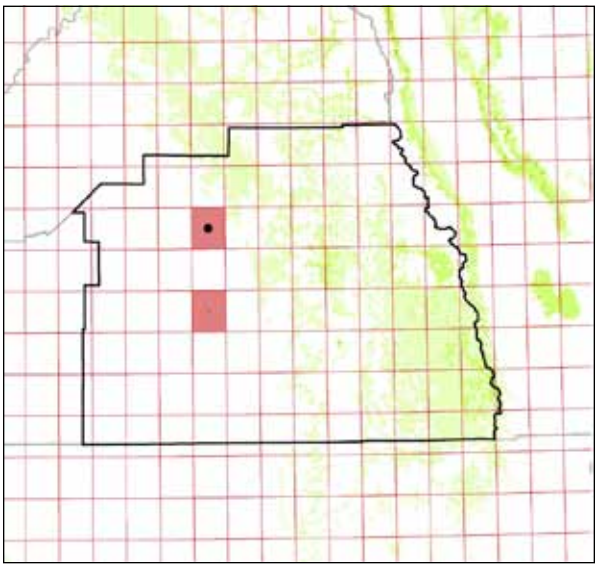
French broom (*Genista monspessulana*)



Spanish broom (*Spartium junceum*)



giant reed (*Arundo donax*)



Dalmatian toadflax (*Linaria genistifolia* subsp. *dalmatica*)

Priority	Species	Opportunities			Statistics							
		Eradication	Containment	Surveillance	% Infested	% Suitable Infested	% Spreading	% Managed	% Eradicated	% Suitable 2010	% Suitable 2050	Suitability Change
	Family Apiaceae											
	Poison-hemlock	-	M	-	26	58	81	0	0	26	0	↓
	Family Asteraceae											
●	**Russian knapweed**	**-**	**-**	**H**	**22**	**22**	**14**	**0**	**0**	**79**	**88**	**-**
	Musk thistle	-	-	L	0	0	-	-	0	0	0	-
	Italian thistle & slenderflower thistle	-	-	M	1	-	0	0	0	-	-	-
	Woolly distaff thistle	**-**	**-**	**L**	0	-	-	-	0	0	0	-
	Diffuse knapweed	-	-	L	0	0	-	-	0	30	26	-
●	**Spotted knapweed**	**H**	**-**	**-**	**2**	**3**	**0**	**0**	**1**	**35**	**45**	↑
●	**Tocalote**	**-**	**M**	**-**	**49**	**-**	**16**	**0**	**0**	**-**	**-**	**-**
●	**Yellow starthistle**	**-**	**H**	**-**	**52**	**55**	**60**	**14**	**1**	**79**	**86**	**-**
●	**Rush skeletonweed**	**-**	**-**	**H**	**3**	**7**	**0**	**67**	**0**	**20**	**22**	**-**
	Canada thistle	M	-	-	1	2	100	0	0	8	4	↓
	Bull thistle	-	M	-	39	46	15	10	0	59	90	↑
	Stinkwort	-	-	L	0	0	-	-	0	1	0	↓
	Ox-eye daisy	-	-	M	8	19	0	0	0	7	19	↑↑
●	**Scotch thistle**	**-**	**H**	**-**	**14**	**31**	**14**	**0**	**0**	**17**	**7**	**↓**
	Family Boraginaceae											
	Houndstongue	-	-	-	0	-	-	-	0	-	-	-
	Family Brassicaceae											
	Lens-podded white-top & hoary cress	-	-	M	3	-	0	0	1	-	-	-
	Dyer's woad	-	-	L	0	0	-	-	0	0	0	↓
	Charlock mustard	-	-	L	13	-	92	0	0	-	-	-
	Family Dipsacaceae											
	Common teasel & fuller's teasel	-	-	M	6	12	0	0	0	14	20	↑
	Family Fabaceae											
●	**Scotch broom**	**H**	**-**	**-**	**2**	**17**	**0**	**0**	**0**	**1**	**23**	**↑↑**
●	**French broom**	**H**	**-**	**-**	**5**	**63**	**80**	**20**	**0**	**0**	**15**	**↑↑**
●	**Spanish broom**	**-**	**H**	**-**	**4**	**11**	**0**	**75**	**0**	**13**	**51**	**↑↑**
	Black locust	L	-	-	3	-	0	0	0	-	-	-
	Red sesbania	-	-	L	0	0	-	-	0	11	31	↑↑
	Gorse	-	-	-	0	-	-	-	0	0	5	-
	Family Poaceae											
●	**Giant reed**	**-**	**H**	**-**	**21**	**37**	**67**	**0**	**0**	**30**	**51**	**↑**
	Annual false-brome	-	-	M	0	0	-	-	0	5	1	↓

	Common velvet grass	-	M	-	11	18	46	9	0	37	55	↑
	Mediterranean barley	-	M	-	53	-	11	0	0	-	-	-
	Hare barley	-	M	-	64	-	9	0	0	-	-	-
	Italian ryegrass	-	M	-	47	71	75	0	0	38	23	↓
	FAMILY POLYGONACEAE											
	Japanese knotweed	-	-	-	0	-	-	-	0	-	-	-
	Giant knotweed	-	-	-	0	-	-	-	0	-	-	-
	FAMILY SCROPHULARIACEAE											
●	**Dalmatian toadflax**	**-**	**-**	**H**	**2**	**3**	**50**	**0**	**0**	**24**	**74**	**↑↑**
	Yellow toadflax	-	L	-	0	0	-	-	0	34	56	↑
	FAMILY SIMAROUBACEAE											
	Tree-of-heaven	-	M	-	49	79	94	2	0	34	74	↑↑
	FAMILY SOLANACEAE											
	Tree tobacco	-	-	M	21	51	10	0	0	21	43	↑↑

Opportunities: H = high priority, M = medium, L = low

% Infested: portion of USGS quads in the area in which the species is present in wildlands

% Suitable Infested: portion of quads in the area with suitable climate that are currently infested

% Spreading: portion of infested quads in which the species is spreading

% Managed: portion of infested quads where species is under management

% Eradicated: portion of all quads in the area in which the species has been eradicated

% Suitable in 2010: portion of area with current climatic suitability of at least a level of "low" or higher

% Suitable in 2050: of area with projected 2050 climatic suitability of at least a level of "low" or higher

Suitability change:
↑ = a 15% - 99% increase from 2010 to 2050
↑↑= an increase of greater than 100%
↓ = a decrease of greater than 15%