

# Regional Prioritization for Weed Management

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# Regional priorities

- Multi-WMA
- Landscape-level prioritization
- Containment or eradication, EDRR
- Based on:
  - CDFA Rating
  - Low distribution (CWM and Calflora)
- Other info:
  - Cal-IPC Rating
  - Local lists
- Complement, not replace, local priorities

# Project Overview

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Sept.-Oct.

- ❖ Compile distribution data into regional spreadsheets

Nov.-Dec.

- ❖ CACs confirm existing county targets, consider/select potential regional targets
- ❖ Compile existing WMA lists

Jan-Feb

- ❖ WMAs consider/select potential regional targets

March

- ❖ Complete initial lists regional targets

# A,Q,B,W <10%

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- Species:
  - Start from Cal-IPC list [for North Sierra region = 158 species]
  - Include additional species for local lists [=2 for a total of 160]
  - Focus on those rated by CDFA as A, Q, or B (or W)
- Distribution:
  - Focus on species found in fewer than 10% of a region's quads (%Q)
- For North Sierra = 25 species

# A,Q,B,W<10%

Species	Common Name	%Qs Region	#Qs Region	#Qs Butte	#Qs Nevada	#Qs Placer	#Qs Plumas	#Qs Sierra	#Qs Yuba	#Pops Region	CDFA Rating	Cal-IPC Rating	N Sierra Strategy	NVPWMA West	NVPWMA East	Tahoe WMA
Carduus acanthoides	plumeless thistle	1%	1	0	1	1	0	0	0	4	A	Limited	2			
Fallopia sachalinensis (=	Sakhalin knotweed	1%	1	1	0	0	0	0	0	0	A	Mod-Alert				
Limnobium spongia	South American sponge	1%	1	0	0	0	0	0	1	0	A	High	2			
Euphorbia virgata (= Euph	leafy spurge	1%	2	0	0	0	2	1	0	0	A	High	1		1a	3
Fallopia japonica (= Polyg	Japanese knotweed	1%	2	1	0	0	2	1	0	1	A	Mod-Alert				
Euphorbia myrsinites	myrtle spurge	2%	3	0	0	0	3	0	0	4	A	WMA Listed			1b	1a
Alternanthera philoxeroid	alligator weed	2%	3	3	0	0	0	0	1	10	A	High				
Centaurea jacea nothossp	meadow knapweed	2%	3	2	0	1	0	0	0	3	A	Mod-Alert				
Centaurea virgata ssp. squ	squarrose knapweed	2%	3	0	1	1	2	0	0	1	A	Moderate	1		1b	1a
Potentilla recta	sulphur cinquefoil	3%	5	0	3	0	2	0	0	8	A	WMA Listed		1b	1b	1b
Halogeton glomeratus	halogeton	4%	7	0	1	1	6	0	0	0	A	Moderate	2		1a	
Hydrilla verticillata	hydrilla	5%	8	1	6	2	0	0	4	0	A	High		1b		
Linaria dalmatica ssp. dal	Dalmatian toadflax	9%	16	2	4	8	4	3	0	33	A	Moderate		1a	1b	2
Berteroa incana	hoary alyssum	1%	1	0	0	1	0	0	0	4	B	Watch			1b	1a
Carthamus lanatus	woolly distaff thistle	1%	1	0	1	0	0	0	0	0	B	High	1	1b		
Ulex europaeus	gorse	1%	1	0	1	0	0	0	0	9	B	High	1	1b		
Aegilops cylindrica	jointed goatgrass	1%	2	0	0	0	2	0	0	2	B	Watch				
Cortaderia jubata	jubatagrass	1%	2	0	0	2	0	0	0	2	B	High	2			
Cynara cardunculus	artichoke thistle	1%	2	1	0	0	0	0	1	2	B	Moderate	1	1b	1a	
Salvia aethiopis	Mediterranean sage	3%	6	0	0	0	6	0	0	0	B	Limited	1	1a	1a	3
Centaurea calcitrapa	purple starthistle	4%	7	2	3	5	0	0	0	1	B	Moderate	1	1b	1b	1a
Tamarix parviflora	smallflower tamarisk	5%	9	3	0	1	1	0	4	2	B	High	3	1b	1a	1a
Iris pseudacorus	yellowflag iris	6%	10	4	2	4	0	0	1	1	B	Limited				
Tamarix ramosissima	saltcedar, tamarisk	6%	10	5	1	4	1	0	1	93	B	High	1	1b	1a	1a
Euphorbia oblongata	oblong spurge	7%	13	5	5	4	0	0	1	45	B	Limited		2		1a

# A,Q,B,W<10%

Species	Common Name	%Qs Region	#Qs Region	#Qs Butte	#Qs Nevada	#Qs Placer	#Qs Plumas	#Qs Sierra	#Qs Yuba	#Pops Region	CDFA Rating	Cal-IPC Rating	N Sierra Strategy	NVPWMA West	NVPWMA East	Tahoe WMA
Carduus acanthoides	plumeless thistle	1%	1	0	1	1	0	0	0	4	A	Limited	2			
Fallopia sachalinensis (= Sakhalin knotweed)	Sakhalin knotweed	1%	1	1	0	0	0	0	0	0	A	Mod-Alert				
Limnobium spongia	South American spong	1%	1	0	0	0	0	0	1	0	A	High	2			
Euphorbia virgata (= Euphorbia virgata)	leafy spurge	1%	2	0	0	0	2	1	0	0	A	High	1		1a	3
Fallopia japonica (= Polygonum japonicum)	Japanese knotweed	1%	2	1	0	0	2	1	0	1	A	Mod-Alert				
Euphorbia myrsinites	myrtle spurge	2%	3	0	0	0	3	0	0	4	A	WMA Listed			1b	1a
Alternanthera philoxeroides	alligator weed	2%	3	3	0	0	0	0	1	10	A	High				
Centaurea jacea nothosistachya	meadow knapweed	2%	3	2	0	1	0	0	0	3	A	Mod-Alert				
Centaurea virgata ssp. squarrosa	squarrose knapweed	2%	3	0	1	1	2	0	0	1	A	Moderate	1		1b	1a
Potentilla recta	sulphur cinquefoil	3%	5	0	3	0	2	0	0	8	A	WMA Listed		1b	1b	1b
Halogeton glomeratus	halogeton	4%	7	0	1	1	6	0	0	0	A	Moderate	2		1a	
<del>Hydrilla verticillata</del>	<del>hydrilla</del>	5%	8	1	6	2	0	0	4	0	A	High		1b		
Linaria dalmatica ssp. dalmatica	Dalmatian toadflax	9%	16	2	4	8	4	3	0	33	A	Moderate		1a	1b	2
Berteroa incana	hoary alyssum	1%	1	0	0	1	0	0	0	4	B	Watch			1b	1a
Carthamus lanatus	woolly distaff thistle	1%	1	0	1	0	0	0	0	0	B	High	1	1b		
Ulex europaeus	gorse	1%	1	0	1	0	0	0	0	9	B	High	1	1b		
Aegilops cylindrica	jointed goatgrass	1%	2	0	0	0	2	0	0	2	B	Watch				
Cortaderia jubata	jubatagrass	1%	2	0	0	2	0	0	0	2	B	High	2			
Cynara cardunculus	artichoke thistle	1%	2	1	0	0	0	0	1	2	B	Moderate	1	1b	1a	
Salvia aethiopis	Mediterranean sage	3%	6	0	0	0	6	0	0	0	B	Limited	1	1a	1a	3
Centaurea calcitrapa	purple starthistle	4%	7	2	3	5	0	0	0	1	B	Moderate	1	1b	1b	1a
Tamarix parviflora	smallflower tamarisk	5%	9	3	0	1	1	0	4	2	B	High	3	1b	1a	1a
Iris pseudacorus	yellowflag iris	6%	10	4	2	4	0	0	1	1	B	Limited				
Tamarix ramosissima	saltcedar, tamarisk	6%	10	5	1	4	1	0	1	93	B	High	1	1b	1a	1a
Euphorbia oblongata	oblong spurge	7%	13	5	5	4	0	0	1	45	B	Limited		2		1a



>10%

- Too widespread to qualify as EDRR targets
- 99 species in this category
- Sorted by CDFA rating, then distribution

Species	Common Name	%Qs Region	#Qs Region	#Qs Butte	#Qs Nevada	#Qs Placer	#Qs Plumas	#Qs Sierra	#Qs Yuba	#Pops Region	CDFA Rating	Cal-IPC Rating	N Sierra Strategy	NVPWMA West	NVPWMA East	Tahoe WMA
Centaurea diffusa	diffuse knapweed	11%	20	3	9	9	5	6	0	15	A	Moderate		1a	1b	1b
Onopordum acanthium	Scotch thistle	12%	21	0	7	7	11	5	0	20	A	High		1a	1b	1a
Carduus nutans	musk thistle	17%	30	0	11	10	12	11	0	1715	A	Moderate		1a	2	1a
Centaurea stoebe ssp. m	spotted knapweed	36%	63	13	14	19	27	11	2	397	A	High		1b	1b	1b
Chondrilla juncea	rush skeletonweed	37%	66	6	26	0	10	15	13	330	A	Moderate			1b	1b
Acroptilon repens	Russian knapweed	10%	18	0	7	7	6	5	1	19	B	Moderate	1	1a		1b
Isatis tinctoria	dyer's woad	11%	19	4	2	6	7	1	0	15	B	Moderate	1	1a	1b	1b
Lythrum salicaria	purple loosestrife	13%	23	11	6	6	0	0	6	18	B	High				1b
Sesbania punicea	red sesbania, scarlet v	18%	31	13	3	14	0	0	10	2232	B	High				
Dittrichia graveolens	stinkwort	19%	34	14	4	13	7	0	5	71	B	Mod-Alert		2	2	1a
Arundo donax	giant reed	29%	52	29	5	17	0	0	13	2832	B	High				
Lepidium chalepense (=	Lepidium chalepensis	32%	56	22	11	10	17	5	6	21	B	Mod-Alert		1b	1b	
Lepidium appelianum (=	hairy whitetop	37%	65	28	8	7	35	2	4	0	B	Limited				
Aegilops triuncialis	barb goatgrass	40%	71	22	17	29	11	4	14	198	B	High		2	2	1a
Cirsium arvense	Canada thistle	41%	73	12	4	6	60	13	2	1066	B	Moderate		1b	1b	1b
Lepidium latifolium	perennial pepperwee	49%	86	12	16	0	35	14	6	317	B	High		1b	2	2
Salsola paulsenii	barbwire Russian-thi	11%	19	0	0	0	15	8	0	0	C-W	Limited				
Tribulus terrestris	puncture vine	12%	22	5	1	4	12	0	2	37	C-W	Limited				1a
Ludwigia hexapetala and	Uruguay and creeping	17%	30	16	5	7	0	0	12	10	C-W	High				
Centaurea melitensis	Malta starthistle, toca	28%	49	22	12	19	2	1	12	33	C-W	Moderate				
Salsola tragus	Russian-thistle	30%	53	8	12	16	17	9	10	18	C-W	Limited			2	
Genista monspessulana	French broom	31%	54	29	9	16	6	3	11	96	C-W	High		2	1b	2
Spartium junceum	Spanish broom	33%	59	22	18	26	3	5	10	32	C-W	High		2	1b	2
Carduus tenuiflorus and	slenderflower and Ita	37%	65	31	15	22	0	1	18	0	C-W	Moderate				
Ailanthus altissima	tree-of-heaven	46%	81	35	18	27	6	5	18	65	C-W	Moderate			1a	1b
Cytisus scoparius	Scotch broom	56%	100	28	23	0	29	14	11	633	C-W	High		2	1b	2
Elymus caput-medusae (	medusahead	64%	113	38	19	0	32	7	17	373	C-W	High			1b	1a
Centaurea solstitialis	yellow starthistle	81%	144	47	27	0	43	16	21	1302	C-W	High			1b	1b
Hypericum perforatum	common St. John's wc	96%	170	48	32	0	65	29	16	96	C-W	Limited			2	2
Cirsium vulgare	bull thistle	100%	177	48	32	0	67	29	21	355	C-W	Moderate			2	2
Myriophyllum aquaticum	parrotfeather	23%	40	18	9	11	1	1	14	5	C	High				
Myriophyllum spicatum	Eurasian watermilfoil	24%	42	23	7	11	1	1	13	56	C	High				
Bromus tectorum	downy brome, cheatg	81%	143	27	29	0	67	29	9	176	C	High				3
Hedera helix and H. can	English ivy, Algerian iv	20%	35	21	6	6	5	1	6	24	D	High				
Cynodon dactylon	bermudagrass	50%	88	48	16	22	13	6	21	6	D	Moderate				
Linaria vulgaris	yellow toadflax, butte	11%	19	1	4	8	8	5	0	43		Moderate			2	2
Parentucellia viscosa	yellow glandweed, sti	11%	19	13	5	4	0	0	0	7		Limited	2			



>10%

- Some species listed here are listed as WMA eradication targets
  - 1a and 1b: Watch for, report, and eradicate immediately



Species	Common Name	%Qs Region	#Qs Region	#Qs Butte	#Qs Nevada	#Qs Placer	#Qs Plumas	#Qs Sierra	#Qs Yuba	#Qs Region	#Pops Region	CDFA Rating	Cal-IPC Rating	N Sierra Strategy	NVPWMA West	NVPWMA East	Tahoe WMA
Centaurea diffusa	diffuse knapweed	11%	20	3	9	9	5	6	0	15	15	A	Moderate		1a	1b	1b
Onopordum acanthium	Scotch thistle	12%	21	0	7	7	11	5	0	20	20	A	High		1a	1b	1a
Carduus nutans	musk thistle	17%	30	0	11	10	12	11	0	1715	1715	A	Moderate		1a	2	1a
Centaurea stoebe ssp. m	spotted knapweed	36%	63	13	14	19	27	11	2	397	397	A	High		1b	1b	1b
Chondrilla juncea	rush skeletonweed	37%	66	6	26	0	10	15	13	330	330	A	Moderate			1b	1b
Acroptilon repens	Russian knapweed	10%	18	0	7	7	6	5	1	19	19	B	Moderate	1	1a		1b
Isatis tinctoria	dyer's woad	11%	19	4	2	6	7	1	0	15	15	B	Moderate	1	1a	1b	1b
Lythrum salicaria	purple loosestrife	13%	23	11	6	6	0	0	6	18	18	B	High				1b
Sesbania punicea	red sesbania, scarlet v	18%	31	13	3	14	0	0	10	2232	2232	B	High				
Dittrichia graveolens	stinkwort	19%	34	14	4	13	7	0	5	71	71	B	Mod-Alert		2	2	1a
Arundo donax	giant reed	29%	52	29	5	17	0	0	13	2832	2832	B	High				
Lepidium chalepense (= Lepidium chalepensis	Lepidium chalepensis	32%	56	22	11	10	17	5	6	21	21	B	Mod-Alert		1b	1b	
Lepidium appelianum (= hairy whitetop	Lepidium appelianum	37%	65	28	8	7	35	2	4	0	0	B	Limited				
Aegilops triuncialis	barb goatgrass	40%	71	22	17	29	11	4	14	198	198	B	High		2	2	1a
Cirsium arvense	Canada thistle	41%	73	12	4	6	60	13	2	1066	1066	B	Moderate		1b	1b	1b
Lepidium latifolium	perennial pepperwee	49%	86	12	16	0	35	14	6	317	317	B	High		1b	2	2
Salsola paulsenii	barbwire Russian-this	11%	19	0	0	0	15	8	0	0	0	C-W	Limited				
Tribulus terrestris	puncture vine	12%	22	5	1	4	12	0	2	37	37	C-W	Limited				1a
Ludwigia hexapetala and Uruguay and creeping	Ludwigia hexapetala and Uruguay and creeping	17%	30	16	5	7	0	0	12	10	10	C-W	High				
Centaurea melitensis	Malta starthistle, toca	28%	49	22	12	19	2	1	12	33	33	C-W	Moderate				
Salsola tragus	Russian-thistle	30%	53	8	12	16	17	9	10	18	18	C-W	Limited			2	
Genista monspessulana	French broom	31%	54	29	9	16	6	3	11	96	96	C-W	High		2	1b	2
Spartium junceum	Spanish broom	33%	59	22	18	26	3	5	10	32	32	C-W	High		2	1b	2
Carduus tenuiflorus and slenderflower and Ita	Carduus tenuiflorus and slenderflower and Ita	37%	65	31	15	22	0	1	18	0	0	C-W	Moderate				
Ailanthus altissima	tree-of-heaven	46%	81	35	18	27	6	5	18	65	65	C-W	Moderate			1a	1b
Cytisus scoparius	Scotch broom	56%	100	28	23	0	29	14	11	633	633	C-W	High		2	1b	2
Elymus caput-medusae ( medusahead	Elymus caput-medusae ( medusahead	64%	113	38	19	0	32	7	17	373	373	C-W	High			1b	1a
Centaurea solstitialis	yellow starthistle	81%	144	47	27	0	43	16	21	1302	1302	C-W	High			1b	1b
Hypericum perforatum	common St. John's wc	96%	170	48	32	0	65	29	16	96	96	C-W	Limited			2	2
Cirsium vulgare	bull thistle	100%	177	48	32	0	67	29	21	355	355	C-W	Moderate			2	2
Myriophyllum aquaticum	parrotfeather	23%	40	18	9	11	1	1	14	5	5	C	High				
Myriophyllum spicatum	Eurasian watermilfoil	24%	42	23	7	11	1	1	13	56	56	C	High				
Bromus tectorum	downy brome, cheatg	81%	143	27	29	0	67	29	9	176	176	C	High				3
Hedera helix and H. cana	English ivy, Algerian iv	20%	35	21	6	6	5	1	6	24	24	D	High				
Cynodon dactylon	bermudagrass	50%	88	48	16	22	13	6	21	6	6	D	Moderate				



# Flagship species

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- More widespread, higher visibility
- Limiting spread is possible and beneficial
- Build coordination, mapping, and outreach

# Next steps

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- Meet with CAC Deputies through area groups, get feedback
- CACs review priority species
- WMAs review priority species

Aiming for coordinated work at the landscape level!